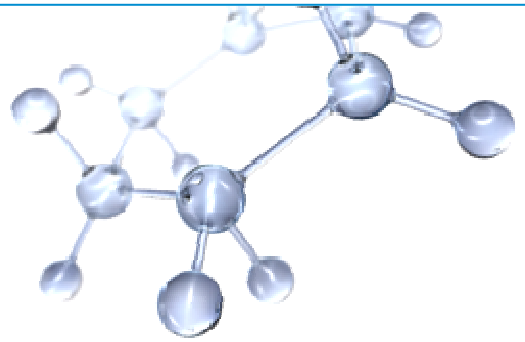
ExxonMobil

Taking on the world's toughest energy challenges.™

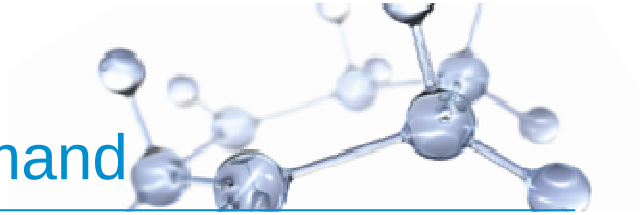
Energy Outlook for the Transport Sector

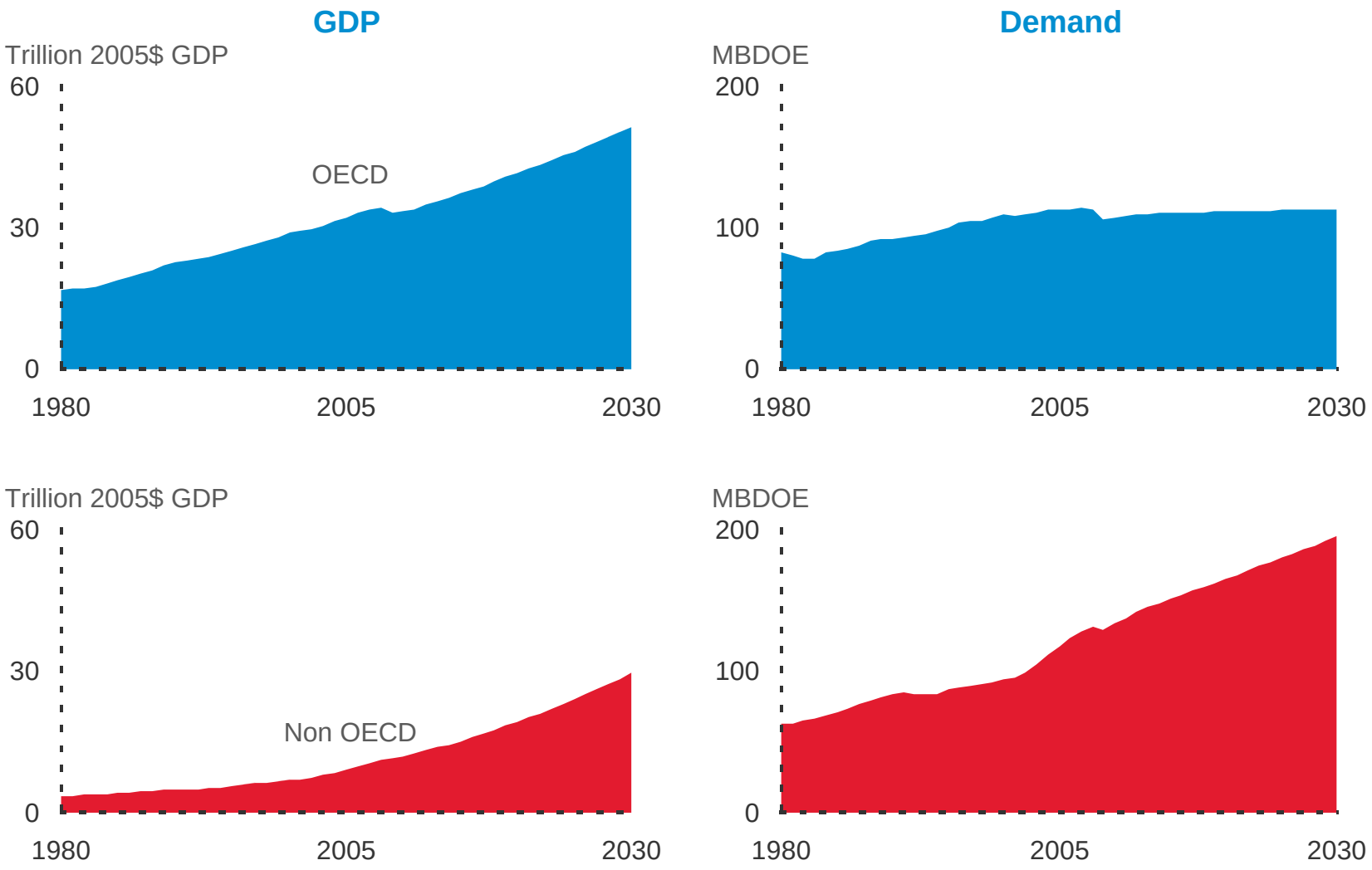


Grant Karsner
Manager, Products Research and Technology
ExxonMobil Research and Engineering

