



EFFECT

Energy Forecasting Framework
and Emissions Consensus Tool

**An Open Tool for Building Low Carbon
Development Scenarios and Forecasting
GHG Emissions**



EFFECT Why EFFECT?

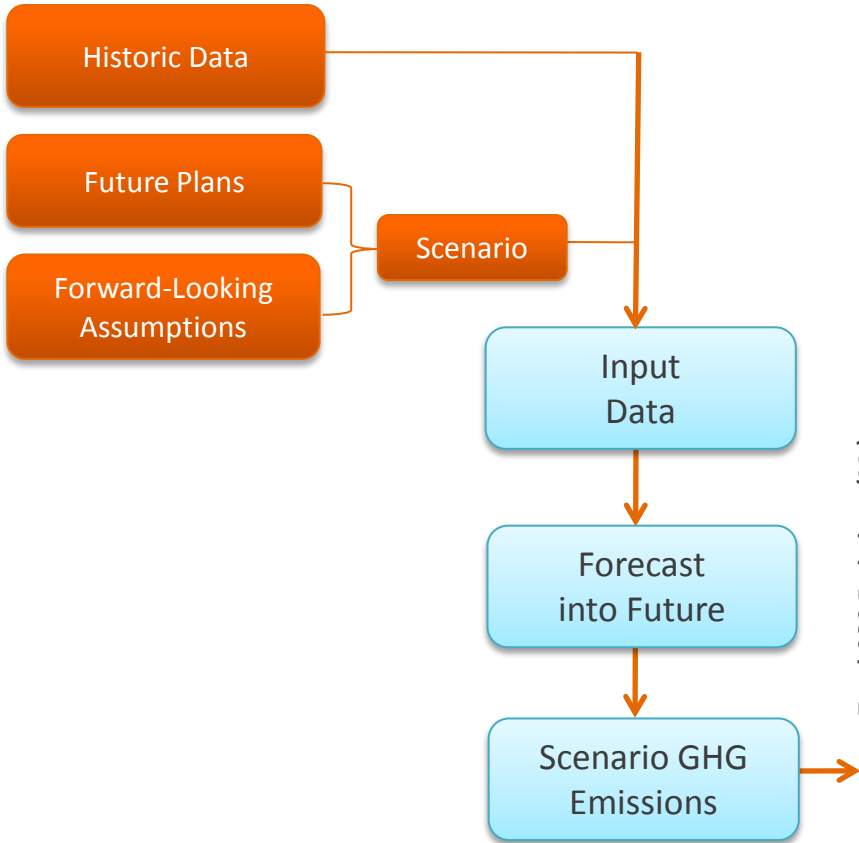
Strong Demand from Countries:

- Building LCD scenarios consistent across sectors
- Forecasting GHG emissions
- Improving access to climate change finance
- Developing industrial advantage

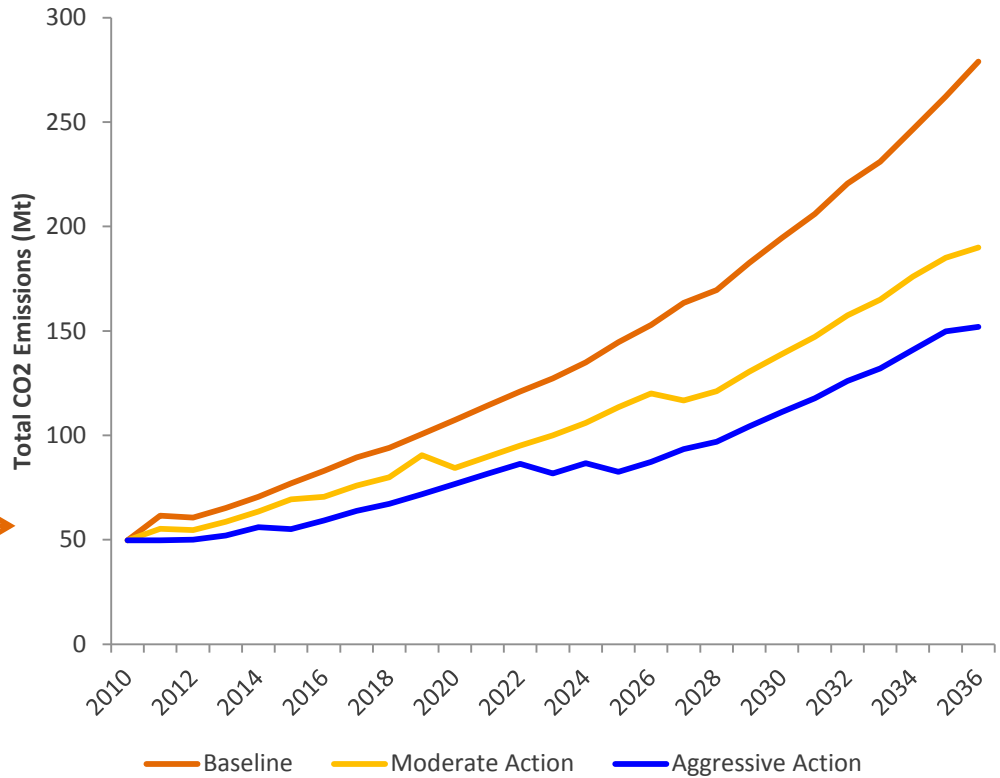
Key Advantages of EFFECT:

