

Sufficiency

Sufficiency Policy - Status, Examples and Options

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Agenda for today

- *The floor is yours:* Presentation of European Decarbonization scenarios
- Individual Choice or Political Dimension?
- Sufficiency in current German policy?
- Some examples
- Choose and pitch your favourite policy
- Europe: Who supports sufficiency policy?
- Your sufficiency task / Next lectures

Task - Decarbonize Europe!

- <https://pad.systemli.org/p/ClimateStrategies>
- Goal? degree and distribution
- Sample scenario or own scenario?
- Name of the scenario and main focus
- Sufficiency settings?
- Difficulties? Surprises?
- Take-aways?

The role of policy for sufficiency

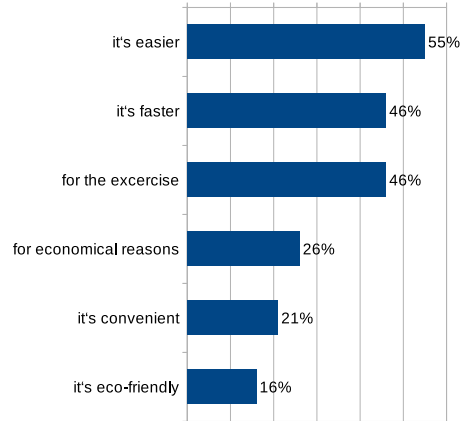
Eco-Routine:

Setting a framework in which the more sustainable habit is the more attractive one.



Picture: heb@Wikimedia Commons - CC BY-SA 3.0

Copenhagener's reasons for choosing to cycle



Reference: City of Copenhagen (2019)

Individual choice or political framework?

Individual choice depends on

- cultural framework conditions
- material infrastructures
- political-institutional framework conditions

Sufficiency Pioneers? First Mover?

They exist.

but

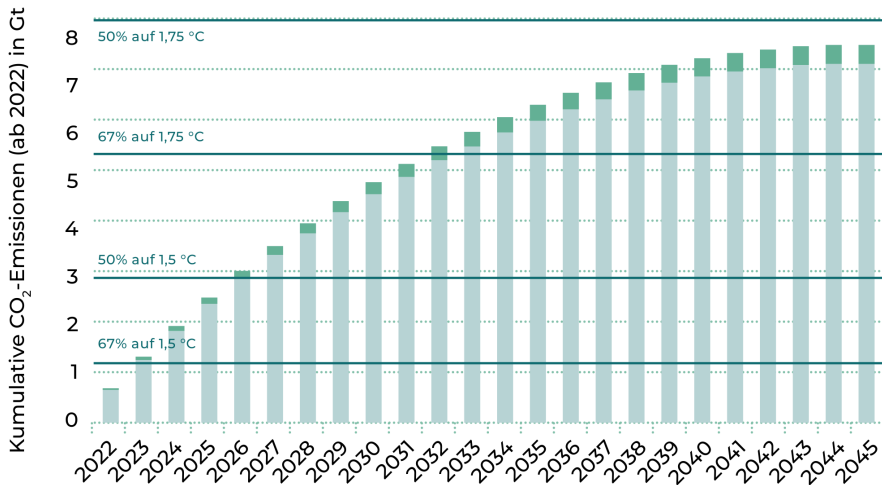
According to an environmental awareness study, 80% of Germans would behave in an environmentally conscious manner if the others did the same (Umweltbewusstseinstudie 2008).

Sufficiency in German policy?

To what extent does current German policy include sufficiency?

Can you think of any sufficiency policy already implemented or mentioned in the coalition contract?

German coalition contract - Climate Check



Reference: Thiele et al. (2022)

German coalition contract - Climate Check

- **BUDGET:** The *Ampel* claims six times the still available German CO₂ budget for globally fair paths to a 67% chance of 1.5°C.
- **ECONOMIC SYSTEM:** The new coalition stands for ecological modernization in the technical sense, but not for a structural and just change of the economic system.
- **ENERGY SECTOR:** The expansion of renewables is greatly accelerated but the exit from the Fossil only inconsistently tracked and natural gas infrastructure even expanded.

