

Abstract

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Organisation : International Energy Agency

Short description:

We are an international agency that serves as a secretariat for Energy Ministries from 27 member countries, with a global outreach and active research programme.

Presentation title: Achieving a low CO₂ future for transport

Executive Summary of your Abstract:

This presentation will brief the audience on IEA's recent analysis published in our ETP 2010. It will focus on achieving global and European transport CO₂ sustainability, in the context of an economy wide effort to decarbonise over the next 40 years. It will cover the baseline trends, 2050 targets, and what pathways we will need to follow to hit key targets. It will then focus more specifically on actions needed over the next 5-10 years in three key areas: vehicle fuel economy, biofuels, and the uptake of advanced (e.g. electric) vehicles. Finally, a discussion of progress we see happening so far and what more needs to happen will be presented.

Abstract:

Current energy and CO₂ trends run directly counter to the repeated warnings sent by the United Nations Intergovernmental Panel on Climate Change (IPCC), which concludes that reductions of at least 50% in global CO₂ emissions compared to 2000 levels will need to be achieved by 2050 to limit the long-term global average temperature rise to between 2.0°C and 2.4°C. Recent studies suggest that climate change is occurring even faster than previously expected and that even the "50% by 2050" goal may be inadequate to prevent dangerous climate change.

Using a combination of existing and new technologies, The IEA has produced the Energy Technology Perspectives 2010 report, featuring scenarios for achieving a low Carbon future, i.e. to halve worldwide energy-related CO₂ emissions by 2050. Achieving this will be challenging, and will require significant investment. But the benefits in terms of environmental outcomes, improved energy security and reduced energy bills will also be large.

The transport sector is currently responsible for 23% of energy-related CO₂ emissions. Given the increases in all modes of travel, especially passenger light-duty vehicles (LDVs) and aviation, the Baseline scenario shows a doubling of current transport energy use by 2050 and slightly more than a doubling of associated CO₂ emissions. Achieving deep cuts in CO₂ emissions by 2050 will depend on slowing the rise in transport fuel use through greater energy efficiency and increasing the share of low-carbon fuels. Encouraging travellers and transporters to shift from LDVs, trucks and air travel to more frequent use of bus and rail is another route for substantial savings.

This presentation will cover the ETP scenarios in general and focus specifically on the opportunities and challenges for transport to achieve deep emissions reductions in the future. Both the global and the European perspective will be addressed.

Recommended reading: IEA ETP 2010, available at <http://www.iea.org/w/bookshop/add.aspx?id=401>