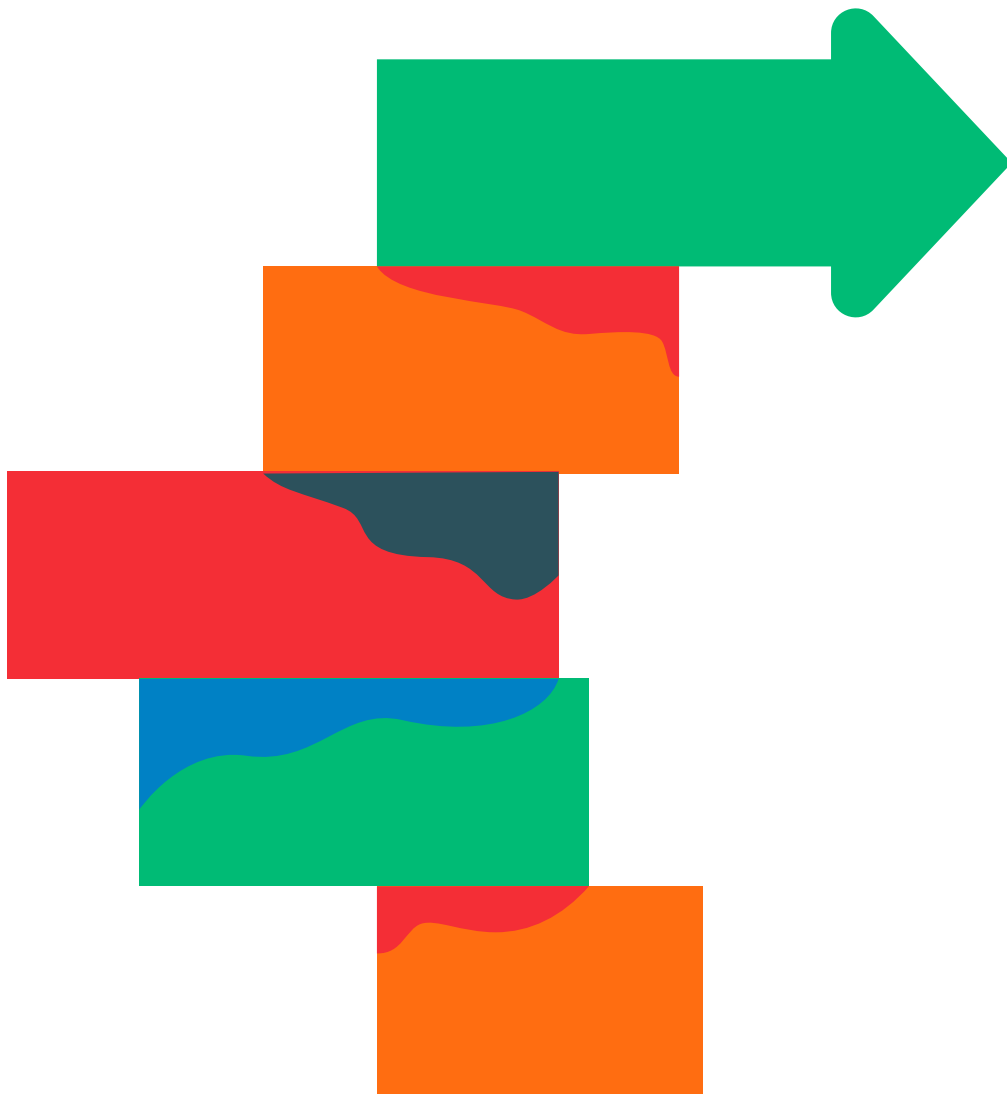


Dealing with Ripple Effects

Fact Sheet



MyFairShare

Dealing with ripple effects from mobility budgets

To avoid simply shifting problems to other sectors, mobility budgets need to be carefully designed. For example, saving my personal mobility budget could be achieved by deliveries instead of shopping myself.

Therefore clear **system boundaries** are required, which define the spatial, temporal, modal, and physical dimensions of the mobility budget. These boundaries clarify which human activities and GHG emissions are to be covered, also helping decide on the proper accounting method to quantify GHG mitigation.

The globally accepted Greenhouse Gas (GHG) Protocol defines **3 scopes**:

Scope 1 includes direct emissions, e.g. fuels used in vehicles.

Scope 2 covers emissions occurring during energy supply, e.g. from electricity generation.

Scope 3 includes all indirect emissions that occur along global supply chains.

