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Reducing Resource Demand in Climate-Neutral and Just European Cities: Sufficiency as a Policy Tool for Fair and Sustainable Urban Transitions

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Abbreviations and acronyms

Acronym	Description
IPCC	Intergovernmental Panel on Climate Change
UNEP	UN Environment Programme

Summary

This NetZeroCities deep-dive report explores how sufficiency can serve as a tool for fair and sustainable transitions in European cities working toward climate neutrality. As research increasingly shows that efficiency and technological innovations alone are insufficient to meet climate neutrality targets, sufficiency complements the strategies by addressing the scale and fair distribution of resource demand and consumption. Sufficiency is understood as meeting people's needs while staying within planetary boundaries. For cities, it can mean finding ways to reduce demand for energy, materials, land and water while ensuring a good life for all.

Based on a literature review and a synthesis of research and city practices, the report examines how sufficiency principles can be applied in local policymaking. It identifies housing, mobility and food as key sectors for demand reduction and presents examples of practical measures such as promoting smaller and shared living spaces, shifting road space from cars to pedestrians and cyclists, and introducing more plant-based meals in schools. Cross-cutting approaches, such as integrating sufficiency into municipal strategies, supporting citizen-led initiatives, and adopting frameworks like the doughnut economics model, are also effective ways to embed sufficiency in local governance.

Sufficiency is particularly timely for the EU Cities Mission and Mission Cities could look into sufficiency-oriented approaches in order to better tackle consumption-based emissions, strengthen social justice, and close the gap between current trajectories and climate goals. Embedding sufficiency as a guiding principle enables cities to connect climate action, wellbeing, and equity, which positions them at the forefront of Europe's just transition.

The findings of this report emphasise that while many municipalities already implement measures aligned with sufficiency, few have yet developed comprehensive strategies guided by sufficiency principles. Moving from isolated actions to integrated policy mixes is a central challenge. Successful implementation requires coordination across departments, alignment between policies, and a combination of both “pull” measures that enable sustainable practices and “push” measures that limit unsustainable ones. Experimentation, evaluation and adaptation to local conditions are crucial to understanding what works. Cities can also build knowledge by piloting and sharing results through networks such as the EU Cities Mission.

Citizen participation and cooperation with stakeholders are identified as essential elements of sufficiency-oriented policies. Because sufficiency measures often touch on areas seen as part of private life, broad public dialogue is needed to build legitimacy and acceptance. Deliberative citizen panels are highlighted in research as particularly suitable tools. The report also highlights the importance of ensuring that costs and benefits are distributed in a just manner, and that local governments need to collaborate with civil society, companies and social movements, and support bottom-up initiatives aligned with sufficiency. Communicating co-benefits (e.g., better health, lower living costs and improved quality of life) is another key factor in increasing political and public support.

A key takeaway of the report is that sufficiency offers cities a complement to efficiency and technological innovation. Adopting sufficiency principles can guide cities to design fair and effective policies that reduce emissions while improving social equity. The report recommends that municipalities begin by embedding sufficiency thinking into their governance and asking new questions about necessity, need satisfaction, and equitable resource use.

Keywords

Climate neutrality, sufficiency policy, consumption-based emissions, cities

1 Introduction

The concept of sufficiency has gained increasing attention in recent years as a way of decreasing emissions and environmental footprints while securing sustainable wellbeing for all within planetary boundaries. An increasing interest in reducing resource demand stems from a situation where research shows that technological changes and efficiency improvements alone are too slow to reach the Paris Agreement objectives (Vogel & Hickel, 2023).

Efficiency measures are insufficient in addressing the overall resource use and reducing emissions and environmental footprints on a global scale (Linnanen et al., 2020), and demand-reduction strategies, such as sufficiency, are therefore seen as necessary to reach sustainable and equitable societies within planetary boundaries (Vogel & Hickel, 2023).

In 2023, the Intergovernmental Panel on Climate Change (IPCC) identified sufficiency as one of the key strategies for adaptation and mitigation in cities (IPCC, 2023). The IPCC defines sufficiency as “**a set of measures and daily practices that avoid demand for energy, materials, land, and water while delivering human well-being for all within planetary boundaries**” (ibid, p. 29). In other words, sufficiency focuses on meeting people’s needs while staying within ecological limits.

Local governments have particular potential and a key role in designing and implementing sufficiency policies, as they are the closest administrative level to citizens and in most cases responsible for important public services and infrastructure at local level in areas where sufficiency policies can be implemented (Iten, Seidl & Pütz, 2024), such as mobility, urban planning and housing. In the future, sufficiency-oriented policies may become one of the tools for EU Mission Cities to complement their current decarbonisation strategies in order to reach their climate neutrality goals in a just and equitable manner.

This report provides an overview on how sufficiency principles can be applied in policy-making and what kind of opportunities and challenges are identified in applying them. This report focuses on reviewing existing research on sufficiency policy.

It provides a literature review and reflections on what the review results imply for municipalities who wish to apply sufficiency principles in local policy. It hopes to function as a first step towards broader consideration on whether sufficiency could be a useful lens to include in the EU Mission on Climate Neutral and Smart Cities, and the NetZeroCities platform.

The report starts with identifying key sectors where demand-reduction strategies and policies are needed. It then looks at definitions of sufficiency and how sufficiency policy instruments can be used to address challenges identified in the key sectors. The fifth chapter explores challenges and opportunities in the design and implementation of sufficiency policies, and the concluding chapter reflects on next steps for cities interested in applying sufficiency principles in local policy.

2 Why are sufficiency strategies needed and which sectors are prioritised?

Usually, local climate targets include the territorial emissions from the geographical territory of the municipality, but these climate neutrality goals (and the related calculation methods) exclude a large share of emissions caused by consumption, for instance by the building sector.¹ A study involving C40 cities shows that 85% of the consumption-based greenhouse gas emissions associated with goods and services consumed in cities are generated outside the city, and often not included in cities' climate neutrality targets and emission reduction calculations (C40 Cities, Arup, & University of Leeds, 2019.)

These estimations show that in order to really reduce their emissions, cities need to not only address their territorial emissions, but also consumption-based emissions. In order to do that, efficiency, but also demand reduction strategies are needed.

Indeed, the latest report on 1,5 degree lifestyles from the Hot or Cool Institute shows that to align with the 1,5 degree target by 2035, average lifestyle emissions need to be cut by 82% to 94% in high income countries, 64% to 81% in upper-middle income countries, and 29% to 67% in lower-middle income countries. The report highlights that without systemic changes, these levels of reductions from lifestyles will not be reached. (Hot or Cool Institute, 2025)

While national and local contexts largely influence which areas have the biggest emission reduction potential that could be reached by decreasing demand, modelling such as the one published by the Hot or Cool Institute can give some indications on areas where cities' efforts for demand reduction might be most useful.

