

The Energy Information Providers: EIA, IEA, and CERA

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The Oil Drum

ASPO 2008 Sacramento

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Outline

- The energy information agencies
 - Energy Information Administration (EIA)
 - International Energy Agency (IEA)
 - Cambridge Energy Research Associates (CERA)
- Overviews
- Strengths
- Weaknesses

The Energy Information Agencies

- If you are looking for:
 - The amount of oil Saudi Arabia exported to the U.S. in 2002
 - The current gasoline consumption of Rhode Island
 - Historical gasoline pricing
 - Perpetually optimistic oil price or production forecasts
- Look no further...

EIA Overview

- Energy Information Administration (EIA)
 - Statistical agency of the U.S. Department of Energy (DOE)
 - Organization of 370 people with an annual budget in Fiscal Year 2007 of \$91 million.
 - “Mission is to provide policy-neutral data, forecasts, and analyses to promote sound policy making, efficient markets, and public understanding regarding energy and its interaction with the economy and the environment” – EIA website

EIA Major Products

- This Week in Petroleum
- Natural Gas Weekly Update
- Weekly Petroleum Status Report
- Short Term Energy Outlook
- Annual Energy Outlook with Projections to 2030
- Special reports
 - Primer on Gasoline Pricing
 - Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge
 - State Energy Profiles
 - Country Analysis Briefs

This Week in Petroleum

- Normally released at 1 p.m. EST each Wednesday
- Follows the release of the Weekly Petroleum Status Report Highlights
- Comprehensive look at the trends and developments
- Graphical summary of weekly inventory and price changes
- Has the power to move the markets

How I Use the EIA

- Debunking: A U.S. Senator recently claimed that U.S. oil companies export 1.4 million barrels of oil per day to foreign countries – at the expense of hard-working Americans
 - Consulting the EIA report: Total Crude Oil and Product Exports by Destination
 - Only Canada recently received U.S. crude oil - 27,000 barrels per day - 1/50th the claimed amount
 - An additional 130,000 bpd of gasoline is exported primarily to Canada and Mexico
 - Petroleum coke comprises the largest category of the exported 'oil'
- Claim debunked via EIA data

How I Use the EIA

- Sharing information

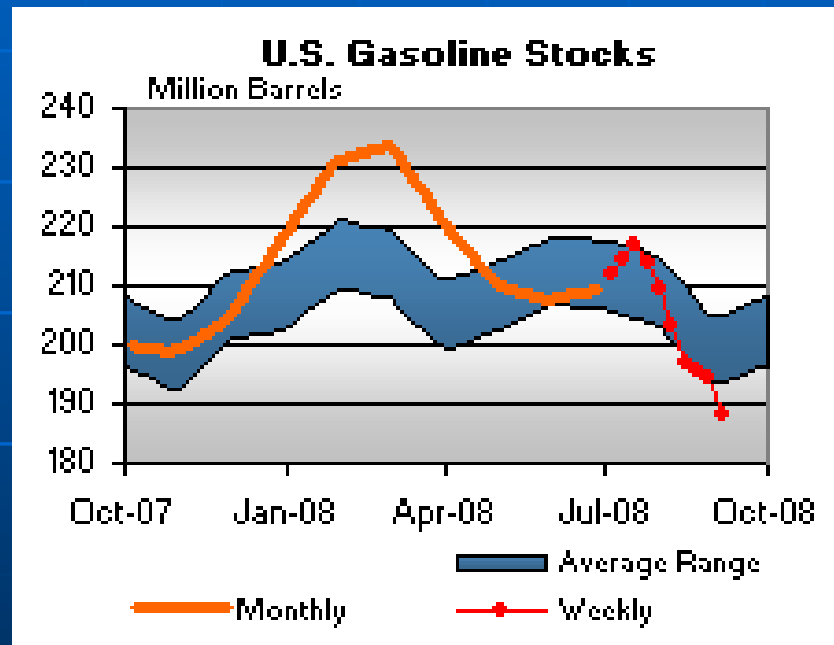
Who were the largest suppliers of crude to the U.S. in 2007?

