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## Transformation Towards Sustainable and Resilient Infrastructures (TRAFIS II)

### Project

### Duration

Oct 2019 - Nov 2022

Infrastructure systems are undergoing a process of profound transformation. They are under great pressure to change in order to contribute to changing social objectives. Expectations and challenges with regard to climate adaptation and climate protection, the circular economy, energy system transformation including the phasing out of nuclear power, coal, mobility, decarbonisation, as well as the long-term processes of urbanisation and demographic change are setting new goals, which also affect the development of infrastructures. The new technical possibilities of information and communication technologies in the wake of the digital transformation, including the increasing familiarity of the users in their application, together with the new objectives lead to a great dynamic of change towards more efficiency, comfort and partly completely new services.

A central element of the transformation is therefore the creation of novel and more sustainable systems by coupling infrastructures that have previously operated independently of each other. Based on the findings of the previous project "[TRAFIS](#)", it becomes clear that knowledge deficits particularly concern how innovative and promising innovations can be supported in leaving niches and becoming more broadly anchored, in such a way that resource and climate protection as well as resilience are advanced more effectively. This is directly followed by the question of how to assess the evaluation of sustainability impacts in the course of such a "mainstreaming".

Against this background, the project work encompasses the following activities:

1. clarification of the main terms and concepts relating to the mainstreaming of innovations
2. systematisation of infrastructure couplings and their concise evaluation with regard to their suitability for mainstreaming
3. analysis and systematisation of political framework conditions for the mainstreaming of infrastructure innovations from a federal and local political perspective (top-down, bottom-up)
4. evaluating synergies and conflicts between the framework conditions and drawing up recommendations for action at the federal policy level
5. further development of a broadly applicable tool for assessing the sustainability of, above all, coupled innovative infrastructure solutions at municipal level with the aim of anchoring sustainability assessments in municipal planning and decision-making processes
6. testing approaches to mainstream innovative infrastructure solutions in cooperation with selected case studies in continuation of an established cooperation with the relevant local and regional actors on site.

Ecologic Institute is responsible for activities 1, 3, 4 and 6 of the above list.

## Funding

[German Environment Agency](#) (UBA), Germany

## Partner

[Leibniz Institute of Ecological Urban and Regional Development](#) (IOER), Germany  
Brandenburg University of Technology Cottbus-Senftenberg, [Fakultät 6 - Fachgebiet Stadttechnik](#), Germany  
[Dutch Research Institute for Transitions](#) (DRIFT), Netherlands  
[Ecologic Institute](#), Germany

## Team

[Susanne Langsdorf](#)  
[Mandy Hinzmann](#)  
Ariel Araujo  
Dr. Martin Hirschnitz-Garbers  
[Ilka Merbold](#)

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Germany  
literature review, expert interviews, expert workshops, multi-criteria assessment, transdisciplinary/transformational research

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