

ITF's Decarbonising Transport initiative

Acting Now for the Future

Dr. Young Tae KIM
Secretary-General, ITF

Policy Session on Decarbonizing the Transportation Sector, TRB
12 January 2022, Washington D.C., USA



An Intergovernmental Organisation

- **63 member countries** on five continents
- Administratively integrated with OECD, politically independent
- Only global platform with a mandate for all modes of transport

A Think Tank

- Policy-relevant research and analysis (more than **60 reports** per year)
- Modelling, data and statistics
- Identification of best practices

The Summit

- The world's **largest gathering of transport ministers**
- The premier global transport policy event



ITF Summit 2022

<https://2022.itf-oecd.org/>

May 18-20,
Leipzig, Germany

5 ITF Focus areas



DECARBONISATION

CONNECTIVITY

UNIVERSAL ACCESS, INCLUSION

SAFETY, SECURITY, HEALTH

DIGITALISATION

ITF Corporate Partnership Board

33

Corporate members
from modal to thematic aspect

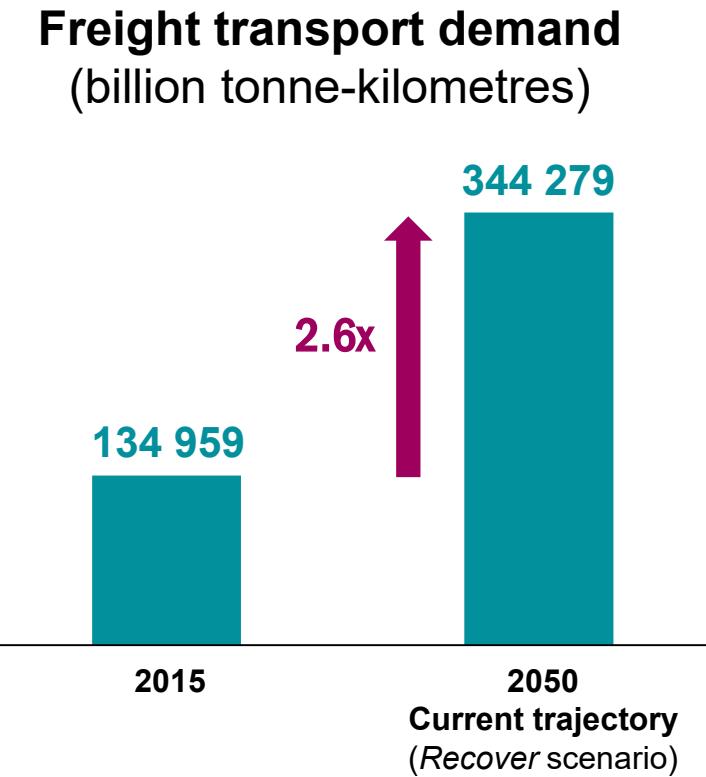
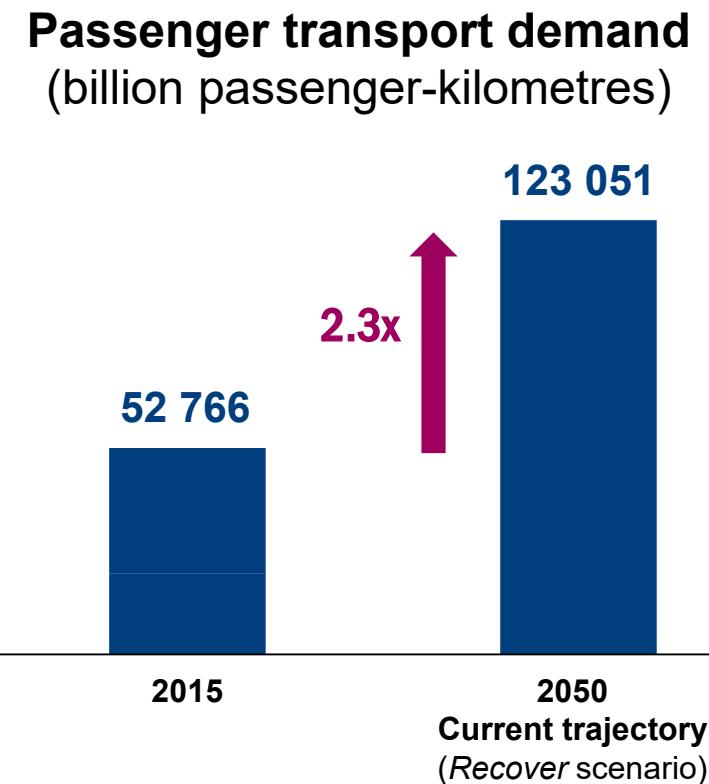
31