According to the report, the biggest impact potential can be found in food and nutrition, transport and housing (Hot or Cool Institute, 2025). Also the UK Committee on Climate Change states that there is a clear case for demand-side policies as part of decarbonisation strategies, and they also highlight the fields of home energy use, shifting to healthier and more sustainable diets and reducing travel by air and car (Committee of Climate Change, 2023).

Based on above-mentioned calculations on the need for demand reduction strategies, and the areas where local governments often have mandate and power to act, **this report focuses on the sectors of housing, mobility and food**. Whereas other areas, such as consumption of goods, are also relevant for cities, and solutions such as promoting sharing of goods are important, they are outside the scope of this report. The section below looks into the current situation in those sectors and provides further information on why efficiency improvements in those sectors have not been sufficient to reach emission reduction targets.

In housing, the overall size of buildings and their technical equipment have been increasing over the last decades, while increased energy efficiency has not been sufficient to counteract the need for more energy for heating and cooling, ventilation and lighting caused by these developments. This means that energy efficiency measures have not led to a significant reduction of energy use in buildings. (Koch et al., 2024). Increasing housing sizes has also contributed to land-take and biodiversity loss caused by that, as well as to increased environmental footprints from construction materials (Lorek & Spangenberg, 2019)

At the same time, many European cities suffer from housing shortage and lack of affordable housing, while also struggling with reducing the environmental and climate impacts of new construction. For instance, a study in the UK showed that the UK's previous government's target to build 300 000 new

¹ Several EU Mission Cities include consumption-based emissions in the Climate City Contracts. Several methodologies have been developed to help cities calculate consumption-based emissions, including PAS 2070 consumption-based (CB) methodology of British Standards Institution, ICLEI USA protocol, and Stockholm Environment Institute (SEI) guidelines. (British Standards Institution, 2014; Kuivalainen, 2020.)

apartments annually in England to meet the affordable housing crisis would consume the entire 1.5°C carbon budget by 2050 (zu Ermgassen et al., 2022).

In high-income nations, transport emissions are substantial, largely due to a reliance on fossil-fuel-based vehicles, with hybrid and electric cars forming a small proportion of the market. Air travel also significantly contributes to transport footprints, though its impact is less pronounced in countries with extensive rail networks. In upper-middle-income countries, cars are the primary mode of transport, followed by public transportation. Lower-middle-income countries show uneven demand, with private car use being lower than in other income groups. Motorcycles and buses constitute the largest share of transport, while walking and cycling also play a significant role in those countries. (Hot or Cool Institute, 2025)

In mobility, a sufficiency benchmark calculating a “sweet spot” or a consumption space that on one hand ensures wellbeing, but on the other hand avoids material excess states that for mobility, a sufficiency benchmark could be approximately 4 200 - 8 000 passenger kilometers per person per year, compared to the current 25 000 passenger kilometers per capita in car-dependent countries (Hot or Cool Institute, 2025).

Related to food and nutrition, food systems are the largest contributor to the transgressing of five planetary boundaries, and account for approximately 30% of global greenhouse gas emissions (Rockström et al., 2025). These emissions could be halved by transforming the food system. In line with sufficiency thinking, the latest EAT-Lancet report notes that less than 1% of the global population are in a situation where their basic needs are met, but within planetary boundaries. At the same time, more than 70% of the food-related environmental impacts are driven by the wealthiest 30% people, highlighting the need for food justice. (Rockström et al., 2025)

Hot or Cool Institute’s calculations show that dietary shifts adopting e.g., plant-based or vegetarian can cut emissions between 1000 and 2500 kg CO₂ per capita, depending on the country. Countries with large current meat consumption (such as France) show the largest potential in reducing emissions by changing food consumption and production. (Hot or Cool Institute, 2025)

After looking at overall instruments for sufficiency policy, the following chapter will explore definitions of sufficiency and how sufficiency policy responds to the above outlined challenges.

3 Definitions and approaches to sufficiency

Sufficiency focuses on meeting people’s needs while staying within ecological limits. It is about changing direction and finding ways to satisfy needs within planetary boundaries, focusing on wellbeing and preconditions for good life. For local communities, living well within the planetary boundaries can mean healthier diets, stronger communities and improved well-being (Hot or Cool Institute, 2025). Sufficiency strategies ask cities and citizens to reflect on questions such as:

- How much is enough? (Iten, Seidl, Putz, 2024, p. 1709)
- Which of our individual emissions are really needed, and which of them could be avoided?” (Linnanen et al., 2020, p. 23)

The UN Environment Programme (UNEP) connects sufficiency with the idea of a just transition. Rather than only focusing on technical measures, it emphasises the normative and transformative goals of sufficiency. UNEP states that **“sufficiency refers to the need to increase resource use in low-development contexts to enable dignified living, while reducing consumption levels in those parts of the population who live well above the capacity of the planet”** (UNEP, 2024, p. vii).

Since planetary boundaries cannot be exceeded, sufficiency underscores the need for fair distribution of resources to ensure everyone's basic needs are met (Xue & Eräranta, 2025).²

As cities often carry responsibilities for both the environment and social welfare, the concept of sufficiency could be a way of integrating local economic, environmental equality efforts, and finding co-benefits and synergies between them. While the concept brings together these different fields, re-focusing on sufficiency also has the potential to unite sectors and bring more municipal departments but also new stakeholders to create visions and measures for a future where wellbeing is secured within planetary boundaries.

It is relevant for local governments to note that sufficiency approaches have also started to emerge at the EU and national level. Applying the IPCC definition of sufficiency, the European Commission has begun to integrate sufficiency into its policy agenda as a response to the ongoing polycrisis. Through its Horizon Europe programme, it supports research and innovation projects on sufficiency-related solutions (see e.g., [FULFILL](#)) and has recently launched a call for projects focusing on sufficiency measures in the built environment. (EC, 2025).

In France, “*la sobriété énergétique*” (energy sufficiency) has already become a core pillar of national energy policy—alongside energy efficiency, nuclear power, and renewable energy (Bourliauget, 2025). Integrating sufficiency into urban strategies enables cities to balance climate goals with social equity and long-term resilience—making them leaders in Europe's transition to climate neutrality.

