



Report on the comparative analysis of sufficiency policies

Fundamental decarbonisation
through sufficiency by lifestyle changes

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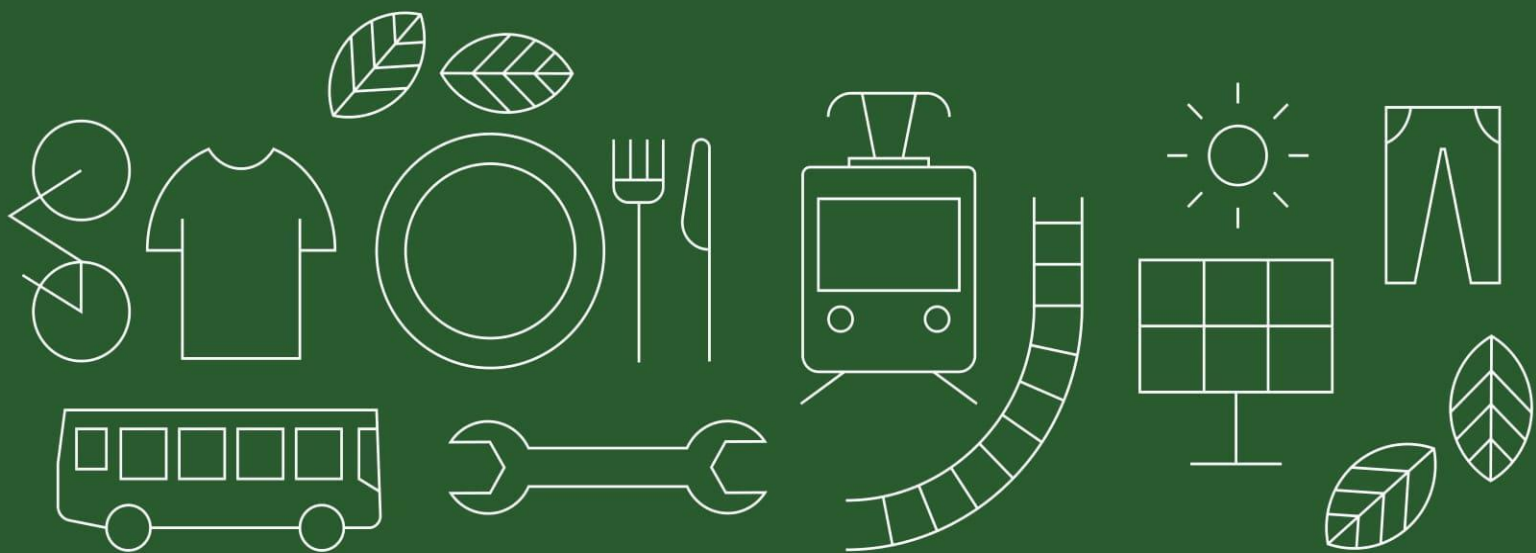
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List of Abbreviations

EU	European Union
NDC	Nationally Determined Contributions
SSH	Social Sciences and Humanities
MS	Microsoft

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Abstract / Summary

This report analyses the role of policies and governance measures in the diffusion of sufficiency lifestyles at the macro level. Looking at 16 case studies of national sufficiency policies that have been implemented or debated across Denmark, France, Germany, Italy and Latvia this report identifies key barriers and enablers in the implementation of these policies. A comparative analysis between the policies sheds light on the factors that drive and inhibit successful implementation of sufficiency policies taking into account the varying national contexts and social acceptability of the policies. Enablers of sufficiency policies that are identified include a coherent policy mix with appropriate supporting measures, affordable and attractive alternatives and enabling infrastructure, appropriate financing, stakeholder engagement, successful piloting, education and positive communication with a focus on co-benefits of the sufficiency measure. Barriers to sufficiency policy implementation, on the other hand, include top-down approaches that do not involve local governments, citizens, or civil society organisations, disinformation as well as lobbying by influential players on top of the lack of the listed enabling factors. It is concluded that to mainstream sufficiency practices, behaviour change needs to be made easy. Low carbon diets, sufficient mobility and housing practices require adapted infrastructures and policies to have a large impact. The adoption of appropriate targets and instruments requires political will at the national and local levels. It is suggested that pilots should be conducted and assessed, the policy debate should be opened to all stakeholders, adequate support should be given and the communication should focus on multiple benefits taking into account affordability as a key enabler. Finally, further independent research is needed on the link between the perception of sufficiency measures and socio-demographic factors to facilitate a better understanding of enabling factors for various parts of the population and consequently allow for a more effective sufficiency policy design that is met with acceptance by citizens.

Introduction and Overview

Purpose of this Document

This report serves to summarise the findings of task 5.2 of the FULFILL project, which aims to analyse the role of policies and governance measures in the diffusion of sufficiency lifestyles at the macro level. Looking at 16 case studies of national sufficiency policies that have been implemented or debated across Denmark, France, Germany, Italy and Latvia this report identifies key barriers and enablers in the implementation of these policies. A comparative analysis between the policies sheds light on the factors that drive and inhibit successful implementation of sufficiency policies taking into account the varying national contexts and social acceptability of the policies.

Project Summary

The project FULFILL takes up the concept of sufficiency to study the contribution of lifestyle changes and citizen engagement in decarbonising Europe and fulfilling the goals of the Paris Agreement. FULFILL understands the sufficiency principle as creating the social, infrastructural, and regulatory conditions for changing individual and collective lifestyles in a way that reduces energy demand and greenhouse gas emissions to an extent that they are within planetary boundaries, and simultaneously contributes to societal well-being. The choice of the sufficiency principle is justified by the increasing discussion around it underlining it as a potentially powerful opportunity to actually achieve progress in climate change mitigation. Furthermore, it enables us to go beyond strategies that focus on single behaviours or certain domains and instead to look into life-styles in the socio-technical transition as a whole. The critical and systemic application of the sufficiency principle to lifestyle changes and the assessment of its potential contributions to decarbonisation as well as its further intended or unintended consequences are therefore at the heart of this project. The sufficiency principle and sufficient lifestyles lie at the heart of FULFILL, and thus constitute the guiding principle of all work packages and deliverables.

Project Aim and Objectives

- To achieve this overarching project aim, FULFILL has the following objectives:
- Characterise the concept of lifestyle change based on the current literature and extend this characterisation by combining it with the sufficiency concept.
- Develop a measurable and quantifiable definition of sufficiency to make it applicable as a concept to study lifestyle changes in relation to decarbonisation strategies.
- Generate a multidisciplinary systemic research approach that integrates micro-, meso-, and macro-level perspectives on lifestyle changes building on latest achievements from research into social science and humanities (SSH), i.e. psychological, sociological, economic, and political sciences, for the empirical work as well as Prospective Studies, i.e. techno-economic energy and climate research.
- Study lifestyle change mechanisms empirically through SSH research methods on the micro- (individual, household) and the meso-level (community, municipal):
 - achieve an in-depth analysis of existing and potential sufficiency lifestyles, their intended and unintended consequences (incl. rebound and spillover effects), enablers and barriers (incl. incentives and existing structures) as well as impacts (incl. on health and gender) on the micro level across diverse cultural, political, and economic conditions in Europe and

in comparison to India as a country with a wide range of economic conditions and lifestyles, a history which encompasses simple-living movements, and a large potential growth of emissions.

- assess the dynamics of lifestyle change mechanisms towards sufficiency on the meso-level by looking into current activities of municipalities, selected intentional communities and initiatives as well as analysing their level of success and persisting limitations in contributing to decarbonisation.
- Integrate the findings from the micro and meso-level into a macro, i.e. national and European, level assessment of the systemic implications of sufficiency lifestyles and explore potential pathways for the further diffusion of promising sufficiency lifestyles.
- Implement a qualitative and quantitative assessment of the systemic impact of sufficiency lifestyles which in addition to a contribution to decarbonisation and economic impacts includes the analysis of further intended and unintended consequences (incl. rebound and spillover effects), enablers and barriers (incl. incentives and existing structures) as well as impacts (incl. on health and gender).
- Combine the research findings with citizen science activities to develop sound and valid policy recommendations contributing to the development of promising pathways towards lifestyle
- Generate findings that are relevant to the preparation of countries' and the EU's next NDCs and NDC updates to be submitted in 2025 and validate and disseminate these findings to the relevant stakeholders and institutions for exploitation.
- Consider the relevance and potential impacts of sufficiency lifestyles beyond the EU.

1 Theoretical Framework

FULFILL understands the sufficiency principle as creating the social, infrastructural, and regulatory conditions for changing individual and collective lifestyles in a way that reduces energy demand and greenhouse gas emissions to an extent that they are within planetary boundaries, and simultaneously contributes to societal well-being. This definition of sufficiency emphasises the need for social, infrastructural, and regulatory conditions that enable lifestyle change.

The literature review of this project further expands on this definition by acknowledging that sufficiency is not just a matter of personal investment decisions and individual behaviour change but instead stresses that infrastructures and social frameworks are necessary to support changes in habits that last¹. In line with the classification derived from Sahakian and Wilhite (2014)², throughout the FULFILL project and this report, we therefore differentiate between **sufficiency habits** (sufficiency measures taken by individuals due to permanent lifestyle changes), **sufficiency infrastructures** (physical and non-physical infrastructures enabling sufficiency habits), and **sufficiency societal frameworks** (institutions, legislation, norms enabling sufficiency habits).

Based on this assumption, this deliverable investigates the role of policies (sufficiency societal frameworks), which shape sufficiency infrastructures in the diffusion of sufficiency lifestyles (sufficiency habits) by examining barriers and enablers in the implementation of 16 exemplary sufficiency policies that have been implemented or are being discussed in France, Germany, Latvia, Italy, or Denmark. The research thereby aims to shed light on the key barriers and enablers in the implementation of these policies, taking into account varying national context and social acceptability.

Successful policy implementation that leads to a policy achieving the desired effect depends on various factors including organisational elements such as policy design, mobilised resources, and stakeholder engagement as well as the context in which a policy is implemented³. Social acceptability of a given policy is further influenced by fairness considerations as has been shown by a recent OECD study. The study demonstrates that public approval of climate policies is centred around the perception of the policy's impact on inequalities, its perceived effectiveness in achieving emission reductions and how it is understood to affect people's self-interest⁴. Building on these findings, a questionnaire has been developed to analyse each sufficiency policy collecting information on its organisational implementation factors, context and evaluating its impact on both people and the environment.

¹ Lorenzo Pagliano and Silvia Erba, "Literature Review for Analysis of Lifestyle Changes" *Fulfill Project*. December 2022. <https://fulfill-sufficiency.eu/wp-content/uploads/2022/12/D2.1-Literature-Review.pdf>.

² Sahakian, M., & Wilhite, H. (2014). Making practice theory practicable: Towards more sustainable forms of consumption. *Journal of Consumer Culture*, 14(1), 25–44. <https://doi.org/10.1177/1469540513505607>

³ Mthethwa, R.M. "Critical dimensions for policy implementation." *African Journal of Public Affairs* 5, no. 3 (2012): 5-18, https://repository.up.ac.za/bitstream/handle/2263/20618/Mthethwa_Critical%282012%29.pdf?sequence=1&isAllowed=y

⁴ Dechezleprêtre, A., et al. (2022), "Fighting climate change: International attitudes toward climate policies", Documents de travail du Département des Affaires économiques de l'OCDE, n° 1714, Éditions OCDE, Paris, <https://doi.org/10.1787/3406f29a-en>.

2 Methodology

2.1 Selection of Policies

As a first step, every national partner (WI, EURAC, NW, POLIMI, Inforse, ZALA) selected three sufficiency policies per country. The only exception is Italy, where one extra local policy was added to the three required ones. This was due to two Italian partners working on 5.2 (POLIMI and EURAC), so more human resources have been available for Italy than for the other countries. The selection criteria for the policies has been established in discussion with the task leaders from T3.3 and T5.1, as well as all partners involved in task 5.2 to ensure the policy analyses can be embedded smoothly in the FULFILL bigger picture and the results used by other work packages. The following selection criteria have been established:

First, the three policies should comprise one food policy, one housing policy and one policy that was freely chosen. The first two were meant to allow for a comparison between the European countries studied and to gain insights into how national context affects policy implementation. The third one was meant to highlight policies that are not (yet) present in the other European countries to leave room for inspiration which sufficiency policies might be possible.

For the food policy, it was possible to narrow the category down to policies that aim to introduce more vegetarian or climate friendly meals in public institutions or the discussion of a similar policy in case such a measure was not existent in each country. The food policy category has been chosen due to the high impact of diets on both climate and well-being, which makes for an interesting sufficiency case study as will be elaborated upon in the following chapter. Previous FULFILL work packages have further identified diets as an area of specific interest for the FULFILL research, to which this report can contribute.

For the housing policy, the policies turned out to be of a much wider range, since sufficiency in the housing sector can be addressed through various strategies including co-housing, eco-villages or water tariffs. It has therefore been decided to separate the analysis of the food policies in this report to allow for a comparison between similar policies in chapter 3 and then combine the housing and the freely chosen policies in the second part chapter 4. Most of the freely chosen policies address mobility. This approach allows for an in-depth comparison of similar sufficiency policies in the food sector followed by broader insights into which factors might drive or inhibit sufficiency policy implementation across sectors.

On top of the sectors, further selection criteria for the analysed policies included that the policies analysed were supposed to have a **big impact**, which means they should address frequent behaviour, affect a large number of the population, or address high emissions. Their **implementation should further be likely**, which means the policies should already be implemented or a public discussion should have developed around its potential implementation. Each national partner also tried to combine **different types** of policies such as monetary, regulatory or informational policies. Additionally, the policies should respond to **barriers identified in FULFILLs empirical work in WP3** and be **transferable** across countries as opposed to policies that only apply to a specific local context. Moreover, the selected policies were supposed to address **structural change**, be **inclusive and gender-sensitive** and **include both older and newer policies**, so that for the older ones impact assessments could be available but currently debated issues were not overlooked.

2.2 Questionnaire

To allow for a comparative analysis between 16 sufficiency policies across 5 European countries and shed light on the key barriers and enablers in the implementation of these policies, as a first step, each sufficiency policy has been analysed individually using a framework that has been developed by the task leader (JDI).

As part of the framework, a questionnaire has been developed based on the literature outlined above to guide the analysis. It consisted of three parts collecting information on **1) the organisational factors of the policy implementation, 2) the context in which the sufficiency policy has been implemented and 3) an evaluation of its impact on both the environment and people.** The evaluation aimed to take into account multiple benefits, social acceptability and pay specific attention to the gender dimension.

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

--

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Objective(s) of the policy (and associated success metric if available):
Status of the policy (implemented, debated, rejected):
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

Context:

How is the implementation of this policy influenced by the national context?

<p>Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)</p>
<p>Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?</p>
<p>Policy enforcement: How is the policy enforced? By whom? Is it effective?</p>
<p>Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?</p>
<p>Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in in the adoption of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?</p>

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

<p>Success: Has the policy reached the intended objective?</p>
<p>Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):</p>
<p>Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)</p>

<p>Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?</p>
<p>Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?</p>
<p>Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)</p>
<p>Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?</p>

2.3 Desk Research and Interviews

With the aim to shed light on the questions established above, each national partner conducted both **desk research** and at least three **semi-structured interviews** per policy and country. The desk research included a qualitative analysis of the policy at hand through studying laws and regulations, decision-making processes and policy debates, impacts assessments, media coverage and further useful material. After a first desk research phase, each national partner was asked to identify questions for which the desk research had not provided sufficient information, which might be due to factors such as missing data, conflicting information, or varying points of view.

To fill the identified information gaps, to expand on the desk research and potentially confirm (some of the) findings, **at least three semi-structured interviews** have been conducted in each country for each policy with key stakeholders such as policymakers, journalists, members of citizens' organisations, or consumer organisations. In the choice of interview partners, each national partner tried to cover a variety of different views with the three interviews. This involved engaging individuals from different organizations and distinct positions within the policy landscape. For instance, one interview might involve a policymaker, while another could feature a representative from a citizen's organization or lobbying group and the third might include the policy's initiator. However, the availability constraints of potential interviewees constrained our ability to choose interview partners.

In preparation for the interviews, the interviewers provided the respondents with information about the FULFILL project, outlining its objectives and the expectations for the interview. This proactive approach ensured that interviewees were adequately informed about the project and the subject of energy sufficiency. Before conducting interviews, all interview subjects were asked to complete and sign a **consent form**, ensuring they understood the use of the information shared. Consent forms, along with related documents, were securely stored in accordance with GDPR principles. The interviews were only recorded if prior consent of the interviewees had been given. In case no consent had been given, the interviewers took notes instead, which they used to fill in the questionnaire laid out above. Both the recordings and the notes were then stored in accordance with GDPR principles.

3 Food Policy Measures

Food policies as sufficiency measures

Eating less animal products is the single biggest lever to reduce a person's impact on the environment, given the large environmental impact of animal protein compared with plant protein. To illustrate, moving to a vegan diet has the potential to reduce the land use of food by 76%, including a 19% reduction in arable land, food's greenhouse gas emissions by 49%, acidification by 50%, eutrophication by 49%, and scarcity-weighted freshwater withdrawals by 19%⁵. On top of that, previous work of this project shows that diet constitutes the largest part of the carbon footprints of average individuals in the countries studied by the project, even though it has to be noted that data on flying has been excluded from the assessment due to the COVID-19 pandemic induced travel restrictions⁶.

Besides its environmental benefits, changing to a diet that contains few animal products and is rich in plant-based foods such as vegetables, fruit, legumes (beans, lentils, chickpeas etc.) and nuts also proves **health benefits**⁷. This dual benefit of a plant-based diet for the environment and people's health, makes reducing animal products a fruitful ground for sufficiency intervention, since sufficiency is about both planetary boundaries and people's well-being. As has been discussed in the theoretical framework, we assume that to enable the sufficiency habit of eating more plant-based diets that include less animal products, sufficiency infrastructures and a sufficiency societal framework are needed. We thus use a structuralist viewpoint that supposes that social institutions and circumstances influence individual's food options, and choices⁸.

3.1 Comparative Analysis

The food sufficiency policy measures compared in this chapter, aim at the introduction of more vegetarian or climate friendly meals in public canteens or schools. In the case of **Germany**, an additional policy aiming at the abolition of VAT on healthy and climate-friendly foods has been analysed on top of the debate around a vegetarian day in public canteens. The policies vary in scope and ambition as well as implementation status. The detailed individual analyses can be found in the annex of this report. In the following the measures are briefly summarised:

For **France**, the analysed policy measures include a test run of providing one vegetarian menu per week in school canteens as well as the introduction of a daily vegetarian option in cafeterias of public institutions. Both measures result from the EGALIM law *for balanced trade relations in the agricultural sector and healthy, sustainable food*, which has been implemented in 2018.

⁵J.Poore, T. Nemececk "Reducing food's environmental impacts through producers and consumers", Science, AAAS, February 2019 https://ora.ox.ac.uk/objects/uuid:b0b53649-5e93-4415-bf07-6b0b1227172f/download_file?file_format=application%2Fpdf&safe_filename=Poore_and_Nemececk_2018_Reducing_foods_environment_impacts.pdf&type_of_work=Journal+article

⁶ FULFILL deliverable 3.1, forthcoming.

⁷ https://eatforum.org/content/uploads/2019/07/EAT-Lancet_Commission_Summary_Report.pdf

⁸ Monterrosa EC, Frongillo EA, Drewnowski A, de Pee S, Vandevijvere S. Sociocultural Influences on Food Choices and Implications for Sustainable Healthy Diets. Food and Nutrition Bulletin. 2020;41(2_suppl):59S-73S.

doi:[10.1177/0379572120975874](https://doi.org/10.1177/0379572120975874)

In **Denmark**, a similar mix of measures aiming at introducing more climate-friendly meals in public canteens has been analysed. It includes official nutritional guidelines, the guarantee of vegan options, and the introduction of one or two vegetarian meals per week in public canteens.

The **Italian** case study consists of an ongoing pilot project by a hospital, which introduces an exclusively plant-based (vegan) meal one day of the week exclusively for staff.

The **Latvian** policy measure consists of the departure of the ban of serving vegetarian meals in school canteens that was in place until 2018. Today, children can receive vegetarian meals that have been evaluated by a nutritionist or dietician if there is a written request from their parents or legal guardian.

National context

The following analysis of sufficiency policies will include an examination of the national contexts and hence, the existing infrastructures and social frameworks that influence eating habits across France, Germany, Latvia, Denmark and Italy. Based on these contexts, the comparative analysis will shed light on barriers and enablers in the implementation of sufficiency measures aiming at introducing more plant based food in public canteens such as schools that have been discussed or implemented in the five countries studied.

To start with the context and in which the policies unfold, in all five countries studied, the average diet today is heavily based on meat and animal products. The share of vegetarians, pescetarians and vegans in all five countries remains marginal. According to the survey conducted in WP3, Germany has the highest share of vegetarians/ pescetarians and vegans with 9%. Italy comes second with 5%, followed by Denmark (4%) and finally France and Latvia (3%)⁹. In accordance, animal and animal product consumption per capita is high. The yearly meat consumption per person is highest in France (79.20 kg) and Germany (79.18 kg), followed by Italy (71.32 kg), Latvia (70.35 kg) and Denmark (63.31 kg) with a slightly decreasing trend. In global comparison, the United States has the highest meat consumption per capita with 126,74 kg and the Democratic Republic of Congo lowest with 3,13 kg per person.¹⁰

Comparing across countries, a strong determinant of how much meat is consumed per person is wealth (see graph 2). Many countries have seen an increase in meat consumption per person as a side effect of economic growth. This is further illustrated by the drop in meat consumption in the 1990s in Latvia, which can be partly attributed to the economic transition that followed the dissolution of the USSR. India is an exception, as meat consumption per person stayed almost the same between 1961 and 2013, when consumption slowly started to rise¹¹. The tendency for an almost constantly low meat consumption in India seems to be rooted in religious and cultural reasons, as all major religions practised in India have some

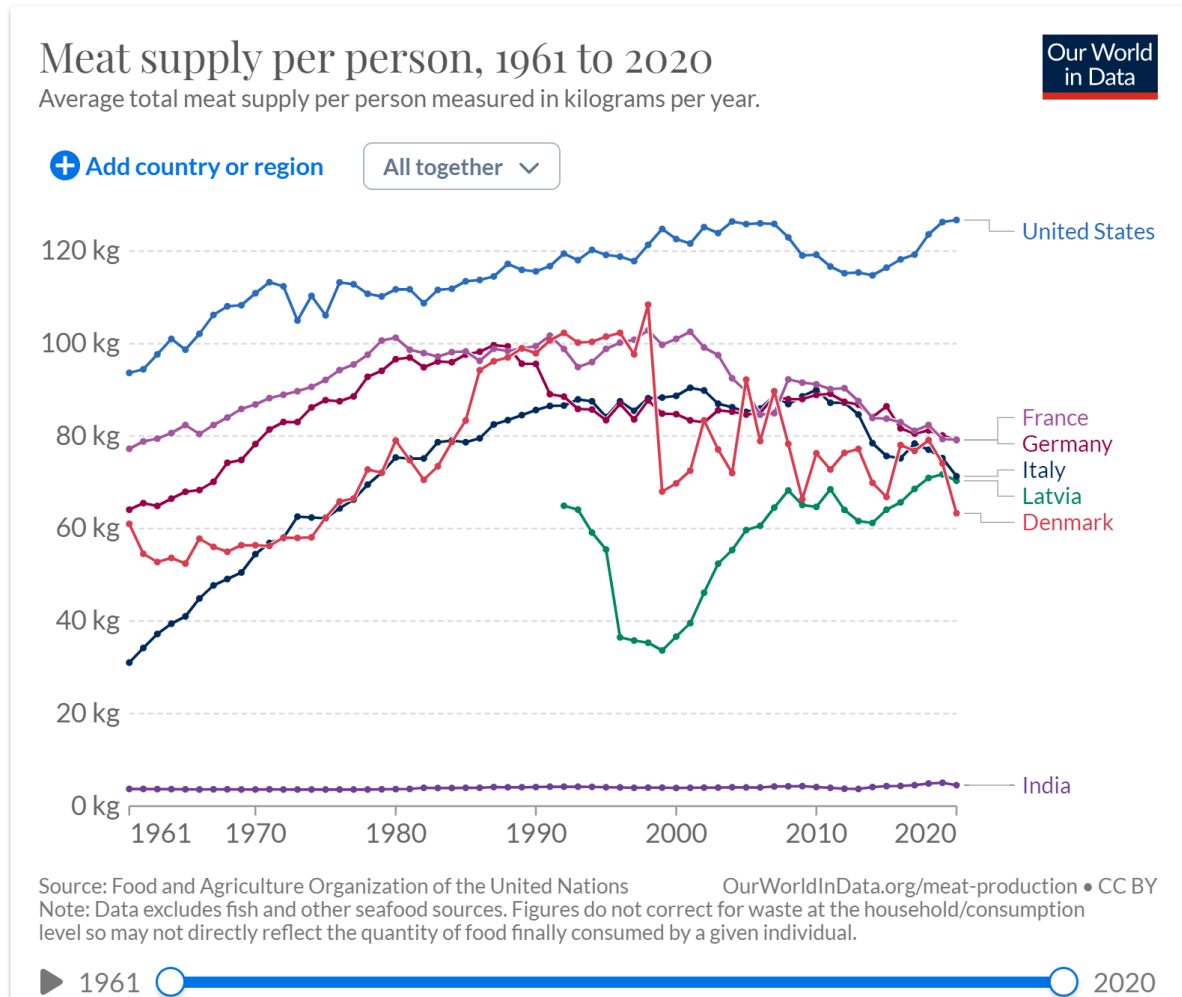
⁹ FULFILL deliverable 3.1, forthcoming.

¹⁰ Hannah Ritchie, Pablo Rosado and Max Roser (2017) - "Meat and Dairy Production". Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/meat-production>

¹¹ Hannah Ritchie, Pablo Rosado and Max Roser (2017) - "Meat and Dairy Production". Published online at OurWorldInData.org. Retrieved from: <https://ourworldindata.org/meat-production>

form of restrictive dietary rules and traditions and 81% of grown-ups actively limit their meat consumption¹².

Graph 1 Meat supply per person, 1961-2020¹³



¹² Neha Sahgal, Jonathan Evans, Ariana Monique Salazar, Kelsey Jo Starr and Manolo Corichi, "Religion in India: Tolerance and Segregation", Pew Research Center, June 2021, https://www.pewresearch.org/religion/wp-content/uploads/sites/7/2021/06/PF_06.29.21_India_full_report.pdf

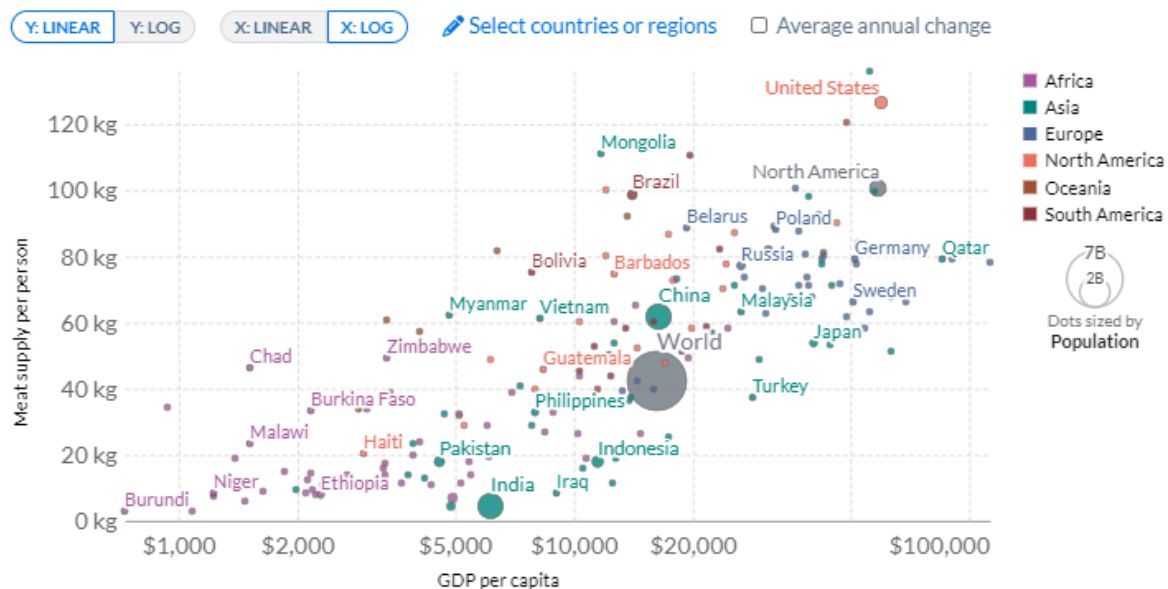
¹³ Hannah Ritchie, Pablo Rosado and Max Roser (2017) - "Meat and Dairy Production". Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/meat-production'

Graph 2 Meat consumption vs. GDP per capita, 1961-2020¹⁴

Meat consumption vs. GDP per capita, 2020

Average meat consumption per capita, measured in kilograms per year versus gross domestic product (GDP) per capita measured in constant international-\$. International-\$ corrects for price differences across countries. Figures do not include fish or seafood.

Our World in Data



Source: Food and Agriculture Organization of the United Nations; Data compiled from multiple sources by World Bank
OurWorldInData.org/meat-production • CC BY

Changing culinary habits seems to be more difficult than establishing other sufficiency habits as has been confirmed in a survey conducted by the 1.5 degrees lifestyle project¹⁵. This might partially be due to food being closer to people's heart and identity than other sufficiency habits such as turning off the light. Dietary choices can be seen as an expression of cultural meaning and identity¹⁶. With many culinary traditions being based on animal products and most traditional dishes in all five countries including meat and/or animal products, successfully implementing policies that counteract such traditions can be challenging and evokes especially emotional debates. At the same time, in Western countries where supermarkets and other shops offer a broad variety of products, consumers have a high level of freedom to choose non-meat products for cooking.

However, it is important to question the perception of what is considered a traditional diet. Over the past decades, animal product consumption has risen substantially in Europe¹⁷. While in the 1960s, the major protein source for European's diets was plants, today, up to

¹⁴ Ibid.

¹⁵ Vadovics, Edina, Jessika Richter, Maren Tornow, et al. "Preferences, Barriers and Enablers of 1.5° Lifestyles: Findings from Citizen Thinking Labs in Five EU Countries." SCORAI Conference, Wageningen, Netherlands, 2023. https://onepointfive.lifestyle.eu/sites/default/files/attachment/2023-07/SCP2023conf_CTLpaper.pdf.

¹⁶ Monterrosa EC, Frongillo EA, Drewnowski A, de Pee S, Vandevijvere S. Sociocultural Influences on Food Choices and Implications for Sustainable Healthy Diets. Food and Nutrition Bulletin. 2020;41(2_suppl):59S-73S. doi:[10.1177/0379572120975874](https://doi.org/10.1177/0379572120975874)

¹⁷ González, N., Marquès, M., Nadal, M., and Domingo, J. L. "Meat Consumption: Which are the Current Global Risks? A Review of Recent (2010-2020) Evidences." Food Research International 137 (2020): 109341. <https://doi.org/10.1016/j.foodres.2020.109341>.

58% of consumed proteins stems from animal products¹⁸. Since then, the meat consumed per year per European has increased by 60%¹⁹. Globalisation, modern technologies, food marketing and the increase in wealth discussed above all have contributed to major changes in people's dietary patterns. The resulting "modern" diet is higher in meat consumption, produces more food waste and is less sustainable than European's diets used to be²⁰. Thus, although there are many traditional dishes in European countries that contain animal products, the overall amount of meat and animal products consumed per person has been, traditionally, much lower.

Today, the culinary landscape in all project countries is heavily based on animal products. Infrastructures and legislation reinforcing that preference include for example a less numerous and sometimes less appealing vegetarian offer in many restaurants and public canteens or the advantageous positioning of meat based meals in canteens at the very beginning. The price of food also influences consumption choices. Subsidies for animal products and livestock farming, for example, in Germany, incentivise animal production consumption and the resulting low prices do not account for adverse societal side effects such as health and environmental costs²¹. Such **infrastructures** make choosing vegetarian meals outside the home the less convenient choice, if at all possible. Thus, active opting out of eating animal products is often required instead of an active choice to eat meat and dairy products. This is in line with German interviewees describing the eating habits of the German population as reactive to what is on offer instead of the result of deliberate reflection. With the status quo in all five countries being a diet rich in animal products, policies aiming to change that are likely to face opposition due to the **status quo bias**. The status quo bias is a well established concept in behavioural economics which refers to an inclination for people to prefer things as they are even if a change could improve their situation²².

¹⁸ Bonnet, Céline, Zohra Bouamra-Mechemache, Vincent Réquillart, and Nicolas Treich. "Regulating meat consumption to improve health, the environment and animal welfare." *Food Policy* 97 (2020): 101847. <https://doi.org/10.1016/j.foodpol.2020.101847>.

¹⁹ Hannah Ritchie, Pablo Rosado and Max Roser (2017) - "Meat and Dairy Production". Published online at OurWorldInData.org. Retrieved from: '<https://ourworldindata.org/meat-production>

²⁰ Sproesser, Gudrun, Matthew B. Ruby, Naomi Arbit, et al. "Understanding Traditional and Modern Eating: The TEP10 Framework." *BMC Public Health* 19 (2019): 1606. <https://doi.org/10.1186/s12889-019-7844-4>.

²¹ Beermann, Ann-Cathrin et al. "Zehn klimaschädliche Subventionen im Fokus." Forum Ökologisch-Soziale Marktwirtschaft (FÖS) e.V., 2020. <https://foes.de/publikationen/2020/2020-11-FOES-10-klimaschaedliche-Subventionen-im-Fokus.pdf>.

²² Lang, Corey et al. *Environmental Research Letters*, May 2021, <https://iopscience.iop.org/article/10.1088/1748-9326/abeeb0/pdf>

3.2 Enablers and Barriers to dietary sufficiency policies

Given such contexts that favour meat and animal product consumption, successful implementation of sufficiency policies for introducing more plant-based diets is both necessary for the sufficiency habit to be enabled and likely to be difficult. Based on the case studies, several barriers and drivers have been identified, which can serve policy makers to successfully implement dietary sufficiency policies in the future. In the following, enabling and inhibiting factors are listed starting with **actors**, followed by **implementation strategies and instruments**.

3.2.1 Actors

National governments, municipalities and local governments

Governments can be important enablers or barriers to create the necessary sufficiency infrastructures and societal framework that enable more plant based nutrition. Given the wider reach of national policies compared with local regulations, the potential of national governments to reduce the environmental footprint and improve people's health through regulating animal product consumption in public canteens is clear. In France, the EGALIM law for *balanced trade relations in the agricultural sector and healthy, sustainable food*, which has been implemented in 2018, provides an example of a national policy that constitutes an enabler for more sufficient diets that has a broad impact. The law bundles a variety of policy measures including a two-year pilot phase of one weekly vegetarian menu in schools as well as a daily vegetarian option in public institutions. Conversely, national governments' negative impact on the adoption of more sufficient diets can be significant as can be illustrated by a Latvian national government regulation, which prohibited children in schools to consume meals without meat up until 2012. Even now, vegetarian meals are only allowed if there is a written request from parents or legal guardians, limiting the consumption of vegetarian meals in schools all across Latvia.

Despite the greater reach of national policies, the influence of municipalities should not be underestimated in the implementation of sufficiency policies. In both Germany and Denmark, implementing national solutions for more plant-based diets in public canteens have proven difficult whilst many sufficiency initiatives for more plant-based diets on municipal level exist. For example, a German city council decided to only serve vegetarian lunches to children in day-care centres and primary schools, going much further than the national legislative proposal for one vegetarian meal a week. This shows that municipalities can enact changes that might not be feasible on a national level. Likewise, municipalities need to be taken on board when national sufficiency policies are supposed to be implemented smoothly. To illustrate this, in France, the proposal to expand the provision of vegetarian meals in public canteens to more days has been opposed by powerful local authority networks that object to state intervention on their local level. This is in line with the findings from D4.4. that show the importance of involving local stakeholders, such as members of municipalities, at the early stages of the decision-making process in order to favour a successful implementation of sufficiency policies. The work on the cooperation between municipalities and sufficiency initiatives conducted in WP4 further emphasises the positive effect of municipalities long term planning and goals aligning with measurable results of the initiatives. In line with that, in Germany, the inclusion of environmental considerations of school meals in city monitoring reports has been identified to positively

influence the implementation of measures that introduce more vegetarian meals in schools. It can be concluded that including sufficiency and related concepts in city's and region's strategies and monitoring guidelines can enable sufficiency policy implementation.