CPB Projects
carried out since 2015



Challenges ahead

Global demand for transport will more than double



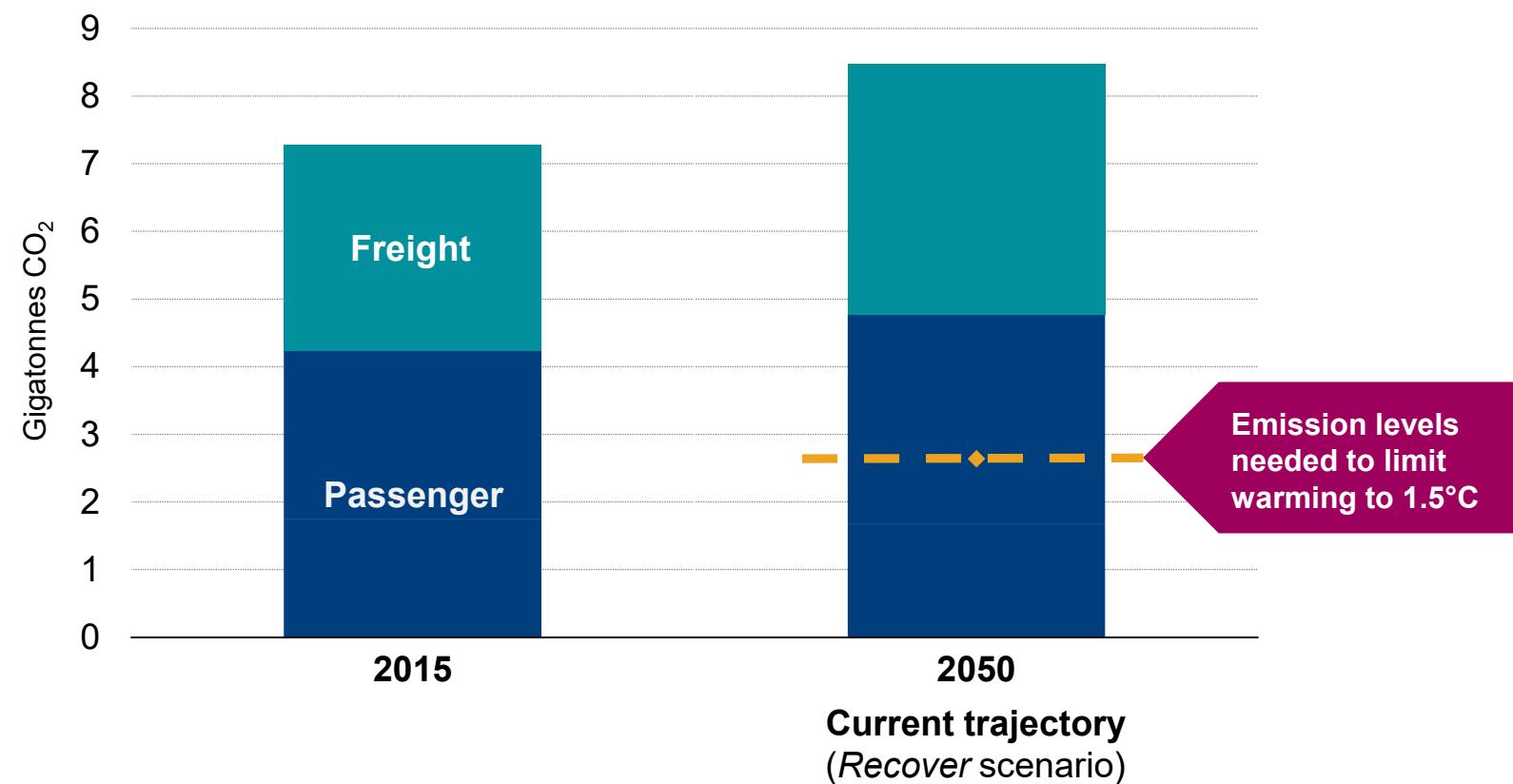
Under the current policy trajectory, **passenger activity will increase 2.3-fold** to 2050. **Freight transport will grow by a factor of 2.6**. Population growth and increasing prosperity drive increased demand in all scenarios.

