



Call for Abstracts

International Workshop: Ambitiously decarbonizing Freight and Passenger Transport and supporting Nationally Determined Contributions (NDC)

A fundamental change in international climate cooperation came up in Paris in 2015, when 195 countries agreed on submitting Nationally Determined Contributions (NDCs) to commit to their national ambitions for reducing global greenhouse gas emission (GHG) and for keeping global temperature increase well below 2°C. The process of a periodical Global Stocktake has been established to evaluate if the NDCs of the countries are sufficient for this target. As a result, it was found that the current NDCs are clearly insufficient to meet the Paris Agreement goals and that much more ambitious decarbonization pathways have to be implemented nationally.

Transport is responsible for about 25% of global carbon dioxide (CO₂) emissions. According to the International Transport Forum (ITF), the transport sector remains the sector with the fastest growing CO₂ emissions compared to the industry and energy sectors in the OECD countries. Although transport CO₂ emission levels in non-OECD countries are still relatively low, they will soon catch up with OECD countries. Passenger transport will more than double by 2050, the global vehicle stock will increase from 1 billion in 2015 to 2.4 billion in 2050, while freight transport is projected to triple. However, having the appropriate mix of technological innovation and behavioural change, policies and governance structures, transport carbon emissions can be significantly reduced and multiple co-benefits like reduced air pollution can be generated. The transport sector thus plays an important role in supporting NDCs getting in line with the Paris Agreement's targets.

This workshop seeks to identify priority areas that will have the greatest potential to reduce transport emissions in both passenger and freight transport and to share knowledge on best practice and latest research findings on emerging trends and technologies. The workshop makes the connection to the question how the transport sector can contribute to sufficiently ambitious NDCs by means of technology, policies, and governance.

Overview

This workshop is organized by the World Conference on Transport Research Society (WCTRS) Special Interest Group (SIG) f2 on Transport, Climate Change and Clean Air. The focus of the event is on innovative measures and pathways for decarbonizing freight and passenger transport. As a special issue, the link to the global NDC process is established in the workshop.

The objective of this call is to select about 10 abstracts from the research community, policymakers, and industry experts to present their work during this interactive workshop in a short pitch. They will provide impulses to the following discussion on experiences with technological transitions and policy measures in NDCs and their probability for success in different world regions. So conceptual (but positive) criticism of the current political framework or national case studies are of high interest.

The workshop will be supplemented by findings of the EU-funded research project NDC ASPECTS (www.ndc-aspects.eu). The project combines the assessment of expedient policy measures and governance options for feeding into the NDC process worldwide with the quantitative setup of ambitious and innovative sectoral decarbonization pathways, especially for the transport sector. The results of the workshop will be fed into NDC ASPECTS and thus be made available to the research and policy network of the project.

Key outcomes from this event will be drafted as inputs to the 27th Conference of the Parties (COP 27) to the United Nations Framework Convention on Climate Change (UNFCCC) in Egypt, November 2022.

Topics

This workshop will focus on innovative measures in the transport sector that can effectively reduce transport CO₂ emissions. Selected topics include the following but are not exclusive.

- Transition to a decarbonized, clean transport sector
- The role of transport for ambitious NDCs and climate action
- Approaches for deep decarbonization of freight and passenger transport
- Hydrogen and e-fuels and their roles in decarbonizing the transport sector
- Implications of electric mobility on infrastructure design, behavior and policies
- Transport and clean air
- Financing of low or zero carbon transport technologies
- The role of national and regional boundary conditions for successful transport decarbonization
- Modeling freight and passenger transport to support NDCs
- Policy and governance options for successfully implementing sectoral transition pathways in NDCs
- The possible role of Climate Clubs in the transport sector.

Schedule

Submission of Abstracts (between 300 and 500 words): June 17, 2022

Notification of abstract status: June 30, 2022

Workshop date: July 27, 2022 at 3 p.m. until 5 p.m. CET (during the WCTRS online conference)

Location: Virtual

Participation is free of charge.

Abstract Specifications

The abstract should comprehend between 300 and 500 words. The corresponding author submitting the abstract must provide complete contact details, including mailing address, phone, and e-mail. Abstracts should be sent by e-mail before June 17 to Tatiana Borovleva (tatiana.borovleva@dlr.de). Authors will be notified by June 30, 2022 of their abstract status.

We are looking forward to receiving your abstract and welcoming your participation in July 2022.

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The project NDC ASPECTS has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 101003866.