



Accessing International Financial Support Mechanisms for Vehicle Fuel Economy

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FIA Foundation
for the Automobile and Society



Presentation contents

- 1 Introduction
- 2 The benefits of fuel economy
- 3 Vehicle fuel economy measures
- 4 International support
- 5 Ways to increase the likelihood of obtaining financial support
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Background

- Energy use in land transport will increase by nearly 50% by 2030 and 80% by 2050 (from 2010 levels), and use could increase by up to 130% by 2050
- Transport energy use doubled between 1971 and 2006, and nearly all recent growth in oil use has been in transport
- Around 95% of energy used in transport derives from oil
- Transport could account for 97% of the world's primary oil use over the period 2007 to 2030
- Global vehicle fleet is predicted to triple by 2050 with over 80% of the growth occurring in the developing world

Need for vehicle fuel economy

- Challenging for developing countries to obtain finance to support fuel economy
- FIA Foundation commissioned the development of an introductory guide to inform national governments about some of the sources of international funding that are available and could be used to support vehicle fuel economy
- The guidance document was supported by UNEP (the United Nations Environment Programme)

The FIA Foundation/UNEP guide



- Introductory guide was not intended to be comprehensive
- It provides a practical 'reference of first resort' for those engaged in identifying funding to promote vehicle fuel economy
- It aims to increase awareness of the support that is available and the range of institutions that can provide finance
- Link to the guide:

http://www.globalfueleconomy.org/Documents/Publications/wp6_financial_support_for_fuel_economy.pdf



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The benefits of fuel economy

- Reducing dependency on expensive (generally imported) oil
- Improving economic performance
- Safeguarding the quality of life
- Safeguarding the natural environment

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Vehicle fuel economy improvements

- Maintenance and inspection policies
- Driver behaviour
- Fuel quality
- Emissions control technologies
- Advanced vehicles and fuel
- Future vehicles and fuel

Potential technological improvements

Technology	Description	Improvements	Comments
Petrol Vehicles	Spark-ignition (SI) internal combustion engine	On-going improvements in engine and transmission systems Gasoline direct-injection Turbo SI engines	Significant improvements in SI engines are possible: up to 30% improvement in fuel economy compared to existing vehicles.
Diesel Vehicles	Compression-ignition (CI) internal combustion engine	Higher pressure fuel injection Improved management of thermal and exhaust gases Homogeneous charge compression ignition	Improvements in CI engines may be limited by challenges meeting air quality emission standards (particularly for particulates and NOx).
Petrol-Hybrid Electric Vehicles (HEV)	Capturing the energy dissipated in deceleration and braking	Use of more efficient electric motors Regenerative braking Start/stop systems to eliminate engine idling	50% improvement in fuel economy compared to existing petrol vehicles. Vehicles now commercially available. No changes to fuelling infrastructure required.
Other/Non-Powertrain measures	Measures to improve fuel efficiency	Improvements in vehicle aerodynamics Improvements in vehicle tyre rolling friction Vehicle weight reduction	These are well established technologies that can improve fuel efficiency by 10-20%.

List of policy measures

Type of policy measure	Policy measure	Level of implementation	Impact on fuel economy			
			Improve vehicles	Improve fuels	Improve driver behaviour	Optimise infrastructure
Economic	Fuel taxes	National	X	X	X	
	Vehicle taxes	National	X			
	Financial incentives to speed up fleet turnover	National	X	X		
Technological	Improvements in new vehicle fuel economy	National	X			
	Develop new fuels	National		X		
	Develop smart infrastructure	National/ Local				X
Information	Driver training to promote more fuel efficient driving practices	National/ Local/ Private				X
	Marketing campaigns to promote the use of green vehicles	National/ Local/ Private	X			
	Improved purchaser information	National/ Private	X			
	The establishment of regional fuel economy frameworks	National/ Local	X	X	X	X
Regulatory	Fuel economy standards (regulatory standards and voluntary targets)	National/ Local	X			
	Improve vehicle inspection and maintenance	National/ Local	X			
	Better regulation of the import of used vehicles	National	X			
	Regulatory incentives to speed fleet turnover	National	X			
	Testing new drivers in fuel efficient driving and awareness campaigns	National				

Policy measures to support vehicle fuel economy

- Design appropriate regulations, planning and information provision
- Set the right financial conditions and economic incentives
- Ensure technology transfer and access
- Strengthen institutions and capacity