Transport CO₂ emissions will grow by 16% to 2050

Under today's policies, transport will emit **16% more CO₂** in 2050 than 2015

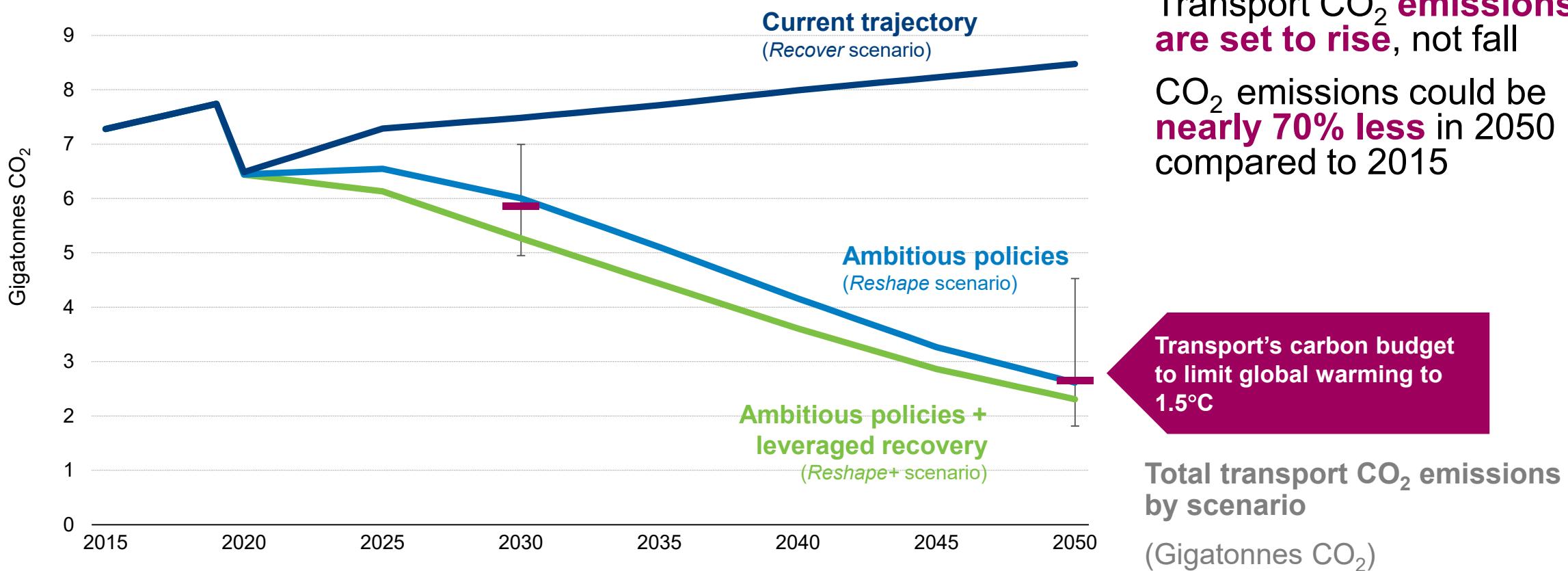
Emissions would exceed transport's carbon budget **more than three times**

Total transport CO₂ emissions by sector
(Gigatonnes CO₂)



Note: Estimates of the emissions levels needed to meet 1.5C warming levels were sourced from <https://data.ene.iiasa.ac.at/iamc-1.5c-explorer> similarly to ICCT (2020). Transport sector emissions pathways with low or no overshoot were selected before estimating the median emissions in each year. Emissions of black carbon are excluded as these are not estimated in the ITF or IEA MoMo models.

Much more ambitious policies can reverse the growth of transport CO₂ emissions



Transport CO₂ emissions are set to rise, not fall

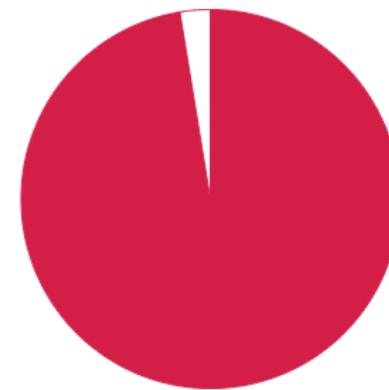
CO₂ emissions could be nearly 70% less in 2050 compared to 2015

Transport's carbon budget to limit global warming to 1.5°C

Total transport CO₂ emissions by scenario
(Gigatonnes CO₂)

