

# ***2006-2007 Winter Fuels Outlook***

**Guy F. Caruso**

**Administrator,**

**Energy Information Administration**

**National Capital Area Chapter**

**United States Association for**

**Energy Economics**

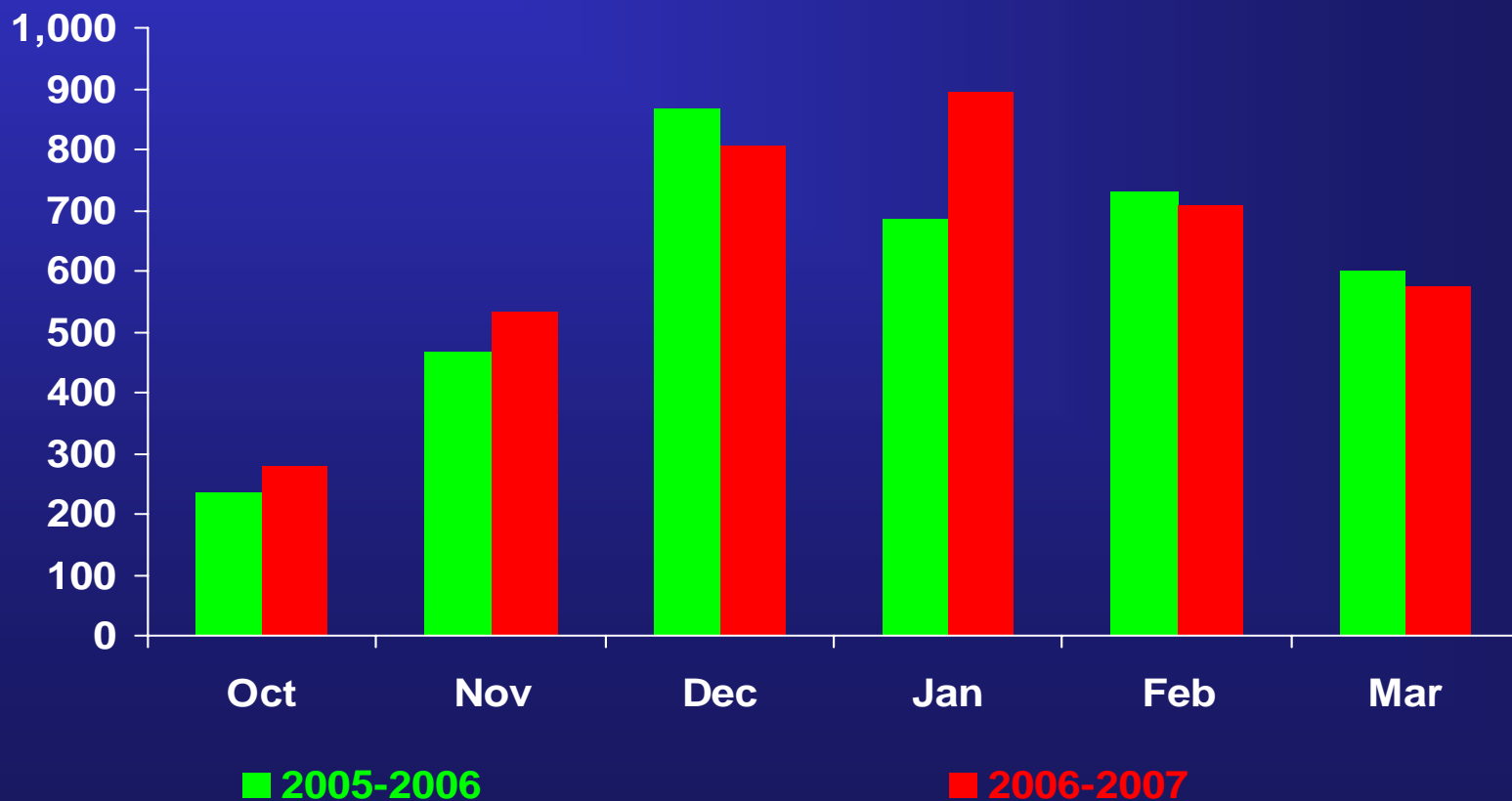
**October 20, 2006**

**Washington, DC**

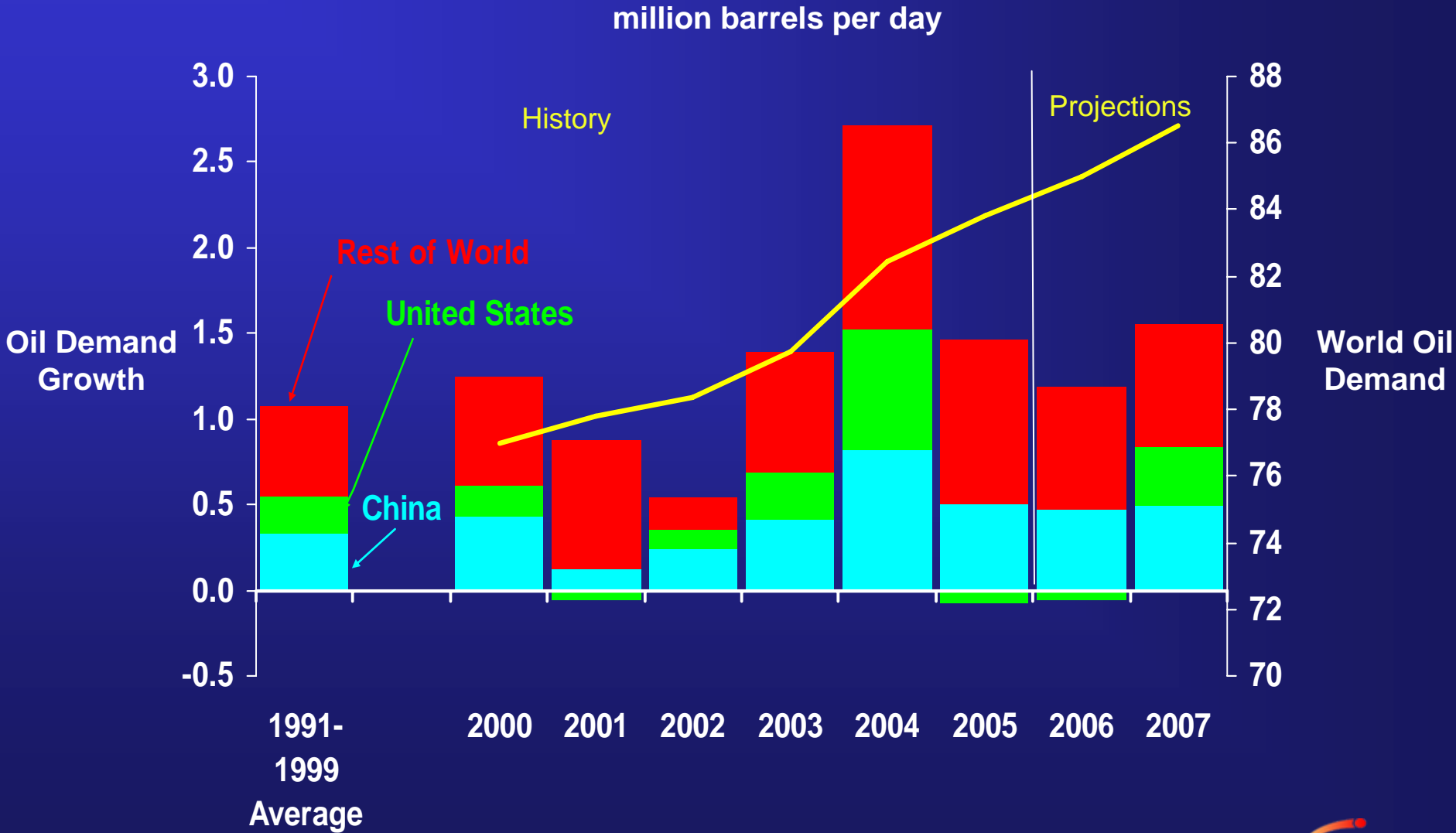


*Winter 2006/07 expected to be 6 percent colder than last winter, but slightly warmer than normal*