Businesses and Lobbies

Big agricultural lobbies and industrial pressure groups including meat product processors, meat-packaging companies and petrochemical companies all have an interest in averting policies that reduce animal product consumption. These pro-meat consumption lobbies and companies are active across the EU and present wealthy and influential players. For example, the European Livestock and Meat Trades Union (UECBV), which includes national federations representing livestock markets, livestock traders, meat traders and meat industry, criticised the EU's Farm to Fork strategy, which aims at a fair and sustainable food system that provides healthy food as part of the Green Deal²³²⁴. In their position paper²⁵, they questioned meat's negative impact on the environment, which has been established in countless scientific studies²⁶²⁷ as well as its health implications. The health advantages of less meat intensive diets that are high in fruit and vegetables, plant protein, healthy fats and whole grains, has likewise been established in various scientific studies²⁸²⁹.

Civil society demand and activism

As opposing forces to the businesses and lobby groups, civil society groups and activists such as the Vegetarian Society of Denmark, or the Latvian NGO "Animal Freedom (Dzīvnieku Brīvība)" act as important enablers for dietary sufficiency policies. Advocating for more plant-based diets, they lobby among politicians and share knowledge about the environmental benefits, the impact on animal welfare and personal health of vegetarian diets and thereby strengthen acceptance of dietary sufficiency policies. When contrasting civil society activist groups with meat industry and big agricultural lobbies, it is important to underline the power imbalance between these actors. The lobbying power of animal product advocates is much larger than that of pro-vegetarian activist groups or supporters of meat-alternative products. To illustrate, a recent study found that spending on lobbying activities for the animal product sector is three times larger and receives 1200 times

²³ European Livestock and Meat Trades Union, "UECBV Position Paper on Farm to Fork Strategy," March 2020, 1-6, accessed September 7, 2023,

<http://www.uecbv.eu/UECBV/documents/UECBVPOSITIONPAPERFARMFORKSTRATEGYF2FGreenDeal20038.pdf>.

²⁴ European Commission, "Farm to Fork Strategy," Food Safety, accessed September 7, 2023, https://food.ec.europa.eu/horizontal-topics/farm-fork-strategy_en.

²⁵ European Livestock and Meat Trades Union, "UECBV Position Paper on Farm to Fork Strategy," March 2020, 1-6, accessed September 7, 2023,

<http://www.uecbv.eu/UECBV/documents/UECBVPOSITIONPAPERFARMFORKSTRATEGYF2FGreenDeal20038.pdf>.

²⁶ J. Poore, T. Nemecek "Reducing food's environmental impacts through producers and consumers", Science, AAAS, February 2019 https://ora.ox.ac.uk/objects/uuid:b0b53649-5e93-4415-bf07-6b0b1227172f/download_file?file_format=application%2Fpdf&safe_filename=Poore_and_Nemecek_2018_Reducing_food_environmental_impacts.pdf&type_of_work=Journal+article

²⁷ Gibbs, Joshua. Cappuccio, Francesco P. "Plant-Based Dietary Patterns for Human and Planetary Health", National Library of Medicine, April 2022, [Gibbs J, Cappuccio FP. Plant-Based Dietary Patterns for Human and Planetary Health. Nutrients. 2022 Apr 13;14\(8\):1614.](https://pubmed.ncbi.nlm.nih.gov/35411111/)

²⁸ Ibid.

²⁹ Willer, Walter. "Healthy Diets From Sustainable Food Systems", EAT Lancet Commission, https://eatforum.org/content/uploads/2019/07/EAT-Lancet_Commission_Summary_Report.pdf

more public funding in the EU compared to the sector of innovative technologies that produces alternatives to animal products, such as veggie patties or plant milk³⁰.

Political tendencies of opponents and supporters

On a party level, it seems that conservative parties have the tendency to be opposed to the introduction of vegetarian diets in public canteens whilst liberals and left wing parties are more likely to be in favour. To illustrate, in Denmark, especially left-wing/green parties have been advocating for policies focusing on plant-based meals. In Italy, conservative parties questioned the validity of the initiative to introduce vegetarian meals in a hospital whereas, parties aligned with environmental concerns supported the initiative. In France, this tendency can also be observed in voter's attitudes: the willingness to reduce the consumption of animal protein is higher in left-leaning voters than in people who favour right-wing parties³¹.

Socio-demographic factors

Younger citizens appear to be more open towards the introduction of vegetarian meals in school canteens than older generations. For example, in schools in Latvia the vegetarian menu has been well received by students but less so by parents. The same holds true in German schools, where teachers and parents disapproved of the introduction of vegetarian meals whereas pupils responded predominantly positively. The situation gradually changed when the teaching staff underwent a generational shift. Wealthy urban citizens seem to display a greater acceptance of vegetarian meals, as highlighted by data from France³². More in-depth sociological studies on the link between acceptance of the introduction of more plant-based diets and socio-demographic factors such as income, occupation, education, family status etc. could facilitate a better understanding of enabling factors for various parts of the population and consequently, allow for a more effective policy design for sufficiency measures.

Gender

According to the survey carried out in WP3, on average, men eat more meat than women and are less likely to be vegetarians³³. Consequently, men are impacted by dietary policies that aim to reduce meat consumption more so than women. On top of that, males seem less likely to be willing to reduce their meat consumption than females. For France, this assumption has been confirmed by a study, which finds that 60% of men are willing to reduce their meat consumption as compared to 73% of women³⁴. This is in line with the culturally gendered perception linking meat to masculinity³⁵. In particular, meat seems to be associated with traditional notions of masculinity, which is understood to be characterised

³⁰ Vallone, Simona and Lambin, Eric F. 2023. "Public policies and vested interests preserve the animal farming status quo at the expense of animal product analogs." *One Earth*, 5 (2): 217-231. <https://doi.org/10.1016/j.oneear.2023.07.013>.

³¹ "Les Français, la consommation écoresponsable et la transition écologique", Ifop pour WWF France, October 2017, https://www.wwf.fr/sites/default/files/doc-2017-10/171010_sondage_wwf_ifop_agriculture%202.pdf

³² Gouvernement. "Etude d'impact - Projet de loi portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets." February, 2021.

³³ FULFILL deliverable 3.1, forthcoming.

³⁴ Ibid. https://www.wwf.fr/sites/default/files/doc-2017-10/171010_sondage_wwf_ifop_agriculture%202.pdf

³⁵ Paul K. Piff et al., "Meat, Morals, and Masculinity," *Personality and Social Psychology Bulletin* 37, no. 6 (2011): 732-742, <https://www2.psych.ubc.ca/~heine/docs/2011meatmorals.pdf>.

by “competitiveness, strength, suppression of emotions, and rejection of femininity”³⁶. In this context, it is important to emphasise the difference between self-rated gender as opposed to physical sex in influencing meat consumption behaviour. The readiness to reduce meat consumption seems to decrease the more men identify with traditional masculinity³⁷. Likewise, men identifying more strongly with new forms of masculinity, which question stereotypically male norms and privileges, appear more likely to reduce their meat consumption³⁸. In line with this, the case studies revealed that, in Germany, barbecuing is understood to be a male activity, a notion that has been reinforced by advertising and magazines such as “Beef: men cook differently”³⁹. In France, the introduction of vegetarian meals in schools has been opposed with the argument that vegetarian meals might put boys at risk.

Experts

Nutritional experts and scientists seem to work as enablers for dietary sufficiency policies in that they debunk myths about the missing nutritional values of vegetarian meals. The misbelief that meat based diets were healthier than vegetarian or vegan diets is widespread across all 5 countries studied, even though they run counter to countless scientific studies establishing the health benefits of more plant-based diets^{40,41}. In Denmark, this uncertainty has been found to inhibit authorities to introduce dietary sufficiency policies, as they are afraid to make recommendations that prove unsafe, for example introducing food options, which might lack certain essential vitamins, fats or proteins. To counteract this lack of knowledge, which constitutes a barrier to dietary sufficiency policies, education on the nutritional value of plant-based diets based on independent expertise has been found to be an important driver of a successful implementation of reduced meat consumption policies. Official nutritional guidelines by independent scientists can further help reduce uncertainty and strengthen social acceptability of dietary sufficiency policies in the general public as well as amongst kitchen staff in public canteens.

³⁶ Stanley, S.K., Day, C. & Brown, P.M. Masculinity Matters for Meat Consumption: An Examination of Self-Rated Gender Typicality, Meat Consumption, and Veg*nism in Australian Men and Women. *Sex Roles* 88, 187–198 (2023). <https://doi.org/10.1007/s11199-023-01346-0>

³⁷ Ibid.

³⁸ De Backer, Charlotte, Sara Erreygers, Charlotte De Cort, Frederic Vandermoere, and Alexander Dhoest. 2020. “Meat and Masculinities. Can Differences in Masculinity Predict Meat Consumption, Intentions to Reduce Meat and Attitudes Towards Vegetarians?” *Appetite* 147: 104559. doi:10.1016/j.appet.2019.104559.

³⁹ BEEF! Manner Kocher Anders, <https://www.beef.de/>

⁴⁰ Willer, Walter. “Healthy Diets From Sustainable Food Systems”, EAT Lancet Commission, https://eatforum.org/content/uploads/2019/07/EAT-Lancet_Commission_Summary_Report.pdf

⁴¹ Gibbs, Joshua. Cappuccio, Francesco P. “Plant-Based Dietary Patterns for Human and Planetary Health”, National Library of Medicine, April 2022, [Gibbs J, Cappuccio FP. Plant-Based Dietary Patterns for Human and Planetary Health. *Nutrients*. 2022 Apr 13;14\(8\):1614.](https://pubmed.ncbi.nlm.nih.gov/35411111/)

3.2.2 Strategies for policy implementation

Policy Instruments: the difficult balance between bans and softer measures

People tend to be opposed to bans and prefer softer instruments such as dietary guidelines, even if the outcome is the same (i.e. less meat consumption in public canteens). For example in Denmark, nutritional guidelines for public kitchens that focus on serving less meat, more vegetables and legumes (lentils, beans etc.) and reducing dairy products in meals have the potential to drastically reduce the amount of animal products consumed without specifically banning meat based meals one or a few days a week. To illustrate the unpopularity of bans, in Germany, an attempt by the Green party to implement one day of exclusively vegetarian meals in public canteens failed spectacularly with the help of the tabloid press that campaigned "The Greens want to ban us from eating meat!"⁴². Following this campaign, the German Green party has emerged as the loser from the federal elections and the topic of implementing dietary changes with laws and regulation has since cautiously been avoided by policy makers in Germany. This incident also underlines the power of the media, which can act as a barrier if it is used to stir up people's fear instead of raising awareness based on scientific consensus. Consequently, policy action to steer behaviour change should be designed with a holistic approach, not relying on single instruments such as ban-only, or incentives-only, but a coherent mix thereof.

Communication focusing on multiple benefits

In line with the unpopularity of bans, positive communication that focuses on the multiple positive effects seems to drive acceptance of sufficiency policies. Especially benefits that do not concern the environment such as health benefits seem to drive acceptance of sufficiency policies. Communication strategies that are being considered for these reasons in Germany include labelling meat-free days in canteens "health-conscious days" or introducing "regional food days" that focus on strengthening local producers instead of communicating about the absence of animal products. In France, secularism has been used as an argument in the debate surrounding the introduction of a daily vegetarian offer in public canteens. This non-environmental focus has the potential to invite actors that might not be in favour of vegetarianism for ecological reasons to endorse the proposal of plant-based meals in schools.

Pilots / implementation experience

Piloting, sharing best practices and positive role models seem to be important drivers for the successful implementation of dietary sufficiency policies. Given the oftentimes strong emotional opposition to the introduction of dietary policies on a national level, positive examples on a local level can have an important role model effect that foster social acceptance of sufficiency policies. In Latvia, the successful introduction of vegetarian meals in contradiction to the law prescribing that meat shall be included in all school meals was decisive in overturning the law. Being able to present several years of positive experience with vegetarian school meals enabled a successful lawsuit by the school to be allowed to continue to serve vegetarian meals. In France, several pioneer cities have voluntarily implemented vegetarian menus in their schools, which has contributed to a change of perception in the feasibility and acceptability of the policy idea. Likewise, following a

⁴² "Die Grünen wollen uns das Fleisch verbieten!", BILD, August, 5th, 2013, <https://www.bild.de/politik/inland/vegetarisch/gruene-wollen-einmal-die-woche-in-kantinen-fleisch-verbieten-31661266.bild.html>

successful initiative of an Italian hospital to introduce vegetarian meals, several other hospitals want to follow suit demonstrating the potential of a grassroots approach to exert regional influence. Further enabling role models for the introduction of plant-based meals seem to be famous advocates for plant-based diets such as politicians or celebrities, as well as cooking shows that normalise using plant-based ingredients.

Stakeholder Involvement

Engaging stakeholders in the policy implementation process drives social acceptance of sufficiency policies. As an illustration, the successful introduction of the weekly mandatory vegetarian menu in French schools was supported and ranked in the top 10 of preferred policy options in an online survey consulting citizens ahead of the implementation of the policy. In contrast, the disastrous attempt to introduce a veggie day in Germany went ahead without public stakeholder involvement, which is understood to be part of the reason why the tabloid press was successful in framing the idea as a top-down ban that needs to be averted. In Denmark, stakeholder involvement focused specifically on employees of kitchens and canteens who have been actively involved in the implementation of the dietary guidelines that are considered a success even if their application remains voluntary. Involving kitchen staff through training seems to be important for the successful implementation of sufficiency policies, as many employees lack the knowledge of how to put into practice vegetarian dietary requirements. This is especially important given that taste of vegetarian meals drives acceptance whereas the lack of tasty alternatives hinders social acceptability.

Availability of attractive and affordable alternatives

Availability of attractive and affordable alternatives is key. For the introduction of more plant-based food in public canteens to be a success, it is important that the offered meals constitute a balanced, healthy and tasty alternative to a meat dish. Just leaving out the meat and serving what are usually the sides of a meat dish (carbohydrates and vegetables) does not make for an attractive meal and lacks important proteins. Plant-based proteins, such as chickpeas, beans, nuts, or tofu, have been associated with a more positive health effect than animal products⁴³. Besides the attractiveness of vegetarian meals for taste and health reasons, their accessibility beyond public canteens is a key enabler of more plant-based diets. Reducing costs for healthy plant-based food items, as is currently discussed in Germany through a VAT reduction, can help make plant-based food accessible for everyone. The acceptance of VAT reduction policies is naturally very high, even though the risk that the reductions are not passed on to the consumers' needs to be managed. Reducing subsidies for animal products or livestock farming, or including their environmental costs and costs in public health spending could increase the price of animal products and further lead to a reduction in consumption. However, such policies need to be carefully designed not to disadvantage low-income households disproportionately.

⁴³ Ferrari, Luca, Stefan-Alexandru Panaite, Antonella Bertazzo, and Francesco Visioli. 2022. "Animal- and Plant-Based Protein Sources: A Scoping Review of Human Health Outcomes and Environmental Impact" *Nutrients* 14, no. 23: 5115. <https://doi.org/10.3390/nu14235115>

4 Housing and mobility policies

Housing and transport account for approximately 70% of European household's carbon footprint⁴⁴, rendering sufficiency measures in these sectors a relevant object of study. The housing and mobility sufficiency policies analysed in this paper push for a variety of solutions, therefore making the sectoral comparative approach challenging, as opposed to the food policies studied in the previous section that were homogenous in terms of measure (vegetarian meal offer in institutional catering). This is partly because sufficiency policies are still in their infancy, and therefore not evenly adopted and implemented across Europe. It also illustrates the diversity of possible approaches towards the same decarbonisation goals. A comparative analysis remains relevant if we consider these policies under the umbrella of measures that support a change of practices. In the following, the studied policies will be summarised. For the individual analyses, please see the annex of this report.

Overview of the studied policies (see detailed analyses in annex)

The sufficiency policies studied in the field of housing and mobility aim at fostering consumption shifts away from the currently dominant patterns:

As regards mobility emissions:

- reducing the use of cars for most travels by:
 - limiting parking space in cities through a change in federal law to allow regions to abolish obligations of car parking spots associated to buildings in Germany,
 - creating a low emission zone in Riga (Latvia),
 - developing cycling infrastructure in Danish municipalities,
- addressing the rising emissions from aviation through a ban on short-distance flights in France

As regards housing emissions:

- reversing the trend of:
 - increasingly larger houses and rising average floor area per capita with a tiny house project in Roseborg, Denmark
 - under-occupation of houses by addressing the single-family home paradigm that hinders the emergence of co-housing and community living in France
- limiting the destruction of green areas with new buildings as an answer to the lack of affordable housing by promoting the recovery of abandoned buildings in Milan, Italy
- fostering fairer and more frugal energy and water consumption through the implementation of progressive tariffs that ensure a reasonable price for baseline consumption levels and charge overconsumption (over the baseline) with higher tariffs
- addressing the poor energy performance of multi-apartment buildings in Latvia. Although more related to energy efficiency policies, this qualifies as sufficient if we consider the improvement of living conditions in smaller surface and co-housing projects would support limitations of housing space per capita, since Soviet period multi-apartments buildings tend to be smaller than multi-apartment buildings in other regions in Europe.

⁴⁴ Ballesteros, Juan Ramón García, and Miguel Cardoso. "Measuring the CO2 Footprint of European Households." BBVA Research, December 2022. https://www.bbva.com/wp-content/uploads/2022/12/EW22_12_Measuring-the-CO2-Footprint-of-European-Households.pdf.

4.1 Comparative Analysis

The analysed policies are at different stages of implementation, with the low emission zone in Riga still at the concept stage, the feasibility study being stalled, while the recovery of unused buildings in Milano is up and running, with more than 50 buildings soon to be available for new activities and users. Most policies are however quite recent, from a few months old like the French ban on short-distance flights or the change in federal law in Germany to allow regions to limit car parking spaces, to a few years, like the Danish cycling infrastructure improvement push.

In all case studies, sufficiency policies focus on solutions that remain marginal, and still face many hurdles. However, the fact that they are now on the political agenda itself is a success. The following section will highlight the enablers and barriers to the further dissemination of sufficiency practices.

4.2 Enablers and Barriers

4.2.1 Actors

National governments

The political will of national governments is an important enabler of sufficiency measures due to the regulatory, financial and technical power they usually hold. For example, the goal of improving cycling infrastructures in Denmark will be implemented at the local level, but municipalities' investments are constrained by national rules, and hence depend on national budgetary decisions. In Germany, lifting car parking space obligations at the regional level is dependent on a change in national federal law, which shows how reforms at the national level can be necessary to enable change on a more local level. As another example, the Latvian programme of renovation for multi-housing apartments, which will particularly benefit the capital Riga, is co-financed by the EU Recovery Fund. This reflects the political will to make renovation a priority, since the recovery plans were decided by national governments with limited engagement of other stakeholders. The steps taken towards the implementation of a low emission zone in Riga also show that the awareness of transport emissions among policy-makers at the national level is rising. Lastly, in Italy, decisions on water pricing policy are made at the national level.

Conversely, the lack of political will at the national level can be detrimental to the scale-up of sufficiency policies. In Denmark, the minister of transport signed a declaration to increase cycling and created a steering committee including various stakeholders and civil society organisations such as the Danish Cyclist Federation. Such a body can influence future policies, yet implementation activities still seem to be missing, which reduces its impact and shows the limits of government commitment. In France, the extreme precaution from policy-makers with regards to policies that could disrupt mobility habits is reflected in the lack of ambition of the ban on short-distance flights, which will only concern a few lines, hence have limited impact on shifting practices. In Italy, despite a lively debate and strong civil society support for a reform of water markets, the lack of political will on the national level hinders progress on this file.

Municipalities and local governments

Municipalities can be strong advocates for greater sufficiency policies, act as early-movers and support policy change at the national level. The interest from local authorities to develop sufficiency policies is a key driver for adoption at the municipal level, as illustrated by the momentum for co-housing, especially with elders, and eco-communities in France, municipal support for renovation in Riga, Latvia, Milano's plan for the reuse of abandoned buildings which already allowed for the repurposing of 50 buildings, or the many Danish

municipalities that ask for more national funding for cycling infrastructures. Many sufficiency policies will eventually depend on local implementation, such as the Riga low emission zone, which relies on targets and directions given in Riga's development programme for 2022 - 2027. The low emission zone project also benefited from the local Energy Agency initiative to implement a "Sustainable Energy and Climate Action Plan". Yet, municipalities have more limited resources than national governments to implement sufficiency policies. In Milano, the office responsible for the identification of unused buildings is overworked, and Danish municipalities that want to improve their cycling infrastructure to support the national objective of increased cycling share in mobility depend on national budgetary decisions.

On the other hand, municipalities can also hinder sufficiency policies. In Riga, fragmented political support within the city council is deemed responsible for the stalled implementation of the low emission zone. Some Danish municipalities prefer to support cars instead of biking infrastructures, while some French local authorities oppose the ban on short-distance flights because it would negatively impact their economic activity and regional attractiveness. As noted by Négawatt (see annex), the local level has a significant influence on national policy-making, even in a centralised country such as France. They can hinder or facilitate new policies, and therefore need to be consulted and included at the early stages of the policy-making process in order to ensure their concerns are taken into account.

Businesses

Lobbies seem to have a strong influence on mobility-related policies. In Germany, the car industry is a very influential player that opposes changes in urban law to preserve mandatory car parking spaces. Similarly, the car lobby seems to be blocking some of the efforts to develop more cycling infrastructure in Denmark. In France, the airline industry joined some local authorities in opposing the ban on short-distance flights, and managed to weaken the initially ambitious proposal stemming from the French Citizen Convention on Climate. The participating citizens had proposed a ban on flights for which a train alternative exists for journeys up to 4h, instead of 2h30.

The roots of the alliance between lobbies and local / national authorities or political groups against sufficiency change should be investigated. While a part of lobbies' claims just relate to industrial interests in the fossil fuel industry, some stakeholders express valid concerns around loss of jobs, activity and attractiveness that can have a negative impact on the social and economic fabric of territories. Accompanying change will be a key element of a just and socially acceptable transition. Airline and car industries will have to undergo some profound transformations that should be anticipated with solutions collectively designed with the affected people.

Businesses were only mentioned as opposition forces to sufficiency measures in the case studies, but this could be due to opponents being most vocal, especially powerful industries such as car and air travel industries. This does not necessarily mean that businesses are per se opposed to sufficiency, but may rather illustrate the fact that pro-sufficiency businesses are less structured, smaller, and hence have less capacity to make their voice heard. One can think of cycling manufacturers, cycling shops, renovation companies, or co-housing projects.

Experts - only mentioned as enablers

The role of planning professionals has been particularly highlighted in mobility related sufficiency policies. A consensus of planning professionals around the creation of a low emission zone in Riga, Latvia, acted as an enabler, but more could be done in terms of research to strengthen the policy design. In Germany, city planners no longer plan cities around cars, facilitating change away from the conventional car-centric paradigm.

Social demand from the civil society

Social demand from civil society appears as a driving force of sufficiency policies. The tiny house experiment in Rosbord, Denmark, illustrates an increasing interest and demand for sustainable living. The Danish Cyclist Federation played a critical role in getting a larger national budget for cycling infrastructure, with the inclusion of cycling lanes in the 2022 - 2035 infrastructure plan, while asking for 10% of the transport infrastructure budget instead of the final 2%. The civil society also largely supports cycling policies. In Riga, the engagement of civic organisations asking for improved mobility solutions and higher public space quality contributes to the political momentum in favour of the low emission zone. The ban on short-distance flights in France was backed by an increased awareness of the population on the need for climate action on aviation, together with support for regulation of short distance flying and increasing social justice motives. Besides, the deliberative democracy exercise of the Citizen Convention on Climate concluded with a consensus on the measure.

Yet, civil society support is not enough to enact strong sufficiency policies, partly because of some powerful opposing stakeholders (businesses, local authorities), but also because despite civil society organisation's activism, there is still a lack of awareness on some topics, such as co-housing in France and Italy, or tiny housing in Denmark. Currently, no organisation focusing on tiny living that could unify the varying views of what tiny housing communities are or should be exists in Denmark. Yet, the capacity of advocacy seems critical to raise awareness and put new ideas and practices on top of the political agenda. Finally, some topics simply remain controversial, such as the need to reduce car use in Germany. Some voters do not want to give up their cars, have safety concerns for night travels, despite the shift in behaviour and culture in other parts of the population. In Riga, protests against the zoning of the low emission zone is a barrier to implementation.

More sociological studies on the determining factors of a positive or negative attitude towards a new practice or infrastructure, and on the different enabling factors for the various parts of the population (depending on where they live, their occupation, their income level or family status) would enable a better understanding and hence policy design on sufficiency. Several policies studied in the case studies originated from NGOs or individual initiatives and advocacy, showing the critical role of the civil society in piloting and mainstreaming sufficiency. However, acceptance of sufficiency is not evenly distributed across social groups. Wealthier and more educated citizens tend to favour more sufficiency, despite the fact that they tend to emit more carbon than less well-off households do. This is an illustration of the core issue of social justice for social acceptability of sufficiency policies, which imperatively need to be taken into account in policy design⁴⁵. In line with the findings from FULFILL deliverable 3.2⁴⁶, constraints should be put on the policy direction, while leeway should be given to people and local authorities on how to achieve the objective while providing adequate technical, and financial support. The forthcoming article by several members of the FULFILL consortium "Who is sufficient? The social determinants of sufficiency and its policy implications" will further investigate this link.

Gender

Little information on the gender dimension of the analysed sufficiency policies is available, confirming the need for more sociological studies on the factors influencing sufficiency policy perception. In terms of housing policies, tiny houses are suggested to

⁴⁵ Dechezleprêtre, A., et al. (2022), "Fighting climate change: International attitudes toward climate policies", Documents de travail du Département des Affaires économiques de l'OCDE, n° 1714, Éditions OCDE, Paris, <https://doi.org/10.1787/3406f29a-en>.

⁴⁶ Aurore Flipo and Sabine Rabourdin, "In-depth analysis of highly sufficient lifestyles," *Fulfill Project*, July 2023, https://fulfill-sufficiency.eu/wp-content/uploads/2023/07/D3.2_interviews-micro.pdf.

potentially have a positive influence on gender equality in Denmark, since more opportunities to buy smaller and cheaper homes might benefit women who currently own less houses than men and earn less money. However, this has yet to be confirmed by scientific research. In the case of mobility, improved cycling infrastructure in Denmark seems to be used by women more than men, while limiting the use of cars and short distance flights in France has the potential to rebalance carbon footprints between men and women since there seem to be more male than female users, especially concerning frequent flyers. In Germany, the gender dimension is mostly discussed in terms of public transport safety. It is crucial to prioritize safety concerns when designing and planning alternative modes of transport to avoid e.g. poorly lit bicycle lanes, bus stops, or train stations and allow people of all genders to feel safe outside of the privacy of their cars. The lack or provision of safe alternatives to travelling by private car presents an important barrier or enabler of more sufficient forms of transport.

Cost

Cost is a key determining factor for all actors. Who will bear the costs and who will benefit is a central question in climate policies. Housing renovation in Latvia is motivated by the lack of affordable housing built after the 2000s, leading to a shortage of dwellings, which can be a driver for improving the existing building stock, given renovations are usually less costly than building new apartments. However, costs can also constitute a barrier given high renovation costs, low willingness of banks to grant loans, and the problem of covering the remaining costs, which can lead to rent increase after renovation and fears of “renovictions”, which describes the eviction of dwellers due to a planned renovation of their apartment building. In Denmark, despite their smaller size and lower running costs, tiny houses appear to be still quite expensive, in part because of high land costs, which diminishes their attractiveness in the absence of public support.

4.2.2 Strategies for policy implementation (tools, instruments etc.)

Strategy

Strategy (or the lack thereof) is a key element of the uptake of a sufficiency practice or infrastructure facilitating sufficiency. Denmark has no strategy on tiny housing and lacks a unified definition of what it is and its purpose. In France, co-housing has not been prioritised and is not part of a comprehensive policy effort. It therefore lacks sufficient understanding and consideration within administrative and social housing bodies. Similarly, in Italy, it is called for a regenerative urban planning approach towards abandoned buildings to fulfil the need for reconversion of co-housing policies. A clear strategy would not necessarily fully solve this issue, but could contribute to addressing this gap. Riga’s housing policy guidelines for 2024 - 2030 include energy efficiency as a major direction and this gives a policy signal to administration and stakeholders. In Riga, the low emission mobility zone is backed with objectives to double the rate of cyclists by 2027, reduce car use by 5%, increase the use of public transportation, and reduce transport emissions by 22%. Yet, this vision needs a concrete action plan that is still missing to become reality, and different conceptions of the project have not yet been reconciled. It is therefore a necessary but insufficient first step. This is in line with the findings from D4.4, which suggest that the inclusion of sufficiency or climate targets in municipalities long-term planning can have a positive effect on local sufficiency initiatives.

Infrastructure

Existing and future infrastructure influence individual choices and social acceptability of sufficiency policies. In France, co-housing is hindered by the predominance of the

individual property based paradigm, which is reflected in the fact that most real estate projects do not include co-housing considerations. In Denmark, upgrading road infrastructure for safer bike travel leads to an increase of up to 23% of bike traffic. Reducing the place of cars in cities, be it in Germany, Denmark or Latvia, requires the improvement of public transport services, the deployment of cycling lanes and footpaths. If something is taken away, citizens should be offered more options and alternatives in return. The investment gap in Latvia and other case studies lead to lower quality of alternative infrastructure and reduced choice for citizens, hence lowering social acceptability of policy change. The fact that France has an already well-developed national railway network with high-speed trains is identified as a major enabler of the reduction of short-distance flights, and sustained investment in this infrastructure is part of the way forward.

Financing

Financing the right infrastructure and providing incentives can facilitate sufficiency.

- **EU funds:** Riga's low emission zone started with a funding for a pre-study on a low emission zone, and the EU recovery fund created a favourable investment context with investments in cycling lanes and e-buses in the region of Riga. The EU recovery fund is also a significant enabler of Riga's housing renovation projects. However, the project lacks the sufficient scale to achieve 2030 objectives of renovating 2000 buildings. Other funding streams need to be explored.
- **National funds or schemes:** In Denmark, cycling infrastructure at the municipal level depends on the availability of national funding, to cover 40% to 50% of investment costs. The lack of funding led to a decline in bike use between 2014 and 2019 despite a clear national strategy. Without resources, policies are unlikely to be enacted. Tax benefits could be an additional measure to support cycling. Yet in France, the lack of a dedicated financial mechanism for co-housing is not addressed by the introduction of a new tax credit for intergenerational flat sharing (ELAN law). Banks still lack trust in the projects and remain reluctant in funding it, suggesting the need for greater public support.

Pilots / implementation experience

Piloting and ex-post policy evaluation appear critical in supporting new policy designs.

In Germany, community initiatives promoting alternative modes of transport and different use of parking space fuelled the momentum for new practices. In Riga, successful previous EU cooperation and research projects related to mobility hubs created some space for the launch of the low emission zone. Yet, the delay in reaching the first project milestone and delivering the preliminary study is a key barrier. Beyond the issues with the contracting firms, the stalled situation seems to be partly linked to the lack of political support within the city council, and potential fears of public backlash. Disjointed political support could be overcome with the creation of dedicated bodies, as suggested in the case of co-housing in France, to increase consideration of the topic and support exemplary projects. Similarly, the ban of short-distance flights could go forward with the experimentation of the ban on some international lines coupled with an ex-post assessment. Evidence shows that policy support can increase once a policy is in place. This calls for a more systematic piloting, evaluation and sociological approach to increase policy-makers' understanding of stakeholders constraints and reaction depending on their specific / individual factors. Ex-post studies should be widely publicised to share co-benefits, good practices, and improve the initial policy.

Regulation

Regulation often reflects the current dominant social paradigm. New practices or conceptions of energy use can require amendments or new definitions of legal status, as



exemplified by the legal hurdles faced by cohousing and shared space projects in France due to the absence of a clear legal definition. Similarly, tiny houses are not favoured by the Danish regulation and the public administration in Italy is unable to influence sufficient housing practices due to a lack of a regulatory framework for shared housing in Italy. On the other hand, a change of regulation can be an acknowledgement of new emerging paradigms, such as the change in regulation in Germany to enable differentiated car parking space obligations depending on local conditions and to adapt to municipal development strategies. Regulations related to health or other policy areas can also enable sufficiency policies. The obligation to address urban air pollution fostered low emission zones across Europe, including in Riga. This shows the importance of considering co-benefits as key levers in adopting new regulations in favour of sufficiency. Facilitating the adoption of ambitious policies in Member States can be facilitated by similar moves at the EU level or in other Member States, such as the ban on short-distance flights. Acceptability and consistency could require to include international connections in the scope, hence requiring international coordination and willingness to act, at least among the concerned destinations. Good regulation should also use simple and not too restrictive criteria that will be easy to understand and flexible enough to adapt to a real life context. This holds, for example, for the selection of airlines to be suppressed, but also for low emission zones. Lastly, EU regulation can facilitate sufficiency policies, as shown by the air pollution policy that supported the diffusion of low emission zones, or can accommodate it, as demonstrated with the ban on short distance flights, which was approved as compatible with EU law, although with limitations.

Coordination across instruments

Coordination across instruments: a comprehensive policy mix is required to achieve the best results. In France, the lack of a comprehensive approach in solving the administrative and financial hurdles that remain in the way of cohousing explains the small impact of the law, despite some progress. In Riga, the impact of the renovation policy is limited by the absence of targeting of the worst performing buildings, which are often considered dangerous for inhabitants. Yet the lack of access to funding constrains people's ability to undertake renovations. To address this, the municipality could take over these buildings for renovation, yet no consensus has been achieved on this idea so far. Similarly, the low emission zone in Riga uses a technical approach only. Without integrated social policies, part of the complexity of the project is not addressed and risks of social backlash reduce the political interest in completing the project. In Denmark, the increased target for cycling use is not reflected in budget allocation for municipalities to build up cycling infrastructure, despite the clear link between the improvement of safety with cycling lanes expansions and the uptake of bicycles. Besides, beyond the improvement of supporting policy instruments coherence, hindering policies should also be revised. In the case of cycling policies in Denmark, this means phasing out tax incentives for cars, and rebalancing financing because large public infrastructure budgets are still granted to roads for cars. In France, public subsidies for domestic airlines⁴⁷ can be as high as 600€ per passenger in 2021⁴⁸.

Communication / knowledge:

Communication and knowledge are key to fostering change in social norms. As regards the reduction of car parking space in Germany, in addition to the build-up of alternatives, they should be massively advertised and their advantages emphasised. Marketing strategies would enhance the uptake of alternatives once available. In France, the lack of awareness

⁴⁷ Gardner de Béville, Eric, "Voici pourquoi l'aérien reste bien moins cher que le train", Challenges, August 17th, 2021, https://www.challenges.fr/economie/voici-pourquoi-l-aerien-reste-bien-moins-cher-que-le-train_777171

⁴⁸ "Jusqu'à 600 € de subventions publiques par passager sur la ligne aérienne entre Quimper et Paris", ouestfrance, June 20th 2023, <https://www.ouest-france.fr/economie/transports/avion/jusqua-600-euros-de-subventions-publiques-par-passager-sur-la-ligne-aerienne-entre-quimper-et-paris-d9c7de96-0eae-11ee-ac50-49f0bcb2afc>



about the benefits of cohousing could be addressed by national assessment whose results would be broadly communicated. The challenge is thus both to improve our expert knowledge, especially about the co-benefits of the policies, the barriers faced by users for adoption of new practices, and the wide diffusion of this scientific knowledge with attractive marketing campaigns.



