

How are we reducing greenhouse gas emissions from urban mobility?

December 10 2010, by Annette Ostrand



Forty percent of all road transport CO₂ emissions come from urban mobility, according to the European Commission. Many projects aim to reduce greenhouse emissions while simultaneously improving mobility.

Within a project called Ticket to Kyoto five European public transport companies try to drastically reduce their CO₂ emissions. These companies are Dutch RET, British GMPTE, German moBiel, French RATP and Belgian STIB. Some of the measures are to use movement sensors and timers to lower the [energy demand](#) in stations, teach drivers to drive in an eco-friendly way by smoother acceleration and deceleration, recover energy released when the metros and trams brake, recover heat from passing metros to heat buildings, use more efficient

heating installations warming the tracks during winter and through a large communication campaign mobilise companies and citizens to be more eco- friendly.

[Vehicle manufacturers](#) are also working on sustainable solutions to lower greenhouse gas emissions. This year Daimler has launched the e-mobility Italy project in cooperation with the Italian energy provider Enel in charge of the infrastructure. The network will include over 400 charging stations. For the project's duration inhabitants in Pisa, Rome and Milan will drive 100 battery-powered electric automobiles from Mercedes-Benz and smart. These vehicles provide locally emission-free driving. A similar project was started in Berlin in 2008 and in 2007 a pilot test begun in London involving public authorities. Daimler is planning to continue to other cities in both Europe and the U.S.

In Stockholm all inner city buses are using renewable fuels and renewable electricity is making all commuter trains and subways run. The bus fleet running on ethanol is the world's largest and electricity/ethanol hybrid buses are presently tested. In Madrid, the city council's goal is to have only clean vehicles in its public fleets by next year. Stockholm Public Transport (SL) will encourage the region's companies to more often use public transport for local business trips through measures such as new infrastructure, increased service frequency and environmental information.

Another way that Stockholm has reduced greenhouse gas emissions while at the same time enhanced mobility, is through its Bicycle programme. This includes for example investments in the existing bike network, new bicycle connections, parking and traffic lights. Over the past ten years the number of cyclists using the present 760 km of cycle lanes has increased by 75 percent.

In 2005 Stockholm's greenhouse gas emissions from transportation,

electricity and heating were 4 tons per inhabitant. In 2009 they had been reduced to 3.4 tons and the goal is to reach 3 tons no later than 2015. If this is achieved it would mean a decrease of 44 percent per inhabitant compared with the level in 1990 (5.4 tons). The city was elected the first European green capital by the European Commission due to the capital's long-term environmental work. SL aims to provide a 100 percent fossil free bus service by 2025 and the city strives to be totally independent of fossil fuels by 2050.

Many ambitious projects are taking place right now and unforeseen circumstances will most likely delay some of them. However, within the coming years we will definitely see a reduction of [greenhouse gas emissions](#) from urban mobility in many places.

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