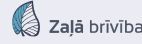
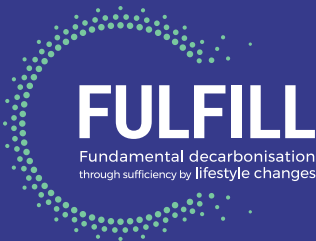


Sufficiency: Wellbeing for all within planetary boundaries



Research conducted in 5 EU countries + India



>21000
citizens surveyed



50
sufficiency citizen initiatives studied



160
interviews conducted



16
sufficiency policies analysed



3
citizen science workshops carried out



Input-output models used to quantify effects of sufficiency measures



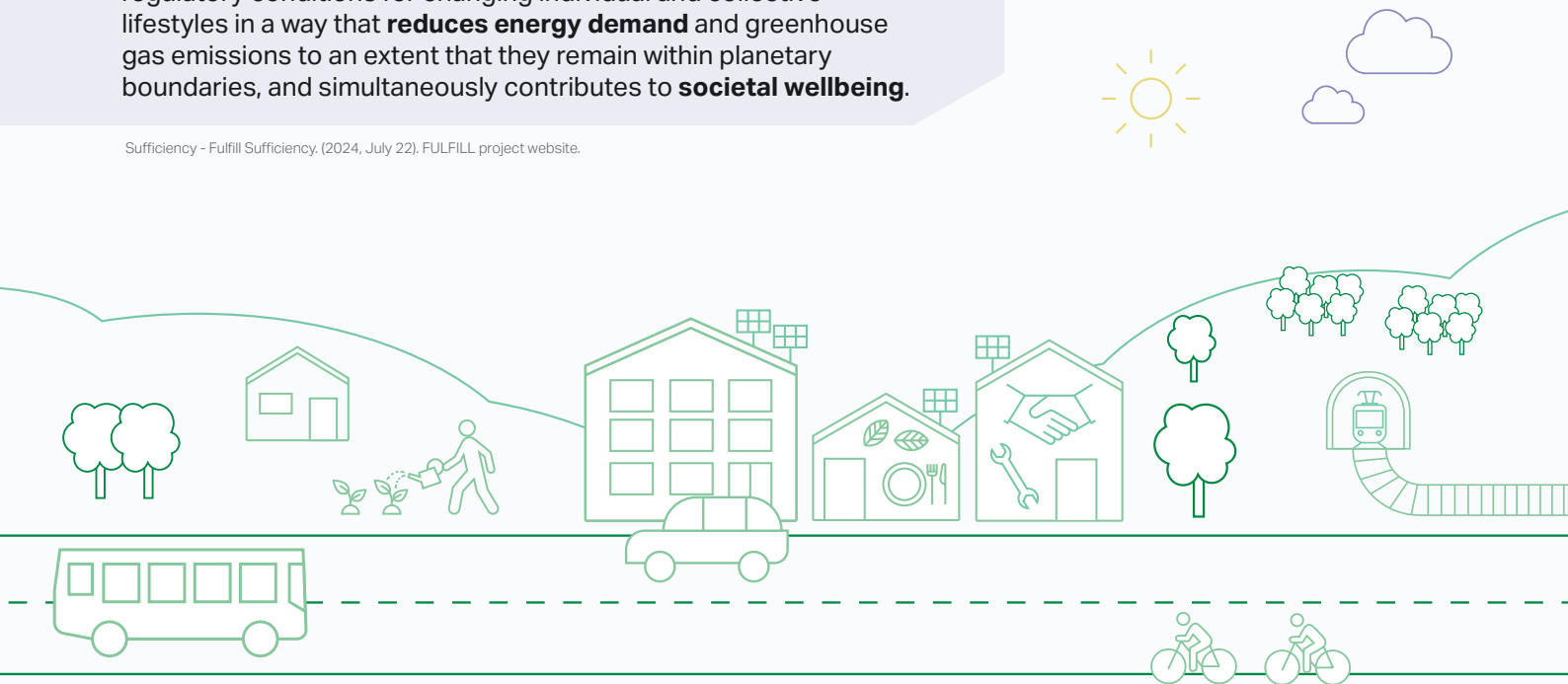
>30
project publications



4
countries' NECPs analysed

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

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





If everyone lived like an average European, we would need three planets to sustain us.¹ We are overconsuming the earth and overshooting many planetary boundaries.