5 Conclusion

Drivers and Barriers for the implementation of sufficiency policies

Looking at 16 case studies of national sufficiency policies that have been implemented or are debated across Denmark, France, Germany, Italy and Latvia this report identified key barriers and enablers in the implementation of sufficiency policies. A comparative analysis between food policies as well as housing and mobility measures shed light on factors that drive and inhibit successful implementation of sufficiency policies taking into account the varying national contexts and social acceptability of the policies. **Enablers** of sufficiency policies that are identified include a coherent policy mix with appropriate supporting measures, affordable and attractive alternatives and enabling infrastructure, appropriate financing, stakeholder engagement, successful piloting, education and positive communication with a focus on co-benefits of the sufficiency measure. **Barriers** to sufficiency policy implementation, on the other hand, include top-down approaches that do not involve local governments, citizens, or civil society organisations, disinformation as well as lobbying by influential players on top of the lack of the listed enabling factors. The following table lists the main drivers and barriers for the implementation of sufficiency policies:

Table 1 Drivers and Barriers of sufficiency policies

Drivers	Barriers
Policy Design	
<ul style="list-style-type: none"> Coherent policy mix 	<ul style="list-style-type: none"> Conflicting or inconsistent policies (e.g. sufficiency policy combined with tax reductions for non-sufficient behaviour)
<ul style="list-style-type: none"> Sufficiency measure as part of a bigger strategy, long-term planning 	<ul style="list-style-type: none"> Fragmented approach
<ul style="list-style-type: none"> Appropriate policy mix including supporting measures 	<ul style="list-style-type: none"> Bans without appropriate support measures or flexibility
<ul style="list-style-type: none"> Appropriate financing 	<ul style="list-style-type: none"> Unavailability of financial instruments to implement the sufficiency measure Costs distributed in a socially unjust way
<ul style="list-style-type: none"> Successful piloting projects with ex-post assessments, sharing best practices 	

<i>Acceptance</i>	
<ul style="list-style-type: none"> ● Offer of affordable and attractive alternatives and enabling infrastructure 	<ul style="list-style-type: none"> ● Lack of affordable and attractive alternatives and missing infrastructure
<ul style="list-style-type: none"> ● Stakeholder engagement <ul style="list-style-type: none"> ○ Taking municipalities and cities on board ○ Engage citizens and civil society organisations ○ Include businesses 	<ul style="list-style-type: none"> ● Deciding top-down and not involving players such as local governments and municipalities, citizens, businesses, civil society organisations and trade unions
<ul style="list-style-type: none"> ● Positive communication <ul style="list-style-type: none"> ○ Focus on multiple effects, e.g. health 	<ul style="list-style-type: none"> ● Fear of bans and inflexible measures
<ul style="list-style-type: none"> ● Activism, advocacy work of NGOs and civil society players 	<ul style="list-style-type: none"> ● Lobbying by influential players with large resources
<ul style="list-style-type: none"> ● Engaged individuals 	<ul style="list-style-type: none"> ● Opposed individuals, protest
<ul style="list-style-type: none"> ● Advocacy by political parties 	<ul style="list-style-type: none"> ● Opposition by political parties

Policy recommendations

To mainstream and democratise sufficiency practices, behaviour change needs to be made easy. Low carbon diets, and sufficient mobility and housing practices require adapted infrastructures and policies to become widespread. The adoption of appropriate targets and instruments requires political will at the national and local levels. Political will can originate from a combination of the following factors:

- Independent expertise in favour of policy change, highlighting the benefits, evaluating the costs
- Successful pilots coupled with ex-post assessments

The NECPs' update, which is due by June 2024 represents the opportunity to strengthen sufficiency policy planning. Building on the analyses of sufficiency policies carried out in this report, the following recommendations are proposed to be included:

Policy Design

- **Enable citizens to meaningfully influence decision making:** Given that sufficiency policies aim to reduce overall resource use while ensuring well-being, a democratic approach that honours fairness and equity principles while protecting the most vulnerable is imperative for decisions on the distribution of limited resources. Citizen

assemblies have shown to be more inclined to support sufficiency policies than many governments. The National Energy and Climate Plans (NECPs) of several countries already include sufficiency measures. However, these measures are far fewer in number and less in ambition than those recommended by citizens' assemblies⁴⁹, which are representative mini-publics with a high degree of legitimacy⁵⁰. It follows that including more sufficiency measures in the NECPs and implementing more sufficiency policies should be met with high approval rates by citizens.

- **Strengthen multi-stakeholder involvement at an early stage and allow for meaningful participation in the policy-making process:** All affected stakeholders including local governments and municipalities, citizens, civil society organisations, trade unions and businesses should be included in the policy debate before the implementation of a policy. By including affected stakeholders in decision-making processes, policy acceptance increases and stakeholders are given transparency and planning security for their activities in relation to regulatory changes in the future⁵¹.
- **Strengthen expertise:** Fill the knowledge gap on the link between the acceptance of sufficiency measures and socio-demographic factors such as age, education, income, urban-rural etc. Such data derived from independent research including sociological studies can facilitate the understanding of the determining factors of positive or negative attitudes towards a new practice or infrastructure for various parts of the population. Consequently, it allows for a more effective sufficiency policy design that is met with acceptance by citizens and takes into account varying needs and sensitivities. The recent Ipsos study conducted for RTE in France can provide inspiration for such an endeavour⁵².
- **Piloting:** Before implementing sufficiency policies on a large scale, the measures should be tested through piloting projects with ex-post assessments, which allow for an improvement of the policy before its wider implementation. Local piloting projects allow the sharing of best practices and can be used to counter the status quo bias, a well established concept from behavioural economics which refers to the inclination for people to prefer things as they are even if a change could improve their situation⁵³.

Policy implementation

- **Affordability is a key enabler of sufficiency policy.** Climate goals are conditioned to people's financial capacity to afford alternatives at all levels including citizens, businesses, governments. This leads to the following recommendations:
- **Offer attractive and affordable alternatives and enabling infrastructure:** To increase acceptance of sufficiency policies and mainstream sufficiency habits, attractive

⁴⁹ CLEVER. CLEVER Energy Scenarios: A Pathway to a Climate-Neutral Europe by 2050. PDF. Brussels: CLEVER, 2023. https://clever-energy-scenario.eu/wp-content/uploads/2023/08/CLEVER_final-report.pdf.

⁵⁰ Jonas Lage, Johannes Thema, Carina Zell-Ziegler, Benjamin Best, Luisa Cordroch, and Frauke Wiese, "Citizens call for sufficiency and regulation — A comparison of European citizen assemblies and National Energy and Climate Plans," Energy Policy 2023 (2023): 114826, <https://doi.org/10.1016/j.enpol.2022.114826>

⁵¹ Thalberg K. 2022. "The Swedish energy transition. A race far from won", Policy brief, Paris: Jacques Delors Institute, 9 September.

⁵² Ipsos, Enquête Consommation & Production énergétique (Paris: Ipsos, 2023), 12, <https://www.ipsos.com/sites/default/files/ct/news/documents/2023-06/Ipsos%20RTE%20-%20Enque%CC%82te%20Consommation%20%26%20Production%20e%CC%81nerge%CC%81tique%20-%202023.pdf>.

⁵³ Lang, Corey et al. Environmental Research Letters, May 2021, <https://iopscience.iop.org/article/10.1088/1748-9326/abeeb0/pdf>

alternatives and enabling infrastructure needs to be made available. To achieve that, sufficiency should be included in long-term strategies such as city planning.

- **Highlight multiple benefits:** Communication on sufficiency policies should emphasize aspects beyond environmental benefits such as health benefits, improvement of well-being or strengthening of regional development.
- **Provide adequate support:** Sufficiency policies should be accompanied by adequate support measures including the provision of financial means, human resources, technical support and trainings to ensure a smooth implementation of the policy. When there is uneven capacity to act, adequate support should be provided where necessary and additional costs should be distributed fairly.
- **Provide support for affected industries:** The roots of the alliance between lobbies and local / national authorities or political groups against sufficiency change should be investigated. While part of lobbies' claims relate to industrial interests in the fossil fuel industry, some stakeholders express valid concerns around loss of jobs, activity and attractiveness that can have a negative impact on the social and economic fabric of regions. Accompanying change will be a key element of a just and socially acceptable transition. For example, airline and car industries will have to undergo some profound transformations that should be anticipated with solutions collectively designed with the affected people.

Outlook

Following the comparative analysis of 16 sufficiency policies across Europe, it can be concluded that to mainstream sufficiency practices, behaviour change needs to be made easy. Low carbon diets, sufficient mobility and housing practices require adapted infrastructures and policies to have a large impact. The adoption of appropriate targets and instruments requires political will at the national and local levels. It is suggested that citizens should be enabled to meaningfully participate in decision-making, pilots should be conducted and assessed, the policy debate should be opened to all stakeholders, adequate support should be given and the communication should focus on multiple benefits taking into account affordability as a key enabler. Finally, further independent research on the link between the perception of sufficiency measures and socio-demographic factors is needed to facilitate a better understanding of enabling factors for various parts of the population and consequently allow for a more effective sufficiency policy design that is met with acceptance by citizens.

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Annex: Case Studies

In the following, each policy measure will be presented separately as analysed by the project partners: Négawatt for France, POLIMI and EURAC for Italy, Inforce-EU for Denmark, the Wuppertal Institute for Germany and Zala Briviba for Latvia.

1. Dietary Polices

1.1 Dietary Policy: France - Vegetarian menus in schools and public cafeterias

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers:

- Growing awareness about the negative impacts of meat production
- Support in various forms by official authorities and civil society organisations to improve the implementation
- Multiple causes that can support the promotion of plant-based alternatives: better health, reduced religious discriminations, animal welfare, etc.
- Involvement of pioneer cities, catering, and chefs to demonstrate the feasibility
- Successful feedbacks and policy evaluation, which help to reduce the perceived risks

Barriers:

- Unfounded worries concerning impact on health
- Systematic involvement of pro-meat lobbies to denigrate meat reduction and suggest negative health risks
- Influence of powerful local authority networks who object to State intervention and request to be left free of self-organising their activities
- Insufficient chef training and availability of ingredients to prepare tasty and varied vegetarian meals

Potential solutions:

- Reinforcement of the independent expertise to assess the objections to more vegetarian food in catering
- Support to local authorities who voluntarily go beyond legal provisions

- Increased consideration for vegetarian cuisine in the education and training of chefs and catering staff
- Implementation of sanctions

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
EGALIM "Loi pour l'équilibre des relations commerciales dans le secteur agricole et une alimentation saine et durable" : <i>Law for balanced trade relations in the agricultural sector and healthy, sustainable food.</i>
Objective(s) of the policy (and associated success metric if available):
<p>The policy covered a broad range of agricultural and food topics, and in particular implemented two obligations:</p> <ul style="list-style-type: none"> • To serve at least one vegetarian menu per week in all school canteens, during a 2-year experiment starting in November 2019. • To offer at least one vegetarian option daily in cafeterias of state-owned buildings from January 2023. <p>It is important to note that the scope does not cover all of the public catering, nor the private sector.</p>
Status of the policy (implemented, debated, rejected):
Implemented, and perpetuated.
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
<p>The policy was adopted in November 2018.</p> <p>The obligation related to school canteens was foreseen for 2 years as an experiment, with a subsequent assessment. The 2021 Climate policy "Loi Climat et Résilience" has confirmed and perpetuated the EGALIM law requirements (but not extended the scope).</p>

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

Food and gastronomy are of particular importance in the French culture and lifestyles, with a significant role played by meat-based dishes. Meat consumption has steadily increased for centuries, reaching 90 kg/year per capita in 2000 (81 kg on average in Europe)⁵⁴, while vegetarian diets in the population and vegetarian menus in restaurants remained relatively niche. Food production represents about 20% of the national greenhouse gas emissions⁵⁵ and a carbon footprint of 2 tonnes of CO₂-eq per person⁵⁶, with meat being a large contributor. French Court of Auditors recommends to reduce French cattle to achieve climate objectives⁵⁷.

Some signs of change are noticeable since a decade. Meat consumption has seemingly started to slowly decline⁵⁸, although statistics are not easy to interpret⁵⁹. Surveys show that only 2% of the population was fully vegetarian in 2020⁶⁰, however 48% said they have reduced meat consumption and 30% are still willing to do so⁶¹. National nutrition guidelines have started including goals to reduce red meat consumption below 500 g per week⁶².

Concerning political parties, broadly speaking, the left is more pro-veg than the right/extreme right, and the center is more neutral. At the individual level, it is obviously more nuanced. The lobbies of the world of breeding and meat processing have a great influence.

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

⁵⁴ Agreste. "Synthèses Conjoncturelles". July, 2022. <https://agreste.agriculture.gouv.fr/agreste-web/download/publication/publie/SynCsm22394/consyn394202207-ConsoViande.pdf>

⁵⁵ CITEPA. "Emissions de gaz à effet de serre en France : bilan officiel 1990-2020". June, 2021. https://www.citepa.org/fr/2021_06_a10/

⁵⁶ Ministère de la transition écologique. "L'empreinte carbone de la France de 1995 à 2021". November, 2022. <https://www.statistiques.developpement-durable.gouv.fr/lempreinte-carbone-de-la-france-de-1995-2021>

⁵⁷ <https://www.ccomptes.fr/system/files/2023-05/20230522-S2023-0466-Soutiens-publics-eleveurs-bovins.pdf>

⁵⁸ ibid

⁵⁹ I4CE. "Non, la consommation de viande ne baisse pas". October, 2022. <https://www.i4ce.org/consommation-viande-climat/>

⁶⁰ IFOP pour FranceAgriMer. "Végétariens et flexitariens en France en 2020". May, 2021. <https://www.ifop.com/wp-content/uploads/2021/05/Synthese--Vegetariens-et-Flexitariens-en-France-en-2020-IFOP.pdf>

⁶¹ HARRIS Interactive. "La consommation de viande : quelles nouvelles attentes ?". February, 2021. <https://reseauactionclimat.org/wp-content/uploads/2021/02/note-harris-la-consommation-de-viande-reseau-action-climat.pdf>

⁶² Ministère de la Santé. "Programme national nutrition santé 2019-2023". <https://www.reseau-national-nutrition-sante.fr/fr/programme-national-de-l-alimentation-et-de-la-nutrition.html>

The policy is generally consistent with other pieces of legislation, such as the National energy and climate strategy, the National nutrition and health programme, or the 2021 National plant-based protein strategy. However, a new national decree in discussion in early 2023 regarding the quality of school catering and setting minimum levels of protein types to be served has raised concerns⁶³. It reveals that pro-meat attitudes remain strong among decision-makers.

The EGALIM policy did not include massive State funding to implement the law, as it is considered under the responsibility of local authorities (schools are in charge). Some national support has been progressively developed though, through a website⁶⁴, official guidelines and vegetarian cooking recipes⁶⁵. Despite this, some canteens have suffered from unpreparedness in the first years and would have welcomed more guidance.

A study on pioneering canteens has demonstrated that vegetarian menus are not necessarily more expensive to prepare and may even generate savings too⁶⁶. This might not be a universal rule though, and a generalisation of vegetarian menus to more places could be facilitated by incentives (such as reduced taxes on vegetarian and organic ingredients).

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The State is supposed to enforce the policy, although the 2-year experiment in school canteens did not foresee any control or sanction.

A monitoring by civil society watchdogs, such as vegetarian associations and Greenpeace France⁶⁷, indicated that by 2022 the overall level of conformity in schools seemed satisfactory (with only about 6% of them fully ignoring the law). Implementation appears to have been swifter and more satisfactory in primary than high schools.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

⁶³ https://www.lemonde.fr/idees/article/2023/02/25/le-gouvernement-doit-faciliter-la-mise-en-place-du-menu-vegetarien-et-non-l-entraver_6163271_3232.html

⁶⁴ <https://ma-cantine.agriculture.gouv.fr/>

⁶⁵ CNRC. "Expérimentation du menu végétarien". July, 2020. <https://www.restauration-collective.com/au-quotidien/2020-09-03-un-guide-experimentation-du-menu-vegetarien-par-le-cnrc/>

⁶⁶ Observatoire de la restauration collective bio et durable. "Résultats de l'enquête 2020". <https://observatoire-restauration-biodurable.fr/sites/default/files/OBSERVATOIRE-Principaux%20r%C3%A9sultats-2020.pdf>

⁶⁷ Greenpeace France. "Au menu des cantines". 2020. <https://www.greenpeace.fr/aumenudescantines/>

The policy is based on the Etats Généraux de l'Alimentation, a 5-month consultation in 2017 involving discussions and events with stakeholders of the food chain and the public.

An online survey, filled by 18,000 citizens, showed that a weekly mandatory vegetarian menu in schools was supported and ranked in the top 10 of preferred policy options⁶⁸.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adoption of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

Civil society organisations promoting vegetarianism have existed since the beginning of the 20th century, often closely related to social and labour movements⁶⁹. Alongside long-standing vegetarian associations (such as AVF), citizen organisations raising awareness on the impacts of meat are numerous, with a variety of motives (health, animal welfare, climate mitigation, etc.). Their *modus operandi* ranges from communication campaigns, spectacular stunts, to advocacy and training. The goal of reducing meat consumption has also been embraced by some political parties. Many of these organisations have questioned the amount of meat served in canteens and the perceived excessive influence of pro-meat lobbies in schools.

It is interesting to note that the premises for the EGALIM law provisions were not necessarily primarily fuelled by climate or health aspects, but secularism. Yves Jégo, a centre right-wing politician, suggested a bill in 2015 to ensure that a quality vegetarian option would be served daily in schools so that children from all religions would be served a suitable meal. Despite a petition exceeding 150,000 signatures⁷⁰ and support from several Members of Parliament, the idea was discarded at that time notably due to a strong opposition from pro-meat lobbies and federations of municipalities (who judged the policy proposal too prescriptive).

In the following years, an increasing number of pioneer cities have voluntarily implemented vegetarian menus in their schools, as a daily option or weekly menu for all⁷¹. This has contributed to a change of perception in the feasibility and acceptability of the policy idea.

⁶⁸ Ministère de l'Agriculture. "#EGalim - La restitution de la consultation publique". December, 2017.

<https://agriculture.gouv.fr/telecharger/88178>

⁶⁹ Hondermarck, Alexandra. "Evidence through inquiry: physicians and the promotion of vegetarianism in France and Belgium around 1900." *Histoire, médecine, et santé* (Summer, 2021). <https://doi.org/10.4000/hms.4529>

⁷⁰ <https://www.20minutes.fr/societe/1756319-20151226-petition-faveur-menu-vegetarien-cantines-scolaires-recueille-150000-signatures>

⁷¹ https://actu.fr/ile-de-france/montereau-fault-yonne_77305/alternative-menu-vegetarien-montereau_17057691.html

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

<p>Success: Has the policy reached the intended objective?</p>
<p>The implementation of a mandatory weekly vegetarian menu in schools has been officially evaluated after 2 years (end of the experimentation phase set by the policy)⁷².</p> <p>The assessment underlined implementation hurdles in the beginning, related to public reactions, the lack of preparation from the catering sector, specificities of vegetarian cooking and procurement, and the COVID crisis. However, there has been no significant signs of decreased attendance on vegetarian days, cost increases, higher food waste (except in some rural areas), or negative impacts on health. Overall, the implementation has been considered successful and the extension of the scope to other types of catering would not pose difficulties.</p> <p>In additional statements⁷³, the national agency for food and health safety has not seen any negative impact on children nutrition from well-balanced and quality vegetarian meals at school.</p>
<p>Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):</p>
<p>An official impact assessment study⁷⁴ has evaluated the carbon savings in the order of 0.15 Mt of CO₂-eq per year in collective catering. However, a review by environmental NGOs⁷⁵ considered the figure conservative and found up to 0.7 Mt, which could further double if the scope was extended to all public catering.</p>
<p>Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)</p>
<p>The policy decisions, both in schools and public cafeterias, have the potential to influence the way people eat outside home. It may change their perception of plant-based meals and educate them towards alternative diets. The actual impact on their daily cooking habits at home is difficult to measure precisely, however several national surveys have shown a growing interest to reduce meat consumption (e.g. a</p>

⁷² CGAAER. "Évaluation de l'expérimentation du menu végétarien hebdomadaire en restauration collective scolaire". March, 2021. <https://agriculture.gouv.fr/telecharger/126736>

⁷³ ANSES. "Menu végétarien hebdomadaire à l'école : l'Anses en appui à l'expérimentation". November, 2021. <https://www.anses.fr/fr/content/menu-v%C3%A9g%C3%A9tarien-hebdomadaire-%C3%A0-l%E2%80%99%C3%A9cole-l%E2%80%99anses-en-appui-%C3%A0-l%E2%80%99exp%C3%A9rimentation>

⁷⁴ Gouvernement. "Etude d'impact - Projet de loi portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets." February, 2021. https://www.legifrance.gouv.fr/contenu/Media/Files/autour-de-la-loi/legislatif-et-reglementaire/etudes-d-impact-des-lois/ei_art_39_2021/ei_trex2100379l_cm_10.02.2021.pdf

⁷⁵ AVF et al. "Option végétarienne dans les cantines : décryptage de l'étude d'impact." February, 2021. https://cdn.greenpeace.fr/site/uploads/2021/03/ContreAnalyse-Etude-dimpact_PJLClimat2021_GP-AVF-FCPE.pdf

2021 opinion poll with 75% of respondents stating it, representing a 9 point increase against 2017⁷⁶).

One of the success factors is likely the tastiness of the vegetarian meals served in schools and public buildings. Thus, the importance of quality in ingredient procurement as well as staff training. There is also an issue in imposing sanctions in the event of non-compliance, which is not currently the case.

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

The original policy decision to serve one weekly vegetarian meal in schools was probably adequate, as it allowed chefs to get used and children to discover alternative nutrition at a reasonable pace.

The reluctance from policy makers to expand the scope in 2021 to more days or types of catering places may be seen as a missed opportunity though, considering that some of the opposing arguments (such as concerns over the level of iron intake for girls) have been controversial⁷⁷. But the idea of an expansion was strongly opposed by many local authorities and their associations, who considered that they had already done a significant effort. Enforcing an obligation in private cafeterias could also raise legal challenges or disputes to be assessed.

Just at the time of writing this report (April 2023), a Member of Parliament has submitted a new bill to expand the scope of the policy to more weekly meals in schools.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

As the policy covers meals outside home, it does not have a direct impact on household daily habits.

However, meat consumption has some cultural gender-based aspects in France. There has been a long tradition of claiming that men require more meat-based food than women, although this does not appear scientifically founded. On average, men eat twice more red meat than women⁷⁸. Some families may believe that vegetarian food at school put their boys at risk. Others may be concerned by levels of iron intake. These appear as myths requiring adequate debunking.

Another controversy emerged in the French public debate around the potential relationship between (red) meat consumption and sexism. A survey revealed that frequent red-meat eaters among men were more prone to display sexist attitudes,

⁷⁶ IFOP for Ouest France. "Les Français, leurs agriculteurs et leur alimentation". December, 2021.

<https://www.ifop.com/publication/les-francais-leurs-agriculteurs-et-leur-alimentation/>

⁷⁷ AVF et al. " Option végétarienne dans les cantines : décryptage de l'étude d'impact." February, 2021.

⁷⁸ ANSES. " Evolution des habitudes et modes de consommation, de nouveaux enjeux en matière de sécurité sanitaire et de nutrition". July, 2017. <https://www.anses.fr/fr/content/inca-3-evolution-des-habitudes-et-modes-de-consommation-de-nouveaux-enjeux-en-mati%C3%A8re-de>

suggesting that meat is used as a patriarchal attribute⁷⁹. Favouring plant-based meals in schools could contribute to mitigate this state of mind early in the education.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

As the average level of meat consumption in France is (way) above the recommended amounts for a healthy lifestyle, reducing this level has proven health benefits. There are also direct impacts on animal welfare and other environmental aspects (water consumption, deforestation, etc.)⁸⁰. Vegetarian options also increase the chances of limiting food-based religious discriminations.

Besides, serving more vegetarian meals has allowed the public catering sector to save on meat and procure ingredients of higher environmental quality, thus meeting other obligations included in the EGALIM law⁸¹.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

After a rather cold initial reception, the acceptability of the policy jumped to higher levels afterwards. Two years after the entry into force, the support to mandatory quality vegetarian offers in the catering sector reached 80% in a survey⁸².

Concerning the actual targeted population in the scope (families with children in schools), acceptance appears higher in wealthy urban populations than in rural areas where pro-meat and pro-hunting attitudes are more common⁸³. Diets with meat alternatives have more chances to be supported by urban profiles in the highest socio-professional categories⁸⁴. No national representative surveys could be found on the perception by children themselves though.

As the policy has had no consequences on catering tariffs, no distributional or inequality concerns have been reported.

⁷⁹ IFOP for Darwin Nutrition. " Enquête sur les rapports au genre et à la politique des amateurs de viande." October, 2022. <https://www.ifop.com/publication/enquete-sur-les-rapports-au-genre-et-a-la-politique-des-amateurs-de-viande/>

⁸⁰ Greenpeace France. " Menus végétariens dans les cantines : Quels impacts pour la planète ?". April, 2020. <https://bit.ly/3bB8ZCG>

⁸¹ Gouvernement. " Etude d'impact - Projet de loi portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets." February, 2021.

⁸² HARRIS Interactive. "La consommation de viande : quelles nouvelles attentes ?". February, 2021. <https://reseauactionclimat.org/wp-content/uploads/2021/02/note-harris-la-consommation-de-viande-reseau-action-climat.pdf>

⁸³ Gouvernement. " Etude d'impact - Projet de loi portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets." February, 2021.

⁸⁴ Romane Poinot. *Place de l'offre végétarienne en restauration scolaire pour concilier nutrition et environnement : le cas français*. Alimentation et Nutrition. Université Montpellier, 2021. Français. NNT : 2021MONTG040

In general, critics on the policy have mostly focused on the obligation regarding schools, but with controversial arguments. One of them was the unfair burden on poorest families, whose kids supposedly only have a chance to eat meat at the school canteen. It has been debunked by studies and media⁸⁵. Pro-meat lobbies are also known to have extensively used the children health argument, although the levels of animal protein intake still largely exceed recommended thresholds⁸⁶.

Lastly, some debates have also taken place in 2021 around the potential extension of the scope of the daily vegetarian alternative to all public catering. Concerns have been heard about populations usually perceived as fragile such as babies in kindergartens, hospital clients, or elderly in nursing homes.

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⁸⁵ Several examples, e.g. <https://www.leprogres.fr/societe/2021/02/23/les-enfants-pauvres-mangent-ils-moins-de-viande-que-les-autres>

⁸⁶ Greenpeace France. "Cantines scolaires, les lobbies continuent de défendre leur bifteck" November, 2019. <https://cdn.greenpeace.fr/site/uploads/2017/12/Copie-de-REDAC-ARTICLE-LOBBIES-GEMRCN2.pdf>

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1.2 Dietary Policy: Italy - Green Mondays: Exclusively Plant-Based (Vegan) Menu at Bolzano's Hospital Canteen

Introduction

The results presented in this policy sheet, unlike others in this section of the project, pertain to a specific individual initiative, in a local public institution, rather than a government policy implemented at the national or regional level. However, the measure adopted by the Bolzano hospital, which involves introducing an exclusively plant-based (vegan) menu on one day of the week exclusively for staff, was initially intended for adoption at the provincial level. In conducting the interviews and reporting the results, an effort is made to provide information, wherever it is possible, with two levels of reading and interpretation: one focused on the specific individual initiative, and the other on its potential adoption at the provincial level.

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers at the initiative level:

- A favourable culture and general interest in the topic from both users and staff involved.
- Top management support that provides the necessary framework, resources, and leadership for launching, implementing, and sustaining the initiative.
- Support from operational staff, particularly kitchen staff who directly impact the initiative's outcomes.
- The primary role of the initiator. In such contexts, having an individual who takes charge of promoting, leading, and sustaining the initiative beyond difficulties has proven crucial.

Barriers at the initiative level:

- Lack of the above enablers could be a barrier when implementing the initiative in a similar structure.
- Initially, limited knowledge about alternative menus was a hindrance, but it has been overcome through the interest and dedication of the kitchen staff.
- Limited awareness about the relationship between food and environmental impact, which is relevant for conveying the objective of the initiative.
- Timing. The initiative was launched after the COVID-19 period and was partially perceived as an imposition, generating discontent among some users.
- Food, being a cultural and individual aspect, is often laden with personal and emotional meanings that identify and characterize us. This makes it more challenging to change compared to other behaviours.
- Ideological resistance from some canteen users.

Upscaled initiative:

If the initiative were upscaled to become a provincial policy, the presence or absence of the enablers listed above would still be the major driver or hindrance at the individual institution level (hospital or school canteen). However, an opportunity exists to build upon the experience and skills gained from Bolzano's hospital.

An initiative at a higher geographical level may encounter increased resistance from certain political parties who may seek to address the concerns of the dissatisfied portion of users.

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Green Mondays. Plan(e)t based food
Objective(s) of the policy (and associated success metric if available):
<ul style="list-style-type: none"> - Reduce the consumption of meat and animal-based products by approximately 15% to improve the climate balance and prevent/treat diet-related chronic diseases. - Serve as an exemplary model for meals in hospital canteens and kitchens. <p>The reduction in the consumption of animal-based products has been achieved and quantified, and its impact on greenhouse gas emissions has been assessed. Assessing the impact on health is more challenging since the initiative involves only one meal out of 14 in a week, requiring more extensive statistical surveys to evaluate changes in weekly dietary habits.</p> <p>While increasing awareness is an indirect goal that is not explicitly mentioned, it is also a challenging aspect to measure. Thus, also in this case, no success metric is available.</p> <p>Regarding the exemplary role, the initiative will be expanded to other hospitals in the province of Bolzano.</p>
Status of the policy (implemented, debated, rejected):
The measure has been successfully implemented, and other hospitals in the province will follow suit. However, there are currently no plans to extend the initiative to schools.
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
The initiative was officially launched on Monday, October 11th, 2021, and it does not have a specified end date. It is a long-term measure that has been implemented, indirectly creating the necessary conditions to sustain it. There is a high probability that the initiative will continue even after the initiators are no longer involved. Furthermore, there are plans to upscale the initiative to other hospitals in the Province of Bolzano.

Context:



How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

At the Provincial level, there are no specific policies in place; however, there are a few regulations at the national level. In Italy, public catering services are managed by municipalities, who ensure the provision of meals to various public and affiliated institutions within their territories. The Action Plan for Environmental Sustainability in Public Administration (PAN GPP)⁸⁷ provides a comprehensive framework for Green Public Procurement, establishing national objectives, identifying priority categories of goods, services, and construction works based on their environmental impact, and defining the Minimum Environmental Criteria (CAM) for expenditure volumes. In line with the PAN GPP, the Ministry of Environment issued new CAM for collective catering on March 10, 2020. For employees working within hospital, healthcare, social-healthcare and detention facilities, CAMs specify that weekly menus based on Mediterranean diet must include at least one vegetarian dish per day and a fully vegetarian meal at least once every two weeks⁸⁸.

Despite meat consumption stays significantly high in the country especially in regional culinary traditions, there have been growing awareness on sustainable farming practice and higher demand for organic and locally sourced meat products. After being substantially stable around 7%, the percentage of vegetarians or vegans in Italy has been reported nearly at 9% in 2020⁸⁹.

In 2021, the LAV (Anti-Vivisection Organisation) issued a challenge to major Italian cities, including Milan, Naples, Rome, Bologna, and Turin⁹⁰. The request was for them to commit to reducing meat consumption by 20% in public canteens under their jurisdiction over the following four years. It has been estimated that the "hidden cost" of meat in Italy (accounting for both environmental and health damages) amounts to nearly 37 billion euros per year⁹¹, which currently remains uncompensated and unaccounted for in the pricing of various food products derived from cattle, pigs, and poultry. The study quantifies health and environmental costs for Italy by type of meat consumed. For example, beef and processed pork meat are the ones that generate the highest societal cost per 100g consumed, with a hidden social cost of 1.90 euros per 100g. As regards beef, the 71% of the societal cost is attributable to the environmental impacts generated throughout its life cycle, while the opposite is true for processed pork meat (73% of the societal cost is referred to health costs for the society).

The total per capita meat consumption in Italy – considering an equal consumption rate for every omnivorous Italian citizen – amounts to approximately 43 kg per year. The most consumed meat is pork (61 g/day), followed by chicken (33 g/day) and beef (29 g/day). The same study (based on elaborations of data from ISPRA⁹²⁹³

⁸⁷ Ministero dell' Ambiente e della Sicurezza Energetica.

https://www.mase.gov.it/sites/default/files/archivio/comunicati/allegato_1_cam_ristorazione.pdf.

⁸⁸ Ministero dell' Ambiente, Tutela del territorio e del Mare, 2020. [Relazione di Accompagnamento. CAM Servizio di ristorazione collettiva e fornitura derrate alimentari \(DM n.65/2020\)](#).

⁸⁹ Eurispes, Rapporto Italia 2020. <https://eurispes.eu/ricerca-rapporto/rapporto-italia-2020/>.

⁹⁰ LAV, 2022. [Campagna 5 Sindaci. Una #SfidaGreen](#).

⁹¹ Demetra and LAV, 2021. "The hidden cost of meat consumption in Italy: environmental and health impacts". [The hidden cost of meat consumption in Italy, Summary Report](#).

⁹² ISPRA, the Italian Institute for Environmental Protection and Research.

⁹³ DISCLAIMER: These numbers differ from those listed earlier in the report, due to the use of different sources.

documents that agriculture and livestock contribute to nearly 7% of Italy's total GHG emissions. Approximately half of these emissions are caused by enteric fermentation in ruminant animals, being the one from bovines the biggest contributor.

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

The policies described in the background section above are coherent with the initiative in the Bolzano hospital and have contributed to establishing a supportive environment for the initiative by promoting healthy eating and dietary guidelines in various context.

In terms of funding, with regard to the specific initiative in the Bolzano hospital, the initiative has been financed with the ordinary budget for food without incurring in additional costs. In fact, it has generated savings instead. The cost-effectiveness of the initiative is a defining characteristic, and any potential expansion should not involve additional expenses

Minimal funds have been allocated from the regular management budget for communication support. Initially no specific training sessions have been promoted, but the expansion of the initiative in other hospitals will benefit from the experience acquired in the hospital of Bolzano in forms that have to be discussed.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

At the hospital level, the measure is supported by the general management with the approval of the provincial management.

Several hospitals in the province want to follow the example of the Bolzano hospital. Therefore, the initiative is spreading through a participatory grassroots approach, supported by the provincial management, rather than through the introduction of a provincial policy.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

The measure was introduced based on a limited number of initiators who participated in a provincial tender for sustainable projects. During the design and implementation phases, the key actors involved were top management, administrative staff, and kitchen staff (chefs and logistics personnel). The direct involvement of canteen users was not initially included in the early stages. However, for the expansion of the initiative to other hospitals based on the experience gained at the Bolzano hospital, a more extensive involvement of user representatives should be considered from the beginning.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

At the local level, the topic lacks significant attention from major organizations, and there are no notable initiatives that can be highlighted to demonstrate social

engagement in the area. However, following the launch of the initiative in the hospital of Bolzano, conservative parties promoted a public motion questioning the validity of the initiative. Conversely, parties aligned with environmental concerns supported the initiative.

As mentioned earlier, the initiators of the initiative hold key positions within the hospital and are experts in the relevant field of the topic.

It is premature to evaluate whether the policy has influenced a change in public opinion, especially considering the uncertainty surrounding the impact at the level of the users of the hospital canteen.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

Yes, the initiative reached the intended objectives.

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

The initiative has achieved the following monthly reductions in food:

Eggs: 25 kg
 Fish: 18 kg
 Cheese: 40 kg
 Milk: 220 l
 Beef: 240 kg

These reductions correspond to an annual reduction of 53,750 kg CO_{2eq}, which is equivalent (as shown in the brochure and poster promoting the initiative) to 23 round trips in a petrol car from Bolzano to Abu Dhabi (11,600 km one way).

Additionally, the initiative has resulted in saving 17,877 m³ of water, which is equivalent to 124,148 showers with a water usage of 12 litres per shower.

There has been no third-party assessment. The reduction in the purchase of quantities of specific products is directly measurable, and the subsequent quantification of the emissions and water use reduction was based on data from literature^{94, 95}.

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

This aspect is difficult to evaluate as a specific questionnaire on this topic has not yet been administered among the about 900, in average, canteen users involved.

⁹⁴ Ferrari et al. Could Dietary Goals and Climate Change Mitigation Be Achieved Through Optimized Diet? The Experience of Modeling the National Food Consumption Data in Italy. Italy. Front. Nutr. 2020. doi: 10.3389/fnut.2020.00048

⁹⁵ Mekonnen MM & Hoekstra AY, A global assessment of the water footprint of farm animal products, Ecosystems, 2012, 15(3): 401-415 e dal Water Footprint Network (www.waterfootprint.org).

However, it is expected that the initiatives and communication strategies surrounding it, including the objectives and achieved results in terms of greenhouse gas reduction, will contribute to increasing awareness about the topic. Increasing awareness about the link between food and environmental issues could enhance the transformative capacity of the initiative on lifestyle choices.

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

The awareness of the problem (the impact of diet on emissions) is only now emerging in the general public's attention and is not yet a common element, so the measure is appropriate in this context. Extending it to more days would certainly have created greater resistance.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

The gender aspect was not considered during the design phase of this initiative. Aspects related to diet for pregnant women or other relevant cases were not deemed necessary for the purpose of the initiative, which focuses on one meal out of 14 (or 21 with breakfast). However, these aspects are addressed by the nutrition and clinical dietetics service at the Bolzano hospital. They have established a counselling service specifically for plant-based (vegan) nutrition and are available to provide information regarding specific dietary requirements, including pregnant women and the weaning of children.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

Regarding the impact on health, as previously mentioned, it is challenging to assess it within this context (limited number of participants, and one meal in the week only). Impacts on jobs and potential influences on inequalities are also deemed as not too relevant. As for rebound effects related to economic savings achieved through the initiative, they can be excluded in the hospital administrative context.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

From the satisfaction survey administered in January 2022, it emerged that 58% of the users were satisfied with the quantity provided by the "Green Mondays" menus, 42.3% were satisfied with the variety, and 50.3% were satisfied with the taste of the meals.

