Railways and Sustainability: New UIC EcoPassenger calculator provides more information on environmental impacts of major transport modes

(Paris 10 November 2015) More than a quarter of greenhouse gases emissions come from the transportation sector, showing the highest growth in these emissions on the last decades and it is not stopping. The International Union of Railways (UIC) has launched the new version of EcoPassenger in order to increase awareness among users. The new EcoPassenger calculator aims to spread knowledge about the consequences of our travel choices and to give support to decision makers on how to facilitate sustainable choices.

On 8 November the UIC online calculator EcoPassenger launched a new version, with an updated design, including new countries, usability for smart phones and tablets and containing new scientific methodological improvements.

EcoPassenger, the UIC user-friendly internet tool to compare energy consumption, CO₂- and exhaust atmospheric emissions for planes, cars and trains for passenger trips, has renovated the graphical design and the website, adapting to the most modern trends in IT.

EcoPassenger provides the most accurate information on railway timetables, performing the calculations according to the type of train and service. The new version of EcoPassenger extends the scope of the tool to Russia, Turkey, Belarus, Greece and Ukraine according to the inclusion of these networks at the MERITS database.

The new website contains the possibility to implement a short widget in other websites. This functionality allows UIC members to include a basic form of the tool to perform calculations for their clients.

EcoPassenger is supplied with the best available data for all modes, and developed in cooperation with Ifeu (the German Institute for Environment and Energy) for energy consumption and emission factors, the Sustainable Development Foundation for railway consumption and electricity emissions and Hacon (routing system and software).
EcoPassenger does not only calculate the energy or the fuel it takes to run trains, cars or planes. The calculations include the emissions from the cumulative energy consumption, including the energy used to produce the electricity or the fuel, in a “well to wheel” perspective.

Users have the possibility to calculate airplane emissions including the Radioactive Forcing Index (RFI) of GHG emissions at high altitudes. For cars, the EURO standard type car can be selected, including the latest EURO 6 standard, in order to adjust the calculation to more realistic conditions. Furthermore, load factor can be customised for all modes of transport.

Rail data included in EcoPassenger come from the Environmental Strategy Reporting System (ESRS) of UIC. This system includes a set of indicators of the European UIC members and Russia, reporting on the environmental impacts of rail services. ESRS includes the dual reporting according to the conclusions of the UIC Zero Carbon Project and the GHG Protocol Guidance, one of the main standards of the topic.

This new version of EcoPassenger implements the Zero Carbon Project conclusions as a new functionality for users. CO\textsubscript{2} emissions of rail services are displayed in two ways, with the national production mix – the general average of the country – but also using the railways mix, based on the electricity produced and purchased by rail companies, including the guarantees of origin (GOs) of renewable sources. A new methodological report produced by IFEU and Hacon is published on the website containing all the data and sources used to perform the calculations.

The new version of EcoPassenger shows that it is possible to have right information and data through international and technical cooperation. With the energy consumption information provided by this tool, everyone can take decisions in order to mitigate GHG emissions, and it enables the environmental advantages of the railways – compared to main competitors – to be highlighted.

UIC invites you to check your emissions at [http://ecopassenger.org/](http://ecopassenger.org/)

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