



# SUMMARY REPORT

2021 ANNUAL MEETING

**TTG** Transport  
Task Group

## EXECUTIVE SUMMARY

The 2021 Transport Task Group annual meeting was held on September 30, 2021. The meeting was attended by 41 participants from around the globe, including officials of eleven G20 governments (Argentina, Brazil, Canada, European Union, Germany, Indonesia, Italy, Japan, Mexico, United Kingdom, United States), two guest countries (Uruguay, Singapore), and three international organizations.

The meeting was focused on the transition to zero-emission vehicles. Hearing from government officials around the world and from international experts, the group learned about policy developments, practical experiences of governments, and research on effective policies to accelerate this transition.

The meeting launched with introductory remarks from the TTG co-leads—the United States of America, and the European Commission—followed by remarks from the current President of the G20, the Italian Republic. These were followed by a series of videos submitted by governments that highlighted recent transportation developments in different regions. A panel presentation on policy developments in 2021 and an outlook on what's to come in 2022 followed. We also heard from the United Kingdom about the Zero Emission Vehicles Transition Council and its ambitious goals and activities to accelerate the global transition to zero-emission vehicles. After this, we heard from international experts about the current pace of this transition and what governments can do to close the gap with climate goals, including by strengthening policies to transition the heavy-duty vehicle sector toward zero emissions. The Italian government then presented their research on the role of hydrogen in the transition to zero-emission heavy-duty vehicles. Participants then had breakout discussions about the role that the TTG should play in supporting the transition to zero-emission heavy-duty vehicles among the G20 economies and their neighbors. The day concluded with remarks from the United States and the next G20 President, the Republic of Indonesia. A full list of participants and affiliations is available from the webpage for the meeting. Presentations are also available on the site.

## ABOUT THE TRANSPORT TASK GROUP

The Transport Task Group (TTG) was established in 2014 to serve as a voluntary platform for G20 countries to share experience and work together to improve the energy and environmental performance of motor vehicles, especially heavy-duty vehicles (HDVs). The group is co-led by the United States Environmental Protection Agency (US EPA) and the European Union's Directorate-General for Climate Action (DG-CLIMA). It is supported by two implementing organizations: the International Council on Clean Transportation (ICCT) and the Global Fuel Economy Initiative (GFEI). Participation in the TTG is voluntary and open to all G20 economies and their neighbors.

## MEETING

A full list of participants and affiliations is available from the webpage for the meeting. Presentations are also available on the site.

The principal objective of the TTG meeting was to evaluate the impact of Covid-19 on policymaking processes and to learn about key policy advances in the transportation emissions space. The meeting began with introductory remarks by the current President of the G20- the Kingdom of Saudi Arabia, and by the co-lead of the TTG, the United States of America. Then the ICCT provided an overview of the key policy developments that have taken place over the year. Participants divided into groups and discussed how Covid-19 was impacting their priorities and operations. Later sessions featured an update on an upcoming TTG report on the air quality benefits of updated heavy-duty standards in G20 countries. Presentations by the Kingdom of Saudi Arabia followed this discussion and highlighted new studies on e-fuels and updates to the country's fuel economy standards. The TTG then heard from the Ricardo Group, which conducted an in-depth lifecycle study for the EU comparing alternative vehicles to traditional ones with internal combustion engines. The group concluded the meeting by having another break-out session to brainstorm topics for the TTG's work program, and finally hearing concluding remarks from our group leads and from the next President of the G20, the Italian government.