Reference: Thiele et al. (2022)

German coalition contract - Climate Check

- **INDUSTRY:** Above all, the export industries of the location Germany should become “green” market leaders with state funding; no dismantling of energy-intensive industries is planned.
- **TRANSPORT:** The focus is on the e-car, but rail and public transport are also to be strengthened. But restrictions on combustion engines and air traffic: none.
- **AGRICULTURE:** Organic farming is to be expanded; the structure of the agricultural sector and especially the animal industry are hardly touched.
- **HOUSING and BUILDINGS:** New construction with increased energy standards is the focus; no priority for building refurbishment and comprehensive urban planning.

Reference: Thiele et al. (2022)

Sufficiency Policy

It is not only, but also about refraining from something, stopping, dropping, omitting...

What is EXNOVATION? Can you find an example? Discuss with one other person.

Exnovation

Exnovation is the termination of (unsustainable) practices, technologies or systems of use. It is important to consciously shape the associated structural change in order to avoid social hardship.



Sufficiency Policy

Examples

Sufficiency in Practice - Buildings: Kalkbreite Zürich



Sufficiency Policy: Buildings

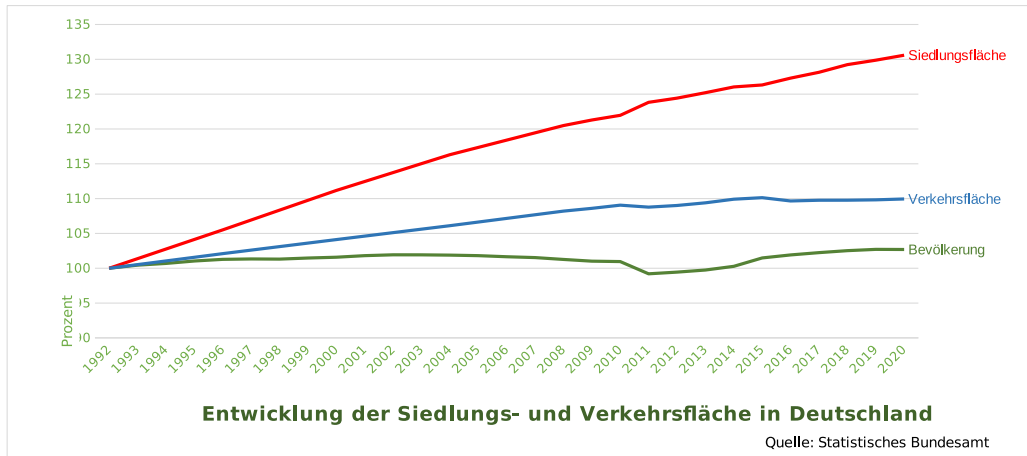
- Sustainable urban development
 - Resealing limits
 - Green areas in cities, e.g. minimum quota
 - Limit urban sprawl
- Quality of living instead of quantity
 - Efficient use of living space: home exchange, minimum occupancy rates and division of living space
 - Flexibility through non-rising rents: Promote cooperative living, non-profit housing in existing buildings, stop rent increases
 - High-quality living space: innovative concepts, sustainable training offensive

