



European Sustainable Energy Seminar

17-19 August, 2026

Venue: Nordic Folkecenter for Renewable Energy, Ydby, Denmark



Energy sufficiency, its role in the Energy Transition and Road to Climate Neutrality, International Experiences

By Yves Marignac
NegaWatt, France

Presented by Gunnar B.Olesen,
INFORSE-Europe



Presentation is part of Proceedings: https://inforse.org/europe/seminar_2026_INFORSE-Europe_Denmark.htm



Swedish Society
for Nature Conservation



Latvijas Zaļā kustība
Latvian Green Movement



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Naturvernforbundet
Friends of the Earth Norway



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Estonian Green Movement-FoE

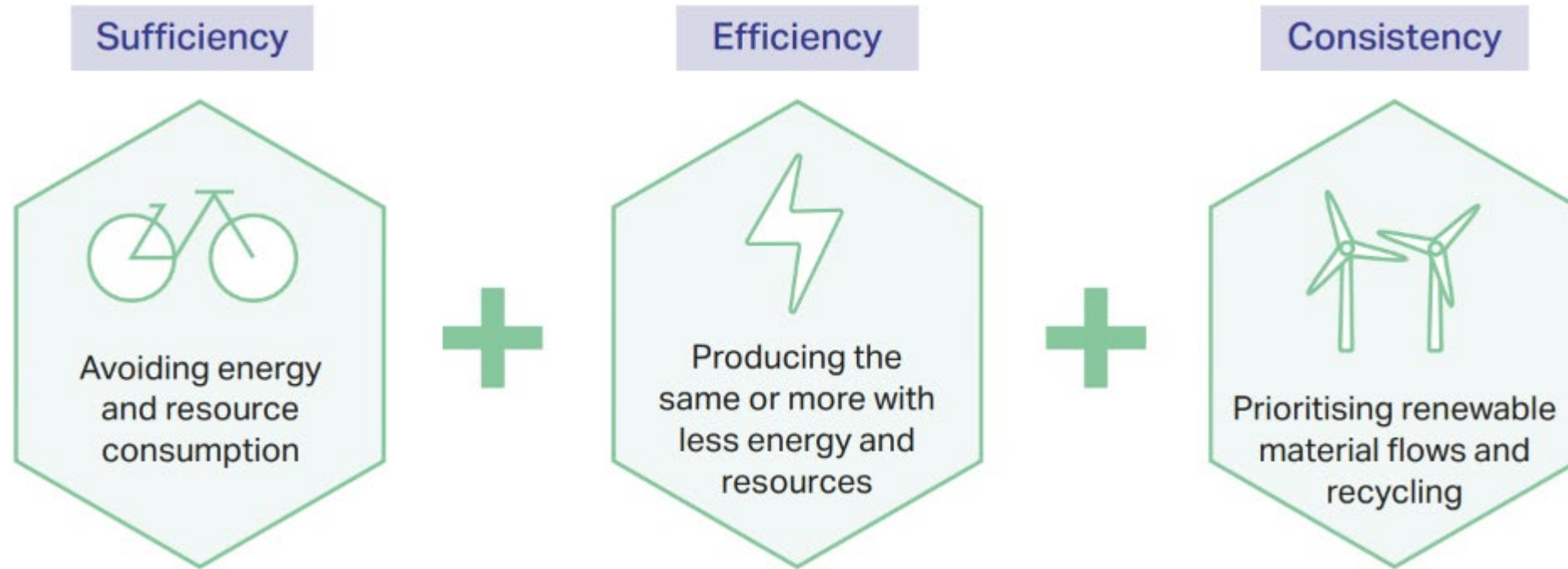


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Sufficiency is often seen as one of the three strategies that shall bring us out of the climate and resource crisis.