- Transparent - Enables consensus building among a wide range of stakeholders
- Flexible - Enables customization to suit local conditions
- Adept - Compiles a large amount of local data from multiple sources





EFFECT yields economy-wide GHG emission forecasts from data about energy producing/consuming assets in development scenarios





Ministry of Economy and Sustainable Development
OF GEORGIA

Objective

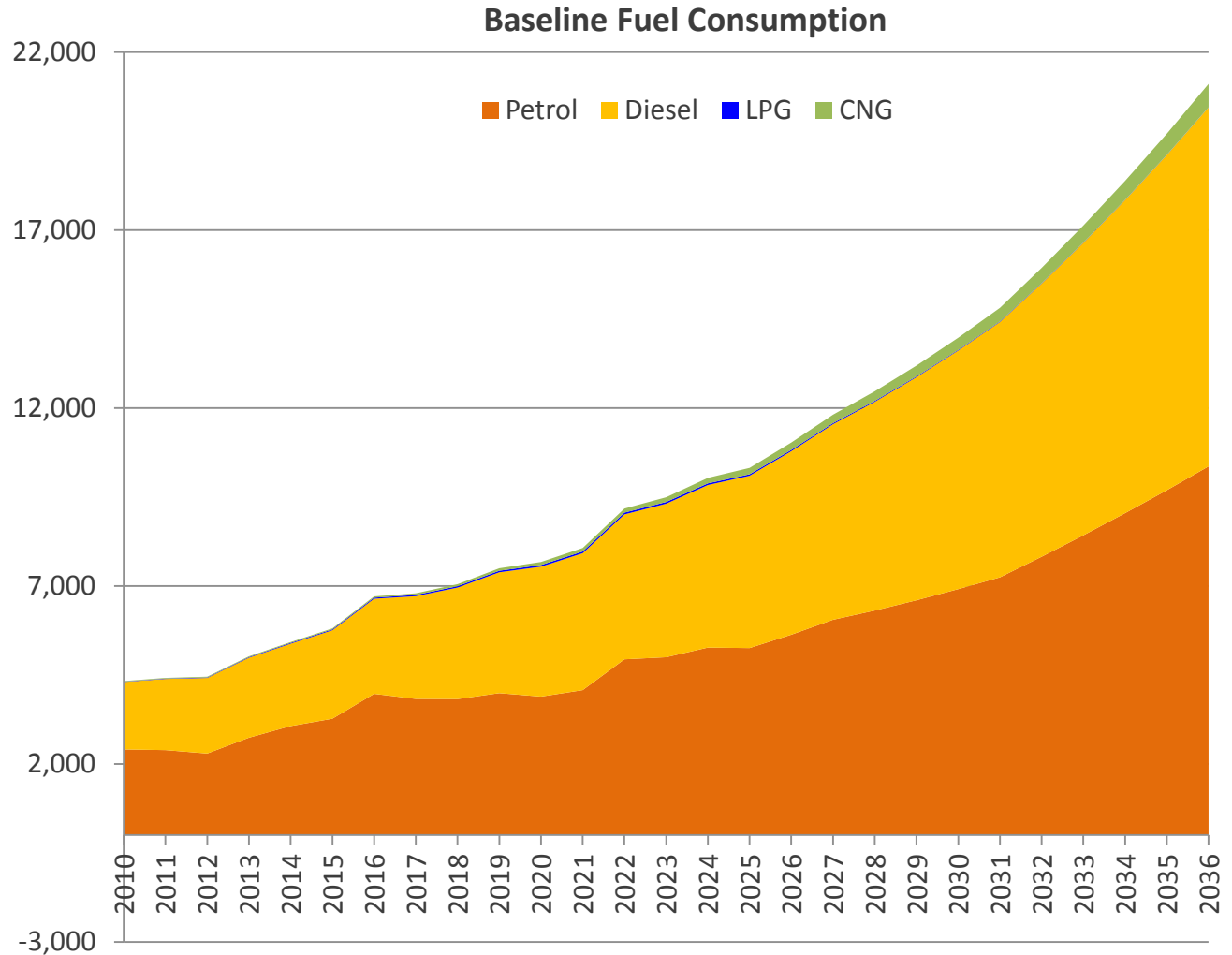
- Reduce fossil fuel use in order to improve balance of trade and energy security