However, only 390 questionnaires were collected (approximately 43% of the average user population), making the sample less representative.

General remarks:

Lessons learnt from these analyses and preliminary recommendations:



Overall the experience has been positive and is leading to its implementation in other hospital.

The major recommendations that could be drawn are:

- Food is a sensitive topic, very close to identity, tradition. In addressing the topic care should be taken into communicate effectively the value of the initiative and the reasons behind
- Communication is indeed a crucial factor in addressing potential discontent. The promoter of the initiative acknowledged in the interview that this aspect could have been improved during the initial phase of the project, along with greater involvement of the canteen users.
- When transferring the initiative to other hospitals, it is inherently important to capitalize on the experiences gained at the hospital in Bolzano. In this regard, it is essential to acknowledge the crucial role of the staff and top management.

References:

Demetra and LAV, 2021. "The hidden cost of meat consumption in Italy: environmental and health impacts". [The hidden cost of meat consumption in Italy, Summary Report](#).

Eurispes, Rapporto Italia 2020. <https://eurispes.eu/ricerca-rapporto/rapporto-italia-2020/>.

Ferrari et al. Could Dietary Goals and Climate Change Mitigation Be Achieved Through Optimized Diet? The Experience of Modeling the National Food Consumption Data in Italy. Italy. Front. Nutr. 2020. doi: 10.3389/fnut.2020.00048

LAV, 2022. [Campagna 5 Sindaci. Una #SfidaGreen](#).

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https://www.mase.gov.it/sites/default/files/archivio/comunicati/allegato_1_cam_ristorazione.pdf.

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1.3 Dietary Policies: Germany

1.3.1 Food Policy Germany one - Veggie-Day

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Drivers:

- Interest groups (NGOs, local communities, activists, etc.) which push the topic on the agenda
- Caterers via nudging (out-of-home consumption is huge leverage)
- Bold concepts and communication
- Scientific community who has an influence on the guideline of the German Nutrition Society (German: Deutsche Gesellschaft für Ernährung; DGE)

Barriers:

- Structures in the companies and the system (e.g. verification requirements, specifications, etc.).
- Will of the cook and the management
- Conservatives, people who are afraid of change
- Negative perception of bans in Germany

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Veggie-Day
Objective(s) of the policy (and associated success metric if available):
The main objective of the Veggie-Day is to promote a more vegetarian diet in the out-of-home-gastronomy, which also induces further side-effects like the promotion of health, less animal exploitation, reduction of factory farming, less species extinction, less ecological harm through nutrition, increased consumer education and a different attitude towards vegetarian diets overall. ⁹⁶
Status of the policy (implemented, debated, rejected):
In 2013 the party Bündnis 90/Die Grünen (green party) included in their election manifesto the proposal of a meat-free-day per week, a so called "Veggie-Day", in public canteens. The Public canteens should take on pioneering functions in promoting more vegetarian meals. The tabloid newspaper "BILD" - by far widest-reaching and highest-circulation newspaper in Germany with around 7.35 Million readers per issue in 2022 ⁹⁷ opened the debate with the comment: "The Grünen want to ban us from eating meat" (own translation) ⁹⁸ . In the aftermath of a disastrous election in which the green party only got a share of 8.4 percent and finished only on the fourth place, after CDU/CSU,

⁹⁶ cf. Linz, "Der Veggie-Day Der Grünen."

⁹⁷ ag.ma, "ma 2022 Pressemedien I - Reichweite überregionaler Tageszeitungen."

⁹⁸ Linz, "Der Veggie-Day Der Grünen."

SPD and Linke⁹⁹, the party discarded the idea of a Veggie-Day, and the idea has since never returned to the political agenda at the federal level.

Although the policy has never been implemented at the federal level, there are local examples in which a policy with similar objectives has been **implemented at the municipal level**. For example, the city council of Freiburg decided that children in day-care centers and primary schools will only be served vegetarian lunches¹⁰⁰. Also, the municipality of Göttingen has three days per week, where they only serve vegetarian dishes in their school and kindergarten catering. Their menu consists of 20 meals per week, from which the customers can choose and only 2 of the menus contain meat or fish, as stated by an employee of the municipality of Göttingen (2023).

Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

/

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

The Meat consumption per capita in Germany was 55 kg in 2021. This is a decrease of 2.1 kg compared to 2020, which is a record low since 1989 (start of data collection). Possible reasons for a decline in meat consumption could be the tendencies towards a plant-based diet. The continued pandemic-related lower out-of-home consumption in gastronomy, canteens or at events could also have influenced this development¹⁰¹. In 2022, around 7.9 Million Germans were vegetarian or largely forgo meat consumption and around 1.58 Million were vegan or largely forgo consumption of animal products¹⁰²¹⁰³.

According to the guidelines of the Planetary Health Diet, the recommended meat consumption per person per week is 300 grams. Meanwhile, the DGE suggests a range of 300 to 600 grams of meat per week per person. However, the current consumption figures show that individuals are consuming 1000 to 1200 grams of meat per week. Considering the consumption of meat in particular, we would need the resources of four earths to sustain this current lifestyle for everyone. In light of the recommendations, our meat consumption habits surpass the recommended levels by a factor of four. It is important to consider that the Planetary Health Diet represents an average diet intended for the global population. However, within Central Europe, a nutritionally beneficial choice would be a vegetarian diet. Ultimately, our current dietary patterns are fundamentally unsustainable both in terms of meeting the recommendations and from a

⁹⁹ Deutscher Bundestag, "Deutscher Bundestag - Bundestagswahlergebnisse seit 1949 – Zweitstimmen."

¹⁰⁰ SWR, "Vegetarisches Essen für Kinder."

¹⁰¹ BLE, "Pressemitteilungen - Versorgungsbilanz Fleisch 2021: Pro-Kopf-Verzehr Sinkt Auf 55 Kilogramm."

¹⁰² IfD Allensbach, "Die Allensbacher Markt- Und Werbeträgeranalyse 2022."

¹⁰³ DISCLAIMER: These numbers differ from those listed earlier in the report, due to the use of different sources.

preventive health standpoint, according to a Professor from the Hochschule Osnabrück (2023).

The interviewees described the eating habits of the German population as intuitive and reactive. Against the background that everything is always available, consumers do not pay attention to what they really need, but consume food in response to what is on offer. Often, the advertising of the food industry also plays a decisive role in the consumption decisions. The result is that the diet of the German population is far different from what is recommended by official institutions and can be labelled as "externally controlled". (*Employee of municipality Göttingen; Professor of Hochschule Osnabrück; employee of catering company*). It would be good to have sustainable and nutritional alternatives at hand, because most options for quick meals on the go must be considered junk food.

Some expert opinion of the Scientific Advisory Council for Agricultural Policy, Nutrition and Consumer Health Protection are shown below ¹⁰⁴:

- The WBAE recommends a comprehensive reorientation and strengthening of the policy field of nutrition that integrates the four sustainability dimensions of health, social, environmental and animal welfare.
- A more environmentally friendly diet has various starting points. An important one is to reduce the consumption of meat and other animal products, another is to avoid food waste. The consumption of organic products can also contribute to a certain extent to a more environmentally friendly diet.
- In international comparison, Germany is a country with few governmental frameworks in the area of food consumption.

It is above all the campaigns of some media outlets and political actors against Veggie Day that have stuck in the political memory ¹⁰⁵. This might be the key reason why all interviewees see no chance for the Veggie-Day to return to the political agenda on national scale.

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

There are possibilities for good synergies, for example the VAT reduction on certain food (e.g. vegetables, wholefoods, wholegrain, etc.) and/or also the VAT increase for other foods like meat, fish, etc. This would lead to more "True-Cost-Accounting" (prices who reflect the real environmental costs of a product/service) and promote better food choices in many regards (ecology, health, etc.).

Policy enforcement: How is the policy enforced? By whom? Is it effective?

All interviewees are in agreement, that a number of local initiatives and organizations are effectively promoting the idea of a Veggie-Day on a smaller scale, and their success is steadily growing. It is evident that a transformative societal shit is underway, further bolstering the achievement of these initiatives.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

¹⁰⁴ Spiller et al., "Politik für eine nachhaltigere Ernährung."

¹⁰⁵ Heyen et al., "Konsumbezogenes Ordnungsrecht in der Umweltpolitik: Gesellschaftliche Akzeptanz und ihre Einflussfaktoren."

In the first attempt, public stakeholders haven't been involved in the process, what might be one of the reasons why the approach was depicted in a bad light by the tabloid press and labelled as a 'ban culture'. Chances are high that the negative press is one of the reasons why it was rejected in the first run and has since never made it to the political agenda again. All interviewees mentioned that communication is key if implementing such a policy should be successful. A ban of meat and comparable foods will not work, because of the aforementioned reasons, that it is not feasible in Germany due to the social attitude towards political bans.

According to an employee of a catering company (2023), having a Minister Food or Agriculture who follows a vegetarian diet would serve as an effective advocate for the cause. This person should keep the concept of the veggie day inclusive while highlighting its numerous benefits. The publications from the BDF hold great significance in promoting the message. Additionally, the consumer center (Verbraucherzentrale) bears a responsibility in actively encouraging dietary transformations. The medical system also plays a crucial role, as health insurance companies and doctors have the potential to contribute more in this regard. It is essential to perceive meat as something special, to be enjoyed occasionally. To successfully implement this, teachers, educators, and doctors can serve as valuable contacts. In driving the adoption of the veggie day, it is important to involve well-informed individuals and activists.

In a scenario where people are well-educated and the media actively participates in highlighting the individual's impact and responsibility towards the community, the veggie day can be viewed as a social progress. Such progress is far more desirable than relying solely on political pressure, such as implementing bans. Occasionally, it might be more effective to foster a sense of competition, encouraging cities or schools to compete against one another based on their self-initiated efforts and level of advancement, according to an employee of the municipality of Göttingen (2023).

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organizations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

According to a professor of the Hochschule Osnabrück (2023), the Farmer's Association and the FDP (liberal democratic party) are not showing enthusiasm (not actively against) towards this measure. Once the political factions, including the opposing sides, realize that the demands of one camp could also benefit them and alter their perspectives, that is a pivotal moment of triumph. Therefore, those who are currently labeled as advocates, such as the green party or the SPD (social democratic party) concerning food poverty, need to be convinced since they have already taken initial steps. Ideally, the political factions like yellow and black (FDP and CDU/CSU) should also become proponents of this cause. This would result in a political majority and enable enforcement. The current predicament is that the ones promoting this cause are individuals who work for meager incomes and contribute through voluntary work. Conversely, those who work as lobbyists are opposing it. This also encompasses the lobbying efforts of the meat industry, including the value chain structures that contribute to making meat cheaper than vegetables due to more standardized processes. Another issue is the perception in Germany that nutrition should not come at a cost. As long as this mindset prevails, both at the political level and among consumers and private households, progress will be impeded.

As said by an employee of the municipality of Göttingen (2023), the driving forces behind keeping the issue in focus and on the agenda are the interest groups. Another group that can contribute to its visibility through nudging is the caterers. The obstacles arise from certain structures that are upheld by companies, and it requires courage to overcome them. The more individuals that are willing to be courageous and actively participate, the greater the number of people who will join in. This process requires patience and time. Instead of focusing on pointing fingers and imposing restrictions, it is crucial to highlight the positive effects. By encouraging individuals to make meaningful contributions through certain behaviors, such as incorporating them once or twice a week, a significant impact can be created. Moreover, it is important for cooks to learn and incorporate more plant-based ingredients into their culinary practices.

Based on the statement of an employee of a catering company (2023), it is not the veggie day that should dictate the population's diet, but rather the meat day. In consideration of the climate and planetary boundaries, it should become the norm to have certain days dedicated to food that includes meat. Society should strive towards a point where meat consumption becomes the exception rather than the rule. Instead of emphasizing renunciation, the focus should be on recognizing the added value of health and global well-being through sufficiency. Social acceptance plays a crucial role in this debate, and role models can greatly influence it. For instance, cooking shows could limit the use of meat to one day, highlighting the importance of vegetables. Radio, television, and the press can also play a significant role as role models. Kindergartens should adopt a different approach to presenting food, and it is important to prioritize the meals provided to children outside their homes.

When the municipality of Göttingen began increasing the availability of vegetarian dishes in schools, they faced opposition from teachers and parents. However, the student body responded positively, providing minimal negative feedback. As the teaching staff underwent generational shifts, the situation gradually changed, and parents also became more content. This transformation was facilitated through consistent communication and the fact that their children had no issues with the vegetarian options, as explained by an employee of the municipality of Göttingen (2023).

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

The policy has not been implemented on a national scale until today.

All those interviewed agree that Veggie Day no longer has a chance of making it onto the political agenda. There must be no ban culture, because the topic of food is too emotional in the population and one loses the population with a ban rather than getting them to change their behavior. (Professor of Hochschule Osnabrück 2023; Employee of municipality Göttingen 2023; Employee of catering company 2023).

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

Speck et al.¹⁰⁶ show that if the meat portions are reduced or removed from the 1.6 billion dishes that are served in (corporate) catering kitchens in Germany, that would decrease to CO₂e emissions between 1-2 million tons per year.

According to an employee of the municipality of Göttingen (2023), the inclusion of environmental considerations in city monitoring reports regarding school meals is essential, and the veggie day can serve as a means to address these effects.

The table below shows CO₂ footprints of selected meat and meat substitute products "at the supermarket checkout" in Germany in kilograms of CO₂ equivalents per kilogram of food with the reference year 2019. It can easily be understood that replacing animal products with plant based substitutes reduces the CO₂ footprint heavily¹⁰⁷:

No.	Food products	Carbon footprint
		kg CO ₂ -eq. / kg Food products
1	Bratling / Veggieburger / Soy-based patty	1,1
2	Bratling / Veggieburger / Pea-based patty	1,8
3	Fish, wild caught, mass-produced, frozen	2,4
4	Fish, wild caught, speciality, frozen	10,0
5	Fish, aquaculture	5,1
6	Fish, shrimps, frozen	12,5
7	Fish, wild caught, fresh	4,0
8	Vegetable nugget / cutlet	1,3
9	Chicken, average	5,5
10	Chicken, frozen	5,7
11	Chicken, nuggets	3,3
12	Chicken, Sausage slices	2,9
13	Lupine flour	0,4
14	Beef, average 3	13,6
15	Beef (organic) 3	21,7
16	Minced beef 4	9,2
17	Minced beef (organic) 4	15,1
18	Beef patty / roast, frozen	9,0
19	Pork, average	4,6
20	Pork (organic)	5,2
21	Pork, frozen	4,6
22	Seitan	2,5
23	Soy granules, Textured Vegetable Protein (TVP)	1,0
24	Tempeh	0,7
25	Tofu	1,0
26	Venison, deer 5	11,5
27	Sausage, Bratwurst, Thuringian Rostbratwurst	2,9
28	Sausage substitute, vegan bratwurst	1,7
29	Sliced beef, cold cuts	7,9

3 Both conventional beef (11 to >30 kg CO₂-eq. / kg food) and organic beef (16 to >30 kg CO₂ eq. / kg food) show wide ranges, with organic beef tending to perform slightly worse.

4 Processed meat such as minced meat has a lower CO₂ footprint than prime meat; the range is also smaller: 7 to 26 kg CO₂ -eq./kg food for conventional minced beef.

5 This average value includes in particular game meat produced by agricultural creel farming and partly imported from overseas, for example deer meat produced in New Zealand.

¹⁰⁶ Speck et al., "How Public Catering Accelerates Sustainability."

¹⁰⁷ Reinhardt, Gärtner, and Wagner, "Ökologische Fußabdrücke von Lebensmitteln Und Gerichten in Deutschland."

Economists consider state intervention in the meat market to be necessary. This is the result of the 30th ifo-FAZ economists' panel, in which 123 professors took part. 85% demand regulations on animal welfare, in particular improved minimum standards for animal husbandry.¹⁰⁸

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

According to an employee of the Göttingen municipality (2023), the supermarket's focus lies on analyzing the highest-selling items and where the largest profit margins can be achieved. Consumption levels take precedence over considerations of health and social transformation. However, the criteria for success should be based on promoting health and social change, rather than solely seeking increased margins and consumption. In the realm of out-of-home catering, which falls within the corporate sector, providers need to strategize on how to generate high acceptance and participation with their offerings. Community catering in schools and daycare centers differs from that in corporate catering, and the situation further varies in care and senior citizen facilities. The key question is how to integrate more vegetarian and vegan food options within these target groups and existing settings. It is important to acknowledge that such a transition cannot occur overnight; a thoughtful approach needs to be devised to effectively address these challenges.

"Veggie Day has not yet reached all levels of society. The transformation always comes from more sides to make it work. The guidelines come from above and the knowledge has been passed on, now it just has to be implemented" (Employee of catering company 2023).

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

Given the fact how many meals are served each day in the out-of-home sector, in 2022, 10.4 billion guests/visits were counted¹⁰⁹, the Veggie Day could tackle the ecological problem in a broad sense, because vegan or vegetarian dishes are far more ecological friendly than those that contain meat (see figures above). Furthermore there is consensus about the fact that the amount of meat that is consumed among German citizens today isn't healthy. Nutritional changes induced by the Veggie Day can therefore solve multiple problems at once. It is to be expected that without political intervention in consumer behaviour, there will be no major changes and without political measures in the area of nutrition, Germany will miss its climate protection targets¹¹⁰.

As mentioned by a Professor of the Hochschule Osnabrück (2023), a notable best practice example is the vegetarian canteen at the FU in Berlin, which has successfully operated for 15 years. The cafeteria offers affordable meals of high quality, providing a positive dining experience. This is just one instance among many. The key to successful implementation lies not in promoting a narrative of deprivation or solely vegetarian options, but rather in offering delicious, well-prepared meals in ample portions within a positive and engaging environment. For most individuals, particularly those who are not already vegetarian or vegan, the decision regarding their meal choice is often made at the serving counter. If the meat dish is prominently displayed at the beginning, accompanied by enticing aromas that overshadow other scents, most people tend to opt for the meat dish. By examining the menu options, a concrete measure would be to transition completely to vegetarian offerings, embracing the concept of sufficiency.

¹⁰⁸ Ahlheim et al., "Brauchen wir staatliche Eingriffe in den Fleischmarkt?"

¹⁰⁹ BVE, "BVE-Jahresbericht 2023."

¹¹⁰ Lemken et al., "Staatliche Eingriffe in Die Lebensmittelwahl."

Community caterers typically offer two to three menu lines per day, with at least two of them being vegetarian. While occasional meat dishes can still be included, they should feature reduced meat content and no longer be centered around meat as the main component. In the medium term, a shift towards a 100 to 80 percent vegetarian orientation is advisable, which may also lead to cost advantages. Introducing occasional veggie days can be a small yet impactful step in terms of communication.

According to an employee of the Göttingen municipality (2023), there was an attempt to influence dietary choices by introducing a veggie day in 2013. However, the outcome was met with confusion and resistance, as people did not fully comprehend its purpose, and nobody wants to feel restricted from eating certain foods. There was a lack of awareness regarding the significance of such a change. To effectively promote the concept of a veggie day, the goal should be established and instilled at an earlier stage in people's lives, normalizing it from a young age. Enforcing something upon individuals often makes it challenging to implement and sustain.

The demanded renunciation of meat one day per week in public canteens had met with considerable media criticism. The reduction of the consumption of animal products, especially beef, is quite unanimously named in research as a central field of action to reduce consumption-side GHG emissions in the area of nutrition. In the area of nutrition, the use of information-based instruments predominates in international policy ¹¹¹.

The dietary habits of the population significantly deviate from the recommended guidelines. The importance of out-of-home catering is growing, particularly in light of childcare rights and the aging population. When children receive care from an early age, parents are more inclined to dine in company cafeterias, as explained by an employee of a catering company (2023).

According to a professor from the Hochschule Osnabrück (2023), community catering holds significant potential, from both a research and policy standpoint, and not only in terms of environmental sustainability but also for fostering social sustainability. By simply adjusting a recipe, a chef within this domain has the power to impact and transform 2000 to 5000 meals per day, resulting in substantial reductions in greenhouse gas emissions. Additionally, combatting food poverty can be addressed by offering free meals in educational institutions, daycare centers, and corporate settings.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

When examining women's dietary patterns, it becomes evident that they tend to more inclined towards vegetarian options and prioritize health, according to a professor of the Hochschule Osnabrück (2023). By shifting these dietary preferences outside the home, there is a potential to contribute to greater emancipation and gender equality. The more transparent and explicit lunchtime catering becomes, with clear externalization, the more effectively both genders can plan their lives with equality, balance, and functionality. This represents an important lever to address the inequality prevalent among children and individuals in need of care, i.e. care work. It is crucial to consider nutrition in older households where individuals are left to manage their own meals and lack the necessary attention from caregivers (i.e. their children), particularly due to limited ability to care for their parents. This situation leads to significant food-related challenges, especially in rural areas. In such cases, meal delivery services can serve as a solution. Experiences in senior facilities have shown that many seniors prefer smaller portions of meat as they are easier to digest and chew. While the trigger for this preference often comes from relatives, it is worth noting that they may not consume

¹¹¹ Lemken et al.

meat themselves on-site. The issue extends beyond children and also affects seniors. Target group-specific best practice examples already exist, but addressing this matter is also dependent on financing structures in areas such as demand management for meals provided to seniors and school meals.

According to an employee of the municipality of Göttingen (2023), it becomes apparent, in terms of gender equity, that women who have a stronger preference for vegetarian and vegan diets are more likely to adhere to this dietary choice and avoid subordination to their partner's desired diet within domestic communities. When it comes to providing for or feeding a family, the question arises as to the extent of compromise that can be achieved within the family environment. It is crucial to establish early on that a varied diet is embraced, with a focus on moderation and conscientious utilization of the resources provided by nature or the world.

As stated by an employee of a catering company (2023), a shift in perception is necessary: the association of meat with masculinity needs to be reevaluated. This notion has been reinforced in advertising and publications like Beef (<https://www.beef.de/>) and has led to a resurgence of a highly gendered portrayal within barbecue culture.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

- Vegan or vegetarian diets or a reduced meat consumption compared to today's average have an impact on a person's health
- Could be a step towards more gender equality due to less resistance and resentment towards vegetarian diets, which women tend to take for granted, the reduction of the belief that meat consumption has something to do with masculinity, and the relief of the woman in the household, since the children are provided for by school meals
- Vegan and vegetarian dishes have much smaller ecological footprints than meat dishes

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

- Has not been accepted due to poor press coverage, which has pushed public opinion strongly in one direction before information campaigns have even had a chance to take place
- Might be more accepted nowadays but all interviewees mentioned that forbidding something will not lead to acceptance but harm the idea
- It needs years of educational work and communication and little progress now and then

According to an employee of a catering company (2023), it should not be referred to as Veggie Day, in any case. Instead, two days could be designated without meat options, but without explicitly communicating this change. When individuals perceive that something they are entitled to is being taken away from them, their reasoning diminishes. A more effective approach might involve introducing two health-conscious days linked to the local region. Such an approach could yield greater success. Rather than labeling it as Veggie Day, the emphasis should be on cooking in accordance with the recommendations of the DGE. In a seven-day meal plan, meat should not be offered more than twice a week, aligning with a clear conscience. Consequently, four days would automatically become veggie days. This approach would ensure equal rights for

everyone. However, political decisions and support would be necessary to advance in this direction.

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1.3.1 Food Policy Germany two - VAT Reduction

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Drivers:

- Green party and its agriculture minister Özdemir
- Scientists
- Consumer organisations
- Adaptation of the VAT Directive by the European Commission

Barriers:

- FDP (liberal democrats) and their financial minister Lindner
- Some food producers and politicians arguing that it would hinder fair competition on the market

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
VAT reduction or VAT increase on certain foods (German: Mehrwertsteuersenkung bzw. Mehrwertsteuererhöhung auf bestimmte Lebensmittel)
Objective(s) of the policy (and associated success metric if available):
The objective of this policy is the reduction of the VAT on certain foods to lower food prices. Since the value-added tax on all food is the same, low-income households bear a higher relative tax burden than high-income households. A reduction in the VAT rate on food would ease the burden on low-income households in particular. A zero percent VAT on basic food was made possible by the EU on April 5 th 2022 ¹¹² . Another (additional) option is a VAT increase for unhealthy and/or unsustainable foods such as meat or high sugar foods.
Status of the policy (implemented, debated, rejected):
Debated - Agriculture Minister Özdemir expects food prices to remain high and to not return to the level before the inflation. That is why he calls for the abolition of VAT on healthy food. He proposes to set the VAT on fruit, vegetables and pulses at zero percent. The Federal Ministry of Finance said that there were no plans to change the current VAT system ¹¹³ . Such a policy was temporarily implemented during the COVID-19-Crisis with the aim to increase consumption and stimulate the economy. The regular VAT of 19% was reduced to 16% and the reduced VAT, that applies for certain products like staple foods and press releases among others, of 7% was reduced to 5%.
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

¹¹² Scholle, „Mehrwertsteuer für Lebensmittel auf null senken“.

¹¹³ ZDF, „Özdemir fordert Abschaffung der Mehrwertsteuer für Gesundes“.

Not implemented. A VAT reduction to zero percent was made possible by the EU on April 5th 2022. It is debated since the high inflation due to the war in Ukraine and supply chain problems in 2022.

Temporarily implemented from 01.07.2020 till 31.12.2020 in Germany.

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

Historically, food was not of great importance in Germany, even though the population's diet has been subject to certain trends since the end of the Second World War. Currently, it can be observed that certain parts of the population attach more importance to their diet while for other parts of the population it still seems to be nothing more than a necessity. Because of this, food in Germany has historically always been very cheap when compared to prices in other EU countries. When looking at the EU-27 price index for food and non-alcoholic beverages, Germany ranks 16th with an index of 104.5¹¹⁴. Food is most expensive in Switzerland (index = 166) followed by Norway (index = 149). Food is cheapest in northern Macedonia (index = 64.2) and Turkey (index = 63.1). The "common" German diet is relatively meat heavy, which leads to the fact that two-thirds of greenhouse gas emissions related to agriculture and our diet are associated with livestock farming and meat consumption¹¹⁵.

At present, the costliest diet option available comprises organic and plant-based foods, whereas a conventional, meat-based diet is comparatively cheaper. Concurrently, research has indicated a direct correlation between the environmental impact and the degree of animal-based consumption. The challenge lies in establishing appropriate incentives and governmental initiatives to encourage a shift towards a more sustainable dietary approach (Researcher of University Greifswald, 2023).

Therefore, and to tackle the problem of increasing food prices for low-income households, the Federal Environment Agency (UBA) proposes that value-added tax be geared more closely to ecological and social criteria. The core of the "Climate and Environment Relief Package" is to completely exempt plant-based staple foods such as fruit, vegetables, cereal products and vegetable oils from VAT¹¹⁶. Unfortunately, as table 1 shows have the prices for meat and fish less increased than the prices for vegetables:

Food items	Inflation
Edible fats and oils	+49.7%
Dairy products and eggs	+28.9%
Vegetables	+23.1%
Bread and Cereal products	+19.8%
Meat	+19.3%
Fish and seafood	+16.7%

¹¹⁴ Statista, „Lebensmittelpreise in Europa nach Ländern 2021“.

¹¹⁵ UBA, „UBA empfiehlt 0% MwSt. auf pflanzliche Grundnahrungsmittel“.

¹¹⁶ UBA, „Mehrwertsteuer ökologisch und sozial gestalten“.

Jam and confectionery	+10.7%
Fruits	+6.2%

Table 1: Inflation on foodstuffs; Source: ZDF (2023) based on Destatis and own calculations; Own translation

According to a first estimate, a VAT exemption for plant-based staple foods such as fruit, vegetables, cereal products and vegetable oils would relieve private households of about 4 billion euros annually ¹¹⁷.

Traditionally, reduced VAT rates have been criticised because competition between individual industries is distorted. Furthermore, critics state that a VAT reduction induces high costs when introduced and that the increasing absolute relief with increasing income would contradict the distributional objective ¹¹⁸.

Policy consistency / policy mix: Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

In general the policy is coherent with other policies that are used to combat or solve environmental problems, such as the eco-tax on energy sources like gasoline or electricity. At the moment there are subsidies on animal products and livestock farming that clearly contradict the VAT reduction on eco-friendly foods because they prevent a kind of true-cost-accounting. To support more eco-friendly diets it would be good to implement educational training on food handling (buying, storing) and cooking (planning, use of leftovers, etc.).

Considering the type of tax adjustment, whether it be a reduction or increase in VAT, the allocation of additional revenue is crucial. For instance, if the revenue were directed towards a dedicated fund aimed at implementing sustainability measures to facilitate and foster transformation within the food system, would be highly beneficial. (Professor of Hochschule Osnabrück, 2023).

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The policy is being promoted by Agriculture Minister Özdemir, whose proposal has received support from the scientific community and consumer associations. However, his efforts have met with little success because the Ministry of Finance appears to be pursuing other plans.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

Despite the popular notion that consumers regulate demand, they actually lack significant power in the equation. It is the supply side that dictates the market dynamics, rather than demand shaping supply. In this context, it is the responsibility of politics to incorporate these uncomfortable messages, such as raising certain VATs and reducing others, into the narrative. By doing so, these messages can reach and be comprehended by all segments of the population, emphasising that sometimes decisions may initially be uncomfortable (Professor of Hochschule Osnabrück, 2023).

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or

¹¹⁷ Neuerer, „Verbraucherpreise“.

¹¹⁸ Scholle, „Mehrwertsteuer für Lebensmittel auf null senken“.

against the objective of the policy? Which actors played a key role in in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

“The acceptance regarding the VAT reduction on organic foods is very high” (Researcher of University Greifswald, 2023).

Federal Minister Özdemir, among others, is actively advocating for a zero percent VAT on fruit and vegetables. Similarly, various institutions like the True Cost Economy Association (e.V.) and companies such as Bioland are promoting the idea of zero percent VAT on organic foods.

However, conflicting objectives abound. The issue of increasing VAT on meat products, in particular, faces challenges due to opposition from the German Farmer’s Association (Deutscher Bauernverband).

The recent report from the European Court of Auditors highlights the contradiction between the majority of measures, particularly within the Common Agricultural Policy (CAP), and both European and national objectives. While Germany aims to reduce intensive animal farming, there is a lack of effective measures to achieve this goal. Only a mere 30 percent of the CAP budget is allocated towards supporting rural areas, infrastructure, and organic farming, which is insufficient given the targets of increasing organic production to 30 percent by 2030, as set by both European and German authorities (Researcher of University Greifswald, 2023).

The push for implementing a reduced VAT on certain food items has encountered mixed support from political parties. According to a researcher from the University of Greifswald (2023), the CDU, CSU, and to some extent, the FDP, do not appear to be in favour of this proposal.

However, a professor from the Hochschule Osnabrück (2023) suggests that public acceptance would likely be high if lower VAT rates were applied to essential food items. This indicates that there is potential for positive reception among consumers.

Contrary to popular belief, it is not the consumers who would hinder the implementation of such policies. Instead, it is the food producers who, according to the same professor, hold the position of hindrance due to lobbying efforts and the influence of misleading media.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

Initiating and implementing changes over an extended period is of utmost importance, as the short-term VAT reduction in 2020 failed to yield significant results. Small and medium-sized enterprises, in particular, faced excessive stress and time-consuming tasks when adapting their accounting systems without reaping substantial benefits from the changes.

For future implementations, it is crucial to introduce them as a test phase lasting at least two years. This duration allows for thorough evaluation and potential modifications afterward. However, it is imperative to follow through with the planned changes to ensure their effectiveness and impact (Professor of Hochschule Osnabrück, 2023).

It can thus be noted that a VAT reduction/increase has the potential to address the desired goals but it must not be implemented temporarily because it generates high costs on the part of the companies in the beginning.

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

There are no climate benefits that can be directly achieved by a VAT reduction/increase because it can't be foreseen how the reduction/increase will have an effect on consumption behaviour.

If the result is a change in nutrition from meat towards more plant-based proteins and a higher consumption of vegetables there will be climate benefits that can be compared to those mentioned for the policy Veggie-Day.

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

According to a professor from the Hochschule Osnabrück (2023), a VAT reduction, particularly for plant-based products, would be highly desirable. This is because these foods are a predominant component of the Planetary Health Diet, which is considered the ideal dietary choice.

Price elasticities, linked to specific indices, provide a precise means of calculating the extent to which the share of consumption within the consumer base would change for a specific organic product if its price were to decrease. This demonstrates that changes in consumptions are not merely speculative hypotheses but quantifiable figures that are economically determined (Researcher of University Greifswald, 2023).

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

According to a professor of Hochschule Osnabrück (2023), it is crucial to consider the destination of the additional revenue generated from reduced VAT rates. If the VAT reduction is merely passed on to consumers, there is a strong likelihood that they would bear the cost in the end. Therefore, careful consideration should be given to ensure that the benefits of reduced VAT rates directly benefit consumers without imposing additional financial burden. This significant concern regarding the possibility of consumers compensating for an adjusted VAT through increased product prices, allowing sellers to attain higher profit margins, is supported by a researcher from the University of Greifswald (2023). Particularly in the current inflationary period, the problem of prices simply being adjusted further exacerbates the issue.

As pointed out by the interviewees, the policy is adequate as long as the VAT reduction reaches the consumer. There is scientific evidence (cf. section "Transformative power") that price elasticities result in a change of consumption behaviour. The adequacy of the measures is also supported by a study of Copenhagen Economics ¹¹⁹, which also considers true cost accounting through appropriate taxation to be a good solution.

Highlighting the viewpoint of the professor from the Hochschule Osnabrück (2023), it becomes apparent that the current inflation crisis and soaring living costs have exposed the poor budget management of numerous households. Even before the crisis, many of these households were burdened with consumer debt. In light of these circumstances, the professor suggests that instead of seeking compensation in the field of nutrition, substitutions should be made in other areas of consumption, such as clothing, transportation, and contracts. It is emphasised that nutrition requires a minimum budget, as the current allocation in Germany is deemed insufficient and too low. Therefore, the notion that lowering VAT alone will serve as adequate compensation for inflation is considered a false narrative.

¹¹⁹ „Reduced VAT for Environmentally Friendly Products“.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

The interviewed professor from the Hochschule Osnabrück (2023) emphasises that the implementation of reduces VAT rates on food would primarily benefit individuals residing in low-income households, particularly those who have not completed their education or are single parents. Furthermore, considering that the majority of single parents are women, a gender dimension becomes relevant in this context.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

- Increasing the VAT for conventional meats and decreasing the VAT for organic meats could improve animal welfare, in the sense that the proportion of organic animal husbandry would become greater
- state budget could benefit because more revenue would be generated -> additional revenue could be used to support the transformation from conventional to regenerative and organic agriculture
- chance to come closer to achieving the goal of 30% organic farming by 2023 to which to current government agreed on ¹²⁰

(Researcher of University Greifswald, 2023)

Furthermore, a change of the nutritional behavior can potentially have an impact on a person's health condition due to the scientific evidence that a more plant-based diet has health benefits in comparison to today's common diet (cf. to the policy Veggie-Day).

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

The social acceptability of a VAT adjustment on certain foodstuffs can be rated as high if, above all, the price reductions are passed on to consumers and are not levelled out again by adjusting net prices. It should be communicated that the VAT adjustment is taking place for reasons of climate and environmental protection, as there is a high level of social acceptance for this topic area ¹²¹. In addition, other benefits such as offsetting inflation and relieving the burden on low-income households should be emphasized. Communication of the measure will play a crucial role.

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¹²⁰ SPD, B'90/Die Grünen, und FDP, „Mehr Fortschritt Wagen“.

¹²¹ pollytix strategic research gmbh, „Gesellschaftliche Akzeptanz von Umwelt- und Klimaschutzmaßnahmen: Ergebnisse aus qualitativer und quantitativer Forschung im Auftrag des Bundesministeriums für Umwelt, Naturschutz und nukleare Sicherheit - Abschlussbericht“.

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1.4 Dietary Policy: Latvia

Summary – Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Some of the main enablers are:

- The main organization advocating for plant-based food policy is NGO "Animal Freedom (Dzīvnieku Brīvība)". Its campaign "Don't eat the Globe" (Neapēd Zemeslodi) draws considerable public attention to the benefits of vegan and vegetarian diets. Additionally, January has been designated a vegetarian month or 'veganuary'.
- The Eco-Schools campaign which collaborates extensively with schools in Latvia to educate students on environmentally friendly practices such as sustainable diets, waste-free cooking, and plant-based nutrition. In the past, Eco-Schools implemented the "Ēdam atbildīgi" (We eat responsibly) project in Latvia. This international curriculum focuses on food-related activities in schools, including promoting vegetarian meals and educating students about them. Presently, food-related topics remain an integral part of the 10 subjects addressed by schools within the Eco-School program. Environmental assessments are conducted to identify areas for improvement in environmentally friendly food consumption within schools. The assessment results guide schools in prioritizing their actions. Notably, Eco-Schools are currently introducing initiatives like the 'Day without Meat' event.
- The Environmental Education Forum which consistently offers vegetarian meals and organizes master classes on environmentally friendly nutrition.
- Private educational institutions are currently switching and promoting that there is a vegetarian day once a week. It is mostly an initiative of private institutions following parents' demands.