- BUT sufficiency is also about ensuring that all have enough for the essentials

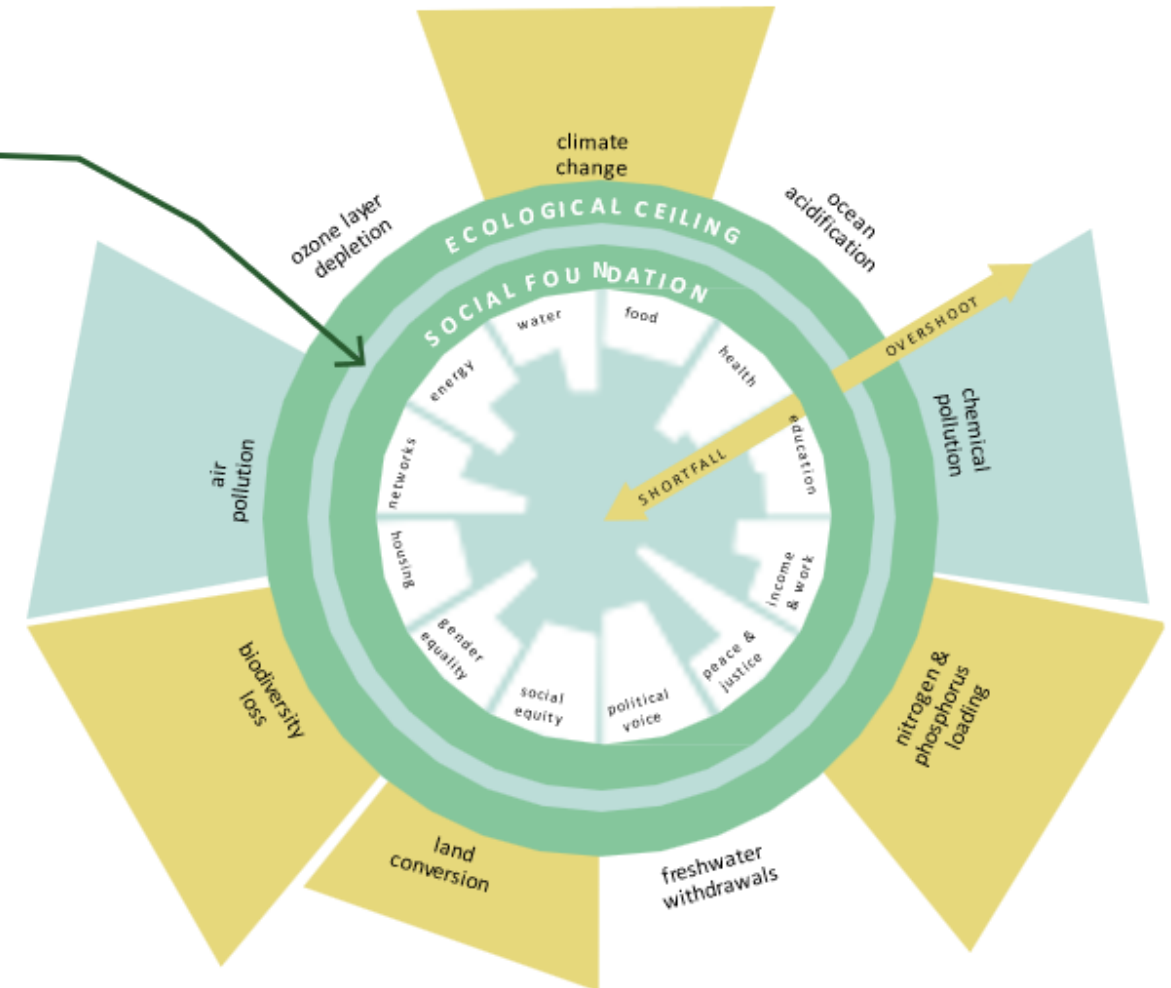


Sufficiency is about finding the sweet spot of wellbeing for all within planetary boundaries.

Curbing overconsumption, for example by reducing emissions from the biggest consumers such as major corporations, and the wealthiest households.



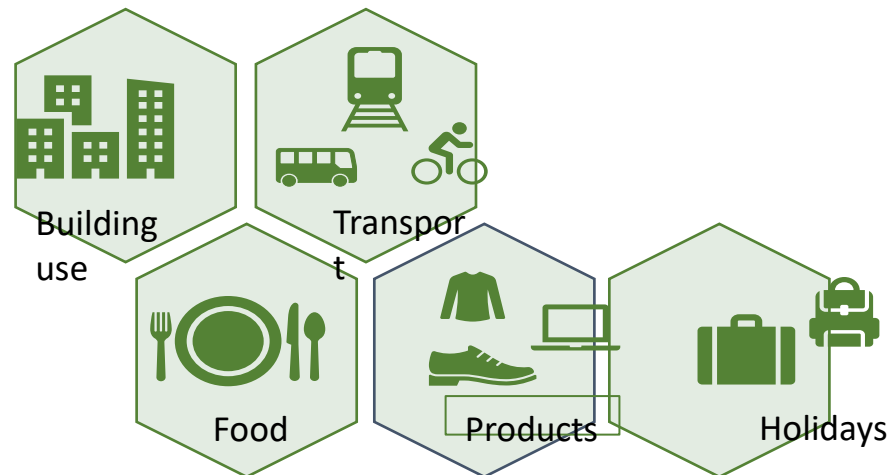
Guaranteeing fair access to essential services for all, such as heating, transportation, electricity, etc.



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

We need sufficiency policies

- Ideas of sufficiency have been around for +20 years
- While good examples and idealistic frontrunners with low consumption are important to lead the way, to make a difference that changes consumption on a societal scale, and reduces global emissions, we need sufficiency policies



Sufficiency policies have many aspects

Extend opportunities, e.g.

- Better rules for tiny houses
- Bicycling paths
- Better public transport
- Repair cafes
- Longer product warranties
- Renting systems for products
- Exchange markets for products
- Local food markets
- Fewer limits on reuse