Examples: Anti Sufficiency Policy

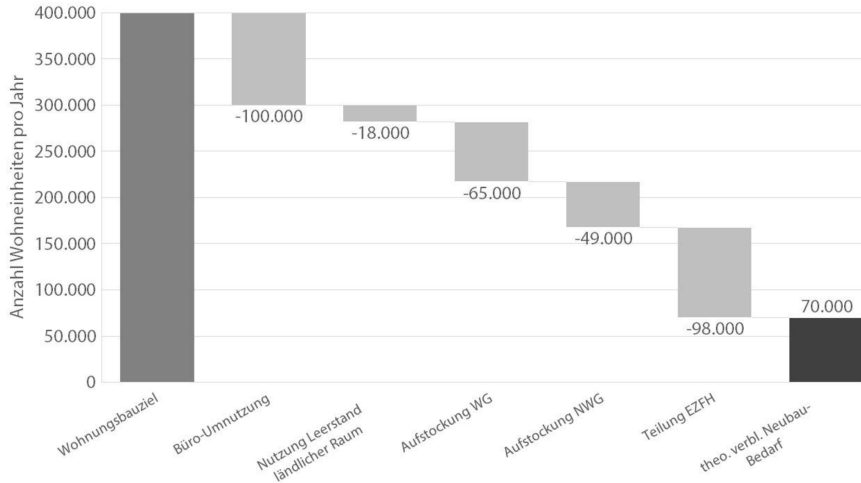
BUILDINGS

- Designation of new development areas on the open countryside
- Current plan of German Government to newly build 400.000 new housing units

Sufficiency Indicator and Goal: Land Usage



Alternatives to building new houses



Reference: Zimmermann et al. (2022)

Transport: Examples of Anti Sufficiency Policy

- Expansion of road infrastructure (esp. Autobahn)
- Structural orientation traffic regulations (Straßenverkehrsordnung -StVO & StVG) on cars (e.g. hardly any change possible if traffic flow is restricted, local options for action are restricted)
- Design of passenger car emission regulations (EU level): GHG-emissions, fleet limits, weight bonus, EV/PHEV counts as 0 emissions, no regulation on electricity-consumption & height/weight

Sufficiency Policy: Transport

MOBILITY

- **Reduce distances, e.g. local supply strategy**, restructure commuter allowances
- Put mobility at the center of traffic policy - not the car, e.g. adjust road traffic regulations to enable equal mobility, anchor goals other than flowing traffic, limit parking spaces,...
- Align infrastructures with the mode shift, e.g. moratorium for roads and airports, **expansion of public transport**, reallocate lanes for active modes
- Economic steering, e.g. increased taxation of car ownership and purchase (progressive), tolls, parking fees, **promotion of public transport**, cargo bikes, ...

Sufficiency in practice: Example of Paris



Picture: Jean-François Gornet @ Flickr – CC BY-SA 2.0



Picture: Eric Huybrechts @ Flickr – CC BY-SA 2.0

Sufficiency Example - Transport: Templin



Foto: City of Templin

- 16,000 inhabitants, 8th largest municipality in terms of area D
- 1998: free - increase from 40,000 passengers per year to more than 600,000
- 2003: 44 euros annual ticket - 250,000 annually

Sufficiency Policy Database



Sector ▾	Policy strategy ▾	Measure / action ▾	Policy Instrument ▾	Time -> impact ▾	Suff. Type ▾	Instr. Type ▾	Reference ▾
▼ filter	Policy strategy	filter / search	New / update	▼	▼ filter	▼ filter	
Industry / Production	Reduce waste	Mitigate waste production	Ban waste exports	long	Avoid	regulation	19
Industry / Production	Reduce waste	Mitigate waste production	Establishing a National Circular Economy Strategy	long	Shift	other	19
Industry / Production	Exnovation	Phase-out of fossil fuels	levies on energy products	short	General	economic	19
Industry / Production	Exnovation	Phase-out of fossil fuels	Reduce subsidies for fossil fuels	short	Avoid	fiscal	19
Industry / Production	Exnovation	Reduce barriers (policies, legislation, cultural) for sufficiency	Eliminate barriers for wood use	medium	Shift	regulation	19
Industry / Production	Exnovation	Phase-out of environmentally harming materials	Tax non-recyclable materials	medium	Avoid	economic	19
Industry / Production	Exnovation	Phase-out of environmentally harming materials	Ban microplastics	long	Shift	regulation	19
Industry / Production	Exnovation	Phase-out of fossil fuels	No subsidies for material uses of fossil fuels	medium	Shift	fiscal	19
Industry / Production	Increase durability of products	Larger market share of repaired & durable products	Information, Eco-Warranty	medium	General	information	19
Industry / Production	Increase durability of products	Larger market share of repaired & durable products	Minimum Lifetime	medium	General	information	19

Link to the database: <https://energysufficiency.de/policy-database/>

Sufficiency Policy Database

<https://energysufficiency.de/en/policy-database-en/>

- about 300 sufficiency policy measures
- clustered by sector, sufficiency type, instrument type
- planned: time horizon of impact and implementation, policy level, supporting or removing barriers, quantifications and examples
- work-in-progress: You are welcome to suggest additional measures + give feedback!
- We are looking for a student assistant for translating the database + doing further work on it.