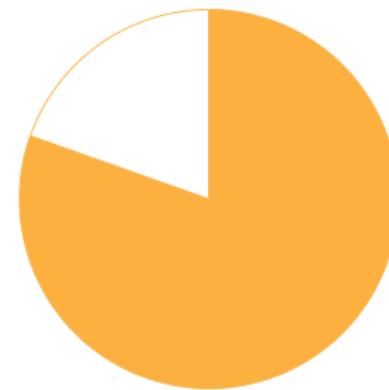
Note: ITF models used in this Outlook are typically run by five-year increments, therefore the 2020 to 2025 recovery trend may not necessarily be linear despite being shown as such in the figure. The shape of this “recovery curve” will depend on policy implementation and economic trajectories. Estimates of the emissions levels needed to meet 1.5C warming levels were sourced from <https://data.ene.iiasa.ac.at/iamc-1.5c-explorer> similarly to ICCT (2020). Transport sector emissions pathways with low or no overshoot were selected before estimating the median emissions in each year, error bars represent the 25th and 75th percentiles of scenarios. Emissions of black carbon are excluded as these are not estimated in the ITF or IEA MoMo models.

Countries are getting more serious about decarbonising transport according to COP26 commitments*



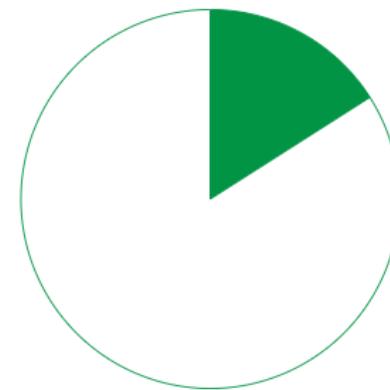
97%

of NDCs mention
transport



80%

of NDCs include
transport measures



16%

of NDCs set CO2
reduction targets

*as stated in their Nationally Determined Contributions (NDCs)

As of 06 December 2021

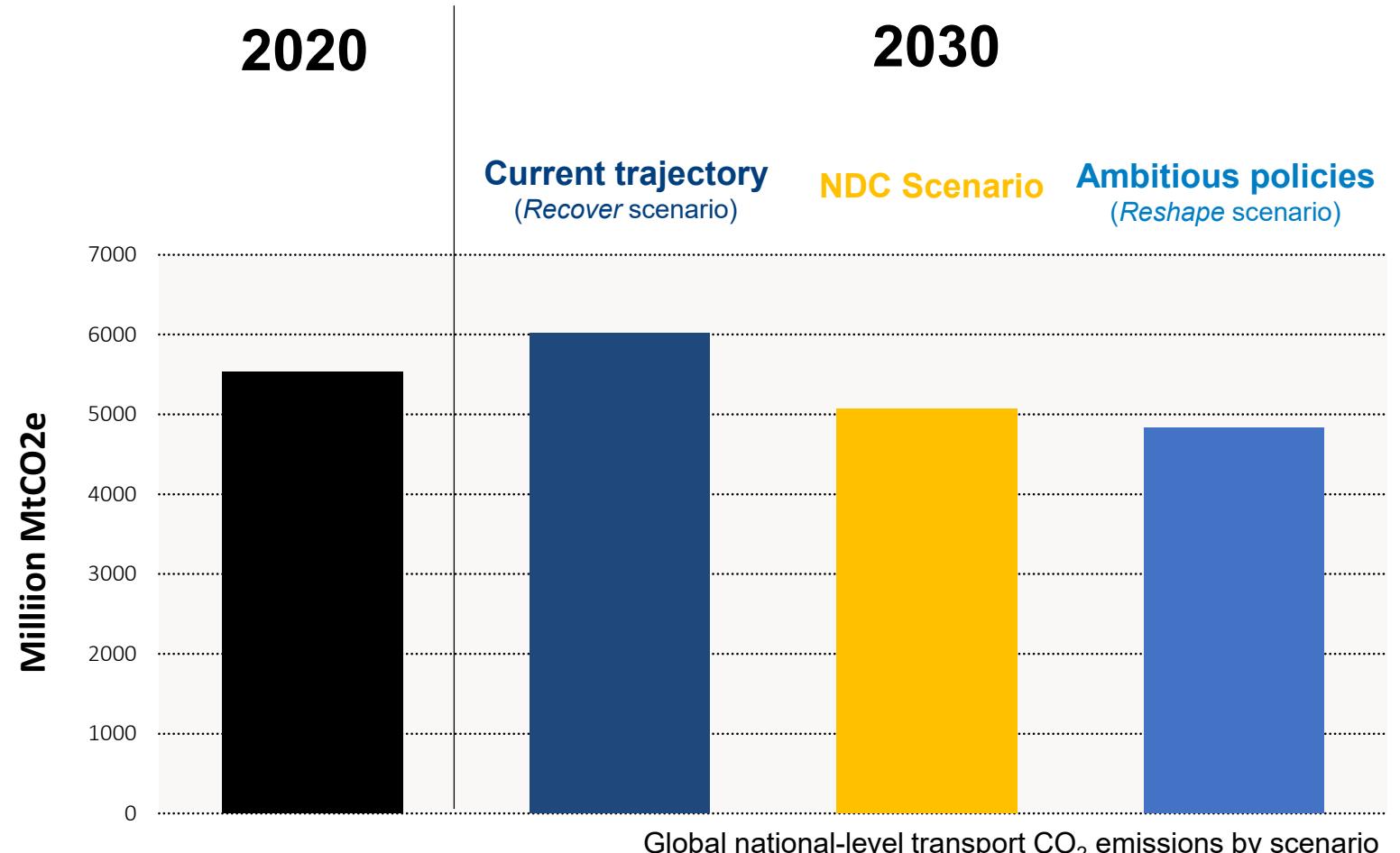
※ Source: <https://www.itf-oecd.org/ndc-tracker/en>

