



INNOVATION

LIGHT DUTY

NG VEHICLES

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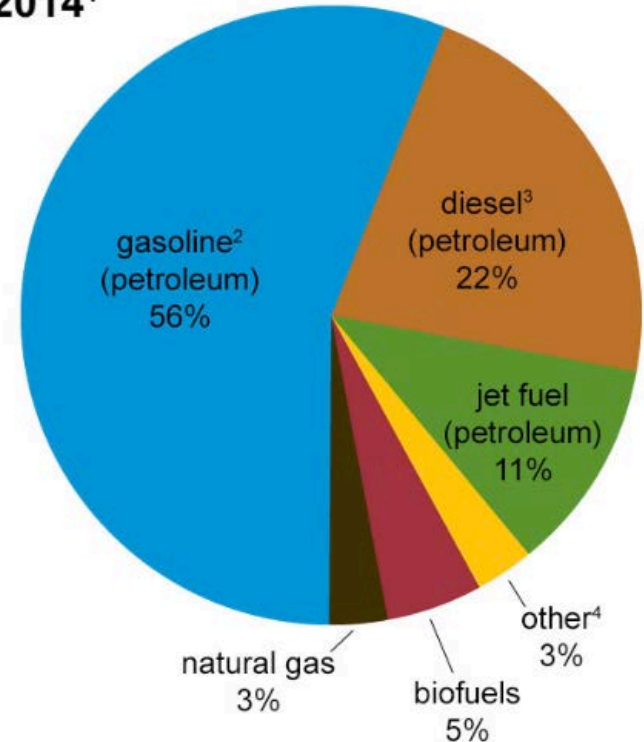
2016 NGV America Annual Meeting & Industry Summit

Denver, CO September 7 – 9, 2016

# Light Duty Sector is Largest Fuel Consumer

» 60% of transportation fuel is finished motor gasoline (including ethanol), mainly used in cars and light trucks