Sufficiency Policy: Which one would you choose?

Checkout the sufficiency policy database:

<https://energysufficiency.de/en/policy-database-en/>

- Industry group / Agriculture group / Cross-sectoral group
- Choose the policies you think are most powerful for your sector or invent own ones
- Discuss if there are policies you would not introduce if you would be in power.
Note those down.
- Each person: Choose your favourite one.
- Pitch your favourite policy in 1 minute.
- Let us discuss the ones you would not support.

Sufficiency policy -Buildings/Housing/Land-use

- Upper limits for sealing - e.g. with cap-and-trade system between municipalities
- Housing quality instead of quantity
- Use existing housing stock: Protect existing housing, reduce barriers to relocation and change of use, make it easier to change flats, support smaller flats, provide advice on relocation, change of use, right to exchange flats without rent increase.
- Climate-friendly and attractive cities: minimal car traffic, unsealed surfaces, green in the city.
- Removing barriers to recycled and renewable building materials
- Link building permits to energy and resource intensity + recycling plan
- Reduce benefits for outdoor building areas
- Training offensive (crafts/administration/architecture/urban planning) for renovation, flexible building and working with regenerative and recycled building materials

Sufficiency policy - Transport/Mobility

- Mobility as the focal point of transport policy instead of the car: adapt road traffic regulations accordingly (goal orientation beyond danger prevention), scope for municipalities to shape policy.
- Local supply strategy for short distances (integrated urban and regional planning)
- Right to tele-working + infrastructure for it
- Reduce incentives for long journeys and private motor vehicles (parking regulations, service mobility reform,...)
- Moratorium on motorways, roads and airports
- Strengthen public transport, e.g. mobility vouchers when a car is removed, orient public transport more strongly towards supply routes
- Bicycle and pedestrian infrastructure: green wave etc.
- Micro-hubs for suppliers

Sufficiency policy - Industry

- Circular economy: curb waste exports, avoid waste destruction.
- Increase longevity of products: mandatory minimum warranty period, spare parts availability, longevity benchmarking according to top-runner principle, data provision for self-repair
- minimum compatibility times for software
- Repair centres as part of public facilities
- Higher taxation of non-recyclable materials
- Environmental footprint label + certain products may no longer be sold

Sufficiency Policy - Agriculture

- Ceilings for livestock units per area have several positive effects: Biodiversity, emission reduction, animal welfare, regional added value, soil regeneration, landscape.
- Nitrogen efficiency - fertilising less but smartly is central, it saves energy in production and is good for soils and water with the same yield.
- The weekly menu in refectories and canteens of public administration and educational institutions should be adapted to the recommendations by health organisations. The proportion of organic products should at least correspond to the current target for organic farming.