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Main Barriers:

- School caterers lack experience, expertise and education in providing vegetarian food. LDUSA (Association of Diet and Nutrition Specialists of Latvia) representative mentions that educational institutions do not always require a cook to have a chef's education, which is a big problem as well. This concern is emphasized by representatives of the Eco-School programme, and the Food and Veterinary Service (PVD) as well. LDUSA representative mentions that parents who are interested in solving these issues solve and show the educational institution that it is their responsibility to provide vegetarian food in schools and usually it is provided, but it is a matter of quality and understanding. The PVD representative points out that coordinating the menu with a nutritionist is essential, but not all educational institutions have access to one, which means they need to seek external support for menu coordination. Not all educational institutions have a nutritionist who makes these menus, it might as well still be a nurse, they can be a representative of an outsourcing company or a branch manager, it doesn't have to be a nutritionist, LDUSA representative mentions that. Additionally, the representative highlights the need for extensive knowledge in menu balancing to develop a vegetarian menu effectively. This knowledge gap is identified as one of the hindrances to the broader implementation of vegetarian menus.
- The vegetarian option is not always available in schools, thus the vegetarian diet option is not widely offered.
- Low public support for vegetarian diets is also limiting the popularity of this initiative. There is a strong bias among parents that their children will not receive balanced nutrition when switching to a vegetarian diet.
- Some of the agribusiness representatives, like farmers' associations, are actively advocating against such an initiative promoting meat-based diets as healthy and environmentally friendly. Even some of environmental organizations, like the Latvian Fund for Nature, are joining this trend.
- Currently, the Ministry of Agriculture is promoting an initiative so that children in schools can choose local vegetables and local products as much as possible, although this initiative has difficulties due to the complexity of the entire procurement law, the procurement process and the complexity of the EIS (Electronic Procurement system). At the moment, there are negotiations with VARAM (Ministry of Environmental Protection and Regional Development of the Republic of Latvia), when there should be some sort of simplified procurement process, so that it would be possible, for example, to buy apples from a local farmer.

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:

Policies supporting vegetarian diets at schools

Objective(s) of the policy (and associated success metric if available):



Regulations of the Cabinet of Ministers of March 13, 2012 No. 172 "Regulations Regarding Nutritional Norms for Educatees of Educational Institutions, Clients of Social Care and Social Rehabilitation Institutions and Patients of Medical Treatment Institutions" is a policy supporting vegetarian diet in schools in Latvia. The goal of the policy is defined in the annotation:

"The purpose of the regulations is to ensure the use of healthy and balanced nutrition in general primary education, general secondary education, and vocational education institutions, educational institutions implementing preschool education programs, long-term social care and social rehabilitation institutions and medical institutions. The draft regulations determine the energy and nutrient norms for pupils, the food products to be included and not included in the daily menu of pupils, as well as the amount of salt and sugar to be added to the diet. The draft regulations also determine the daily norms of energy and nutrients for the basic diet for patients of medical institutions and clients of long-term social care and social rehabilitation institutions. Energy and nutrient intakes are calculated using "Recommended energy and nutrient intakes for Latvian residents" (approved by Ministry of Health order No. 174 of October 15, 2008). Nutrient and product quantity norms are based on recommendations of the World Health Organization."¹²²

However, this regulation was amended specifying the purpose of the regulation: "The purpose of the legal act is to specify the determined energy values and nutrient norms, to specify the amount of individual food products in the weekly menu, as well as to foresee the possibility of offering a vegetarian menu in educational and medical institutions, long-term social care and rehabilitation institutions."¹²³

Status of the policy (implemented, debated, rejected):

The legislation was initially passed in 2012, and subsequent amendments were made in 2018. Since 2018, educational institutions have had the option to provide vegetarian food to children if there is a written request from their parents or legal guardian. It is a requirement that vegetarian menus are evaluated by a nutritionist or dietician.

Quote from the law: "The educational institution can provide a vegetarian menu if a written application from the child's legal representative has been submitted. A vegetarian menu in the sense of these regulations is a menu that does not include meat and fish, as well as their products. The menu is developed according to the basic principles of healthy nutrition and age-appropriate nutritional norms, and their compliance is evaluated and approved by a nutritionist or dietitian."

Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

The rules were adopted on June 1, 2012, but amendments on vegetarian diet were included and entered into force in 2018.

¹²² VMAnot_060212; Ministru kabineta noteikumu projekta "Uztura normas izglītības iestāžu izglītojamiem, sociālās aprūpes un sociālās rehabilitācijas institūciju klientiem un ārstniecības iestāžu pacientiem" sākotnējās ietekmes novērtējuma ziņojums (anotācija) (VSS-1164)

¹²³ VMAnot_130818_uztn; „Grozījumi Ministru kabineta 2012.gada 13.marta noteikumos Nr.172 „Noteikumi par uztura normām izglītības iestāžu izglītojamiem, sociālās aprūpes un sociālās rehabilitācijas institūciju klientiem un ārstniecības iestāžu pacientiem”” projekta sākotnējās ietekmes novērtējuma ziņojums (anotācija)

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

Up until 2012, government regulations¹²⁴ in Latvia prohibited children in schools from consuming meals without meat. These regulations also outlined specific guidelines regarding the acceptable levels of salt and sugar in food.

In 2018, the Ministry of Health developed draft regulations that were subsequently approved by the Cabinet of Ministers. The regulation aimed to provide clearer guidance on established nutritional norms and quality requirements for catering services, which included the provision of vegetarian meals in schools.¹²⁵

According to the representative from the Food and Veterinary Service (PVD), there are several schools are offering vegetarian menus. However, the exact number is unknown as there is no available data on the overall prevalence of vegetarian menus in schools. The coordination of the vegetarian menu with a nutritionist, adherence to nutritional norms, energy content, and compliance with relevant regulations are all factors that are practically assessed and monitored.

Food consumption contributes 19% of Latvia's carbon footprint. Between 2010 and 2019, there has been no significant change in the overall calorie intake. However, there have been notable shifts in the food consumption patterns in Latvia. There has been an increase in the consumption of meat, particularly poultry, as well as milk, eggs, processed foods, and fruits. On the other hand, there has been a decrease in the consumption of bread, potatoes, and fish products. Surveys indicate that the proportion of vegetarians in Latvia is still below 5%.¹²⁶

LDUSA representative mentions that a new version of the rules of the regulations of the minister's cabinet (government regulations) will soon be adopted, which are cosmetic and small, more related to increasing funding for meals in schools because 1.42€ per person for years had not changed, but now it will be around 3 €, plus plan is to reduce the amount of sugar.

Policy consistency / policy mix: Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

¹²⁴ The Cabinet of Ministers of March 13, 2012 No. 172 "Regulations Regarding Nutritional Norms for Educatees of Educational Institutions, Clients of Social Care and Social Rehabilitation Institutions and Patients of Medical Treatment Institutions" (<https://likumi.lv/ta/id/245300>)

¹²⁵ Semjonova, Ella. "Skolās būs atļautas veģetāras pusdienas." Latvijas Sabiedriskie Mediji. August 21, 2018. <https://www.lsm.lv/raksts/zinas/latvija/skolas-bus-atlautas-vegetaras-pusdienas.a289453/>

¹²⁶ Liobikienė G, Brizga J. Sustainable Consumption in the Baltic States: The Carbon Footprint in the Household Sector. Sustain. 2022;14(3).

The head of the Education, Culture and Sport Committee of Riga City Council ("Development of Latvia"), says that the children's catering service in Riga is spending EUR 25 million a year, and the state helps with funding for students in Classes 1-4. A buffet principle or an offer of choice would be ideal for feeding pupils.

Catering service providers have previously pointed out that inflation makes it increasingly difficult to secure pupils' lunches, as the minimum amount for a student's lunch is €1.42, which has not changed for eight years.

For pupils in Riga educational institutions, catering is currently free of charge. In Riga, it was planned to increase the cost of catering in educational institutions from September 1, 2022. The increase in costs is intended to be covered partly by the local government budget and partly by the co-payment of parents of students in grades 5 to 12 in the amount of 50% of the price of the catering service.

Riga City Council determines whether the kindergarten will offer vegetarian food or food without pork or beef, and the kindergarten can adjust the menu for the child only if such necessity has been determined by the doctor due to the illness of the child.

The Ministry of Environment has launched a campaign '[Bietmens](#)' (public information campaign on healthy nutrition), where the consumption of more fruits and vegetables is actively promoted. In Latvia, there are poor indicators of how many children and young people consume fruits and vegetables. In the campaign 'Bietmens', this problem is brought up directly, thus, one could think of similar campaigns in relation to the vegetarian diet in schools.

The Eco-Schools network provides general training on environmentally friendly diets. There is a rule that there is always vegetarian food at events. At big events like the [forum](#), there is always a skills workshop on cooking, it's always a plant-based diet to learn recipes and other aspects like zero waste cooking, these masterclasses are very popular. The forum is one thing, but the fact that the topic of food is always brought up is another.

The representative of Eco-Schools mentions that there have been improvements in the last few years, accordingly, vegetarian nutrition is being talked about more and more widely.

Banners are also posted in Eco-Schools, where one of the goals is the consumption of responsible food and their impact, there is also a section on animal products' impact on the environment. Working with schools on the topic of food is a core subject. Therefore, different aspects are looked at, not only the reduction of palm oil consumption, fair trade. Schools are given materials when they choose this as their theme for the year.

Food and Veterinary Service (PVD) representative mentions that the money is the same for everyone in schools, whether or not there is a vegetarian menu, that issue is currently being resolved. It has been determined what the minimum support is, which is 1.42 Eur per person in schools, it is planned to increase the money to about 3 Eur for the next year.

Food and Veterinary Service (PVD) representative mentions that in educational institutions, there are known problems with the coordination of the menu, not all educational institutions undertake it, because it is not a mandatory requirement to provide vegetarian nutrition.

The representative of LDUSA mentions the long-term campaign 'school fruit', but there is a question about what kind of fruit it is and whether it is organically grown and a local product. The procurement process is quite complicated and, accordingly, large companies start and win in them, which do not always provide schools with suitable fruits that students also want to eat. Currently, also through the project of vegetables and local products, basically through the initiative of the Ministry of Agriculture, there is a plan to take over this good example and practice that exists in Finland, which stands out for the fact that it understands that a healthy diet is an investment in the future of children, and also society in health and the future of the country. Accordingly, if we succeed in even a part of this here, there could be more fundamental changes here as well. VARAM (Ministry of Environmental Protection and Regional Development of the Republic of Latvia), the Ministry of Health has already been involved in this process, hopefully, the Ministry of Education will also accept this and join in.

LDUSA representative complements that the provisions of [government regulations](#) have been around for more than ten years, and amendments have been made, but they are old. Accordingly, they are morally and technically obsolete, they should be fundamentally changed. The law has not changed in substance.

The representative of LDUSA mentions that, in general, training and education about vegetarianism are taking place. In this regard, there are various procurements organized by SPKC (Center for Disease Prevention and Control) and the Welfare Department of Riga City Council. Also in the regions there are various activities of this kind, where there are master classes on healthy nutrition. European money has been allocated for those events, including various trainings, but not one of them is specifically aimed at vegetarian nutrition. They make thematic, for example, vegetarian, budget menu preparation courses, where more plant products are chosen, because high-quality animal products are very expensive.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The law only allows but does not oblige, vegetarian meals to be provided in schools. Vegetarian meals are provided only by demand of parents. Only few private educational institutions provide with vegetarian meals as default option. There are and will be vegetarian meals, and the representative of LDUSA is quite sure, compliments that the quality will improve over time. It is only normal that we say this here as a recommendation. There are vegetarian days in schools and often this is done in many places without even emphasizing the fact that it is a specially vegetarian day. When asked about vegan meals, the representative mentions that she does not think that the legislators will accept them. This is an ongoing process of public education. An initiative has appeared where they travel around the regions (representatives from LDUSA do this) and educate, and train cooks, including residents, there are several categories they work with.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

A major influence on the changes that were adopted in 2018 in the law, including vegetarian meals in schools, is the legal proceedings of The Free School of Ikšķile with the Food and veterinary service of Latvia (PVD). Vegetarian meals were served at the school for 6 years, and Food and veterinary service inspectors had no objection to this, however, in 2016, the inspectors interpreted it as non-compliance with the rules of the Cabinet of Ministers (MK). The school was in litigation with the Food and Veterinary Service for several years, which resulted in amendments to the regulations of the Cabinet of Ministers. The Free School of Ikšķile was suing the Food and Veterinary Service to obtain permission to serve vegetarian lunches at the school. The school management was convinced that the students should be allowed to eat vegetarian food, and they had been doing it for several years, meanwhile, the officials followed the law and had already managed to fine a school for vegetarian lunches. After litigation with the Food and Veterinary Service, changes were made in the legislation. From September 1, 2018, all schools in Latvia are allowed to offer a vegetarian menu.¹²⁷ The head of Ikšķile Free School, states that the next step is to encourage other schools in Latvia to offer healthy vegetarian meals at least one day a week.¹²⁸ The representative of LDUSA says that, following the precedent, The Free School of Ikšķile was awarded a trial on several levels. Then the legislation was changed accordingly, then it appeared that there is an asymmetry with what is in Europe, where vegetarian meals are allowed, moreover, the big international nutrition associations that have global recognition support these vegetarian diets here, if they are fully balanced and properly planned. Accordingly, in this case The Free School of Ikšķile was partly the mover, but basically this was the precedent.

¹²⁷ SINFO: Gadījumu izpētes pārskats, BSC, 2021 1 PIELIKUMS Nr. 3: Ikšķiles Brīvās skolas gadījuma apraksts Autori: Miķelis Grīviņš, Līna Orste, Baltic Studies Centre

¹²⁸ Siliņa, Dace. "Veģetārs uzturs skolās ir piemērots." ReTV. December 16, 2020. <https://www.retv.lv/raksts/vegetars-uzturs-skolas-ir-piemerots>.

The representative of LDUSA mentions that the Ministry of Health has a nutrition council, so when this was incorporated into the law, this nutrition council was the one that looked at and determined the norms, through which it is initiated, from whom advice is sought. In general, The Free School of Ikšķile played a role in this whole process, which was brave enough, with a good legal background, and was not afraid to stand against the PVD and the existing order, but conceptually it will be more of a ministry.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

An electronic survey of educational institutions conducted by the Centre for Disease Prevention and Control could be referred to as a public opinion, in which the majority, or 71.9% of general basic and secondary educational institutions indicated that vegetarian nutrition is not current in educational institutions, however, 13.7% of educational institutions indicated that students were interested in the possibility of vegetarian nutrition, while in 12.6% cases, parents were interested in providing vegetarian diet.¹²⁹

How many people in LV are vegetarians? According to the survey, the majority, or 83% of Latvian residents are omnivorous, which means that they consume animal products. Only 12% are adherents of a dynamic diet or so-called flexitarians, and eat meat or fish occasionally. Meanwhile, 3% are vegetarian - don't eat meat and fish, but eat other animal products like eggs or honey, 1% don't consume meat, but eat fish.¹³⁰

In October and December 2022, the NGO Green Liberty organized citizen thinking labs. They modeled what lifestyle choices Latvian residents are prepared to make in order to reduce their impact on the climate, and what steps should be taken by 2040 in order to reduce obstacles to the most difficult choices to make without reducing their quality of life. Residents, for example, said they were less willing to switch to a vegetarian or vegan diet (< 10%). But the introduction of climate-friendly lifestyle actions depends not only on the readiness of the population but also on various obstacles. Part of the hurdle involves cultural attitudes and negative historical experiences, such as understanding vegetarian diets as foreign, unsavory, or inappropriate "our latitudes." At the beginning of the think lab, experts evaluated which lifestyle actions to implement for Latvian residents would be more acceptable and unacceptable. The opinion of both groups is rather unequivocal that Latvians would not be prepared to become vegans, although there is relatively strong support for reducing meat consumption.¹³¹

¹²⁹ LETA. "Skolās un slimnīcās turpmāk varēs piedāvāt veģetāru ēdienkarti." DELFI. September 1, 2018. <https://www.delfi.lv/news/national/politics/skolas-un-slimnecas-turpmak-vares-piedavat-vegetaru-edienkarti.d?id=50351651>.

¹³⁰ Goba, Arta. "Aptauja: 83% iedzīvotāju Latvijā ir visēdāji; tikai 1% – vegāni" tv3.lv. March 31, 2021. <https://zinas.tv3.lv/latvija/sabiedriba/aptauja-83-iedzivotaju-latvija-ir-visedaji-tikai-1-vegani/>.

¹³¹ NGO Green Liberty. "Latvijas iedzīvotāji un eksperti par klimatu saudzīgu dzīvesveidu". Zaļā Brīvība. December 19, 2022. <https://www.zalabriviba.lv/dzivesveids/latvijas-iedzivotaji-un-eksperti-par-klimatam-saudzigu-dzivesveidu/>

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

Currently, in accordance with the current regulatory enactments, a vegetarian diet is allowed in schools and kindergartens, which must necessarily include a certain amount of dairy products, including eggs. A vegan diet is not currently considered an option in educational institutions according to the mentioned regulations, except if the child has a doctor's note that provides for a vegan diet.

Vegetarian food in educational institutions is allowed if the vegetarian menu has been evaluated and approved by a nutritionist or dietician. Schools and kindergartens may provide a vegetarian menu if there is a written request from the parents, but it is not an obligation. Therefore, whether the child will receive a vegetarian diet after submitting the parents' application will depend on the flavor and management of the particular institution.

It should be noted that the Center for Disease Prevention and Control has developed sample vegetarian menus for educational institutions. They have been developed by a nutritionist and all the necessary calculations have been made in them so that the menus fully comply with the requirements of regulatory acts (all calorie and product amount requirements are met). The menus have fully developed technological maps, which, according to the requirements of the Food and Veterinary Service, educational institutions must provide. Therefore, it is not a big burden for educational institutions to provide vegetarian nutrition at the moment – on the contrary – vegetarian menus have already been developed and are ready for use directly in educational institutions. Since they have been developed by a nutritionist and approved by Center for Disease Prevention and Control, they do not require a separate certification from a nutritionist.

When asked whether the policy has achieved its intended goal, the representative of Eco-Schools answers that probably not, more analysis should be done. Certainly, it has not been achieved on a national scale, but it has been achieved in the Eco-Schools network, because it is increasingly being talked about and implemented in schools, for example, a 'Day without meat'. There are more such individual cases. This political initiative is an additional tool to refer to. As one of the campaigns, the representative of Eco-schools also mentions 'International Food Day', which also takes place in eco-schools.

Food and Veterinary Service (PVD) representative mentions that it is difficult to evaluate, to say whether the goal has been achieved, the fact that freedom of choice must be given has not been achieved, because if educational institutions cannot ensure that vegetarian nutrition is available all the time, that it cannot be ensured, then it is not reached. The representative of the Food and Veterinary Service (PVD) emphasizes that the child must be given the freedom of choice, but in this case, it is very often the parents who choose what nutrition to provide for the child.

The representative of LDUSA mentions that the policy has partially achieved its intended goal because at least those who are interested can implement it. It is admitted that nowadays there are very allergic children, basically, they need a parent's application and a doctor's note, or a nutritionist's note, if there is, for example, an intolerance to eggs, milk, gluten, then they have a special menu, while special menus are no longer subject to PVD requirements. If I have to put two things like that, it is the law itself and lack of experience and knowledge.

<p>Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):</p>
<p>There is nothing calculated about how much vegetarian food is chosen in schools.</p>
<p>Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)</p>
<p>The policy lets you choose</p>
<p>Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?</p>
<p>Food and Veterinary Service (PVD) mentions that it could have been solved by giving children choices. For example, currently, there are more options for a menu of the day, but more attention should be paid to adapting the buffet (various choices on the menu) for children. Food and Veterinary Service (PVD) mentions that it is necessary to change the approach to children's nutrition in general, not only in the direction of vegetarian nutrition but in general. Suppose there was more choice, then it would be better.</p> <p>In that situation, at that moment, the policy was implemented according to the needs of that moment. There is a question whether at that moment it was faster to change the existing regulations, to simply amend, or adjust a couple of points in a certain wording, but conceptually it was possible to change the law as a whole. At the time, it was the fastest and most optimal way to do it. It was a lack of time, experience and everything, but it was necessary to look at the experience of the surrounding countries, to study more about how they organize these educational institutions that cater here.</p>
<p>Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?</p>
<p>Not affected.</p>
<p>Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)</p>
<p>The representative of LDUSA mentions that no studies have been carried out on the scale of LV.</p>
<p>Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?</p>

Surveys say there's little acceptance of vegetarianism. The representative of Eco-Schools mentions that the students are generally open to a vegetarian diet. There is no problem with the youth, more with the parents making a fuss. At the eco-school level, in general, everyone is open to a vegetarian diet. He also mentions that, in his opinion, public opinion is changing, and a vegetarian diet is becoming more accessible.

The representative of LDUSA mentions it is clear that public health literacy is very poor when looking at our health indicators and data and it is clear that nutrition is something that we use every day and the question here is that there needs to be a paradigm shift to improve public health in general. Since children spend a large part of their time in an educational institution and this is an opportunity to provide children with a high-quality, varied and tasty day, therefore schools also fulfill a social function, not all children can get quality warm, freshly prepared food at home, due to financial reasons or otherwise.

General remarks:

Lessons learnt from these analyses and preliminary recommendations:

In general, there are several initiatives, but they are not combined in a unified process. The human factor plays a huge role and the human factor starts from the cook, the head of the educational institution, the parents themselves, and how much initiative they take.

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The Cabinet of Ministers of March 13, 2012 No. 172 "Regulations Regarding Nutritional Norms for Educatees of Educational Institutions, Clients of Social Care and Social Rehabilitation Institutions and Patients of Medical Treatment Institutions" (<https://likumi.lv/ta/id/245300>)

VMAnot_060212; Ministru kabineta noteikumu projekta "Uztura normas izglītības iestāžu izglītojamiem, sociālās aprūpes un sociālās rehabilitācijas institūciju klientiem un ārstniecības iestāžu pacientiem" sākotnējās ietekmes novērtējuma ziņojums (anotācija) (VSS-1164)

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1.5 Dietary Policy: Denmark

Summary – Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers:

- Strong engagement by the Organisation for Vegetarian food
- Commitment to climate policies and reduction goals within municipalities
- Support by some (mainly left-wing) political parties in national government
- Growing awareness of the climate impact of certain foods among the population, and a growing wish to consume plant-based meals

Barriers:

- Lack of scientific knowledge about nutritional value in vegan food (especially for small children, elderly- and sick people)
- Political opposition to national influence on regional/municipal matters
- Scepticism and lack of support among staff in canteens, kitchens, kindergartens etc.
- Lack of knowledge of preparing plant-based food among kitchen staff (need for training)
- Strong lobbying organisations in the traditional agricultural industry, representing animal-farmers

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:

Plant based/climate friendly Meals in Public Kitchens and Canteens

Objective(s) of the policy (and associated success metric if available):

There have been several different attempts to implement policies focusing on emissions reductions through plant-based food options in public food services in Denmark. There are two main objectives:

1. Reducing greenhouse gas emissions from the public food sector, by focusing on climate-friendly food*
2. Securing a right to vegetarian/vegan options for all users of the public kitchens and canteens

While reducing climate impact is often an ambition among people choosing to eat vegan or vegetarian, there might be many other reasons for this choice; health, political, animal welfare, religious etc. This objective is therefore about much more than addressing climate change.

*Climate friendly food might include meals with reduced amounts of meat, focusing more on legumes, grains and nuts, seasonal vegetables etc, vegetarian or vegan, also referred to as plant-based.

Status of the policy (implemented, debated, rejected):

Debated/Partly implemented.

Different versions of policies focusing on climate friendly food have been implemented on both national and regional/municipal level:

- Official national nutritional guidelines, specifically for public kitchens and canteens¹³²
- Municipal policies guaranteeing vegan options for users (eg. patients or elderly citizens)
- Weekly or daily plant-based meals available in municipal canteens
- Vegetarian meals, as the only choice in public kitchens and canteens, for instance two days a week

Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

The debate has been ongoing during the last 4-5 years, with different attempts to pass laws on the national level. At the same time, several municipalities and regions have implemented initiatives themselves in the kitchens and canteens within their organisation.

National political level:

October 2020: Motion for a resolution: Two obligatory meat-free meals a week in public (state, regional and municipal) kitchens and canteens – rejected¹³³

December 2020: Motion for resolution: Option to choose a plant-based meal in all public (state, regional and municipal) kitchens and canteens – rejected (in June 2021)

January 2022: The Danish Veterinary and Food Administration of the Ministry of Food, Agriculture and Fishing in Denmark launches 10 new “principles” for public kitchens “Nutritional Advice for Meals” (Danish: Kostråd for Måltider).

March 2022: A political majority imposes the government to research the opportunity to offer plant-based meals in public kitchens. The final report on this subject was published in December 2022.

Municipal Level:

It has not been possible to find a complete list of municipalities with policies around plant-based meals in their canteens, however many have or plan to implement a plant-based option or have taken other measures to reduce impact for climate change from the public food sector.

¹³² Fødevarestyrelsen 2022-1

¹³³ Folketinget: <https://www.ft.dk/samling/20201/beslutningsforslag/B45/index.htm>



Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

The public kitchens and canteens in Denmark offer up to 650.000 meals every day, to staff, citizens, patients, children in schools and kindergartens and many more. These kitchens and canteens include kindergartens, hospitals, schools, Higher educational institutions, homes for elderly people and workplaces under the state, regions and municipalities¹³⁴.

There has been an ongoing debate about plant-based food options since 2019. In May 2022, the Danish government and The Danish Veterinary and Food Administration launched 10 new "principles" for meals in public kitchens. These focused on serving less meat, more vegetables, offering legumes more often than meat, reducing the use of cheese and milk and mostly using whole grain. If followed, these principles would drastically reduce the amount of meat in each meal (compared to the average Danish meal), even though they do not include a specifically plant-based meal option. The principles are currently being implemented.

In March 2022 a political majority decided that the Danish government had to look into the possibility of offering plant-based meals -as a guaranteed option to users if ordered, but not a readily available meal on a certain number of days every week. A report was ordered, which was supposed to research the opportunity to do this and look into possible barriers. The report concluded that there is a need for training and new knowledge among the staff in the kitchens before the implementation of a law can be successful¹³⁵. Another barrier for implementation, according to the report, is the lack of scientific knowledge about the nutrition in plant-based meals, especially when it comes to people with special dietary needs such as small children, elderly or people in hospitals. This points to a "safety-principle"; Danish authorities do not want to recommend anything that could later prove to be unsafe, for example food options which lacks certain essential vitamins, fats or proteins (Ibid).

Several Danish municipalities have already implemented rules in this area, deciding to offer their citizens a plant-based option in their own canteens. More municipalities are expected to follow in 2023.

Throughout the past 5 years, approximately, there has been increased number of people in Denmark who describes themselves as either vegan, vegetarian or flexitarian. A majority of the population believes that it is necessary to cut down on their consumption of meat (Ibid)

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

As there is no national policy on plant-based food at the moment beyond a guideline, no funds have been allocated to this. There have been state-funded campaigns,

¹³⁴ Klimarådet, 2021

¹³⁵ Fødevarerstyrelsen-2, 2022

training material and courses following the new national guidelines which were launched in 2022 by the Danish veterinary and food administration.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

A national policy would be enforced by the Danish Nutritional and Food Administration, while regional and municipal policies are enforced by appropriate administrations at these levels. In addition to these administrations, kitchen- and canteen leaders would be in charge of the day-to-day implementation of policies.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

The most important stakeholder is the national organisation Dansk Vegetarisk Forening (Danish Vegetarian Organisation), an advocacy organisation working to promote plant-based diet. They have been very actively involved in the subject in many years, lobbying among politicians, offering information etc.

Employees and users of the kitchens and canteens have been actively involved in the research for the report published in 2022 through interviews and other data collection. They have also been involved in the implementation of the 10 principles "Nutritional Advice for Meals" since early 2022, through workshops and other training material intended to spread the use of the new principles.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

(See also section above) The Danish Vegetarian Organisation has been engaged in the debate for many years.

On the national political scene especially left-wing/green parties have been advocating policies focusing on plant-based meals. These include Frie Grønne, Enhedslisten, and Alternativet.

There has been an increase in national awareness of the need to address climate change through diet changes among the Danish population in recent years. 3 % of the population considers themselves vegans and vegetarians in 2022, this number was 1,8% in 2017¹³⁶. The number of Danes who have adopted weekly meat-free days is much higher. In 2022 there were 40% of the people having at least one meat-free day a week, while in 2017 this number was 28%¹³⁷. These numbers point to an increasing awareness of the climatic emissions and environmental consequences of meat production among the population.

¹³⁶ Coop Analyse og DVF, 2022

¹³⁷ Ibid

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

<p>Success: Has the policy reached the intended objective?</p>
<p>Because there is no national policy about plant-based meals yet, the objective has not been reached on a national level. As of today, there is no national right to plant-based or vegetarian meals when eating at public kitchens or canteens.</p> <p>However, with the implementation of the Nutritional Guidelines, in the beginning of 2022, there is likely to be a decrease in greenhouse gas emissions from public kitchens and canteens in the coming years.</p>
<p>Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):</p>
<p>There are no statistics on reductions in energy or other emissions available from the (few) local initiatives for climate friendly food.</p> <p>If national laws on vegetarian meals (eg. 2 days per week) were passed, this would cause reductions in emissions from the public food sector. State-, regional- and municipal kitchens and canteens offer up to 650.000 meals every day. Research shows that a person eating a meat-based diet (or the "normal" Danish diet containing meat every day) emits 2.055 kg CO₂ a year, while a vegetarian emits only 1.391 kg CO₂ a year¹³⁸.</p>
<p>Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)</p>
<p>The increasing public focus on the subject of climate friendly food and plant-based foods in recent years has had a documented effect on people choosing to have one or more meat-free days a week.¹³⁹ The number of Danes who wants to eat less meat in the future was 59% in 2022. This amount has increased since this statistic was first made in 2017¹⁴⁰. Therefore, there is likely to be a continues change in lifestyles, when it comes to climate-friendly dietary habits.</p>
<p>Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?</p>
<p>No. In order to secure a right to plant-based meals and also further reduce reductions from the public food sector on national level, there is a need to implement national policies.</p>
<p>Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?</p>
<p>Some research suggests that more women than men are vegetarian or vegans in Denmark, which suggests that a right to plant-based meals would positively affect</p>

¹³⁸ Klimaklogt, Danmarks Naturfredningsforening, 2022

¹³⁹ Coop Analyse og DVF, 2022

¹⁴⁰ Ibid

women¹⁴¹. Some of the state- and regional work places with canteens and kitchens also have a very high percentage of female staff (such as hospitals and homes for elderly people).

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

Offering to more people plant-based meals is likely to have a positive effect on health among staff and citizens using eating in the canteens and kitchens on a regular basis. Research shows that a plant-based diet includes a wide range of health benefits compared to the standard animal-based diet, including lower risks of diseases such as diabetes and some forms of cancer.¹⁴²

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

The 10 new principles for meals in public kitchens launched in 2022, are still under implementation. There is no evaluation available yet.

It has not been possible to research the response of individual municipal changes in local kitchens or canteens.

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¹⁴¹ Ibid.

¹⁴² Felding, Mari



2. Case Studies Housing

2.1 Housing Policy: France - Fostering participatory and community living

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers:

- Vivid network of civil society organisations and project developers, raising the awareness on cohousing
- Increased constraints on traditional large-scale building projects (e.g. due to policies against soil artificialisation), leaving more space for alternative approaches
- Interest from some local authorities to promote cohousing (especially for aging considerations, cohousing can integrate the elderly) and eco-place projects

Barriers:

- Predominance of the individual property-based paradigm in housing
- Remaining financial and legal hurdles and lack of trust from banks to support project developers
- Insufficient understanding and consideration from administrative and social housing bodies
- Lack of awareness on the multiple benefits of cohousing

Potential solutions:

- More comprehensive policy to prioritise cohousing, streamline the support, facilitate dedicated financial mechanisms, and solve remaining legal issues (such as status of cohousing projects and shared spaces)
- Creation of a dedicated administrative agency to increase the consideration of cohousing (notably in social housing) and support exemplary projects
- National assessments communicated to a larger audience

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:

ALUR Law - Loi pour l'accès au logement et un urbanisme rénové, especially its 2015-1725 Decree on cohousing

Objective(s) of the policy (and associated success metric if available):

ALUR is a broad national legislation on housing and access to property. It has several objectives, including to foster participatory and community living.

The law set a framework for easing cohousing projects through the legal recognition of two types of entities that participating households may use to develop their projects: 'inhabitant cooperative' and 'allocation and self-promotion company'.
Status of the policy (implemented, debated, rejected):
Implemented
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
The policy was adopted in 2014, and the decree on cohousing in 2015

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)
Buildings are the first source of energy consumption in France, representing 44% of the total ¹⁴³ . The number of rooms per person is above the EU average ¹⁴⁴ , showing potentials for sufficiency improvements. The State has ambitious objectives in its energy and climate strategy, mostly focused on building renovation and new buildings. Some considerations for sufficiency have also emerged ¹⁴⁵ , although in their infancy or mostly targeting short-term savings ¹⁴⁶ . Although growing, cohousing and community living are far from being mainstream in France. About 1,200 projects have been identified in March 2023 ¹⁴⁷ , out of which about 400 have been completed. This is a very small fraction of the total number of real estate projects. Cohousing approached are still difficult to integrate into the dominant individual property-based paradigm.
Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?
Reducing living space per capita has never been explicitly highlighted as a national goal and limited policies have been adopted. The French legislation still doesn't have a clear legal definition for private spaces shared between households. In 2018, a national target of halving the pace of soil artificialisation by 2030 has been adopted. It may constraint urban sprawl and enhance more compact and optimised living

¹⁴³ <https://www.ecologie.gouv.fr/energie-dans-batiments>

¹⁴⁴ <https://ec.europa.eu/eurostat/cache/digpub/housing/bloc-1b.html?lang=en>

¹⁴⁵ Plan Bâtiment Durable. "Vers une Sobriété immobilière et solidaire". November, 2022.

https://www.planbatimentdurable.fr/IMG/pdf/221118_note_sobriete_v_def.pdf

¹⁴⁶ <https://www.ecologie.gouv.fr/dossier-presse-plan-sobriete-energetique-mobilisation-generale>

¹⁴⁷ Habitat Participatif France, Coopérative OASIS. "Base de données". <https://www.basededonnees-habitatparticipatif-oasis.fr/?CartE>

spaces. In the same year, a new law on housing has implemented tax credits for intergenerational flatsharing (between elderly and students)¹⁴⁸. The role of local authorities appears essential in these matters. An increasing number of municipalities seem interested in promoting (sustainable) cohousing projects and providing some forms of support, such as call for projects on dedicated lands or loan guarantees.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

As the policy sets a legal framework but no obligation, it is enforced as any other legal decision. Legal bodies are in charge of verifying that the provisions are adequately followed. Its effectiveness appears limited, as cohousing has not surged dramatically in the following decade and some of the actual cohousing projects did not even use the ALUR framework.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

Cohousing and eco-village projects are rare but have existed long before the implementation of the policy. The ALUR law and decree are notably inspired by a report prepared in 2011 by several civil society organisations promoting cohousing and representing local projects¹⁴⁹. The report insisted on the environmental and social benefits of cohousing projects. Some of the recommendations, but not all, have been followed by decision-makers.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adoption of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

There is a vivid citizen movement for cohousing and eco-districts in France and several networks of local initiatives. They have been vocal to raise the awareness of decision-makers. The first national gatherings of cohousing projects took place in 2010 and led to the creation of a national coordination, which became the Habitat Participatif France¹⁵⁰ federation in 2018. They organise regular events and open house days. The OASIS Cooperative, focused on eco-districts and villages, has launched an observatory of such places¹⁵¹. Other networks have emerged in the 2010's: the National network of local authorities for cohousing (RNCHP¹⁵²), and the National network of professional actors of cohousing (RAHP¹⁵³). These organisations have worked together and been instrumental in pushing the cohousing agenda and supporting the preparation of the ALUR policy. Available surveys show mixed feelings in the general population about cohousing principles. A 2014 opinion poll¹⁵⁴ revealed that a large majority of respondents thought that community living was essentially fit for students and not families. Only 23% was able to correctly identify

¹⁴⁸ Article L. 118 of Code de l'action sociale et des familles, introduced by the 2018 ELAN Law on housing.