Sufficiency is further emerging in the agenda of EU city networks. The Energy Cities network, which represents several hundred European member cities, calls sufficiency the ‘missing pillar’ of a resource-wise Europe. It frames sufficiency as a “**pragmatic response to the scarcity and poor distribution of resources that Europe is already facing and will have to confront even more in the coming years**” (Guyon, 2023, p.11). Ahead of the 2024 European Parliament elections, the network urged the next Parliament and Commission to embed sufficiency principles in policy to strengthen social justice, planetary responsibility and resilience (Guyon, 2023).

EU Mission Cities, it is timely to explore how sufficiency approaches can accelerate local climate neutrality goals while ensuring social inclusion and resource balance. Practical sufficiency policy instruments are explored in the next chapter.

4 Applying sufficiency principles in policy

This chapter starts with an overview on types of sufficiency policies and instruments identified in research. It will then explore policies suggested and implemented in housing, mobility and food, as well as how cities address sufficiency at a cross-cutting strategy level. This chapter focuses on reviewing suggested and implemented policies, whereas chapter five will look at the challenges, opportunities and enabling conditions for their local implementation.

4.1 Overview of sufficiency policy instruments

Sufficiency policies can be defined as **individual or sets of policies that create conditions for sufficiency in consumption and/or production** (Iten, Seidl & Pütz, 2024). They are policies for “less, lighter, slower, closer, and more personal modes of consumption and production to comply with planetary boundaries while satisfying fundamental human needs” (Iten, Seidl & Pütz, 2024).

The Hot or Cool institute's latest report on 1.5 degrees lifestyles follows the Avoid-Shift-Improve framework used by the IPCC, and states that sufficiency approaches focus on the “avoid” and “shift” **strategies that go beyond improving technologies and try to redefine and question what is**

² The sufficiency policy perspective applied in this report considers sufficiency as a sustainability strategy for affluent societies, while noting that for societies where basic human needs are not being met, sufficiency can instead imply resource-use increase (see e.g. Iten, Seidl & Pütz, 2024). This is true to the so-called Global North-Global South division, but there are also major variations between EU Member States and between EU Mission Cities, where some cities may have lower sufficiency potential and require efficiency measures first (Lorek et al., 2019).

necessary and desirable, while recognising that many human needs can be met in different ways, and that social expectations and norms of desirable lifestyles can change. (Hot or Cool Institute, 2025)

In Hot or Cool Institute's model, sufficiency strategies need to:

- Redefine aspirations and build collective new visions (e.g., in citizen assemblies, or by contributing to reaching social tipping points through regulation of advertising and marketing)
- Edit in alternative and more sustainable ways to satisfy needs (e.g., low carbon and nature positive options)
- Edit out harmful and carbon intensive options (e.g., phasing out incentives for extensive consumerism such as frequent flyer rewards)
- Focus on equitable access, fair distribution and needs-based prioritisation (e.g., wealth caps or progressive taxes) (Hot or Cool Institute, 2025).

Sufficiency policies have also been categorised into pull and push measures. Pull measures promote sufficiency (for instance by providing subsidies for public transportation), whereas push measures phase out unsustainable consumption or production (for instance restricting or making private car use less attractive) (Iten, Seidl & Pütz, 2024).

Sufficiency policies apply various policy instruments, such as:

- Regulatory instruments (e.g., reducing the amount of parking spaces, banning private cars on certain days, restricting the establishment of new shopping malls, or limiting advertising of certain goods or in public spaces),
- Economic instruments (e.g., introducing flight taxes, road tolls and congestion charges, or removing VAT from second hand products),
- Nudging (e.g., making low carbon choices more accessible or providing individualised sufficiency advice),
- Cooperation (e.g., community-based wind power initiatives, increasing the shared use of living space through regulation, or supporting existing and establishing new public institutions that promote practices of sharing, renting, reusing and social innovations), and
- Information (e.g., communication to specific target groups, marking high-carbon products similar to current cigarette packages, or better integration of climate into official dietary recommendations) (Linnanen et al., 2020).

However, reviewed sufficiency policy research generally considers the regulatory and economic instruments to be more effective than nudging and information that can function as supportive tools (Linnanen et al., 2020). However, the cases reviewed by Iten, Seidl & Pütz (2024) show that regulatory policies towards sufficiency are still rare, and softer measures such as information campaigns are still more common. Some of the research reviewed by Iten, Seidl & Pütz (2024) also points to the challenge where many measures are additive and end up diversifying consumption options instead of reducing overall consumption.

4.2 Housing

To respond to the dual crisis of environmental degradation and housing crisis, sufficiency measures are seen as a way to contribute to affordable housing for all within planetary boundaries. For instance, they can address the situation in many cities where space is being allocated to investment apartments and second homes that remain unused or underused, while the same cities often struggle with lack of affordable housing (Koch et al., 2024).

The current unequal distribution of living space indeed means that 17% of the people in the European Union live in overcrowded housing despite the fact that the living space in capita overall is increasing (Lage, 2025). In comparison to traditional housing policy, adapting a sufficiency framework to housing means not only agreeing on what should be the lowest acceptable housing standard, but also agreeing on an upper limit for excess housing (Gough et al., 2023). This means aiming for more

effective and fair use of the existing housing and building stock, while reducing the need for new construction (and thereby reducing the material footprint of housing).

4.2.1 Approaches to housing sufficiency

Hot or Cool Institute's (2025) modelling points at the highest impact potential in the housing sector coming from smaller living spaces, renewable-based heating and cooling, and stronger energy efficiency measures (retrofitting). In comparison, sufficiency measures on lower temperatures in homes and measures to increase the use of recycled and low-carbon building materials are estimated to have considerably lower impacts (e.g., in Finland, lower indoor temperatures are calculated to have potential to save 20 kg CO₂e/capita/year and use of recycled and low-carbon building materials 50 kg/CO₂/capita/year - compared to 310 kg CO₂e/capita/year from smaller living spaces and 440 kgCO₂e/capita/year from retrofitting). (Hot or Cool Institute, 2025)

Sufficiency policies in housing primarily refer to limiting the demand for square meters used for housing and aiming at more equal distribution of housing space in order to be able to stay within the planetary boundaries, while ensuring sufficient housing for all. While sufficiency measures often target the demand for space, they are often combined with efficiency measures such as energy retrofits and renewable-based heating.

4.2.2 Examples of sufficiency policy measures in housing

Various concrete housing sufficiency measures have been identified in literature. The table below is a non-comprehensive categorisation of measures identified in the reviewed research literature and roughly estimates which measures could be more relevant to local level and which measures might often require national level intervention. It should be noted that the division of power between local, regional and national level varies between countries and there is a large variation on housing and planning systems within Europe. After the table, a couple of non-EU case examples are provided for inspiration.

