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## Sufficiency, behavioural change & social transition

# Global approach

**Technical Dialogue 3** Copenhagen, 27 February 2019



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#### 1. Need for a global approach

- > Current overshoot of planetary boundaries call for a broad response:
  - beyond the development and deployment of greener technologies
  - need for changes in societal organisation and everyday practices
- Question about how much such changes are needed, and how much can be achieved
- > Sufficiency emerges as the (proposed) term that "encompasses such efforts to rethink and redesign collective and individual practices in line with the Earth limits and people aspirations for better lives"
- "It requires reflecting on human needs, social equity, economic development, urban structures, social norms, consumption habits, as well as the role of policies to support the necessary transition"



International Network for Sufficiency Research & Policy

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#### 2. Sufficiency and limits adapted to think about energy sufficiency (ECEEE) The "doughnut economy" concept (Raworth et al.) climate change Atmospheric carbon freshwater use land use on ange ENVIRONMENTAL CEILING The safe and just space for humanity food water Sufficient energy Services Demand nitrogen and phosphorus cycles KiddinS biodiversity loss Land and water availability income Shelter health Health Work education Messieles - infrastructures -Biodiversity gender equality Mobility resilience Voice social ocean acidilication equity PLUS VOICE energy jobs voice Com orone depletion Alourishing ecosystems noitullog leaimana enibeol stringeologinge gringeologinge Air pollution

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#### 3. Energy vs. energy services

- Energy is not simply a commodity or theoretical concept: it has social, ecological and strategic values, connected with familiar policy areas: social welfare, climate and air quality protection, security and resource management, etc.
- Energy services refer to the benefits provided by energy, such as cooking, lighting, cooling, IT-based communication, automotive transport and industrial processes
- > Delivering energy services is more than making energy available to end users:
  - Services have a subjective dimension depending on context
  - Ambient 'free' energy, activities and materials can contribute to delivery of services
    Example: staying comfortably warm or cool can be a function of clothing, activity levels, control over one's living or work space, and other factors that are often not even considered under the heading of 'energy'
  - Non-energy initiatives or changes can create or deny access to energy services
    Example: when planners, innovators or natural processes alter the 'landscape' and possibilities for action
- > A focus on services allows for thinking in terms of having enough and not using too much

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#### 4. Sufficiency and lifestyle choices

- An important part of sufficiency lies in behaviour change, i.e. lifestyle change through informed actions of individual end users
- > This is often seen as an extension of efforts for improving efficiency to further reduce energy demand
- Broader issues need to be considered:
- Focussing on sufficiency only in terms of demand reduction takes attention away from the need to ensure adequate energy services for everyone (including people who do not yet have them) Sufficiency encompasses concerns for social wellbeing and equity
- Pointing to specific, conscious individual decisions and actions to change lifestyle draws attention away from the unconscious, routine nature of many activities associated with energy consumption
- Infrastructures of supply and demand, which greatly influence the possibilities open to individuals, may not receive enough attention if sufficiency is framed primarily in terms of lifestyle choices
   Design and construction of the built environment can be crucially important in 'locking in' high or low consumption patterns, for example

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#### 5. Sufficiency and the economic system

Strong negative reactions to sufficiency are sometimes witnessed, even before any potential has been discussed and understood – in relation to an ideological or political background

US president George Bush Senior in 1992: 'The American way of life is not up for negotiations. Period.'

- The term "sufficiency" is symbolically strong and can be understood as subversive, morally normative, or carrying negative ideas of curtailment, etc.
- Sufficiency often goes against the mainstream worldview and dominant social paradigm based on consumerism and materialism, that pushes for increasing the use of energy-intensive services
- > The economic system we live in, and how its growth is achieved, often creates barriers to sufficiency
- Social norms and wants poorly compatible with sufficiency are often supported by mainstream media and marketing, in the way they promote certain lifestyles as desirable or even normal (e.g. large luxury flats, big and fast cars, immoderate use of digital technologies, globe-trotting, etc.)