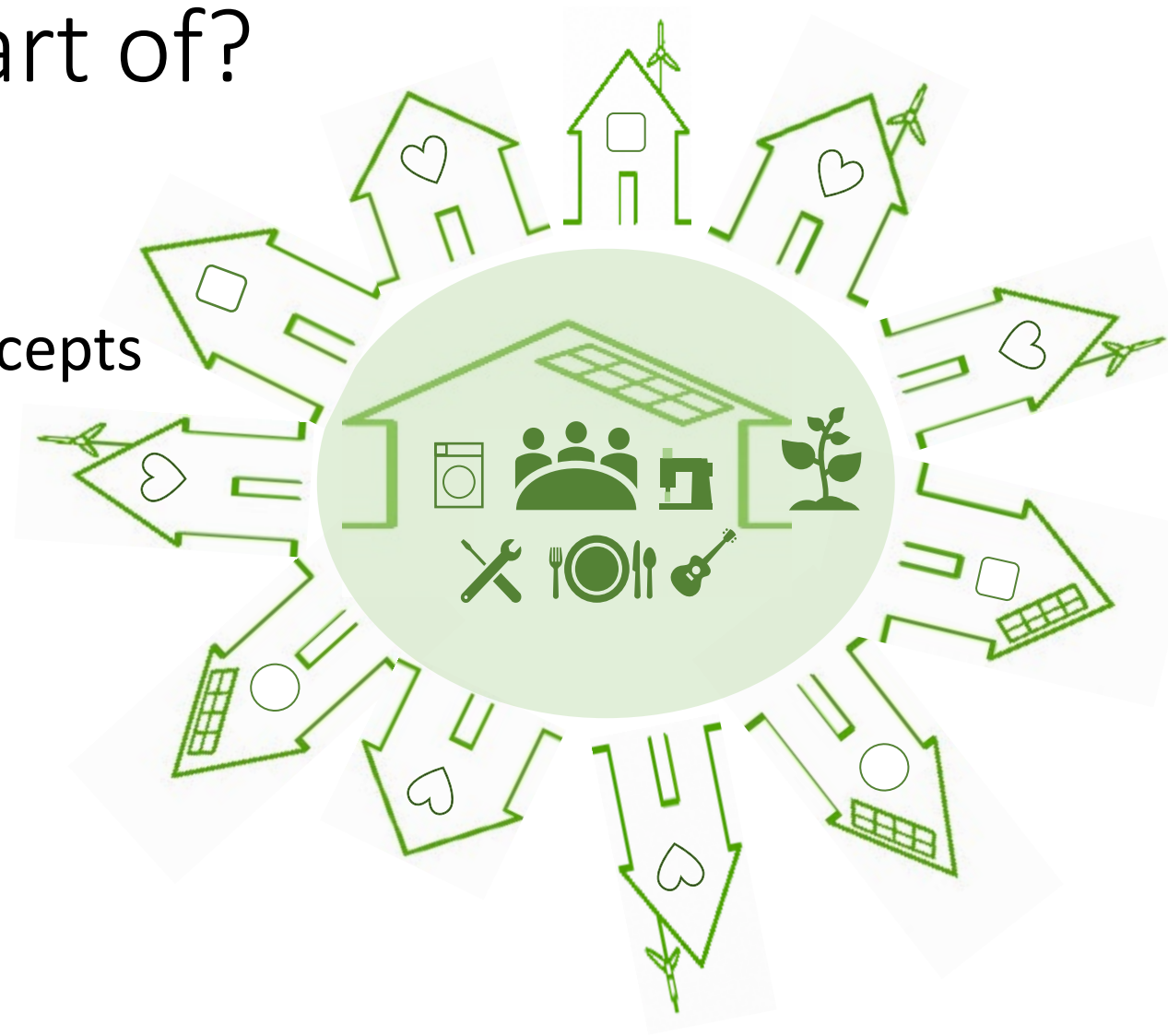
Limits opportunities, e.g.

- Ban on large homes
- High taxation on large homes, empty homes
- Limit on car driving
- High taxes on cars, fuel, parking
- Speed limits
- Ban on products and their use, e.g. Single-use products
- Requirements for products
- Aviation taxes



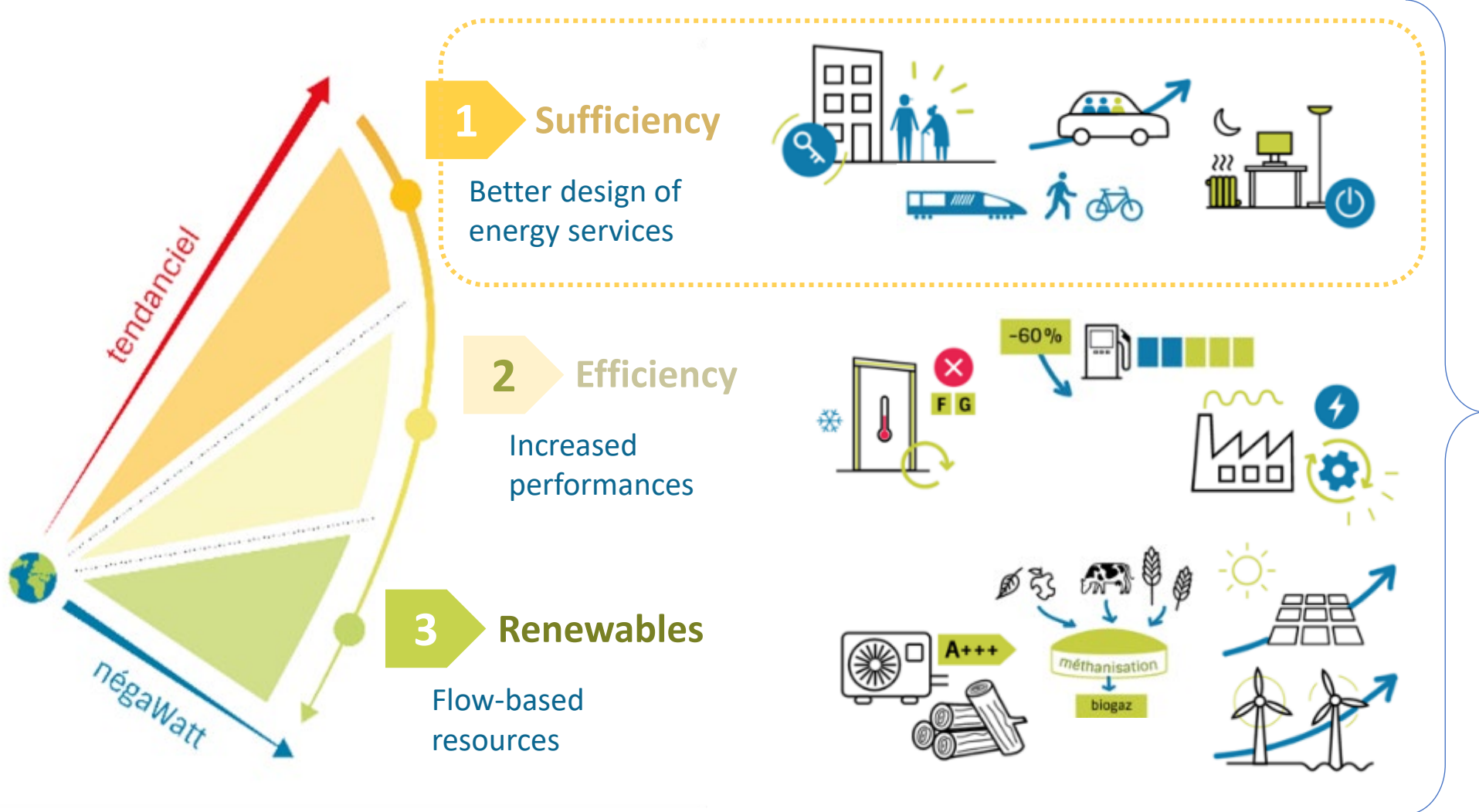
What is sufficiency a part of?