¹⁴⁹ Coordin'action. "Livre Blanc de l'Habitat Participatif". 2011. <https://docplayer.fr/68552577-Le-livre-blanc-de-l-habitat-participatif.html>

¹⁵⁰ <https://www.habitatparticipatif-france.fr>

¹⁵¹ <https://cooperative-oasis.org/decouvrir/lobservatoire-des-oasis/>

¹⁵² <https://www.rnchp.fr/>

¹⁵³ <https://www.rahp.fr>

¹⁵⁴ CSA for Guy Hoquet Immobilier. "Habitat participatif et colocation : le logement de demain ?" June, 2014. <https://www.observatoiredelafranchise.fr/indiscretions-actualite/GUY-HOQUET-LIMMOBILIER-sondage-guy-hoquet-l-immobiliercsa-habitat-participatif-et-colocation-le-logement-de-demain-53696.htm>

what cohousing is about, and only 13% considered it as a potential mainstream approach for the future. 8 years later, a new poll¹⁵⁵ still showed a strong aspiration for living in quiet individual houses with private gardens for more than 80% of respondents. At the same time, a large majority also considered neighbour solidarity as important and would be ready to spend more time providing services to their neighbours¹⁵⁶.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?
The law has set legal clarifications and opportunities for cohousing, however it has not solved all administrative and financial hurdles that project developers are facing. In itself, the law has not triggered a massive change in projects and in the perception of alternative housing approaches.
Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):
Studies at the micro-level on existing projects have highlighted social and environmental benefits of community living (e.g. decreased resource use, lower carbon footprint, etc.), especially when the projects have been designed with environmental criteria. Eco-village inhabitants usually emit twice less carbon than the average, and carbon sequestration is higher in these places ¹⁵⁷ . Comprehensive national assessments are lacking though. The overall impact of this particular policy seems still limited, but could become more significant if other conditions were met to make cohousing (and especially eco-friendly projects) more mainstream.
Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)
The ALUR law aims at facilitating cohousing, which represents a substantial lifestyle change for project participants as it influences many daily routines and supports sufficiency habits. However, the impact at national level is not sufficient yet to transform housing social norms at a large scale. Anecdotal evidence shows that the law has triggered an interest for cohousing in the media ¹⁵⁸ .
Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

¹⁵⁵ Kantar Public for La Fabrique de la Cité. "Baromètre - Les Français et les villes moyennes". July, 2022. https://www.lafabriquedelacite.com/wp-content/uploads/2022/10/Etude-complete70CF24_Fabrique-de-la-cite-Les-Français-et-les-villes-moyennes_0208.pdf

¹⁵⁶ BVA. "Les Français et les relations de voisinage". May, 2019. <https://www.bva-group.com/wp-content/uploads/2019/05/BVA-pour-Profile-Les-Fran%C3%A7ais-et-la-f%C3%AAte-des-voisins-Mai-2019-BVA-ACTU-1.pdf>

¹⁵⁷ BL Evolution. "Empreinte Carbone des éco-lieux français".

¹⁵⁸ A recent example of a mainstream magazine article mentioning the law: <https://www.telerama.fr/sortir/cooperatives-jardinage-et-entraide-les-nouveaux-modeles-de-l-habitat-participatif-7014237.php>

According to interviews of project developers, completing a cohousing project remains a long and arduous journey, notably when it comes to bank financing. The framework set by the law is insufficient to help securing financial guarantees and easy access to regular support for housing (such as tax cuts for access to property, long-term or social loans, etc.). A clearer legal definition and acknowledgment of not only resident cooperatives but also cohousing projects themselves could avoid actual grey areas.

It seems particularly difficult to develop projects in the social housing sector, where state support is generally substantial but earmarked to tenants and difficult to secure for cohousing. The idea of involving residents from the start remains very unusual and few successful projects have been developed with social landlords¹⁵⁹.

Thus far, practical support to project developers and promotion of cohousing has mostly been taken in charge by volunteers in citizen organisations and local networks. They consider the support of the State administration still insufficient or inconsistent.

Last to note, a decree of the ALUR law is still pending on the formal recognition of contributions in kind as social shares in cohousing projects.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

The law in itself only sets legal provisions, thus does not have direct identified gender impacts. However, cohousing projects may trigger certain risks if the distribution of roles and chores between participating families is unbalanced. Gender aspects should be duly considered from the project development phase and the responsibility for maintaining the shared spaces organised in a careful way.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

A few studies have assessed the benefits of cohousing based on samples of individual projects. Although not necessarily representative of a national average, the results suggest that participants to cohousing and eco-places experience greater social relationships¹⁶⁰, feel generally happier and more satisfied of their living conditions, and have more pro-environmental attitudes¹⁶¹.

Elderlies seem particularly interested in spending their remaining years in a more communal lifestyle through cohousing, which can bring several benefits.

Cohousing may also facilitate accession to property for people with moderate revenues. These multiple benefits of alternative housing approaches do not seem monitored at national level, nor widely promoted to the public through public channels.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

As the policy is limited to legal provisions, no acceptance issues are to be noted. Among project developers and cohousing supporters, there seems to be mixed feelings about the policy effectiveness so far. Additional provisions and greater support are requested.

¹⁵⁹ *L'habitat participatif : état des lieux national*, PGI Bourgogne Franche Comté, AG2R La Mondiale (2018)

¹⁶⁰ ADEME. "Construction d'un indicateur de capacité relationnelle dans les écolieux et application à 10 lieux." March, 2023. <https://librairie.ademe.fr/consommer-autrement/6238-rci-e-une-mesure-du-bien-vivre-dans-les-ecolieux.html>

¹⁶¹ Hab Fab. "Les bénéfices socio-économiques de l'habitat participatif". April, 2021. https://www.hab-fab.com/images/Documents/CentreRessources/DocDiv/COMPTE_RENDU_BNFICES_SOCIO-CONOMIQUES_2.pdf

In terms of social fairness, some evidence suggests that cohousing projects have been so far mostly developed by middle-class persons with limited social diversity (nearly 90% of the projects do not include working-class people). This is an aspect worth noting should cohousing become more mainstream in the future. Dedicated cohousing projects and places for low-income populations would be relevant¹⁶².

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¹⁶² *L'habitat participatif : état des lieux national*, PGI Bourgogne Franche Comté, AG2R La Mondiale (2018)

2.2 Housing Policies: Italy

2.2.1. Housing Policy Italy one: Urban regeneration in the city of Milan: recovery of abandoned buildings

Introduction

In cities the lack of residential building at a reasonable cost in the last years became a real problem: many municipalities are developing strategies for addressing the high demand in this sector. In parallel use of new urban green areas should be avoided, preserving the available land. The use or reuse of abandoned buildings is part of the strategy in many cities: in order to speed up the process a number of policies at local, regional and national level are active. The driver for the intervention is an increase (where possible) of the building indexes, or at least avoid the degradation of the building index to the lowest possible. Other incentive schemes, structural reinforcement and energy retrofit, can be combined for the intervention in existing buildings.

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers at the initiative level:

- in Milano several buildings, typically old offices, commercial sites, or former industrial constructions are abandoned or unused since years
- the pressure on the residential sector is unsustainable: the cost for renting an apartment have increased 50% in 10 years, 10% only in the last year
- the market is growing, such interventions are surely profitable
- many of the property owners and other actors in the construction market are very active in the residential sector

Barriers at the initiative level:

- The main barrier is the correct identification of the objects and the right assessment of the bonus
- the necessary work for analysing each single case is time consuming, the office responsible for the work is overloaded and the procedure is complex
- the architectural integration of the proposed project can be problematic: the design is not always properly integrated and not in all cases is possible to ensure a bonus on the building index

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Urban regeneration – recovery of abandoned buildings
Objective(s) of the policy (and associated success metric if available):
<p>Recover and requalify all abandoned buildings. Reuse the existing structures, improving the quality (energy use, comfort). Reduce the use of green soil. Increase the availability of housing opportunities. Increase the safety in and outside the abandoned buildings.</p> <p>Metrics: number of buildings reused, number of apartments made available, number of spaces for other uses. Energy performance of the refurbished buildings (energy need, primary energy consumption, non renewable energy consumption).</p>
Status of the policy (implemented, debated, rejected):
<p>The measure is in the implementation phase: the first 115 areas/buildings were identified. 50 buildings are currently under intervention works.</p> <p>https://www.comune.milano.it/servizi/edifici-degradati-e-abbandonati</p>
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
<p>The policy was implemented after the new masterplan in 2019. Until today for more than 50 buildings the works have been started. In the medium term more areas and buildings will be identified or announced.</p>

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

In Italy about half a million buildings are abandoned or degraded, more than 310 sq. km of available surface. Many constructions are located in the countryside, some in special areas with high environmental value, but also in the urban context.

The land use /land take in Italy is below the EU average in recent years, but more efforts are needed in order to respect the long-term EU strategy that defined the zero target for 2050.

Considering the average 4% of land use for construction in the EU, the Lombardy region reaches 12%. Every year 9 sq. km. of land in the region are built, about 0,2 in Milan city.

In the last years the city of Milan started an impressive work on the former industrial and infrastructural areas (abandoned freight yards, manufacturing plants, ...). Several competitions were made for local master plans with more residential and tertiary buildings.

The low quality of life for the people living in or surrounding such areas needs to be addressed soon, especially in the suburbs of large cities.

In parallel the demand for affordable housing is growing, especially in large cities and major urban centers. More populous cities such as Milan, Rome, and Turin are experiencing increased demand for real estate, with price growth of about 3% every year, while rents increased about 10% in the last year.

EU projects like <https://www.alt-bau.eu/> tried to address the problem of abandoned properties, degraded environment and affordable housing prices, presenting a number of success stories and good policy actions.

The Lombardy Region addressed this issue in 2005, art. 40 bis of the Regional Law 12/2005. In 2012 was proposed a national draft law, and in 2018 another draft proposed the expropriation for such buildings (for safety reasons).

A map of abandoned buildings in Milan, already addressed by the policy, is available here

<https://geoportale.comune.milano.it/portal/apps/webappviewer/index.html?id=8fb81000cd5e422a8b4265957c9db2c3>

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

The municipal policy was driven by the combination of a regional law (first version 2005, modified in 2019) and the new master plan approved in 2019. The policy is coherent and in fact the municipal regulation is stricter than the regional legislation. Other national policies are in discussion, as presented above. The policy is implemented without public finances or other incentives. For all the necessary approval processes the municipality must sustain administrative costs. The incentive schemes for refurbishing the existing buildings are another set of policies that supports this type of intervention. These are typically tax rebates (Ecobonus) or direct money (Conto termico).

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The policy is working and is effective, since more than 50 abandoned buildings will in a short time host new activities and people. In many cases, thanks to the increased building index, it was possible to speed up the process. The list of buildings is updated regularly, and for facilitating the interventions the deadlines for proposing projects are postponed for specific cases.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

There is a political debate if, for high quality buildings, it is really necessary to include the bonus on the building index, or if the inclusion of luxury areas is acceptable. In those areas the revenues for the owner or the building company are already more than sufficient for justifying the intervention, without using the volumetric incentive. Any property owner has the possibility to signal the building. The other citizens and actors can only do a formal communication to the municipal office.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

Associations and citizens participated in the discussion mainly in the beginning, during the approval of the municipal master plan. The regional law started the policy, the municipality defined more in detail the local rules. All the decisions are taken at municipal level (city council).

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

<p>Success: Has the policy reached the intended objective?</p>
<p>The policy is contributing to urban requalification. Only in the longer term will a more comprehensive evaluation be possible – the number of buildings and the complexity of the interventions are quite high.</p>
<p>Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):</p>
<p>There has been no direct assessment of such policy. In general, the reused buildings are more efficient and for sure the land take is reduced. So, not only energy and emissions reduction but also better environmental management is possible thanks to the reuse of existing structures.</p>
<p>Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)</p>
<p>The policy is contributing to urban requalification. Only in the longer term will it be possible to understand if such policy will change the construction sector. The higher profitability of new constructions is the major obstacle to reuse and refurbishment.</p>
<p>Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?</p>
<p>As written above, only in the longer term will it be possible to understand if such policy is appropriate. Clearly there are elements of inequity (different bonuses are possible depending on the area, more profitable interventions are in central areas, ...), and the architectural integration must be carefully evaluated.</p>
<p>Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?</p>
<p>The gender aspect is not directly considered in this policy.</p>
<p>Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)</p>

The possible multiple benefits are the requalification of a specific area/building. The impact on jobs is clearly positive, due to the refurbishment of the existing structures and, if accepted and possible, the newly built volumes. Those actions typically lead to a better life quality for the surroundings, higher property value, more safety due to the removal of abandoned structures.

The negative effect can be that the most profitable areas and buildings are addressed first and with more quality, leaving abandoned properties in the suburbs or far from the centre.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

The policy has been generally ignored by the citizens. Probably it is a policy intended for big investors or property owners. Associations and political parties are criticising the bonus in the case of highly profitable interventions, depicting those as a "gift" to the richest companies and areas.

General remarks:

Lessons learnt from these analyses and preliminary recommendations:

The local authorities, responsible for the land and the urban development, tackled the problem of abandoned and unused buildings - already some years ago - for safety and decency reasons, and in many cases for solving the high demand of housing. The regional policy in Lombardy has been active since 2005, the municipality in Milan has included it afterwards in the master plan, limiting the bonus and scanning the city territory with the help of citizens, associations, and obviously the property owners. The policy is working since many projects are in progress. The administrative load is quite high, due to the number of technical issues to be checked by the technicians. It's important to structure an office with several experts in the architectural field for a good result, especially in big cities.

2.2.2. Housing Policy Italy two: Co-Housing Trentino

Introduction

The results presented in this document refers to a specific individual initiative promoted by a group of active citizens and experts rather than a government policy implemented at the national or regional level.

Cohousing Trentino aims to promote co-housing in Trentino Province, organizing laboratories and offering technical support to public administration and private companies/citizens that would like to implement this way of living.

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers at the initiative level:

- Sense of community, savings, sharing and mutual help raising the awareness on cohousing
- Legal framework implementation as housing policy.
- Inclusion within the legal framework of the cohousing model as a housing policy supported by the public administration or local government.
- Experiments.
- Involvement of public administrations, market actors (businesses, architectural firms), third sector, and civil society to promote cohousing and eco-place projects.
- To initiate a cohousing experience, the first step is to cultivate self-awareness among the participants who are involved in this endeavour.
- A culture directed towards sharing economy, frugality, solidarity economy, and environmental consciousness.
- Active and conscious citizenship.

Barriers at the initiative level:

- Lack of opportunity in the real estate market.
- Public administration does not act unless there is a regulatory framework so currently they are unable to influence alternative lifestyles such as community living. Public administration often does not take action unless there is a specific law or clear regulations that outline how to proceed.
- The interpretation of cohousing as a welfare policy rather than a housing policy. Misinterpreting cohousing as solely welfare could undermine the broader goals and values of the cohousing movement, which include sustainability, social connection, and active participation in community life.
- Cultural distortion: cohousing is often perceived from a welfare perspective rather than as a social lifestyle. Confusion between the definitions and understanding of concepts between social housing and cohousing.
- A lack of shared definition of cohousing among all the involved stakeholders.

- A cultural model still predominantly individualistic, competitive, and oriented towards wealth accumulation and consumerism.
- Lack of awareness on the multiple benefits of cohousing.

Potential solutions:

- The need for reconversion in cohousing policies: a regenerative urban planning approach towards abandoned buildings.
- An active welfare policy that incentivizes the shared economy, the use of spaces for intentional communities while optimizing resource utilization (collaborative economy), such as car sharing. Cohousing seen as self-production of welfare services (examples: internal day care and mutual assistance among residents).
- Increase awareness
- Develop a strategic plan to establish a pact or agreement that defines the shared elements of coexistence and the reasons for coming together. This strategic plan aims to create a collective understanding among the participants and outline the principles and values that will guide their shared living experience.
- Promote on the media with wide coverage (ie. TV) exemplary and positive projects that enhance the awareness of alternative ways of living and to trigger emulation. There is no awareness that this shared way of living exists (see co-housing experiences in the Netherlands).
- Empowering individuals through free workshops.
- Increase the awareness-raising events organized by the Province and local municipality. As of today, direct promotion is lacking from politicians and municipalities.
- Training program is needed to facilitate the creation of a solid intentional community, otherwise the model of collaborative cohousing risks (as has already happened in some projects we have visited in Italy) turning into a condominium, with the same conflicts and housing difficulties.

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Co-housing and co-living
Objective(s) of the policy (and associated success metric if available):
<ul style="list-style-type: none"> • Cohousing Trentino has the objective to promote and support cohousing projects and to facilitate participatory and community living and also to increase the awareness of this way of living, describing the differences between traditional living and co-housing and co-living.

- To initiate a participatory process that has led to the involvement of various economic operators in the region (food, tourism, and commercial businesses) as well as individual citizens.
- To support the first community energy cooperative in Trentino (CER), which will be able to self-generate resources for collaborative co-housing.
- To obtain a legal and administrative framework for cohousing and intentional communities

Status of the policy (implemented, debated, rejected):

Thanks to the Cohousing Trentino, in the Autonomous Province of Trento there is a specific legal recognition that introduces the Cohousing model among provincial housing practices, opening up space for a real ecological and environmental transition.

Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

At the end of 2019 there has been the approval of some amendments to the provincial law of November 7, 2005, No. 15, "Provisions on provincial housing policy and regulation of provincial interventions in housing construction," following the international guidelines set by the Agenda 2030. Recently, in December 2021, a further step was taken with the Resolution of the Provincial Council ([Del. G.P. n. 2295 di data 23 dicembre 2021](#)) the drafting of implementation criteria by the public administration, aiming to promote social cohesion and community welfare through this measure. Essentially, this legal framework allows for the allocation of public funds for the renovation and restructuring of properties to make them suitable for use by housing communities pursuing collaborative living intentions.

With these amendments and the related implementation criteria, it has been taken the first step towards positioning the Autonomous Province of Trento as a best practice reference in Italy.

Following this, a first experiment of collaborative housing has been promoted by the Municipality of Albiano in 2022.

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

The Italian PNRR (National Recovery and Resilience Plan) seeks to support innovative policy interventions that leverage urban regeneration to pursue the objectives set by the UN 2030 Agenda. Specifically, Mission 5 (Inclusion and cohesion) aims at integrating national policies and investments in the country "to ensure a multifaceted

approach that involves both the availability of more accessible public and private housing and urban and territorial regeneration". An active promotion of innovative, ecological, and socially impactful housing solutions in Italy is undertaken by Homers¹⁶³. The task to collect and maintain a database¹⁶⁴ to map co-housing projects is the result of a collaboration between Homers Lab and HousingLab, an association which is committed to spread good practices regarding social and collaborative ways of living.

In Italy, co-housing is still at a preliminary stage. There are experiments conducted by public administrations (i.e. Porto 15 <https://www.porto15.it/>), as well as initiatives by private entities (i.e. Ecosol, <https://www.ecosol-fidenza.it/>) and, at most, those promoted by the third sector in a more welfare-oriented form. In general, however, there have been grassroots initiatives that have been taking place.

So far, 40 projects of collaborative housing have been mapped in the country¹⁶⁵. Of these, 30 are inhabited, 4 are under construction, and 6 are in possession of a building or land (awaiting project approval or the start of construction). Existing projects are mainly located in the North, particularly in Milan (19) and Turin (6). Data show that collaborative housing has its pioneering first project back in 2001, though the systematic implementation of collaborative housing began in 2008. The first cohousing initiative was launched in 2009, and the data demonstrate that, despite some fluctuations, the production of cohousing remains constant.

In recent years, the Italian Network of Ecovillages, the Italian Cohousing Network, the European SALUS Network, and CONACREIS have developed a legislative proposal for the recognition of Intentional Communities¹⁶⁶. Thanks to the initiative of some parliamentarians this proposal was submitted to the Constitutional Affairs Committee on October 22, 2020. Among the interesting points that emerge from the law proposal is the possibility for public administrations to grant Intentional Communities the availability and use of public properties and assets, including those confiscated from organized crime¹⁶⁷. However, as of today, the proposal is still pending in Parliament and awaiting scheduling and discussion.

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

¹⁶³ Homers - a spin-off of Politecnico of Turin - is an innovative benefit corporation promoting a model to recover and enhance unused building assets, while also building communities interested in their acquisition and reuse.

¹⁶⁴ A map of existing co-housing projects in Italy can be found here: [Mappa Cohousing in Italia | Diffusione e luoghi \(homers.co\)](#).

¹⁶⁵ Housing Lab. *Abitare collaborativo in Italia, stato dell'arte*. 2017 [report-mappaturaHL20171.pdf \(housinglab.it\)](#)

¹⁶⁶ <https://documenti.camera.it/leg18/pdl/pdf/leg.18.pdl.camera.2730.18PDL0120570.pdf>

¹⁶⁷ <https://www.italiachecambia.org/2021/04/legge-ecovillaggi-cohousing-comunita-intenzionali/>

At provincial level, the Autonomous Province of Trento intends to actively promote the development of collaborative housing projects and experiences, particularly in the form of cohousing and coliving, with the aim of promoting innovative housing solutions that combine sustainability and solidarity, collaboration and mutual support among the interested residents. This initiative also aims to generate social value and strengthen the sense of community.

However, from the interviews, it emerges that the policy could have more impact if the co-housing would become more a housing policy or a welfare housing policy. In this case co-housing could be a comprehensive response to the fragmentation of welfare services within a range of self-sufficiency people.

A policy that promotes a culture directed towards sharing economy, frugality, solidarity economy, and environmental consciousness should be cultivated.

There is still a lack of awareness among policymakers that a home is not just walls (as a space concept) but a system of services (housing as a service), often self-produced.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

A first experiment of co-housing has been put in place at the end of 2022 and it is still early to evaluate its effectiveness.

From the interview it emerges that there is another open reflection with experts from the provincial structure that a Cohousing project cannot solely focus on financing the renovation of a property. It should be designed to meet the needs of collaborative living, striking a good balance between private spaces and communal areas.

Furthermore, it is crucial to promote the development of an intentional community as well.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

The Resolution has been reached through the awareness-raising efforts of a group of active citizens and experts from "Cohousing Trentino," and with the valuable political support of sociologist and provincial councilor Alex Marini.

The Co-housing Trentino has been involved as technical support both at provincial and municipality level.

Co-housing Trentino in general engage citizens through laboratories and workshops.

Co-housing Trentino believes that a training program is needed to facilitate the creation of a strong intentional community; otherwise, the model of collaborative cohousing risks (as has already happened in some projects we have visited in Italy) turning into a condominium with the same conflicts and housing difficulties.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adoption of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

Thanks to word of mouth and several offered laboratories on Cohousing, Cohousing Trentino counts on 1200 people interested in this alternative way of living.

They have organized a training workshop: "ABC dello stare insieme ®" ("ABC of Being Together®") of 3 days in October 2021 towards the construction of the first nucleus of an "intentional community": the Circle of Good Living.

The Resolution has been reached through the awareness-raising efforts of a group of active citizens and experts from "Cohousing Trentino," and with the valuable political support of sociologist and provincial councilor Alex Marini.

Some other initiatives are being carried out, such as organizing provincial conferences on co-housing or initiatives organized by mutual aid associations. However, there is a perception that the political sphere has not yet fully grasped the concept of co-housing beyond its physical space or its association with welfare.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

<p>Success: Has the policy reached the intended objective?</p>
<p>Yes, the initiative reached the intended objectives to introduce a provincial Resolution. However, there are still working on obtaining a law for the recognition of Intentional Communities.</p> <p>From the point of view of the Resolution put in place, the 1st and only experiment in Albiano just started.</p>
<p>Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):</p>
<p>Not applicable in this case. However, analysis of existing projects in Italy have highlighted social and environmental benefits of community living (e.g. decreased resource use, lower carbon footprint, mutual help, etc.), especially when the projects have been designed with environmental criteria.</p>
<p>Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)</p>
<p>N/A</p>
<p>Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?</p>
<p>The Resolution put in place by the Province of Trento tries to fill a regulatory gap related to Cohousing and Coliving as models of collaborative living.</p>
<p>Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?</p>
<p>N/A</p> <p>From the interviews, it emerges that women in general show greater sensitivity to the subject and understand better the co-housing concept and intentional community. For women, cohousing seems to be seen as a factor of emancipation, shared caregiving, and a lifestyle model that brings many benefits in organizing daily life and alleviating daily burdens. On the other hand, men seem to associate cohousing primarily with sharing Recreational and sports activities.</p>

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

N/A

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

According to the interviewers:

- Since in Italy housing is connected to land rent, shared ownership (common spaces) could be seen as a negative factor.
- The cultural model in Italy is still predominantly individualistic, competitive, and oriented towards wealth accumulation and consumerism and this represents a barrier.
- There is a cultural shift when people participate in co-housing initiatives. They realize that it is not just about agreeing on shared spaces, but about developing as a community and embracing a different lifestyle. It is not yet widely seen as an effective or equitable way of living.

General remarks:

Lessons learnt from these analyses and preliminary recommendations:

- To approach and implement solutions for housing, it is important to bring together and involve the four key actors, namely the public administration, market operators, the third sector and the society, in an integrated systemic approach.
- The emulation of models applied in other countries (i.e. the Scandinavian cohousing model) in Italy may not work because it has been applied without considering the need to involve all four key actors. In Italy, it requires a coalition actor to initiate a chain of collaboration among the different stakeholders.

2.3 Housing Policy: Germany

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Drivers:

- Community initiatives that promote alternative modes of transport and alternative usage of parking space (e.g. Radentscheid)
- Municipalities, city and traffic planners that no longer plan cities around car traffic/roads
- A change in transport behaviour within some parts of the population away from the car towards more sustainable modes of transport (pioneers for their peers)

Barriers:

- Lobbyism by the automobile industry
- Certain parties and their voters who don't want to give up the car and don't accept any alternative
- The need to promote alternatives like public transport, better and more bicycle lanes, etc.
- Safety concerns especially during darkness
- Huge differences between urban and rural areas

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Parking space key in the building sector (German: Stellplatzschlüssel im Gebäudebereich)
Objective(s) of the policy (and associated success metric if available):
Municipal parking space statutes or ordinances determine the number of parking spaces for motor vehicles and bicycles that must be built on the building plot or a nearby plot in the case of new buildings or conversion work on existing buildings.
Status of the policy (implemented, debated, rejected):
(Partially) Implemented: On 1 July 2022, the uniform NRW parking space ordinance came into force. With this ordinance, municipal parking space statutes have gained a special status: They enable parking space regulations to be differentiated according to local conditions and municipal development strategies and can be used as a building block of municipal transport development and mobility management. Please note that this information is only valid for the state of North Rhine Westphalia. Please find more information on the current situation in other states below.
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
01.07.2022 The time horizon of the policy is long-term due to its tie to the construction sector.

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

Legal Framework: The construction of parking spaces is subject to building code law and is thus regulated federally, in the respective state building codes (LBO - Landesbauordnung) of the federal states. In most federal states, the obligation to build parking spaces is anchored in the LBO (Bayern, Baden-Württemberg, Bremen, Niedersachsen, Nordrhein-Westfalen, Rheinland-Pfalz, Saarland, Sachsen, Schleswig-Holstein, Thüringen). The municipalities are allowed to enact their own bylaws with deviating regulations. In Brandenburg, Hessen, Mecklenburg-Vorpommern und Sachsen-Anhalt there are no obligation to build parking spaces. The municipalities in these federal states have the opportunity to enact their own bylaws. In Berlin there is no obligation to build parking spaces, in Hamburg not for residential buildings and halls of residence. The number of parking spaces required depends on the type of use and the number of users of the building. The parking space key determines the number of parking spaces that must be built and bought by the owner per spatial unit.¹⁶⁸

The most common rule is "one car parking space per dwelling". In rural and suburban areas often more: Here the average parking space ratio is 1.5 car parking spaces per residential unit. This leads to a problem, especially in cities where space is scarce: parking spaces compete with other land uses. When too many parking spaces are built, they attract traffic. Shopping centres and leisure facilities become traffic generators, causing congestion as well as environmental problems. The obligation to build parking spaces increases construction costs and makes housing more expensive.¹⁶⁹ Furthermore, grey energy is also bound in the construction of parking spaces, which has an environmental effect.

When municipalities are allowed to enact regulations on the obligation to build parking spaces, three procedures can be distinguished¹⁷⁰:

1. Removal of the obligation to build parking spaces in order to reduce construction costs: In Germany, for example, the city states of Berlin and Hamburg have at least partially removed the obligation to build parking spaces
2. Reduction or suspension of the obligation to build parking spaces if there are alternatives, e.g. if the building project is located in an area with good public transport connections and/or qualified mobility concepts are available: Practical examples are Freiburg/Br., Darmstadt and Graz
3. Setting a maximum number and thus limiting the number of parking spaces, i.e. parking space ceilings for new buildings. Practical examples are Zurich, which has the most progressive approach of maximum values for residential buildings, and central London, where the change from minimum to maximum numbers took place in 1976 before this approach was extended to the whole city.

In most European countries, responsibility for parking policy lies with the municipalities. Each city and municipality is usually free to define the goals of parking policy and to select the political instruments implementation¹⁷¹.

¹⁶⁸ VCD, 'Intelligent Mobil Im Wohnquartier. Handlungsempfehlungen Für Die Wohnungswirtschaft Und Kommunale Verwaltungen'.

¹⁶⁹ Gies, Jürgen, and Martina Hertel. 'Regelungen Zum Stellplatzbau Als Steuerungsinstrument In Der Stadt- Und Mobilitätsplanung - Europäische Erfahrungen Und Praxis', August 2021.
https://park4sump.eu/sites/default/files/2021-10/parking%20standards_civitas_de%20web.pdf.

¹⁷⁰ Ibid.

¹⁷¹ Ibid.

In order to be able to evaluate the significance of mobility management for reducing the need for parking spaces, comprehensive impact studies are required. In conclusion, it is not yet possible to say how the various measures have a concrete impact on car ownership¹⁷².

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

As stated by a local politician from Dortmund (2023), certain examples demonstrate the transformation of parking spaces into exclusive areas for car-sharing providers, fostering the growth of car-sharing services. Another approach involves repurposing parking spaces into secure bicycle boxes. However, such measures primarily benefits cyclists, limiting their reach to a specific group of individuals. As a result, the implementation of these initiatives faces challenges in gaining public acceptance due to their limited inclusivity.

All interviewees agreed that instead of banning or reducing the number of parking spaces, the expansion and promotion of alternatives such as sharing services, public transport and improved cycling infrastructure plays a much more important role when it comes to changing people's mobility behaviour. If there is always talk of a reduction or a ban, then there is a danger that people will think something is being taken away from them and that this will lead to rejection.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The policy is being enforced by the municipalities by traffic and urban planners. Whether they are successful depends on the specifications of the municipalities, but also on the wishes of the developers. There are rarely upper limits for the construction of parking spaces (none of the interviewed persons had an idea why) so people or investors can theoretically build as many as they want. It has to be kept in mind that the marketability of residential units still depends in parts on parking spaces.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

Highlighting the perspective of a local politician from Dortmund (2023), it is evident that the public is actively engaged in the decision-making process within the city. Numerous citizens' initiatives have emerged, and advisory boards focused on topics such as local mobility, noise/air pollution and climate have been established. Importantly, these boards and councils do not solely consist of political representatives, but also include a significant number of representatives from the general public. Additionally, the general public is involved through interactions and collaborations with various associations and stakeholders present in the area. The involvement of the public is considered a crucial aspect of decision making [in Dortmund].

In many German municipalities there are local NGOs that are called "Radentscheide" (bicycle decisions) which call for a redesign of the traffic infrastructure by the city via petitions.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

According to a local politician from Dortmund (2023), there is a diverse range of opinion regarding this policy. It is important to note that not everyone supports it, and among those who do, their level of support varies significantly. Some advocate for sweeping changes in parking space statutes, while others call for more modest adjustments. On the other hands, there are those who completely reject the policy. The degree of support or opposition is

¹⁷² Ibid.

influenced by personal perspectives, and it is also influenced by the agendas and priorities of different factions or parties.

"A very big obstacle are the lobbying associations, the interest groups that live from cars and live from the sale of cars" (City planner from Aachen, 2023).

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?
Can't be said at the current moment.
Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):
Climatic advantages result from the fact alone that less area has to be compacted and built on for use as a parking lot. On the one hand, this means that less soil is sealed and, on the other, it saves gray energy that is tied up in building components. In addition, the effects on the change in mobility behavior result in further climatic benefits if alternative means of transport such as the bicycle or public transport become more attractive than the car.
Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)
As stated by a local politician from Dortmund (2023), the transformation of parking space statutes holds significant transformative potential. However, this transformation may give rise to tensions, particularly when there is a lack of alternative options. Without providing viable alternatives, such as expanding and improving the public transport system, the situation is likely to deteriorate, especially in rural areas with inadequate public transportation infrastructure. "There are certainly many people that, because of their habits, believe they always have to own a car and have it as close to their home as possible" (City planner from Aachen, 2023).
Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?
According to a city planner from Aachen (2023), reducing the number of parking spaces will be a crucial element of a comprehensive mobility transition. This transition requires a reorganisation of the entire mobility system to accommodate these changing demands. It is important to ensure that people can still fulfil their mobility needs within a simplified and alternative system that supports them. The reduction of parking spaces serves as a necessary step in this direction. According to Gies & Hertel ¹⁷³ the reduction of parking space ratio is also one of the greatest potentials for sustainable land use for settlement purposes. However, it needs to be acknowledged that this shift in mindset may take a considerable amount of time, possibly even decades, before it is widely accepted by the public.

¹⁷³ Ibid.

Following the same city planners' statement, reducing city traffic raises questions, including whether it would effectively address commuting congestion. While inner city traffic may potentially decrease due to limited parking spaces and reduced local driving, the impact of commuting traffic remains uncertain. To tackle this challenge, additional strategies are required. One approach involves placing greater emphasis on regional traffic, ensuring seamless connections with local public transport and even implementing bicycle expressways. This entails establishing more efficient public transport links, such as a denser bus network and ride-sharing networks in the suburbs and rural areas surrounding the city. These measures primarily target the origin of commuting travel that flows into the city.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

As stated by a local politician from Dortmund (2023), cities must incorporate a gender-responsive approach in their planning. Currently, the emphasis has primarily been on addressing the needs of the most vulnerable groups of the population, such as the immobile and children, without ensuring gender equity. Safety is paramount in promoting mobility. For instance, subway stations that lack connections for extended periods of time during the night create anxiety-inducing spaces known as 'Angsträume'. It is crucial to design and plan these areas to prioritize safety and foster a sense of security. Other examples include poorly lit bicycle lanes, bus stops, and trains stations, which also require attention and improvement.

Regarding the gender dimension, the safety issue has been mentioned by all interviewed persons. Especially in the evening, the "protective shell" of the car is an important aspect for choosing the car as the mode of mobility. Other options will only become attractive if the safety issues are addressed and people feel safe.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

By reducing the presence of cars in urban areas, the city spaces can become less cluttered, offering numerous advantages. Not only would this lead to improved air quality, as evidenced by the decrease in particulate matter and CO2 levels during COVID pandemic, but it would also have a positive impact on public health due to cleaner air, according to a local politician from Dortmund (2023).

Based on statements by a city planner from Aachen (2023), the utilization of parking spaces in urban areas goes beyond their conventional purpose and holds significant potential for various urban development goals and plans. The current parking space statutes often act as a constraint for certain building types, limiting the density of construction on land plots. However, reducing the number of parking spaces would simplify construction processes, potentially making them more cost-effective, especially when it comes to underground parking, which incurs high construction costs. Such reduction would not only decrease construction expenses but also contribute to lower CO2 emissions associated with the construction industry.

Moreover, repurposing parking spaces can address climate adaptation needs by creating green spaces that serve as recreational areas and contribute to overall urban resilience. Additionally, the introduction of car-sharing and ride-sharing initiatives can generate new employment opportunities.

Contrary to concerns raised by businesses and the retail sector that reducing parking spaces would negatively impact revenue and sales, evidence suggests that

an attractive and pedestrian-friendly city can attract more visitors, resulting in increased spending. Numerous studies demonstrated that promoting cycling, for example, can lead to a boost in sales.

Therefore, reimagining the use of parking spaces holds substantial benefits for urban development, construction efficiency, environmental sustainability, and economic vitality.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

The interviewees agree that social acceptance will only be achieved through the massive expansion of alternative transportation methods (good spatial coverage, high frequency, good service, cleanliness, safety), good repurposing of currently existing parking areas, development of rural areas to a degree that alternative methods (e.g., through park & ride lots, or similar) are considered reasonable. All these measures must not only be implemented but also communicated and advertised on a large scale and with strong intensity. Political agreement on the necessity and sense of these measures can help to ensure that no one, for convenience or other reasons, can take an opposite side that enjoys political backing.

