Global Transportation Energy and Climate ROADMAP

The impact of transportation policies and their potential to reduce oil consumption and greenhouse gas emissions

Roadmap Webinar Series
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The International Council on Clean Transportation

2011 Car and Truck Sales (in million units)

- China: 18.51
- EU-27: 17.71
- U.S.: 13.04
- Japan: 4.21
- Brazil: 3.63
- India: 3.30
- Russia: 2.79
- Canada: 1.62
- S. Korea: 1.58
- Australia: 1.01
- Mexico: 0.94
Key Questions

- What can national governments do in the near term to reduce GHG emissions from the transportation sector?
- How far have adopted policies taken us in terms of reduction of oil consumption and GHG emissions?
- What are the policies in the pipeline, and how far will they take us?
- How much more could we expect from transportation policies in the near term?
- How do countries compare in terms of policy progress?
- What do these near-term reductions mean for long-term climate targets?
Focus on key regions and modes is important
It is also important to focus on different strategies

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<thead>
<tr>
<th>Strategies</th>
<th>Avoid</th>
<th>Shift</th>
<th>Improve</th>
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<tbody>
<tr>
<td>On-road vehicle efficiency improvements</td>
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<td>Marine and aviation sector improvements</td>
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<td>Low carbon fuels</td>
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<td>Land use planning</td>
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<td>Travel demand management</td>
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<td>Sustainable transportation infrastructure</td>
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<td>Logistics improvements</td>
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<td>Fiscal measures</td>
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Tremendous policy progress to date, but much more is possible and necessary.

REFERENCE
Assumes no policies adopted post 2000. Intended only to be used for quantification of Adopted Policies.

ADOPTED POLICIES
Includes existing, enforceable and finalized regulations but assumes no further changes.

POLICY PIPELINE
Considers all policies under active regulatory development or that exist as formal, stated policy goals.

POLICY POTENTIAL
Includes technically feasible policies and plausible regulatory timelines, without any consideration of political will.

2030 GHG Reduction (GtCO₂e) 2030 Oil Reduction (Mboe/day)

- 2030 GHG Reduction (GtCO₂e):
  - REFERENCE: 1.9
  - ADOPTED POLICIES: 1.1
  - POLICY PIPELINE: 2.8
  - POLICY POTENTIAL: 5.8

- 2030 Oil Reduction (Mboe/day):
  - REFERENCE: 9.7
  - ADOPTED POLICIES: 4.9
  - POLICY PIPELINE: 14
  - POLICY POTENTIAL: 28.6

Total Reduction:
- REFERENCE: 5.8
- ADOPTED POLICIES: 4.8
- POLICY PIPELINE: 16.8
- POLICY POTENTIAL: 34.4
LDV policies illustrate the full benefits of regulatory action.
High activity growth and lack of regulatory progress means much higher HDV emission growth rates.
Policy Impacts on Global Marine Emissions

2030 GHG Reduction

0.45 GtCO$_2$e
25%
Policy Impacts on Global Aviation Emissions

2030 GHG Reduction

0.33 GtCO₂e
18%
China, U.S. and Europe have taken the lead
Country Policy Trajectories
Adopted policies will have a tremendous impact in the reduction of oil consumption and GHG emissions from the transportation sector, and policies in the pipeline will augment these reductions.

Expansion of world-class policies and cost-effective technologies across the world – including vehicle efficiency, mode shift, and activity reduction policies – would stabilize transportation emissions by the year 2020.

Despite these large emission reductions, these policies will not put the transportation sector on a trajectory to reduce emissions by 50-85 percent by 2050 from 2000 levels.

Increased policy progress beyond 2030, coupled with a transformation of the transportation sector with new technologies and dramatic shifts in how people and freight move, will be required to constrain temperature increases to 2 degree Celsius.
Future webinars

| ROADMAP MODEL | The tool behind the analysis, already available on ICCT’s site.  
|               | [http://www.theicct.org/roadmap-model](http://www.theicct.org/roadmap-model) |
| ROADMAP HEALTH REPORT | An analysis of the benefits and potential of transportation policies to reduce emissions of local air pollutants and health impacts. |
Thank you!

For more information:

http://www.theicct.org/transportation-roadmap

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