



Taking on the world's toughest energy challenges.™

## ***The Outlook for Energy: A View to 2030***

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**Corporate Planning Manager**

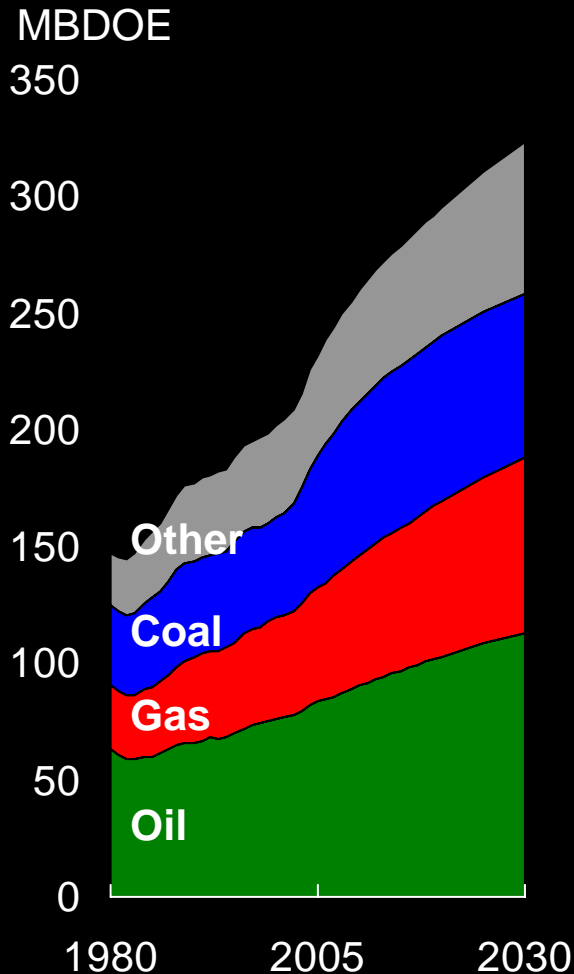
**NAESCO 24<sup>th</sup> Annual Conference**  
**October 25, 2007**



This presentation includes forward-looking statements. Actual future conditions (including economic conditions, energy demand, and energy supply) could differ materially due to changes in technology, the development of new supply sources, political events, demographic changes, and other factors discussed herein (and in Item 1 of ExxonMobil's latest report on Form 10-K). This material is not to be reproduced without the permission of Exxon Mobil Corporation.

# 2007 Energy Outlook Basis

## Energy Supply/Demand



- **Energy Demand Outlook**

- Detailed buildup by country and end-use sector
- Links energy use to economic drivers
- Incorporates efficiency improvements
- Considers trends, economics, and supply by fuel type
- Reflects assessment of potential policy initiatives

- **Oil & Gas Supply Outlook**

- Incorporates ultimate recoverable resource estimates
- Models production profiles for all countries or regions
- Considers economics and ongoing advances in technology

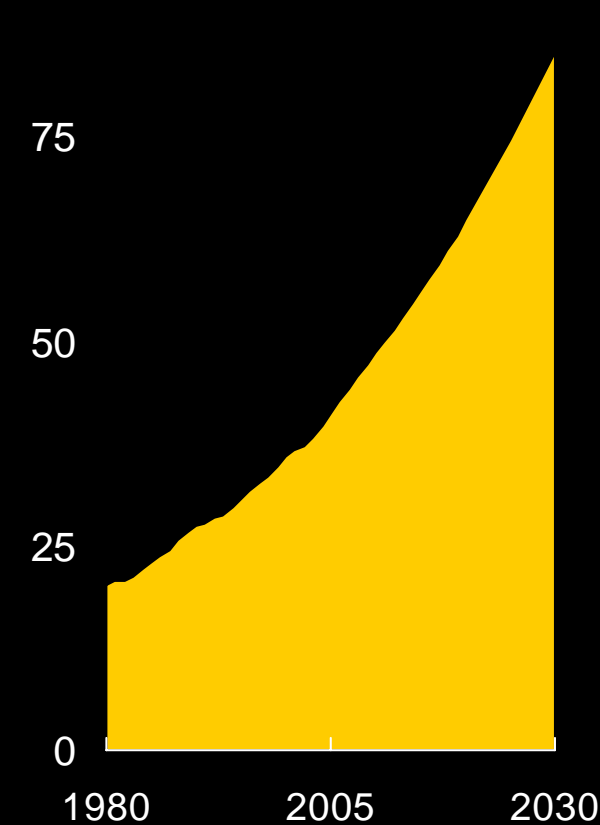
# Global Economics and Energy

## GDP

Trillion 2005\$

Average Growth / Yr.

