

## **A Transport Decarbonization Toolbox supporting countries, cities and companies towards carbon neutrality**

**We are not on track to hold the global warming “well-below 2°C” requiring to reach the carbon neutrality in the second half of the century as stated in the Paris Agreement!**

Transport emissions amounted to about 7GtCO<sub>2</sub>eq, which represented about 23% of energy-related emissions and 14% of all GHG emissions globally in 2010. Without mitigation measures, the current increasing demand and slow technological change could result in doubling the emissions by 2050 (2014, IPCC). In addition, to be aligned with trajectories holding the global warming well-below 2°C and targeting 1.5°C compared to pre-industrial levels, the global annual emissions should be reduced between 25% and 45% over the period 2010-2030 (2018, IPCC).

The current ambition pledged by the submitted Nationally Determined Contributions (NDCs) for the decarbonization of the transport sector by 2030 is quite low. Strategies are not detailed enough to assess the mitigation measures consistently with the long-term objective of the Paris agreement. Other analyses highlighted also that some parts of this sector are under-analyzed such as the freight, and that some mitigation drivers are underestimated such as the socio-organizational drivers for example (2018, ITF-OECD) (2017, GIZ).

We are not on track and the low-carbon transformations have to be accelerated before 2030 to be able to reach the carbon neutrality in the second half of the century. However, Parties will submit new NDCs by 2020 and have the opportunity to address this challenge by raising their decarbonization objectives by 2030 and spell out detailed transport-related measures to implement in order to limit the global warming and aligned with the goals of the Paris Agreement (2017, UNEP).

**There are three main articulation issues to consider in the revision of NDCs**

1. A significant reduction of transport-related emissions requires systemic and profound transformations in different fields and across all modes: in the socio-economic organization of activities, the use and development of low-carbon technologies, infrastructures and fuels, the provision of mobility and freight services and so on.
2. The fight against global warming should not overshadow the other objectives of the national and sectoral sustainable development, as for example the fight for universal access, the fight for safety or the fight against air pollution (2017, SUM4ALL).
3. Countries, regions, cities and companies have different action levers. Countries define national objectives that non-state actors should integrate in their visions and non-state actors can feed national governments with concrete measures to raise the ambition. A coordination between all of them is “key to enhancing future ambition” (2017, UNEP).

A consistent articulation between the different transformations, between the different national objectives, between the different scales of action and between these three elements is necessary to provide an effective contribution.

**The Transport Decarbonization Toolbox provides relevant inputs for the revision of NDCs**

Existing complementary tools, presented below in the Transport Decarbonization Toolbox, propose analytical framework to understand and articulate the profound and systemic transformations with the decarbonization and other national development objectives. In offering the possibility to test some mitigation policy packages and to explore different long-term low-emission pathways, the toolbox provide relevant inputs to detail short-term implementation action plans, increase the transport climate ambition for countries, cities and companies and inform the revision of NDCs.

Furthermore, the Transport Decarbonization Toolbox supports an extensive dialogue and engagement with cities, companies and experts in order to define relevant and implementable low emissions objectives and associated strategies, taking into account all views.

## Genesis and joint objectives of the “Transport Decarbonization Toolbox”

Five key international initiatives have been launched since COP21 to investigate specific aspects related to the sustainable transformation of the transport sector. These five initiatives are:

1. ITF’s [Decarbonising Transport initiative](#)
2. IDDRI’s [Deep Decarbonization Pathways initiative](#)
3. PPMC’s [Global Macro Roadmap for Transport Decarbonization](#)
4. WWF, CDP, UNGC, WRI’s [Science Based Target initiative](#)
5. WBCSD’s [Sustainable Urban Mobility initiative](#)

Since COP 23 in Bonn and Movin’On Summit 2018 in Montreal, they have decided to join forces and to build upon their complementarities and improve their relevance to inform policy makers on sustainable mobility. These initiatives have their own independent rationales, but they all propose policy-relevant tools for Countries, Cities/Regions and Companies, that aim to inform the design of long-term low-emission development strategies and provide concrete inputs for the revision of NDCs.

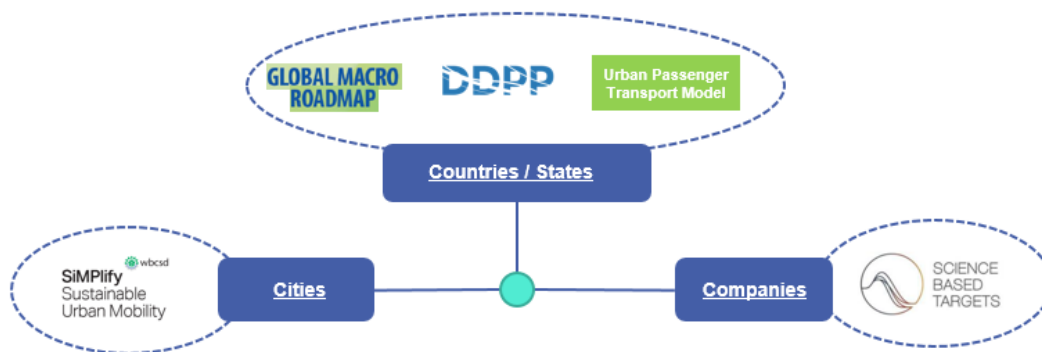
### What these tools are offering to decision makers?

These tools are tailored to different policy and decision makers working in national or local governments, in companies or in non-profit organizations and are able to integrate context-specific priorities.

They offer a complementarity of action:

- Analytical frameworks of the sustainable mobility to understand drivers of transformations
- Assessment of emission reduction targets compatible with “well-below 2°C” objective and other key transport-related indicators
- Comparison of strategies to analyze the enabling conditions for sustainable mobility and to structure short-and long-term development strategies compatible with the Paris Agreement

*Graph 1: Decision makers and tools*



*Graph 2: Complementarity of action*

|  | DDPP | Urban Passenger Transport Model | SIMPlify <small>WBCSD</small> | GLOBAL MACRO ROADMAP | SCIENCE BASED TARGETS |
|--|------|---------------------------------|-------------------------------|----------------------|-----------------------|
| Analyze sustainable mobility to understand drivers of transformations        | ✓    | -                               | ✓                             | ✓                    | -                     |
| Assess emission reduction targets and other key transport-related indicators | ✓    | ✓                               | ✓                             | -                    | ✓                     |
| Compare long-term scenarios and strategies                                   | ✓    | ✓                               | -                             | -                    | -                     |

**Scaling-up collaboration among all transport stakeholders is essential to support actual implementation of ambitious decarbonization and resilience action.**

*Sources:*

**2014. IPCC.** *Transport (Chap 8). In Climate Change 2014: Mitigation of Climate Change. Contribution of WG III to the Fifth Assessment Report of the IPCC*

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**2017. UNEP.** *The emissions gap report 2017. Synthesis report.*

**2017. SUM4ALL.** *Global Mobility Report 2017: tracking sector performance. Sustainable Mobility For All.*

**2018. ITF-OECD.** *Transport CO2 and the Paris Climate Agreement, Reviewing the impact of nationally determined contributions.*

**2018. IPCC.** *Global Warming of 1.5°C, an IPCC Special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. (Oncoming, not published yet)*