Objective	Examples of suggested local measures	Examples of suggested national measures
Enabling and promoting shared space and co-housing solutions	<p>Municipal advisory to citizens interested in co-housing and bringing together interested citizens</p> <p>Land lease regulations favouring or architecture competition requiring sufficiency solutions</p> <p>Enable use of suitable municipally owned spaces for resident groups</p>	National planning regulations enabling flexible solutions
Enabling and promoting housing mobility and downsizing based on (changing) needs	<p>Practical and financial support to (elderly) people looking to downsize within their local community (e.g., OptiWohn project in Germany)</p> <p>Investing in social housing and alternative housing forms that enable more flexibility and easier re-allocation when</p>	Removal of real estate transfer tax when moving to smaller apartment

	needs change	
Promotion of conversion of existing building stock to housing	<p>Provide municipal advisory specifically on converting buildings and the related regulations and support opportunities</p> <p>Monitor vacancies in the building stock to identify buildings that could be converted to housing and set requirements for building owners to report vacancies</p>	Include demolition permits in planning regulation in addition to building permits to decreased un-necessary demolition of existing buildings
Decreasing the per capita housing consumption	<p>Council tax surcharge on long-term empty and vacant homes (e.g. Wales)</p> <p>Planning or lease conditions only allowing certain uses (e.g. new builds only for owner-occupiers in Amsterdam)</p> <p>License-requirement on second homes or holiday rental (e.g., Barcelona)</p>	<p>Progressive property taxes based on per-capita floor area</p> <p>Regulating maximum per capita housing consumption</p> <p>Regulating minimum occupancy rate or maximum un-occupancy duration</p> <p>Second home tax</p> <p>Funding tools for converting bigger residences into smaller ones</p>

Table 1: Examples of suggested sufficiency policies in housing (Source: Iden, Seidl & Pütz, 2024; Breucker and Defard, 2023; Xue & Eräranta, 2025; Gough et al., 202; Lorek & Spangenberg, 2019)

4.2.3 Local case example

Housing Solutions for Sufficiency: How two U.S. cities are promoting conversion of existing buildings into housing

Citywide Adaptive Reuse Ordinance in Los Angeles

Approved in December 2024, the current Citywide Adaptive Reuse Ordinance in Los Angeles, US, builds upon the original 1999 ordinance, which aimed to revitalise the city's downtown by converting commercial buildings into residential units. The updated initiative seeks to address the city's affordable housing crisis and facilitate the conversion of vacant office buildings into housing.

Previously, only buildings located in the Downtown L.A. area and constructed before 1974 would be eligible for conversion, but the new law broadens eligibility for buildings and structures at least 15 years old (the eligibility is not tied to a specific year anymore) or buildings 5 to 15 years old that receive the approval from specific Zoning Administrators through a Conditional Use Permit. This permit instrument allows for conversion of buildings to uses that contrast with the ones from the zoning they are inserted - i.e. from commercial/parking to residential. It also implies flexibilization of construction requirements for residential units such as minimum size or parking requirements per

unit. Additionally, the initiative's reach now extends across the entire city. (Los Angeles Conservancy, n.d.)

The main benefits of the ordinance from a sufficiency perspective include the potential for converting buildings outside the city center and removing minimum unit size requirements offering greater flexibility and a wider variety of housing options. Additionally, carbon emissions are minimized through the reuse of existing structures. (Los Angeles City Planning, 2024)

Legislation for construction and conversion of existing buildings into co-living units in Seattle

In 2024, Seattle approved a new legislation permitting the construction and conversion of existing buildings into co-living units. The removal of some design standards for common areas and parking units (in buildings located at a certain distance from metros) were also included to provide more flexibility.

Incorporation of shared spaces in co-living arrangements, combined with the elimination of car parking, helps reduce the 'per-capita footprint' of the living space, while the more flexible design regulations facilitate more adaptable floorplans to meet diverse requirements. The legislation was created to address the city's housing shortage by offering alternative and affordable living options in all areas where zoning regulations allow for multifamily housing. (Office of the Mayor, City of Seattle, 2024; Seattle City Council, 2024)

4.3 Mobility

In comparison to the housing sufficiency measures presented, the mobility sufficiency measures identified in research might seem more familiar to many cities.

The benefit of adapting the sufficiency lens in local mobility planning could be that it so clearly puts re-distribution of mobility resources in the centre, which often implies shifting from prioritising private car owners to balancing their needs with needs of other groups. In many cities, this means reducing and limiting private car use and decreasing the space reserved for private vehicles, and investing in shared mobility and non-motorised modes of transportation. Looking at mobility policy through the sufficiency lens also leads to highlighting co-benefits of measures, for instance how green spaces can be preserved if less new land is needed for road infrastructure.

4.3.1 Approaches to mobility sufficiency

Based on quantifications of the most impactful measures to reach the goal, the Hot or Cool Institutes report emphasises the following as high impact measures: switching to public or active commuting, reshaping urban planning to enable living closer to work and study, and switching to alternative fuels - all with support from policies and infrastructures. (Hot or Cool Institute, 2025)

Taking a re-distributive lens to transport planning would emphasise reallocating road space that is currently used by private cars to buses, pedestrians and cyclists, or setting up goals for longest distances to public transport to satisfy mobility needs (Xue & Eräranta, 2025). A sufficiency lens would further imply an overall approach of rethinking how basic mobility needs can be met with fewer resources, for instance by replacing private cars with shared mobility and public transport (Xue & Eräranta, 2025).

4.3.2 Examples of sufficiency policy measures in mobility

A comprehensive mapping of sufficiency policies by Iten, Seidl & Pütz (2024) notes that currently, most existing local policies that are aligned with sufficiency principles are found in the mobility sector. As noted in previous chapters, municipal level mandates vary between countries, but the table below can provide some examples of policy measures for different levels. After the examples, a case example from the City of Ghent is presented.