An example for mobility budgets

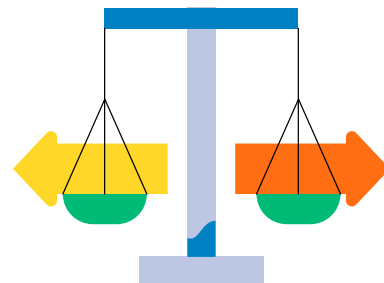
Mobility budgets for individuals in Austria, per month, in greenhouse gas emissions per passenger km for all modes of transport, calculated as scope 1+2+3 consumption-based GHG/carbon footprints.

The focus of mobility budgets on individuals and their mobility allows to clearly communicate and monitor the important goal of reducing GHG emissions of personal mobility. At the same time, it is essential to avoid unintended ripple effects.

Importantly, changing everyday mobility practices requires adequate infrastructure, cultural meaning and individual competencies. Mobility budgets should be flanked with additional measures to accelerate the uptake of low-/no-carbon mobility modes, fostering social justice and climate change mitigation.

In a nutshell

- Carbon footprints of everyday life need to be reduced to stop global warming.
- Mobility Budgets help to reduce personal carbon footprints by defining targets and benchmarks which are easy to communicate, and which are transparent and fair.
- Reducing mobility carbon footprints must not result in causing more emissions with other activities. Their ripple effects need to be addressed pro-actively.
- Changing the structural conditions for everyday life across all activities, i.e. mobility, housing, food, work, care and leisure is crucial to achieve internationally agreed upon climate protection targets.
- Individual carbon budgets for mobility as well as other domains can help communication, inform specific measures, monitor progress, and to address fairness. and justice.



Other domains

Carbon budgets can also be developed for other domains, such as buildings and housing, consumer goods, and food

It is crucial to ensure high quality service provisioning, appropriate infrastructure, positive health effects and time wealth, for a good life for all!

What is a ripple effect?

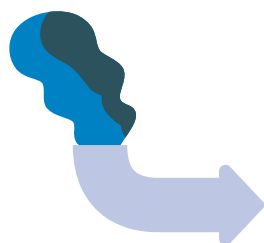
The concept of ripple effects summarizes several specific issues, including rebound effects, spillovers, moral licensing and burden-shifting.

'**Rebound effects**' occur due to the individual re-allocation of money and time saved because of certain improvements. For example, more fuel-efficient car engines can result in more car driving (direct rebound), the money saved on fuel might also be spent on air travel, as well as other goods and services ('indirect rebound').

'**Spillover effects**' can be positive, when environmental-friendly behavior spills over to other areas of consumption. They can also be negative when people calm their conscience

with environmentally friendly behavior in one area, and because they have 'done their part', engage in more energy-intensive consumption behavior in other areas. For example, because someone achieved car-free everyday mobility, they might say that holiday travel by airplane is okay.

'**Burden shift effect**' occurs when solving one environmental burden creates other, or even new environmental problems. For example, more stringent social and environmental standards in one country can result in increased production and exports in other countries with lower standards.



... in personal mobility?

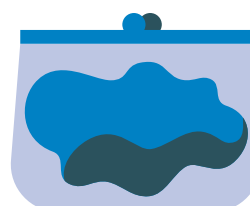
Energy efficient vehicles can increase car usage, leading to a 30-80% loss of emission reductions from efficiency improvements.

Teleworking reduces work-related commuting, but potentially results in longer overall distances travelled. Teleworking could potentially reduce 300.000 tons of CO₂-eq./yr, offset by 90 kt CO₂-eq./yr in Austria.

Spending carbon and financial savings of car sharing in **other consumption sectors**.

The closely related concept of '**moral licencing**' describes how people rationalize that certain activities with known high climate impacts are okay, because of some other climate-friendly activity. For example, going on holidays by airplane is being legitimated because of a vegan diet.

Carbon budgets in other areas of activities are needed to avoid the **increase in online shopping, food delivery and demand for technical equipment**, eventually resulting from a mobility budget.



MyFairShare is a pan-European research project that builds on the sufficiency principles to change mobility habits through individual mobility budgets.

Project partners



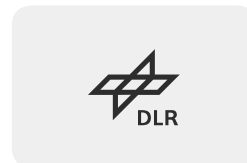
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MyFairShare is a JPI Urban Europe project selected within the ERA-NET Cofund Urban Accessibility and Connectivity (ENUAC) call. The ENUAC call aims at creating and testing new solutions and approaches for sustainable urban mobility.



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European Commission



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