DEER Conference
September 27, 2010
Detroit, MI

Economic Growth Drives Energy Demand



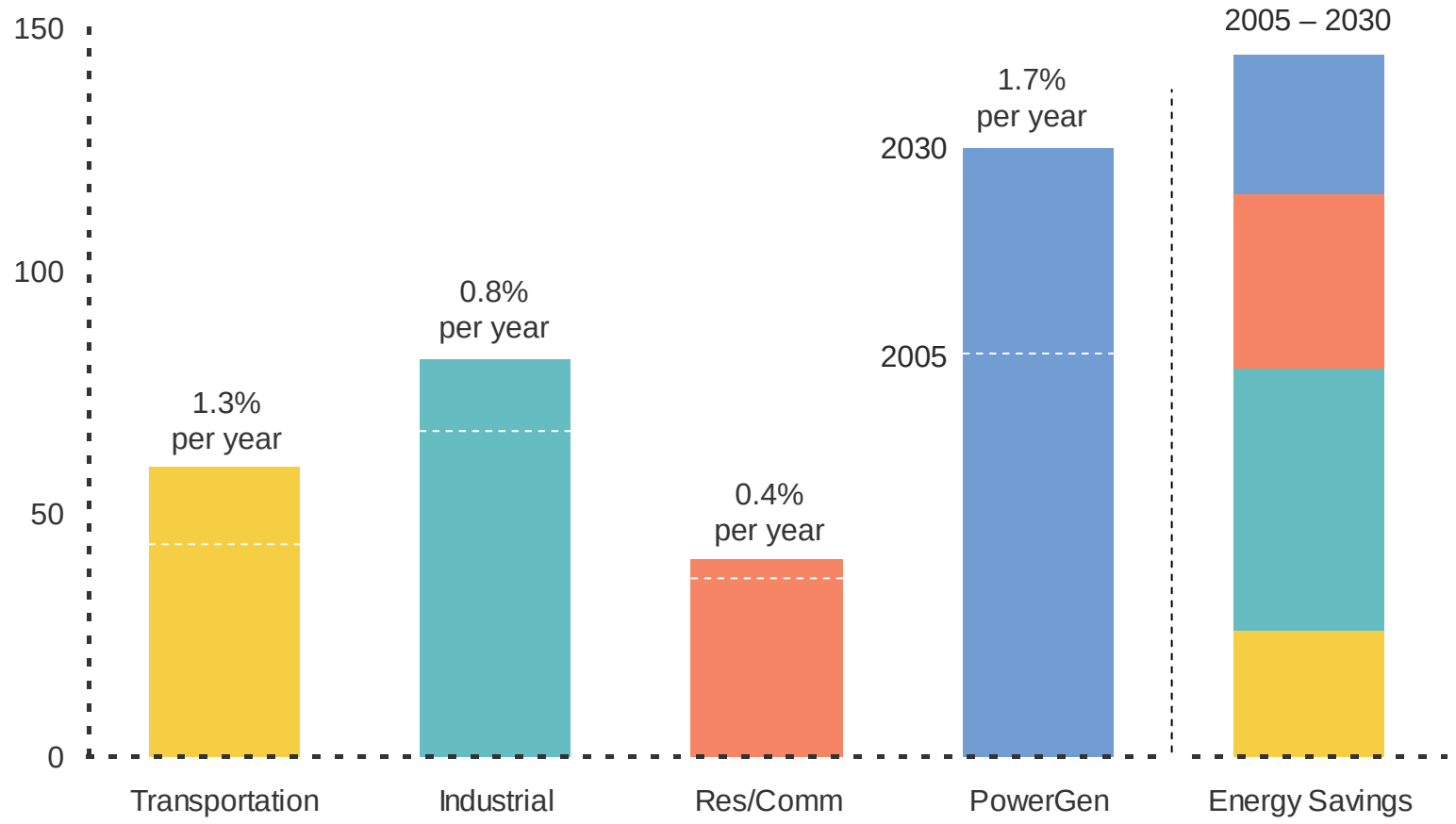


ExxonMobil
Taking on the world's toughest energy challenges.™