- It is a part of the transition
- It is part of the “beyond GDP” concepts
- Sufficiency is NOT green growth
- Sufficiency is also not degrowth

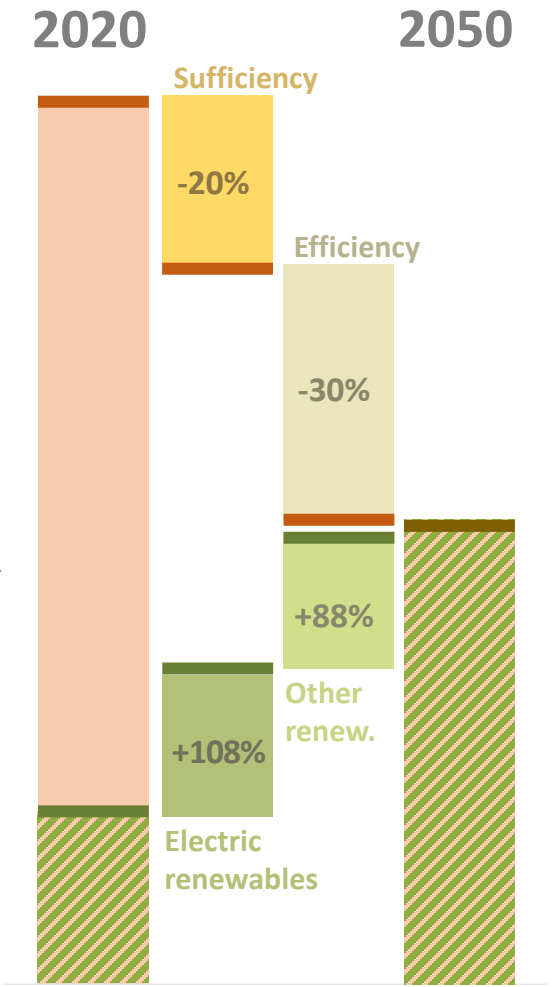


SnW2022 scenario for France – Global results

Applying the negaWatt approach to France over 2020-2050:



Final energy **consumption** and **renewables** share



SnW2022 scenario for France – Main assumptions

Impact of sufficiency



on final energy:

