## Sufficiency: Wellbeing for all within planetary boundaries

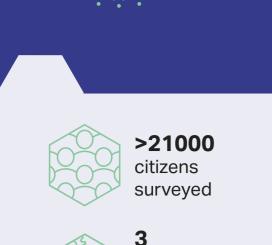














**50** sufficiency citizen initiatives studied



workshops

Input-output models used to quantify effects of sufficiency measures

160 interviews conducted

>30

project

publications

Sufficiency - Fulfill Sufficiency. (2024, July 22). FULFILL project website.

gas emissions to an extent that they remain within planetary boundaries, and simultaneously contributes to societal wellbeing.

Sufficiency is about creating the social, infrastructural, and

regulatory conditions for changing individual and collective

lifestyles in a way that reduces energy demand and greenhouse

16 sufficiency policies analysed

countries' NECPs

analysed

<sup>1</sup> Global Footprint Network. "EU Overshoot Day 2024." Earth Overshoot Day, 3 May 2024. Accessed July 23, 2024. Sufficiency is about finding the safe space • of wellbeing for all within planetary boundaries.

If everyone lived like

an average European,

we would need three

planets to sustain us.1

earth and overshooting

We are overconsuming the

many planetary boundaries.

while at the same time, many people struggle to satisfy their basic energy needs.3 <sup>2</sup>Chancel, L., Piketty, T., Saez, E., Zucman, G., et al. World Inequality Report 2022. World Inequality Lab. wir2022.wid.world. <sup>3</sup> European Economic and Social Committee (EESC). (2023, July 19). Energy poverty: 42 million people in the EU cannot afford to heat their homes adequately. climate change

At the same time, consumption levels are

unfairly distributed across the population,

with income and carbon emissions being

highly correlated. The richest countries but

also the richest individuals across countries

are responsible for most carbon emissions,<sup>2</sup>

example by reducing emissions from the biggest consumers such as major corporations, and the wealthiest households. **Guaranteeing fair access to** essential services for all, such as heating, transportation, electricity, etc. Enjoying the multiple benefits of sufficiency lifestyles such as better air quality, healthier

diets, and more attractive cities.

Curbing overconsumption, for

The latest IPCC report⁴ recognises the **need for** behavioural change to reach the climate goals as does the International Energy Agency<sup>5</sup>, which emphasizes that behavioural changes are most important in advanced economies. Sufficiency can make achieving the EU's climate goals more cost-effective and likely and help decrease the

critical resources.

2023". Synthesis Report Summary for Policymakers.

**Sufficiency** 

Avoiding energy

and resource

consumption

1.5 °C Goal in Reach. IEA, 2023. Accessed July 23, 2024.

freshwater land conversion withdrawals Illustration adapted from Raworth, K. (2017). 'A doughnut for the anthropocene: Humanity's Compass in the 21st Century', The Lancet Planetary Health, 1(2). The European Union has set itself the goal to swiftly reduce emissions and become climate neutral by 2050, yet we are still far from it. 55% 2030  $CO_2$ 

FIRST CLIMATE NEUTRAL

**CONTINENT BY 2050** 

European Commission. (2021). Delivering the European Green Deal.