(ITF published in 2021 “Transport CO2 and the Paris Climate Agreement: Where are we 6 years later?”
<https://www.itf-oecd.org/sites/default/files/docs/transport-co2-paris-agreement-six-years-later.pdf>)

These updated commitments are still not enough to meet the objectives of the Paris Agreement

...but they would bring into reach a pathway to containing global warming.

[if assuming that all 2030 NDC targets are fully implemented making optimistic assumptions about the impact of CO₂ reduction measures]



* Source: <https://www.itf-oecd.org/transport-co2-paris-climate-agreement>

Notion of Sustainability

Sustainable transport and mobility is one that is universal, efficient, safe, and green. These are four goals that are essential to achieve the sustainable development goals (SDGs) and build a better future for the planet



Quoted from "Sustainable mobility for all"(World Bank, 02 AUG 2021)

ITF's Decarbonising Transport (DT) initiative

2. ITF's Decarbonising Transport initiative

The DT initiative provides decision makers with tools to select CO₂ mitigation measures that deliver on their climate commitment



- **Launched in 2016** after the Paris agreement
- **Provides targeted analytical assistance** for countries and partners
- **Gathers and shares evidence** for best practices
- **Shapes the climate change debate** by building a global policy dialogue

See: <https://www.itf-oecd.org/decarbonising-transport>

2. ITF's Decarbonising Transport initiative

The DT initiative is organised into five work streams



- **Progress tracking** – NDC analysis/tracker
- **In-depth sectoral reports** – identify effective policies for sub-sectors, e.g. urban passenger, road freight, maritime etc.
- **Focus studies** – analyse specific decarbonisation issues, e.g. impact of electrification on tax revenues
- **Pathway development** – help regions/countries/cities pathways to meet their transport CO₂ reduction ambitions
- **Policy dialogue** – organise dialogue on transport and climate change (e.g. ITF summit, workshops, briefings) → contribute to UNFCCC and COP processes

See: <https://www.itf-oecd.org/decarbonising-transport>

The ITF Transport Climate Action Directory brings together evidence to help policy makers choose mitigation actions that work

The Directory provides over **80 mitigation measures** with the evidence to assess their effectiveness.

Each measure contains **information on CO₂ emissions impacts, costs, co-benefits and other considerations**.

"The International Transport Forum's TRANSPORT CLIMATE ACTION DIRECTORY is a key tool for moving from ambition to climate action - our most urgent challenge in climate policy today."

Governments now have a new resource to help them choose mitigation and adaptation measures that work in their specific context and that support their objectives."



Patricia Espinosa

Executive Secretary
UNFCCC

See: <https://www.itf-oecd.org/tcad>

2. ITF's Decarbonising Transport initiative

Current DT project focus areas: Hard to abate sectors (“DT Implement”) and emerging economies (“DTEE”)

DT Implement

Decarbonising Transport - Driving Implementation Actions

The ITF created three country-led stakeholder for to scale transport solutions that help reduce carbon emissions from the hard to abate sectors: **heavy-duty road freight transport, shipping and aviation.**

More info: <https://www.itf-oecd.org/dt-implement>

DTEE

Decarbonising Transport in Emerging Economies

The DTEE project supports transport decarbonisation in **Argentina, Azerbaijan, India and Morocco**. Country-specific modelling tools and policy scenarios help participating governments implement ambitious CO₂-reduction initiatives

More info: <https://www.itf-oecd.org/dtee>

2. ITF's Decarbonising Transport initiative

Countries participating in DT Implement project as of today (30 + EU)



Still possible for countries to join!