-10% by 2030

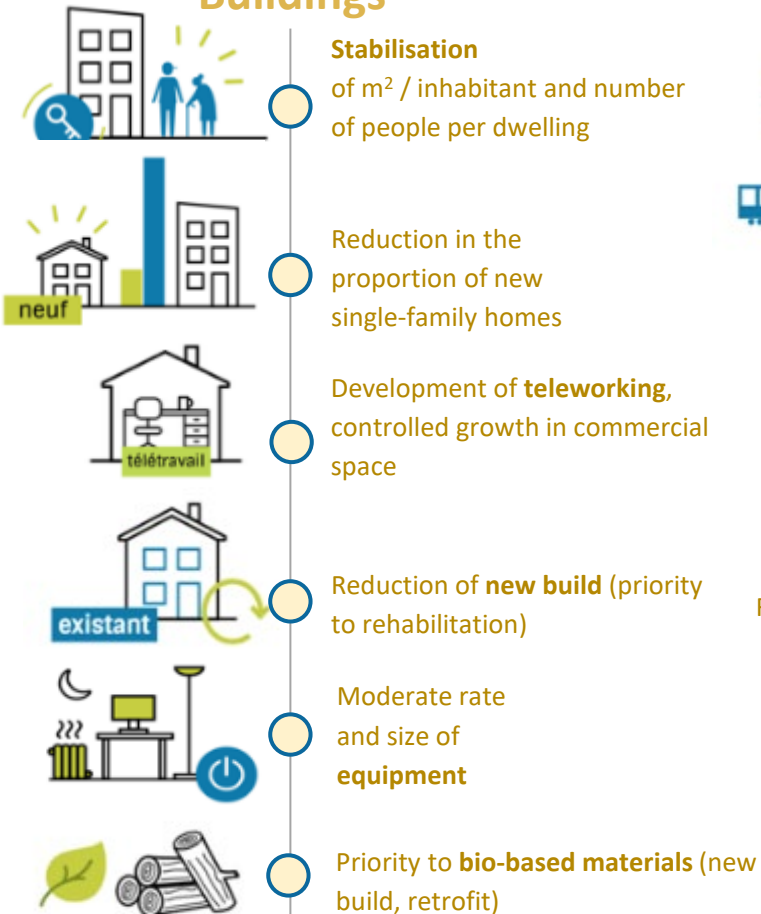
-20% by 2050



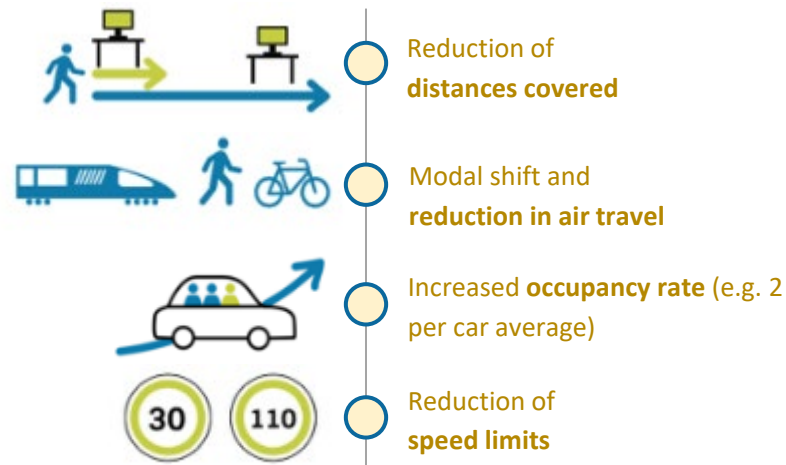
Medium- to long-term potential

through the structural and progressive implementation of sufficiency

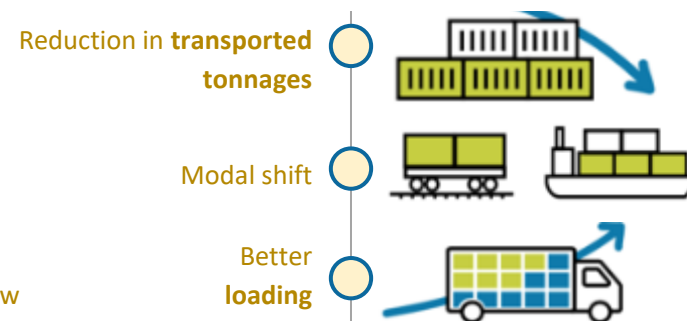
Buildings



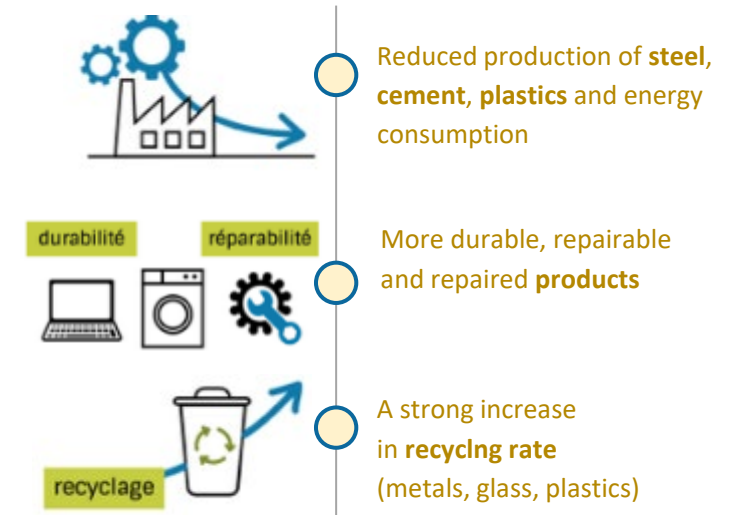
Mobility



Freight



Industry

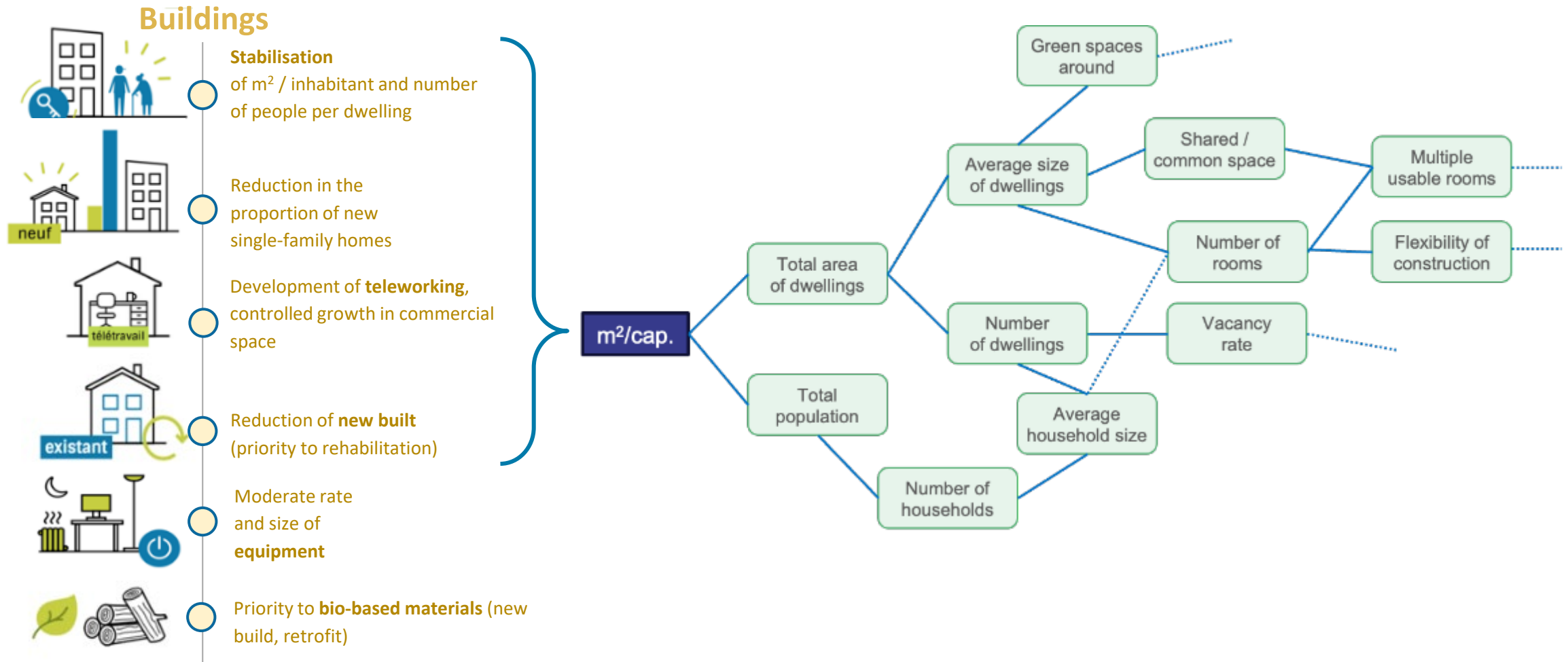


Agriculture



A link to numerous societal and social factors

► Working on sufficiency indicators and levers enables to identify the factors likely to have an impact, thus to target and adjust policies