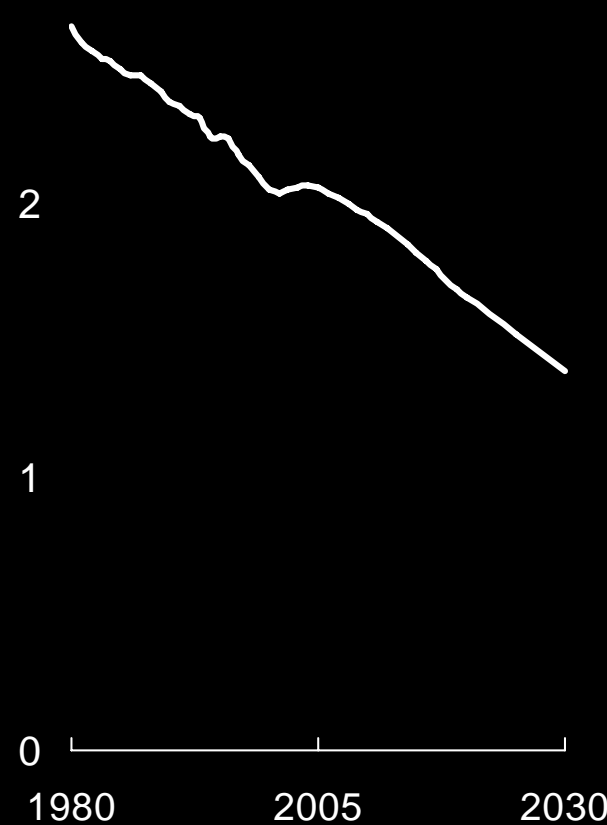
100 1980 – 2005 2005 – 2030  
2.9% 3.0%



## Energy Intensity

BOE/2005\$K GDP

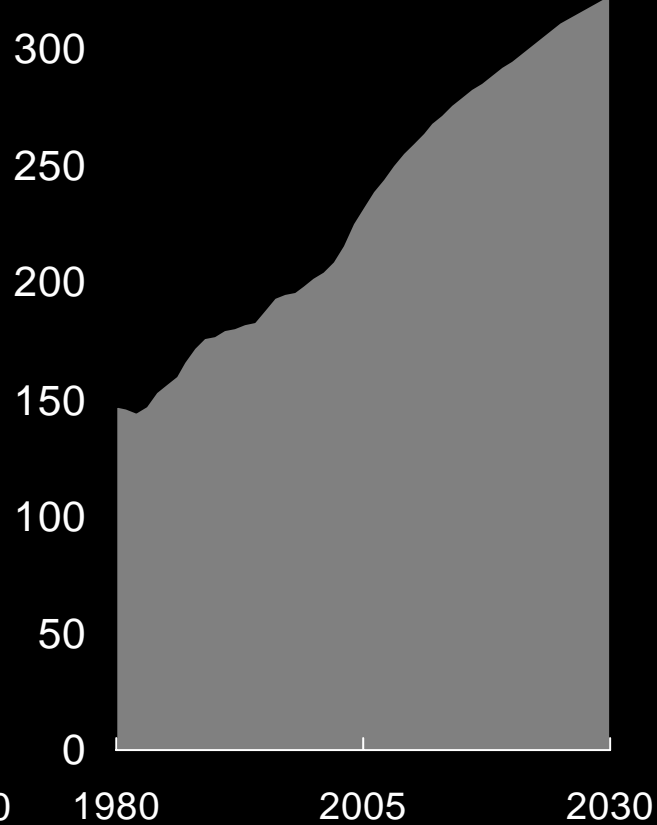
3  
-1.0% -1.6%



## Energy Demand

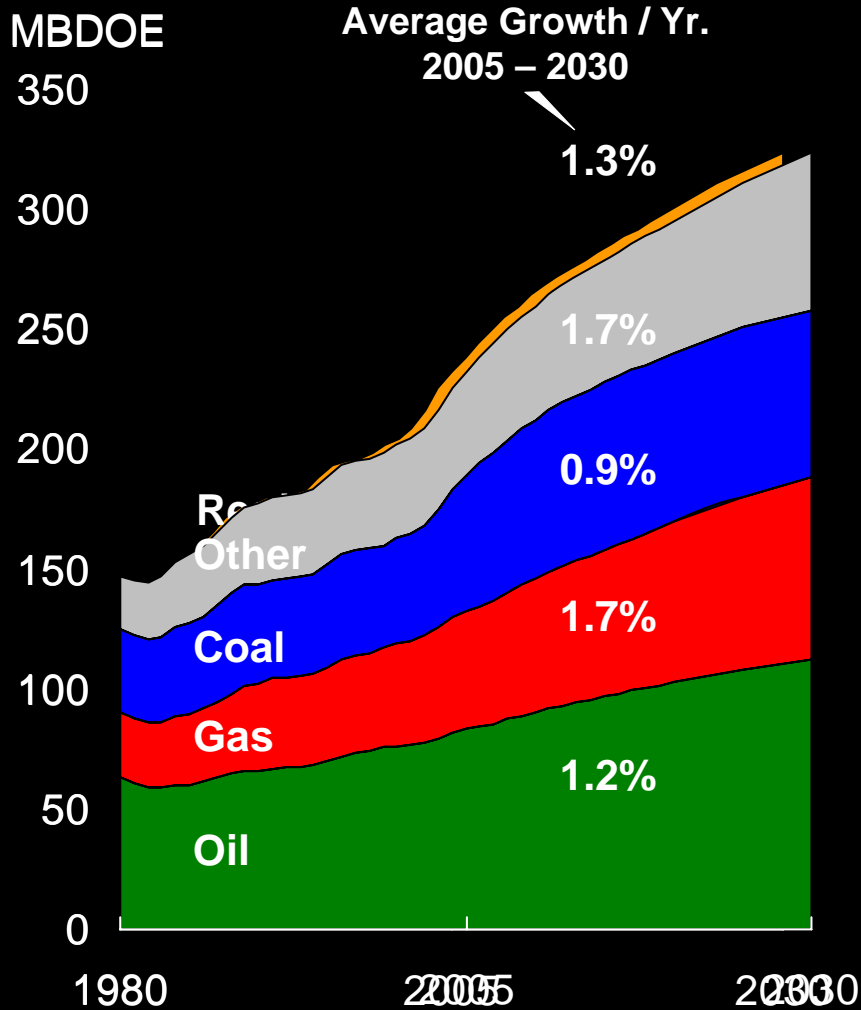
MBDOE

350 1.8% 1.3%

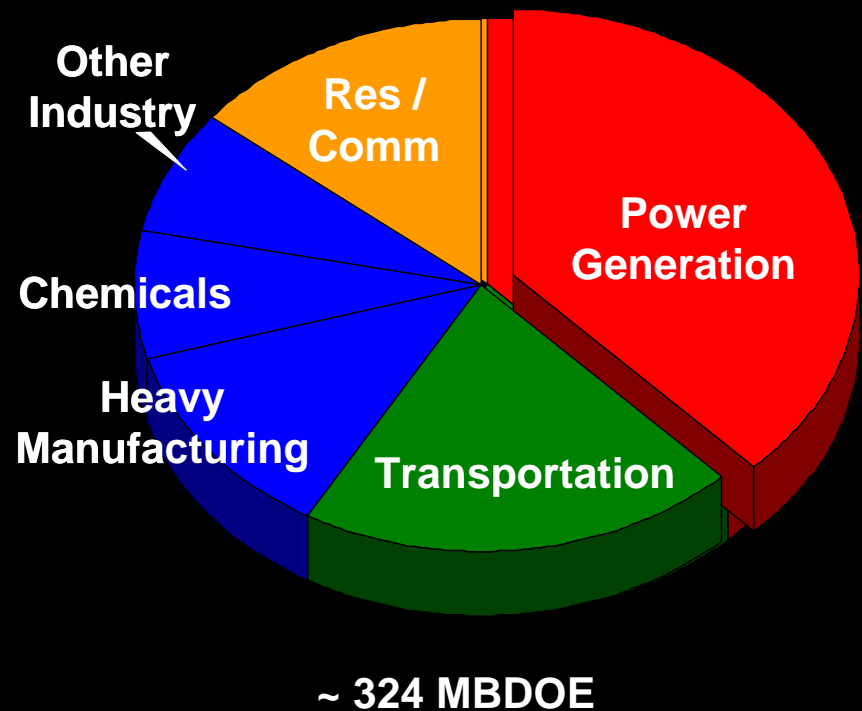


# World Energy Demand

## By Sector



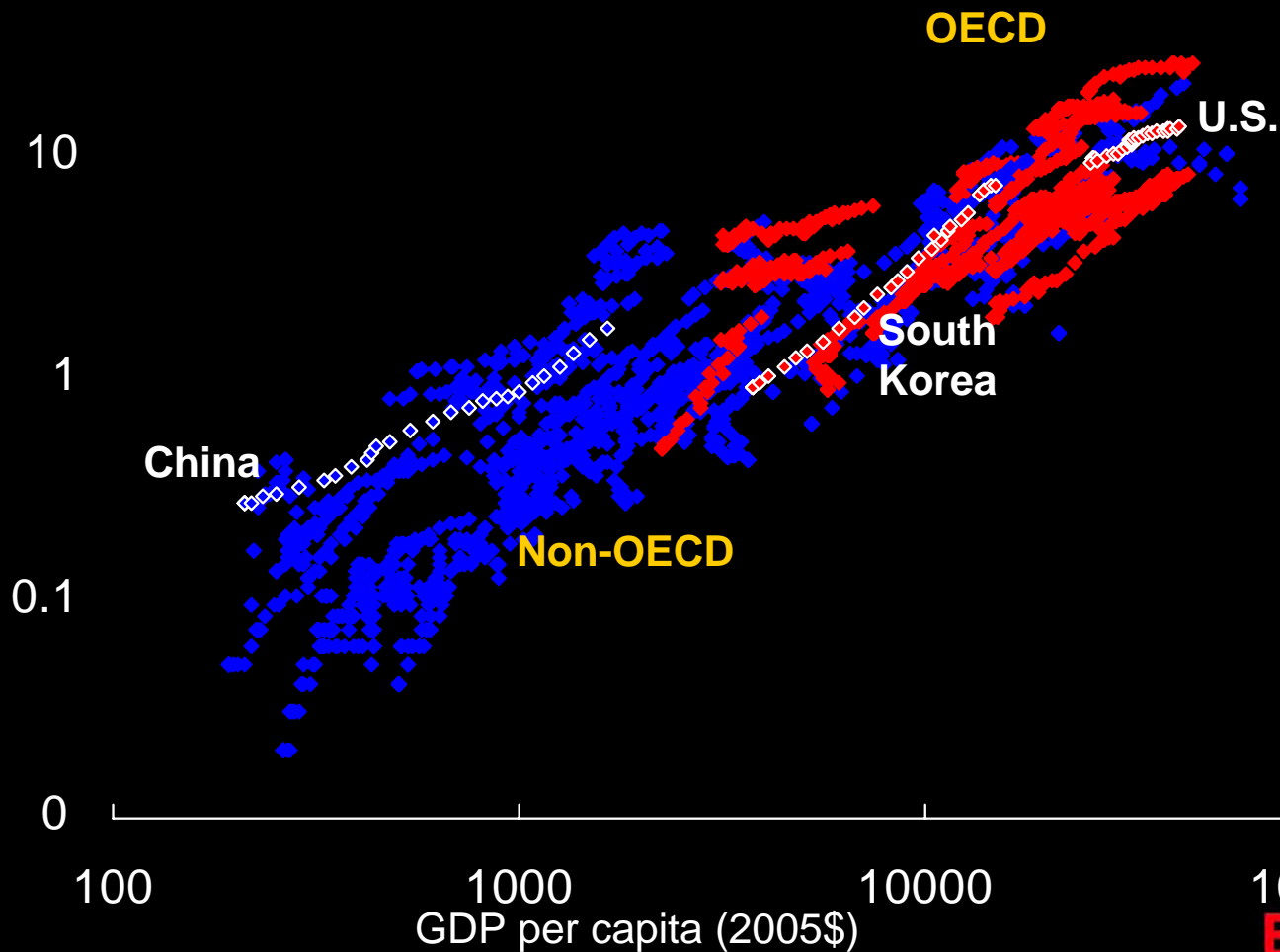
## By Sector - 2030



# Electricity Demand Linked to GDP

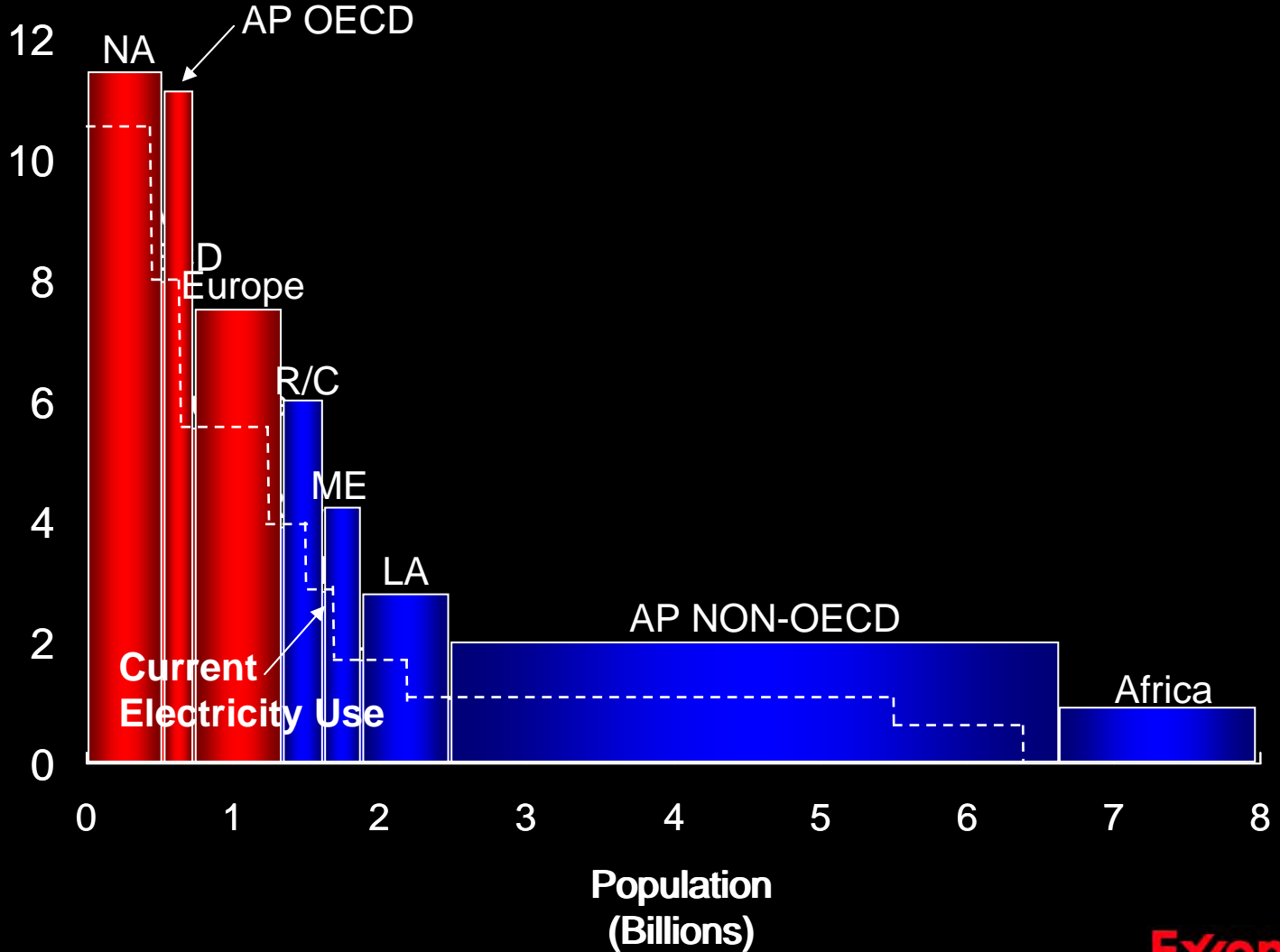
1000 kW hours  
per capita

1980 to 2005



# 2030 Electricity Use by Region

1000 kW hours  
per capita



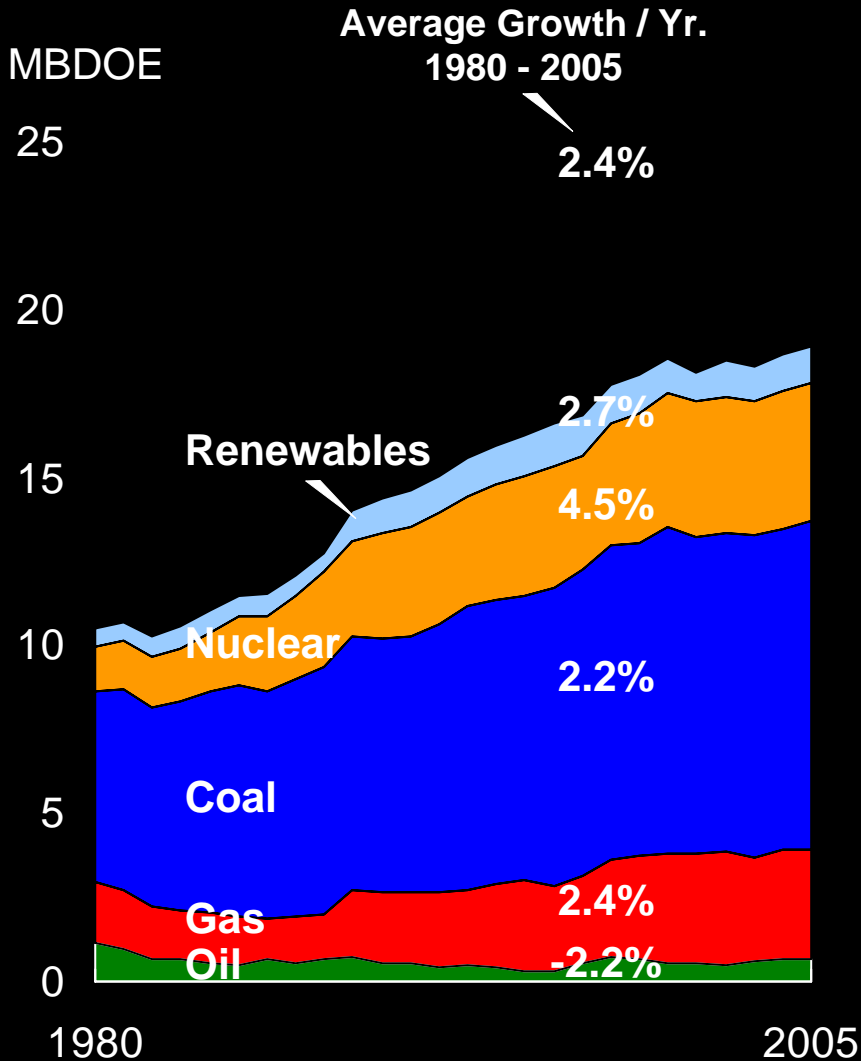