Objective	Examples of suggested local measures	Examples of suggested national measures
Limiting urban space reserved for cars and re-allocating space to pedestrians and cyclist and other uses	<p>Reducing parking spots</p> <p>Decreasing the number of new parking spots required per new apartments in new developments</p> <p>Creating car-free areas and low emission zone</p> <p>Congestion charges or road tolls</p> <p>Lowering speed limits</p> <p>Zero land-take goal for roads</p> <p>Communication of co-benefits of limited private car use and increased active mobility</p>	<p>Revising legislation, for instance to ensure that spatial planning regulation enables establishment of low emission zones and congestion charges</p>
Improved access to public transport	<p>Investment in public transport</p> <p>Setting up goals for longest acceptable distances to public transport</p> <p>Free of charge public transport (to all or to certain groups in need) or free school transport</p>	<p>National level investments</p> <p>Supporting regulatory frameworks</p>
Support to active walking and cycling	<p>Prioritise walking and biking in infrastructure and urban planning, and improve public space for walking and cycling</p> <p>Good winter-maintenance to enable walking and cycling (prioritising walking and cycling in snow removal)</p> <p>Campaigns to promote bicycle commuting</p> <p>Ensuring safe and secure bicycle storages, for instance in connection to mobility hubs</p> <p>Enable and promote environmentally-friendly local cycling tourism</p> <p>Setting up requirements for good bicycle storage and/or</p>	<p>Subsidies to individuals for electric bicycles</p> <p>Tax allowances that support bike commute</p> <p>National subsidies to municipalities investing in bicycle infrastructure</p>

	provision of mobility services in new developments	
Increased shared mobility	Promoting car sharing (e.g., by providing municipal car fleet to be shared by citizens when not in use) Provide platform for private car-sharing City-wide bike sharing schemes, including cargo bikes	
Urban planning that decreases individual everyday transport needs	Adapting 15-minutes city principles in urban planning Support local and decentralised services	Setting national goals for accessibility of e.g., services and green spaces

Table 2: Examples of suggested sufficiency policies in mobility (Source: Iden, Seidl & Pütz, 2024; Breucker and Defard, 2023; Xue & Eräranta, 2025)

4.3.3 Local case example

Ghent Circulation Plan as mobility solution for sufficiency
<p>In 2017 the city of Ghent implemented an ambitious plan in the city center: an existing area with restricted traffic was expanded by 128%, substantially reducing the space reserved for private car traffic and freeing up space for other uses.</p> <p>This initiative stemmed from a city administration assessment revealing that approximately 40% of vehicles crossing the city center were merely passing through, not destined for any location within it. (Chartered Institution of Highways & Transportation, 2018)</p> <p>To tackle this issue, the city was divided in six sections surrounding the restricted traffic area. These sections are connected through a ring road allowing the distribution of traffic in the outer part of the city. The strategy prioritizes space for pedestrians, cyclists and frees up space for traffic that really needs to pass through the city: buses, trams, emergency services, waste collection services, taxis and healthcare providers with permits. Additionally, five important commercial streets were converted to strictly pedestrian use from 11am to 6pm. (City of Ghent, 2017)</p>

4.4 Food

Research by Breucker and Defard (2023) on Germany and Danmark shows that national solutions for more plant-based diets can be more difficult to implement compared to local initiatives, which emphasises the central role that local governments can play in promoting more healthy and sustainable diets.

4.4.1 Approaches to food sufficiency

Sufficiency policy suggestions in research focus on reducing food-waste and on shifting diets towards more regional, seasonal, plant-based and organic food (see Iten, Seidl & Pütz (2024). At local level,

this in practice often means introducing principles and implementing a shift to more vegetarian and climate-friendly meals in municipal institutions, such as public canteens and schools. A research overview by Merk et al. (2024) shows that the calculated GHG emission reductions from meat-free days in schools range from 31% to 74%.

At the national level, there are examples such as abolishing VAT on healthy and climate-friendly foods. VAT reduction can also make healthy and environmentally friendly food available for all groups. (Breucker & Defard, 2023). Information campaigns are also a common measure. Examples include, for instance information campaigns on food waste reduction or on the value and availability of locally produced food. (Iten, Seidl & Pütz, 2024).

Breucker & Defard (2023) show that education and communication of science based on independent expertise has been identified as a key driver for local sufficiency policies related to food, as authorities are afraid of introducing food options that lack essential vitamins, fats or proteins.

Local governments can also promote local food production, for instance by supporting community agriculture and by ensuring availability of land for food production. Urban food production can be supported in various ways, e.g., by preserving and allocating suitable areas for urban gardening within the urban structure.

4.4.2 Examples of sufficiency policies in food

Objective	Examples of suggested local measures	Examples of suggested national measures
Increased consumption of climate-friendly food	<p>Only providing vegetarian lunches to children in day-care and primary schools</p> <p>Including environmental considerations of school meals in city monitoring reports</p> <p>Dietary guidelines for public canteens based on independent expertise</p>	Abolished or reduced VAT on healthy and climate-friendly food
Increased local food production	<p>Local strategies for edible plants in public municipal green spaces</p> <p>Supporting local urban farming (for example providing soil for growing vegetables to interested citizens) and include local urban farming in local spatial plans</p> <p>Preserving and strengthening the role of urban allotment gardens for local food production</p>	Ensuring that national planning regulations allow for local planning solutions in favour of urban farming

	Local regulations on shares of private gardens to be used for food production	
Increased knowledge on benefits of climate-friendly nutrition and sustainable and/or local food production	<p>School-based teaching garden to teach students about food production</p> <p>Local independent consulting boards for nutrition recommendations</p> <p>Provide information on local food production and processing to increase the interest in and consumption of regional products, e.g. with a 'From the region for the region' campaign</p> <p>Information campaigns for food waste reduction</p>	Climate impacts included in science-based national dietary recommendations

Table 3: Examples of suggested sufficiency policies in nutrition (Source: Iden, Seidl & Pütz, 2024; Breucker and Defard, 2023)

4.4.3 Local case example

The City of Almere's regulations on food production in Oosterwold
<p>The City of Almere has established an independent governance scheme for its Oosterwold district, promoting self-governance, but setting requirements on food production. In the district, each housing plot must have a dedicated area to food production. (Docker-Loeb, 2024)</p> <p>In practice, the food production requirements differ based on four categories of plots. Owners of plots assigned as "agricultural plots" need to dedicate up to 88% of the land area to agriculture when the plot is bought (reduced to 80% later). Owners of "business plots" and "standard" plots are expected to dedicate 50% to farming, whereas for "landscape plots", no agricultural use is required. Development control of the land is conducted by a system of 'parcel passports' that is a type of contract which states the rules of the specific plot bought (Münderlein & Jansma, 2025).</p> <p>The city of Almere has become a role model in the Netherlands and worldwide for its approach to food production. In addition to the planning regulations, the city has been focusing on improving urban agriculture skills in the population and promoting food related businesses in the city. In 2017, a knowledge institute focused on food-related challenges was also established in Almere. van Houten, van Engelshoven and van Ark (2023) note that these types of "agro-cities" offer a model for mitigating food-chain emissions associated with transportation. Additionally, food waste within these systems can be extensively repurposed for agricultural applications.</p>

