



European Sustainable Energy Seminar

17-19 August, 2026

Venue: Nordic Folkecenter for Renewable Energy, Ydby, Denmark



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

Sufficiency

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



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INFORSE European Sustainable Energy Seminar August 17-21, 2026

Nordic Folkecenter for Renewable Energy, Thy, Denmark

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Aalborg Universitet



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Agenda

Defining my approach to sufficiency, need and consumption

Living well with less – two stories from my bike trip

How to get inside the consumption corridors?

Defining my approach to
sufficiency, need and
consumption

Sufficiency

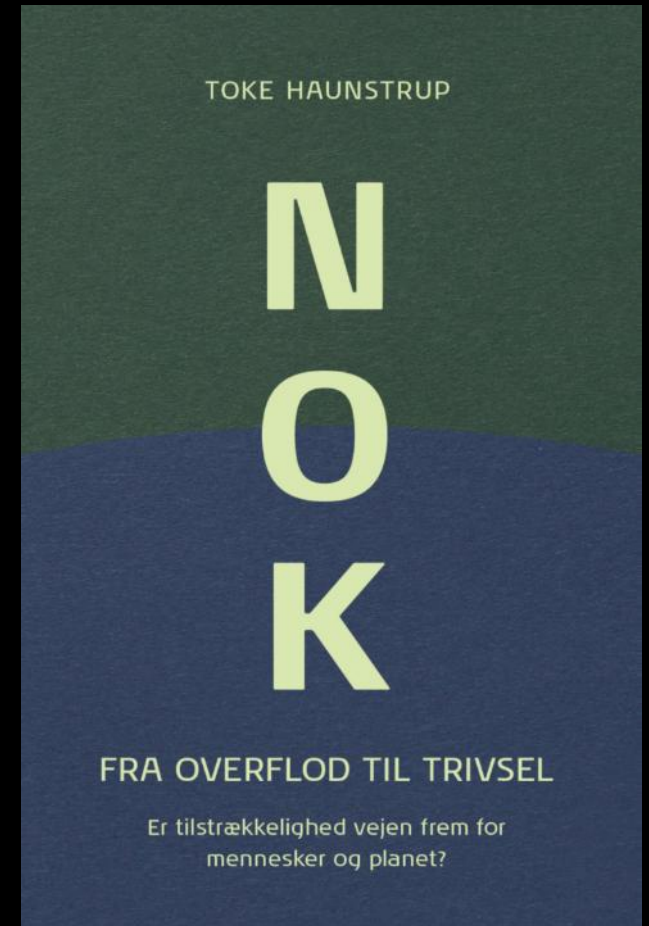
Sufficiency is about...

- Consuming (much) less than we do today
- Everyone should have enough to thrive in Denmark and the whole world (fair distribution)
- Placing people's well-being at the center of social development instead of economic growth or high consumption

Challenging the idea that a good life is a life with high consumption

The purpose of sufficiency is to take care of the planet's living systems and ensure that all citizens in the world have a fair chance to strive for the good life. ... The task of restructuring our rich society is an opportunity to rethink and redesign life ... What if we could create a future that, based on sufficiency, brings greater joy, well-being and more meaning?

Are shorter working hours a path to sufficiency?



Sustainable consumption corridors

Maximum material consumption (ceiling)

The limit of exceeding the planetary boundaries



Sustainable consumption corridors

Needs are met and people can pursue their dreams



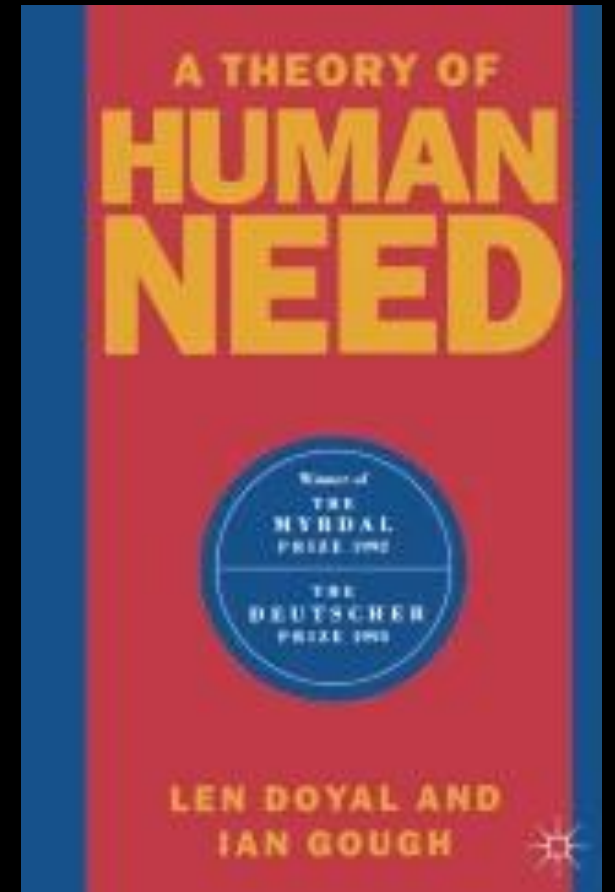
Minimum material consumption (floor)