Growing Global Demand

By Sector

MBDOE

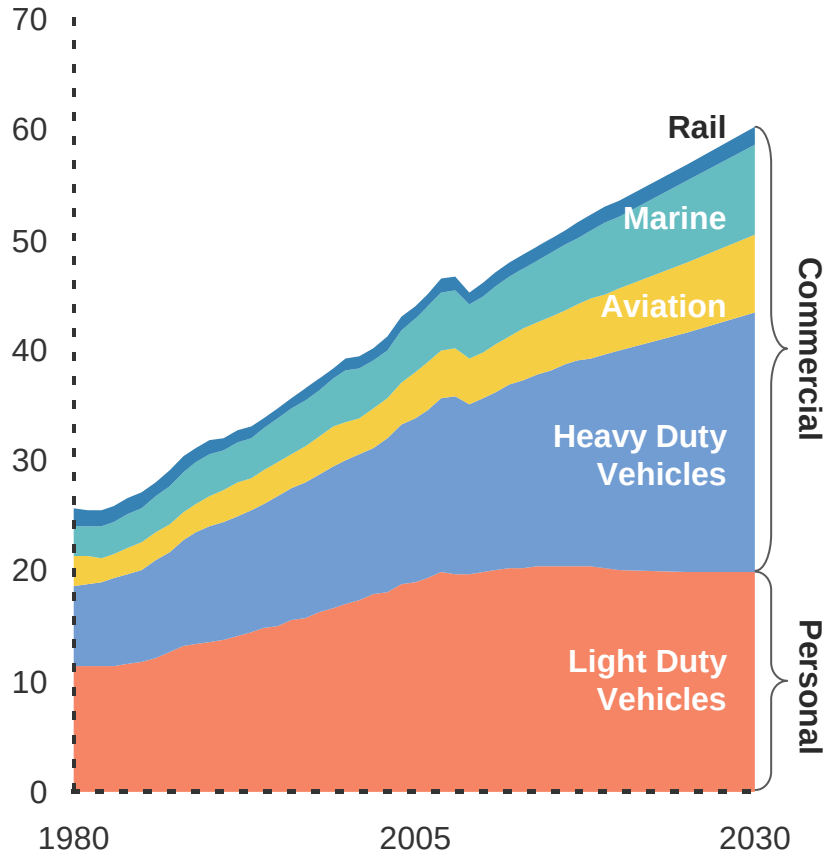


ExxonMobil
Taking on the world's toughest energy challenges.