1. Canada	680.533 million barrels supplied
2. Saudi Arabia	530.245
3. Mexico	514.48
4. Venezuela	419.841
5. Nigeria	394.856
6. Angola	181.215
7. Iraq	177.009
8. Algeria	161.755
9. Ecuador	72.138
10. Kuwait	64.306

Source – EIA: [U.S. Crude Imports by Country of Origin](#)

How I Use the EIA

- Reporting



- Source - EIA: [This Week in Petroleum](#)

How I Don't Use the EIA

- Price Forecasting
 - EIA oil price forecasting over the past dozen years has been consistently wrong – by as much as 127%
 - Average error was 53%
 - Best year still had error of 24%
 - The 2002 Annual Energy Outlook predicted 2008 oil prices to be \$23.11/bbl

Source - EIA: Annual Energy Outlook Retrospective Review

How I Don't Use the EIA

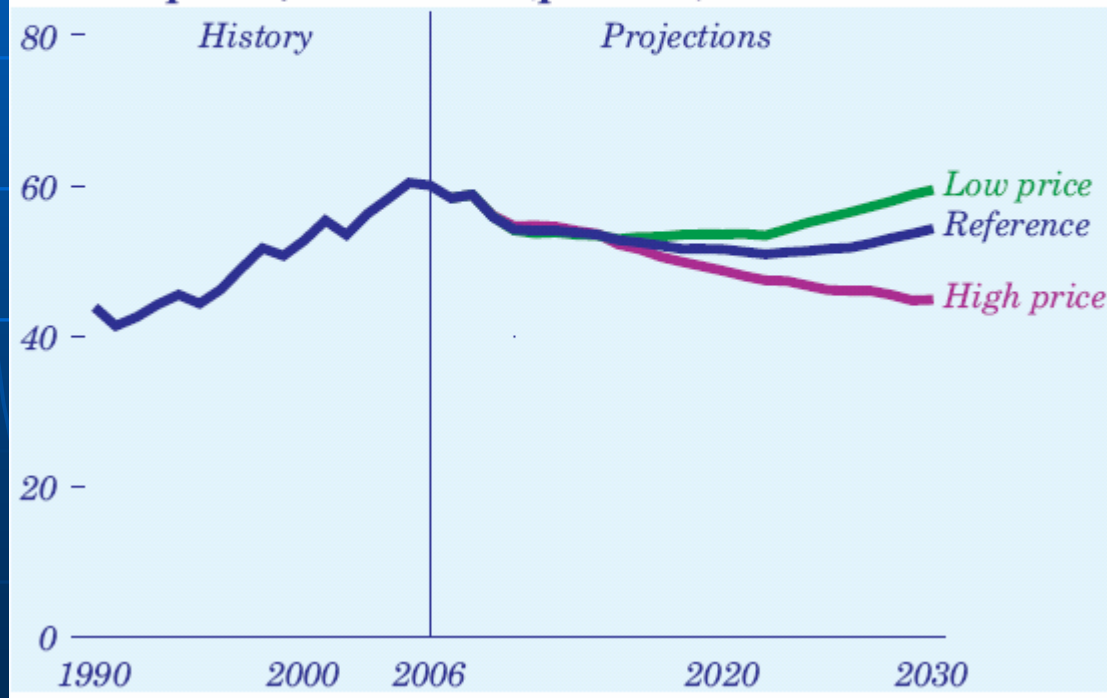
- Supply Forecasting
 - EIA oil supply forecasts have been consistently too optimistic
 - The 2002 Annual Energy Outlook predicted 2007 world oil production at 88 million bpd*
 - Actual was 84.5 million bpd
 - EIA predicts 2020 world oil production at 118.6 million bpd
 - Businesses and governments make decisions based on these forecasts

* Total liquids

EIA Forecasts from 2008 Annual Energy Outlook

Imports of Liquid Fuels Are Expected To Decline

Figure 90. Net import share of U.S. liquid fuels consumption, 1990-2030 (percent)

