



www.iea.org

Transport in a Low Carbon World

*COP 22, Marrakech, Morocco
13 November 2016*

*Jean-François Gagné
Energy Technology Policy Division Head
International Energy Agency*

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

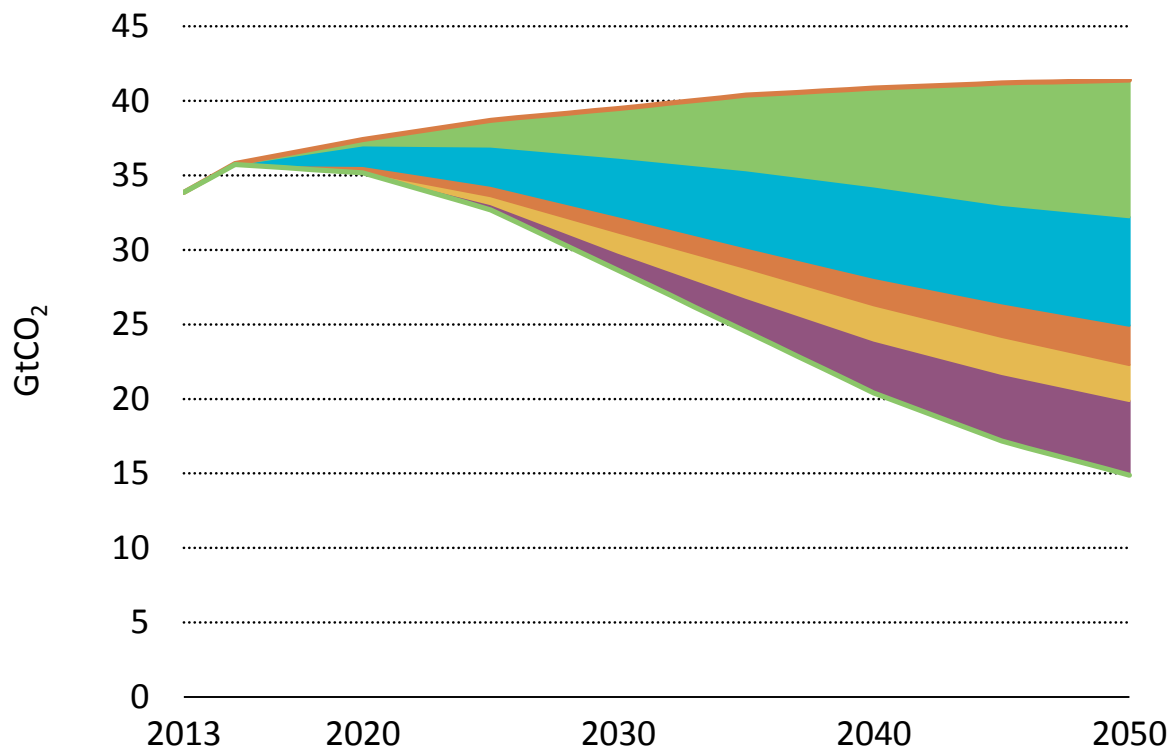


- Build on a decade of analysis on what we need to do to keep temperature increase below 2°C
- Now developing analysis on faster and deeper energy-sector decarbonisation