Global Transportation Demand

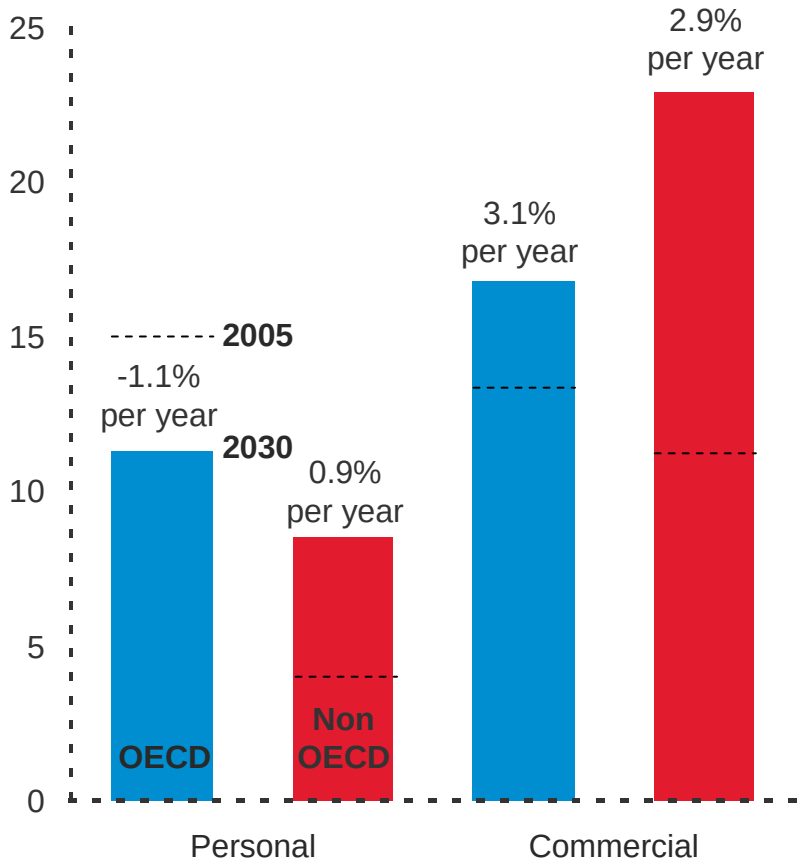
By Sector

MBDOE



Personal vs. Commercial

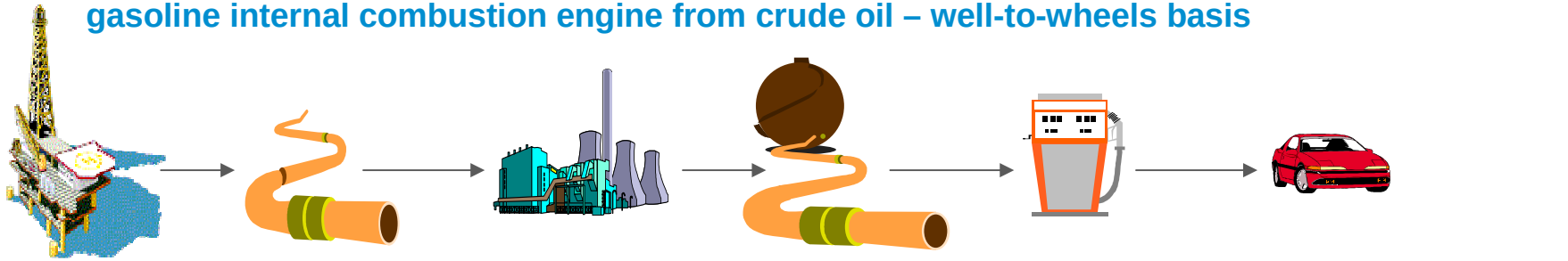
MBDOE



ExxonMobil
Taking on the world's toughest energy challenges.™

Technologies for GHG Reduction

gasoline internal combustion engine from crude oil – well-to-wheels basis



production of fuel
20% GHG/mile

Consumers' use of fuel
80% GHG/mile

technologies for fuel production

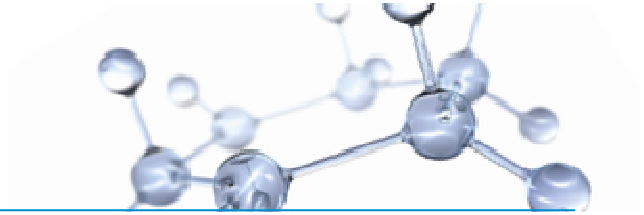
shorter-term
- energy efficiency
- flare reduction
- cogeneration

longer-term
- second generation bio-fuels
- Carbon Capture and Storage (CCS)

ExxonMobil
Taking on the world's toughest energy challenges.