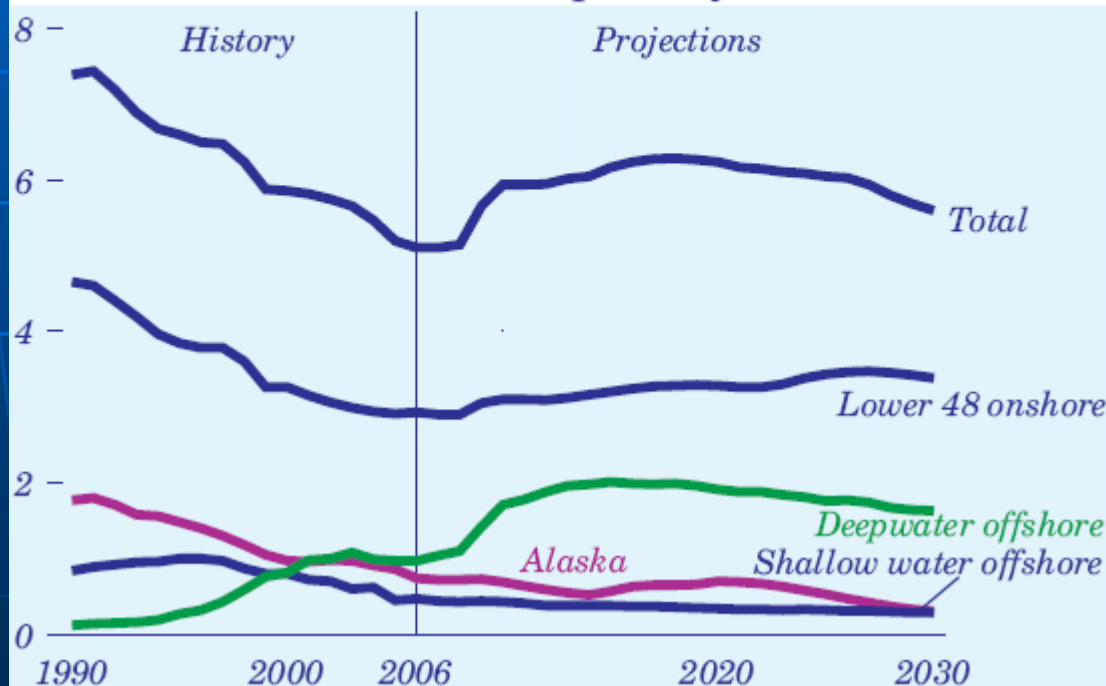


- Imports predicted to reverse course and decline!

EIA Forecasts from 2008 Annual Energy Outlook

U.S. Crude Oil Production Increases Slightly Through 2030

Figure 84. Domestic crude oil production by source, 1990-2030 (million barrels per day)



- U.S. oil production predicted to reverse course!

IEA Overview

- International Energy Agency (IEA)
 - Energy policy advisor to 27 member countries
 - Staff of 190 individuals from member countries
 - IEA member countries committed to taking joint actions to prevent oil supply disruptions