Sufficiency Policy - Cross-sectoral

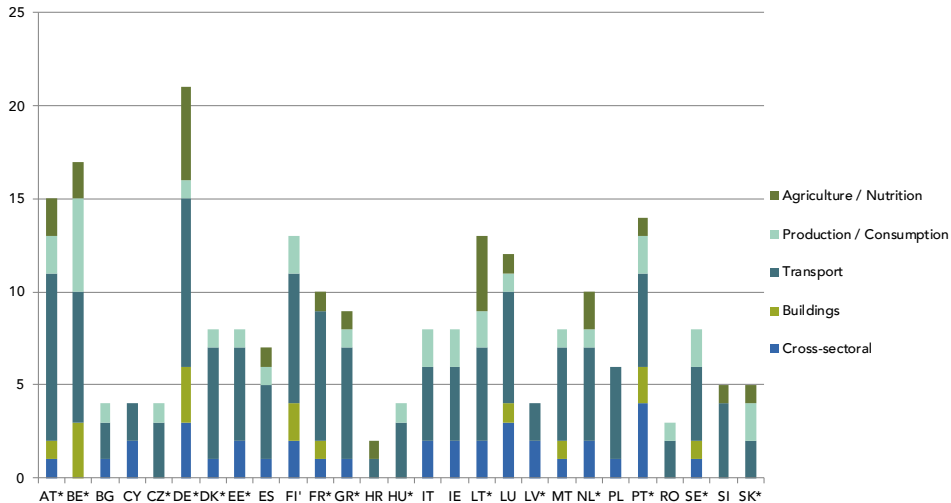
- Higher taxes on energy and resource consumption.
- Ban or quotas on advertising
- Tax luxury expenses
- Reduction of working hours (hours/four days/holidays)
- Check growth dependency of social security systems

Sufficiency in European countries

Who supports sufficiency policy?

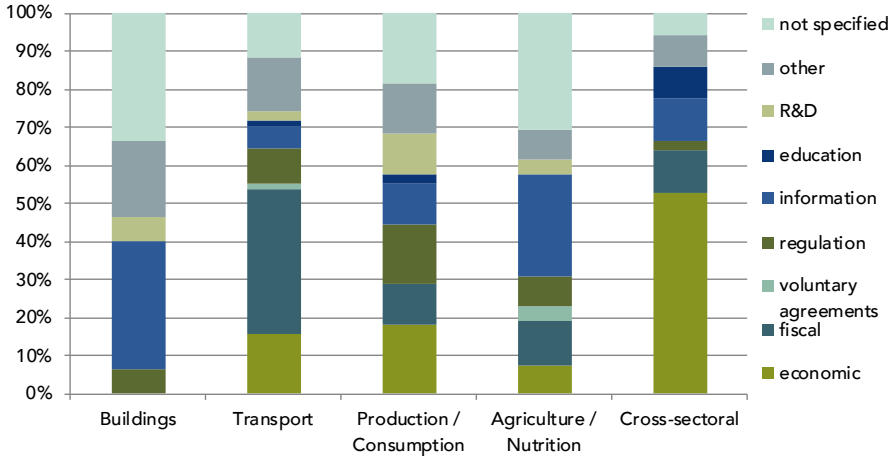
Comparison between **National Energy and Climate Plans (NECPS)** of European Governments and policy recommendations by Climate **Citizen Assemblies**

NECP-Analysis - Number of Measures



Reference: Zell-Ziegler et al. (2021)

NECP-Analysis - Instrument Types

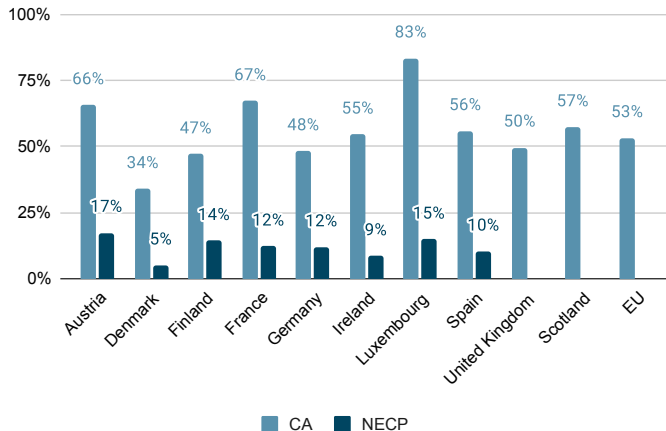


Reference: Zell-Ziegler et al. (2021)

NECP-Analysis - Main Findings

- Assessment of sufficiency in National Energy and Climate Plans and Long-Term Strategies.
- Sufficiency-related measures exist in many NECPs/LTSs, predominantly in the transport sector.
- Sufficiency is underrepresented compared to efficiency and renewables.
- Regulatory instruments to reduce energy demand are rare, fiscal/economic instruments dominate.
- The template for EU NECPs and LTSs lacks a sufficiency chapter