# Power Generation

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# U.S. Power Generation

## By Fuel



## Economics

2005 Cents/  
kWhr\*

10

Baseload Power Generation  
U.S. New Builds, Startup 2020

8

6

4

2

0

Coal

Gas

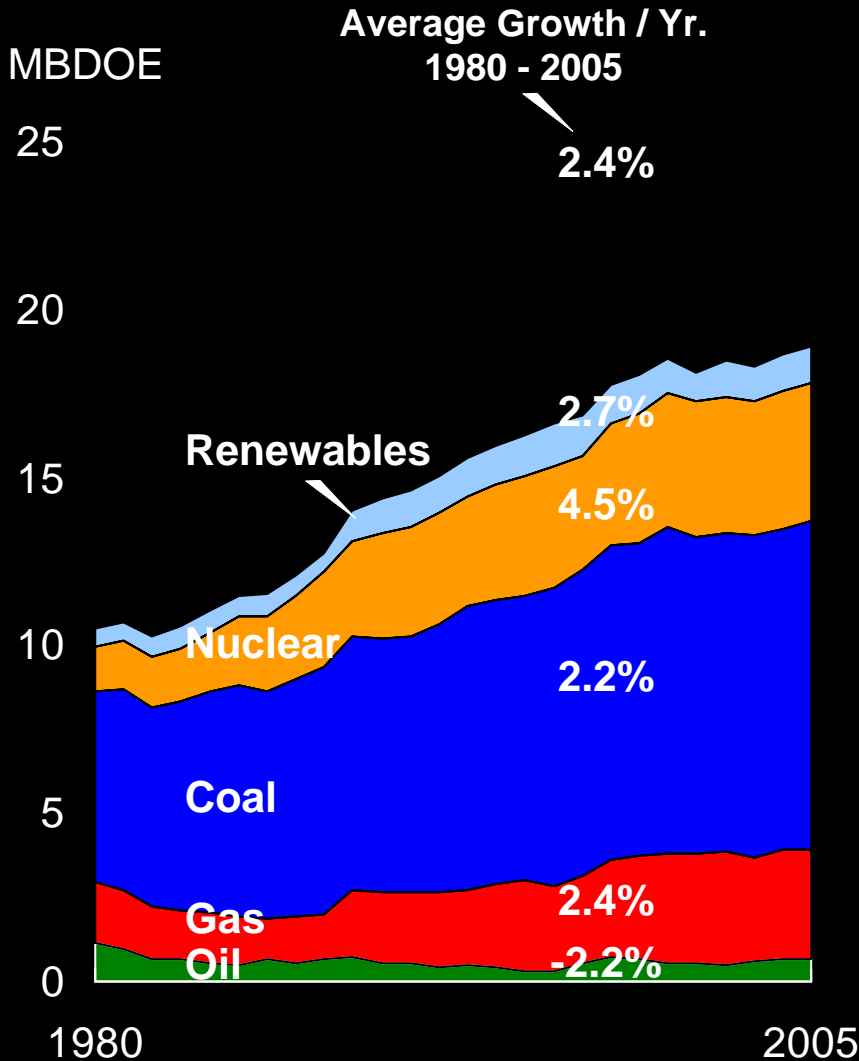
Nuclear

\* Reflective of recent fuel prices

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# U.S. Power Generation

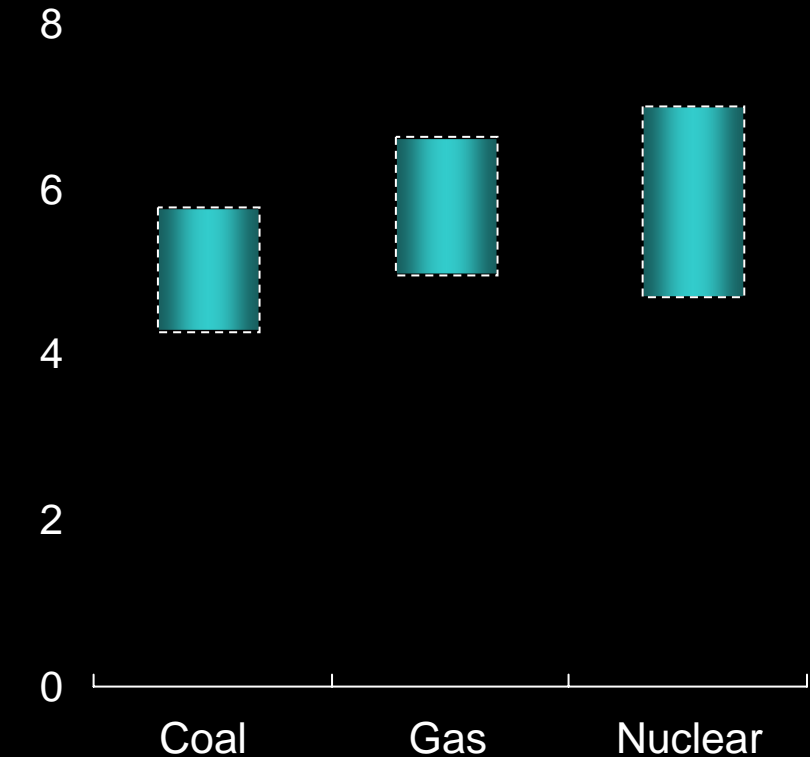
## By Fuel



## Economics

2005 Cents/  
kWhr\*

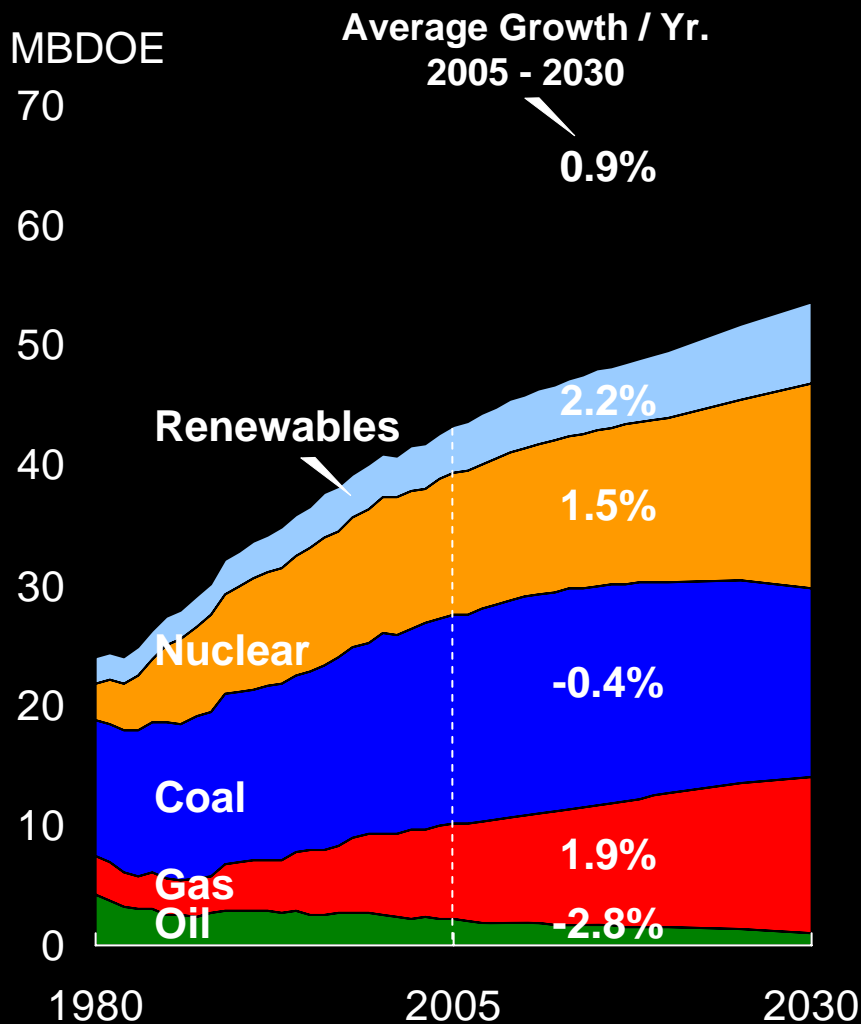
Baseload Power Generation  
U.S. New Builds, Startup 2020  
CO<sub>2</sub> Prices @ \$30/MT



