

Energy Efficient Trucks

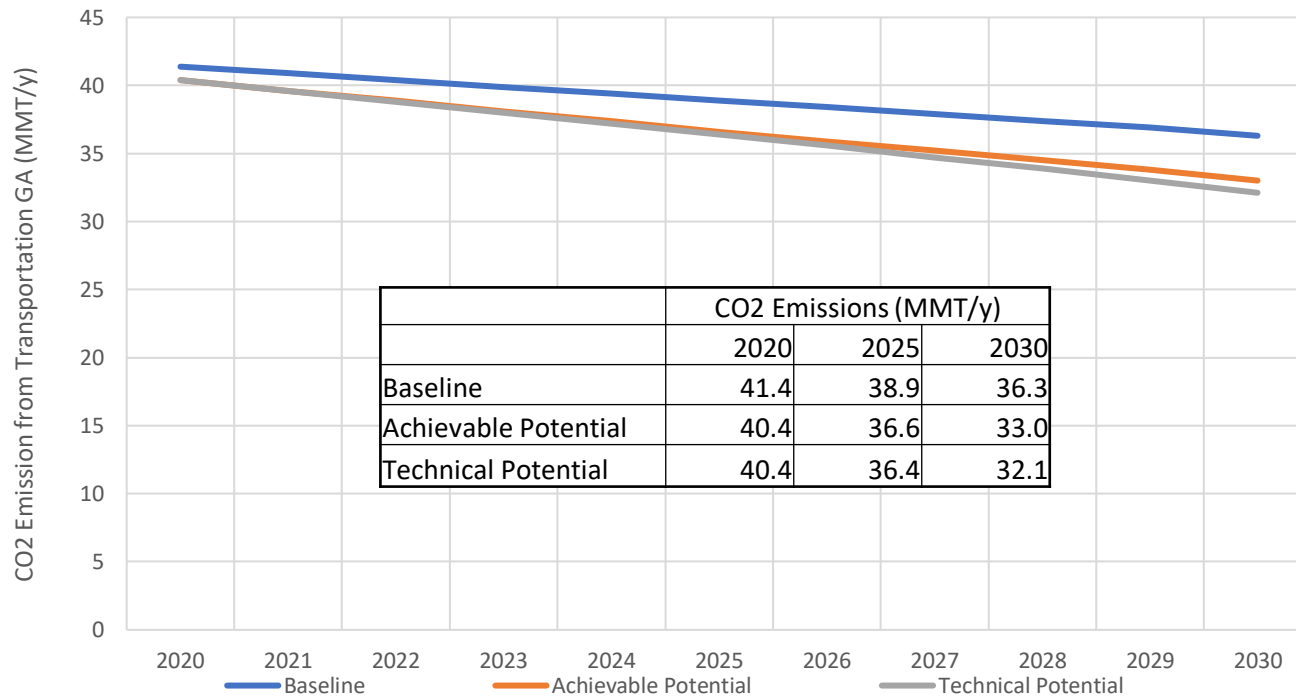
Medium- and heavy-duty trucks in the U.S. consume about 50 billion gallons of diesel fuel each year. Trucks consume a disproportionate quantity of fuel relative distances travelled. Increasing fuel efficiency for both new and existing trucks can lead to significant emission reductions. Numerous fuel-saving technologies are available at compelling paybacks.





Energy-Efficient Trucks

M/HD Trucks can contribute additional CO2 reductions beyond a favorable baseline trend by 2030



Baseline = Assumes business as usual for fuel economy and CO2 reductions, driven by new vehicle technologies and Federal CAFÉ regulations

Achievable Potential = 25% overall reduction in truck fuel consumption by 2030.

Technical Potential = ~30% overall reduction in truck fuel consumption by 2030

Contributing **4.2 MtCO₂e/y** in CO₂ reductions compared to baseline.

1 MtCO₂e solution in 2030 = net reduction of 100 million gallons of diesel fuel consumption (>1 billion gallons consumed by ~400k trucks in GA annually)

Majority of benefits derive from Medium Duty Applications

- +Improved Air Quality
- +Approaching TCO price parity
- +Lower operating & maintenance costs
- Affordability on capital cost basis

