POLICY PATHWAYS BRIEF

Improving Fuel Economy of Road Vehicles

Road vehicles typically account for three-quarters of transport energy use. Market-ready technologies for conventional gasoline and diesel vehicles can cost-effectively reduce the specific fuel consumption of new vehicles by half, providing significant benefits including lower costs and better air quality for consumers, improved industrial competitiveness and increased national energy security.

The International Energy Agency has identified three critical factors to guide policy makers in realising the potential benefits from improving the fuel economy of road vehicles.

Policy pathway to improving the fuel economy of road vehicles:

- Focus on improving the efficiency of the new vehicles using a combination of information measures (such as labels), fuel economy standards (such as the US CAFE standards), and fiscal measures (such as fuel taxes and rebates).
- Vehicle standards will be most effective in countries with a substantial existing or developing manufacturing base. In countries that primarily import vehicles, policy should initially centre on labelling and fiscal measures.
- Phase-out fuel subsidies and align automotive fuel taxes with vehicle fuel economy or CO2 emissions rates while simultaneously investing in public transport. If necessary implement other redistributive policies to ensure vulnerable social groups are not adversely affected. Consideration should be given to further incentivesor rebates for advanced vehicles.

The full Policy Pathway offers guidance on implementing fuel economy measures for road vehicles and provides case studies from around the world. The report can be downloaded from www.iea.com

POLICY PATHWAYS BRIEF

Checklist to successfully deliver Improved Fuel Economy of Road Vehicles

PLAN: Based on existing and projected number, source and efficiency of new vehicles, select the mix and scope and policies (vehicle efficiency standards, labelling, and fiscal measures) to maximise benefits. Secure sufficient resources to enable effective implementation.

1. Gather information on new car sales. Determine policy scope, type of measures, and implementation dates.
2. Decide the fuel efficiency measurement method, incorporating specific local traffic conditions into the driving cycle.
3. Develop systems for gathering and certifying essential information and secure fiscal and human resources.
4. Set target values for fuel economy standards and/or labels. Align with other measures including fiscal support.

IMPLEMENT: Initiate vehicle fuel economy test and require vehicle manufacturers publish fuel economy results. Promote benefits of fuel economy and justifications for fiscal measures in place.

5. Define vehicle families and begin fuel economy certification process. Where possible use existing vehicle certification schemes.
6. Make fuel efficiency information available to all stakeholders at point of sale and on websites. Publicise reasoning for fiscal measures.

MONITOR: Establish quality control mechanisms to monitor performance of the certification scheme including audits to check for compliance with the fuel economy standards and labelling measures.

7. Collect data to monitor fuel economy, check conformity of vehicles sold and compliance with policies.
8. Openly communicate positive and negative compliance results including average fuel efficiency trends and most efficient vehicles.

EVALUATE: Evaluate impacts of fuel economy policies and, if necessary, revises policies to take account of developing technologies and policy design flaws. Analyse compliance data to check whether any enforcement actions are required.

9. Evaluate level of compliance and resulting policies outcomes. Where necessary enforce penalties to maintain scheme credibility.
10. If needed revise design and mix of fuel economy policies to meet new market conditions and technology improvements.

iea