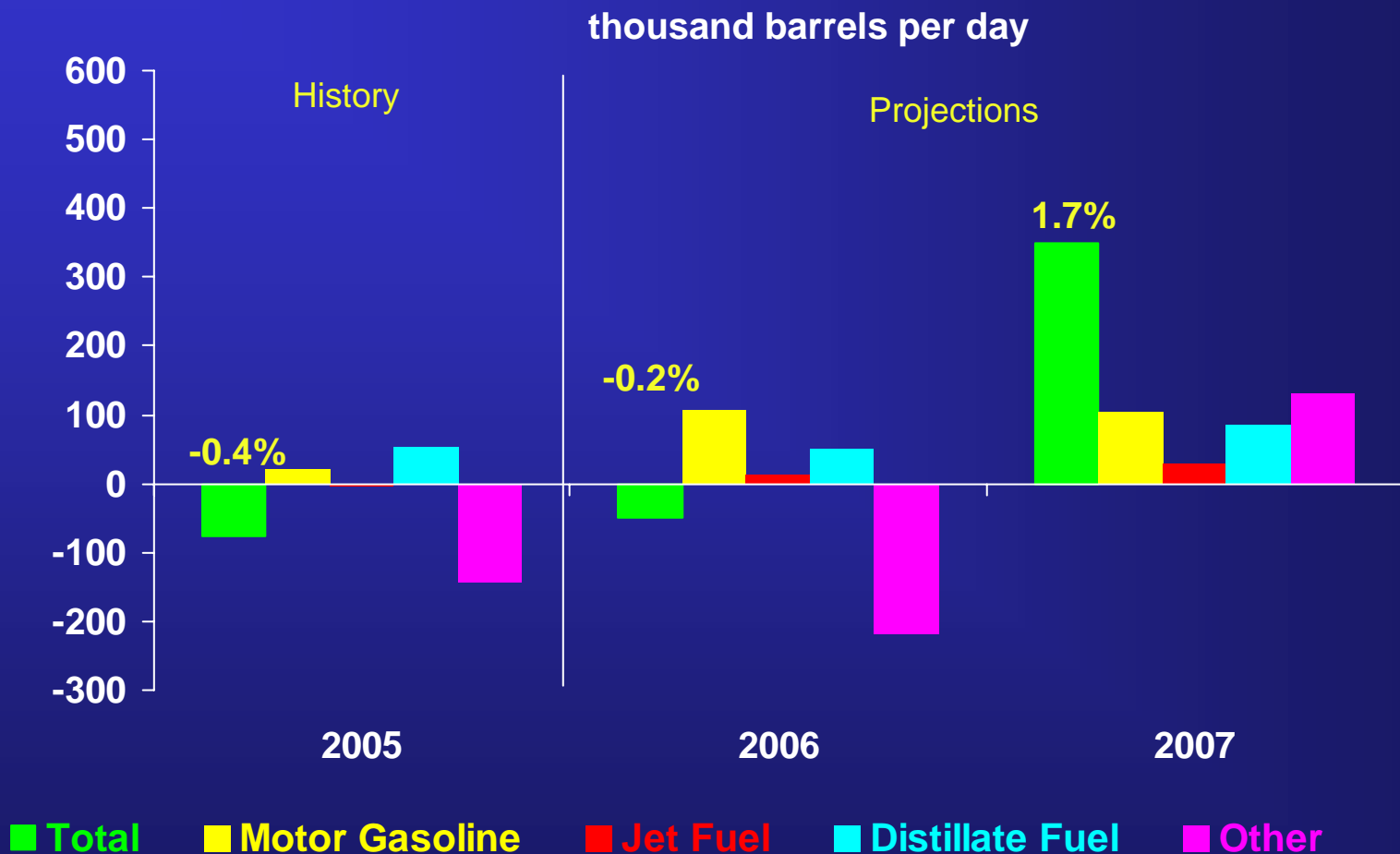
U.S. heating degree-days population-weighted