Consistency

Prioritising renewable

material flows and

recycling



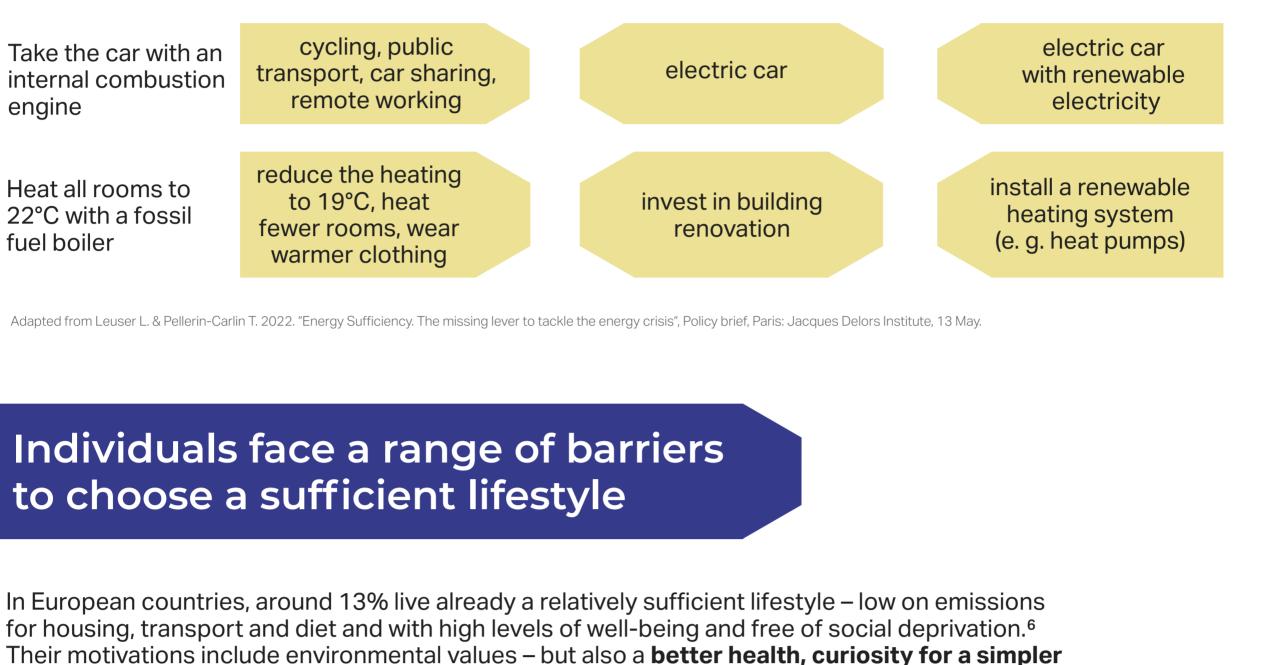
**Examples** 

What role for sufficiency in the green transition? According to the latest IPCC report⁴ and the IEA5, we need all three approaches to reach climate targets:

EU's dependence on energy imports and other

<sup>4</sup>IPCC, (Intergovernmental Panel on Climate Change). 2023. "Climate Change

<sup>5</sup>International Energy Agency. Net Zero Roadmap: A Global Pathway to Keep the



Missing bike

infrastructures

**Efficiency** 

Producing the

same or more with

less energy and

resources

Public transport

unavailable or

unaccessible

There is limited awareness about

Plant-based food

options not always

easily available

Often cheaper and quicker

a new one than repairing

Preference of individual

Bike rental

000

the environmental

Increased animal

Advertisement

Food industry

Car sharing

This issue is largely overlooked at the policy level.

consider the weight and size of the vehicle, in

address this problem.

- and so are their emissions. IEA Commentary.

addition to CO2 emission reductions, could help

Cozzi, L., & Petropoulos, A. (2024, May 28). SUVs are setting new sales records each year

Introducing fiscal incentives for electric vehicles that

Lower costs

CO<sub>2</sub>

regulation.

regulation.

welfare

costs of production

000

over shared housing

to replace a broken item with

Current policies and infrastructures often favour unsustainable lifestyles.

## Within current structures, sufficiency lifestyles are unaffordable for many people due to the required time and financial resources.

life and social bonds to people with similar ideas.78

Train tickets more

expensive than flying

Social norms can discourage

For lasting change, sufficiency cannot rely

but requires a societal debate and creating

conditions to overcome the barriers that

benefits for their cities and for those involved.

Recommendations made by citizen assemblies

the National Energy and Climate Plans (NECPs).

of the mitigation policies brought forward

by citizens were sufficiency measures.10

Energy Research & Social Science 104 (2023): 103254.

(Deliverable D 3.3). FULFILL Project.

39%

(three to six times more) than policy makers list in

contain significantly more sufficiency policies

diffusion (Deliverable D 3.3). FULFILL Project.

Sufficiency initiatives

solely on individual responsibility and action

supportive social, infrastructural, and regulatory

individuals face to implement lifestyle changes.

Alexander-Haw, A., Dütschke, E., Janßen, H., Schleich, J., Tröger, J., & Tschaut, M. (2024). Report on long term effects of sufficiency lifestyles and governance approaches for

On a local level, sufficiency initiatives formed by citizens offer multiple

sustainable choices.

However, many people face barriers to living sufficiently, such as:79

Cities designed

for cars

Lack of education on the risks associated sufficiency as a concept, the environmental with high meat consumption for health impacts of current habits, and the benefits professionals and individuals of a sufficiency lifestyle.



