Support for the Introduction of EU Emissions Standards for Light Duty and Heavy-Duty Vehicles in Georgia

Nana Janashia | CENN
CENN Mission

Working with communities, governments, and businesses across the South Caucasus to create sustainable solutions for a healthy environment.

Thematic areas

• Climate Change, Environment and Energy
• Agriculture and Rural Development
• Economic Growth
• Democracy and Good Governance
• Education and Youth
• Public Health and Well-being

In 2010 CENN started cooperation with UNEP to support transition of Georgia to zero and low-emissions mobility for improved air quality and climate change mitigation
1. Transport as the major source of air pollution in urban areas of Georgia and contributor to global warming

2. Facts about transport in Georgia

3. Air pollution and human health

4. International commitments and national requirements

5. Initiation of an Auto Fuel Efficiency Programme in Georgia & Development of the Caucasus Fuel Economy Initiative (CFEI) (UNEP, 2010-2014)


Transport is the major source of air pollution in urban areas of Georgia and contributes to global warming

- Transport-related GHG emissions make 24% of all GHG emissions in Georgia
- GHG emissions from transport will increase by 70% (till 40%) by 2030
- Transport emissions are main contributors of urban air pollution: CO – 54.3%, NO\textsubscript{x} – 42.7%, VOC – 30.4%, PM – 5.4%
  - In big cities 95% of NO\textsubscript{2} emissions are from transport sector
  - In many cases NO\textsubscript{2} emissions exceed limit values (in 9 municipalities and Tbilisi)

### Air pollution sources in Georgia

<table>
<thead>
<tr>
<th>Substance</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td></td>
<td>54.3</td>
<td>6.6</td>
<td>39.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SO\textsubscript{x}</td>
<td>1.2</td>
<td>94.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NH\textsubscript{3}</td>
<td>102.2</td>
<td>86.4</td>
<td>9.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NMVOC</td>
<td>30.4</td>
<td>23.2</td>
<td>23.2</td>
<td>31.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NO\textsubscript{x}</td>
<td>42.7</td>
<td>15.9</td>
<td>9.4</td>
<td>31.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td>5.4</td>
<td>43.2</td>
<td>39.2</td>
<td>12.2</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### NO\textsubscript{2} concentration in 25 municipalities

- 2020
- Limit values
The number of cars and traffic is rapidly increasing contributing to air pollution, congestions and safety risks:

- In 2017-2021 the number of vehicles increased by 25%
  - 1,395,000 vehicles in 2021 (62% light-duty vehicles)
  - 34% of vehicles are in the capital

- In 2021 import of vehicles increased by 28%
  - No restrictions on age, emission standards, and technical conditions of cars
  - The excise tax system stimulates the import of 6-8-year-old cars
  - The share (%) of imported vehicles according to the age:

<table>
<thead>
<tr>
<th>&gt;20 years old cars</th>
<th>11-20</th>
<th>7-10</th>
<th>4-6</th>
<th>1-3</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>28%</td>
<td>4%</td>
<td>43%</td>
<td>15%</td>
<td>5%</td>
<td>5%</td>
</tr>
</tbody>
</table>

- Tax system stimulates import of electric and hybrid cars (tax breaks on imports of electric (100%) and hybrid (60%) vehicles)

<table>
<thead>
<tr>
<th>Petrol</th>
<th>Diesel</th>
<th>Hybrid</th>
<th>Electric</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
<td>26%</td>
<td>20%</td>
<td>1%</td>
</tr>
</tbody>
</table>
Key challenges of transport sector in Georgia

- Old and poorly maintained car fleet, poor transport planning and administration:

<table>
<thead>
<tr>
<th>Age</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;20 years old</td>
<td>52%</td>
<td></td>
</tr>
<tr>
<td>11-20</td>
<td>31%</td>
<td></td>
</tr>
<tr>
<td>7-10</td>
<td>11%</td>
<td></td>
</tr>
<tr>
<td>4-6</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>1-3</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0.5%</td>
<td></td>
</tr>
</tbody>
</table>

- Renovation of the bus system in big cities (Tbilisi, Rustavi, Batumi, Kutaisi) is underway

- Weak enforcement of technical inspections:
  - 1,020,311 cars (73%) have been inspected in 2021
  - Only 67% passed technical inspection

- Fragmented and uncoordinated transport policy:
  - No policy and strategy documents on transport management at the national level (only in some municipalities)
  - No regulation on vehicle emissions standards yet (drafted by UNEP/GFEI/CENN and under consideration)
  - Modern standards are introduced: petrol (Euro5) and diesel (Euro4), excise tax increased for old cars, hybrid and electric cars are promoted (developed and lobbied by UNEP/GFEI/CENN)
  - Inefficient traffic management and parking system
Air pollution emitted from transportation has negative impacts on the health and welfare