¹ Global Footprint Network, "EU Overshoot Day 2024." *Earth Overshoot Day*, 3 May 2024. Accessed July 23, 2024.

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,² while at the same time, many people struggle to satisfy their basic energy needs.³

² Chancel, L., Piketty, T., Saez, E., Zucman, G., et al. *World Inequality Report 2022*. World Inequality Lab. wir2022.wid.world.

³ European Economic and Social Committee (EESC). (2023, July 19). Energy poverty: 42 million people in the EU cannot afford to heat their homes adequately.



Sufficiency is about finding the safe space of wellbeing for all within planetary boundaries.

Curbing overconsumption, for 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.

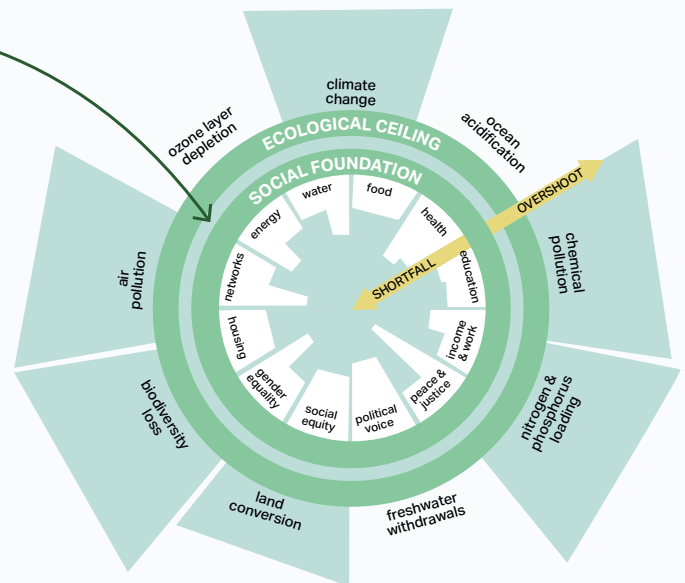


Illustration adapted from Raworth, K. (2017). 'A doughnut for the anthropocene: Humanity's Compass in the 21st Century', *The Lancet Planetary Health*, 1(2).

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.

The latest IPCC report⁴ recognises the **need for behavioural** change to reach the climate goals as does the International Energy Agency⁵, 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 EU's dependence on energy imports and other critical resources.

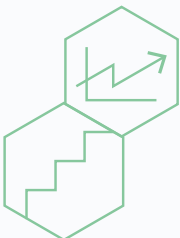
⁴ IPCC, (Intergovernmental Panel on Climate Change). 2023. "Climate Change 2023". Synthesis Report Summary for Policymakers.

⁵ International Energy Agency, *Net Zero Roadmap: A Global Pathway to Keep the 1.5 °C Goal in Reach*. IEA, 2023. Accessed July 23, 2024.