Fuel used for U.S. transportation, 2014<sup>1</sup>



<sup>1</sup> Based on energy content

<sup>2</sup> Motor gasoline and aviation gas; excludes ethanol

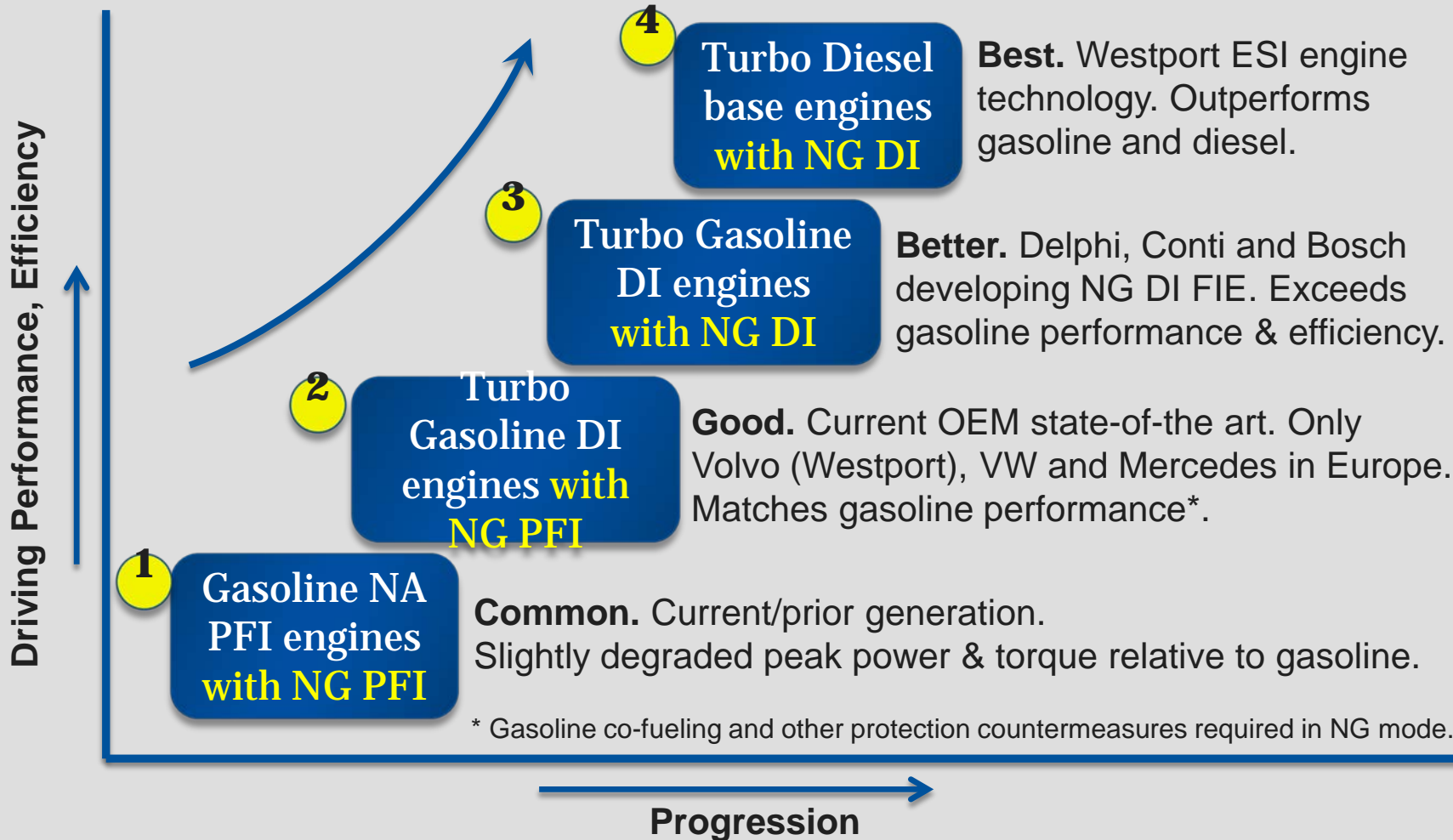