Sizing the scale of the challenge... ... and its solutions

Contribution of technology area to global cumulative CO₂ reductions



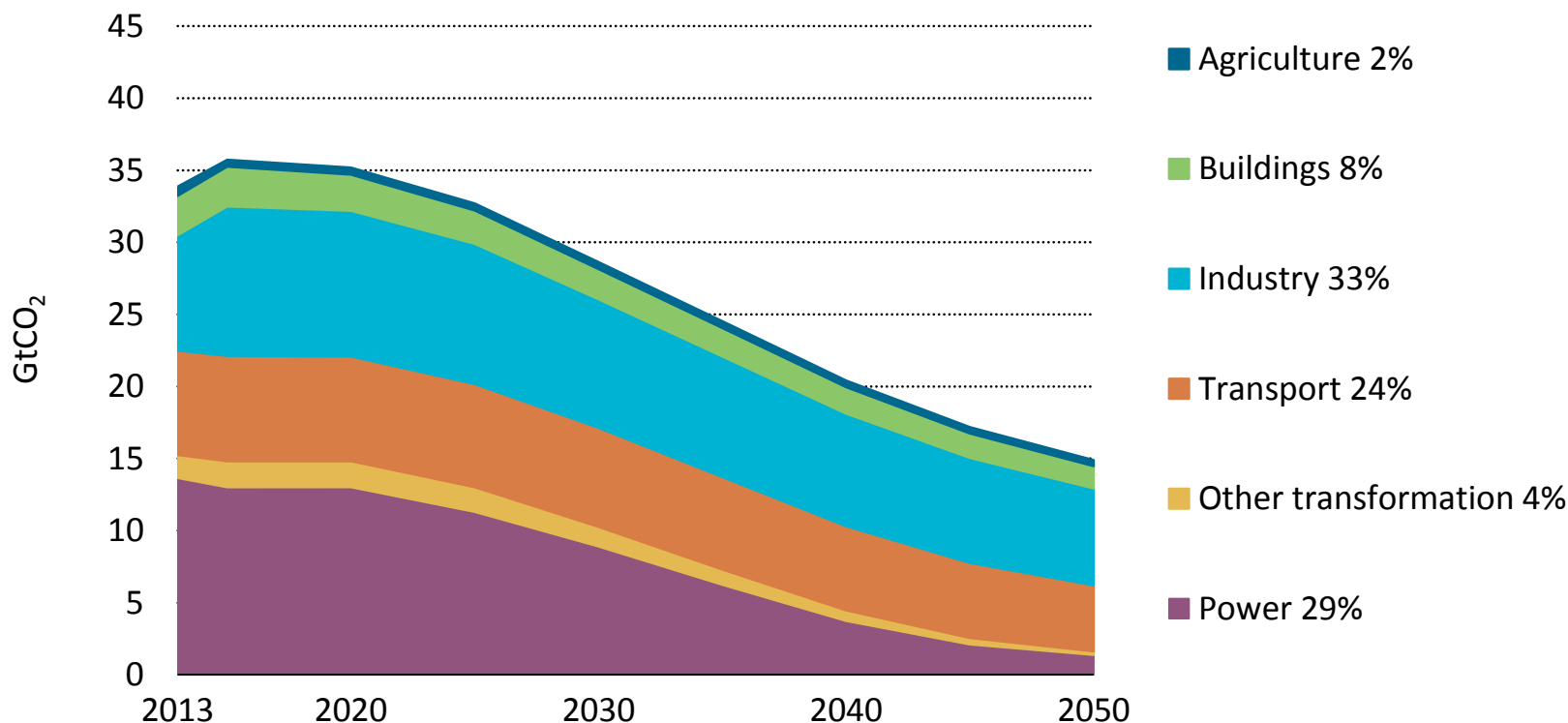
The carbon intensity of the global economy can be cut by two-thirds through a diversified energy technology mix

ETP
2016

© OECD/IEA, 2016

But the challenge increases to get from 2 degrees to “well below” 2 degrees

Energy- and process-related CO₂ emissions by sector in the 2DS

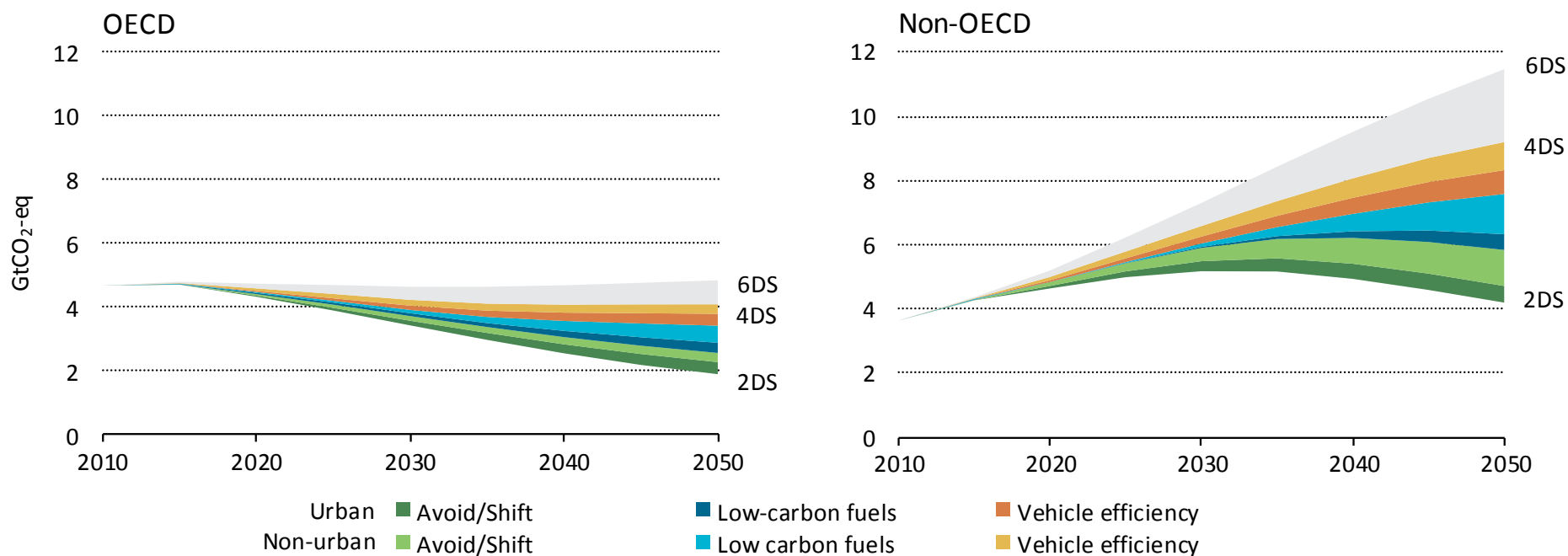


Industry and transport account for 75% of the remaining emissions in the 2DS in 2050.