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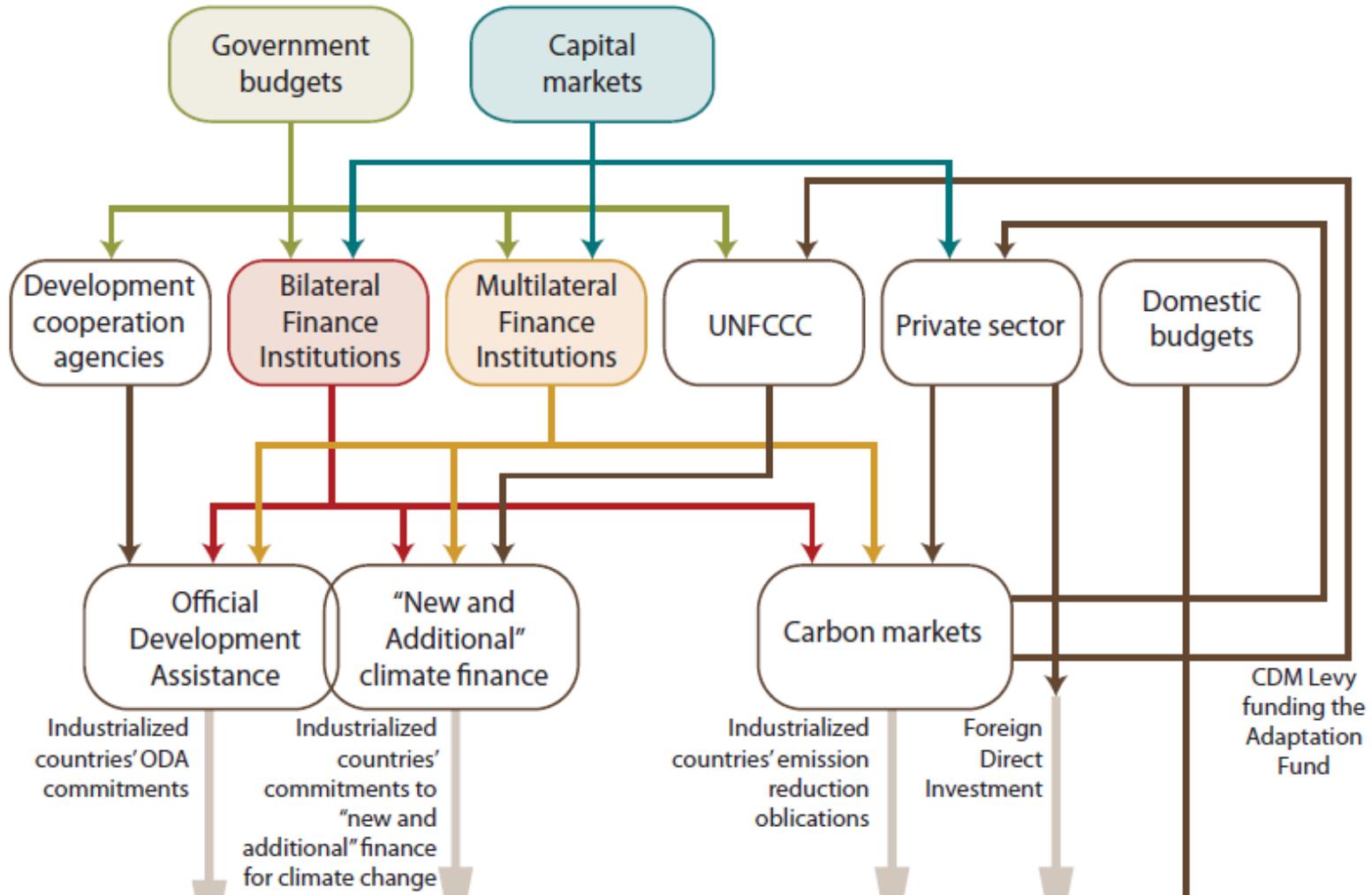
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Available support

- Multilateral or bilateral
- Public or private
- Tied or untied
- Financial or technical support

But may need to demonstrate additionality and require co-financing

Main sources of finance



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Key success factors

- Increase domestic recognition of the need for vehicle fuel economy
- Have a supportive framework in place
- Develop a robust business case
- Initiate dialogue with financial institutions from an early stage
- Be an informed client
- Collaborate with the private sector
- 'Package' vehicle fuel economy measures into a wider 'bundle' of measures
- Follow the UNFCCC process

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Conclusions

- Demand for vehicle fuel economy measures is increasing
- It can be challenging for developing countries to obtain finance to support them
- FIA Foundation/UNEP guide provides a practical and concise 'reference of first resort'
- Guide aims to increase awareness, and understanding, of the support that is available
- Level of available support is still not sufficient to meet demand
- Developing countries should demonstrate that they are engaged with the UNFCCC process and are proactively taking domestic actions to reduce their GHG emissions

Future developments

- Paper for Addis Ababa, Kampala and Nairobi as part of the GEF Sustrans project
- Paper for the GEFI Networking event in Hong Kong on 3-4 December 2012
- TRL happy to assist in developing proposals to secure funding





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**Do You
Have Any
Questions?**



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Thank you CODATU

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