<sup>3</sup> Excludes biodiesel

<sup>4</sup> Electricity, liquid petroleum gas, lubricants, residual fuel oil, and other fuels

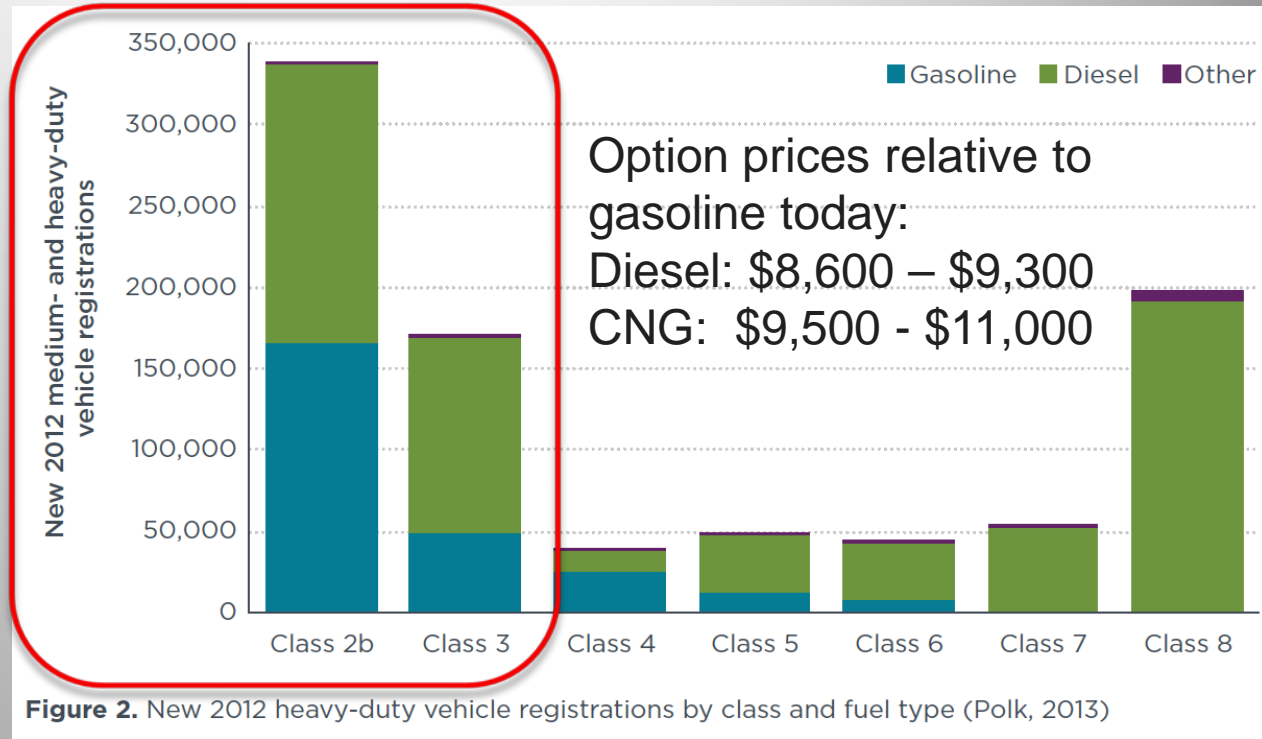
Note: Due to rounding, data may not sum to exactly 100%.