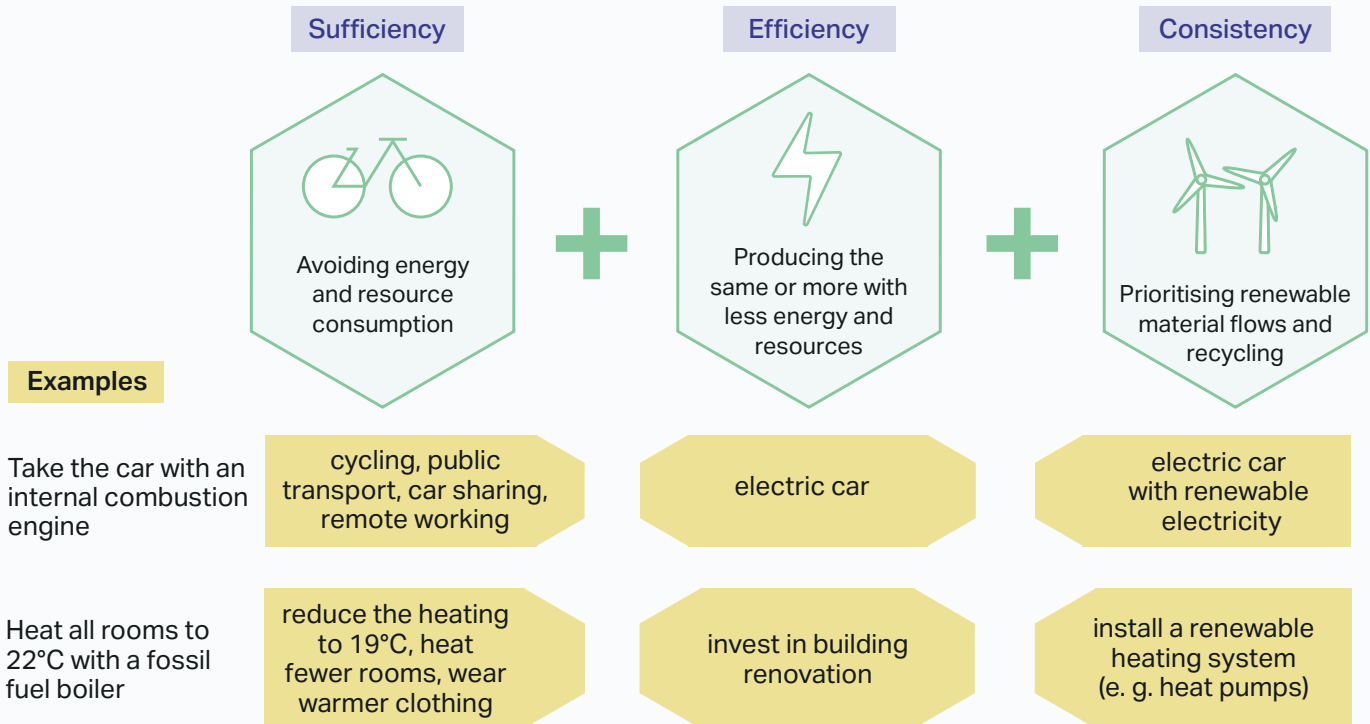
FIRST CLIMATE NEUTRAL CONTINENT BY 2050

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



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:

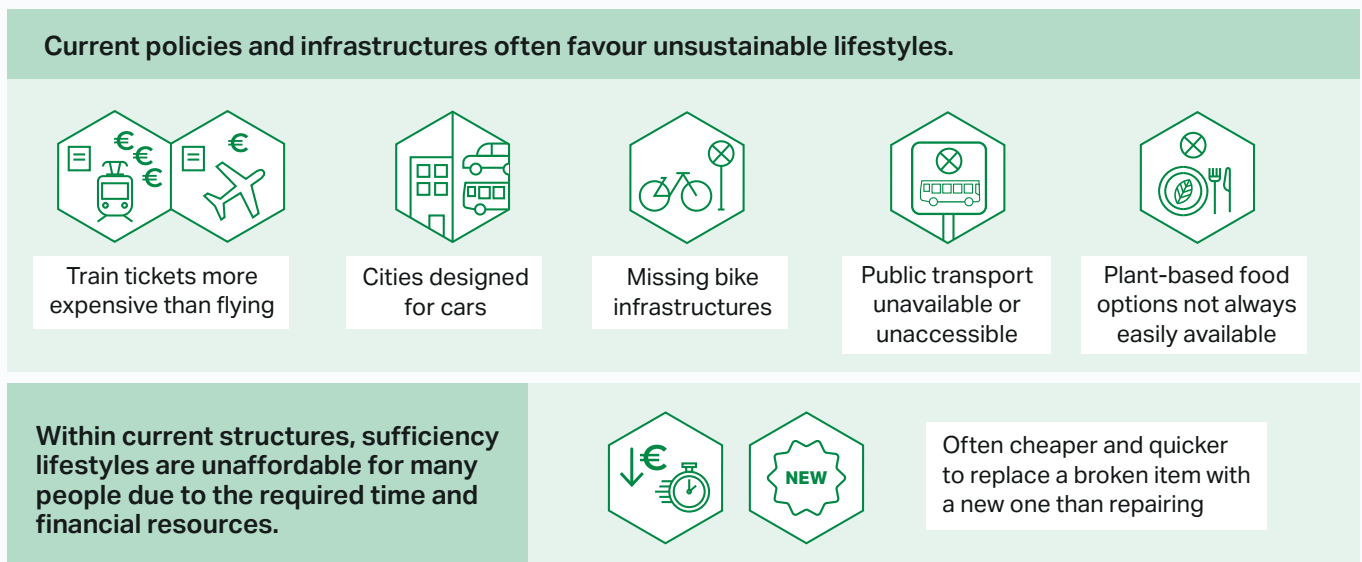


Adapted from Leuser L. & Pellerin-Carlin T. 2022. "Energy Sufficiency. The missing lever to tackle the energy crisis", Policy brief, Paris: Jacques Delors Institute, 13 May.