Sufficiency in Citizen Assemblies (CA)

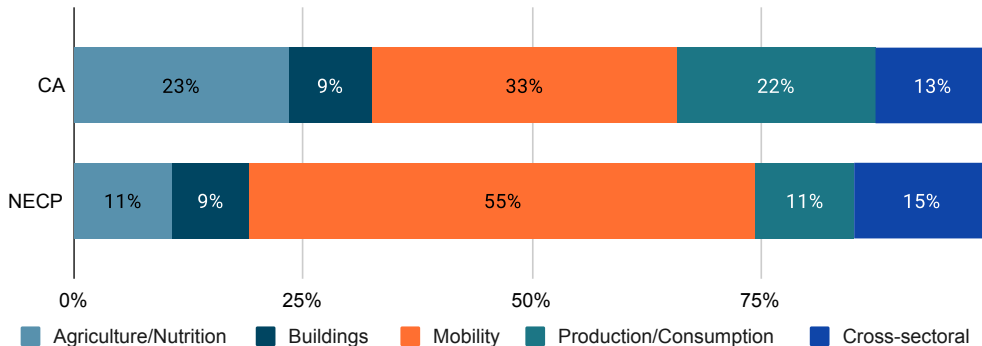


Share of policies including sufficiency of total climate-mitigation policies by country (CA and NECP)

Note: UK, SC and EU did not submit an NECP / Reference: Lage et al. (forthcoming)

- Sufficiency plays a minor role in NECPs (national policy)
- 90 Sufficiency policies in NECPs of these countries
- Sufficiency central strategy in CAs
- 333 Sufficiency policies in CAs (same country base)

Sufficiency policies by sector



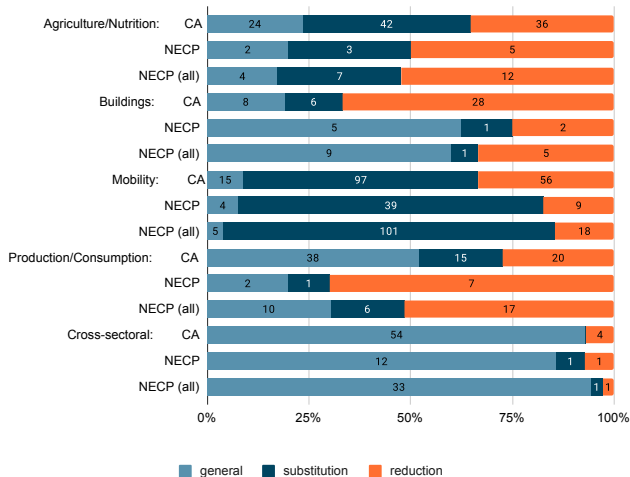
Sufficiency-related policies in the CAs and NECPs by sector

Note: Figures show countries for which an NECP and a CA document is available

Reference: Lage et al., Sufficiency in NECPs and Citizen Assemblies, under review

- More diverse in CAs
- Focus on transport in NECPs

Share of policies by sufficiency type and sector

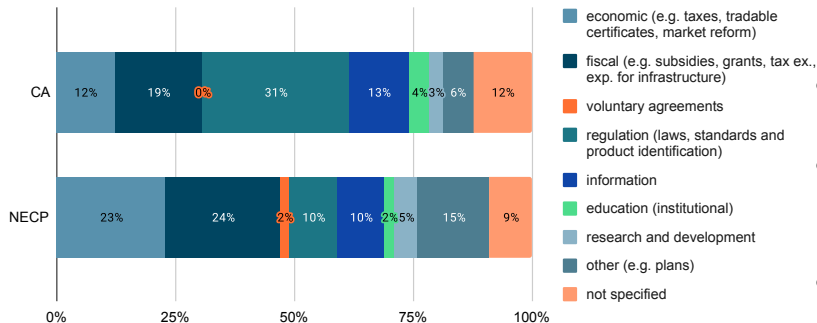


Sufficiency types

- **General:** may incentivise sufficiency e.g. CO₂-tax
- **Substitution:** mode shift
- **Reduction:** absolute reduction of consumption and production levels