Source: U.S. Basis - WTW Study, Argonne National Lab, 2005

Algae-based biofuels

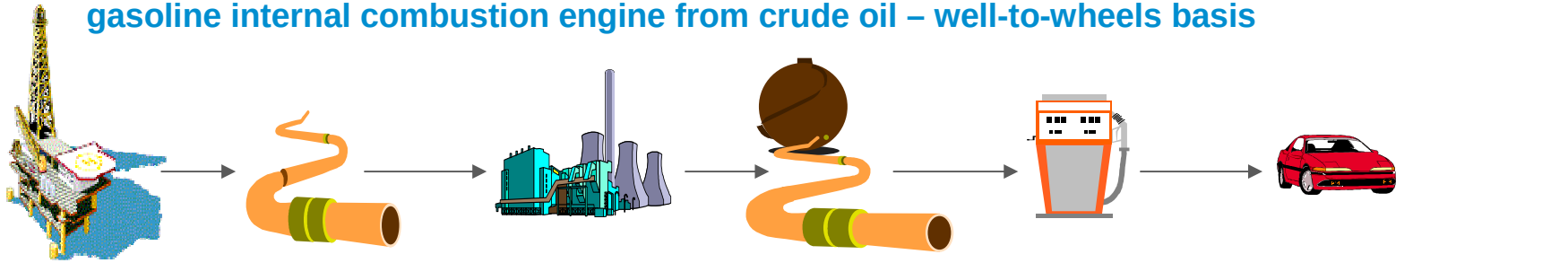


- benefits of using algae for biofuels production:
  - can be grown using land and water unsuitable for food production
  - potentially yield greater volumes of biofuels per acre than other biofuel sources
  - could be used to manufacture biofuels similar to today's transportation fuels
  - growing algae consume CO_2; algae-based biofuels could provide GHG mitigation benefits versus conventional fuels

- ExxonMobil alliance with Synthetic Genomics Inc
  - focus on development of advanced biofuels from photosynthetic algae
  - complements ExxonMobil's ongoing efforts to advance breakthrough technologies to meet the world's energy challenges

Technologies for GHG Reduction

gasoline internal combustion engine from crude oil – well-to-wheels basis



production of fuel
20% GHG/mile

Consumers' use of fuel
80% GHG/mile

technologies for fuel production

shorter-term
- energy efficiency
- flare reduction
- cogeneration

longer-term
- second generation bio-fuels
- Carbon Capture and Storage (CCS)

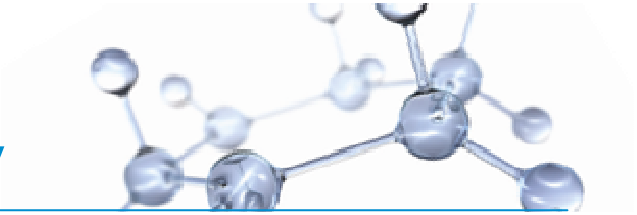
technologies for consumers' use of fuel

shorter-term
- conventional vehicle technology improvements
  - engines, transmissions, body and accessories
- advanced vehicles
  - hybrids, advanced diesel engines

longer-term
- breakthrough vehicles
  - "HCCI" or "CAI"; hydrogen fuel cells
  - plug-in hybrid, battery electric vehicles

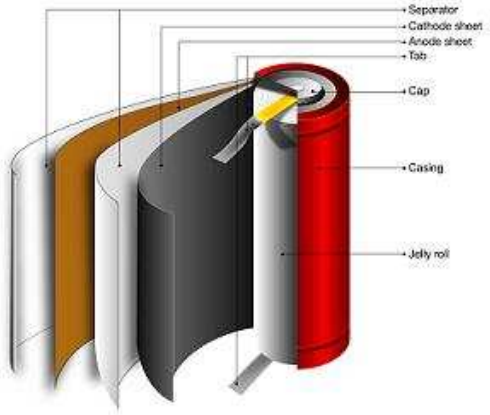
Source: U.S. Basis - WTW Study, Argonne National Lab, 2005