Individuals face a range of barriers to choose a sufficient lifestyle

In European countries, around 13% live already a relatively sufficient lifestyle – low on emissions for housing, transport and diet and with high levels of well-being and free of social deprivation.⁶ Their motivations include environmental values – but also a **better health, curiosity for a simpler life and social bonds** to people with similar ideas.^{7,8}

However, many people face barriers to living sufficiently, such as:^{7,9}





Lack of education on the risks associated with high meat consumption for health professionals and individuals

There is limited awareness about sufficiency as a concept, the environmental impacts of current habits, and the benefits of a sufficiency lifestyle.

Social norms can discourage sustainable choices.



Preference of individual over shared housing

⁶ Alexander-Haw, A., Dütschke, E., Helferich, M., Preuß, S., & Schleich, J. (2023). Report on the first survey and identification of the sufficiency groups (Deliverable D 3.1). FULFILL Project.

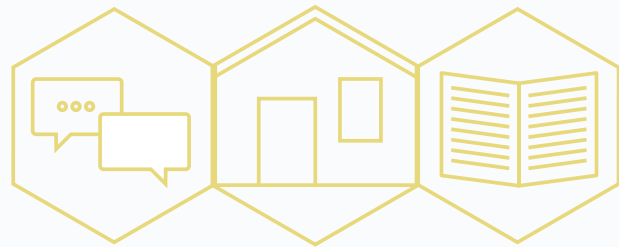
⁷ Flipo, A., & Rabourdin, S. (2023). In-depth analysis of highly sufficient lifestyles (Deliverable D 3.2). FULFILL Project.

⁸ Flipo, A., Rabourdin, S., & Alexander-Haw, A. (2023). From pioneering sufficiency lifestyles to a sufficiency society (Deliverable D 5.1). FULFILL Project.

⁹ Barbas, A., & Breucker, F. (2024). Report on citizen engagement activities (Deliverable D 7.1). FULFILL Project.

How can these barriers be overcome?

For lasting change, sufficiency cannot rely solely on individual responsibility and action but requires a societal debate and creating supportive social, infrastructural, and regulatory conditions to overcome the barriers that 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 diffusion (Deliverable D 3.3). FULFILL Project.

Sufficiency initiatives

On a local level, sufficiency initiatives formed by citizens offer multiple benefits for their cities and for those involved.



Health benefits and education



Skills



Sense of belonging



Financial advantages



Repair cafés



Bike rental services



Car sharing clubs

Breucker, F. & Farfoglia, R. (2023). Report on vertical horizontal multilevel governance (Deliverable 4.4). FULFILL Project.
Schepelmann, P. (2023). Policy brief on findings from WP4 (Deliverable D4.5). FULFILL Project.

Public support for sufficiency measures

When given the opportunity to express their views in decision making processes and learn more about sufficiency, citizens tend to support sufficiency policies.

Recommendations made by citizen assemblies contain significantly more sufficiency policies (three to six times more) than policy makers list in the National Energy and Climate Plans (NECPs).

39%

of the mitigation policies brought forward by citizens were sufficiency measures.¹⁰

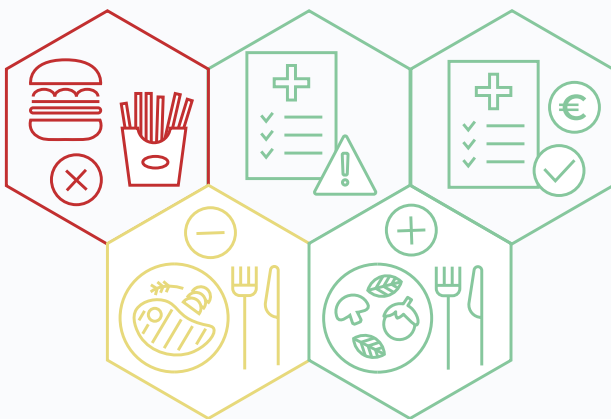


Uninformed publics tend to prefer softer policy measures over more restrictive ones. However, acceptance can be increased through engaging citizens and informing them about sufficiency as well as designing policies in a socially just way.^{11 12}

¹⁰ Lage, Jonas, et al. "Citizens call for sufficiency and regulation - A comparison of European citizen assemblies and National Energy and Climate Plans." *Energy Research & Social Science* 104 (2023): 103254.