## AGENDA

**Date: Thursday, September 30, 2021**

Times are in Eastern Time (New York / Washington DC)

TIME	TOPIC	DURATION
09:00-09:05	Opening Remarks <b>Speakers:</b> <ul style="list-style-type: none"> <li>» Jim Blubaugh, Director, International, Office of Transportation and Air Quality, U.S. Environmental Protection Agency</li> <li>» Alexandre Paquot, Head of Unit, Road Transport, DG Climate Action, European Commission</li> </ul>	5 min
09:10-09:15	Group photo, Overview of TTG and activities <b>Speaker:</b> <ul style="list-style-type: none"> <li>» Diana Galperin, Office of Transportation and Air Quality, U.S. Environmental Protection Agency</li> </ul>	5 min
09:15-09:30	Ice breaker introductions - Breakout Discussion	15 min
09:30-09:40	Videos from country participants Country participants are invited to submit a short video highlighting 2020-2021 updates on transportation and transportation policies.	10 min

09:40-10:10	<p>Panel Presentation of Policy Development of 2021 and Outlook for 2022</p> <p><b>Panel Speakers:</b></p> <ul style="list-style-type: none"> <li>» Elizabeth Connelly, Energy Technology and Transport Analyst, International Energy Agency (IEA)</li> <li>» Canadian Government, Mark Cauchi, Director General, Energy and Transportation Directorate, Environment and Climate Change Canada</li> <li>» Drew Kodjak, Executive Director, ICCT: Overview of transport policy developments in select G20 countries</li> </ul> <p><b>Topics:</b> What progress have countries made in setting net-zero targets? What does this mean for global transportation? How is Canada developing domestic transportation policies to meet its climate targets? What are other policy updates to the transportation sector to address climate change and air pollution?</p>	30 min
10:10-10:30	<p>Information and Q&amp;A on ZEV Transition Council</p> <p><b>Speaker:</b></p> <ul style="list-style-type: none"> <li>» Stephanie Edwards, Head of Sector Strategy for International Climate Change, Department for Business Energy and Industrial Strategy, The United Kingdom</li> </ul> <p><b>Topics:</b> What is the ZEV Transition Council, and what is it planning to do next?</p>	20 min
10:30-10:45	Break	15 min
10:45-11:15	<p>Panel Presentation and Q&amp;A: Pace of the global transition to ZEV technologies</p> <p><b>Panel Speakers:</b></p> <ul style="list-style-type: none"> <li>» Josh Miller, Modeling Center Manager, ICCT</li> <li>» Sara Baldwin, Director of Electrification Policy, Energy Innovation</li> </ul> <p><b>Topics:</b> ICCT to present study on the pace of the global ZEV transition, Sara Baldwin will discuss key findings from the study: Goldman School of Public Policy at University of California Berkeley: 2035 The Report: Transportation.</p>	30 min
11:15-11:30	<p>Speaker Presentation: Zero-emission HDVs—where to start? ICCT overview of HDV ZEV policy options in advanced economies and emerging markets</p> <p><b>Speaker:</b></p> <ul style="list-style-type: none"> <li>» Ray Minjares, HDV program director, ICCT</li> </ul>	15 min
11:35-11:45	Break	10 min
11:45-12:00	<p>Speaker Presentation: H2 as Opportunity for ZEHDVs, 2021 G20 President, Italian Republic</p> <p><b>Panel Speakers:</b></p> <ul style="list-style-type: none"> <li>» Viviana Cigolotti, Department of Energy Technologies and Renewable Sources, ENEA-Italian National Agency for New Technologies, Energy and Sustainable Economic Development</li> </ul> <p><b>Topics:</b> Use of H2 for HDV in Italy</p>	15 min

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12:00-12:30	<p><b>Breakout Discussion</b></p> <p><b>Goal:</b> What is the TTG's role to inform HDV ZEV policies in G20 countries and beyond?</p> <p><b>Divide into groups and discuss:</b></p> <ul style="list-style-type: none"><li>» What is feasible in your region for accelerating the transition to ZEV HDVs?</li><li>» Discuss: Pilot programs, voluntary programs, CO2 standards and ZEV regulations, fiscal incentives, charging infrastructure, low-carbon fuel policies, delivery/urban vehicles</li></ul>	30 min
12:30-12:40	<p><b>Closing Remarks</b></p> <p><b>Speakers:</b></p> <ul style="list-style-type: none"><li>» Jim Blubaugh, Director, International, Office of Transportation and Air Quality, U.S. Environmental Protection</li><li>» Risal Wasal, 2022 G20 President, Republic of Indonesia</li></ul>	10 min
12:45	<b>Adjourn</b>	

