

UIC strives to cut rail's carbon impact

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Despite the failure of December's United Nations COP15 climate change conference in Copenhagen to achieve a binding agreement, the Train to Copenhagen campaign organised to coincide with the summit was a success. UIC's sustainable development coordinator Henning Schwarz and senior advisor for sustainable development Margrethe Sagevik talk to Kevin Smith about the UIC's work to promote rail's environmental credentials.

THE world was again disappointed last December as once more global leaders' unwillingness to compromise at the expense of their own national interests proved to be the undoing of an international treaty intended to curb carbon emissions. Too many players had too much to lose for negotiations to produce anything worthwhile during the 11-day Copenhagen summit.

With transport currently contributing 23% of global CO₂ emissions from fuel consumption, this was a particularly disappointing outcome for rail which emits comparatively fewer emissions than air, ship and road, and has much to gain from an agreement.

Nevertheless, the UIC says the Train to Copenhagen organised in conjunction with the UN Environment Programme and World Wildlife Fund did increase rail's profile.

"It was successful in bringing transport issues onto the agenda and highlighting the strong role that rail can play," Sagevik says. "We believe this cause is something positive for the railway business and that railways are what governments should be thinking about when looking to reduce emissions from transport. We communicated our concerns and developed closer ties with key stakeholders, but it is important now to encourage them to continue to improve and for us not to rest on our laurels."

Achieving the ambitious emissions reductions goals set out in 2008 is central to the UIC's current efforts. The target is a 30% cut in emissions by 2020, a goal initiated by the Community of European Railways and Infrastructure Companies (CER) and monitored by the UIC. Long-term targets call for an even more ambitious cut in emissions by 2030 and carbon neutral concepts are discussed for 2050.

While UIC member railways are largely on board, Schwarz says a major challenge is making sure that rail remains central to the emissions debate at government level. Too often, he feels, it is overlooked.

"When politicians talk about finding solutions to transport's emissions problem, often they are not thinking about railways," Schwarz says. "This is why we must continue to show that we are the solution for curbing emissions in Europe and need to be at the centre of any debate. Modal shift to rail will be the key."

A focus of the UIC's strategy to improve communication with businesses and the public about the environmental benefits of rail are its EcoTransit and EcoPassenger carbon footprint calculation tools. Accessible via the internet, they estimate the carbon emissions of a passenger journey taken by road, air, or rail between any two European locations, or the emissions produced by transporting a defined tonnage of freight in Europe by road, water, air or rail.

The UIC will officially launch the global version of EcoTransit at the International Transport Forum in Leipzig at the end of

this month.

"It is very important for us to show we have ambitious and wide-reaching goals to improve our performance," Schwarz says. "It is also important to improve our communication with the public about what we are trying to achieve so they are aware of the important role rail can play. The life-cycle of railway assets is so long that we have to think about technological solutions now if we want to have a minimal carbon footprint by 2050."

Schwarz says one idea is for railways to move away from diesel by developing a viable alternative low-carbon propulsion system. "This kind of initiative will help us achieve our long term targets. Achieving a decarbonisation of rail in Europe is dependent on the availability of green energy. The energy sector needs to supply more green energy while the railway sector needs to look at its energy procurement strategies."

Many of these points are likely to be raised at the UIC's sustainability conference in Madrid from June 16-18. Schwarz says Madrid was chosen as the venue because of Spain's strong recent record in investing in and promoting rail as an environmentally-sustainable mode of transport. In particular the country's massive high-speed programme is drawing people away from other modes of transport thereby reducing their carbon footprint.

"Admittedly high-speed trains do consume more energy than other trains, but when high-speed trains are full with passengers and you calculate the energy efficiency of that compared with other modes, the benefits of high-speed far outweigh other modes."

While Schwarz and Sagevik believe that it is unrealistic to think rail is the answer to everything, they say in an environmentally-friendly future rail will be the backbone of any sustainable transport concept.

"To achieve this, a combination of policies and economic measures is needed as the market often is distorted in favour of road and aviation," Sagevik says, "For example the external costs need to be internalised in order to move towards a fair and level playing field for transport."