#TogetherForOurPlanet

- ITF supported the UK COP Presidency in organising an inaugural **Transport Ministerial Meeting** at COP26
- ITF Secretary General delivered a **statement in the High Level Segment** of the COP26 Session for the first time
- ITF organised **two side events** on
 1. “The Role of Gender Equality in Decarbonising the Transport Sector”
 2. “Decarbonising Transport: Driving Implementation Actions and Turning Targets into a Transformation”
- As a focal point for transport in the UNFCCC, ITF was a leading organiser of the **Marrakech Partnership Transport Action Event** on Transport Day



* ITF policy brief “Transport at COP 26” (<https://www.itf-oecd.org/sites/default/files/docs/cop26-transport-policy-brief.pdf>)

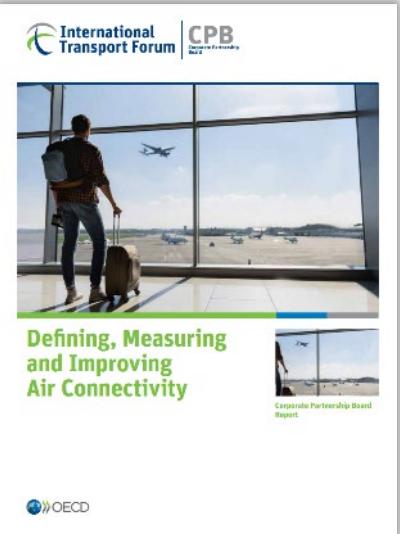
Decarbonising Air Transport

– Acting now for the future

3. Decarbonising Air Transport

ITF Aviation Projects and Reports

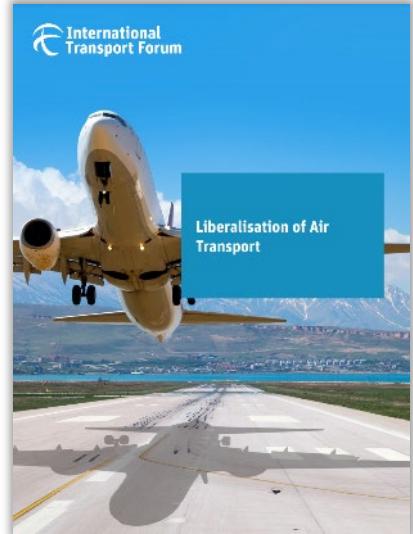
Connectivity



Airport capacity



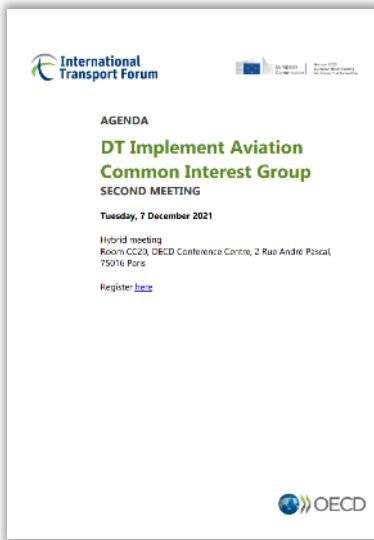
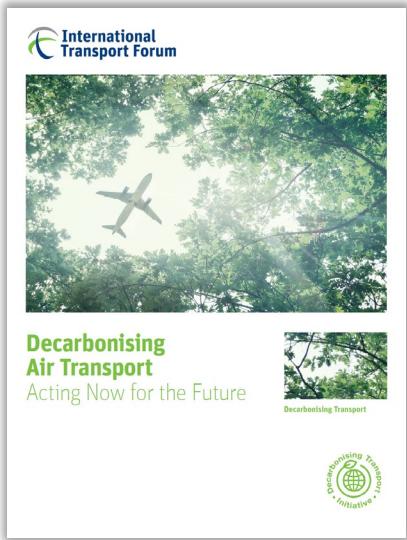
Regulation