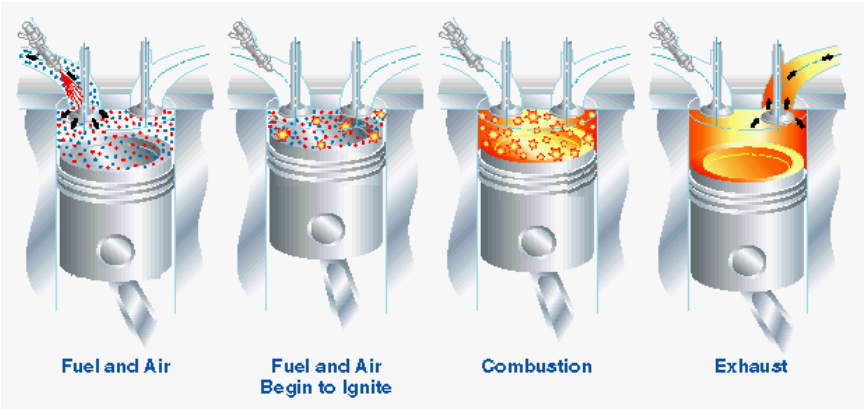
Improving Consumers' Use of Energy



lithium-ion battery materials*

new separator technology for lighter and safer hybrid and electric vehicle batteries





advanced engines and fuels research

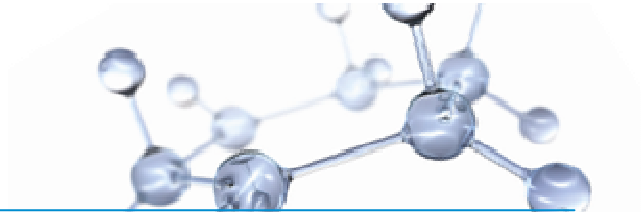
potential for improved fuel economy vs. current gasoline engines, by using diesel-like combustion process

on-board hydrogen generator for fuel cell vehicles

converts hydrocarbon fuels into hydrogen to power a fuel cell – all on-board the vehicle

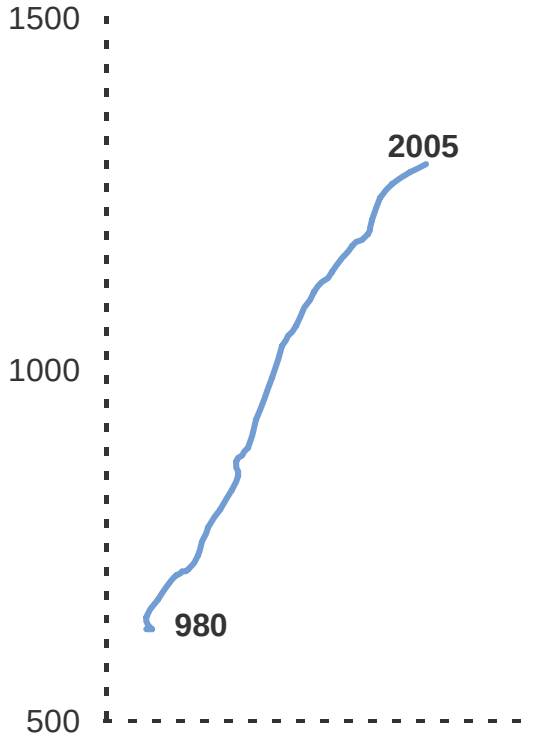
Since 4Q'09 Lithium Ion Battery Separator film s are produced and marketed by Toray Tonen Specialty Separator Godo Kaisha, a joint venture in which ExxonMobil has a 25% interest.