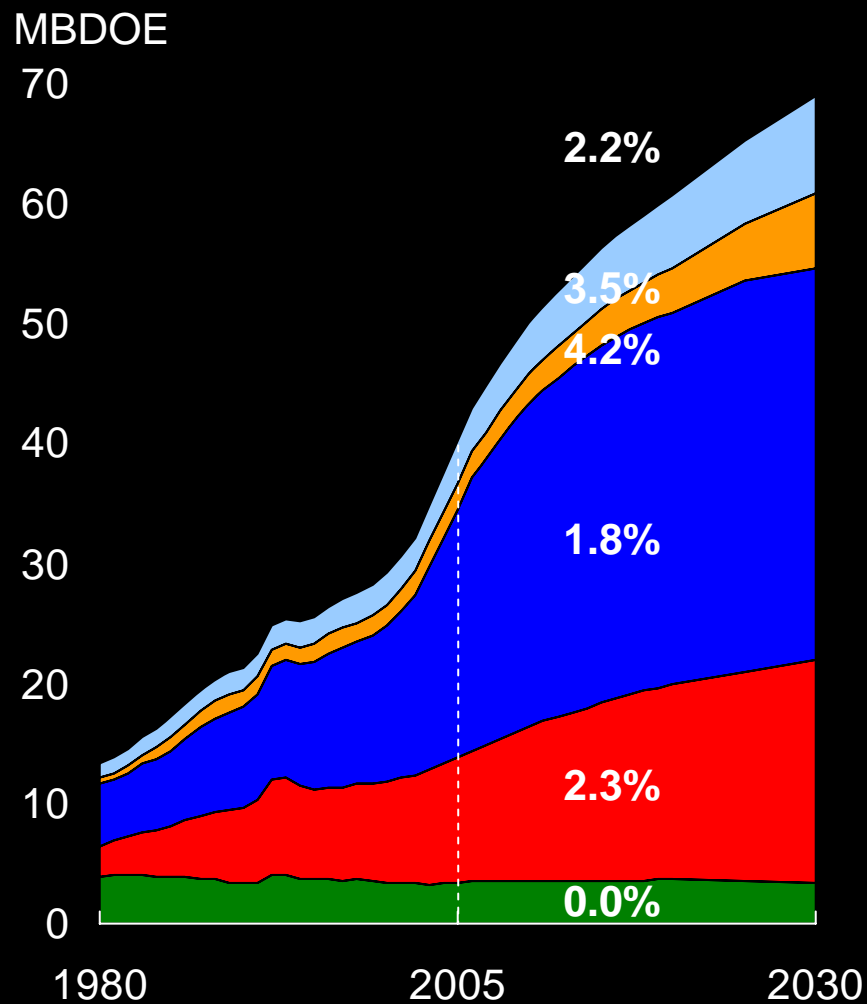
\* Reflective of recent fuel prices

# Power Generation Demand

## OECD



## Non-OECD

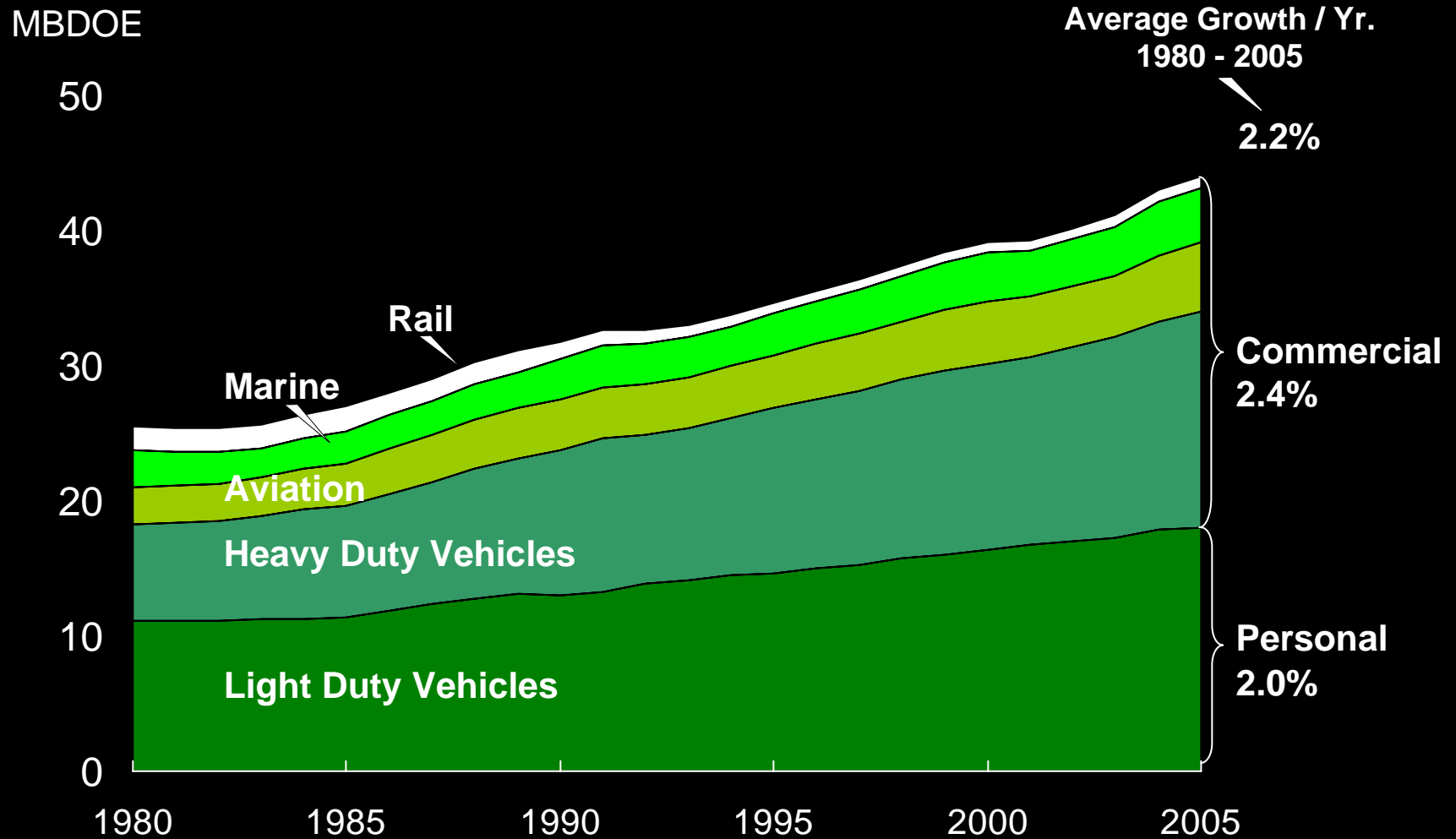


# Transportation

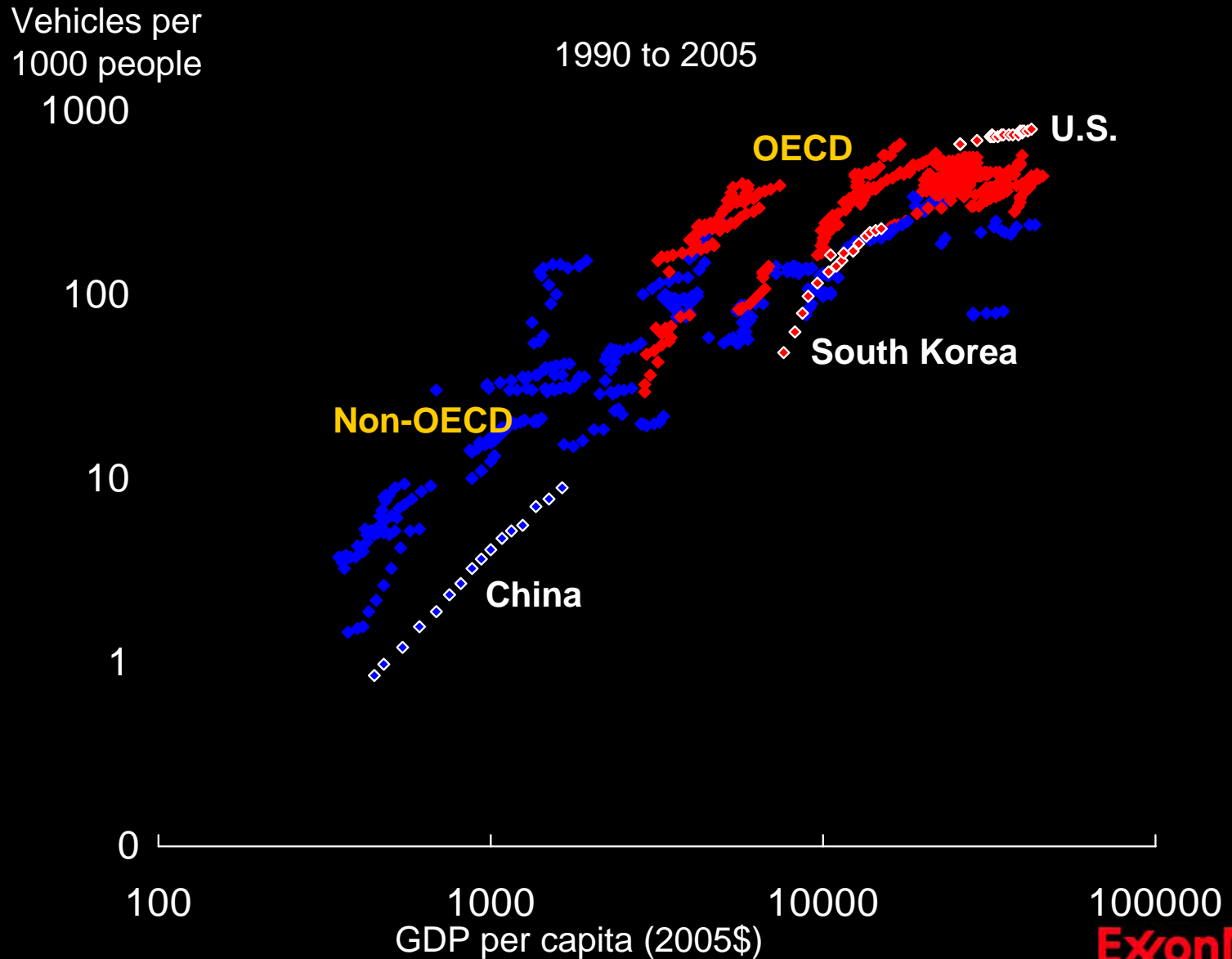
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# Global Transportation Demand