Reference: Lage et al. (forthcoming)

Sufficiency Policies by Instrument Type



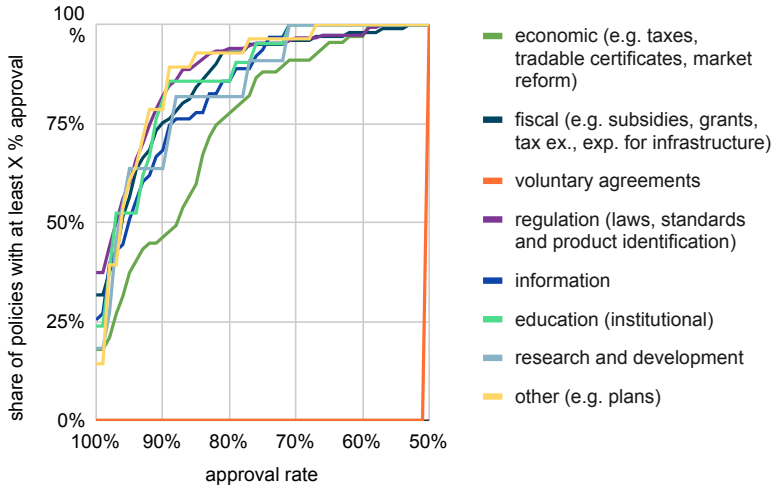
- NECPs avoid regulation
- NECPs prefer economic instruments
- CAs suggest more balanced policy instrument types, including regulation

Share of instrument types in the recommendations made by the CAs and the NECPs

Note: Figures show countries for which an NECP and a CA document is available

Reference: Lage et al., Sufficiency in NECPs and Citizen Assemblies, under review

Approval rates of policies in CA recommendations



Reference: Lage et al. (forthcoming)

- Generally high approval rates in CAs
- Especially high approval rates for regulative instruments
- Lowest approval rates for economic instruments

Wrap-up Sufficiency Policy

- A trend to sufficiency exists, but it needs to be significantly supported by **broad and concrete sufficiency policy** to cope with ecological and social challenges
- Policy always facilitates some and impedes other practices
- Sufficiency policy sets (supply-side) framework conditions so that changes in **social practices** to comply with absolute limits on consumption **become easier and normalised**.
- Energy sufficiency policy needs an **instrument type mix** of convincing target group-specific communication, regulation and clear price signals
- **Informed citizens suggest sufficiency policy including regulative** instruments
 - in contrast to current policy focus

References I

- City of Copenhagen, 2019. The Bicycle Account 2018 - Copenhagen City of Cyclists. Technical Report. URL: <https://cyclingsolutions.info/wp-content/uploads//2020/12/CPH-Bicycle-Account-2018.pdf>.
- Thiele, L., Krohn, R., Schmelzer, M., 2022. Mit grüner Marktwirtschaft das Klima retten? Klimagerechtigkeits-Check der Ampel-Regierung. Technical Report. konzeptwerk neue ökonomie. URL: https://konzeptwerk-neue-oekonomie.org/wp-content/uploads/2022/01/Konzeptwerk_Klimagerechtigkeits-Check_der_Ampel-Regierung_2022.pdf.
- Zell-Ziegler, C., Thema, J., Best, B., Wiese, F., Lage, J., Schmidt, A., Toulouse, E., Stagl, S., 2021. Enough? The role of sufficiency in European energy and climate plans. Energy Policy 157, 112483.
doi:<https://doi.org/10.1016/j.enpol.2021.112483>.

References II

Zimmermann, P., Brischke, L.A., Bierwirth, A., Buschka, M., 2022. Unterstützung von Suffizienzansätzen im Gebäudebereich. Technical Report. im Auftrag des Bundesinstitut für Bau-, Stadt- und Raumforschung (BBSR). URL: <https://www.bbsr.bund.de/BBSR/DE/veroeffentlichungen/bbsr-online/2023/bbsr-online-09-2023.html>.