Heavy Duty Vehicles



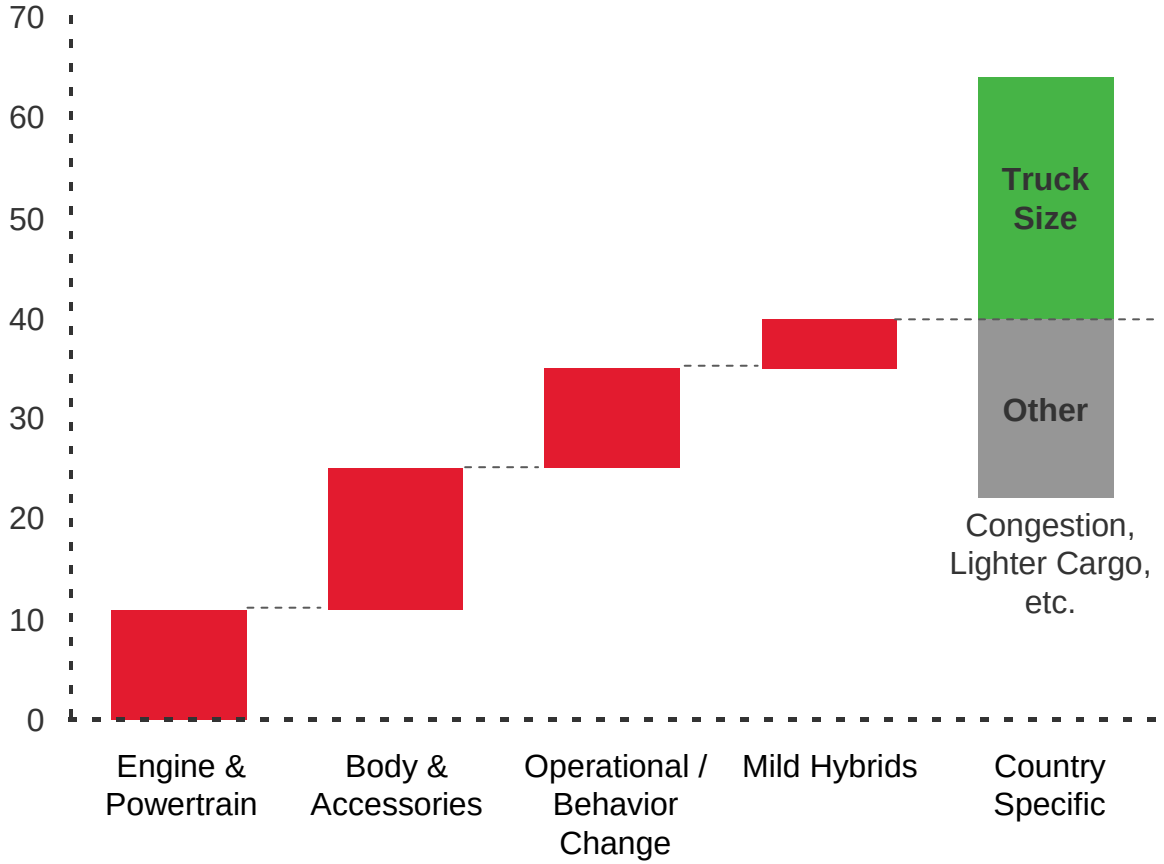
Road Freight – US

Ton-Miles

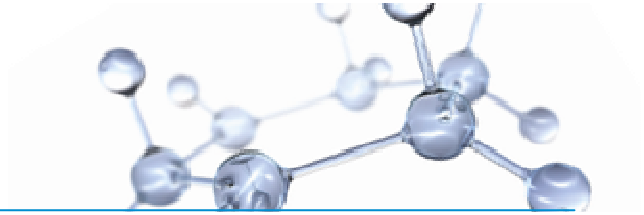


New Truck Efficiency

Percent Improvement 2005 – 2030



Integrated Energy Solutions

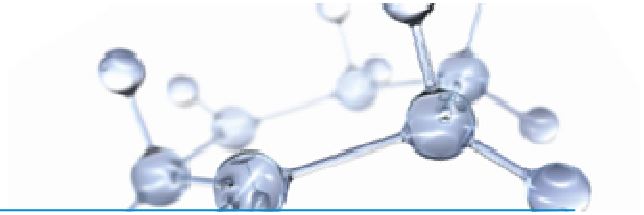


increase efficiency

mitigate emissions

expand supply

ExxonMobil
Taking on the world's toughest energy challenges.™



ExxonMobil™