

COP21 – The View of the Suppliers

Interview Henri Poupart-Lafarge, Executive Vice President, Alstom

1. As a railway supplier, what impact does COP21 have on your strategy?

Let me begin by saying that, at Alstom, we adhere completely to the UNFCCC max. 2°C objective and are convinced that rail, as the most environmentally-friendly means of public transport, has a major role to play in achieving it. We also support fully the UIC's "Low carbon rail transport challenge" and its inherent targets.

We have been focused for some years on the main issue of COP 21 – the reduction in CO₂. We have achieved over the past decade reductions of up to 20 % in the energy consumption of our solutions (and therefore in the associated CO₂ emissions) and a similar level of improvement in the energy intensity of our operations (factories, offices, etc.). Recently we committed to further reductions by 2020: -20% in our solutions and -10% in our operations (c.f. 2014 levels).

We are seeing a reinforcement of the trend towards environmental issues in general, and energy consumption in particular, having increased weight in the evaluation of tenders for train supply.

We are convinced that our innovations in this area will give us competitive advantage.

Focusing on energy consumption is a win-win as it brings down the operation costs for our customers – the operators – whilst also reducing our own manufacturing costs.

So, Alstom's strategy to combat climate change is to continuously improve our environmental performance, both in our operations and our offerings, through innovation and collaboration. We are focusing increasingly on opportunities with customers who put a realistic value on the environmental impact of the products and solutions that we offer to them.

2. In your research and development strategy, what actions are specifically influenced by the objectives of sustainable development and climate change?

Everything we do has an eye towards sustainable development and climate change. We apply an eco-design policy which takes these issues into account right through from the conceptual design phase; through manufacture; installation; operation; to the end of life phase where recyclability and recoverability are important issues.

A key to our strategy is to deploy the best available technologies. To mention just a few recent innovations, we are of course constantly looking to reduce energy consumption by reducing train weight; improving the efficiency of traction motors; providing driver assistance systems; optimising the auxiliaries. We have collaborative programmes in place with a selection of our customers which are helping us to understand better the energy consumption patterns of our trains and trams.

Alstom is currently developing entirely new types of trains, one example being a new regional train for Germany equipped with a fuel cell drive, a device that converts the energy from a fuel into electricity through a chemical reaction. Such trains will be completely emission-free and their noise level will be drastically reduced.

Furthermore, with electrical mobility in mind, we have developed SRS, which is a system to allow the rapid recharging of Trams with on-board energy storage at the station-stops using an underground connection system. This system can also be applied to electric buses.

Alongside this, we are working to take full advantage of the digital revolution by using smart real time data in order to optimise the operation of train fleets; match transport supply to demand; and make seamless the interface between transport modes. Each of these, and others besides, seek to reduce energy consumption whilst improving the passenger experience.

3. What cooperation do you expect from rail operators in this context to ensure the success of trains in the future?

Of all the energy-related CO₂ emissions created by the transport sector, rail consumed only 3% whilst carrying 9% of the passengers and freight. So it is clear that rail has a major role to play as the least emitting means of mass public transport.

We are looking to work with our customers the operators in order to i) improve the attractiveness of rail (passenger comfort; matching supply to demand; seamless links to other modes; connectivity and information flow; network expansion etc.) ii) increase the rail network-km by accessing new financing sources iii) reduce further the environmental impact and the costs of rail. In particular, we welcome collaboration with the operators in order to pilot new technologies. We are looking for operators to express their sustainability requirements strongly in their requests for tender and to promote and reward innovations.

With the global population and road congestion rising; with the trend towards increased urbanisation; with the necessary focus of climate issues; we are convinced that the rail sector has a great future as a key element of global sustainable transport systems.

Henri Poupart-Lafarge
Executive Vice President, Alstom