EU 2040

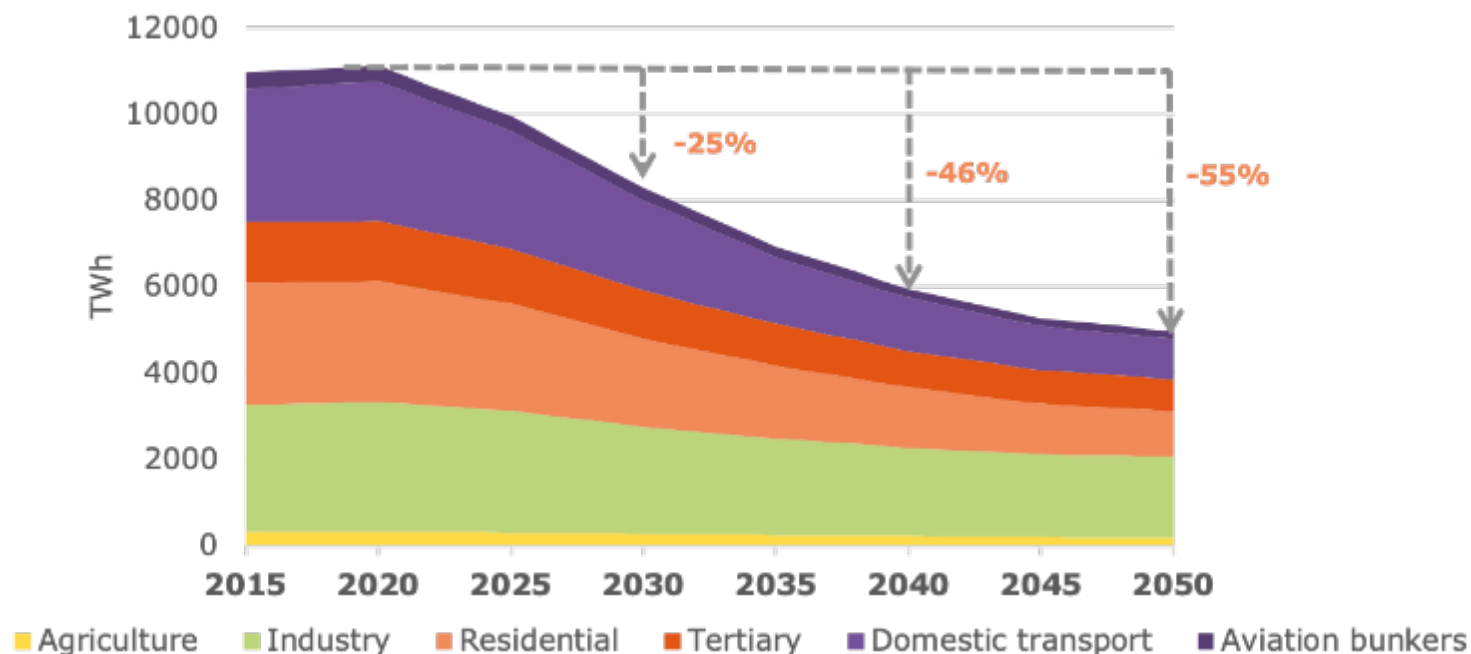
-90% net as minimum 2040 GHG target,
including -85% gross reductions

-45% reduction of final energy consumption

80% RES in final energy consumption

Need of reduction target(s) on raw materials use

EU27 Final Energy Consumption (FEC) reduction by sector (TWh)



- Carbon neutrality by 2045
- 100% renewables > energy security
- Reduces burden of transformation
(investments, volume of electrification, materials, need for biomass...)
- Confirms and reinforces LIFE findings



**Fundamental decarbonisation
through sufficiency by lifestyle changes**

EU Horizon Project 2021-2024

Fiona Breucker, Jacques Delors Institute; Dr. Elisabeth Dütschke, Fraunhofer ISI
Mélanie Bourgeois, Energy Cities; Yves Marignac, Association Négawatt
Gunnar Olsen, Inforse Europe; Wolfram Sparber, Eurac Research
Dr. Manuel Bickel, Wuppertal Institute

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Sufficiency needs policies and infrastructures

Policies, infrastructure,
regulatory conditions,
social norms

Individual level



choosing plant-based diets



Biking and using public transport



repairing and sharing goods



reconsidering consumption demands

- Policies and infrastructures often favour unsustainable consumption patterns
- A sufficient lifestyle under current conditions requires time and money
- Revised regulations and improved infrastructure has the potential to **make low-carbon behavior attractive and accessible to all**