Basis for living a good life

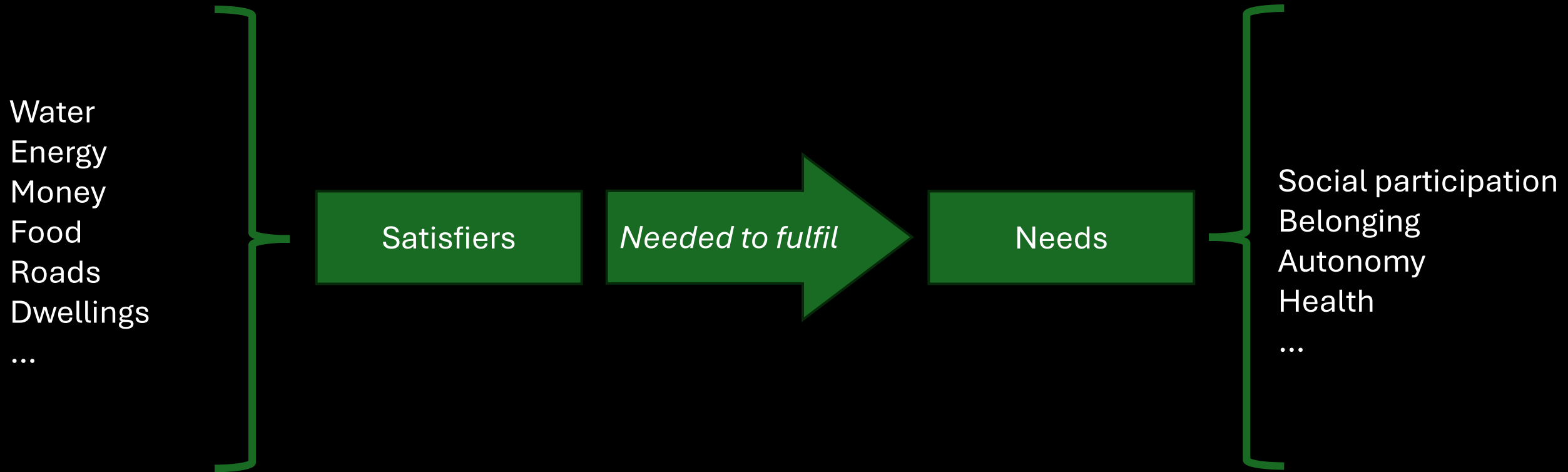
Sufficiency

The human needs

- To be able to participate actively and equally in social relationships with others
- To have good health (or receive care if you do not have it)
- To be able to decide over your own life



Needs and satisfiers



Living well with less – two stories
from my bike trip

Anders



After a few years in the regular job market, I concluded that I needed to take a different path in my life. It was about wanting more freedom in terms of work and finances, but also a desire to realize my dream of living as sustainably as I possibly could.







I remember thinking, 'Where can I buy something new?' if something broke. Today I have a much more of a mindset where I think, 'What do I have lying around that I can fix or build something else myself?' My mindset has changed a lot from being a consumer-oriented person to being more producer-oriented. The practicality is very important today. It shapes me as a person.



Some people think I'm poor because I don't have the income that others have. You can just smile at that. In reality, I feel much richer than I have ever been in my life in relation to all the things I'm so privileged to be able to spend my time on in terms of work today.

Henning and Karina



Karina: It's not the material things that drive us. Many people think it's the most natural thing in the world to tear out the kitchen and bathroom when they buy a house. Because you don't want something that others have had. But for us it's not like that.

Henning: It's just what we do [to live frugally].