4.5 Cross-cutting local strategies

An overview of existing research shows that few cities have yet adapted consistent and overall sufficiency frameworks at strategic levels. Local approaches currently focus on individual policies instead of strategic pathways towards societal transformations, but the mapping by Iten, Seidl & Pütz (2024) provide some examples of cross-cutting strategies, such as:

- Include sufficiency goals in local sustainability strategies, e.g., by adding goals on reducing consumption volumes and goals for reducing consumption-based emissions
- Including sufficiency as a guiding principle in local energy strategy
- Establishing new welfare indicators to monitor local developments
- Supporting local sufficiency-oriented initiatives by providing advisory and e.g., communications support
- Establishing pilot projects on voluntary personal carbon budgets
- Integrating sufficiency in public procurement, e.g., by setting requirements for repairability and durability, by prioritising co-operatives, and only procuring when it is really necessary and something needs to be replaced

It is important to note, that many cities might be working along the principles of sufficiency and promoting reduced resource demand while promoting wellbeing for all, even if the concept of sufficiency is not used. One example of an overarching approach where the principles may align with the sufficiency principles is the doughnut economic model developed by Kate Raworth that focuses on how to ensure that basic human needs for all are met within planetary boundaries. City examples and practical tools for operationalising the doughnut economics model are shared online and implementation support to cities is provided by the non-profit organisation [Doughnut Economics Action Lab](#).

4.5.1 Cross-cutting strategy examples

Below, we will shortly describe the information available on two European cities (Zürich and Grenoble) that explicitly state that they have adapted the concept of sufficiency as a guiding strategic principle.

The City of Zürich net zero strategy explicitly integrates energy efficiency with sufficiency, and concrete sufficiency measures are designed in regular stakeholder workshops as well as in inter-departmental cooperation (Guyon, 2023). The city renewed its municipal energy policy in 2016 to include the priorities of sufficiency (reducing the demand for energy-relevant goods and services), efficiency (in buildings, processes and devices, and related to mobility), and energy sources (Rovira & Borsi, 2022). The priorities were selected to support the sufficiency-aligned goal of becoming a “2000-Watt Society” which referred to each resident having two kilowatt hours (kWh) per hour at their disposal for all their energy requirements (including e.g., housing, mobility and food). (Rovira & Borsi, 2022)

An Energy Master Plan was developed in order to quantify the objectives of the 2000-Watt Society goal, and to design concrete measures for its implementation. The Energy Master plan includes targets and implementation measures in settlement development, energy supply, buildings, mobility and consumption. Example goals include work-related travels following the principles of sufficiency, efficiency and consistency, and conducting work-related travel by public transport, bicycle on foot. When air travel is unavoidable, the CO₂ emissions are offset and all airline travel needs to be reported.

It has been key to the Master Plan implementation, and the inclusion of sufficiency approaches to the city’s overall work, that the plan is annually harmonised with the different municipal departments’ other strategies and objectives, and adjustments and corrections are made to align plans. (Rovira & Borsi, 2022).

In Grenoble, the concept of sufficiency was first introduced in local energy policy in 2015. Sufficiency then entered into its overall vision in a process for “Grenoble 2040” that started in 2021 and mapped a

vision for a desirable and sufficient city. The process applied the Doughnut economics model. (EU Covenant of Mayors, 2024; City of Grenoble, 2024)

The design and implementation process of the doughnut economics model to integrate sufficiency and the doughnut economy principles in local policy and governance included:

- Developing a comprehensive model for a holistic approach to environmental and social responsibility,
- Integrating the doughnut model as an analysis framework into local decision making and prioritisation processes,
- Developing a method for rating suggested projects based on the model (City of Grenoble, 2024)

Cooperation with stakeholders was at the core of the process. For instance, a randomly selected group of citizens was invited to “ecological re-direction workshops” that resulted in a roadmap on what to “abandon, retain and modify” in the fields of transportation, green spaces and consumption. (EU Covenant of Mayors, 2024)

In Grenoble, the doughnut model has become a shared and cross-cutting framework for linking social and environmental topics and is continuously used to pre-evaluate projects and inform decision-making. (EU Covenant of Mayors, 2024; City of Grenoble, 2024). Practical measures implemented as a result include, for instance, better utilisation of school spaces for community activities, applying sufficiency in the local land use strategy, and appointing two municipal staff members dedicated to saving energy and raising awareness among municipal building users. (EU Covenant of Mayors, 2024)

Well-aligned with the principles of sufficiency, the Mayor of the City of Grenoble Éric Piolle sees the doughnut model as an approach to “questioning our lifestyles and strengthening existing policies” while bringing all stakeholders together to build a future together (City of Grenoble, 2024, p. 2). In late 2024, the city published a [report](#) in English aiming at providing inspiration and learning to other cities.

This chapter has outlined sufficiency-oriented policy options in the main urban sectors and through cross-cutting measures. These examples illustrate the range of approaches available to municipalities, while their effectiveness depends on various factors such as local contexts, governance capacities, political will and societal acceptance. The following chapter will explore various local and national enabling conditions and challenges in sufficiency policy design and implementation.

5 Challenges, opportunities and enabling conditions for local sufficiency policy

The chapter consists of two main parts. The first part discusses overall challenges and drivers in policy and strategy, while the second focuses on citizen engagement, stakeholder cooperation and communication of co-benefits as key drivers and enablers behind developing and implementing policies with high acceptability.

5.1 Moving from individual policies to strategic and holistic policy mixes

Strategy, or lack of it, is a major enabling condition, or a barrier, to the possibility to promote norms, practices, infrastructures and regulations in line with the sufficiency principles.

As noted, few cities have yet to approach their local strategy with this lens, but some examples exist, as highlighted by the examples presented from Zürich and Grenoble. In particular, the doughnut

economics model is applied as a strategy framework in a growing network of cities in Europe and beyond. As noted by Hot or Cool Institute (2025), high emission reduction impact strategies also address and question dominant norms on, for instance, meat-focused diets, private car use or oversized housing.

5.1.1 Integration of policy areas and building a coherent policy mix

In practice, implementing a holistic strategy approach requires integration of various policy areas. This could, for instance, mean integrating social policy into the technical considerations typical to introducing low emission zones. It further means that policies need to take a holistic approach to the phenomena that is being addressed. For instance, when addressing sufficiency in housing, it is necessary to also consider the residents' mobility practices. As an example, increasing use of home offices leads to changes not only in resource use in homes, but also in transport patterns and the demand for near-by services (Lorek et al., 2019).