Symptoms

- Chronic current account deficit (above 10%)
- 10-fold increase in petroleum imports between 1998 and 2008
- 27% increase between Jan and May 2011 (year study started)

Option 1 | Baseline Fuel Consumption

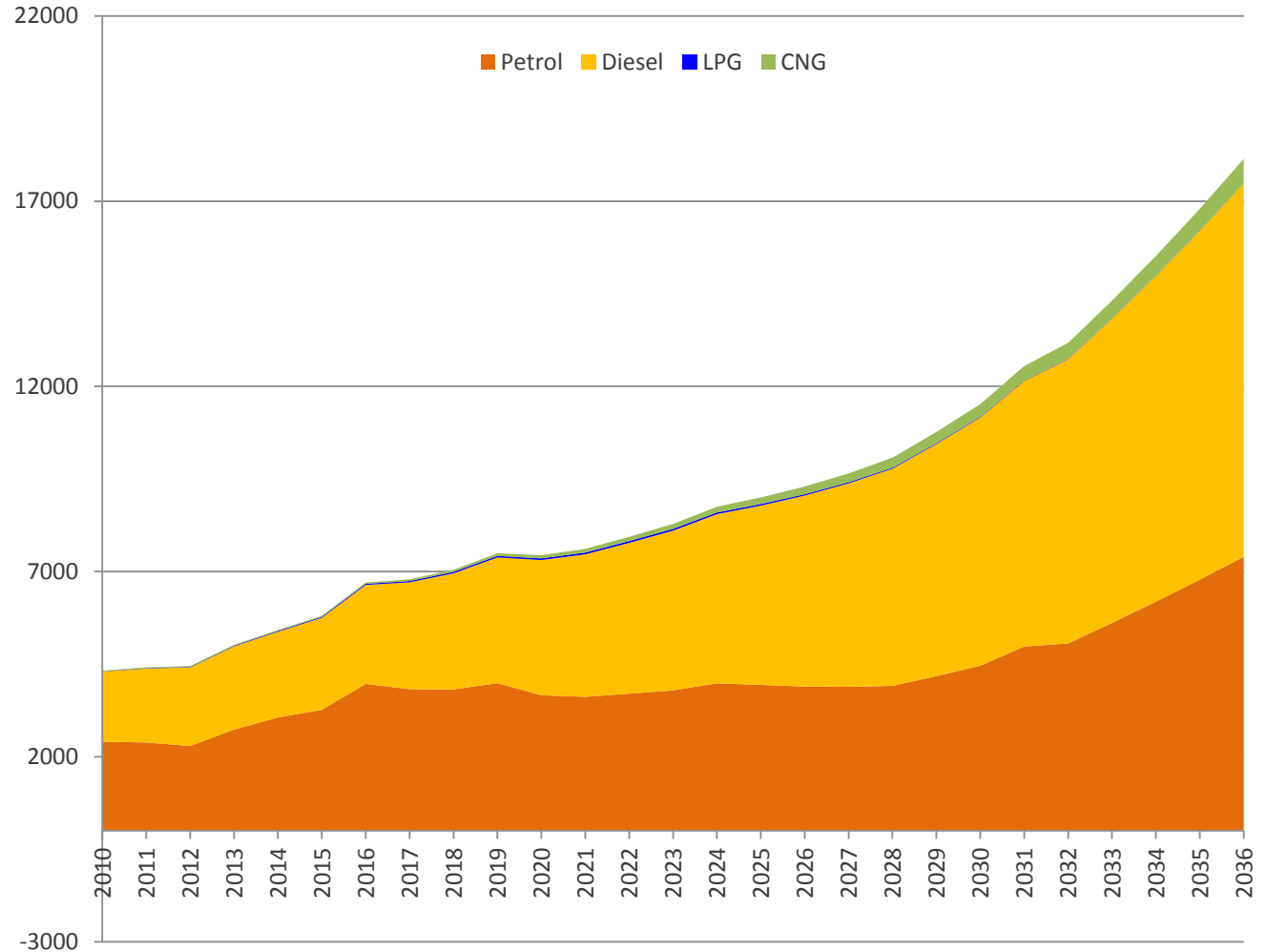
Significant increase in total fuel imports if the government takes no action