Changing
infrastructures

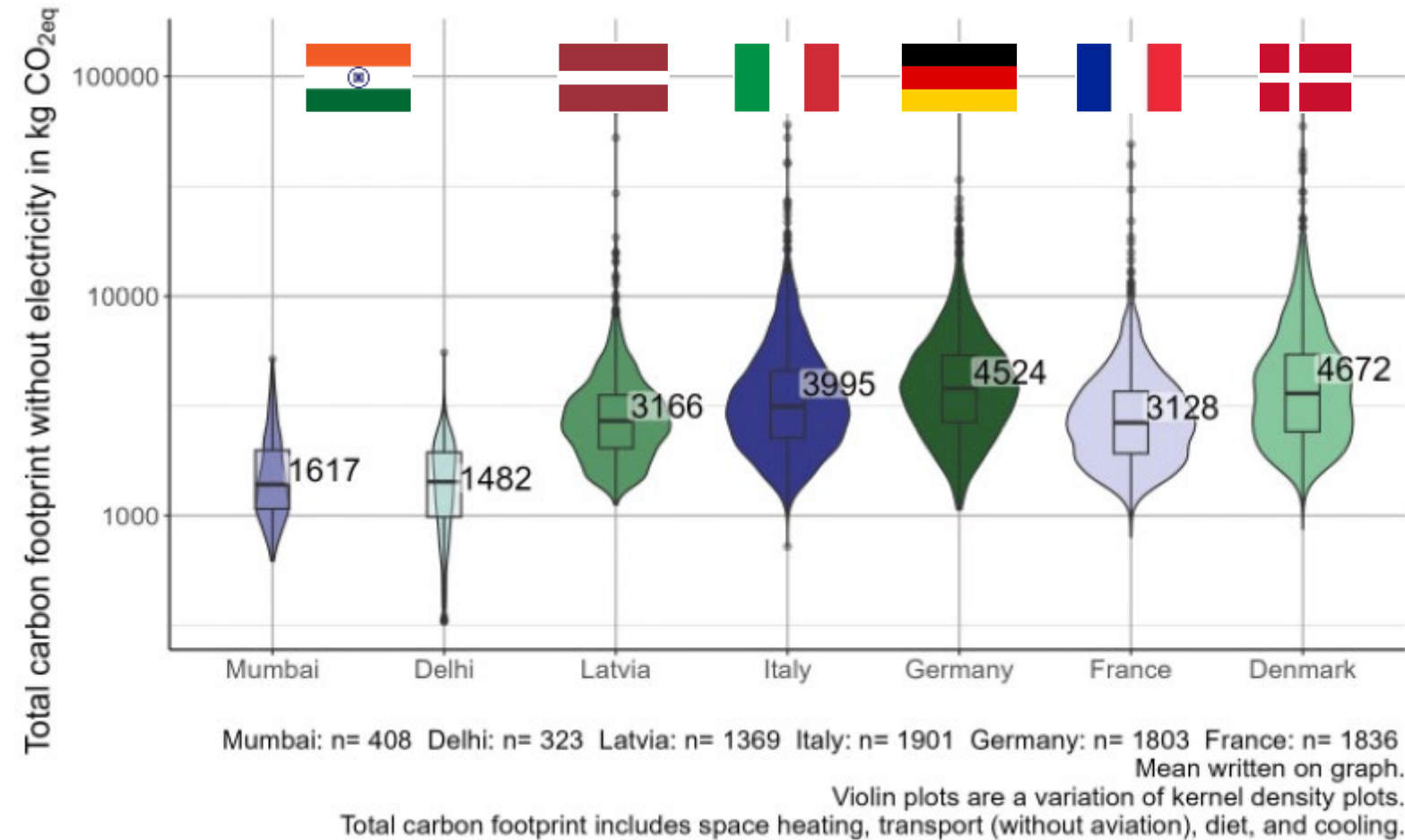


Source: @CarlosMorenoFr

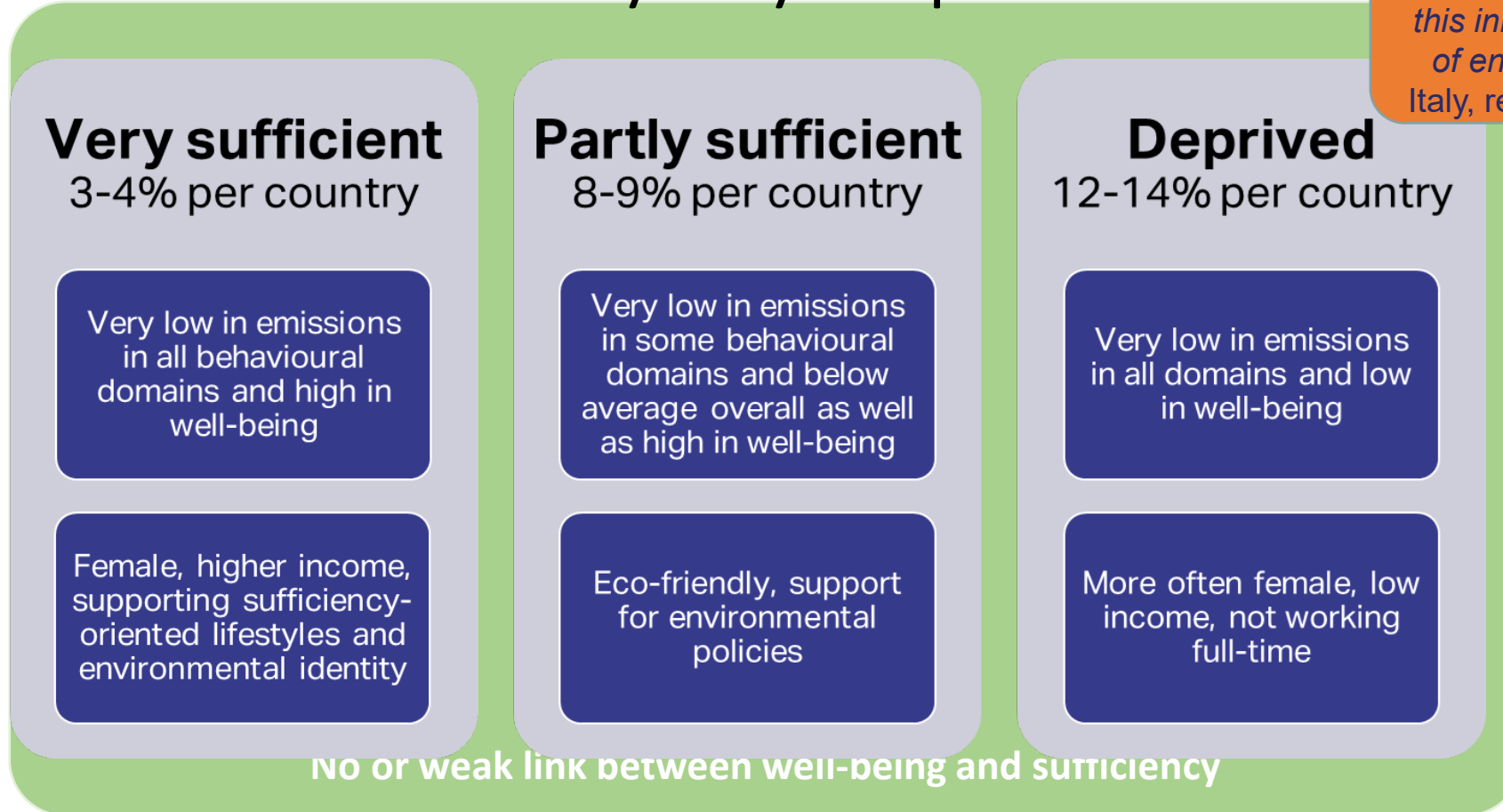


Source: Franceinfo

Identifying sufficiency: current lifestyles



European citizens and sufficiency - everyday experience



"I always say that participating to this initiative gives me a lot of energy". (Woman, 47, Italy, reduced consumption)

Living in a tiny house allows me to be less a slave to work." (Woman, 25, France, tiny house)