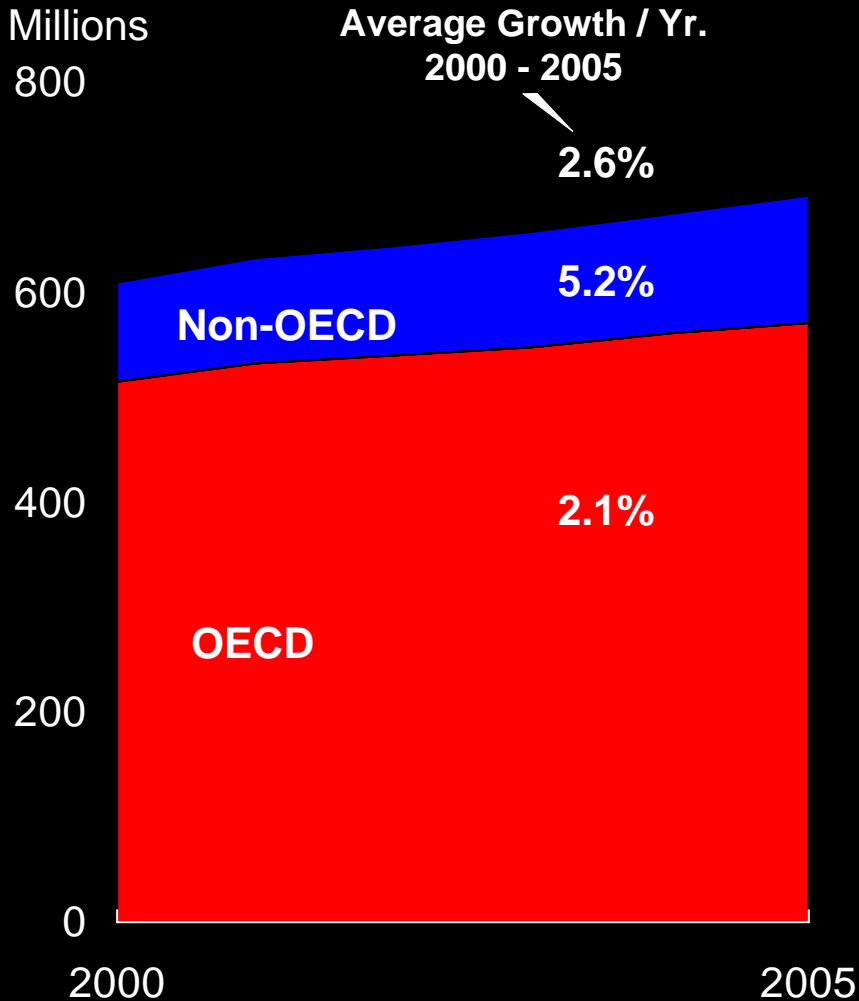


# Light Duty Vehicle Penetration Linked to GDP

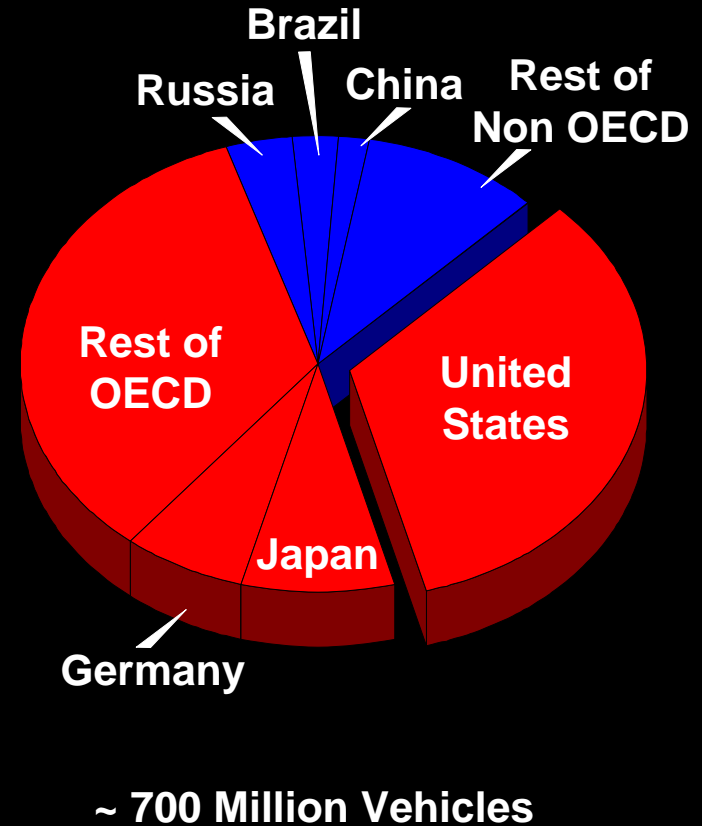


# Global Light Duty Vehicle Fleet

## By Region



## 2005



# U.S. Light Duty Vehicles – Fuel Economy

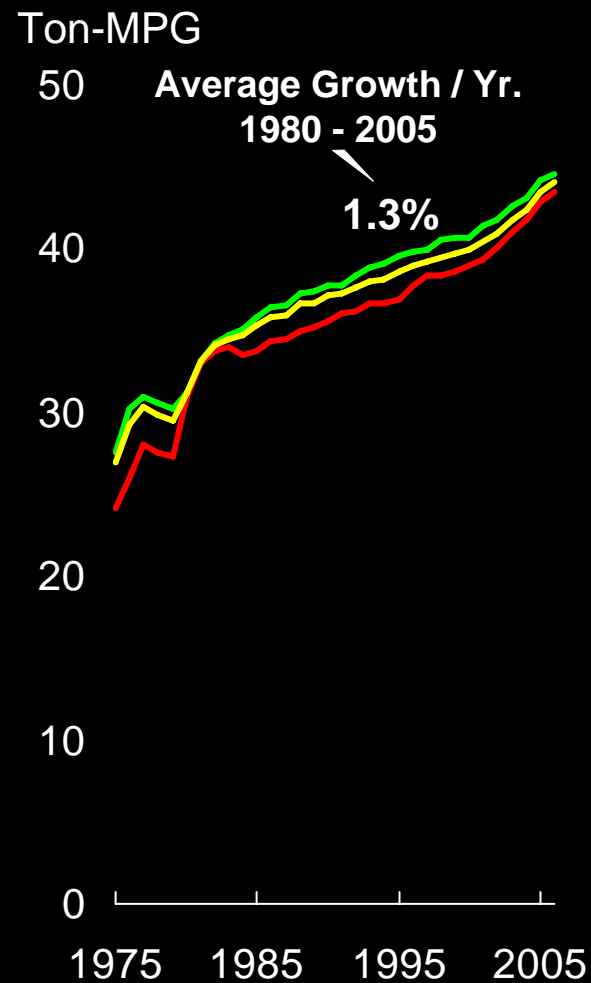
## New Vehicles



## Vehicle Weight



## Efficiency

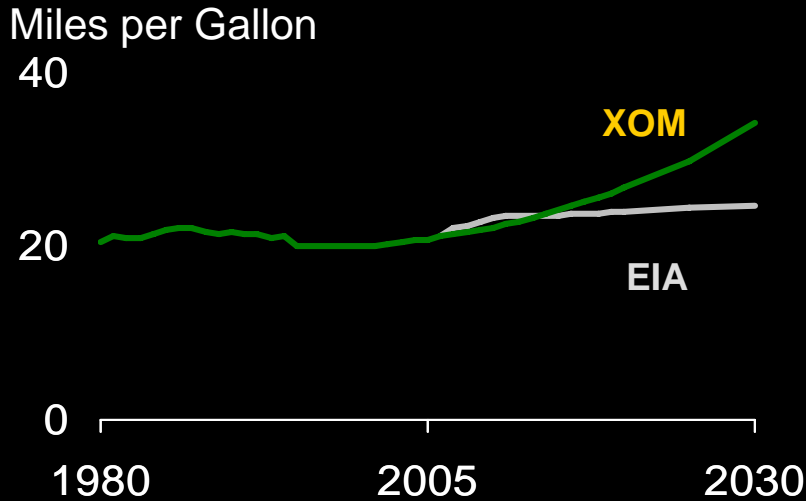


Source: U.S. EPA

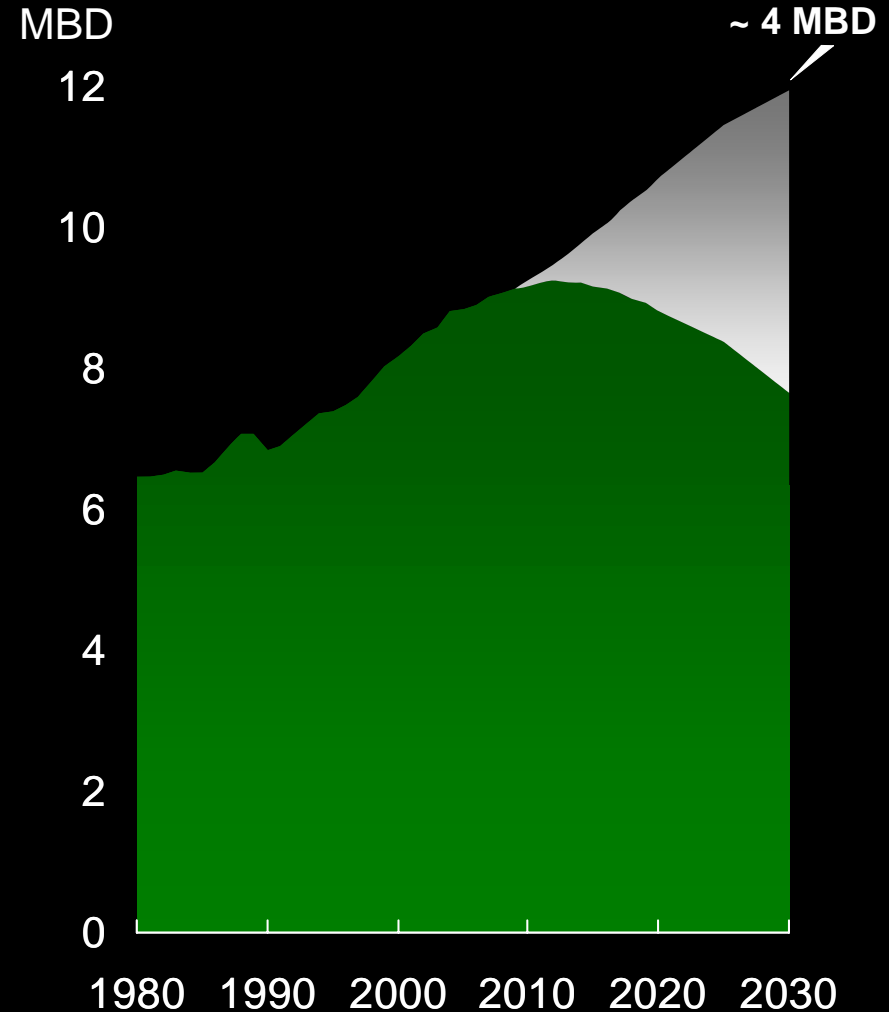
**ExxonMobil**

# U.S. Light Duty Vehicles – Comparison with EIA

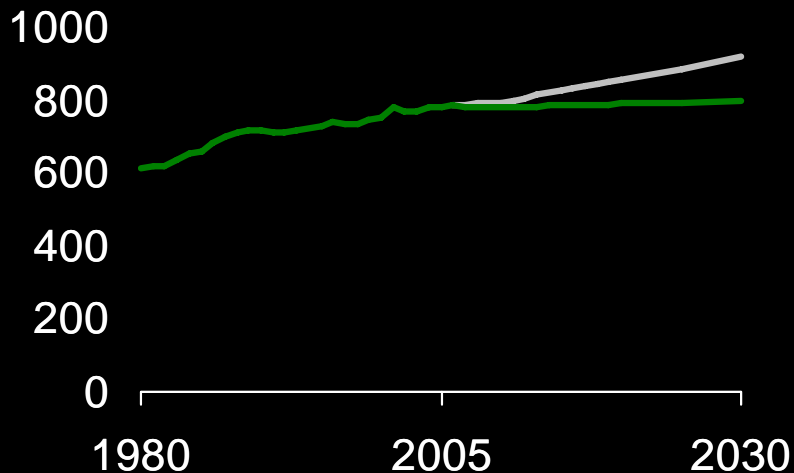