Option 2 | Greening Private Cars Scenario

- Introduce vehicle emission standards
- Increase vehicles taxes on older imported cars

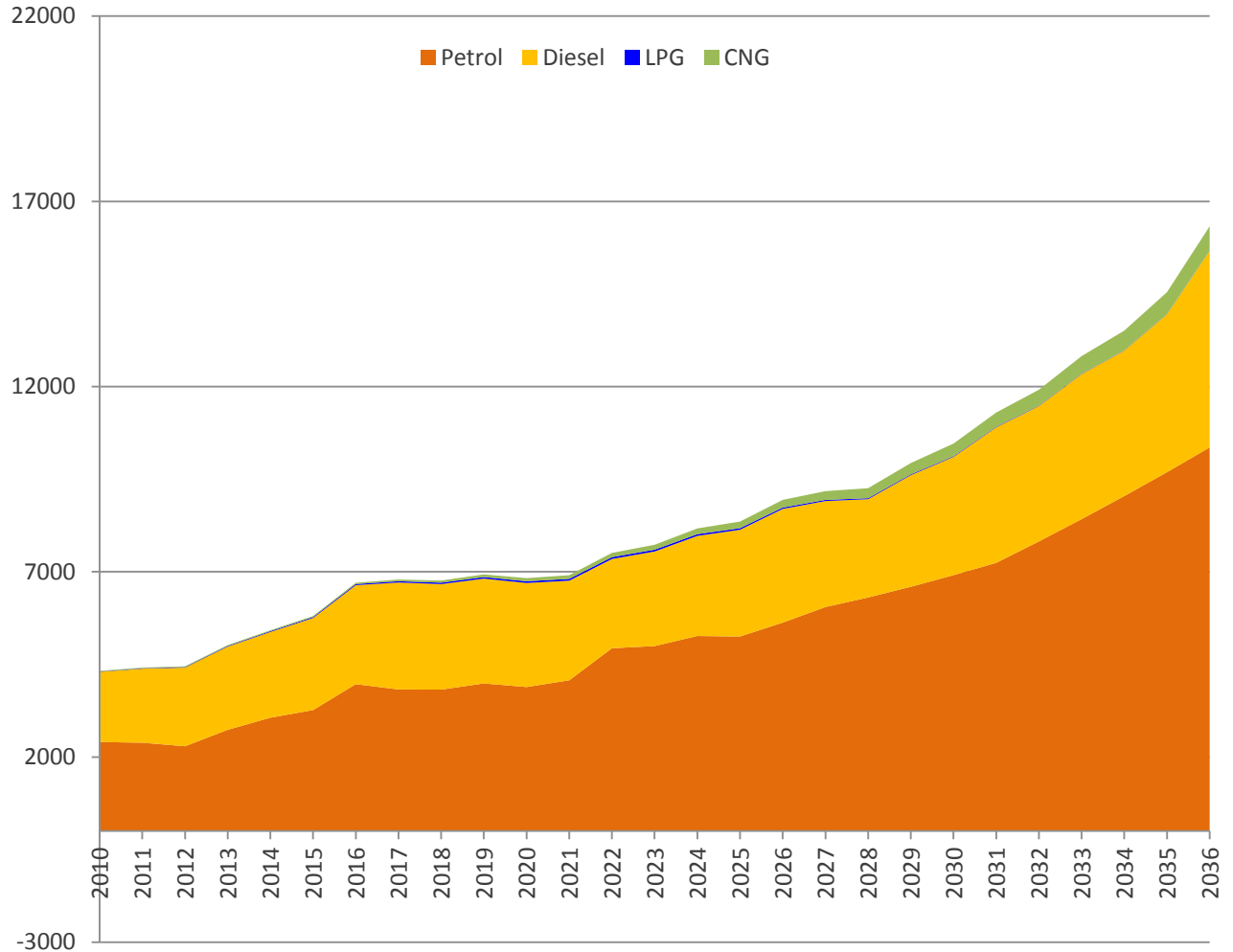
Private Cars Intervention Fuel Consumption