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**Financial** 

ENGAGED CITIZENS

SUPPORT SUFFICIENCY

Uninformed publics tend to prefer softer policy measures over more restrictive ones. However, acceptance can be increased through engaging citizens and informing them about sufficiency as well as designing policies in a socially just way. 11 12

Current diets are increasingly unhealthy, unsustainable, and

inequitable for many people. 13 When it comes to food, sufficiency

means eating healthier and more climate friendly food, for example

by reducing animal products in our diets. Changing diets has the

biggest potential to reduce individual CO2 emissions among all

the policy measures studied in FULFILL.<sup>14</sup>

Increased availability and

plant-based products.

Meat-free days in public

and corporate canteens.

<sup>13</sup> Fanzo, J., & Davis, C. (2019). Can Diets Be Healthy, Sustainable, and Equitable? Current Obesity Reports, 8(4), 495–503.

16 Breucker, F., & Defard, C. (2023). Report on the comparative analysis of sufficiency policies (Deliverable D5.2). FULFILL Project.

affordability of

Enablers<sup>15</sup>

 $(\mathsf{x})$ 

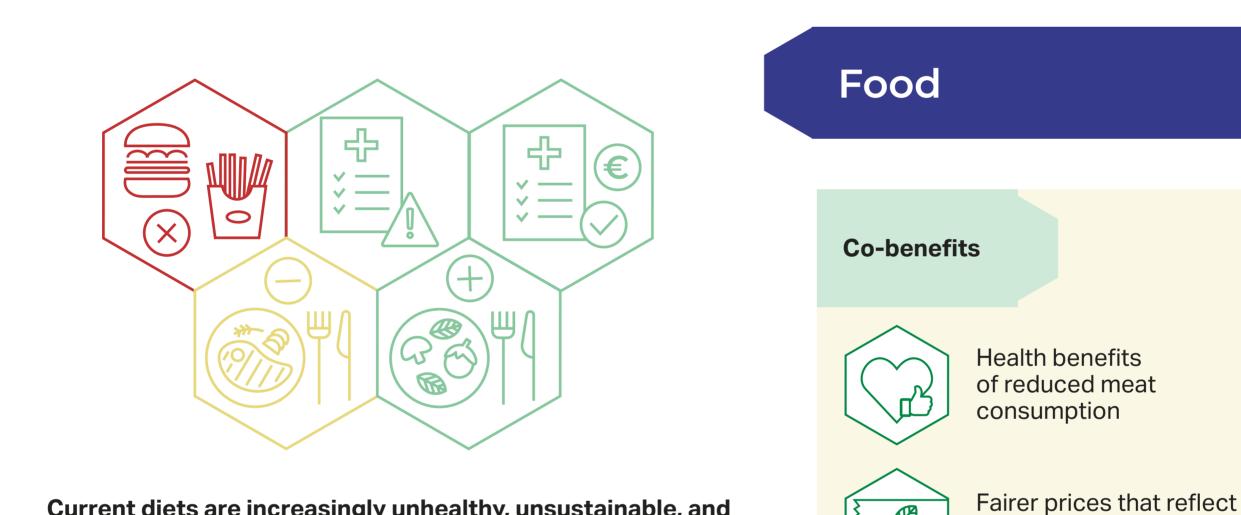
**Mobility** 

<sup>11</sup> Barbas, A., & Breucker, F. (2024). Report on citizen engagement activities (Deliverable D 7.1). FULFILL Project.

<sup>10</sup> Lage, Jonas, et al. "Citizens call for sufficiency and regulation - A comparison of European citizen assemblies and National Energy and Climate Plans."

12 Alexander-Haw, A., Dütschke, E., Janßen, H., Schleich, J., Tröger, J., & Tschaut, M. (2024). Report on long term effects of sufficiency lifestyles and governance approaches for diffusion

and learn more about sufficiency, citizens tend to support sufficiency policies.