## New Vehicle Fuel Economy



## Light Duty Fuels Demand



## Vehicles/1000 people

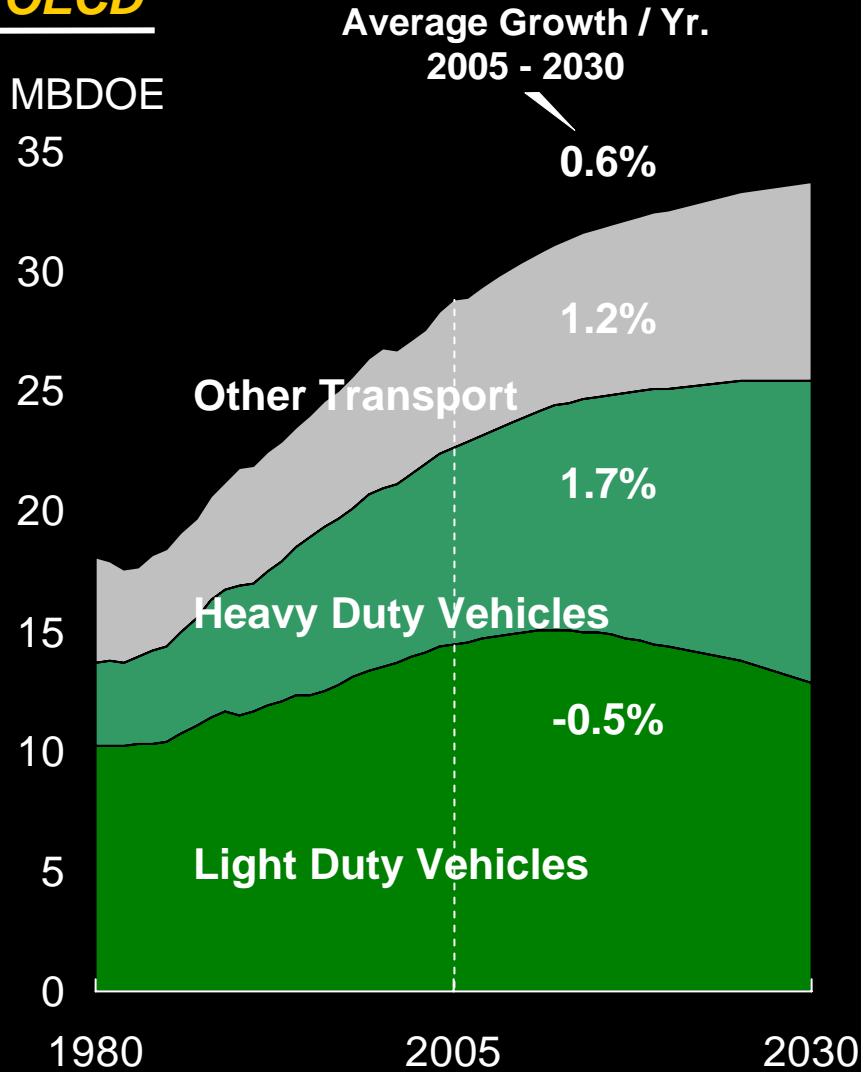


EIA Source: AEO2007

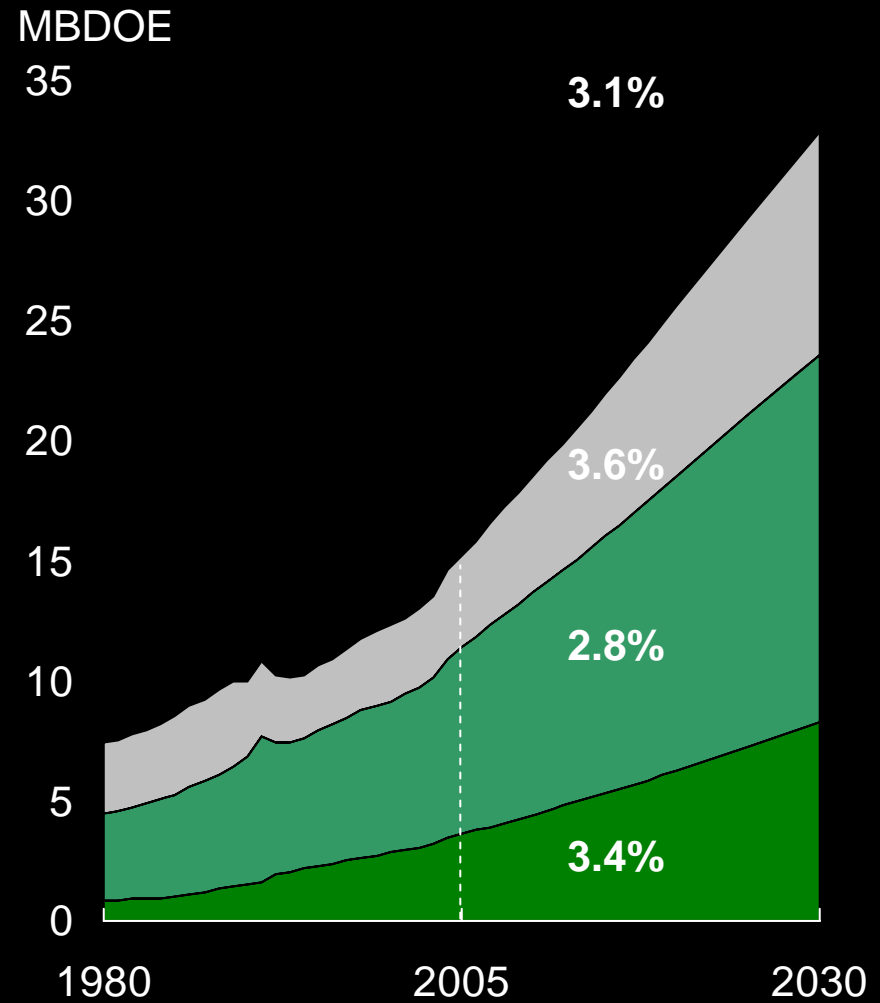
**ExxonMobil**

# Global Transportation Demand

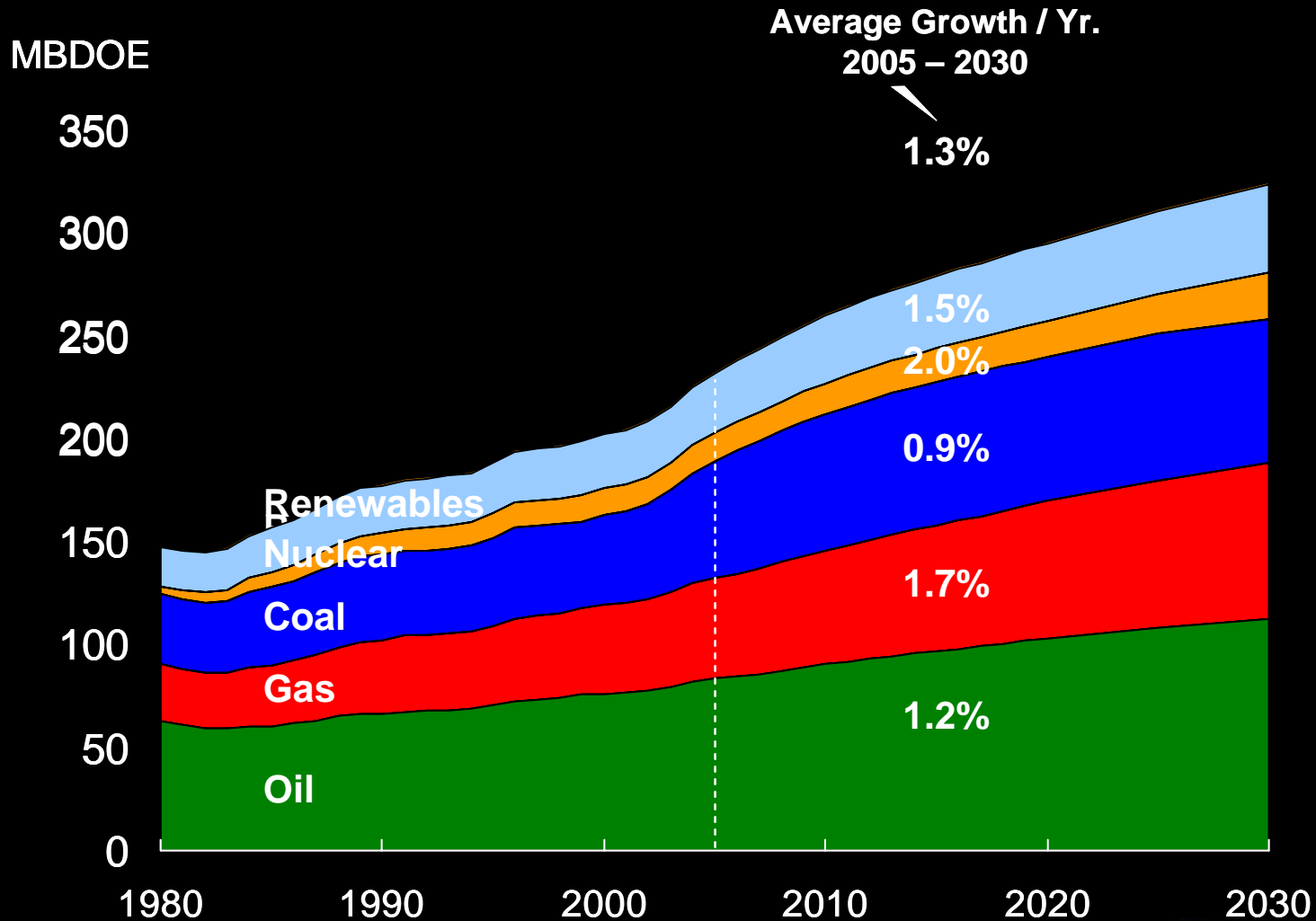
## OECD



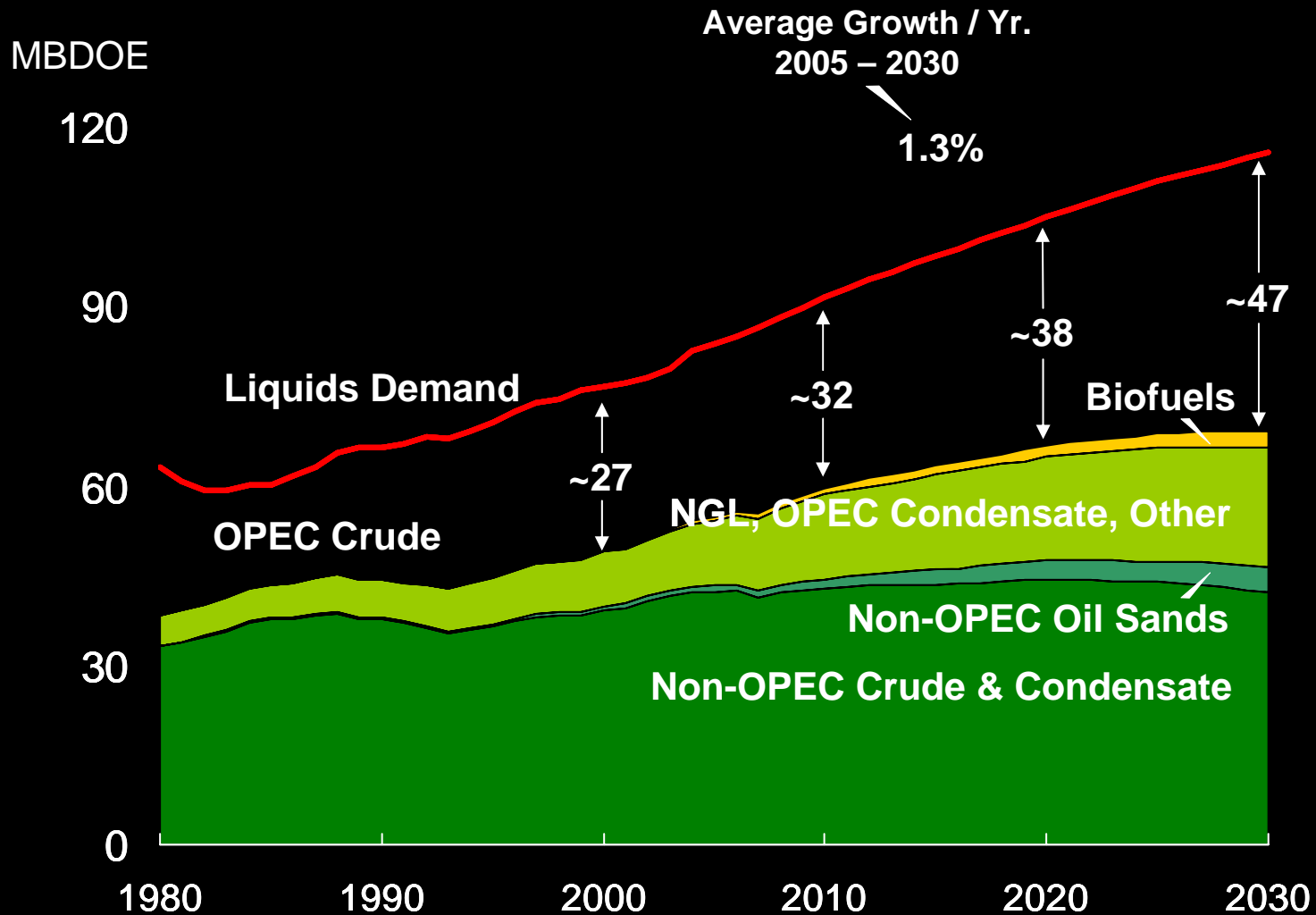
## Non-OECD



# World Energy Demand & Supply



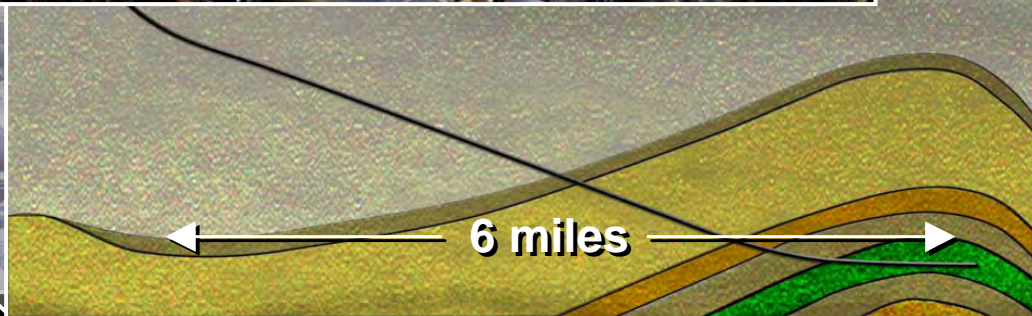
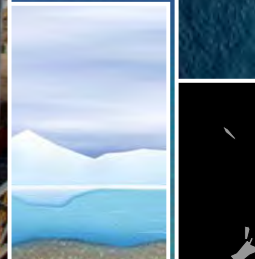
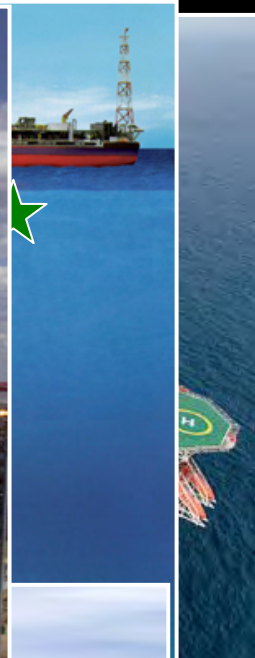
# Liquids Supply & Demand