## SUMMARY OF PROCEEDINGS

This meeting's theme is on the role of road transport and especially the heavy-duty vehicle sector in contributing to global climate goals, and on the policies and technologies needed to reach these goals. The day began with introductory remarks, followed by an overview of the work completed by the TTG over the preceding year. During introductions, the current President of the G20, the Italian Republic, highlighted their work on intermodal travel and making urban transportation more sustainable.

The morning panel presentation focused on the growing number of countries with net zero economy-wide GHG targets and the implications of these targets for the transportation sector. The panel began with a presentation by IEA on their Net Zero by 2050 analysis and the implications of that analysis for policies needed to support the transition to zero-emission vehicles. The IEA analysis finds that to meet climate goals, nearly all new vehicle sales—including heavy-duty trucks—must be electrified by 2050. Along with the report, IEA published an online tool to enable browsing of their data and assumptions.

Next, Canada highlighted their experience in setting and working toward net zero targets. In their submitted Nationally Determined Contribution to the Paris Climate Agreement, the Canadian government included a 40-45% reduction below 2005 levels by 2030. In Canada, the second largest source of emissions is the transportation sector. To achieve its net zero target, Canada is targeting a whole of government approach, including increased carbon prices, a clean fuels standard, and mandatory measures to reach 100% zero-emission light-duty vehicle sales by 2035.

We concluded the panel session with a presentation from ICCT about what other countries have achieved this year. ICCT highlighted how many countries are putting in place zero-emission goals and regulations for light-duty vehicle sales. The next steps should include turning attention to heavy-duty vehicles, which are lagging light-duty vehicles in terms of adoption of CO2 standards and ZEV regulations.

The next morning session was led by the United Kingdom, which introduced the work of the ZEV Transition Council, which was established in November 2020 with the mission to accelerate the global transition to zero-emission vehicles. The ZEV Transition Council includes several of the largest vehicle markets and is interested in broader involvement of G20 economies. Its 2022 action plan includes narrowing in on CO2 regulations, infrastructure, and heavy-duty vehicles. The Transport Task Group will look for ways to stay engaged with the ZEV Transition Council on topics of mutual interest.

After a short break, the final panel presentation joined the virtual stage to discuss the pace of the global transition to ZEV technologies. ICCT

kicked off with a presentation on their forthcoming study on the pace of the global transition and what governments can do to close the gap with climate goals. Energy Innovation followed with an introduction to 2035 report 2.0, which focused on the potential impacts of rapid transport electrification in the United States. ICCT closed the session with a presentation on effective policy options to accelerate the uptake of zero-emission heavy-duty vehicles. In this presentation, ICCT emphasized the importance of further developing zero-emission vehicle targets and performance standards and supporting these with other types of policies, including fiscal incentives, infrastructure programs, fleet purchase requirements, and zero-emission operation zones.

The speaker sessions concluded with a presentation from the Italian Republic, which highlighted the research and development work on hydrogen ongoing in the country.

Finally, the group divided into breakout groups and brainstormed opportunities for the TTG to support the development of zero-emission heavy-duty vehicle policies in G20 economies and beyond. The conclusions formed by these groups are noted in the Action items below.

## ACTION ITEMS WITH THE TTG

How the TTG can support near-term policy actions to introduce zero-emission heavy-duty vehicles:

- » Continue to serve as a forum for countries to share experiences with different powertrains and technologies, e.g., hydrogen, catenary.
- » Continue to share experiences on policies in G20 countries, such as fleet turnover policies.
- » Continue to share expert analysis on topics such as:
  1. lifecycle emissions of electric vehicles. Particularly, country-specific outlooks for well-to-wheel emissions.
  2. long-term impacts of Covid-19 on transportation demand.
- » Continue to serve as a forum to share experiences on implementing or preparing to implement Euro VI and US 2010 equivalent emissions standards.