Better placement

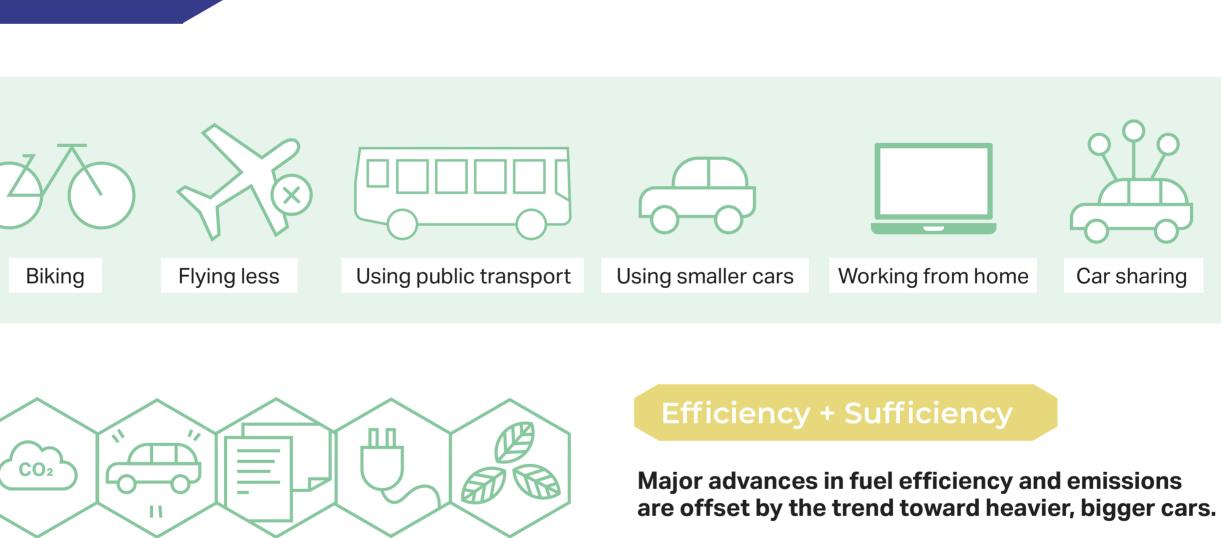
food in canteens.

Education on health

benefits of reduced

meat consumption.

of vegetarian



SUV's were responsible for over 20%

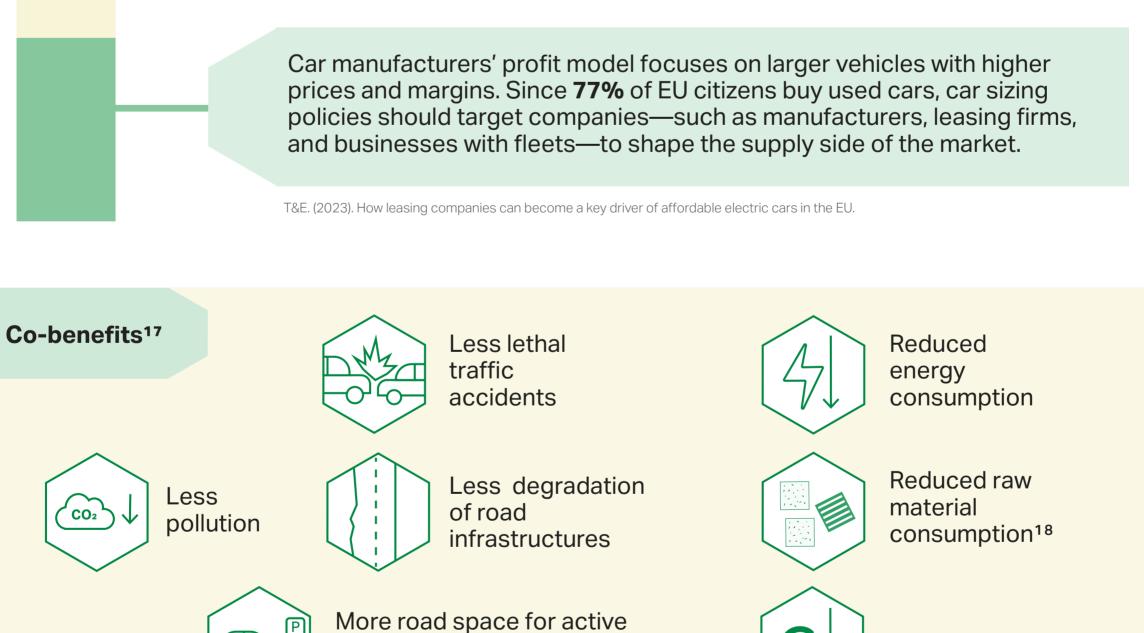
of the growth in global energy-related

CO<sub>2</sub> emissions.