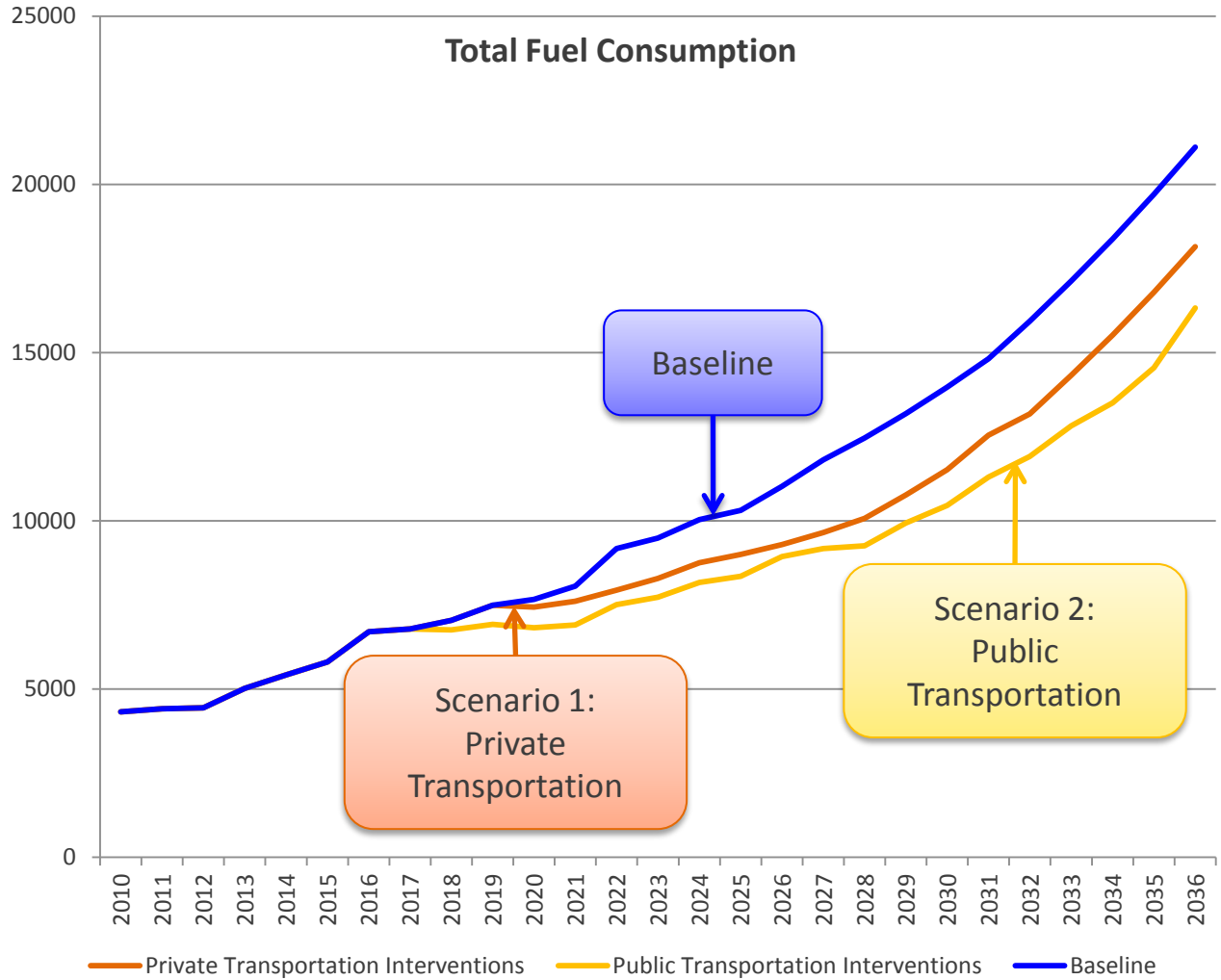
Option 3 | Greening Public Transportation Scenario

