Boosting sustainable mobility and delivering on the Paris Agreement and the New Urban Agenda

COP 22, Marrakech, Morocco
12 November 2016

Jean-François Gagné
Energy Technology Policy Division Head
International Energy Agency
The IEA works around the world to support an accelerated clean energy transition that is enabled by real-world SOLUTIONS supported by ANALYSIS and built on DATA.
IEA supports the low-carbon transition

**IEA: the global energy authority**
- Part of the OECD family
- Founded in 1974 to co-ordinate a response to oil supply disruptions
- 2015: IEA Modernisation grounded on three main pillars
  - global energy security
  - energy cooperation and global dialogue
  - promoting an environmentally sustainable energy future
- Build on a decade of analysis on what we need to do to keep temperature increase below 2°C
- Now developing analysis on faster and deeper energy-sector decarbonisation
The carbon intensity of the global economy can be cut by two-thirds through a diversified energy technology mix.
But the challenge increases to get from 2 degrees to “well below” 2 degrees

Industry and transport account for 75% of the remaining emissions in the 2DS in 2050.
Understanding transport impacts: Mode matters

Well-to-wheels GHG emissions in 2015, by mode

Transport is the least diversified energy demand sector
Solutions need to be adapted transportation modes
Cities are key to carbon abatement

Impacts to global cumulative CO₂ reductions

Cities represent 70% of the cost-effective CO₂ abatement potential by 2050
Understanding transport impacts: Mode matters

Well-to-wheels GHG emissions in 2015, by mode

Transport is the least diversified energy demand sector
Solutions need to be adapted transportation modes
Need to decouple activity & emissions
Avoid/shift, vehicle efficiency, low carbon fuels

GHG Emissions in the 2DS, 4DS, and 6DS – 2010 to 2050

OECD transport emissions have peaked, while Non-OECD transport emissions can be brought back to current levels in 2050.
Transport energy demand projections

Policy and technology have great potential

Global Energy for Transport in 2015 & in 2050 in the ETP Scenarios

2DS sees a net global decline in transport energy demand, but not in all regions.
In the 2DS, by 2050 one billion cars are electric vehicles while public transport travel activity more than doubles.
Local and national actions can make the low carbon transition possible.

**SUSTAINABLE URBAN ENERGY SOLUTIONS**

Leveraging all solutions to urban energy sustainability requires strong private and public action both at local and national levels.
Sustainable Transport Systems analysis: the IEA Mobility Model and ETP

- Foundation of transport-related analysis in the IEA
- Projections to 2050+, 29 global regions (including most of G20), all transportation modes except pipelines
- Assess urban and non-urban activity, energy use, emissions (GHG, pollutants), infrastructure and materials demand
- Shared with OECD Directorates (TAD), ITF
- Developed in the framework of a partnership with major industrial and governmental stakeholders, some academic institutions and NGOs (MoMo partnership)
Thank you

Explore the data behind ETP

www.iea.org/etp  www.iea.org/statistics