ENHANCING SUSTAINABILITY OF RAILWAYS - UIC INITIATIVES

Smart solutions for railway transport

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UIC FUNDAMENTAL VALUES DEPARTMENT DIRECTOR & MIDDLE EAST REGION COORDINATOR

ESCAP/OSJD online experts meeting, 8 July 2020
UIC global cooperation issues serving the entire railway community

Environment & Sustainable Development

Safety & Security

Freight / Intercontinental corridors

Railway Signaling & Control Command

Standardisation
UIC leaflets, IRS

Research & Expertise Development
UIC SUSTAINABLE DEVELOPMENT ACTIVITY
structure

Rail Sector representation at international level
SLoCaT
UN
SUM4all (WB)
ITF (OECD)
IEA

UIC: Lucie Anderton

Sustainable Development Unit
- Energy, Environment & Sustainability Platform & core group
Chair: Willy Bontinck, SNCB-NMBS

UIC: Head of Unit – Lucie Anderton

ERPC
(European Railways Purchasing Conference)
Working group on sustainable procurement
Secretariat: Per Melby (Bane Nor)

UIC Special Group

Noise & vibration Network
Chair: Jakob Oertli (SBB)

UIC: Pinar Yilmazer

Energy & CO\textsubscript{2}eq Emissions Network
Chair: Bart Van Der Spiegel (Infrabel), Chloé Lima Vanzeler (SNCF)

Chair: Philippe Stefanos

Sustainable Land Use Network
Chair: Michael Below (DB), Thomas Schuh (OBB)

UIC: Pinar Yilmazer

Energy & CO\textsubscript{2}eq Emissions Network
Chair: Philippe Clement (SNCF)

UIC: Pinar Yilmazer

Emissions Network
Chair – Philippe Clement (SNCF)

UIC: Marie-Luz Philippe

Sustainable mobility Network
Chair: Margrethe Sagevik (SNB), Luigi Contestabile (FS)

Reuse Network
Chair: Wim Bontinck (SNCB)

UIC: Isabelle de Keyzer

Eco Scoring Network
Chair: Paolo Mazzeo (FS)

UIC: Isabelle de Keyzer
Smart sustainable solutions – recent projects

Noise and vibration – LOWOISESPREAD project: ground-borne noise from railway traffic especially in tunnels at night time - cooperation with rail industry;

**Sustainable Land Use** and vegetation management - **REUSE** project - to build a “state of the art” on sustainable use of resources and circular economy;

**UIC & WWF CEE MoU** signed on biodiversity focus;

**Climate change adaptation** follow up the UIC project 2017;

**Door-to Door solutions** – Optimising interfaces between rail and other modes of transport will result in a public transport system. Increasing rail passenger numbers will deliver a wide range of environmental, social and economic benefits;

**Clean air** - air quality in underground stations;

**SFERA** project – data exchange with Driver Advisory Systems (IRS 90940);

**ECOSCORING** - how to get financing for “green” railway projects
• Goal:
  ✓ Constant update the organisation of the Platform to meet the upcoming challenges;
  ✓ Disseminations the vision of the Platform, give a common thread to all the expert networks, links between them;
  ✓ Updating some documents to respond on recent goals,
  ✓ Communicate/disseminate to all members and beyond

Railway Climate Responsibility
New 2019 Pledge

According to the Paris Agreement, countries must renew or increase their commitments by the end of 2020, by amending their Nationally Determined Contributions submitted in 2015. They must correspond to the highest level of ambition possible. Therefore, UIC is committed to go further.

The Railway Climate Responsibility Pledge 2019 is an extension to the Pledge signed in 2015.

As an official representative of a UIC Member, I acknowledge the critical importance to take immediate action for a more sustainable future.

I recognise the central role of railways in the fight against climate change. As a member of the worldwide community of railway operators and infrastructure managers, I commit to take a leading role in the actions to mitigate climate change, by reducing my company’s carbon footprint and supporting a shift towards a more sustainable balance of transport modes.

In order to achieve this, I commit to:

1. Reduce my company’s specific energy consumption and CO₂ emission, and through this contribute to the UIC “Low Carbon Rail Transport Challenge”, presented in 2014 at the United Nations Climate Summit, and to the Rail Climate Responsibility Pledge, signed in 2015;
2. Carbon Neutrality by 2050;

Disclaimer to the Pledge, Point 2: “Companies with the potential to adapt their electricity supply in order to contain renewable sources of energy, proven by means of guarantees of origin (GOs) or renewable energy certificates (RECs), or via dedicated power plants, have the means required to achieve carbon neutrality by 2050. However, companies bound by specific national regulations preventing decarbonisation such as, but not limited to, regulations making them dependent on their country’s electricity supply mix, should not be precluded from striving towards the objectives of points 1 and 3 of this pledge. Progress under point 2 will be monitored taking each country’s specific circumstances into account.”

Place, date Signature
Name, title of signee
Company name
UIC TARGETS

• Contribute to the UIC “Low Carbon Rail Transport Challenge”,
• Stimulate modal shift to rail in national and international markets,
• Actively communicate to raise awareness,
• Report data on one’s company’s indicators above on a regular basis in order to promote and demonstrate the continuous improvements at an international level.