The good life with less consumption and work – insights from the bike ride

- Meaning in everyday life and in everyday productive (creative) work
- Practical work = creating something concrete
- A rhythm in everyday life that matches the body's rhythm
- Serenity
- Time for family and socializing with others

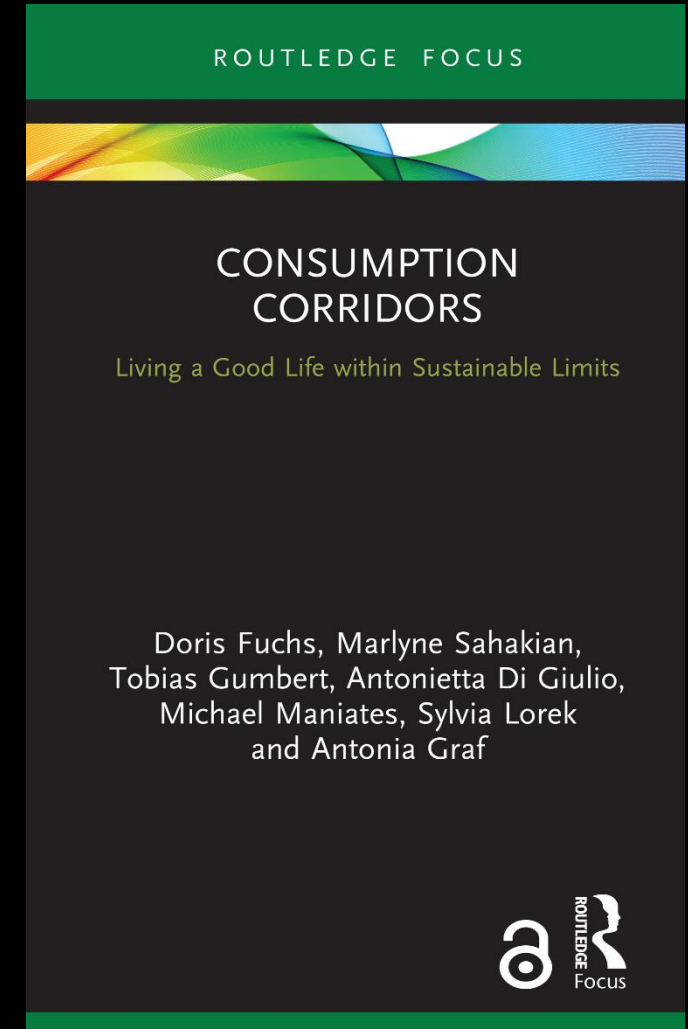
How to get inside the
consumption corridors?

We live in world built on fossil fuels



Photo: Michael Lechner on Unsplash.com

In a world that was built on the abundance of cheap commodities, especially cheap energy, certain social practices and lifestyles have become normalized.



- The infrastructures *guides* practices in certain directions
- “If you build a city for cars, you get a lot of cars and car driving”
- Is supported by social institutions (e.g. tax deduction for commuting)

When enough is too much

In most rich societies, the goal of bringing resource consumption within planetary boundaries will “deprive citizens of a vast range of goods and services that they have agreed are necessary for effective participation in modern life”

Quote from Ian Gough (2017): *Heat, greed and human need*. Cheltenham, UK: Elgar.

The floor is above the ceiling

Maximum material consumption (ceiling)

