

# Contribution of Rail in Mitigating Climate Change

## Moderator's remarks

If the transport sector is to make a meaningful contribution to reducing CO<sub>2</sub> emissions, we have to make better use of greener transport modes. This is a complex challenge that needs a multitude of different stakeholders to get right.

Rail is now widely regarded as the most environmentally-friendly form of surface transport, and yet it is clear that many of the world's railways are not being used as effectively as they could be. There are many reasons for this, ranging from conservative attitudes, lack of investment and a poor public perception through to an unbalanced societal framework which does not properly reflect external costs in the treatment of different modes. Some of these will be relatively easy to change, and others will not. It probably needs a combination of carrot and stick.

Thanks to rail's existing advantages in energy efficiency and low emissions, the biggest 'quick win' can be achieved by encouraging modal shift for both passenger and freight transport. That means making rail more efficient, attractive and flexible for users, which in turn requires positive action to boost competitiveness. Rail is essentially a high-capacity mode, and capitalising on its productivity benefits means concentrating on those applications to which it is best suited.

Rail has been providing 'e-mobility' from renewable resources since 1883, which is more than 130 years. Other transport modes have been steadily improving their environmental credentials in recent years, thanks to research and innovation. The rail sector has not been standing idle, of course, and today there are many technologies available that can improve its environmental performance. These need to be more widely adopted, which will require both investment and a commitment to best practice. It is heartening that last weekend so many railways signed up to a sustainability charter and pledged to continue reducing their environmental footprint. But there is still scope for further research to develop new and improved technologies that will help to make rail transport more attractive and productive in the future.

Railway suppliers and operators are committed to offering products and services that are convenient, reliable and cost-effective, so that people want to use them. Policy makers must ensure that investment is available for the necessary infrastructure, including greater use of electrified railways powered by renewable low-carbon energy. That need not be public funding, of course - we have already seen that an efficient and competitive rail market can attract private investment where the conditions are right. But a balanced transport mix needs a more level playing field where all modes pay fairly for their externalities, including carbon emissions.

## Feedback

Funding remains a particular challenge for emerging countries, where investment in greener rail technologies can help to support economic development in a sustainable way. And as with the dilemma facing urban rail planners in countries around the globe, it is important to recognise that increased modal shift to rail may result in an increase in the absolute value of carbon emissions for this mode which is offset by greater reductions elsewhere in the transport sector.

Our two main messages for Le Bourget are:

1. There is a need for more cross-modal thinking in transport policy, in order to facilitate greater integration, ease of use and the attractiveness of rail - such as intermodal ticketing and journey planning for door-to-door transport (both passenger and freight). While the rail sector can take some steps for itself, the process could be made easier by a supportive policy framework.
2. When making transport investment decisions, there needs to be proper consideration of the external costs for each mode, including a common formula for calculating and disclosing the carbon impact.