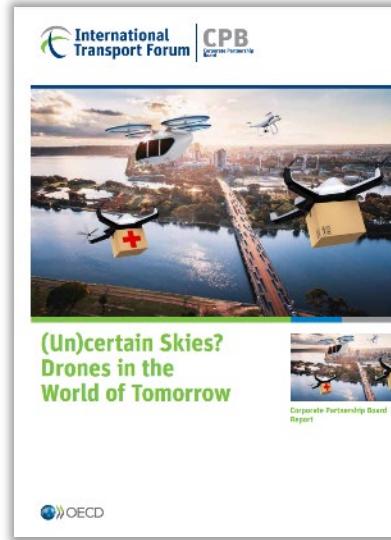
3. Decarbonising Air Transport

ITF Aviation Projects and Reports

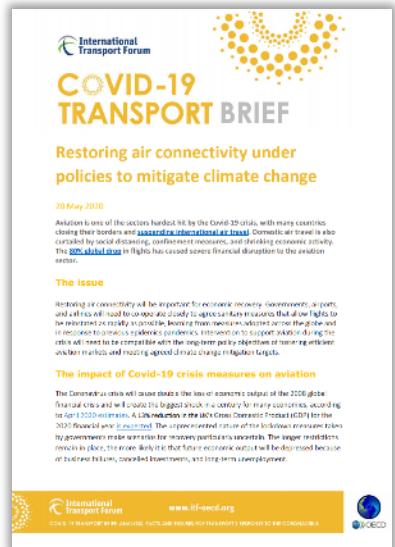
Decarbonisation



Innovation



Covid-19 recovery

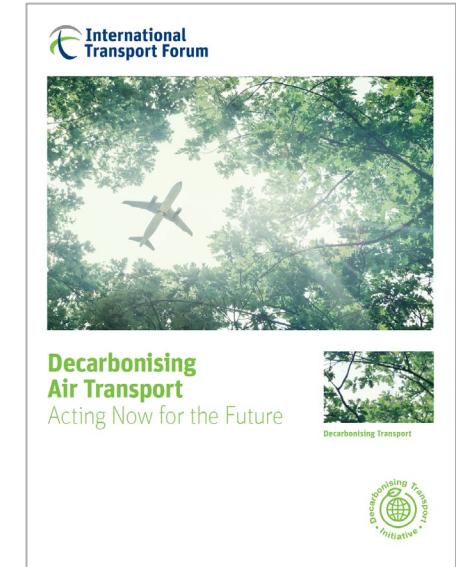


Forthcoming

- Reshaping the Aviation Sector in the Wake of Covid-19 Roundtable – publication coming up in 2022
- Airport Capacity and Competition Roundtable – event coming up in 2023

Existing CO₂ reduction targets and initiatives in aviation are not enough to meet the targets of the Paris agreement

- Despite significant energy efficiency improvements, **air transport remains one of the most energy- and CO₂-intensive transport modes**
- Despite Covid-19, **long-term projections still point to a significant increase in aviation activity**
- The sector faces **limited and costly CO₂ reduction options**



See: <https://www.itf-oecd.org/decarbonising-air-transport>

New technologies and alternative energy carriers will be key to decarbonise the sector

Reduce energy needs

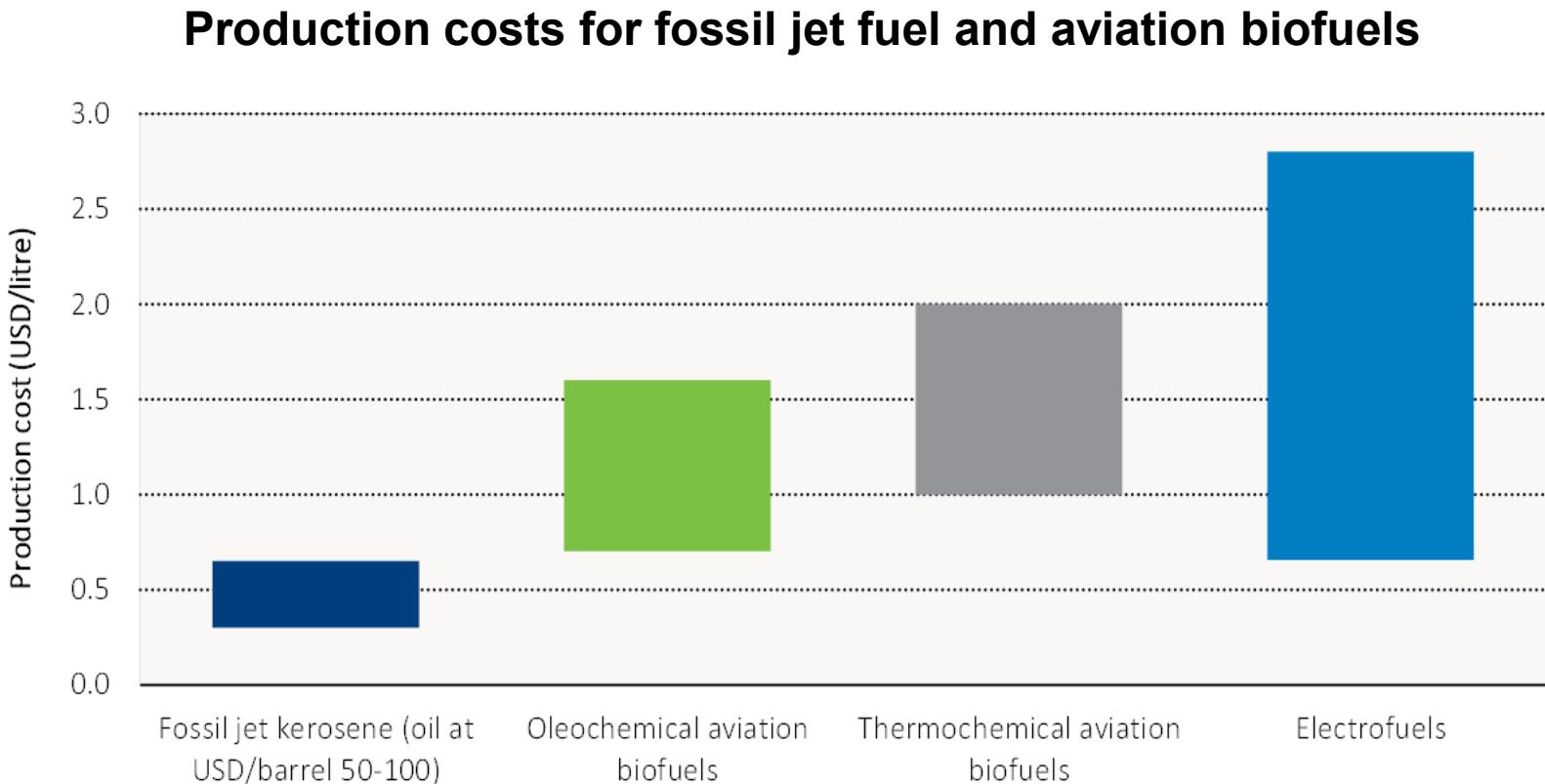
- Energy efficiency improvements of aircraft
- Alternative propulsion systems of aircraft

