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Session Report

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TECHNICAL SESSION RF4: HOW CAN GOVERNMENTS SUPPORT AND HELP ACCELERATE A RESILIENT TRANSITION TO LOW CARBON TRANSPORT?
TUESDAY FEBRUARY 8, 09.45 AM TO 11:15 AM (CALGARY)

1. KEYWORDS

Decarbonisation, Resilience, Covid-19, Response, Recovery, Technology

2. PRESENTATION OF THE SESSION

This session will introduce work carried out as part of the International Transport Forum (ITF) Decarbonising Transport Initiative (DTI), which helps governments and industry translate climate ambitions into actions.

The session will initially review government responses to the Covid-19 pandemic, touching on ITF work carried out in South-East Asia, and exploring how building greater resiliency to COVID-19 can also help governments develop climate resilient pathways to prepare for future disruptions to the transport sector.

The session will then focus on the upcoming technology transition, reviewing current policies and market trends in low carbon vehicles, and potential challenges that need to be addressed to ensure a resilient technology transition, including focusing on labour and skills, government fuel duty revenues and material supply chains. The session will then touch on heavy duty road freight, one of the most challenging modes of transport to decarbonise, with a presentation on recent ITF work on technology and policy pathways conducted with policymakers and industry.

3. PROGRAMME OF THE SESSION

Session Chair: Patrick Malléjacq, Secretary General, PIARC
Session Organiser: Matteo Craglia, Analyst, International Transport Forum
Session Secretary: Matteo Craglia, Analyst, International Transport Forum

Person	Organisation, Position…	Title of the presentation
Young Tae Kim	Secretary General, International Transport Forum	Welcome and session introduction
Patrick Malléjacq	Secretary General, PIARC	Welcome and session introduction
Wei-Shiuen Ng	Advisor on Sustainable Transport and Global Outreach, International Transport Forum	Covid-19 response and recovery guidelines
Vatsalya Sohu	Transport Research Officer, International Transport Forum	Cleaner Vehicles – Achieving a resilient technology transition
Matteo Craglia	Transport Analyst and Modeller, International Transport Forum	Hard-to-Abate - Decarbonising Heavy Duty Road Freight
Else-Marie Marskar	Senior Principal Engineer, Norwegian Public Roads Administration	Greening Freight Transport: Norway's strategies; Work of PIARC Committee 2.3

Luis Martinez	Senior Analyst, International Transport Forum	The Space Race – How best to allocate road space in urban environments?
Patrick Malléjacq	Secretary General, PIARC	Q&A Moderation
Young Tae Kim	Secretary General, International Transport Forum	Closing remarks

4. TECHNICAL FINDINGS AND DEBATE

ITF supported ASEAN Member States in establishing regional and national transport connectivity recovery plans with a focus on resilience and sustainability, as well as developing regional COVID-19 recovery guidelines on cross-border road freight transport. The work identified three key priorities:

- Ensure Transport Workers' Safety and Training,
- Preserving Connectivity for Efficient and Resilient Supply Chains,
- Building Back Better through Digital, Resilient and Decarbonised Transport Connectivity.

Findings from ITF's Cleaner Vehicle report centre around the significant international momentum behind decarbonising transport. Policy actions are increasingly important to foster a resilient transition to electric and digital. Three reasons:

- Significant economic opportunities
- Importance of automotive and energy industries
- Climate change mitigation and risks of delaying action

However, the report also highlights three challenges posed to a resilient transition which must be tackled:

- Demand for new materials and related impact on supply chains
- Revenue losses from fossil fuel taxes as vehicle fleets decarbonise
- Impacts on jobs and skillsets as automotive technologies shift from carbon to electric and analogue to digital

Findings from ITF's Driving Implementation Actions Project on heavy duty road freight include:

- Deploying refuelling infrastructure in the 2020s is essential to reach ambitious decarbonisation targets.
- For urban delivery and short distance applications battery electric vehicles are well placed in the near term and lead to significant emissions reductions.
- Other more challenging use cases e.g. long-haul are less certain and infrastructure decisions are crucial.
- There is some consensus that 'no-regret' options include: improving grid infrastructure near main roads and areas of high demand, and developing modular electrified vehicles that can accommodate different technologies and hedge against uncertainty.

It is also important to highlight that ITF expect ~50% of heavy duty road freight emissions in 2050 to be from countries outside the OECD and China meaning policy actions have to be directed towards emerging economies too.

Insights on Norwegian low carbon transport policy highlighted the importance of beginning the decarbonisation of road freight with shorter trips first where technology readiness levels of battery electric vehicles are higher. This may help to positively impact zero emission long haul freight operations in the long term by stimulating the adoption of charging infrastructure. To drive the initial adoption of low carbon vehicles schemes such as public procurement could help. Norway has developed a comprehensive national transport plan with a range of policy measures to reduce carbon emissions.

ITF's Space Race report investigated dynamically allocating road space in urban environments. Somekey findings include: Optimising road management to match dynamically demand and safety can improve 15% overall safety (conflicts levels). Bicycles are the vehicle where safety changes would suffer higher increase as they coexist unsegregated several time with vehicles at much higher speed in the same space (35%). Pedestrians are also improved, by better traffic segregation but also from space that is converted from

parking to sidewalks (12%). Better management also reduces double parking, specially for freight, improving also motorised vehicles fluidity, although at lough free flow speeds.

5. RECOMMENDATIONS FOR DECISION MAKERS, FOR PIARC OR FOR INTERNATIONAL ORGANISATIONS

Recommendations for developing recovery guidelines from Covid-19 include:

- Carry out stakeholder assessment and mapping
- Define governance structure for implementation
- Maintain the multiple stakeholder groups engaged throughout the implementation process
- Secure a sufficient capacity building support

Recommendations for navigating the low carbon technology transition:

- Maintain or introduce near- and mid-term **policy support for clean vehicles** and for the low-carbon energy they need
- Prioritise a transition to **direct electrification and renewable energy**
- Address challenges on **material efficiency and sustainable supply chains**
- For a **resilient transition from fuel duties**, seize opportunities from increased connectivity and accelerating enabling regulation
- Include infrastructures for clean energy transport & distribution and digital connectivity of road transport in **Covid-19 recovery packages for a resilient transition**
- Prepare for transitions in **jobs and skillsets**
- Accelerate the development of **other low-carbon technologies**

Recommendations on how governments can help drive low carbon technology adoption include:

- Set targets
- Secure knowledge, infrastructure and profitability
- Co-operate and share: Internationally and with other sectors, With industries and businesses
- Evolve, explore, test, implement, and learn
- Focus on result (less CO_2) rather than technology or measure
- Use the purchasing power of the public
- Make haste

Recommendations for increasing safety in urban environments include:

- Safety and Predictability: more modes in a shared space at different speeds increase the likelihood of conflicts and accidents. Safe-system principles should guide the re-allocation of space. Setting default low and safe speeds could go a long way.
- Data and measurement: appropriate space consumption indicators for policy and appraisal assessments
- Building more Inclusive, more Sustainable and more Resilient urban transport requires adjustments to the space allocation rationale and the speed of urban activity

6. PREPARATION OF THE SESSION

This session was planned, designed and organised as with the help from the following individuals:

Patrick Malléjacq, Secretary General, PIARC
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