Need to decouple activity & emissions

Avoid/shift, vehicle efficiency, low carbon fuels

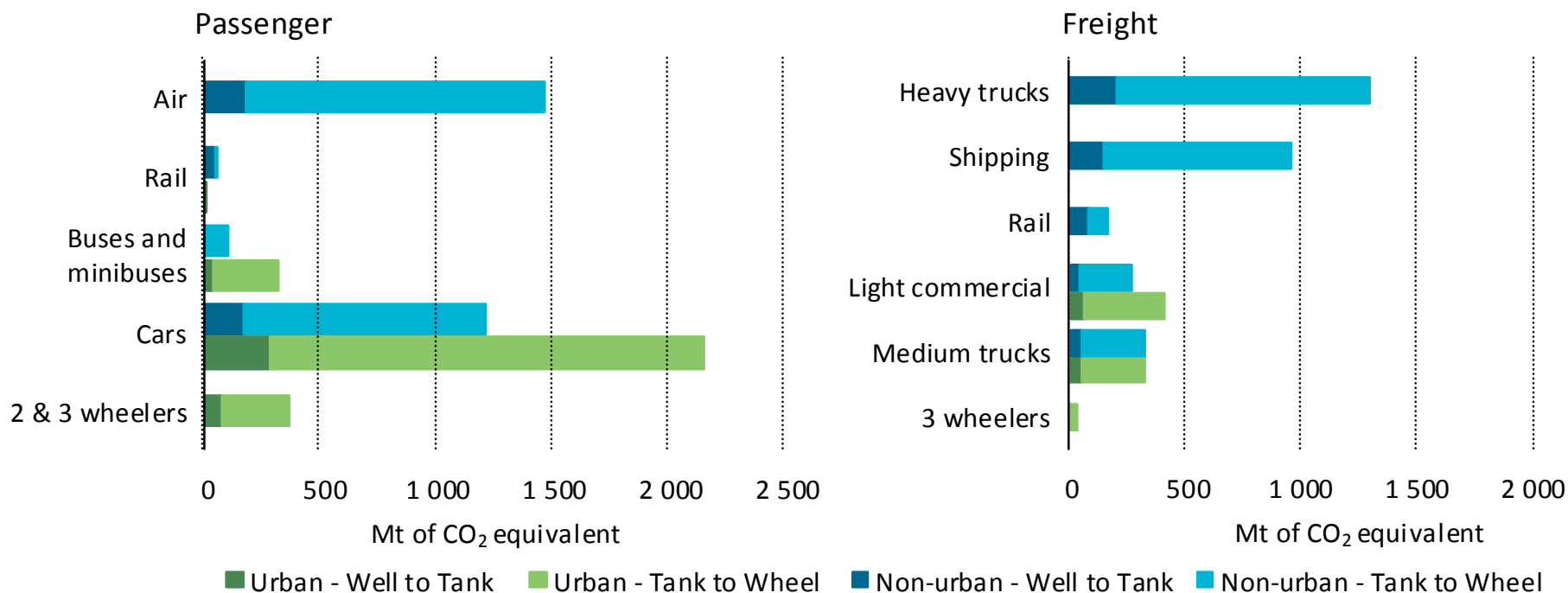
GHG Emissions in the 2DS, 4DS, and 6DS – 2010 to 2050



*OECD transport emissions have peaked,
while Non-OECD transport emissions can be brought
back to current levels in 2050*

Understanding transport impacts: Mode matters

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



Transport is the least diversified energy demand sector ETP
Solutions need to be adapted transportation modes 2016
© OECD/IEA, 2016

The IEA works around the world to support an accelerated clean energy transition that is

enabled by real-world SOLUTIONS

supported by ANALYSIS

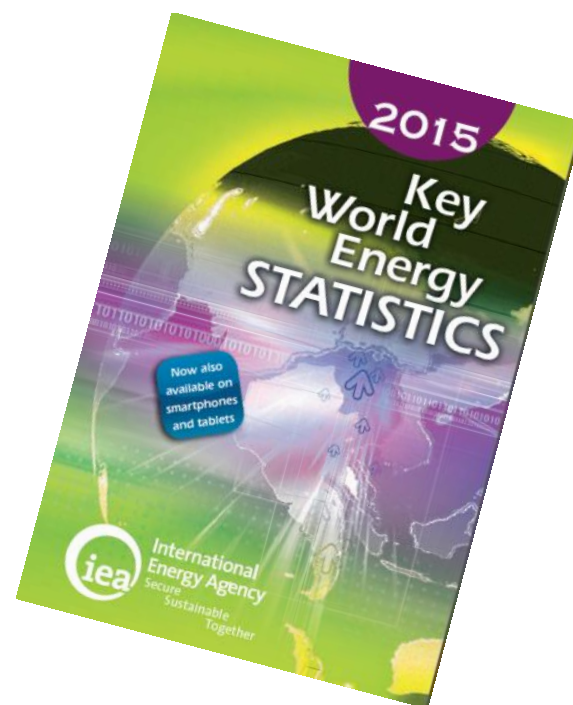
and built on DATA

Thank you

Explore the data behind *ETP*



www.iea.org/etp



www.iea.org/statistics

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)