A holistic approach also means understanding that demand-reduction strategies cannot only address individual behaviours, but need to address things like social norms, understandings of what brings social status, and the infrastructures of everyday life.

A holistic policy approach would also imply not only adding new policies that diversify consumption options, but also revising hindering policies, combined with policies that phase-out high pollution and high material footprint options. An example from Danish cycling policies is the need to phase out tax incentives for cars and re-balancing investments from roads for cars to cycling infrastructure (Breucker & Defard, 2023). Also, both push and pull measures, or carrots and sticks, are needed to be included in an effective and complimentary policy mix.

5.1.2 Multi-level governance and local agency

Depending on the division of power between local and national governments, the political will of national governments can be an important enabler or a hindering factor for local sufficiency strategies, and it needs to be considered when building local sufficiency strategies.

For instance in Denmark, cities' investments in improving cycling infrastructure are limited by national rules and national budgetary decisions, despite the fact that the investments follow the directions set in national goals. (Breucker & Defard, 2023) National regulations can also influence how and where congestion charges can be introduced and for what the income can be used for (for instance, if the city can regulate that the income will be used to develop public transport).

In situations where cities' room for manoeuvre is limited, it is important that cities identify, on one hand, areas where they can take concrete local policy action, and on the other hand, areas where their strategy might be to advocate for national policy and regulatory change, and making sure that cities' voices and needs are heard at the national level.

5.1.3 Experiments and evaluations as key strategy elements

Many of the policy proposals in research still remain suggestions, and there is still limited evidence available on the conditions that support or hinder successful implementation. Systematic policy experimentation and pilots are needed, also as evidence shows that policy support often increases once a policy is in place (Breucker & Defard, 2023).

Cities need to evaluate policies and experiments on their social and environmental impacts, as well as the success factors and barriers in implementation (Breucker & Defard, 2023). Further, learnings from these evaluations need to be properly applied in revising and improving policies, but are also helpful if shared with other cities, for instance within the EU Mission Cities network.

5.1.4 Adapting to local conditions

It is important to note that the feasibility of the different policy approaches presented in Chapter four varies greatly between countries but also between cities. No overall recommendations can be given on

which policy responses to prioritise, and the reviewed research does not include comprehensive analyses on the contextual needs for implementing different types of sufficiency policies.

Various local conditions such as infrastructure, social norms, demographic and socioeconomic structures, as well as policy and regulatory frameworks and path-dependencies need to be taken into consideration when designing policy mixes that are both effective and have high acceptability. As an example of how existing infrastructure enables sufficiency policy implementations in contextual settings, the well-developed national railway infrastructure with high-speed trains has been a major enabler behind policies to reduce short-distance flights in France. Continued investment in railways is a major precondition for continued public support for the policy. (Breucker & Defard, 2023)

The need to meaningfully engage citizens and other local stakeholders in design and implementation of policies and strategies is important from a local democracy point of view, but also to ensure that all relevant knowledge on local conditions and needs are included. The next chapter will discuss the central role of cooperation between municipalities, citizens and other stakeholders in the context of sufficiency strategy and policy.

5.2 Cooperating meaningfully and ensuring influence from citizens and other stakeholders

Sufficiency measures in fields such as housing, mobility and food touch upon areas that are considered to belong to the private sphere and where acceptability of interventions may be limited. Even if it is clear that, for instance, the current allocation of land between private cars and cyclists and pedestrians is a result of politics and earlier policy choices, it is often considered political to suggest changes, while continuing with business-as-usual is more often seen as un-political and un-controversial.

Although what is seen as acceptable highly varies between contexts, cooperation with citizens and other stakeholders is highlighted in research as key to ensure acceptability and increase the public support of sufficiency policies (see e.g. Xue & Eräranta, 2025; Koch et al. 2024).

At the same time, cooperation and enabling of citizen influence is not to be done in order to increase acceptability of top-down decided policies. As sufficiency policy in essence aims at ensuring well-being for all, democratic approaches are at its core to ensure fair policies that contribute to a just distribution of the remaining carbon budgets in order to stay within the planetary boundaries (e.g. Breucker and Defard, 2023).

Instead of top-down approaches, local governments, planners and other officials can adopt transformative roles in helping other actors to “broaden their horizons” by proposing and informing, as well as by encouraging local debate and exploration of new norms for how to reach a high quality of life for all within planetary boundaries. (Xue & Eräranta, 2025)

This could mean, for instance, engaging citizens in discussing the relationship between well-being and private car use, or large individual homes, or about what constitutes a good everyday life, and in what different avenues could be built to reach it (Xue & Eräranta, 2025)

5.2.1 Deliberative citizen processes as a key method

Deliberative citizen processes are highlighted as a particularly important method in formulating and implementing sufficiency policy in the reviewed sufficiency policy research. In many countries, the panels have made decisions that are more aligned with sufficiency and more ambitious than their governments’ views (see e.g. Breucker & Defard, 2023; Lage et al. 2023). For instance in France, the deliberative forum Citizen Convention on Climate suggested and reached consensus on suggesting a ban for short-distance flights (Breucker & Defard, 2023).

Deliberative forums combine expert knowledge from researchers with the everyday practical knowledge of citizens and stakeholders to jointly define what a good life in their specific social and cultural contexts and environmental limits means, and what goods and services are needed for satisfying core needs (e.g., Koch et al. 2024)

Research evidence shows that deliberative citizen panels have helped to review policy goals, behaviours, needs satisfiers and infrastructures, and have contributed to transforming long-term policy in line with the sufficiency principles (Koch et al., 2024).

5.2.2 Ensuring just distribution of costs and benefits

The impacts of planned measures need to be considered and policies designed from the perspective of vulnerable groups in order to avoid causing, for instance, mobility poverty. Vulnerable groups need to be involved in policy design processes to make sure their knowledge and perspectives can influence outcomes.

A study by Guilbert (2024) shows that current sufficiency measures do not always show enough consideration to justice aspects or acknowledge vulnerabilities and different groups' different possibilities to act and make choices. The study highlights the need for inclusive democratic processes and giving power and visibility to vulnerable groups (Guilbert, 2024).

Exemplified with mobility policies, this means that cities need to take a granular approach in understanding mobility needs of different groups. As an example, cities need to ensure that measures limiting private car-use do not, for instance, burden socio-economically disadvantaged car-dependent groups outside city-centres with irregular working hours during which no public transport options are available (Hult et al., 2021). An example from the housing sector is the need to ensure that retrofits in the housing stock do not lead to increased rents and forced displacement of groups who are no longer able to live in their homes.