- Correct mini-bus market failures
- Support development of sustainable urban transport
- Support commercial intercity public transportation services

Public Transportation Interventions Fuel Consumption

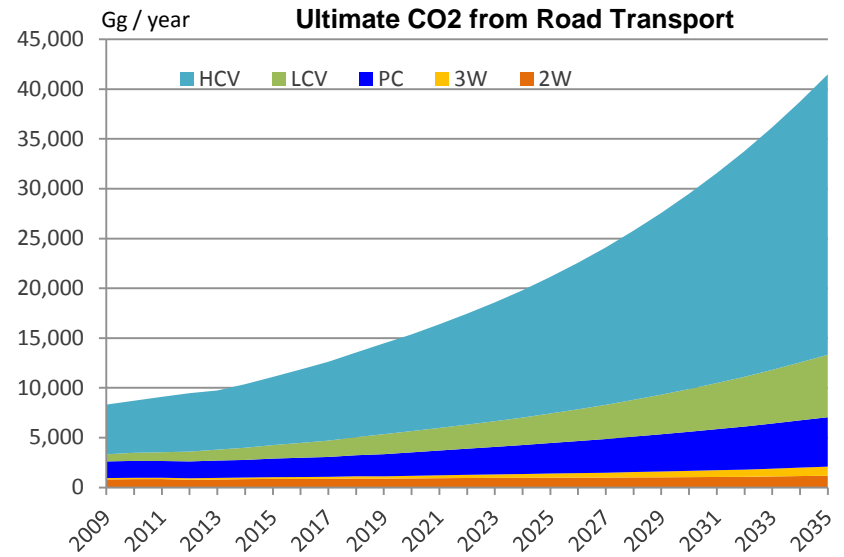
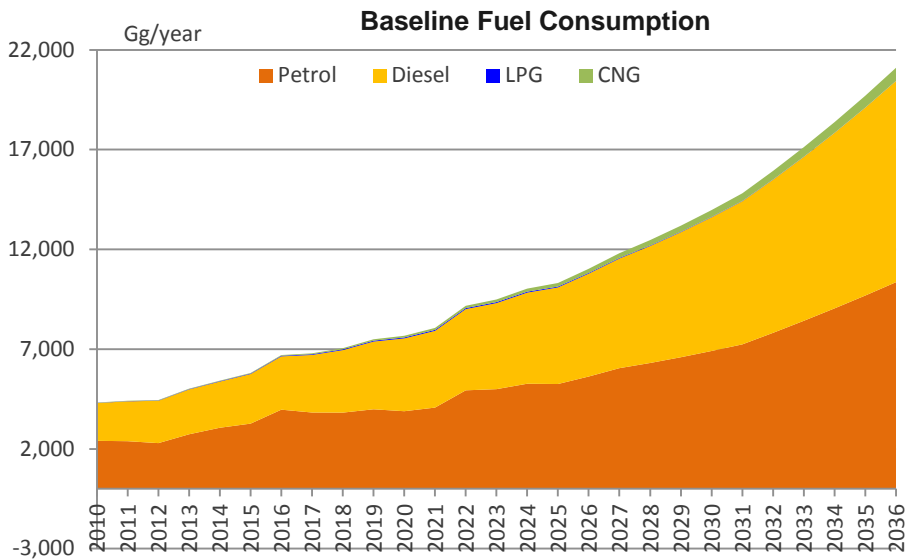
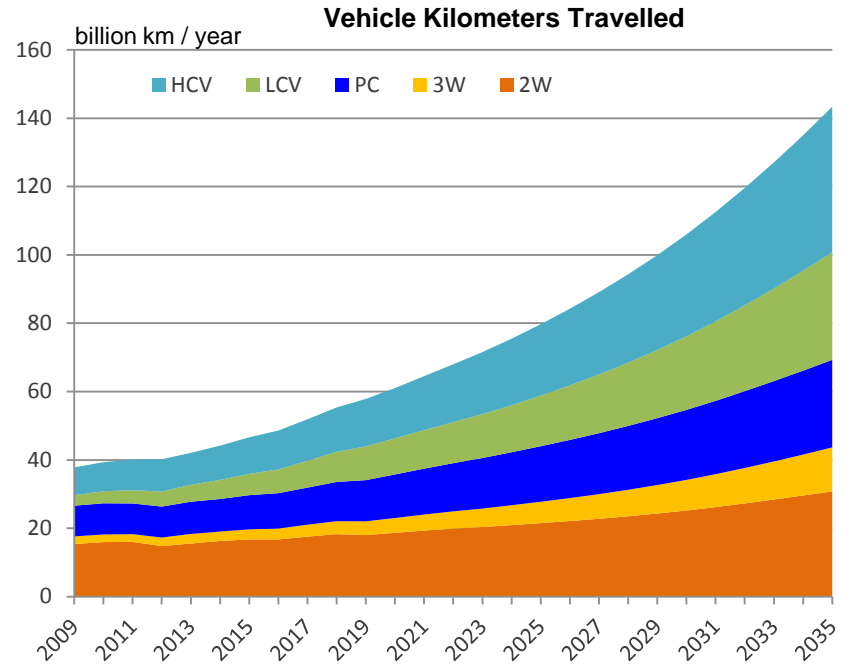
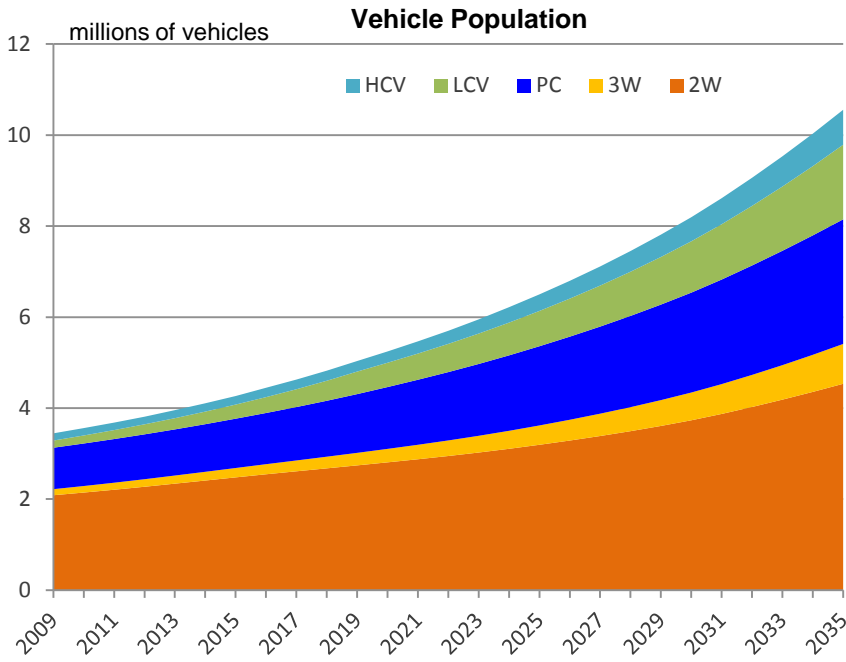


With all else being equal, public transportation interventions result in a greater reduction in fuel consumption





Add'l Results for Building Scenarios





Transport (road + rail)



Power



Industry



Households



Agriculture



Nonresidential

TO GET MODEL | Download from ESMAP Website
<http://esmap.org/esmap/EFFECT>

TRAINING | E-Learning course from WBI Website
<http://vle.worldbank.org/moodle/course/view.php?id=500>
Login: lcd01; password: lcd

SUPPORT | User guides available in software & from ESMAP Staff



FOR ADDITIONAL SUPPORT, CONTACT:
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Thank You.

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