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

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 (Deliverable D 3.3). FULFILL Project.



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.**¹⁴

Food

Co-benefits



Health benefits of reduced meat consumption



Fairer prices that reflect the environmental costs of production



Increased animal welfare

Enablers¹⁵



Increased availability and affordability of plant-based products.



Better placement of vegetarian food in canteens.



Advertisement regulation.



Meat-free days in public and corporate canteens.



Education on health benefits of reduced meat consumption.



Food industry regulation.

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

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.

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

Mobility



Biking



Flying less



Using public transport



Using smaller cars



Working from home



Car sharing



SUV's were responsible for over 20% of the growth in global energy-related CO₂ emissions.

Efficiency + Sufficiency

Major advances in fuel efficiency and emissions are offset by the trend toward heavier, bigger cars.

This issue is largely overlooked at the policy level. Introducing fiscal incentives for electric vehicles that consider the **weight and size** of the vehicle, in addition to CO₂ emission reductions, could help address this problem.

Cozzi, L., & Petropoulos, A. (2024, May 28). SUVs are setting new sales records each year – and so are their emissions. IEA Commentary.

Car manufacturers' profit model focuses on larger vehicles with higher prices and margins. Since **77%** of EU citizens buy used cars, car sizing policies should target companies—such as manufacturers, leasing firms, and businesses with fleets—to shape the supply side of the market.

T&E. (2023). How leasing companies can become a key driver of affordable electric cars in the EU.

Co-benefits¹⁷



Less pollution



Less lethal traffic accidents



Less degradation of road infrastructures



More road space for active modes (including less space needed for parking)



Reduced energy consumption



Reduced raw material consumption¹⁸

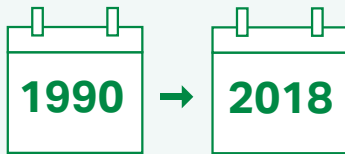


Lower costs

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

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 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 per capita.¹⁹

At the same time, many Europeans struggle with unaffordable housing or live in overcrowded spaces.²⁰ Thus, sufficiency regarding living space is an indispensable lever to decarbonise the housing sector while contributing to the provision of adequate housing for all.



11-18 % feel they have more space than they need²¹

19-30% feel they have too little space

¹⁹ EEB & OPENEXP. (2021). Sufficiency and circularity, the two overlooked decarbonisation strategies in the 'Fit For 55' package.

²⁰ Eurostat. (2022). Housing in Europe. Interactive edition.

²¹ 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 (Deliverable D 3.3). FULFILL Project.



Co-housing



Community living



Sharing common areas



Sharing appliances



Exchanging living space

Decreasing the number of square meters per person or reducing under-occupied housing would be a way to move towards more sufficient lifestyles. Options to enable better use of space include:



developing **more shared housing options**



incentivise the **exchange of apartments** between people who have more space than they need and those who live in overcrowded places

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 (Deliverable D 3.3). FULFILL Project.

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.

Co-benefits



Social aspects



Mental health



Contribute to solving the housing crisis and overcrowding



Teubler, J., Neumann, M., & Flynn, H. (2024). Report on the societal and environmental impacts of sufficiency (Deliverable D6.3). FULFILL Project.

Consumption



Reducing



Avoiding



Shifting away from resource intensive goods



Reusing

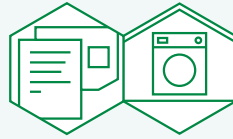


Repairing



Sharing

Regulation and infrastructure can enable or hinder a more sufficient approach to consumption. Examples for enabling factors include:



Legislation enforcing **common areas** in new buildings and when deep renovations are carried out e.g. for common laundry facilities



Better **repair services** for appliances



No more **planned obsolescence**



Discourage single-use disposable items e.g. through fees

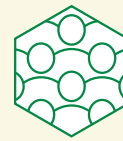
Co-benefits



Financial savings



Less resource and energy use



Social interactions



Gain of space

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.

Want to learn more?



fulfill-sufficiency.eu



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