5.2.3 Cooperating with civil society and companies

In addition to ensuring the involvement of citizens, cities can also build coalitions with other actors from the civil society and the private sector.

Social demand from the civil society has been a driving force behind many sufficiency policies, with examples such as the Danish Cycling Federation that had a key role in ensuring an increased national budget for cycling infrastructure (Breucker & Defard, 2023). Another example here is the European citizen initiative House Europe! that is collecting one million signatures for their “right to re-use” initiative that calls for stopping demolition of buildings and establishing policy and regulatory tools such as VAT reductions for building renovations (House Europe!, 2025).

Cities can cooperate with citizen-led sufficiency initiatives, and examples exist of, for instance, cities working together with housing initiatives to address legal and regulatory issues. Cities can also have a key role in providing financial and other support to local sufficiency-aligned initiatives and social innovations.

Working together with local industries and labor organisations to jointly address risks of loss of jobs or economic activity is also central to just and acceptable transitions (Buschka et al., 2024). Companies, such as developers and architecture companies willing to experiment with new space-sharing solutions, can also be important co-operation partners to cities in various sufficiency-related initiatives.

5.2.4 Communicating co-benefits

Sufficiency policies by nature address both social and environmental factors, but also come with other co-benefits. Identifying, communicating and considering those is highlighted in research as a key lever for new regulations in favour of sufficiency (Breucker & Defard, 2023).

As housing sufficiency measures aim at decreasing the demand for floor space, and thereby the need for land used for housing, they enable co-benefits in, for instance, preserving green space. Green

spaces provide several co-benefits for health and they are essential in a warming climate with increasing heat stress for city-dwellers, while preserving green space can also alleviate the biodiversity crisis especially when areas of high biodiversity values are kept.

Stopping the increase in land used for transport infrastructure networks can also keep land available for greenery, while other mobility sufficiency co-benefits include health and lifestyle improvements by less time spent in traffic, less air and noise pollution and improved quality of urban spaces.

In relation to food, it has shown to be useful to rely on positive communication on non-environmental co-benefits (such as health), while local resilience and crisis preparedness are further arguments for supporting increased local food production.

6 Key takeaways for cities

Sufficiency is increasingly recognised as a vital complement to efficiency and technological innovation. While efficiency improves *how* we use resources, sufficiency helps cities define *how much is enough* - ensuring that local prosperity, climate goals and social wellbeing are achieved within planetary limits. Evidence has shown that efficiency measures on their own cannot deliver the deep reductions needed at city and national level to meet emission goals. For EU Mission Cities and others who are serious about climate neutrality, shifting focus from efficiency-only to also include sufficiency ensures a practical and fair approach to closing the gap between current trajectories and climate targets and reducing the demand for resources.

Sufficiency reframes climate action as an opportunity to enhance wellbeing. It highlights that living within planetary limits does not mean sacrifice but smarter, fairer and more meaningful use of resources, for example, affordable and accessible housing, healthy diets, and liveable, walkable cities. When designed carefully, sufficiency measures can simultaneously reduce emissions, lower the housing costs for households, and strengthen community resilience.

This report has shown that cities already have significant agency in advancing sustainability transitions towards just societies within planetary boundaries. Many are implementing sufficiency-aligned actions, for instance by promoting shared housing, improving cycling infrastructure, or supporting urban agriculture, usually without explicitly labelling them as such. Experience from cities like Zürich and Grenoble, demonstrate how sufficiency can be embedded across municipal strategies and broader city visions and planning processes, aligning environmental, social and economic objectives, and strengthening public support for net zero transformation.

As sufficiency brings different objectives together, it also necessitates and facilitates breaking inter-departmental silos and engaging new voices. Because sufficiency challenges existing norms of what a “good life” looks like, cities need to facilitate open conversations about wellbeing within planetary boundaries. Research consistently highlights deliberative citizen panels as an effective tool for such dialogue.

While cities can achieve the greatest long-term impact by redefining climate strategies to include planetary wellbeing for all, many are more likely to start with smaller, practical steps of testing and co-developing sufficiency approaches with citizens and local actors. Small, well-designed steps can serve as building blocks of deeper transformation.

Below are some suggestions of concrete actions:

- **Bring sufficiency into discussions and decision-making within the municipal organisation:** Encourage municipal teams to ask new questions on what is truly needed and how existing resources can be used better. Highlight co-benefits such as health, affordability, and quality of life, rather than focusing solely on emissions.

- **Apply the sufficiency lens in governance processes:** Consider how strategies, public procurement, or land-use policies might change if guided by sufficiency principles. How might, for instance, strategy framings change if a strategy revision process was complemented with one workshop asking questions on what is enough, or how needs can be met in different ways?
- **Engage residents through dialogue and co-operation:** If launching a full deliberative forum is not feasible, organise smaller workshops, neighbourhood discussions, or participatory budgeting sessions to explore what a “good life within limits” could mean locally. One important step could be to add sufficiency-related topics to already planned other citizen dialogues, helping citizens to come up with new ideas by asking new types of questions.
- **Support local initiatives:** Cooperate and support citizen-led projects (such as shared housing or community gardens) and provide them with regulatory, advisory or financial support. Resources such as the open access book [*Social Innovation Projects for Climate Neutral Cities Making Municipalities Sustainable with People-Based Solutions*](#) (Bresciani, 2025) from the NetZeroCities project can provide useful guidance on how to promote citizen-led social innovations.
- **Pilot, experiment and evaluate:** Work together with citizens and other actors to identify and implement initiatives that could be tested in your city. Experiment and evaluate concrete and small scale measures first, such as temporary car-free zones. Be sure to evaluate both environmental and social impacts of the experiments. Continuously consider who benefits and who might be negatively affected, and ensure that the policies improve wellbeing especially for vulnerable groups.
- **Reach out to the NetZeroCities consortium** if you are an EU Mission City who wishes to start applying sufficiency principles and would like to receive expert support in doing that, or wishes to be connected to other cities for peer-learning and exchange.

Sufficiency helps cities connect two urgent policy agendas: achieving net-zero emissions and ensuring a good life for all. It offers a unifying framework for social justice, resilience, and climate ambition—empowering cities to lead Europe’s transition toward a sustainable and liveable future. Cities do not need to wait for national-level regulation to act. By testing new ideas, rethinking resource use, and embedding sufficiency as a guiding principle, local governments can accelerate their transition toward climate neutrality and greater collective wellbeing.

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