Source: U.S. Energy Information Administration, *Monthly Energy Review* (March 2015), Tables 2.5 and 3.8c, preliminary data



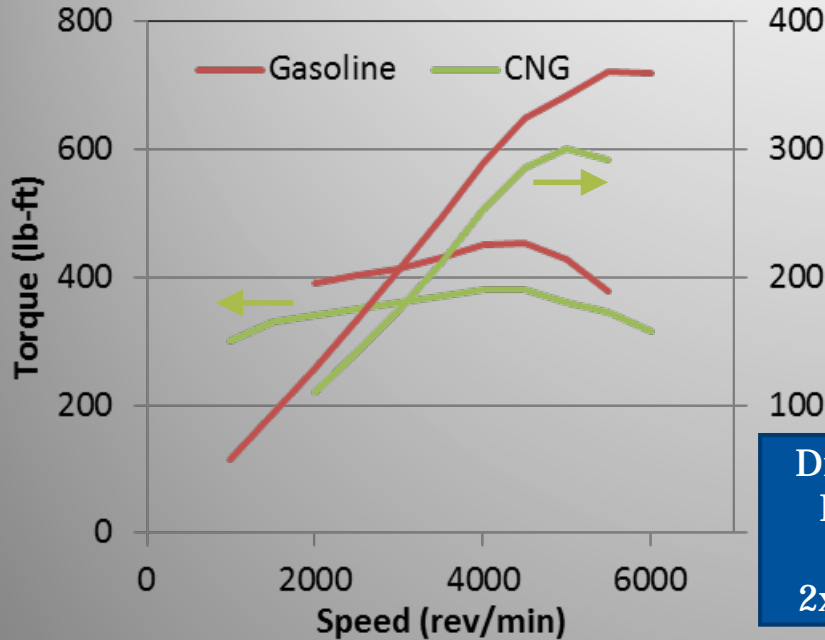


# Heavy Duty Pickup Trucks (Class 2b/3)

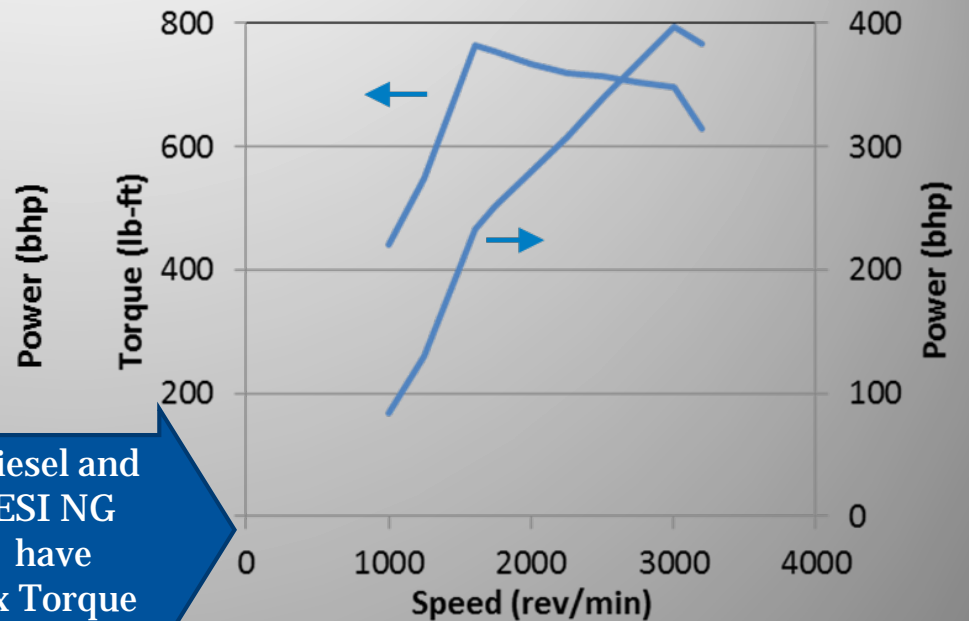


# HD Pickup Truck Engine Power & Torque

## GASOLINE / CNG

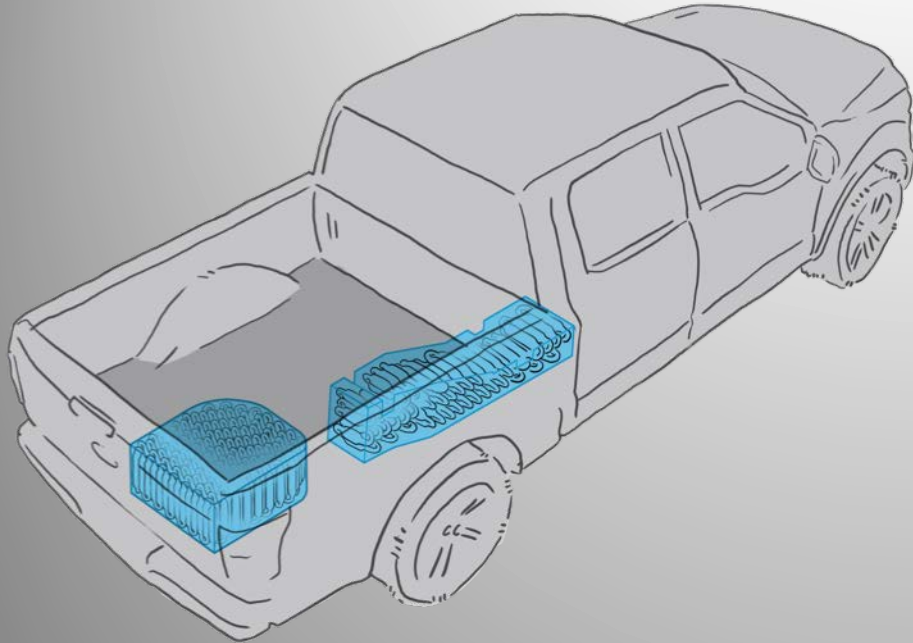


## DIESEL / ESI NG

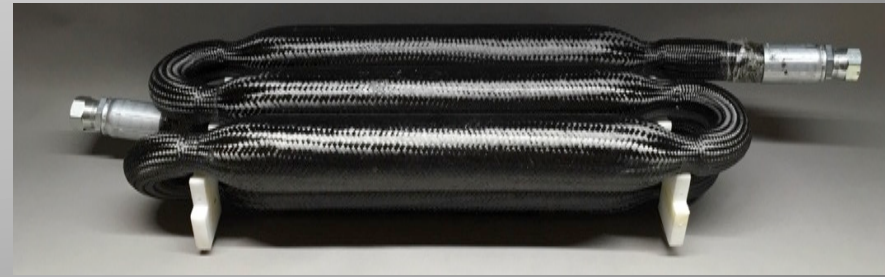


Diesel and  
ESI NG  
have  
2x Torque

# Next Gen Conformable Type IV CNG Tanks



- Folds to fit anywhere
- Lighter, lower-cost systems
- Seamless design
- Continuous manufacturing
- Industry standard materials