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#### 6. Sufficiency and energy conservation

### **Sufficiency:**

Reduce the need to use energy down to the satisfaction of really useful and well set energy services



#### **Efficiency:**

Reduce the amount of energy needed to satisfy a given level of energy services

## Lifecycle energy

EcodesignLife-cycle energy(grey energy)optimisation

### Delivery of energy services

Dimensional	Size, nominal capacity of equipments
Servicial	Intensity and duration of use of equipments
Organisational	Collective planning and sharing

## **Energy transformation chain**

Adaptation (useful energy)	Optimisation of energy exchanges with environment
Equipments (final energy)	Conversion performance of end-use equipments
Production (primary energy)	Conversion performance of production, reuse of energy

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#### 7. Sufficiency aspects (1)

#### **Dimensional sufficiency**

Size, nominal capacity of equipments



#### **Examples:**

Heated surfaces in buildings: evolution of m<sup>2</sup> per person, evolution of tertiary surfaces

Weight and use of adapted vehicles

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### 7. Sufficiency aspects (2)



1

2

**Usage sufficiency** 

Size, nominal capacity of equipments Intensity and duration of use of equipments



#### **Examples:**

Turning off useless appliances (up to -30% on specific electricity in offices) More careful use of hot water (-20%)

Reduced speed on motorways

Increased lifetime of goods/equipments

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## 7. Sufficiency aspects (3)



Usage sufficiency

1

2

3

**Organisational sufficiency** 

Size, nominal capacity of equipments

Intensity and duration of use of equipments

Collective planning and sharing



#### **Examples:**

Mutualized use of equipments

Collective housing, shared spaces

Car sharing

Urban planning (reduced distances),

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### 7. Sufficiency aspects (4)

- **Dimensional sufficiency**
- Usage sufficiency

1

2

3

Organisational sufficiency

Size, nominal capacity of equipments

Intensity and duration of use of equipments

Collective planning and sharing

#### **Related sufficiency on non energetic consumptions:**

Change in diet (more vegetal proteins, less meat and animal proteins)

Reduced consumption of certain goods (with an impact on the use of raw materials in industry

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#### 7. Social acceptance

- > Identified barriers to the perception and acceptance of sufficiency potentials are identified:
  - The relative invisibility and intangibility of energy use in daily practices and routines makes it difficult to realise the saving opportunities
  - Sufficiency potentials can be perceived as encompassing some loss (in comfort, welfare, utility...)
  - There is some resistance to change in daily practices
  - There are difficulties in reaching advanced levels of implementation due to socio-technical lock-in effects, and the weight of social norms and imaginaries
- > Specific sufficiency options trigger emotional (negative) reactions, depending on the concerned publics:
  - reducing air travel
  - lowering speed limits on roads
  - moderating living space areas per capita
  - reducing meat consumption
- The relative absence of sufficiency in policy making, and even in discussions about concrete policies and measures, and the weaknesses and discrepancies of energy scenarios regarding the role of energy sufficiency leads to a self-sustained lack of support

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#### 8. Co-benefits

- > Sufficiency options often come with other benefits alongside saving energy
- These co-benefits may be even more desirable and felt positively Example: perceived benefits of low-meat diet include to 'prevent disease' or the pleasure to 'eat a greater variety of food'
- Health benefits are particularly useful to highlight
- Indirect benefits on conditions of living can be emphasized Example: increased share and reduced use of cars leaves more space for other uses and activities in cities
- > Other benefits on life quality (more fulfilling social interactions, happier life, etc.) can also be identified
- Collective benefits can also resonate with some audiences, e.g. the potential role of sufficiency in reducing inequalities, and contributing to social justice (at the level of a country and worldwide)
- Regarding the recurrent question about the impact of sufficiency on the economy, some studies show how sufficiency can promote new forms of economic wealth and create jobs (e.g. in local tourism, alternative transports, repairing activities, etc.)