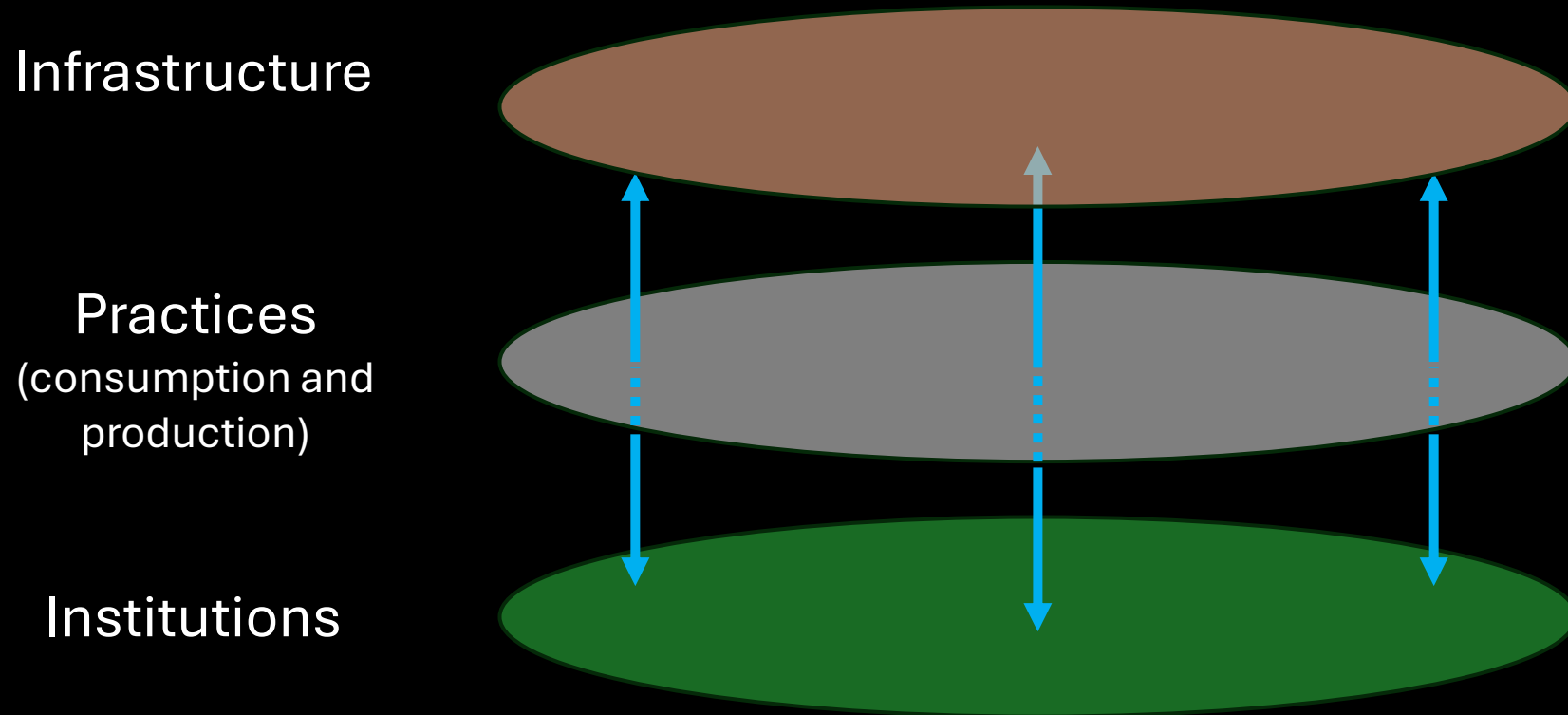


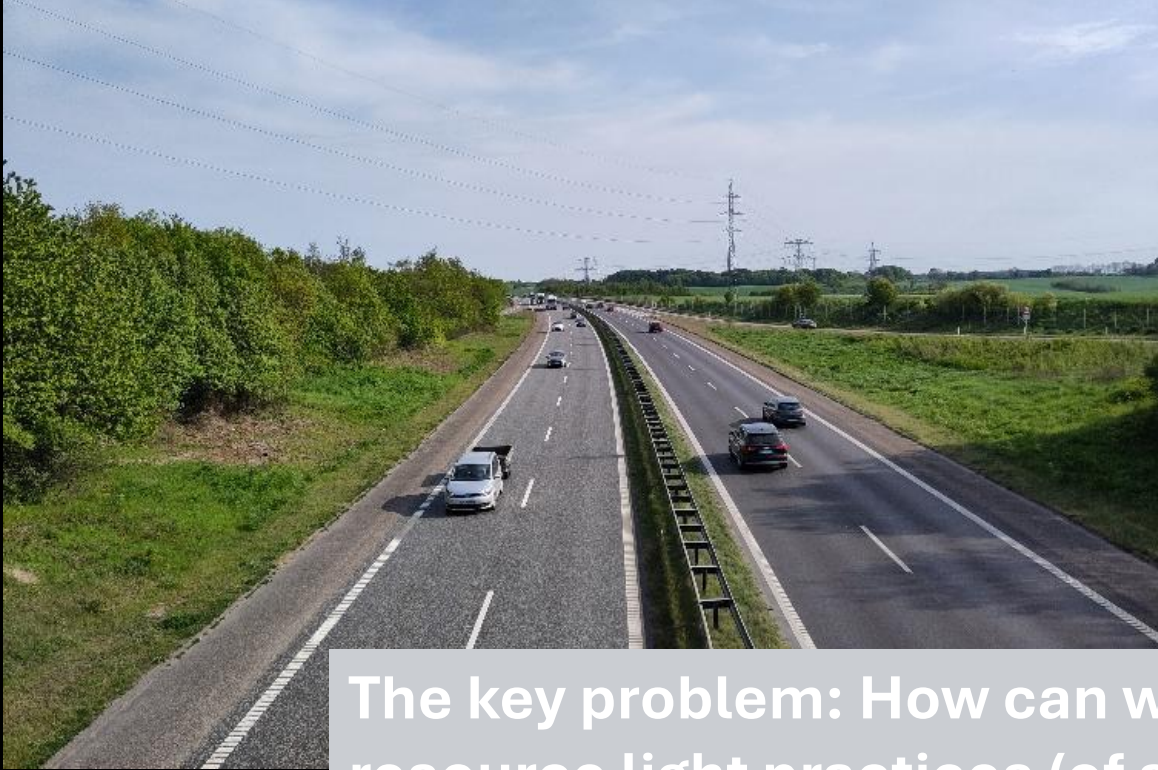
The floor is above the ceiling

Minimum material consumption (floor)