Switch to alternative energy carriers

- **Sustainable aviation fuels (SAF)**
- Electricity
- Hydrogen

The high production costs of Sustainable Aviation Fuels pose a significant barrier for their uptake - a supportive policy framework is needed

Sustainable Aviation Fuels (SAF) comprise biofuels and synthetic fuels



Top tasks for policy makers to decarbonise aviation

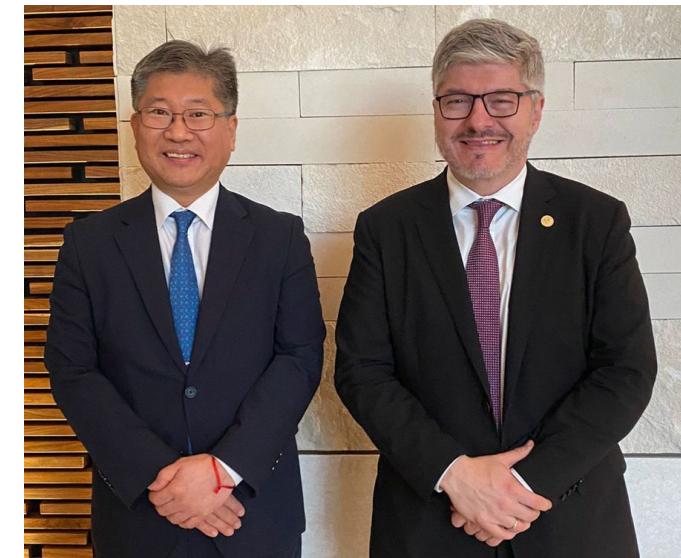
-  1 **Integrate decarbonisation requirements into Covid-19 support/recover packages**
-  3 **Establish a clear long-term vision by setting and monitoring emissions reduction targets**
-  5 **Strengthen regulatory frameworks to accelerate energy efficiency improvements of aircraft**
-  2 **Adopt ambitious fuel quality requirements to encourage the take up of SAF**
-  4 **Introduce carbon pricing**
-  7 **Encourage the deployment of clean energy carriers; support them by de-risking industry investments**
-  6 **Support an international approach & implement decarbonisation policies domestically/regionally**

3. Decarbonising Air Transport

Collective efforts in the aviation sector

ACI World Annual General Assembly (WAGA) 2021:

- First in-person meeting after the Covid-19 outbreak), Cancun, 21-24 November 2021
- Sustainable recovery at the heart of industry discussions
- ITF and ACI World strengthen their cooperation on economics, sustainability, and airport capacity issues



ITF-ICAO strategic discussion for strengthening future cooperation

3. Decarbonising Air Transport



Air-rail modal shift :
We need to focus on interoperability for increased systemic efficiency



Thank you

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