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14 Golinucci, N. et al., (2024). Quantitative evaluation of the macroeconomic impacts of up-scaled sufficiency action at the European level. (Deliverable D6.2). FULFILL project.

15 Gabert, A., Marignac, Y., Djelali, M., Dufournet, C., & Flipo, A. (2024). Integration of SSH findings in quantified sufficiency assumptions for decarbonisation pathways (Deliverable D5.3). FULFILL Project.



modes (including less space

At the same time, many

Europeans struggle with

sufficiency regarding living

contributing to the provision

of adequate housing for all.

space is an indispensable

lever to decarbonise the

housing sector while

11-18 % feel they have more space than they need<sup>21</sup>

19-30% feel they have too little space

unaffordable housing or live in overcrowded spaces.20 Thus,

18 Risk of shortage at the international level for lithium/nickel material in the context of exponential market development underlines the necessity to limit the size of electric vehicles batteries

needed for parking)

<sup>17</sup> Gabert, A. et al. (2024). Report on the consolidation of quantified sufficiency hypotheses in decarbonisation strategies (Deliverable D 5.3). FULFILL Project.

to limit raw material consumption. See: négaWatt Association. (2023). Lithium: Towards a necessary sufficiency. Briefing note, February.

Housing

**Energy efficiency gains in** 

buildings in the EU were

almost completely offset

by increases in floor area

developing more shared

housing options

overcrowding

Teubler, J., Neumann, M., & Flynn, H. (2024). Report on the societal and environmental impacts of sufficiency

(Deliverable D 3.3). FULFILL Project.

**Co-benefits** 

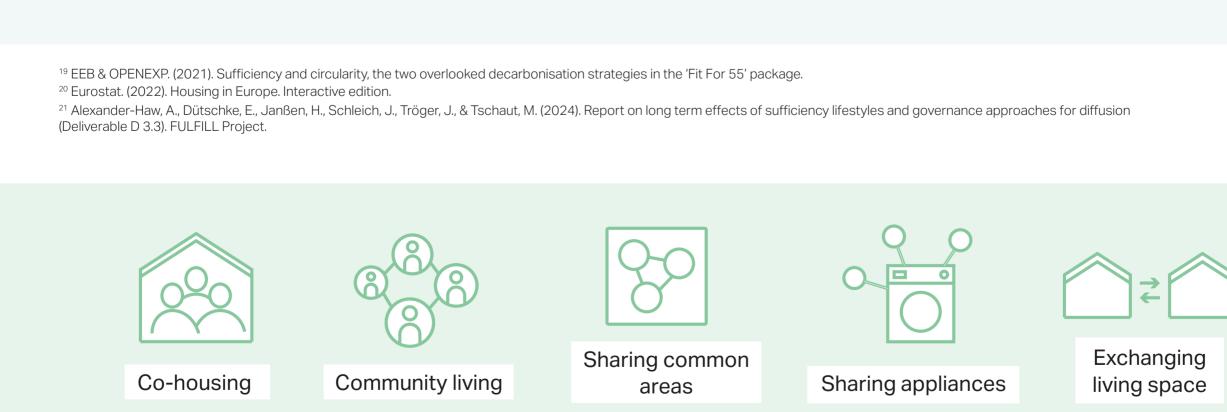
(Deliverable D6.3). FULFILL Project.

Reducing

**Co-benefits** 

and Hannah Janßen for their valuable comments.

per capita.19



Decreasing the number of square meters per person or reducing under-occupied housing would be