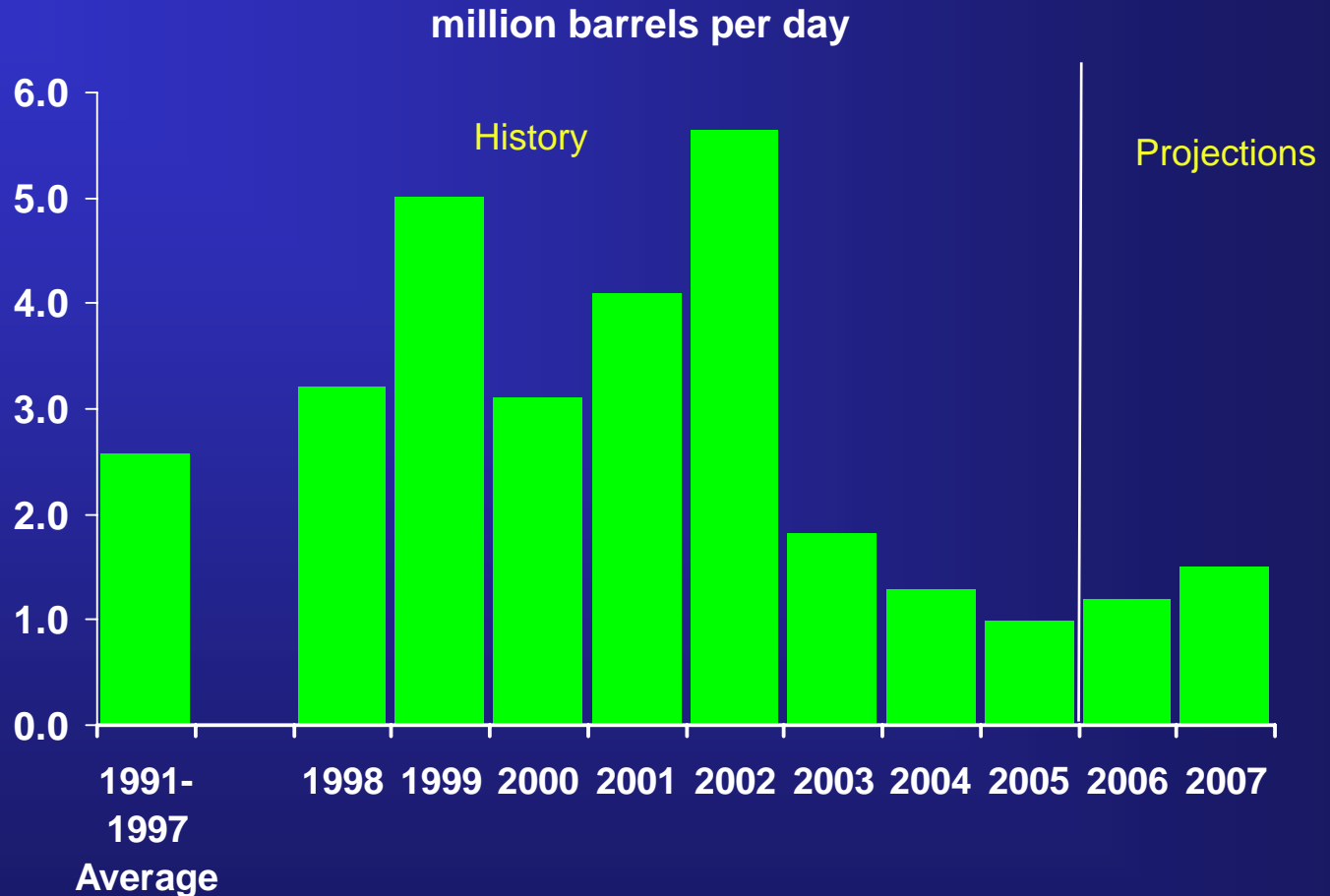
# World oil consumption growth is expected to remain strong