- $\text{NO}_x$, $\text{SO}_x$, $\text{PM}_x$, VOC, CO – cancer, respiratory diseases, asthma, allergies, hipertony, cardiovascular diseases

Citizens mark air pollution as an urgent health, climate and development priority (NDI research, 2020)

- 41% of respondents indicate air pollution as the most urgent environmental concern
EU-Georgia AA, 2014:
• Requirements related to the transport sector, climate change and air quality

A Road Map for EU approximation in the environmental and climate action field, 2016 (MEPA):
• Activity 2.8: Develop a concept and legislation on eco-classes for vehicles and import and production restrictions

Law of Georgia on Protection of Atmospheric Air (Article 25, Clause 7):
• Identify vehicles and assess the fleet according to the EU classes
• Regulate the import not only based on vehicle production year, but also based on EU emission classes
• Ensure compliance of emission standards of vehicles manufactured in Georgia with Euro 5 and Euro 6 light duty vehicle classes (both petrol and diesel)

Climate Change Strategy of Georgia, 2021-2030:
• Goal 2. Reduce GHG emissions from the transport sector by 2030 to 15% below the reference level (40%)
  o Objective 2.1. Increase the share of low- and zero-emission and roadworthy private vehicles in the vehicle fleet

Climate Change Action Plan, 2021-2023:
• Objective 2.1.7. Introduce emission standards on imported vehicles based on CBA (by the end of 2022)
Initiation of an Auto Fuel Efficiency Programme in Georgia & Development of the Caucasus Fuel Economy Initiative (CFEI)

Duration: 2010-2014

Objective: To catalyze the development of national fuel economy plan (White Paper) in Georgia & To scale up the GFEI approach and lessons learnt in Georgia to the South Caucasus

Results: Fuel Economy White Paper for Georgia developed, knowledge shared in Armenia and Azerbaijan

- Fuel economy institutional and legal assessment and analysis implemented for Georgia, Armenia and Azerbaijan
- Vehicle baseline assessment and policy development scenarios developed for Georgia applying GFEI methodologies and tools: (GFEI Fuel Economy Policies impact tool (FEPIt), the GFEI Feebate Simulation Tool, GFEI auto fuel economy baseline and fuel economy projection methodology and tools)
- A White Paper was developed for Georgia and agreed with stakeholders
- Knowledge and lessons learnt were shared in the Caucasus region via workshops, roundtables and conferences

<table>
<thead>
<tr>
<th>White Paper Recommendations</th>
<th>Status of implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduce used car import restriction</td>
<td>Draft by-law on vehicle emission standards (UENP/GFEI/CENN)</td>
</tr>
<tr>
<td>Introduce vehicle fuel economy labeling (indicating CO₂ emissions, fuel economy, model, age, fuel type, tax ban)</td>
<td>Not implemented</td>
</tr>
<tr>
<td>Improve tax system (acquisition/registration tax, ownership tax)</td>
<td>The excise tax system stimulates the import of 6-8-year-old cars</td>
</tr>
</tbody>
</table>

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**Duration:** 2017-2019

**Objective:** To assist the Government to harmonize Georgian legislation with EU requirements by introducing low-emission transport policy and standards

**Results:**

- **A Technical Regulation (By-Law) for Introducing EU Emission Standards for Road Transport**
  - A steering committee was formed (ministries, local governments, international organizations, NGOs), meetings and consultations were conducted
  - A car fleet was assessed and baseline established
  - Relevant regulations - national legislation, international conventions, EU directives, AA requirements - were assessed
  - A technical regulation was developed setting vehicle emission standards in line with EU requirements; agreed with the stakeholders, and accepted by MEPA

**Awareness of public and relevant stakeholders was increased to facilitate implementation of new regulation**

- Workshops and roundtable meetings, TV and radio programs, newspaper articles, competitions, social media.

**Reach:** 50,000 people
Duration: 2020-2021

Objective: Support the adoption and implementation of the by-law on vehicle emissions in Georgia

Results: Cost Benefit Analysis (CBA) on introducing low-emission transport policies and standards in Georgia

- ToR of the CBA was prepared based on Georgia`s specific requirements and circumstances with support from Climate Technology Centre and Network (CTCN)
- Multi-stakeholder committee was formed and regular meetings were conducted
- The CBA was developed and agreed with the stakeholders and MEPA
- **As a result of the CBA:** A Euro 5 Emissions standards will apply only on imports of vehicles in Georgia
- **GoG will introduce a technical regulation Introducing EU Emission Standards for Road Transport in 2023 – working on enforcement mechanisms**

Awareness of public and relevant stakeholders was increased on emissions’ impacts on human health and the environment

- TV and radio programs, newspaper articles, online competitions, posts in social media.
  **Reach:** 50,000 people
Thank you for your attention!