IEA Major Products

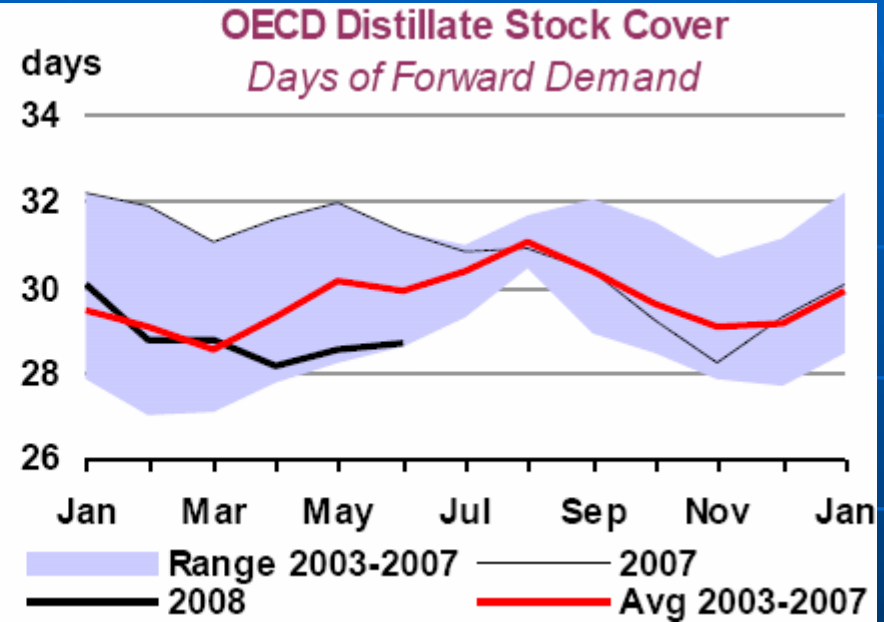
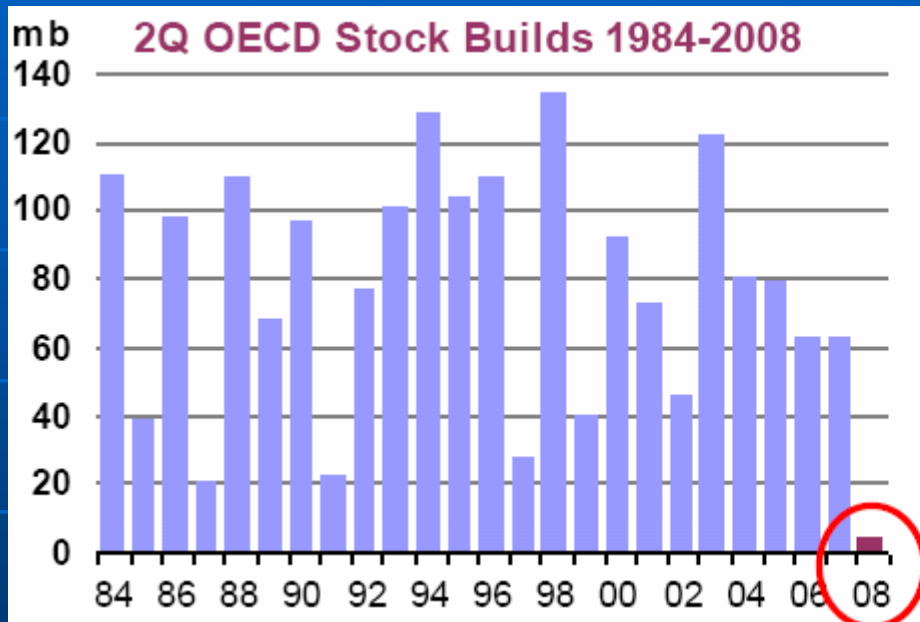
- Oil Market Report
- World Energy Outlook
- Energy Technology Perspectives
- Statistics on oil, natural gas, coal, and renewables
- Special reports
 - IEA Energy Policies Review: The European Union 2008
 - Natural Gas Information 2008
 - Electricity Information 2008
 - Coal Information 2008
 - Renewables Information 2008

How I Use the IEA

- Oil Market Report
 - Most current estimates of world oil supply
 - Excellent source of
 - Worldwide inventory data
 - OPEC supply situation
 - World oil prices
 - World refining margins

How I Use the IEA

- Understanding supply/demand risks



- Source - IEA: [Oil Market Report August 2008](#)

The IEA on Supply Risks

- In 2008, the IEA adopted a more pessimistic tone than the EIA
 - “Downward revisions of OPEC spare capacity”
 - “Impending supply crunch”
 - “Oil demand growth surpasses the growth in global oil capacity”

CERA Overview

- Cambridge Energy Research Associates (CERA)
 - Advisor to energy companies, governments, financial institutions, and technology providers
 - Chaired by Daniel Yergin, Pulitzer Prize-winning author of *The Prize*
 - Covers all major energy sectors: Oil, natural gas, and electric power

CERA Major Products

- Client advisory services
- Industry forums
- CERAWeek
 - Annual conference on global energy issues

CERA Forecasts

- Oil will average \$20/bbl in 2002
 - Reality – \$26.16/bbl
- Oil will fall to low \$20s in 2003
 - Reality - \$31.06/bbl
- Oil will be in high \$20s/low \$30s through 2005
 - Reality – Oil rose to \$65/bbl

CERA Forecasts

- In 2006, forecasts oil supplies to rise to 110 million bpd by 2015
- Oil will fall to \$40 in early 2007
 - Reality – Oil rose to \$57/bbl
- 2008 – CERA reverses course and says oil prices could go much higher
 - “Perception that supply won’t keep up with demand”
 - “Significant upward pressure”
 - Cites “new fundamentals”

Miscellaneous Resources

- BP Statistical Review of World Energy
 - Comprehensive global look at world energy production, reserves, trends, and prices
- Oil Price Information Service (OPIS)
 - Daily look at the news and markets
- Platts
 - Division of McGraw-Hill; frequently updated news headlines and market reports

Summary

- The energy information agencies are great at providing energy data
- They generally have a poor record of forecasting
- But, governments and businesses make decisions on the basis of poor forecasts