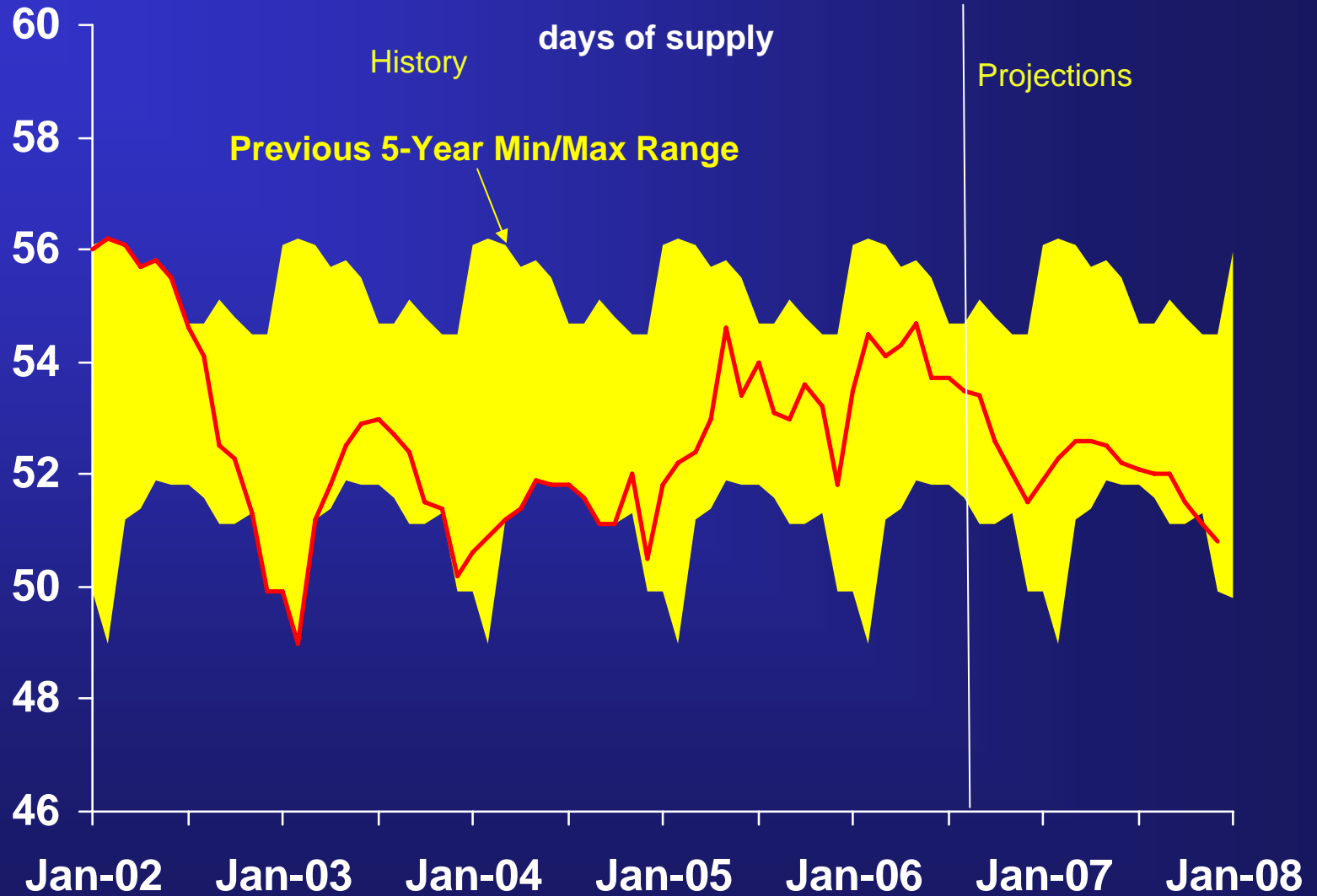
# Growth in U.S. petroleum products consumption is expected to be strong in 2007