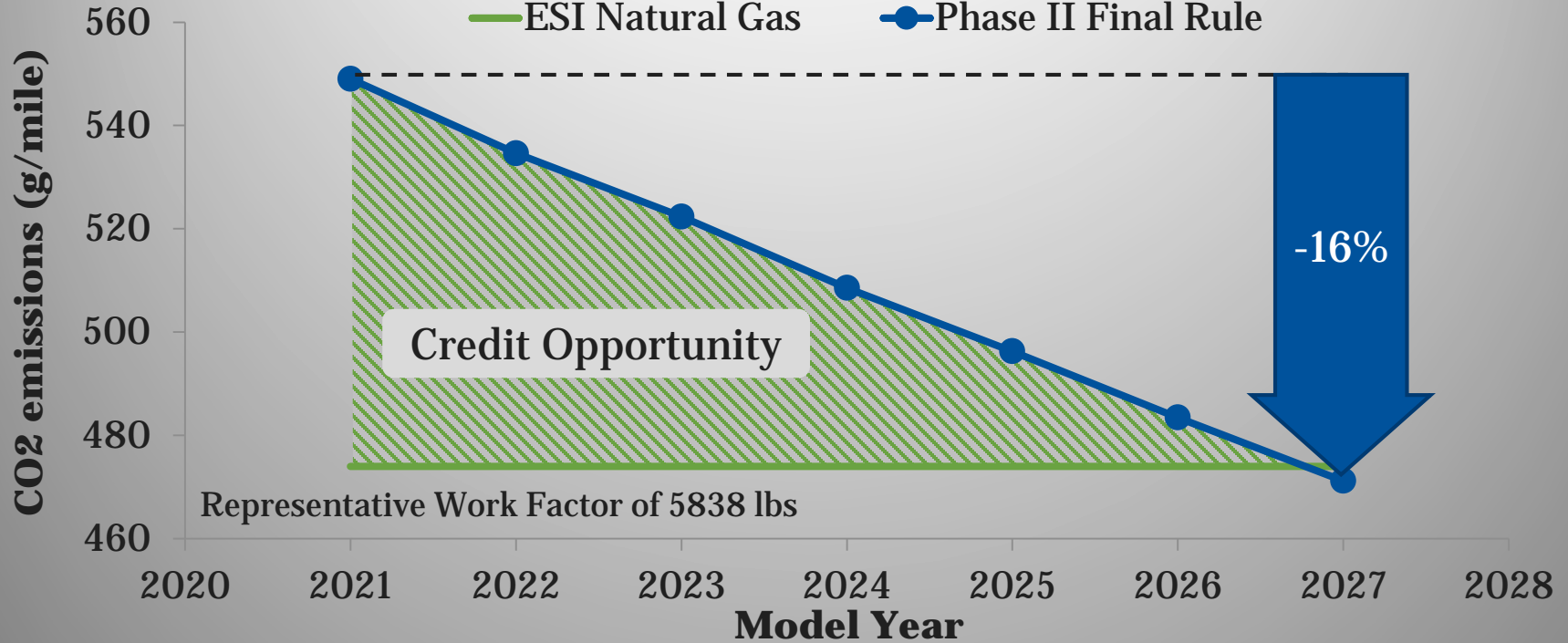




# Early Compliance & Credit Generation

## HD Diesel Pick Up Truck

— ESI Natural Gas      ● Phase II Final Rule



# Next Generation HD CNG Pickup Trucks

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1. Electrification & hybridization, considered promising for smaller urban vehicles, but is cost, weight and duty-cycle challenged for larger vehicles such as pickup trucks
2. Advanced CNG technology provides radically altered customer value proposition – move from niche to mainstream
  - a. Same high levels of performance, capability and utility as diesel
  - b. Similar purchase price as diesel
  - c. A fuel (i.e. CNG) that always costs less than diesel
  - d. Compelling GHG Compliance flexibility for OEMs
3. More CNG stations needed, initial sales where networks already built out – low-cost home refueling an option
4. Investment needed – Seeking funding in SuperPickup Truck NGV Program
  - a. e.g. DOE investing \$80M in SuperTruck II Class 8 Electrified Diesel Program





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