Energy Efficient Trucks

Exact mix of high-impact technologies depends on other solutions

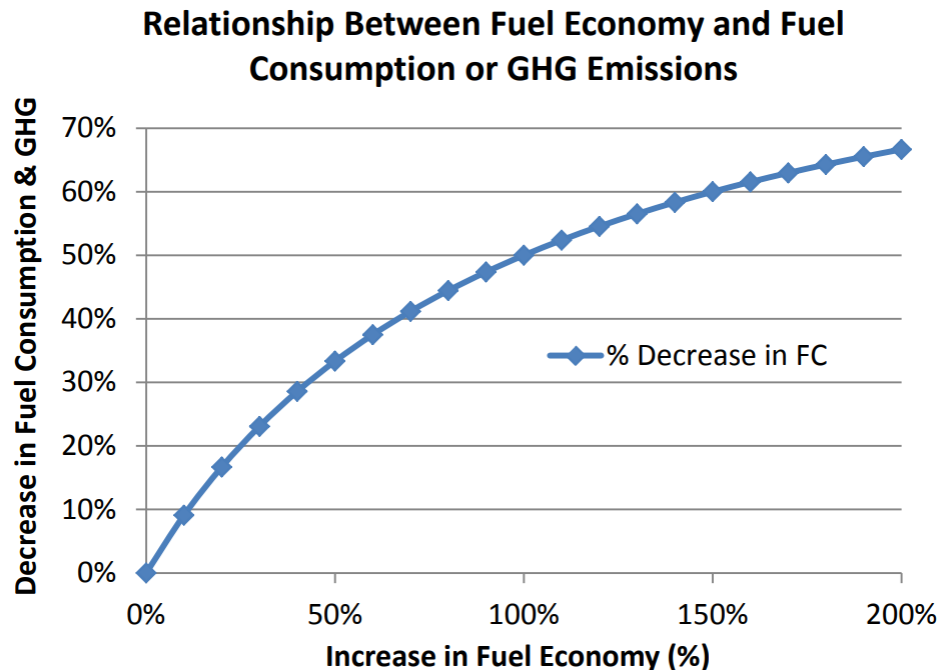
Abatement potential for electric M/HD trucks is tied to the GHG intensity of the grid. If electricity Drawdown solutions are applied, Drawdown potential increases.

A 30% decrease in fuel consumption is equivalent to about a 50% increase in fuel economy

Energy efficient technologies will reduce operating and maintenance costs but may increase capital costs – at least initially.

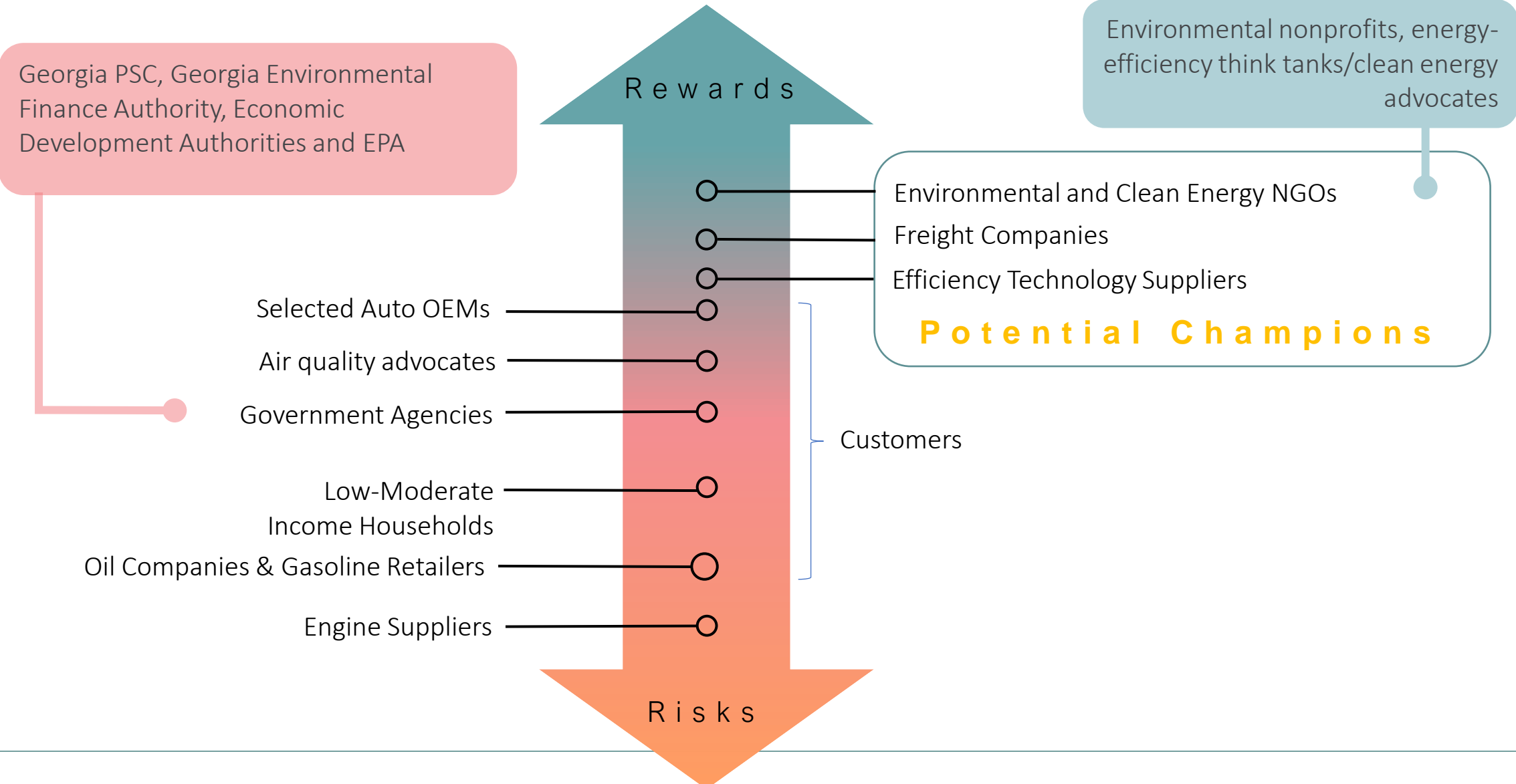
The most cost-effective mix of technologies and operations depends on the outcome of other scenarios addressed in our other transportation solutions. They may include:

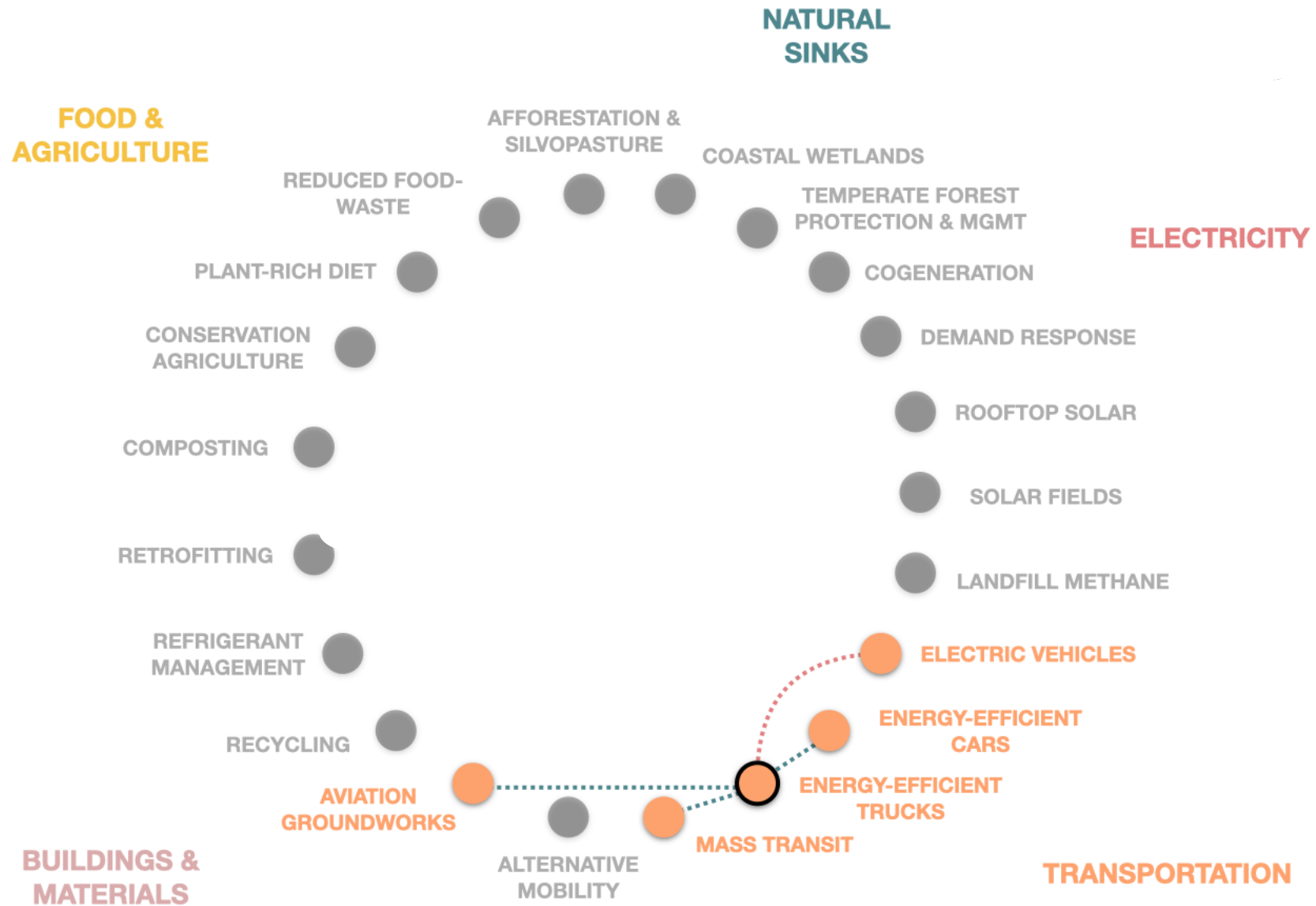
- Electrification
- Hybridization
- Improved efficiency in ICE technologies
- Improved routing and multimodal deliveries (reducing idling and overall fuel consumption)



Source: NHTSA Commercial M/HD Truck Fuel Efficiency Technology Study

Stakeholder Analysis of Energy Efficient Trucks





LEGEND

STRONGLY SYNERGISTIC

WEAKLY SYNERGISTIC

STRONGLY COMPETITIVE

WEAKLY COMPETITIVE

Energy Efficient Trucks

A solution for Georgia that:

- Reduces carbon emissions
- Helps drive down costs for related solutions and technologies
- Results in air quality benefits
- Reduces costs for vehicle owners and operators
- Can generate new jobs





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