Well-being as consequence and motivator

Time availability

Income and affluence

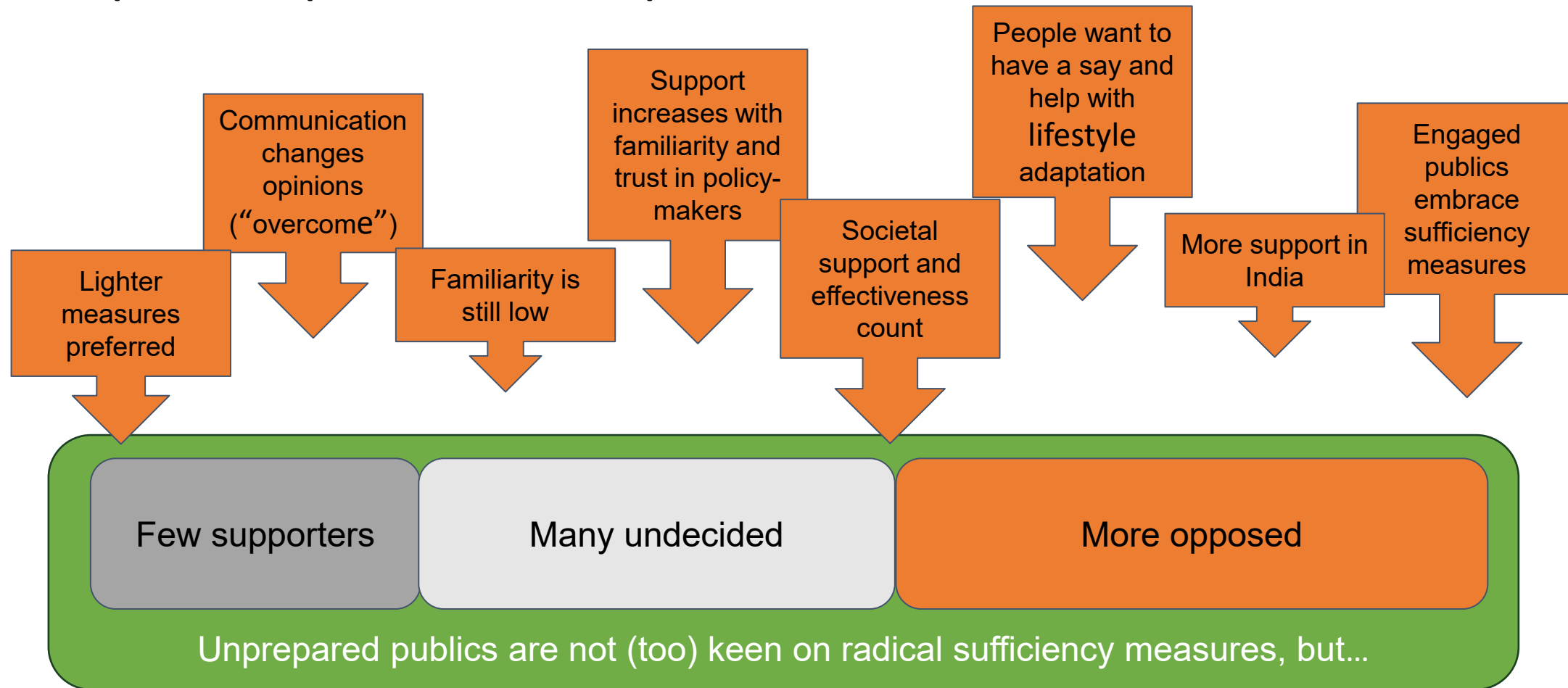
Sufficiency as a side-effect in joining initiatives and unknown as a concept

Perceived as a potential threat among low-income



European citizens and sufficiency

- perceptions on policies



Sufficiency as Climate Action and for Sustainable Lifestyles in Nordic & Baltic Countries and Belarus