incentivise the exchange of apartments between

people who have more space than they need and those

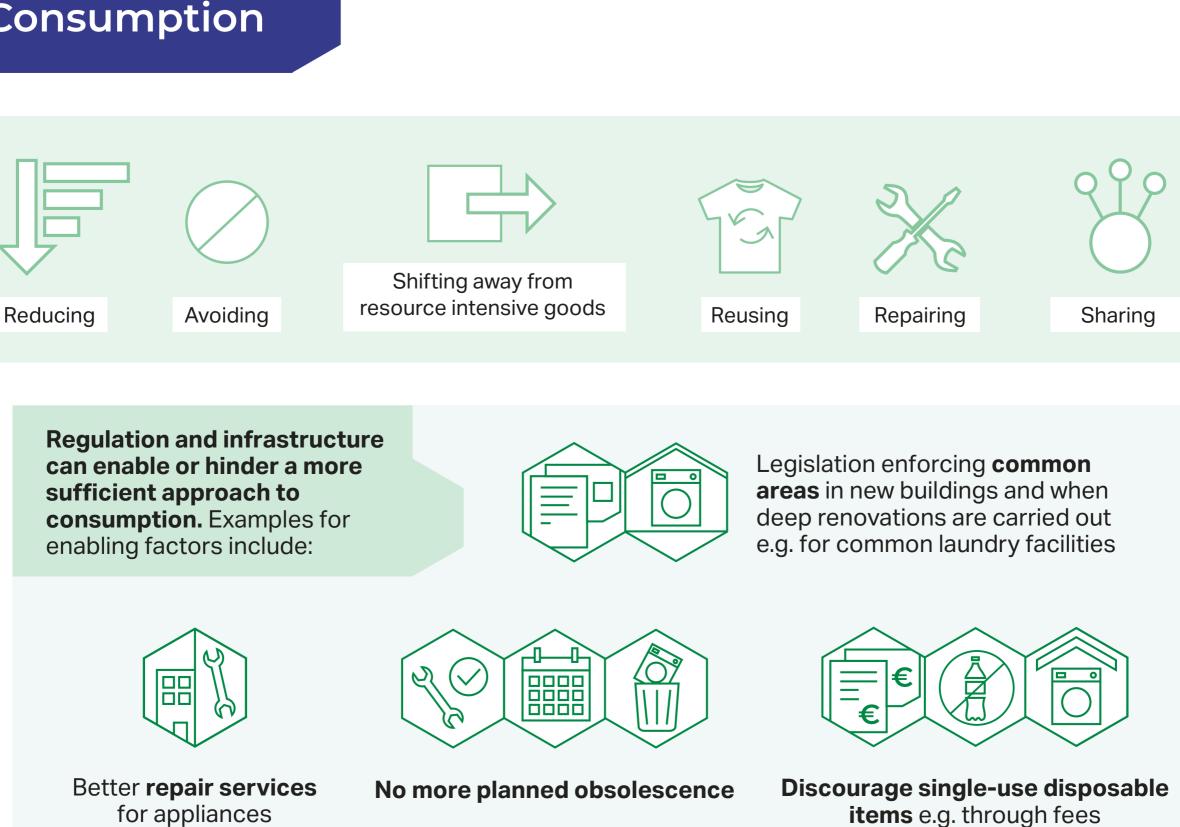
who live in overcrowded places

a way to move towards more sufficient lifestyles. Options to enable better use of space include:

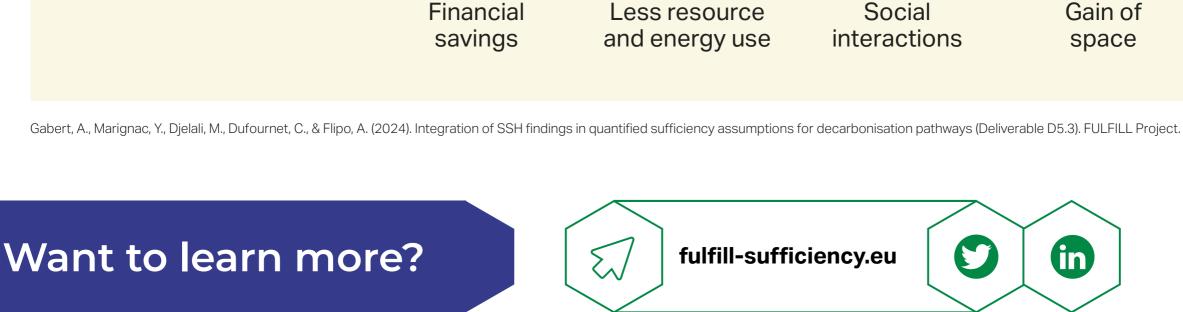
Alexander-Haw, A., Dütschke, E., Janßen, H., Schleich, J., Tröger, J., & Tschaut, M. (2024). Report on long term effects of sufficiency lifestyles and governance approaches for diffusion

Gabert, A., Marignac, Y., Djelali, M., Dufournet, C., & Flipo, A. (2024). Integration of SSH findings in quantified sufficiency assumptions for decarbonisation pathways (Deliverable D5.3). FULFILL Project.

Social Mental aspects health Contribute to solving the housing crisis and



## Better repair services for appliances





This project has received funding from the European

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Union's Horizon 2020 research and innovation

Social

interactions





Gain of

space