How governments promote efficient vehicles through labeling program

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Transport, Energy Efficiency & Behavior
IEA Workshop
The mission of ICCT is to dramatically improve the environmental performance and efficiency of cars, trucks, buses and transportation systems in order to protect and improve public health, the environment, and quality of life.

- Non-profit research organization
- Air Pollution and Climate Impacts
- Focus on regulatory policies and fiscal incentives
- Activity across modes including aviation and marine
- Global outreach, with special focus on largest markets
Vehicle fuel economy labeling (VFEL) has many benefits

VFEL can

- Raise consumer awareness
- Enable other policies
  - Fuel economy standards
  - Fiscal incentive
- Promote fuel efficient vehicle, contribute to fuel saving

UK awareness of labeling program. Source: Esposito G. (2014)

VFEL program has a wide scope

VFEL include

Label displayed on car/in showroom

Online

Other media

And associated consumer information campaign
Implementation of vehicle fuel economy labeling program

Adoption of vehicle fuel efficiency label

- Mandatory
- Voluntary


- US
- UK
- Korea
- Thailand
- Vietnam
- Chile
- Singapore
- China
- Chinese Taipei
- Brazil
- New Zealand
- Germany
- Netherlands
- Austria
- Australia
- Japan
- Canada
- Hong Kong, China
Six key elements for VFEL programs

- Regulatory framework
- Program design
- Label design and information
- Consumer outreach
- Compliance and enforcement
- Performance assessment

http://www.theicct.org/apec-vehicle-fuel-economy-labeling
Program design

- Wide scope
  - Mandatory
  - New + used
  - Passenger car + light commercial vehicle
  - Gasoline/diesel + other fuel types
- Learn consumer behavior/expectations
  - Regular market research and survey
  - Consumer attitudes changes over time
- Reflect real-world performance.
  - Collect in-use fuel consumption performance data
  - Use correction factor or revised test cycle
Label design and information

US label
- Absolute fuel economy value
- Fuel economy/GHG rating
- Annual fuel cost saving

Singapore label
- Absolute fuel economy value
- Fuel economy/GHG range
- Fiscal policy information
Label information for alternative fuel vehicles

Special considerations for alternative fuel vehicles

- Comparable (i.e. fuel consumption equivalent, CO₂ emissions)
- Fiscal information
- Others (Electricity consumption, range, charge time, operation information of AFVs)

Label in the UK
Consumer outreach

- Importance of online information
  - UK - 80% carry out car research online
  - New Zealand - 27% people bought car online

- Information in promotional materials through other major media:
  - Electronic posters online
  - Printed or electronic promotional materials (e.g., newspaper, periodical magazine, catalogue)
Consumer outreach

- VFEL website
  - Additional services beyond the label
  - User-friendly

<table>
<thead>
<tr>
<th>Car 1</th>
<th>Car 2 (optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make: B.M.W.</td>
<td>Make: CHERY</td>
</tr>
<tr>
<td>Model: XS M50D HID SR</td>
<td>Model: J3 HATCHBACK 1.6 5MT 2WD</td>
</tr>
<tr>
<td>Body Type: Sport Utility Vehicle (SUV)</td>
<td>Body Type: Hatchback</td>
</tr>
<tr>
<td>Engine (cc): 2993</td>
<td>Engine (cc): 1597</td>
</tr>
<tr>
<td>Maximum Power Output (kW): 280.0</td>
<td>Maximum Power Output (kW): 87.5</td>
</tr>
<tr>
<td>Fuel Type: Diesel</td>
<td>Fuel Type: Petrol</td>
</tr>
<tr>
<td>Transmission Type: Automatic</td>
<td>Transmission Type: Manual</td>
</tr>
<tr>
<td>Turbo / Supercharged: Yes</td>
<td>Turbo / Supercharged: No</td>
</tr>
<tr>
<td>Hybrid System: No</td>
<td>Hybrid System: No</td>
</tr>
</tbody>
</table>

CO2 Fuel Economy Data

<table>
<thead>
<tr>
<th>Car 1</th>
<th>Car 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Make:</td>
<td>Make: Petrol</td>
</tr>
<tr>
<td>CO2</td>
<td>CO2</td>
</tr>
<tr>
<td>Urban: 199.00 (g/km)</td>
<td>Urban: 194.00 (g/km)</td>
</tr>
<tr>
<td>Extra Urban: 164.00 (g/km)</td>
<td>Extra Urban: 144.00 (g/km)</td>
</tr>
<tr>
<td>Combined: 177.00 (g/km)</td>
<td>Combined: 163.00 (g/km)</td>
</tr>
<tr>
<td>Fuel Economy</td>
<td>Fuel Economy</td>
</tr>
<tr>
<td>Urban: 7.60 (L/100km)</td>
<td>Urban: 8.30 (L/100km)</td>
</tr>
<tr>
<td>Extra Urban: 6.20 (L/100km)</td>
<td>Extra Urban: 6.00 (L/100km)</td>
</tr>
<tr>
<td>Combined: 6.70 (L/100km)</td>
<td>Combined: 6.90 (L/100km)</td>
</tr>
</tbody>
</table>

Reset Car 1 | Get CO2 and Fuel Economy Data | Reset Car 2
Download All Vehicle Fuel Economy Data
Effective consumer outreach-New Zealand

### Start driving!

- **TOYOTA PRIUS C**
  - Change
  - Fuel: $2.00
  - Yearly kms: 1280
  - Cost: $1090
  - Fuel economy: 3.9L/100KM (5%)

- **VOLKSWAGEN PASSAT TSI 118KW RL**
  - Change
  - Fuel: $2.00
  - Yearly kms: 700
  - Cost: $1990
  - Fuel economy: 7.1L/100KM (4%)

- **TOYOTA COROLLA GLX**
  - Change
  - Fuel: $2.00
  - Yearly kms: 820
  - Cost: $1710
  - Fuel economy: 6.1L/100KM (4%)

- **FORD FOCUS AMBIENTE**
  - Change
  - Fuel: $2.00
  - Yearly kms: 780
  - Cost: $1790
  - Fuel economy: 6.4L/100KM (4%)

*Source: New Zealand energywise website*
Six key elements for VFEL programs

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- Label design and information
- Consumer outreach
- Compliance and enforcement
- Performance assessment

Management

[http://www.theicct.org/apec-vehicle-fuel-economy-labeling]
A review and evaluation of vehicle fuel efficiency labeling and consumer information programs

http://www.theicct.org/apec-vehicle-fuel-economy-labeling

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