"The biggest obstacle in implementing such changes are the habits and the lack of imagination to envisage what can be organized in a citizen's life in a different way" (City planner from Aachen, 2023).

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2.4 Housing Policy: Latvia

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers:

- The low quality and energy efficiency of the building stock and increased disappointment by residents
- European funding opportunities
- Lack of affordable housing built after 2000
- The increased political will to address renovation
- The cost benefits of renovation
- Increased municipal support in pursuing renovation projects in Riga
- State support to take loans when banks are unwilling

Barriers:

- Low social cohesion among multi-apartment building residents
- Dispersed cooperative housing traditions and no co-housing projects
- Low capacity and reputation of housing maintenance companies
- Lack of funding beyond European funds
- High construction costs and low willingness for banks to grant loans

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Multi-apartment building energy efficiency programme 2022-2026
Objective(s) of the policy (and associated success metric if available):
To improve the energy efficiency of 170 multi-apartment buildings
Status of the policy (implemented, debated, rejected):
Implemented and in its first year
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
2022 to 2026

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

From the state perspective, the energy sector constitutes 35,1 % of emissions in Latvia with 41,6% of these coming from heating and electricity production.¹⁷⁴ From an individual perspective, emissions from housing constitute 17% of an average lifestyle carbon footprint of an inhabitant of Latvia. 91% of inhabitants of Riga live in housing built before 2000 with the majority living in mass housing projects built of low-cost concrete panels from the 60s to 80s. Most of the buildings have not been renovated and constitute the majority of the emissions on a household level. Soviet-built multi-apartment buildings have relatively smaller apartments than many of their counterparts in Europe which results in Latvia having one of the highest overcrowding rates among OECD countries. Nevertheless, their affordability and prevalence make their renovation the most efficient way to reduce emissions from heating. This is also important since climate change has changed the discourse on what amount of square meters is optimal for good quality of life. While building nearly zero emission housing is important and interest in co-housing projects has appeared, policies aimed at renovation, therefore, qualify most as sufficiency policies.

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

The policy is part of a series of initiatives aiming to support the renovation of multi-apartment buildings. In 2016, Energy Efficiency Law was enforced in Latvia promoting rational use of energy sources and limiting climate change. The country is in the process of promoting and mainstreaming building energy certification and there are many debates on policies that force inhabitants to renovate, such as increased property tax for energy-inefficient buildings. Some of these debated restrictive policies can have both supporting and contradictory trajectories.

An important development in Riga is that in 2023 the municipality is developing its Housing policy guidelines 2024-2030 where one of the major directions is energy efficiency, including aiming to support the use of the renovation programme in Riga. There are also other initiatives proposed in the discussions that are part of the development of the strategy, such as the development of co-housing and the possibility to swap apartments. The policy is financed through the Recovery and resilience facility and includes 57,2 million euros.

¹⁷⁴ LVGMC 2022. gada siltumnīcefekta gāzu inventarizācijas kopsavilkums

https://videscentrs.lv/gmc.lv/files/Klimats/SEG_emisiju_un_ETS_monitorings/Zinojums_par_klimatu/SEG_kopsavilkums/Majas_lapai_LVGMC_2022_seginvkopsavilkums.pdf

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The policy is implemented by ALTUM, a state-funded development finance institution that implements state aid aiming to compensate for market shortcomings.¹⁷⁵ The previous ALTUM programmes have both supported the renovation of many apartment buildings in Latvia and provided state-guaranteed loans to multi-apartment building owners to whom commercial banks have been unwilling to loan. The policy is effective in municipalities that are most active in applying for it. The policy is effective on its scale.

In housing management circles policy enforcement is seen as ineffective since in their view it is not enough to reach broader goals. Many believe that renovation should be enforced on buildings in bad condition. There have been several cases in Riga when a building becomes dangerous for living and the inhabitants are still unwilling to renovate due to various reasons, including financial. For these cases, there is increased movement in policy circles and renovation-related fields to enforce renovation. No policies apart from increased property tax and minimal energy efficiency standards have been developed so far, but for the Riga housing strategy several initiatives have been discussed, including the municipality taking over dangerous buildings for renovation. It is, however, unlikely that the idea will gain support in the final version of the strategy.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

The organisation of the programme is top-down, but the development of housing policy guidelines includes and is going to include wide stakeholder engagement. Most engagement, however, is in the implementation phase where ALTUM and municipalities organise activities that involve organisations, businesses and housing estate representatives. Civil society is increasingly involved in advocating for broader renovation. At the same time, many inhabitants of buildings have not juridically sorted out their collective ownership of buildings since 1990 when the system changed and broad-scale privatisation was organised and expect most to be organised by housing maintenance companies. Participation in civil society organisations in general in Latvia is below the European average. In Riga, trust in other people is also lower than in other regions reaching only 41 %.

¹⁷⁵ Daudzdzīvokļu māju energoefektivitāte 2022-2026

<https://www.altum.lv/pakalpojumi/iedzivotajiem/daudzdzivoklu-maju-energoefektivitate-2022-2026/>

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

There are few long-standing citizen organisations working with housing. There have been several housing estate NGOs, but they didn't attract wide participation. In Latvia, there are quite many maintenance cooperatives, but they are loosely organised and work mostly by themselves. The key actors, therefore, have been state and EU institutions, even though there is a broad understanding in society that renovation should be pursued at a significantly higher pace. The key actors in implementing the policy in Latvia have been municipal housing maintenance companies in municipalities where renovation is of high priority. Riga, for example, so far hasn't been one of them. The previous ALTUM programme has increased many opinions that renovation is financially and environmentally beneficial.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

The policy is ongoing and has yet to reach the intended objective. The policy is highly likely to reach its objective as there is a high need to co-fund renovation. The previous renovation programme of ALTUM was used by many building owners but did not receive high popularity in Riga. The inhabitants of Riga, while a significant share of the Latvian population, received a relatively small amount of funding. Currently, the municipality is aiming to take a significant part of the projects, but it is likely that many other towns have proportionally better results since housing maintenance companies in Riga have not been as proactive in attracting funding and people, in general, has lower trust in them. Additionally, buildings in Riga tend to have more inhabitants with high differences in income, ethnic background and generally low social cohesion.

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

The renovation should allow to reduce heating by about 50%, thus reducing the emissions in the process. In the multi-apartment building sector, combining different energy efficiency programmes, including the one by ALTUM, Riga aims to reduce CO₂ emissions by 59563 tCO₂ per year until 2030.¹⁷⁶

¹⁷⁶ Riga City Sustainable Energy and Climate Action Plan 2022-2030

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

In order to renovate buildings, the residents are forced to come together and make collective decisions. In many apartment buildings, the pursuit of renovation has brought more cohesion. In others, where no decision was made, it has created tension and conflicting situations. While there are municipal workers that offer support in the process, there is nevertheless, a lack of broader mediation that would bring more change in the area. Additionally, the buildings themselves are little suited to create spaces for collective gatherings, such as those present in co-housing projects. In Riga, the municipal housing policy guideline aims to develop new instruments that foster the development of communities in multi-apartment buildings and that also could potentially bring together neighbourly buildings if they decide to cooperate in the renovation.

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

The programme aims to co-fund the renovation of 170 buildings, but around 6000 buildings need to be renovated in Riga alone. The scale of the support is too short to have a large impact on reducing emissions. Nevertheless, it is an important programme with good potential to speed up the process of renovation. Riga is currently in the process of creating the Riga Energy Efficiency Fund and is aiming to renovate 2000 buildings by 2030. While this number is written in its climate action strategy and will also be a part of Riga's housing policy guideline, it is highly unlikely to achieve this goal. The establishment of the fund, however, is an important step towards reaching that goal as Riga has one of the lowest renovation rates in the EU.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

Housing maintenance in apartment buildings is engaged with diversely by men and women in Latvia. The people who take responsibility for multi-apartment buildings tend to represent both genders. While issues related to construction tend to be more often engaged by men, general questions about maintenance, architecture, and cleanliness are often important to both. Some research suggests renovation has positive effects on people spending more time at home, such as older adults, parents with small children and people working from home. In these categories, women are more represented in Latvia, therefore, renovation is of broad concern to women.

Issues of gender are not a part of the political discussion on renovation. Most discussions in Latvia about differential impact and engagement are about age, income and ethnicity. In these, older adults, people with lower income and ethnic minorities are seen as less eager to support the renovation. This, however, is also disputed. None of the policies are aimed or designed to mitigate these potential differences.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

The policy has benefits not only on energy savings and increase of quality of life but in cases where funding has been achieved, it has broader effects of social cohesion among building residents. Kickstarting renovation usually requires cooperation that brings people together. Higher rates of renovation also mean job opportunities in the construction sector and local companies have opportunities to provide their insulation materials. In the Baltic region, there have been several innovative solutions for insulation panels that also take into mind the embodied carbon of building materials in their lifecycle.

The negative side effects are that after renovation some residents might be forced to move as their rents are raised. Other side effects are that if a small part of buildings is renovated their prices rise to an extent that some people might decide to sell their apartments for high prices disproportionately distorting the market. At the moment the programme has not particularly addressed low-income households as beneficiaries. Buildings with a significant share of low-income households are highly unlikely to participate in the programme. Krišjāne et al.¹⁷⁷ have noted that Soviet housing estates that were built earlier (e.g. the 60s and 70s) also tend to have residents of higher age since they acquired the apartments during Soviet times. Older adults in Latvia who pensioned earlier also tend to have lower pensions, thus, making renovation in these neighbourhoods more complex.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How does the acceptance differ across various social categories and profiles of individuals?)

The policy is seen as much needed by citizens. However, the interest of citizens to apply for the programme is not as high as could be expected. In many housing estates citizens have voted against participating in the programme. There is a lack of trust in taking loans and that the benefits of renovation will benefit everyone. As shown by Blumberga et al.¹⁷⁸, people most likely to support renovation in Latvia are those that (1) believe it will prevent heat loss and have overall positive effects; (2) are specialists or civil servants; (3) are sure that their housing management company supports the renovation; (4) expect to benefit financially from the renovation; (5) and trust someone in their building to manage the process. While there have been discussions on possibilities to ensure that the payments are made in a way that affects residents with different incomes proportionally or ensures that the payments are not increased after renovation, this is generally understood as highly complex to administer and, thus, unlikely to be implemented.

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¹⁷⁷ Krišjāne, Zaiga, et al. "Residential change and socio-demographic challenges for large housing estates in Riga, Latvia." *Housing estates in the Baltic countries: The legacy of central planning in Estonia, Latvia and Lithuania* (2019): 225-245.

¹⁷⁸ Blumberga, A., et al. "Unintended effects of energy efficiency policy: Lessons learned in the residential sector." *Energies* 14.22 (2021): 7792.



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2.5 Housing Policy: Denmark: Tiny Rosborg, New Municipal Policy for Tiny Houses

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers:

- Interest/demand for alternative/sustainable living among citizens in municipality (and the country in general).
- Political will to offer a wide range of housing types
- Smaller cost of building smaller house, and less running costs.

Barriers:

- Limitations in planning laws and building regulations
- Final cost of building houses – including purchasing land, land development, and building construction of a house
- Lacking interest from citizens, who have very varying views on what Tiny House communities should be.

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:

Tiny Rosborg, a New Municipal Policy for Tiny Houses

Objective(s) of the policy (and associated success metric if available):

The Municipality is working to develop an area near the largest town in the municipality, dedicated to build “tiny houses”.

The area is part of a new, larger city development area which will also include apartment buildings. Tiny Rosborg will consist of 28 tiny houses, built on plots of approximately 300-400 m² surrounded by common green areas. Each house can be maximum 50 m². They can have a roof up to 6 m in height. Additionally, each house can have a 20 m² extra shed for tools, play house, smaller animals, etc. The municipality has laid out the plans for the area in the Municipal Land Development Plan of 2022 and laid out some conditions for development and construction, including size of the plots and some building regulations.¹⁷⁹

The municipality consists of a larger town of approximately 60.000 citizens and the surrounding areas with coastline, agricultural land, natural areas and many villages of different sizes. There are 119.000 citizens in the entire municipality.

¹⁷⁹ Lokalplan 1361 (Local Planning Law 1361), Vejle Kommune, 2022

Status of the policy (implemented, debated, rejected):
Under Implementation. The necessary legal planning requirements are met. and all development plans are ready. Plots of land are expected to come up for sale to interested citizens during the spring of 2023, whereafter there will be a 2-year building period.
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
2019 – 2023 – long term

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)
<p>Family houses in Denmark have grown in size during the past 50 years. With the big boom in building private houses in the 1960ies and 70ies, hundreds of thousands of new houses were built. New building techniques and prefabricated materials and parts allowed for cheaper and bigger houses to be built and since then, the tendency has continued (Bolius1). Today, the average Danish citizen lives on 53,6 m², in 1981 this number was 43 m². The average Danish detached house was 122 m² in 1963 and in 2022 – about 60 years later, 214 m².¹⁸⁰</p> <p>The tiny house movement has gained increasing popularity in Denmark during recent years. While many existing eco-villages have been concerned with reducing the sizes of new private houses for many years to reduce climate impact, this interest seems to have spread to a wider group of citizens within the past 3-5 years. There is no official Tiny House Movement or organisation in Denmark, but there are several facebook groups and websites dedicated to the subject, and building workshops dedicated to building your own tiny house are available through Folk High Schools across the country.</p> <p>The groups of citizens interested in tiny houses and “tiny living” have very diverse views and opinions about what constitutes a tiny house, what is attractive about this lifestyle and what they believe a community of tiny houses should look like. Research in national facebook groups about tiny houses shows that while some people are attracted to the lifestyle because it offers opportunities to live off-grid, alone, close to nature, others value living in close communities and others have environmental or climate impact concerns for choosing tiny houses. Some prefer an isolated location, others want to live close to towns, school, shopping opportunities etc.</p>

¹⁸⁰ Bolius2 <https://www.bolius.dk/hvor-stort-er-et-gennemsnitligt-hus-raekkehus-lejlighed-og-sommerhus-i-danmark-36883> and Bolius1 <https://www.bolius.dk/nye-huse-er-blevet-naesten-dobbelt-saa-store-paa-60-aar-40954>

Currently, there are

- Noland development plans dedicated to tiny houses, that was initiated by municipalities until now;
Three municipalities have plans under development/implementation
- Many barriers concerning building regulations and land laws
- Growing interest from the public concerning alternative living opportunities

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

The policy is consistent with the general housing policy in the municipality, as it is the goal of the municipality to offer a wide range of housing opportunities to their citizens, with a socially-, economic- and environmentally resilient development of the residences in the area; "... With room for everybody, and houses for all situations and phases of life".¹⁸¹

On the national level, building of tiny houses, is contradictory to several laws and regulations within housing policies and building regulations. These laws and regulations were made based on regular family-size houses and the needs and wishes of the population in the past. They have not been altered to also include housing types such as tiny houses.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The District Planning Laws in any given area are decided by the local municipality, these plans dictate the purpose of the land (industry, housing, road planning, natural areas etc.).

Local urban development is decided by the local municipality, in accordance with their vision for citizen residency, city development etc.

Public owned areas intended for development are then sold to either private citizens or construction companies, who can build there according to the guidelines/laws decided by the municipality.

In this case, the municipality passed a new District Planning Law in 2020, which specifically set out the vision for the new city development area, including the part for tiny houses. The Law states which piece of land should be used, what kind of buildings you can build in each of 10 parts of this area, how large the houses can be, location of roads and parking lots etc.¹⁸²

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

In 2019 the City Planning department carried out a survey with 300 participating citizens, which focused on their wishes concerning a tiny house area near to the city. The participants were asked about preferred size of the house, the desired location and distance of the city centre, their reason for wanting to live in a tiny house etc. After the survey, the interested citizens were invited to a public workshop. Afterwards, interested citizens formed a working group, which have been working closely with the municipal planning department in the development of the project since then. This group still exists and people in the group are

¹⁸¹ Boligpolitik (Residential Policy), Vejle Kommune, 2019

¹⁸² Lokalplan 1331 (Local District Planning Law no. 1331), Vejle Kommune, 2020

following the progress of the area. It includes people with plans to buy a piece of land and build their own tiny house in the area.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

Apart from the citizen engagement mentioned in the section above, there has been some interest from companies which are interested to be involved in the process. There are no organisations focusing on tiny living in Denmark, and as far as our research shows, no other organisations have been actively involved in the policy area.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

The policy has partly reached the intended objective.

There is now a finished project plan made by the municipality, laying out land specifically for the building of 28 tiny houses. The plots of land are expected to be for sale from spring 2023.

As no land have been sold and there are no houses built yet, it is not possible to say whether the objective will actually be reached. Our informant within the municipality and the work Group (of interested citizens) show that they are all anticipating the sale of the land to see whether the project can be considered a success. There is some doubt about this among members of the work group, as the price of land and construction has become higher than many first expected.

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

No evaluations are available yet. There are no specific plans to measure energy or carbon reductions of the houses once they are built and no other plans of an "official" evaluation of climate benefits.

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

This is not possible to answer at the moment, as the policy is still in early implementation.

However, the initial survey conducted among interested citizens showed interest in tiny houses and sustainable lifestyle from a large number of citizens, which suggest that projects like this has the potential to influence lifestyles.

According to our research there is also a big interest nationally, from people who wishes to live more sustainable lifestyles, where they decrease their consumption, use of energy and costs of living. Tiny house communities could help realise these ambitions.

This project serves as an inspiration to other municipalities. There are already several other projects under development around Denmark, which suggests that there is both political will and public interest in the tiny house concept.

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

The policy has been appropriate in offering, for the first time, plots of land specifically intended for the development of tiny houses in this municipality and in Denmark. It has also been an inspiration for other municipalities, some of which are currently working on plans of their own.

However, there is still a lot of differing opinions on the final project design among interested citizens in the municipality. These opinions reflect the generally very diverse opinions and values within the tiny house community (or group of interested people) in Denmark. According to our research, people have very different wishes for and opinions about what a tiny house should be, why they wish to live there and what a community of tiny houses are supposed to offer (this is described further in the section on National Context above and the section on Social Acceptance below).

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

Our research does not show any potential gender-imbalance.

The District Planning Law outlining the project only contains details on land developments, architecture and infrastructure, which in itself is not expected to impact people of different genders in different ways.

However, statistics show that there are more men than women who own houses in Denmark, and within 7 of 10 families, the men earn the most money¹⁸³. With these tendencies, it is likely that more opportunities to buy smaller and cheaper homes will benefit the female population. We have not found any research supporting this, however.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

It is not possible to research the effects of the policy yet, as it has not been fully implemented.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

It is difficult to research the social acceptance or general opinion of the project among citizens, as there is still no group of residents in the community, and it has not been possible to gain contact with many members of the Work Group who have been

¹⁸³ Yougov for Home, 2018

involved with the project. However, our research shows that some interested citizens have left the Work Group throughout the past couple of years because they did not agree with the direction it was taking. Others are very satisfied and still have plans to purchase a piece of land.

There seems to be a general opinion that the final cost of living there; purchasing land, building a house and obtaining the necessary building permits, will be very high compared to the size of the houses. Many people in the Tiny House Community expresses a desire to live with a smaller cost of living, but reality is that land prices and the price of building a house which lives up to building regulations costs a lot, no matter the final size of the house.

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3. Additional Policies

3.1 Additional Policy: France - Ban of domestic commercial airlines when they can be substituted by train journeys of acceptable duration

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers:

- Already well-developed national railway network with high-speed trains
- Increased awareness among the population and civil society of the need for climate action on aviation
- Strong public support to the principle of regulating short-distance flying, exacerbated by social justice motives
- Support to the policy from the Citizen Convention on Climate in 2020
- Green light from the European Commission, although with limitations

Barriers:

- Strong opposition from airline stakeholders, notably using EU regulatory arguments
- Recurrent objections from local authorities where airports are situated and regional authorities who fear for economic attractiveness
- Extreme precaution from policy-makers on potential disruption in mobility habits

Potential solutions:

- Simpler and less restrictive criteria for suppressing airlines
- Inclusion of international connection flights in the scope (potentially first as an experiment on some lines at Charles-de-Gaulle airport with an ex-post assessment)
- Sustained investment in railways, especially where airlines still exist and could be dropped
- Adoption of similar policies in other European countries or at EU level

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:

Article 145 of Loi 2021-1104 portant lutte contre le dérèglement climatique et renforcement de la résilience face à ses effets (so-called "Climate & Resilience Law"), and its implementing decree

Objective(s) of the policy (and associated success metric if available):
The policy includes several climate mitigation measures, including a ban of domestic commercial airlines when they can be substituted by train journeys of acceptable duration
Status of the policy (implemented, debated, rejected):
Implemented
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
The implementation, planned for 2022, has been delayed by a year due to the scrutiny period by the European Commission. The policy provision passed the scrutiny but adjustments had to be made, especially an economic and environmental assessment after 2 years (that could threaten the continuation of the policy measure). ¹⁸⁴

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)
Transports are responsible for about 30% of the national greenhouse gas emissions, and growing. Domestic air traffic amounts for 3% ¹⁸⁵ . Aviation has other detrimental impacts on local air pollution and noise around airports.
Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?
Aviation has been a blind spot in national energy and climate policies for long. It had escaped hard legislation and benefited from tax exemptions (notably on jet fuels in line with the 1944 ratification of the Chicago Convention on civil aviation). In 2006, a small national tax on plane tickets (a few Euros) has been levied to fund international solidarity projects. Its level has been increased in 2020 to support sustainable transport infrastructure development. This tax has not been known to have an impact on air traffic growth though. The 2021 Climate & Resilience Law is the first explicit attempt at mitigating the growth of traffic. Alongside the provisions on domestic airlines, it also imposes on air companies to offset all carbon emissions from their national flights by 2024. The law had to be notified to the EU to check its compliance with European air traffic rules. The policy has faced strong opposition notably by the aviation industry and air

¹⁸⁴ <https://www.service-public.fr/particuliers/actualites/A16193?lang=en>

¹⁸⁵ <https://www.citepa.org/fr/secten/>

companies, in particular for its alleged contradiction with the EU Air Services Regulation based on freedom of operation.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The policy is enforced by the State and implemented by air companies operating on the French metropolitan territory. The exemptions and potential revision clause after 2 years may create implementation uncertainties though.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

The policy to ban domestic airlines appears to have two origins. A left-wing member of Parliament has proposed in 2019 such a law to forbid air trips that could be done by train in less than 2h30, without success. A little later, the idea was also pushed by the Citizen Convention on Climate put in place by the French President in 2020. This initiative gathered a forum of citizens who elaborated policy proposals on climate mitigation. They highlighted the necessity to tackle aviation and came up with several proposals, such as a moratorium on the development of airports, and a recommendation to terminate 23 domestic airlines substitutable in 4h of train (a much bolder scope than the legislation eventually adopted). This measure gathered an 88% support among the convention members. The convention was largely covered in the media and public debate.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adoption of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

The national debate on aviation has become fierce, with vocal supporters and opponents. The Contestation has grown in the 2010's, through increasing local oppositions to new air traffic development. The iconic citizen struggle against the Notre-Dame des Landes airport near Nantes has eventually led to a cancellation of the project in 2018, with a significant coverage from medias and interest from observers¹⁸⁶. Civil society organisations have been increasingly active on the sector since then, as illustrated by the implementation of the Stay Grounded network in France ("Rester sur Terre"). More recently, a renewed pressure has been put on aviation and notably private jets¹⁸⁷, which were exempted from the Climate & Resilience policy. On the other side, aviation lobbies have been very involved in opposing the law. It is probable that, although its scope is limited, it creates a precedent that they concerned with. Opinion polls show mixed feelings in the population. On the one hand, aviation still has a rather positive image and there is still a longing for air travels despite the awareness of

¹⁸⁶ B. Lormeteau , A. Van Lang. "L'abandon du projet d'aéroport de Notre-Dame-des-Landes - Quels enseignements ?". May, 2021.

¹⁸⁷ <https://www.rfi.fr/en/france/20221111-french-scientists-call-for-ban-on-private-jets-a-symbol-of-climate-inequality>

the climate impact¹⁸⁸. On the other hand, a majority is supportive of the principle of banning short-haul air traffic¹⁸⁹.

Regarding the political preferences, the amendment of the Ecologists group set a threshold at 3h30, the amendment of the Socialists at 3h and the amendment carried by six centrist senators and republican 2h¹⁹⁰.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

Due to limited ambition and several exemptions, the policy measure is to be considered a small step towards sufficiency. In practice, only three airlines operated by the national company Air France (Paris Orly-Bordeaux, Paris Orly-Lyon, and Paris Orly-Nantes) have been effectively terminated, and a few others may follow later only if train services are considered satisfactory enough.

Through tweaks in the implementation rules, the French government has managed to rule out the main Parisian airport Charles de Gaulle from the scope, as it handles international connections and there were concerns that passengers would favour journeys connecting at foreign airports. The Lyon-Marseille domestic line has also escaped the ban, although the two cities are close. Against the initial ambition from the Citizen Convention to terminate 23 airlines, this end-result appears more symbolic than effective.

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

The reduction in carbon emissions is expected to be about 5% of the total emissions of national domestic aviation and 0.5% of all air traffic flying from France¹⁹¹, that is 0.1 Mt of CO₂ annually. This is a modest saving, due in large part to the very limited scope of the final legal text.

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

The policy has the potential to transform lifestyles and mobility habits from frequent flyers, which are a small share of the population but with a high carbon footprint. It may

¹⁸⁸ IFOP for Fondation Jean Jaurès. “Les Français, les voyages et l’avion”. June, 2022. <https://www.jean-jaures.org/publication/les-francais-les-voyages-et-lavion/>

¹⁸⁹ BVA for Greenpeace France. “Climat et environnement : quels changements attendus par les Français post Covid 19 ?”. June, 2020. <https://www.greenpeace.fr/espace-presse/sondage-les-francais%C2%B7es-largement-favorables-a-un-changement-de-modele-economique-a-contre-courant-des-annonces-gouvernementales/>

¹⁹⁰ <https://www.publicsenat.fr/actualites/non-classe/loi-climat-le-senat-met-fin-aux-vols-interieurs-en-cas-d-alternative-en-train>

¹⁹¹ Réseau Action Climat. “Climat : que vaut le plan du gouvernement pour l’aérien ?”. May, 2020. <https://reseauactionclimat.org/climat-que-vaut-le-plan-du-gouvernement-pour-laerien/>

also change perceptions about flying and help promote alternative and slower mobility habits.

However, for this impact to be more massive the policy would need to be strengthened with far more domestic (and possibly intra-European) airlines covered.

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

Considering the limited impact on greenhouse gas emissions, the policy appears insufficient and would require a much broader scope to address the problem of aviation. As its long-term effectiveness and potential expansion relies on good train connections, the policy also requires sustained investments in rail transport.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

There is evidence that air passengers, especially frequent flyers, have been predominantly male. There is therefore a gender aspect related to the policy, although there is trend of gender convergence in daily and long-distance mobility¹⁹².

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

By reducing the number of flights, the policy has benefits on local air pollution and noise, especially in the regional airports where the airlines are terminated.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

The policy principle appears largely supported among the general population. Only 8% stated a strong opposition, among which frequent flyers are probably overrepresented¹⁹³. Inhabitants of the Parisian region are also more prone to travel by plane. Users of domestic airlines are often executives in business trips¹⁹⁴. Business trips represent 30% of trips in Europe¹⁹⁵. More generally, air travel remains a distinctive attribute of an elite¹⁹⁶ despite becoming more mainstream over time^[66]. For the rest of the population, measures constraining the over-excessive air mobility of the wealthiest might be viewed favourably as contributing to social justice. This can also be illustrated

¹⁹² *Boarding Classes. Mesurer la démocratisation du transport aérien en France (1974-2008)* Yoann Demoli, Jeanne Subtil Dans *Sociologie* 2019/2 (Vol. 10), pages 131 à 151 Éditions Presses Universitaires de France DOI 10.3917/socio.102.0131

¹⁹³ BVA for Greenpeace France. "Climat et environnement : quels changements attendus par les Français post Covid 19 ?". June, 2020.

¹⁹⁴ *ibid*

¹⁹⁵ <https://www.carbone4.com/analyse-faq-aviation-climat>

¹⁹⁶ Y. Demoli, J. Subtil. "Boarding Classes. Mesurer la démocratisation du transport aérien en France (1974-2008)" in *Sociologie* 2019/2. <https://www.cairn.info/revue-sociologie-2019-2-page-131.htm>

by recurrent debates in the country about the climate impact of private jets and public pressure to see them regulated¹⁹⁷.

If several more airlines were to be banned in the future, an impact on travel prices could be triggered. It highlights the importance of investing in quality train lines at reasonable prices. Air companies and airports could also be impacted on their profitability, meaning threats on their staff forces. But this remains theoretical for the moment.

General remarks:

Lessons learnt from these analyses and preliminary recommendations:

- Opinion polls and citizen forums showed that people are on average more convinced than decision-makers about the necessity for sufficiency policies. There's evidence that support also increases once a policy is in place and perceived risks are mitigated.
- Civil society is playing a key role in fostering sufficiency policies. Several of the policies studied originated from NGO or individual initiatives and advocacy.
- Even in a highly centralised country such as France, local authorities and their networks appear to have a significant influence on national sufficiency policy-making. They may hinder it (e.g. to protect local interests and their own powers) or facilitate it (by being pioneers and supporters). It seems relevant to consult and motivate them well upfront.
- There is virtually no example of radical sufficiency decisions enforcing major lifestyle changes in one go. Instead, sufficiency policies consist of small steps or experiments, due to a fear from public backlash and pressure from opponents. The first step seems important though as it opens a door and creates a precedent (for example ban on just three airlines), thus sometimes causing strong oppositions from lobbies (despite the actual limited impact). A key question is whether this first step will lead to others. It highlights the necessity for sufficiency policies to be designed in a dynamic spirit from the start, and for adequate ex-post evaluations to be carried out and publicised.
- Existing legislation is often a mirror of dominant social paradigms and lifestyles. Implementing sufficiency policies raises issues and requires revisiting legal frameworks (on private property, freedom of movement or feed, etc.), acknowledging and qualifying situations that diverge from the mainstream, and ensuring that traditional supporting schemes from the State can apply to these new conditions.
- Impact assessments of sufficiency policies, especially with regards to co-benefits (on health, well-being, etc.) are a central instrument to promote them. So far, these co-benefits have been insufficiently measured and communicated.

¹⁹⁷ <https://www.reuters.com/business/sustainable-business/france-push-private-jets-regulation-eu-level-2022-08-23/>

- Some of the policies investigated were not primarily intended for energy sufficiency reasons, showing that sufficiency may be fostered through various angles.
- Acceptance of sufficiency policies seems generally higher among wealthier and educated populations than among poorer households and/or less educated who paradoxically emit often less carbon. This lower acceptance is probably rooted in a longing for social justice, that needs to be well taken into account when designing policies and compensation provisions.
- Like in WP3.2 we observe that people and local authorities accept to be constrained but they want to choose how. Policies should impose the target but not the means.

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3.2 Additional Policy: Italy - Use of progressive tariffs in the water (and energy) market

Introduction

The UN Sustainable Development Goal (SDG) 6 is to “Ensure availability and sustainable management of water and sanitation for all”. The actual structure of the market is not always in this line. Many inequalities among and intra countries need to be addressed.

How to set a correct price for a scarce but necessary resource like water? How to reconcile the long-term climate and environmental targets with the overconsumption of electricity? A well-designed tariff system can probably help in both cases, in satisfying needs and keeping the consumption under reasonable limits.

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers at the initiative level:

- it's an already implemented tariff mechanism, already active in many countries for different markets (not only for water, but also for electricity)
- in many cases was introduced for reducing the consumption to an adequate level (or for limiting implicitly the power needs, in the case of electricity)
- it gives a price signal supporting more sufficient behaviour (by individuals and families) which are not rewarded enough, especially in high- income countries and in case of low energy and resources tariffs – jeopardising the efforts towards the climate and energy targets and the valorisation of the natural resources
- in July 2010 the United Nations General Assembly recognized the right of every human being to have access to enough water for personal and domestic uses, meaning between 50 and 100 litres of water per person per day. The water must be safe, acceptable, and affordable. The water costs (for the UN Assembly) should not exceed 3 percent of household income.
- the losses in water networks are around 40% in some countries, reducing the needs and the consumption can help further in reducing leakages and wastewater treatment afterwards

Barriers at the initiative level:

- The main barrier is typically the market structure for such services, often based on traditional schemes for cost recovery. In the electricity market the actual push towards the electrification of systems (and more consumption) is supported by many actors
- in many cases the use of progressive or block tariffs is perceived as unequal (due to missing information or other informative / behavioural barriers)
- the tariff design is often complex
- difficult to implement, especially if there is no metering system in place, or in case of unavailability of complete information about the number of users (# of residents)
- Consumers do not pay according to the costs their water use imposes on the utility
- It can penalise poor families with large households and/or shared connections
- The presence of "social" tariffs or similar instruments tries to cover the inequalities in specific cases (low income, large families), but only covering part of the costs and only in some cases addressing the needs of efficient and sufficient behaviours

Upscaled initiative:

For the water market it is possible to ensure a correct progressive tariff, as many examples are showing us (the lowest tier can also be at a very low cost or for free). The electricity tariff can be (re-) introduced monitoring correctly the information and giving feedback thanks to all the smart applications available. The lack of information (installed metering) or the inequalities (number of components per household, type of appliances installed, ...) must be considered. Most important points are anyway addressing the inefficiency of the market and the use of the resources (reducing leakages, distribution inequalities, ...).

Good examples around Europe are e.g. the water distribution in Paris, the re-publicization of the water market is probably a key enabler.

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Progressive / block tariff
Objective(s) of the policy (and associated success metric if available):
<ul style="list-style-type: none"> - provide a necessary resource (like water) at a reasonable price or for free for the minimum needs per capita. - punish the overconsumption with higher prices, or give more incentive to saving - give a signal price to the consumers - highlight the scarcity of the resource - avoid the over-exploitation of the resources (water, energy, ...) <p>For the water, the first tariff block for water is typically set below cost. The aim is to provide the low-income people (or the less consuming) with inexpensive water. At the same time charge the highest prices to the more consuming customers and companies — who are using more water and have a greater ability to pay or in other words more possibility to save (since by charging higher prices for high consumption, increasing block tariffs are also meant to discourage excessive water use). For electricity the principle is similar, since the availability of energy is not infinite, and the market should discourage excessive consumption.</p> <p>The cost control is a key factor for ensuring a sustainable market for all the actors: the role of the authorities is central and should focus more on the consumers' needs and requests.</p> <p>Common metrics, apart from the efficiency level of the network, can be the per capita consumption of water, the per capita / per service consumption for electricity (and all the associated indicators for both like CO₂ emissions, remaining yearly resources/reserves).</p>
Status of the policy (implemented, debated, rejected):
<p>The measure has been successfully implemented in many markets, especially in the water sector.</p> <p>Many examples are available in different continents and states, with different tariff structure but considering the same principle.</p>
Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):
<p>The progressive tariff in the electricity market was implemented in Italy after the oil crisis in the '70s and now is discontinued. In one of the most advanced markets (US – California) is still active and even more progressive (the fixed part of the tariff is proposed to be linked to the income level).¹⁹⁸</p>

¹⁹⁸ <https://www.nrdc.org/bio/sylvie-ashford/reforming-cas-electric-rates-decarbonization-and-equity>

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

Italy is the 2nd country in the EU for withdrawals of drinking water, 153 m³ per capita per year, twice the European average. Aqueduct losses in 2022 were above 42%, 9% of the population receiving a discontinued service.¹⁹⁹

The water resource in Italy is property of the state, the market is regulated by the national authority ARERA (responsible for water, energy, gas, waste). The tariffs are defined by the local authorities (ATO – Local Authority Water board), following the national rules defined at national level. The cost recovery principle is reflected in tariffs and follows the EU rules.

The tariff structure combines a fixed cost and a variable part (progressive / block). The tariffs applied to the clients are different in the different areas, due to the local administrative subdivision. The spread between local tariffs can be up to 500%, for an average domestic consumption.

For electricity, the market was liberalised in the early 2000's, following the 96/92/CE Directive. Before (since 1962) ENEL was the public company acting as a monopolist in this market. First starting with the bigger consumer, later for the small domestic sector.

The former market for captive clients reduced gradually (by the end of 2022 were about 30%, while 70% are already in the free market).

The progressive tariff in the Italian regulated market was abandoned four years ago (gradually between 2015-2019). The structure of Italian households' electricity tariffs was considered at that time, by the policy makers, as non-compliant with the main objectives of the Energy Efficiency Directive (2012/27/UE), since it was penalising the "efficient" heating generation through heat pumps and not suitable for the electric vehicles.