Maximum material consumption (ceiling)

Infrastructures and social institutions shape practices





The key problem: How can we develop and adopt resource light practices (of sufficiency) within existing materialities that were built on the premise of abundant consumption of cheap oil, coal and gas?



Copenhagen. Photo: Thue C. Leibrandt, Wikipedia (CC BY-SA 3.0)

Reprogramming

Modifying existing material arrangements (and institutions) in ways that **promote** resource-light practices and **displace** resource-intensive practices

- Strategically changing material arrangements (and institutions) to promote sufficiency **across** households and practices
- Target general infrastructures orchestrating **multiplicities of practices** (e.g. roads, dwellings, internet, retail structures)



Reprogramming highways as an example...



NCC – PR photo

Bus Rapid Transit (BRT)

SYNSPUNKT

Drop toget og indsæt busser

Trafik | 31. maj kl. 10:58 | 26

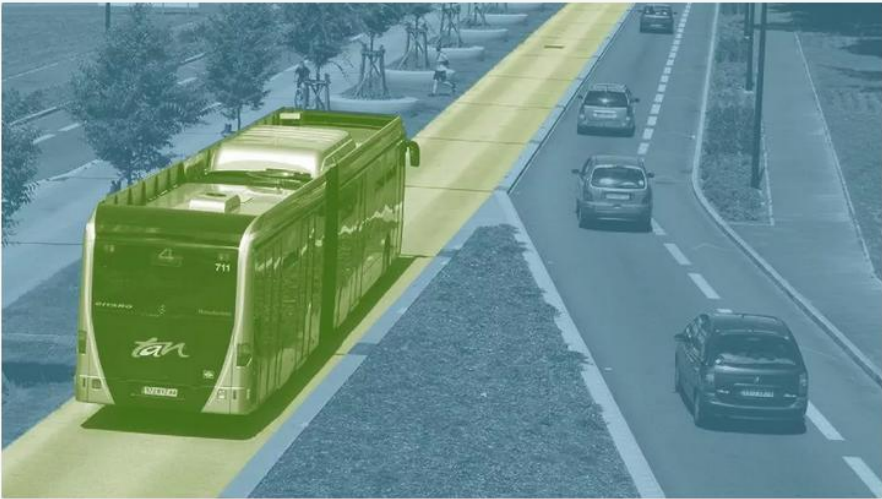


Illustration: Mercedes-Benz / Ingeniøren.

En planlagt jernbanestrækning mellem Silkeborg og Aarhus kommer til at koste fem-seks milliarder kroner for et enkelt spor. Men der findes en bedre og billigere løsning end toget, påpeger forsker.

Artiklen er ældre end 30 dage

Toke Haunstrup Bach
Christensen
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Aalborg Universitet.

Forestil dig, at du bor i det skønne Silkeborg og dagligt pendler til arbejde i Aarhus Nord. Forestil dig dernæst, at du kunne stå på en bus med høj komfort, som hvert femte minut i myldretiden og hvert tiende uden for myldretiden bringer dig hurtigt og sikkert til arbejde og hjem igen senere på dagen. En tur der tager i omegnen af 30-45 minutter.



- BRT can be established relatively quickly
- Utilizes **existing** infrastructure
- Requires limited energy and physical resources for construction
- **Displaces** current resource-intensive mobility practices with resource-light alternatives

Other examples of reprogramming

- Shifting the transport hierarchy in the road design, e.g. “2 minus 1 roads”
- Lowering speed limits for cars
- Limiting car parking in city centres and at working places

Examples related to housing sufficiency (literature review in progress)

- Sharing space and/or things
 - E.g. sharing devices and spaces
- Optimize allocation of dwellings and households
 - E.g. re-allocating residents and homes (increased mobility on the market)
- Ownership models, property market and pricing structures
 - E.g. support schemes for sub-dividing bigger dwellings
- Planning and regulation (targeted new-built)
 - E.g. land use planning limiting new built
- Design of dwellings (e.g. floor space)
 - E.g. floor plans/layouts for flexible use

Thanks for the attention!