UIC Declaration on Sustainable Mobility & Transport 2011

• Final energy consumption from train operations:
  - 50% by 2030 (1990)
  - 60% by 2050
• Average CO2 emissions from train operations:
  - 50% by 2030 (1990)
  - 75% by 2050
• Railway share of passenger transport (pkm) by 2030:
  + 50% (2010), +100% by 2050
• Railway share of freight land transport (tkm): = to road by 2030
  50% greater than road by 2050

RAILWAY CLIMATE DECLARATION
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New targets

Europe
• **CO₂ Emissions:**
  ✓ Changing the baseline year from 1990 to 2005 (for specific and total emissions).
  ✓ Adding the 0-carbon emission target for 2050

✓ **Energy consumption:**
  • Change of baseline from 1990 to 2005
  • New targets

Global:
• Strive to carbon neutrality by 2050
• Contribute to SDGs
The UIC Environmental Strategy Reporting System (ESRS):
- A database and data collection campaigns;
- The new UIC Environmental Reporting Methodology improvement Opt-in aims at updating Leaflet 330 and improving ESRS data collection;
- EcoPassenger and EcoTransit – UIC IT support tools for monitoring the data evolution

Tracking energy consumption

Tracking CO₂ Emissions
ECOSCORING UIC project

GOALS:
- Sector Progress report and benchmarks based on the UN SDGs
- Improved access to green bonds and sustainable finance instruments
- Simple yet robust and reliable assessment tool for marketing purposes by companies and to demonstrate rail sector performance

Challenge: Defining a common view understandable by external stakeholders!

METHODOLOGY:
- **Phase 1:** Defining the sector’s common view about Ecoscoring
  - Step 1: Select the sector relevant SDGs and targets **DONE**
  - Step 2: Define a sector specific KPI shortlist meeting the targets (+methodology & weighting factors) to calculate scoring levels **DONE**
  - Step 3: Collect data and produce a company scoring system and easy-to-read sector synopsis with benchmarks **ONGOING**
- **Phase 2:** Use Ecoscoring to promote Rail transport and projects towards Investors, Financiers, Institutions, etc. (from Jan 2021)
ECOSCORING – Common goals & targets for Rail

**Climate action**

**Target 13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

**Target 13.2** Integrate climate change measures into national policies, strategies and planning: CO2 footprint.

**Responsible consumption & production**

**Target 12.2** By 2030, achieve the sustainable management and efficient use of natural resources

**Target 12.4** By 2020, achieve the environmentally sound management of chemicals and all wastes

**Target 12.7** Promote public procurement practices that are sustainable, in accordance with national policies and priorities

**Gender Equality**

**Target 5.1** End all forms of discrimination against women and girls.

**Affordable & clean energy**

**Target 7.2** Increase substantially the share of renewable energy in the global energy mix

**Target 7.3** Double the global rate of improvement in energy efficiency

**Decent work & economic growth**

**Target 8.5** Full & productive employment for all

**Target 8.8** Occupational safety

**Sustainable cities and Communities**

**Target 11.2** Operational safety for passengers

**Target 11a:** Support positive economic, social and environmental links between urban, peri-urban and rural areas
What criteria guided the team in selecting the KPIs for Ecoscorering?

- In line with the SDGs
- Contribution to ESG criteria
- Availability and Reliability
- Priority to KPIs collected by UIC
- Members’ endorsement
Future tasks to be considered to maintain Ecoscoring over time

➢ UIC dedicated team works for data collection and verification

➢ Evolutive maintenance to keep the IT tool up-to-date according to development of KPIs and others standards
UIC AT THE INTERNATIONAL LEVEL
Cooperation with IEA

Since 2012 yearly edited IEA/UIC common reports on energy efficiency and emissions for rail transport sector; In 2019 published common leaflet on it called « Future of Rail”

Since 2020 new reports is available only at IEA website where UIC is granted access (no more printed handbooks).
SUMMARY

International Transport forum
International Energy Agency
SUM4ALL

OCDE
World Bank
ISO
UE

United Nations

UNSG
UNDESA
UNEP
UN Habitat
UNFCCC
SLOCAT
TDA
MOVINON
CLIMATE4TOMORROW
CLIMATE CHANCE

CER
DG Environment
DG Move
ERA
EEA
U urgent action by UIC

The Railway Climate Declaration adopted by UIC General Assembly in 2019 – so called Pledge 2019 has been signed by 33 UIC members already. The UIC members committed to strive for sector carbon neutrality by 2050, as a response to Sustainable Development Goals (SDG) by United Nations and EU Green Deal challenges contributing to the climate change abatement.
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Signature

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Name, title of signee
The Pledge 2019 follow up – UIC Task Force on carbon neutrality set up

• The Railway Climate Declaration – so called Sustainability Pledge 2019 has been signed by 33 UIC members already.

• In order to strengthen its advocacy role, UIC has set up a Task Force on “Carbon Neutrality” – to assist members for achieving a carbon neutrality status by 2050.

• This idea has been supported by the General Assembly in December 2019 and confirmed by next UIC General Assembly on 30 June 2020.

• The Task Force work program is elaborated under the aegis of the Sustainable Development Platform and the all UIC members’ contributions are still welcome.

• Kick off meeting of the Task Force is foreseen in September.
Stay in touch with UIC!

www.uic.org

#UICrail

Thank you for your kind attention.