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

¹⁹⁹ <https://www.istat.it/it/files//2023/03/GMA-21marzo2023.pdf>

The policy seems to be consistent only for the water market, since the actual interpretation of the EED (energy efficiency directives) and all others linked to the electricity and energy market have abolished in fact the progressive tariffs in the energy market.

Nevertheless, there are countries that are still applying such tariff schemes, also combined with other principles in order to introduce elements to avoid inequalities due to lack of information. The Californian tariff structure has been following this approach since years. Recently there are discussions including progressivity on the fixed tariff based on income. This process is driven by the last state law, Assembly Bill 205, that requires incorporating an "income-based fixed charge" in residential rates to support renewables and cleaner solutions using electricity. Proposals for keeping the progressivity also in the variable part (price per kWh) is supported by NRDC and others.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

In the water market the policy is defined legally at national level in Italy and in several other countries.

The electricity market has abolished it gradually in the last few years. Only a few countries are still adopting it.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

There is a huge debate at national level, not necessarily about the progressivity of the tariff, but more at the level of the market regulation, mainly the cost recovery principles, the right to access to the resource, the revenue mechanism for the utilities. The latter is especially criticised by the citizens' associations. In 2011 a large campaign led to a national referendum - against the privatisation of the market and amending part of the cost recovery scheme - approved by the majority.

The associations are now still claiming for a change in the principle of market governance – a draft law is still pending in the pipeline and has received many amendments, requested by different political parties. The lack of political will is still the major obstacle.

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

The civil society is still active in the water market issues, as described above. The associations and citizens are working more on the market structure and the rights to access – strongly highlighting the level of inefficiency of the water networks that overcomes any discussion on the tariff structure. On the water market there are some opinions against the use of progressive tariffs – mainly based on the adoption of such a scheme in markets that are not ready (lack of individual metering, faulty installations) or with insufficient information (number of inhabitants of dwellings). See [4] for an extensive analysis of non adequate infrastructure for progressive tariff.

In general, the electricity markets are leaving progressively the tiered tariff approach, in few countries/regions it is still active and the citizens are not active on this topic – more on energy cost issues, especially after the last winter. Some of the national/international studies like [1], [2] and [5], promoted by research institutions, think-tank or associations, are considering such schemes as positive for supporting efficiency and sufficiency in energy consumption²⁰⁰.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

The policy for electricity is active in some countries, despite the initial reason for introducing it goal was not always the reduction of the energy consumption. For the water sector the block tariff structure is more widespread and demonstrates clearly that the price signal is an important tool for resource conservation.

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

There has been no direct assessment and is quite difficult to extrapolate the direct effect of the tariff structure. Studies from different contexts are presenting very different values. Electricity consumption is relatively, but not completely inelastic: consumption does not decrease proportionally with rising prices, but it still decreases. In the long term the elasticity is greater since consumers purchase more efficient appliances if energy prices remain higher.

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

²⁰⁰ <https://www.infosperber.ch/umwelt/energiesparen/so-koennen-progressive-stromtarife-funktionieren/>

Tariff structure and absolute price per unit can influence in the long term the behaviour. What can be improved is the information (on consumption, on how to save resources) and a parallel system of incentives can influence positively. A bonus malus tariff scheme (like in car insurance) was also proposed by experts, in order to inform the customers more effectively, directly using price signals. Other tariff schemes, using the same principle of progressivity, were analysed by [3].

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

NA

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

The gender aspect is not directly considered in this policy. No literature study is available on that specific topic, but in many publications it is described on how the energy and water price affects the life quality but nothing that considers the tariff structure implications for the different genders.
In the household sector the different genders are responsible for different choices and behavioural aspects related to the water and energy consumption: generally, the majority of the studies claims that women are more responsible in energy and resources conservation, in different cultures and countries.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

Lower-income households are typically more responsive to the same price signals, compared to high income ones. The progressive tariff system should also shift the savings effect more towards richer households, given the different consumption levels. All this information should be used as a basis for the actual calculation of the appropriate consumption zones and the respective prices.
The possible negative side effect is, as highlighted by the Italian national market authority, the possible disincentive in electrification of consumption (heating, transport vehicles, cooking are typically more efficient and can rely more on local renewables). This issue can probably be addressed with a proper design of the tariff, differentiating the customers by power installed or electrical end-uses installed. Impacts on inequalities can also be corrected thanks to a more appropriate structure of the tariff (definition of the tier levels and price per unit, fixed part of the tariff, ...).

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

The actual progressive water tariff structure is generally accepted by the citizens, other issues (tariff amount, cost recovery mechanism, social tariff, revenues) are still criticised by many citizens' associations. The studies conducted in other countries are still highlighting that the inadequacy of the metering systems or the insufficient or lacking information increases inequality and for this reason the infrastructure is not sufficiently developed for such an initiative. In the era of smart-meter a number of clients are still invoiced and informed about their consumption only a few times per year. Continuous information campaigns on tariff structures and natural resources preservation are necessary, and not only in emergency circumstances.

General remarks:

Lessons learnt from these analyses and preliminary recommendations:

The energy and resources markets are a complex topic. The complexity of the tariff structure must be solved with more information, the obstacles towards this scheme are also to be addressed at regulatory level, providing the necessary information to all actors involved and constantly monitoring the situation (market, prices, costs, investments, revenues, ...).

For the water is important to address first the inefficiencies and inequalities in the resource use and distribution, also following the UN recommendations of minimal sufficient needs to satisfy. The use of block tariffs is extensively used in many countries with different market structures. In the literature are presented a number of solutions and many different approaches for successfully addressing the barriers against a sufficient and just use of this natural resource.

Generally the citizens' participation in the discussion on the administration of public goods or on the energy market is rather low, despite in some cases like in Italy 12 years ago, the associations opened the debate, won the referendum on public water and the profit from it, leading to a legislative proposal.

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3.3 Additional Policy: Latvia - Low emission zone in Riga City

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

Enablers:

- Legal obligations to tackle urban air pollution and avoid EU fines for crossing the threshold values - National Air Pollution Prevention Plan adopted by the Cabinet of Ministers
- Targets and directions of action in Riga's Development Programme 2022-2027 stipulate the low emission zone: the task is integrated in the working agenda of city administration
- Other policy documents - Riga's Sustainable Energy and Climate Action Plan & Riga's Air Quality Action Programme
- Growing awareness of transportation as the main source of GHG emissions among the national-level policy makers, support for e-vehicles and investments in trains.
- Synergies between air pollution and climate change – potential of significant contribution to mitigation
- Forthcoming version of the updated National Energy and Climate Plan and the draft Climate Law in 2023 – need of additional measures
- Engagement of civic organizations – demands for new mobility solutions and public space, independent expertise
- Planning professionals support the idea of low emission zone, there have been discussions
- Funding was allocated for the pre-study in 2021 (contract was ended)
- Former EU cooperation and research projects related to mobility hubs and mobility data

Barriers:

- Delay in reaching the first milestones, pre-study was ended
- Absence of a concrete plan – scenarios not clear yet
- Investment gap – focus on large scale infrastructure projects and lack of funding for integrated projects
- Predominantly technical approaches to mobility planning, challenge to master the complexity of low emission zone
- Urban sprawl in adjacent municipalities, hybrid settlement structure, need of extra coordination
- Possibility of protest from drivers and lack of cooperation in proposing and implementing new measures, reluctance of politicians to make significant changes
- Old car park
- Slow pace of improvement in public transportation
- Too few mobility and planning related research projects to support the transition

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Low emission zone in Riga City
Objective(s) of the policy (and associated success metric if available):
<p>Riga's Development programme 2022-2027²⁰¹ defines the low emission zone as "an urban area where a set of measures is implemented in order to decrease the emissions of transportation." The broad definition leaves room for interpretation – there are different scenarios possible.</p> <p>One of the priorities of the programme is "comfortable and environmentally friendly movement in the city". The objectives (till 2027) are:</p> <ul style="list-style-type: none"> - Increase the number of cyclists at least twofold - Decrease the number of cars crossing the city by at least 5 % - Increase the share of use of public transportation - Achieve 22% decrease in transport emissions <p>The main tasks include development of a plan for low emission zone through rearrangement of urban space and compensatory mechanisms, including new policy of carparking and improvement of urban street network.</p> <p>The action plan of the programme highlights three milestones:</p> <ul style="list-style-type: none"> - Analytic study of the low emission zone - 2023 - Action plan of the low emission zone - 2024 - Implementation of the low emission zone – 2027 <p>The goal to establish a low emission zone is also included in national and local level air quality and climate policies.²⁰² The obligation to establish a low emission zone due to air quality problems is legally binding.²⁰³</p>
Status of the policy (implemented, debated, rejected):

²⁰¹ Riga Development Programme 2022-2027. <https://www.rdpad.lv/strategija/attistibas-programma-2022-2027/>

²⁰² Riga Sustainable Energy and Climate Plan 2022. <https://rea.riga.lv/upload/media/default/0001/01/c6259fc2d1d8f8e342e82a35d7ff18b591cc75dd.pdf>

²⁰³ Regulation of the Cabinet of Ministers, National Air Pollution Prevention Action Plan 2020-2030. <https://likumi.lv/ta/id/314078-par-gaisa-piesarnojuma-samazinasanas-ricibas-planu-2020-2030-gadam>

The Department of Urban Development contracted a consultancy to carry out the pre-study for low emission zone in 2021²⁰⁴ ²⁰⁵ ²⁰⁶. However, the city officials had disagreement with the company and the contract was ended in 2022. No results were published.

In summer 2023, the Department will announce another open call for the study – it will include preparation of difference scenarios, modelling traffic flows and air quality, citizen surveys and economic analysis. The results of the study will be turned into an action plan.²⁰⁷

Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

The first steps of actual implementation should be made by 2027. The study and the development of the action plan will last for two years. In practical terms, the policy depends on several infrastructure projects and investments in public transportation. Delay is expected because of the complexity and scale of the initiative.

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

80% of Latvia's GHG emissions come from the non-ETS sectors where road transportation has the main role. The car park in Latvia is dominated by diesel vehicles and their average age is larger than in Western Europe. Still, the rate of car ownership in Latvia is lower than in neighbouring countries – there is a potential growing demand²⁰⁸. Decarbonization of the transport sector is considered the main challenge for Latvia's renewable energy and emissions reduction targets.

Riga is the capital of Latvia, and its agglomerations hosts more than a half of the population (monocentric system). Since early 2000s suburbanization has taken the dominant role in transformation of urban structure. Increase of commuting and daily travel has not been properly met by public transportation services.

²⁰⁴ Department of Urban Development, Riga City Council, 2021. Press release. <https://www.rdpad.lv/izstradas-ricibas-planu-zemo-emisijas-zonas-ieviesanai-riga/>

²⁰⁵ Department of Urban Development, Riga City Council, 2022. Press release. <https://www.rdpad.lv/riga-petis-iespejas-zemo-emisiju-zonas-ieviesanai/>

²⁰⁶ Department of Urban Development, Riga City Council, 2022, Presentation – launch of the pre-study on low emission zone. <https://www.facebook.com/RDPilsetasattistibasdepartaments/videos/priekšizpētes-veikšana-un-rīcības-plāna-izstrāde-zemo-emisijas-zonas-zez-ievieša/1165230880550057/>

²⁰⁷ Department of Urban Development, Riga City Council, 2023, Technical specification for the study on low emission zone, consultations with the potential tenderers. <https://pvs.iub.gov.lv/show/738864>

²⁰⁸ Eurostat 2023. Data on passenger cars in the EU. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Passenger_cars_in_the_EU

The large-scale transportation projects have not yet changed the mobility patterns in a sustainable way. Transportation and decentralized heating systems are the key concerns of air quality improvement efforts.

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

The low emission zone has significant links with national level climate policies, urban planning programmes and air quality plans. One of the key actors is the municipal public transport company which has been stagnating due to poor governance.

The funding for the studies and plans will be provided by the city administration. The Resilience and Recovery fund provides funding for investments in Riga region – cycling routes, mobility hubs, electric buses²⁰⁹.

The most prominent project is Rail Baltica – new train line connecting the Baltic capitals. The construction works have started in the city centre, it will change the main traffic junctions and the area of the central station.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

The main actor is the Urban Development Department of Riga City Council. The Ministry of Environment and Regional Development and its services are responsible for controlling the pollution thresholds and coordination of investment programmes. Riga Planning Region develops and implements regional scale sustainable mobility policies. The political support for the initiative is mixed – there is a degree of ambivalence among the members of the city council.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

The concept of the low emission zone was introduced in Riga's Development Programme – there were standard public hearing procedures and stakeholder discussions²¹⁰. In broad terms, the low emission zone is being also discussed as one of the topics for the new development plan of Riga's Historical Centre.

The civic activists have highlighted the role of the low emission zone in consultations with the city administration and public communication.²¹¹

As the intended study was not completed, there has not been a discussion on measures, alternatives or change that the new zoning would imply. The areal scope is still unclear as well.

²⁰⁹ Latvia's Recovery and Resilience Plan 2021- 2026. https://commission.europa.eu/business-economy-euro/economic-recovery/recovery-and-resilience-facility/latvias-recovery-and-resilience-plan_en

²¹⁰ Vefresh, 2021. Discussion on Low emission zones / Urban Mobility Incubator. <https://www.facebook.com/VEFRESHmovement/videos/zemo-emisiju-zona-riga/439408140684917/>

²¹¹ Bumanis, A. 2022. Riga castle has new walls – low emission zone. <https://ir.lv/2022/01/13/rigas-pilij-jauni-muri-zemo-emisiju-zona/>

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

Low emission zone is a familiar concept for urban planning community in Latvia. The civil society organizations are supportive, there is critique for government's inaction and lack of policies that would tackle the problems of traffic-dominated urban space.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

The main point of success is that the idea of the low emission zone is active – work in progress. Yet its implementation has been put off due to limited planning resources and fragmentary political support.

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

There are no calculations available yet. The estimates will be provided in the study. The study will include modeling of transportation flows and diffusion of pollution (NO_x, PM_x).

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

Depending on its actual area and the set of measures put forward, the zone may result in different effects. For example, it could be implemented as an entry fee or as a restriction on specific types of vehicles. There are several benefits that must be granted before the zone can come into force – especially, better public transport connections and cycling routes to offer mobility alternatives.

There are no cases of large-scale mobility projects targeted at improved urban space and climate goals.

There is a communication potential for public institutions – for example, advertisements on car-free living.

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

Low emission zones have been created in many other cities, yet each case depends on urban context and governance. The main rationale in Riga is to mitigate the air pollution in the central part of the city. The impacts on different neighbourhoods and movement flows have not been assessed yet, there is a risk of geographically and socially unequal distribution of benefits and costs. The action plan will be based on several scenarios that will differ in ambition, scope and scale; the final selection will be made by the politicians.

Car traffic is not the only source of urban air pollution, heating systems also play a major role. The territorial approach of zoning may improve the situation locally without substantial climate policy gains if the total GHG emissions do not decrease. However, lack of political support and social acceptance could be the main obstacles for transformative interventions.

<p>Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?</p>
<p>Gender-specific impacts will differ among social groups and modes of accessibility - for example, how urban space is experienced in terms of walkability (movement) or environmental quality (noise, air pollution). Riga's planning discourse does not yet have successful examples of integrating gender dimensions in its policies of urban change. Liveability of urban space is a popular discussion topic, yet there is little evidence of practical improvements; recent urban greening efforts have had little impact beyond decorative measures.</p>
<p>Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)</p>
<p>Improvement of air quality and street space would be the main benefits in addition to expected decrease in GHG emissions. New indicators will be monitored and more data will be collected and exchanged.</p> <p>One of the main challenges is the complexity of the solution which differs from traditional mobility and infrastructure projects.</p> <p>Creation of low emission zone will contribute to mitigating the traffic congestion effects due to urban sprawl. Sufficiency measures such as improvement of infrastructure for soft mobility, public transportation and car sharing. Also, it will enliven the concept of 15-minute city applied to different Riga's neighbourhoods²¹².</p>
<p>Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?</p>
<p>It is not possible to assess the level of social acceptance while the information about the plans and alternatives is lacking. The city administration has carried out some surveys which show that people would oppose stronger restrictions, yet the way of formulating the questions was not accurate enough to draw conclusions about the low emission zone. Issues of social justice will be brought up in further discussions – unequal share of benefits among the residents of different parts of Riga's agglomeration. Traditionally, the interests of individual drivers have been better represented by the policy makers.</p>

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²¹² Riga Neighborhood Centre Development Plan 2024 – 2028 (draft). <https://www.rdpad.lv/no-22-maija-lidz-21-iunijam-publiskai-apsriesanai-nodos-apkaimju-centru-attistibas-plana-2024-2028-gadam-1-redakciju/>

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3.4 Additional Policy: Denmark - Bicycling Promoting Policies in Denmark

Summary - Enablers and Barriers:

What drives the implementation of this policy and what hinders it (including but not limited to the factors discussed below)? List bullet points of enablers and barriers for the implementation of the policy:

The national policies for promotion of bicycles are driven by budget allocations, mostly to support municipal bicycle infrastructure projects with 40-50% of the investments costs. While the overall bicycle use has decreased until 2019, evaluations show that on the routes, where bicycle infrastructure got improved with this support, bicycling increased by 5-23% for the different programmes.

The budget allocations are at least 5 times lower than it is recommended by bicycle advocates and requested by municipalities that offer co-funding. In addition, the national bicycle policy is missing other measures than budget allocations, such as tax benefits, lower speed on roads without bicycle paths, and urban planning to reduce daily travel distances.

Basic organisational information:

How was this sufficiency policy implemented or rejected?

Name of the policy:
Bicycling Promoting Policies in Denmark
Objective(s) of the policy (and associated success metric if available):
<p>The general objective is to increase use of bicycling as a mode of transport.</p> <p>The 2014 Danish National Bicycle Strategy has qualitative objectives of increasing bicycling for commuting, holidays, and increasing children’s bicycling to school and to spare-time activities²¹³. The Strategy was adopted in 2014 and no updates have been made.</p> <p>In June 2022, the minister for transport, Ms. Trine Bramsen, together with 30 Danish actors, signed a declaration on increased cooperation to promote bicycling in Denmark²¹⁴. In this declaration, there is a target of increasing bicycling in Denmark by 20% from 2022 to 2030. A steering committee, consisting of representatives of the Danish Road Directorate (Vejdirektoratet), as well as actors and advocates for bicycling including The Danish Cyclists’ Federation (Cyklistforbundet), was established to implement the declaration²¹⁵, but, until present (May 2023), no implementation activities have been started.</p>
Status of the policy (implemented, debated, rejected):

²¹³ Ministry of Transport 2014

²¹⁴ Ministry of Transport 2022

²¹⁵ Information from the interview person from Danish Cyclists’ Federation

There have been national budget allocations for bicycle infrastructure in municipalities as well as along state roads at least since 2009²¹⁶ and, from 2014, this has been guided by a national bicycle strategy. From 2014 to 2021 the budgets were agreed on a short-term basis (for one year or a few years)²¹⁷, while, from 2022, the allocations are part of a transport infrastructure agreement of the Danish Parliament for investments until 2035, including an allocation for bi-cycle infrastructure of three billion DKK until 2035²¹⁸.

The bicycle infrastructure is supported by the state with 410 mill. DKK in the 2022 budget, 97, 5 mill. DKK in 2023, 162,5 mill. DKK in 2024, and 270 mill. DKK in 2025 ²¹⁹. There is no connection between the 2030 target in the declaration from 2022 and the budget allocations.

The state support is now similar to the level 2009 - 2014²²⁰.

In addition to the infrastructure support, the state also supports campaigns and a Knowledge Center for bicycling. The support for these activities were 10 mill. DKK in 2022²²¹, but is less for the following years.

Actors in the sector point at a number of other possible policies to promote bicycling, including tax benefits, as well as negative effects of other policies, including reduction of taxation of cars and large budgets for expansion of roads for cars²²².

Date of Implementation (or the debate) and time horizon of the policy (short-term vs. long term):

The state support for municipal and state bicycle paths and other infrastructure has been ongoing at least since 2009 with different budgets from year to year. It is agreed that it will continue until 2035. It is a long-term policy, though with short-term variations.

Other policy elements than budget allocations have not been implemented.

Context:

How is the implementation of this policy influenced by the national context?

Background on the situation of the country in the domain addressed by the policy (include figures, indicators etc. e.g. carbon emission of the sector (current and past trends, objectives), health related data if applicable etc.)

The Danish transport is dominated by cars with a long-term trend of increasing car use and increasing emissions. 3,8% of personal transport is by bicycling in Denmark in distance

²¹⁶ Vejdirektoratet 2019

²¹⁷ Bicycle support 2014 - 2021 consisted of 4 separate budget allocations, 2014-15, 2015-18, 2017-18, 2021-22, see Vejdirektoratet 2023.

²¹⁸ Ministry of Transport 2021

²¹⁹ Ministry of Transport 2022-2

²²⁰ In 2009-2014, there was allocated 1014 mill. DKK according to Vejdirektoratet 2019,, equal to 169 mill. DKK/year, which with inflation (price index increase) 2014-2023 (May to May) of 19,3% is equal to 203 mill. DKK/year. The allocation 2022-2025 is 420 + 97,5 + 162,5 + 270 mill. DKK according to Ministry of Transport 2022-2, which gives and of 235 mill. DKK/year.

²²¹ Ministry of Transport 2022-2

²²² Information from interview persons

(pkm) while 14,4% of trips included bicycles in 2022²²³. Since the bicycle strategy was adopted in 2014, bicycle use has decreased close to 20% in the period 2014- 2019, but it seems to have stabilised, with an 8% increase 2019-2022.²²⁴ Bicycling's share of total transport follows the same pattern, indicating that increases in bicycling replaces other forms of transport and vice versa.

Since 82% of personal transport, except bicycling, is by personal car + van²²⁵, we will assume that an 82% of an increase or decrease in bicycling would respectively decrease or increase personal transport by car+van 82%, as an average. The increase in bicycling 2019-2022 is 0,1 km/day per person. If 82% of that is replacing car+van use, it has reduced emissions (scope 1) with 15.000 tons CO₂/y in Denmark and have had a value for the society (better health, less congestion etc) of 900 mill. DKK/y. If the target of 20% increase of bicycling from 2019 is realised, it will with the same assumptions reduce emissions with 40.000 tons CO₂ and will have a value for the society of 2,3 billion DKK/y.²²⁶

Policy consistency / policy mix : Is the policy coherent with other policies? Are there other policies that support/ or contradict the policy? How is the policy implementation financed (repurposed money vs. new funds, supporting measures (e.g. trainings, education)?

The bicycle policy is coherent with the overall climate policy, aiming at a reduction in fossil fuel use.

It is also coherent with public health policies, where increased physical activity is one objective²²⁷.

The bicycle policy is contradicted by political decisions to reduce costs of buying cars²²⁸

The support for bicycle infrastructure is on the state budget and also on municipal budgets, but the budget allocations from the state to the municipalities are subject to rules constraining the municipal budgets²²⁹

The state budget for transport infrastructure, that includes the allocations for bicycling, is primarily financing expansion of roads for cars. Only 1,9% of the budget is for bicycle infrastructure²³⁰.

Policy enforcement: How is the policy enforced? By whom? Is it effective?

²²³ According to an annual, large survey of Danish citizens' mobility Transportvaneundersøgelsen 2022, table 3 and table 4

²²⁴, According to Transportvaneundersøgelsen 2014, Transportvaneundersøgelsen 2019, and Transportvaneundersøgelsen 2022 table 2, each dane above 6 years travelled by bike 1,6 km/day in 2014, 1,3 km/day in 2019, and 1,4 km/day in 2022.

²²⁵ Transportvaneundersøgelsen 2022, table 3

²²⁶ Own calculations with 0,1 km/person per day equal to 190 mill. pkm/year of which 156 mill. pkm are from car users. With 1,36 persons in average in each car calculated from Transportvaneundersøgelsen 2022, this is 116 mill. vehicle km. With average emissions of 130 g/vehicle km for Danish personal cars, the saved emissions are 15.000 tons. According to Cykelsamfundsøkonomi, the savings for society of bicycling in Denmark is 4,79 DKK/pkm, which for 190 pkm/year adds up to 900 mill. DKK/year. With 20% increase, equal to 0,26 km/per per day, the saved emissions become 40.000 tons and the savings for the society is 2,3 billion DKK.

²²⁷ The Danish Health Authority recommends physical activity at least 30 min. every day for Danish adults. Bicycling is one of the recommended ways of being physical active, read for instance recommendations for adults below 65 years in Sundhedsstyrelsen

²²⁸ The taxation on new cars was reduced from an average 180.000 DKK in 2007 to 85.000 DKK in 2017 and was further reduced in 2018, see page fig. 3.2 and Boks 3.1 in Skatteministeriet.

²²⁹ Information by interview the person to this study that is repr. of Danish Cyclist's Federation

²³⁰ Of a total budget for transport infrastructure of 160 billion DKK, 3 billion DKK is for bi-cycle infrastructure equal to 1,9%. Budgets according to Ministry of Transport 2021

The national policy for promotion of bicycling is implemented with a state budget allocation. Evaluations of the policy have shown that for routes, where the bicycle paths are improved with state budget support in 2009-2014, bicycling has increased locally by 5% because of these projects²³¹. For a number of regional "super bicycle paths" in the Greater Copenhagen Area, the bicycling on these routes increased by 23% until 2021²³² with 3,2% that changed from cars while the rest (~20%) changed from less attractive bi-cycle routes or from public transport.

In spite of the documented results of the policy, bicycling has decreased in Denmark, at least until 2019. One reason for this is the low state budget allocations, as the support requested from municipalities is around 10 times bigger than the state funds available, even though the municipalities are to pay 50-60% of investments themselves²³³. Other reasons are the policies to increase car use and that there are no other effective state policies than budget allocations (there are for instance minimal tax benefits compared to car use²³⁴). Also, longer commuting distances add to the negative development²³⁵.

Public participation: (How) have stakeholders been involved in the decision-making and implementation process? Has there been a prior engagement of citizens? Effective possibilities of participation?

On the national level, the Danish Cyclists' Federation is representing bicyclists in state advisory boards.

The Danish Bicyclists' Federation has established an informal Bicycle Political Think Tank with politicians, bicycle sellers and others.²³⁶

On municipal level, local citizens' councils (lokalråd) and local branches of the Danish Cyclists' Federation are often involved in the planning of bicycle infrastructure and related traffic interventions, such as speed reductions.²³⁷

Social Context/ Public Opinion: How is civil society engaged in the policy area? Are there (long-standing) citizen organisations/ initiatives/ opinion leaders advocating for or against the objective of the policy? Which actors played a key role in the adaptation of the policy, i.e. who were the initiators? Has the policy led to a change in public opinion?

The Danish Cyclists' Federation is a long-standing advocate for the objective of increased bicycling and for increased budgets of the bi-cycle infrastructure. Bi-cycle sellers, municipalities, business councils and others are supporting the objective.

Those against the increase of the budget and against other policies for bicycling (tax benefits, general lower speed on roads) are the municipalities that prefer to have state support for roads for cars, business groups that advocate for increased roads for cars, and the Danish car owners' association "Forenede Danske Motorejere"²³⁸.

²³¹ According to Vejdirektoratet 2019, p. 23, 3% of bicyclist used car before, 1% public transport and 1% simply did not travel on this route before.

²³² Supercykelstisekretariatet

²³³ According to information from the interview person from a municipality

²³⁴ There is a tax benefit for commuting, but it is only applicable for commuting beyond 12 km each direction according to SKAT, which is beyond bicycle distance for most persons

²³⁵ Information from interview person from municipality

²³⁶ Bondam

²³⁷ Information from interview person that is repr. Danish Cyclist's Federation

²³⁸ Forenede Danske Motorejere (FDM) is campaigning for higher speeds on Danish roads, for instance with polling politicians about higher speed, see: FDM.

The Danish Cyclists' Association played an important role in getting the budget allocations, including the inclusion in the infrastructure plan in 2022-2035²³⁹.

Evaluation:

Has the policy been implemented effectively to reach its goal and be accepted by citizens?

Success: Has the policy reached the intended objective?

Evaluation of specific supported projects have shown that the construction of bicycle infrastructure with state support is effective to increase bicycling in the area, as explained above.

Since the Bicycle Strategy was adopted in 2014, bicycling has decreased in Denmark, which is against the objective of the Strategy and against the objectives of other bicycle policies. The national policy has not met its objective.

The new policy goal with the 2022 declaration is not operationalised (yet).

Climate Benefits: How much energy/ carbon reductions can be/ have been achieved by the policy? (please refer to official or third party evaluations if available):

With the decrease of bicycle use from 1,6 km/day in 2014 to 1,4 km/day in 2022, it can be estimated that this has led to an increase of CO₂ emissions around od 30,000 tons of CO₂ with extra car use.²⁴⁰

The evaluation of "Supercykelstier" shows a shift from car commuting to bi-cycle commuting equal to a saving of around 500 tons/year by 2021 for the paths realised until then²⁴¹.

Transformative power: Does this policy effectively transform lifestyles? (Why, why not? What could be improved?)

The overall failure of the policy has led to less sustainable lifestyle with less bicycling and more use of cars.

The evaluation of the projects show that they have increased bicycle use by 5-23% as explained above, which has transformed the transport practice for these people. Most of them have changed commuting from car use or from public transport to bicycling. The projects have also maintained the use of bicycle for some people that would otherwise have changed to cars, following the general trend of reduced bicycling in Denmark 2014-2019.

²³⁹ Information from interview person from Danish Cyclists Federation

²⁴⁰ Own calculations with 0,2 km/person per day equal to 380 mill. pkm/year of which 312 mill. pkm are from car users if we assume that 82% change to car, which is the average of personal transport exclusive bicycling according to Transportvanundersøgelsen. With 1,36 persons in average in each car calculated from Transportvaneundersøgelsen 2022, this is 232 mill. Vehicle km. With average emissions of 130 g/vehicle km for Danish cars, the saved emissions are 30.000 tons.

²⁴¹ According to "Supercykelstisekretariatet" the bicyclists used the super bicycle path 400.000 km/day in 2021, which was an increase of 23% compared with before the routes were improved. 14% of the new bicyclists for former car drivers, giving saved 6 mill. Pkm/year car driving. With occupation of 1,05, typical for car pendling, and car emissions of 125 g CO₂/km, the saved CO₂ (scope 1) is just above 5000 tons/year.

The policy could be improved with a higher budget allocation. Danish Cyclists' Federation advocate for 10% of transport infrastructure budget, up from 1,9% today. It can also be improved with other policies, as tax benefits, general reductions of speed, and urban planning that reduce the distances travelled between dwellings, shops, schools, and workplaces.

Adequacy: Has the policy been appropriate as a measure to address the given problem/ reach the goal? Could this have been addressed in a better way?

No, it failed as the bicycle use decreased.

It could have been addressed in a better way:

- With higher state budget allocations, following requests from municipalities, at least 5 times higher.
- With additional policies with tax breaks for bicycles provided by the employer for commuting + use at work.
- With lower speed on roads without bicycle paths, near crossings etc.
- Without contradicting policies with lower taxation on cars and with high budgets for roads for cars.

Gender dimension: Is the policy likely to differentially impact people of different genders? (How) can this be mitigated? Is it part of the political discussion?

Since men have higher mobility than women (28% higher mobility, measured in pkm) and they are also bicycling longer (25% longer in pkm)²⁴², policies to improve conditions for bicycling could be expected to benefit men more than women. A recent evaluation of high-quality bicycle paths ("supercykelstier") shows that the bicyclists here 52% are women and 48% men²⁴³. While this is a limited sample, it can indicate that the improved and safer infrastructure for bicycling is particularly favoured by women, benefitting them the most. Building more and safer bicycle paths that allow bicyclists to travel safely along trafficated roads is an incentive that make more women choose to bicycle. Parents can also travel with their children in a bicycle trailer or on a bicycle built to carry children.

Multiple benefits: Does the policy have further positive multiple benefits or negative side effects? (e.g. multiple benefits such as impact on health, jobs, as well as potential influence on inequalities, rebound effect etc.)

The positive Impact on health is well documented as it gives exercise. The health benefit has been evaluated to 10,70 DKK/km travelled, when bi-cycling replaces travel by car.

There are jobs in bicycles, in Copenhagen there are around 650 people making, selling and maintaining bicycles.

Increased bicycle use reduces congestion on roads, in particular for commuting, as Danish congestion is mostly caused by commuting by car.²⁴⁴

²⁴² According Transportvaneundersøgelsen 2022, Table 28, in average men are travelling 40,7 km/day while women are travelling 32,7 km/day, while out of this, men are bicycling 1,5 km/day and women are bicycling 1,2 km/day.

²⁴³ Table 2 in Transportvaneundersøgelsen 2022

²⁴⁴ According to Cykelsamfundsøkonomi Table 2, box on "Jobs I cykelvirksomheder", and paragraphs under the heading "Samfundsøkonomiske effekter ved øget cykling"

Calculations comparing the benefits for the society of bicycling with the costs of bicycle infrastructure investments show that it has a better economy for the society than other transport infrastructure. The internal interest rate is in average 11% for bicycle infrastructure, ranging from 24-37% in the city of Copenhagen, above 10% in suburban connections, and very low in the open land²⁴⁵.

Given the low cost of bicycles and the free access to bicycle infrastructure, it makes more equal access to mobility than car infrastructure.

In Denmark, statistics show that the richest part of the population use a bicycle for 14% of their trips while the poorest use bicycles for 31% of their trips²⁴⁶. Thus, bicycling is a more egalitarian mode of transport than car driving.

Re-bound and spill-over effects are that:

- People will have more money to spend on other activities, if they bicycle instead of buying and traveling by car. For a car owner, the main saving is saved petrol or diesel, which have a larger climate effect than alternative uses of money. For a person that replaces a car with bicycle + other modes of transport, the savings from this change will also, in most cases, be used for purposes with less climate impacts than car use²⁴⁷.
- If a person replaces the car with bicycling, combined with other forms of mobility, as public transport, car-sharing, there is also an indirect effect, as the change away from car ownership will lead to a change in mobility pattern driving less and using other, less environmental harmful means of transport.

Social acceptance: How has the policy been accepted by citizens? Is it perceived to be effective, fair (i.e. burden-sharing, equality concerns) and in the interest of citizens? (How) does the acceptance differ across various social categories and profiles of individuals?

Bicycle promoting policies are generally well accepted by citizens.

Recent national policies are not effective and are not perceived to be effective.

Bicycle policies are perceived to be fair as they benefit all parts of society while improving safe mobility for lower-income households that cannot afford a car.

Bicycle policies are in general accepted across social categories (gender, income, age groups) and for most profiles of individuals.

Policies that improve conditions for bicycles by taxing cars are not popular among car lobbyists, which is an influential group in Denmark.

²⁴⁵ According to Cykelsamfundsøkonomi Table 7, compared with the internal interest rate of road transport projects planned 2022-2035 according to Ministry of Transport 2021

²⁴⁶ According to Transportvaneundersøgelsen 2022, people with income below 150.000 DKK (~20,000 €)/year make 0,28 trips/day involving bicycling out of a total of 0,89 trips/day that involve other transport modes than walking while people with income above 500.000 DKK (~67.000 €)/year make 0,14 trips/day involving bi-cycling out of 1,14 trips/day that involve other transport modes than walking.

²⁴⁷ If a person changes 1 km from car to bicycle, then the reduction in car use is in average 130 g/vehicle km according to Folketinget. If the person drives alone and, the cost is 2,63 DKK/km for cars and 0,50 kr/km for bicycles including depreciation of vehicles according to DTU Management. The saving is then 2,13 DKK/km, if the person sells the car (no car cost remaining). We assume that the saving will be used for general consumption. The emission from Danish private and public consumption is 61 million tons CO₂e according to Energistyrelsen, equal to 12,7 tons for each of the 4,8 million persons above 15 years in Denmark. The average income for Danish people above 15 years is 370.900 DKK including taxes that pay for public consumption according to Statistikbanken. This gives an emission of general consumption of 32 g CO₂e/DKK and for a consumption of 2,13 DKK an emission of 73 g CO₂e. The difference is actually larger than this calculation shows as the above cited car emission only include scope 1 emissions while the above cited emission of general consumption include scope 1 + scope 2 + scope 3.

General remarks:

Lessons learnt from these analyses and preliminary recommendations:

The three sufficiency policies that are analysed have generally popular support, with the least support for the policy for climate friendly food.

The three policies are part of national or municipal policies, but in a small way, where only a smaller part of the sufficiency potential will be covered.

For each of the three policy objectives, there are different policies to support it, but only one or a few are used.

Recommendations:

Increase the present policies (for bi-cycle policies with higher budgets, for tiny houses with more land allocated, for lower climate impact food with more vegetarian/vegan meals in public kitchens) and include more policies to reach a larger part of the sufficiency potential in the three cases.

Use the popular support as a lever to increase sufficiency policies.

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