The Global Fuel Economy Initiative (GFEI) a case study from Mauritius

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Climate Change

Transport sector’s contribution increasing more rapidly than any other sector....

CO2 emissions set to double...

Short lived climate pollutants – black carbon – now second most important climate pollutant

CO2 emissions from the global light duty vehicle fleet – GFEI 2009
Potential for transport to reduce 4 GT/yr in 2030 and 8 GT/yr in 2050 (IEA MOMO model 2015)

Comprehensive approach needed:
- **Avoid** transport, for example through better city planning
- **Shift** to efficient transport modes, like public transport
- **Improve** through cleaner vehicles
- Biggest potential with **improving vehicle efficiency** – the yellow wedge
Six core partners: FIA Foundation, UNEP, IEA, ITF, ICCT and UC Davis. Financial support from FIA Foundation, GEF and European Commission.

Launched in 2009, with target of doubling fuel economy (‘50by50’)

GFEI recognized as leading vehicle efficiency initiative

Achim Steiner ‘a model alliance that should inspire other sectors’
WHAT CAN FUEL EFFICIENCY DELIVER?

Financial Savings

- $2 trillion savings

A total of $2 trillion could be made in fuel savings by 2025, $500 billion of which would fund the costs of initiating a transition to electric vehicles.

Lower carbon emissions

- 300 fewer power stations

The 33Gt of CO₂ that could be saved between 2015 and 2050 is roughly the equivalent of closing 300 coal power stations over the same time period.

Reduced dependence on oil

Air quality benefits

From associated improved vehicle emissions standards
WHAT DOES GFEI DO?

RAISING GLOBAL AWARENESS

IN-COUNTRY POLICY SUPPORT

RESEARCH AND EVIDENCE

CLIMATE SUMMIT 2014
CATALYZING ACTION
CLIMATE 2014

AFFORDABLE AND CLEAN ENERGY

SUSTAINABLE DEVELOPMENT GOALS

G20 2016 CHINA

G20 2016 CHINA
FUEL ECONOMY
STATE OF THE WORLD 2016

Global Progress

FUEL ECONOMY
Average LGE/100km

<table>
<thead>
<tr>
<th>Year</th>
<th>OECD COUNTRIES</th>
<th>NON-OECD COUNTRIES</th>
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</thead>
<tbody>
<tr>
<td>2005</td>
<td>8.6</td>
<td>7.3</td>
</tr>
<tr>
<td>2013</td>
<td>6.9</td>
<td>7.2</td>
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-1.7
-0.1

FUTURE VEHICLE GROWTH TRENDS

Number of vehicles (m)

- OECD PASSENGER VEHICLES
- NON-OECD PASSENGER VEHICLES
Out of 159 NDCs:
67% of NDCs (112 NDCs) have highlighted specific transport mitigation measure and 45% of NDCs (71 NDCs) have proposed measures to improve fuel economy of vehicles.
Action since COP21

Global Fuel Economy
An update for COP22
Mauritius

2010 – Initial engagement with GFEI

2011 - adopted a fee-bate scheme that puts a fee for cars emitting above 158 CO2 g/km and give buyers a rebate if the car they are buying emits less than 158 gr/km.

- immediate shift to cleaner and more efficient cars.
- Fuel economy improved from an average of 7 L/100km in 2005 to 6.6 L/100km in 2013 and 5.8 L/100km in 2014.
- rapid increase of new hybrid vehicle sales registrations from 337 in 2011 to 1418 in 2013.

2013 - national workshop to launch further Work with 3 output reports on Vehicle Inventory, Fuel and Vehicle Legislation, and Cost-Benefit Analysis of Policy Options.
Mauritius

2013 - Feebate adjusted - CO2 threshold reduced from 158 CO2g/km to 150 CO2g/km.

2014 - A national workshop to present the findings to stakeholders. Short, medium and longer term measures to encourage import of more efficient vehicles such as vehicle labelling, a review of the fee-bate CO2 threshold, eco-driving and public sensitisation campaigns were recommended.

2015 – further work eg updates to light and heavy duty vehicle fuel economy & implementation roadmap for the policies

2016 – new policy - clean and efficient vehicles pay less tax, but without a rebate. – benefits new technologies like hybrid and electric vehicles.

Lessons learned from Mauritius are used in almost all other GFEI Country projects.
2017 – A focus on Africa

**KENYA**

As a result of GFEI’s support, Kenya is now adapting its vehicle tax policies to incentivize imports of newer, more efficient vehicles.

GFEI hosted a stakeholder workshop in Nairobi on the 12th May 2016 to discuss new proposals for a vehicle taxation scheme to promote the importation of cleaner, more efficient vehicles in Kenya. The event shared the findings of a report developed by the Kenya Energy Regulatory Commission in collaboration with the University of Nairobi, and supported by GFEI through UNEP with FIDF funding.

The report reviewed vehicle fuel economy trends and identified policy proposals to improve vehicle fuel economy in Kenya. The report proposed two policy instruments: a ‘feebate’ tax system and a vehicle labelling scheme. A feebate tax structure proposes a fee or levy on inefficient vehicles and a rebate or refund on efficient vehicles while a vehicle labelling scheme provides information on vehicle efficiency to consumers. The report also illustrates what a Kenyan vehicle label could look like.

**SOUTH AFRICA**

Fuel economy baseline and policy development

GFEI has been supporting South Africa to develop a fuel economy baseline, including data analysis and stakeholder workshops. The baseline analysis is the first step towards new vehicle FE/CO₂ emissions standards development as it sets the initial input to model the potential benefits of adopting new vehicle FE/CO₂ standards.

As part of the baseline analysis project a workshop was held in Pretoria (Aug 29th) on fuel economy standards. The workshop was attended by a local and state government officials from the departments of Transport, Energy, and Environmental Affairs, City of Tshwane, Johannesburg Metropolitan, as well as technical experts from the South African National Energy Development Institute, and NGOs, all involved in transport and climate issues.

The purpose of the workshop was to present preliminary results of the baseline study, to have a chance to describe how FE and CO₂ standards will work, and to address stakeholders’ questions and comments on the idea of potentially adopting standards. The baseline analysis report will be finalized by the end of November 2016.

**ECOWAS**

GFEI, through UNEP, is working with the Economic Community of West African States (ECOWAS) to support the development of a West African regional clean and efficient vehicles roadmap that will contribute to reduced vehicle CO₂ emissions worldwide in line with the GFEI target of doubling vehicle fuel efficiency by 2050. The ECOWAS Commission brings together 15 West African countries—Benin, Burkina Faso, Cape Verde, Cote d’Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. Already several West African countries are developing GFEI baseline data, and policy proposals.

ECOWAS Commission has been active in promoting cleaner, lower sulphur fuels in the region, as well as promoting a regional outlook to vehicle importation. The ECOWAS Commission recommended implementation of vehicle fuel economy work as the next step for the sub-region at regional workshops held in May 2015 in Abidjan and in June 2016 in Abuja. The support to the ECOWAS to develop a regional roadmap will build on past and on-going support to some of the ECOWAS countries on the GFEI. Some of the countries that the GFEI has been initiated or is planned are Cote d’Ivoire, Benin, Liberia, Togo, Mali, Ghana and Nigeria.
THANK-YOU

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