Enhancing Fuel Economy in KSA

G20 Transport Task Group Workshop
October 7th, 2020

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The Saudi Energy Efficiency Center (SEEC) has been on a journey since 2010 to ensure that Saudi Arabia becomes a highly energy efficient country.

- **2010**: Established through a Council of Ministers resolution
- **2012**: Inter-agency effort to launch the Saudi Energy Efficiency Program (SEEP)
- **2013**: Full-fledged program with 12 teams ~80 initiatives at different stages (feasibility, design, execution)
- **2018**: New mandate for SEEC has been approved in 2018
- **now**: Scope of work expands to cover: Power generation, Water desalination, and Feedstock use in industry.
Multiple initiatives were developed to improve energy efficiency of land transportation in Saudi Arabia. 

- **21%**
  - Light Duty Vehicles: 52%
  - Heavy Duty Vehicles: 38%

### 2012 – 2019

- **CAFE 1.0**
  - Saudi CAFE Standard (Phase I)
  - Fuel Economy label
  - Tire RR & WG Standard (Phase I)

### On-going efforts

- **CAFE 2.0**
  - Tire RR & WG Standard (Phase II)
  - Saudi CAFE Standard (Phase II)
  - HDV Aerodynamic Devices Regulation
## Saudi CAFE Standard

The fuel economy standard for incoming LDVs covers both new vehicles and used imports.

| Timeline       | Phase I started in 2016  
<table>
<thead>
<tr>
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<th>Phase II will start in 2021</th>
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<tbody>
<tr>
<td>LDVs involved</td>
<td>New Imports</td>
</tr>
<tr>
<td>Fuel Efficiency Standard</td>
<td>Corporate Average Fuel Economy (CAFE)</td>
</tr>
<tr>
<td>Attribute</td>
<td>Used Imports</td>
</tr>
<tr>
<td>Fuel Economy Target</td>
<td>Minimum Energy Performance Standards (MEPS)</td>
</tr>
<tr>
<td></td>
<td>Based on footprint (separately for PC and LT)</td>
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<tr>
<td></td>
<td>Independent of any attribute (separately for PC and LT)</td>
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<tr>
<td></td>
<td>Annual growth of 3.5 – 4%</td>
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<td>PC: 10.3 km/l, LT: 9.0 km/l</td>
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Saudi CAFE Standard was implemented to improve the fleet average fuel economy in the Kingdom.

![Graph showing fuel economy improvement](chart.png)

Prior to the introduction of the Saudi CAFE, the fuel economy was ~12.2 Km/L. After introducing the Saudi CAFE, the expected fuel economy in 2023 (end of phase II) is ~17.8 Km/L.

- **Expected fuel economy in 2023**
- **Without the fuel economy standard**, the expected fuel economy would be ~14.3 Km/L in 2023.

Note: (1) Other factors include the expected introduction of dieselization in 2021, the introduction of women driving in 2018.

Source: SEEP internal data
Saudi CAFE Standard

Since the implementation of the Saudi CAFE standard, many indicators have shown its significant impact on the fuel economy of the new fleet*

- **New Fleet’s Fuel Economy**: 16% improvement in the new fleet’s fuel economy
- **Fuel Economy Label Registration**: 21% increase in the number of vehicles registered as “excellent” and above
- **Availability of Highly Efficient Options in The Local Market**: Multiple HE models have been introduced and previous models have been modified to comply with the standard

* New and used incoming vehicles only.
In conclusion, these efforts are aimed to support Saudi Arabia’s vision in reducing the domestic energy consumption.

- Since the beginning of the Fuel Economy standard, the actual fuel economy of new LDV imports has improved by a yearly average of 3.8% (until 2019), which is consistent with the annual growth target for new LDVs (set at 3.5-4%).

- Without the Saudi CAFE standard, the fuel economy of new LDVs is expected to be around 13 km/l in 2019. (currently at 14.5 km/l)

- The standard helped improving the quality of the fleet mix to have better options in terms of fuel economy (e.g. hybrid vehicles represent 0.1% of incoming vehicles registered in 2016, which increased drastically to be around ~2.1% in 2019)
Thank you!