# Large Upstream Projects

~~Skizomba Upgrader~~

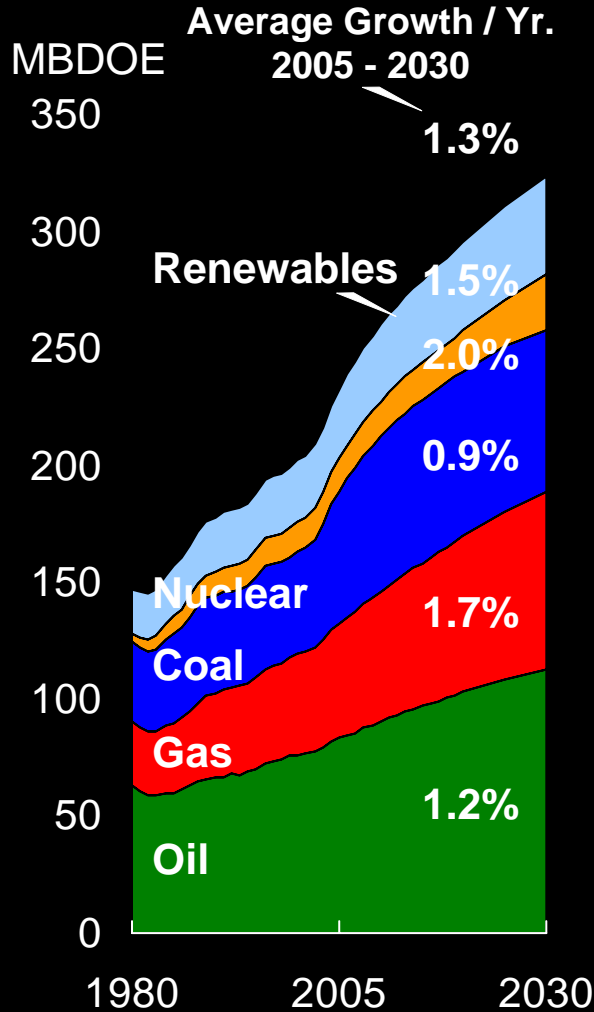
Kizomba A



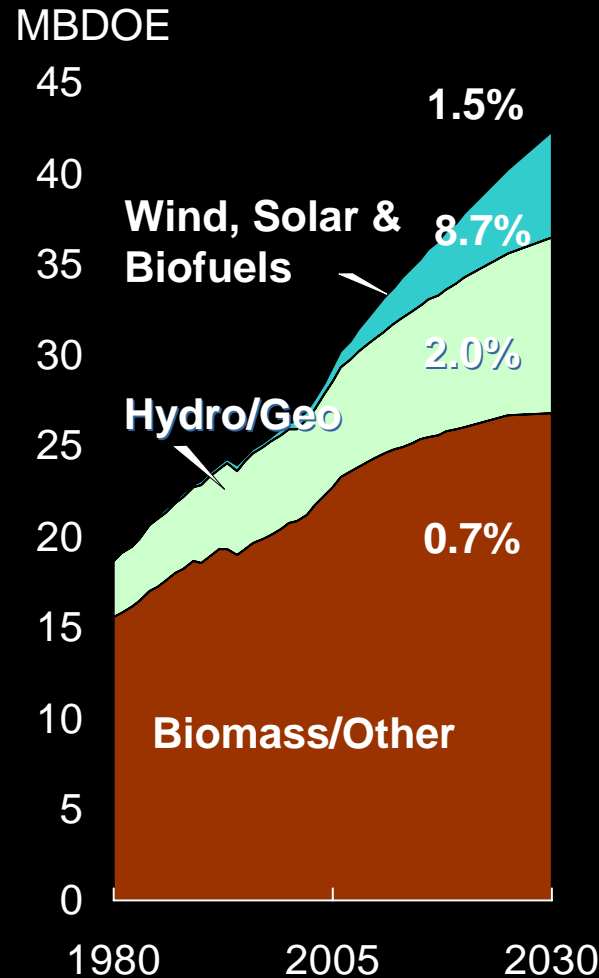
oil

# World Energy Demand – Primary Energy Supplies

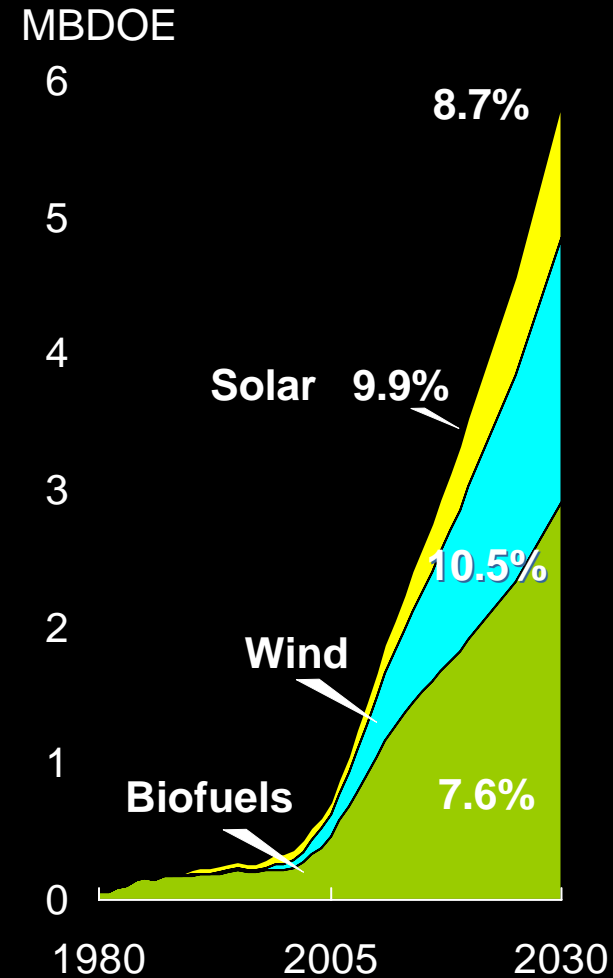
## Primary Energy



## Renewables

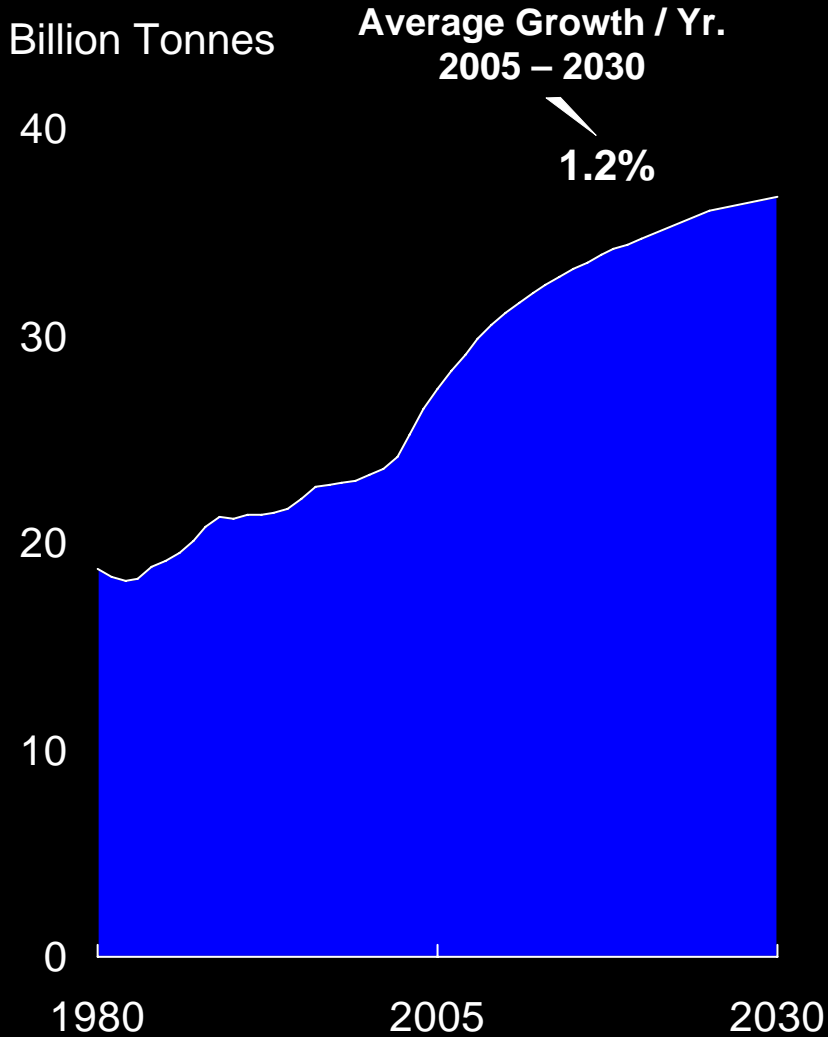


## Wind, Solar & Biofuels



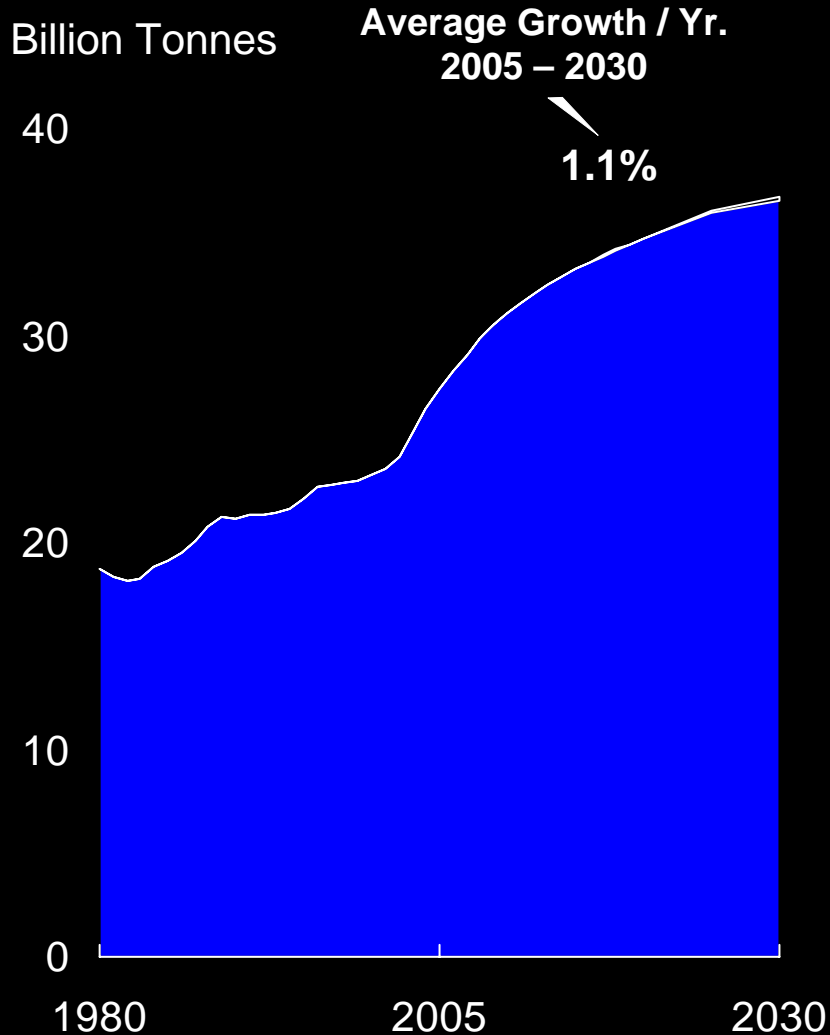
# Global CO<sub>2</sub> Emissions

## Energy Related CO<sub>2</sub> Emissions



# Global CO<sub>2</sub> Emissions

## Energy Related CO<sub>2</sub> Emissions

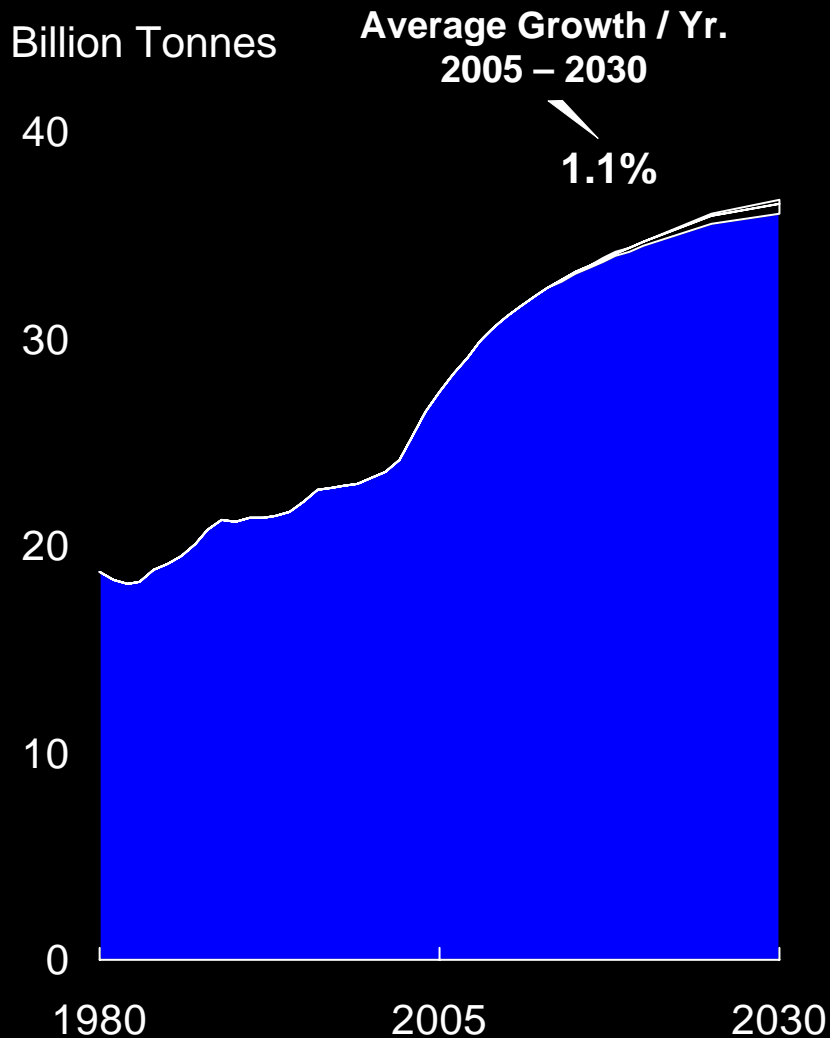


## Sensitivities

- Double biofuels growth through cellulosic ethanol

# Global CO<sub>2</sub> Emissions

## Energy Related CO<sub>2</sub> Emissions

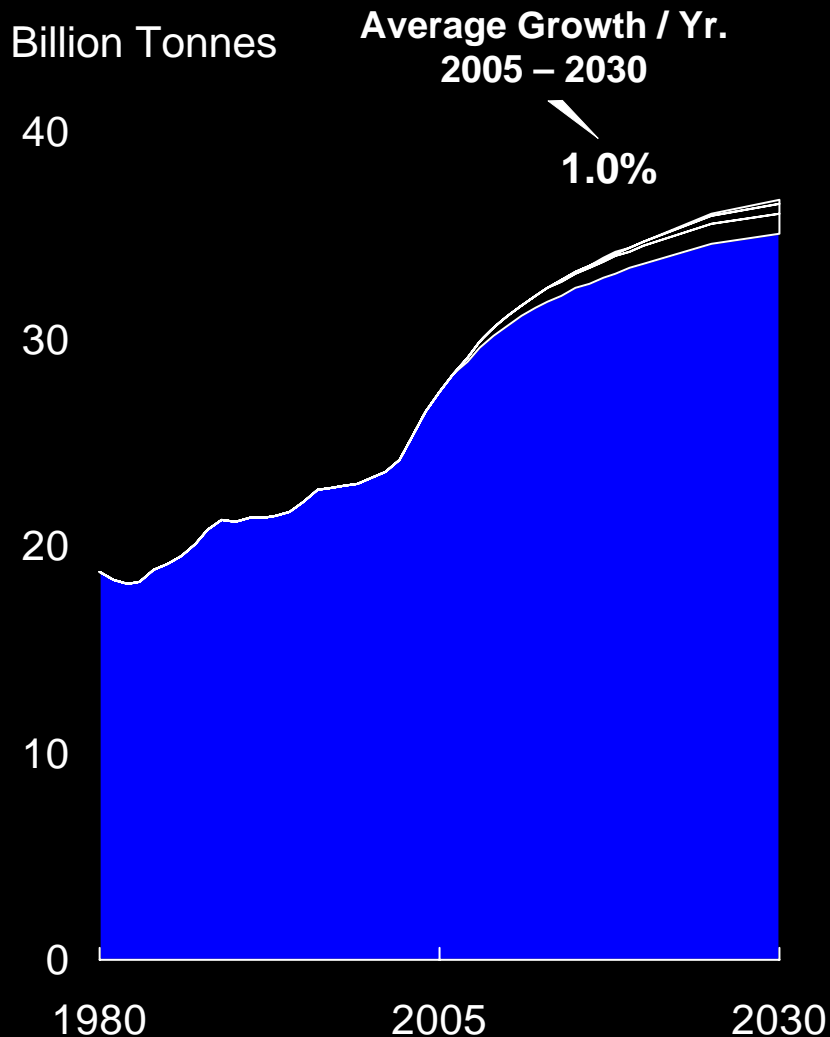


## Sensitivities

- Double biofuels growth through cellulosic ethanol
- Double rate of improvement of new car efficiency

# Global CO<sub>2</sub> Emissions

## Energy Related CO<sub>2</sub> Emissions

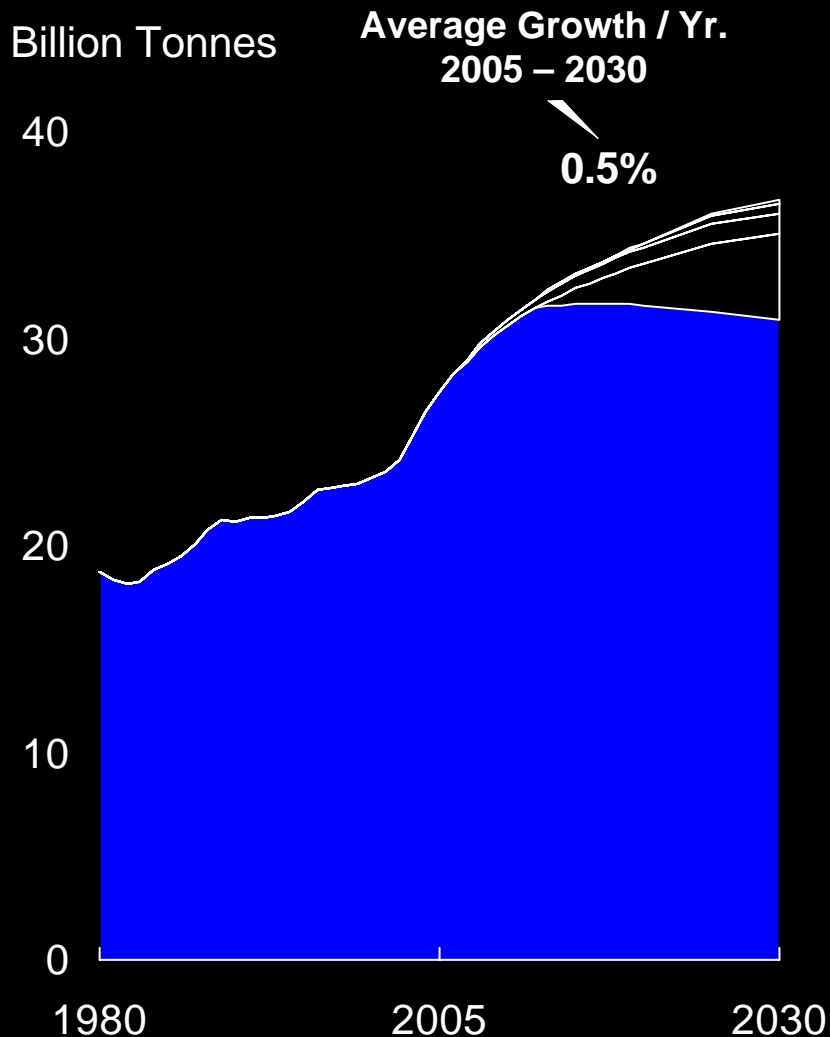


## Sensitivities

- Double biofuels growth through cellulosic ethanol
- Double rate of improvement of new car efficiency
- Replace 1/2 of coal growth with nuclear / CCS

# Global CO<sub>2</sub> Emissions

## Energy Related CO<sub>2</sub> Emissions



## Sensitivities

- Double biofuels growth through cellulosic ethanol
- Double rate of improvement of new car efficiency
- Replace 1/2 of coal growth with nuclear / CCS
- Retire coal plants at 40 years and replace with nuclear / CCS

# Conclusions

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- *Economic progress, especially in developing countries, will drive global energy demand higher despite substantial efficiency gains*
- *Oil, natural gas and coal are indispensable to meeting this energy demand, even with rapid growth in renewables*
- *Significantly impacting CO<sub>2</sub> emissions requires global participation, step changes in energy efficiency, technology gains and massive investment*

# ***The Outlook for Energy***

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***For more information regarding ExxonMobil's Energy Outlook  
please visit the link below:***

**[www.exxonmobil.com/energyoutlook](http://www.exxonmobil.com/energyoutlook)**



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