How the TTG can support longer-term policy actions on zero-emission heavy-duty vehicles:

- » Continue to facilitate knowledge sharing among countries and identify synergies. Members noted that countries have different circumstances and experiences; therefore, it is important to contextualize/adapt solutions as opposed to taking a one-size-fits-all approach.
- » The TTG could act as a forum for countries to disseminate information on pilot projects and to learn about different decarbonisation pathways for different segments of the transportation sector. Countries noted the importance of solutions to be tailored to different heavy-duty vehicle types.

## LIST OF PARTICIPANTS

41 participants from eleven G20 governments, two guest countries, and three international organizations:

<b>Argentina</b>	
Gustavo Rinaldi	Ministerio de Transporte
Julio Vassallo	Ministry of Environment and Sustainable Development
María Inés Hidalgo	Secretaría de energía

<b>Brazil</b>	
Irineu Barreto	Ministério das Relações Exteriores

<b>Canada</b>	
Julie Deschatelets	Environment and Climate Change Canada
Mark Cauchi	Environment and Climate Change Canada
Scott Blurton	Environment and Climate Change Canada
Xiaorong Qiao	Transport Canada

<b>European Union</b>	
Alexandre Paquot	European Commission, DG Climate Action
Ana Maria Danila	European Commission, DG Climate Action
Matteo Ordinanovich	European Commission, DG Climate Action

<b>Germany</b>	
Franziska Alarich	Germany Federal Ministry of Economics and Technology

<b>Indonesia</b>	
Muhammad Farid Ardiansyah	Land Transport directorate, Ministry of Transportation
Mohamad Risal Wasal	Land Transport Infrastructure

Italy	
Alessandro Caretoni	Italian Ministry of Ecological Transition
Antonino Genovese	Italian National Agency for New Technologies, Energy and Sustainable Economic Development
Daniele Villoresi	Italian Ministry of Ecological Transition
Riccardo Simone	Italian Ministry of Ecological Transition
Viviana Cigolotti	Italian National Agency for New Technologies, Energy and Sustainable Economic Development

Japan	
Nishi Hidetaka	Automotive Industrial Strategy Office, Manufacturing Industries Bureau Ministry of Economy, Trade and Industry

Mexico	
Francisco Javier García Osorio	Comisión Nacional para el Uso Eficiente de la Energía
Sandra Alvarez	Comisión Nacional para el Uso Eficiente de la Energía

Singapore	
Ming Teck Sim	National Environment Agency Singapore
Nick Tan	National Environment Agency Singapore
Samuel Chong	National Environment Agency Singapore
Zaini Musa	National Environment Agency Singapore

United Kingdom	
Stephanie Edwards	International Climate Change, Department for Business Energy and Industrial Strategy

United States	
Diana Galperin	U.S. Environmental Protection Agency
Jim Blubaugh	U.S. Environmental Protection Agency
Katherine Buckley	U.S. Environmental Protection Agency
Richard Baldauf	U.S. Environmental Protection Agency

Uruguay	
Emiliano Rosello	Ministerio de Industria, Energía y Minería

<b>Non-government Participants</b>	
Drew Kodjak	International Council on Clean Transportation
Elizabeth Connelly	International Energy Agency
Georg Bieker	International Council on Clean Transportation
Jessica Chu	International Council on Clean Transportation
Josh Miller	International Council on Clean Transportation
Oscar Delgado	International Council on Clean Transportation
Ray Minjares	International Council on Clean Transportation
Samantha Pettigrew	International Council on Clean Transportation
Sara Baldwin	Energy Innovation