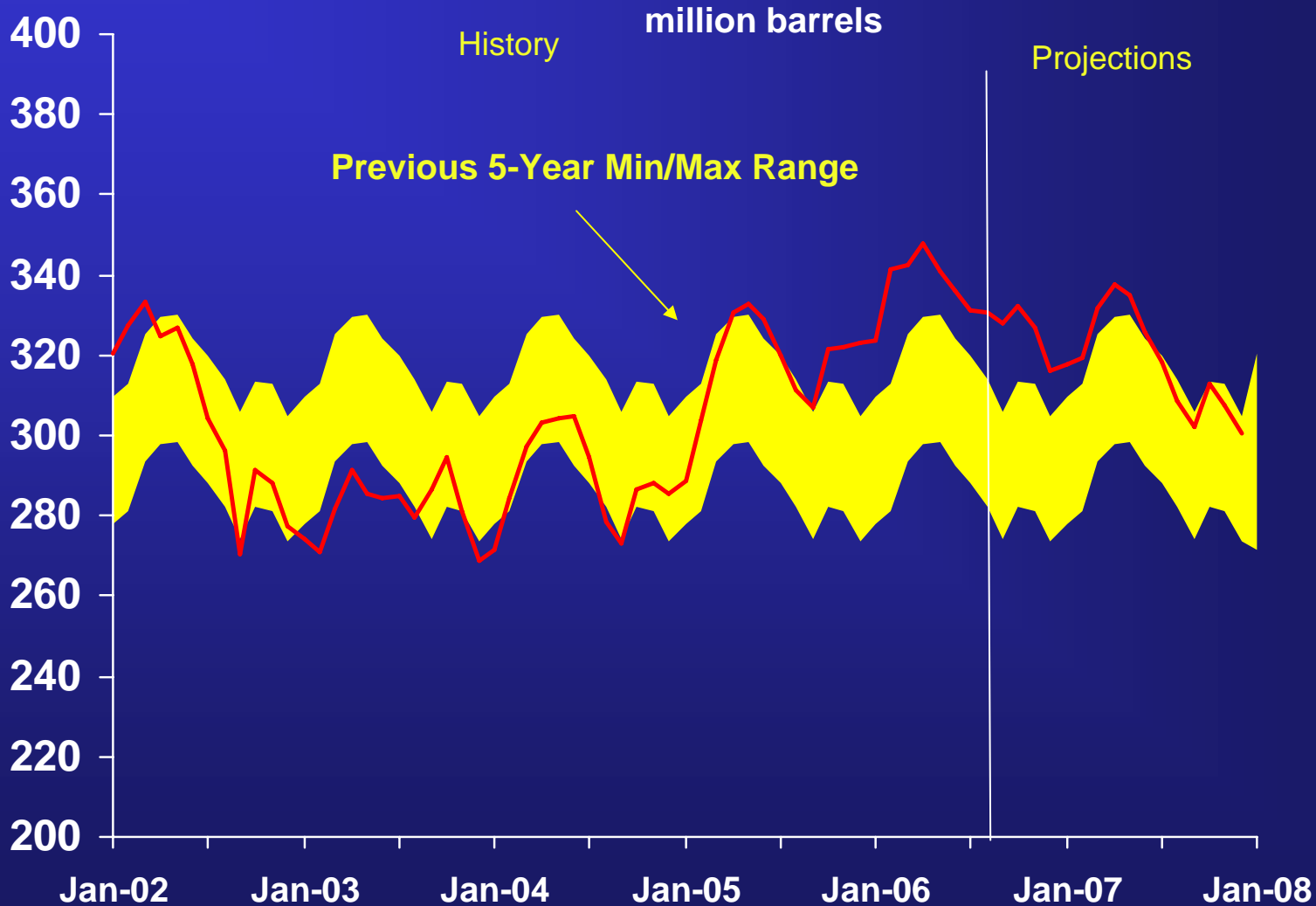
*World oil surplus production capacity is expected to increase slightly but remain at a low level*



# *OECD commercial oil stocks are expected to tighten*

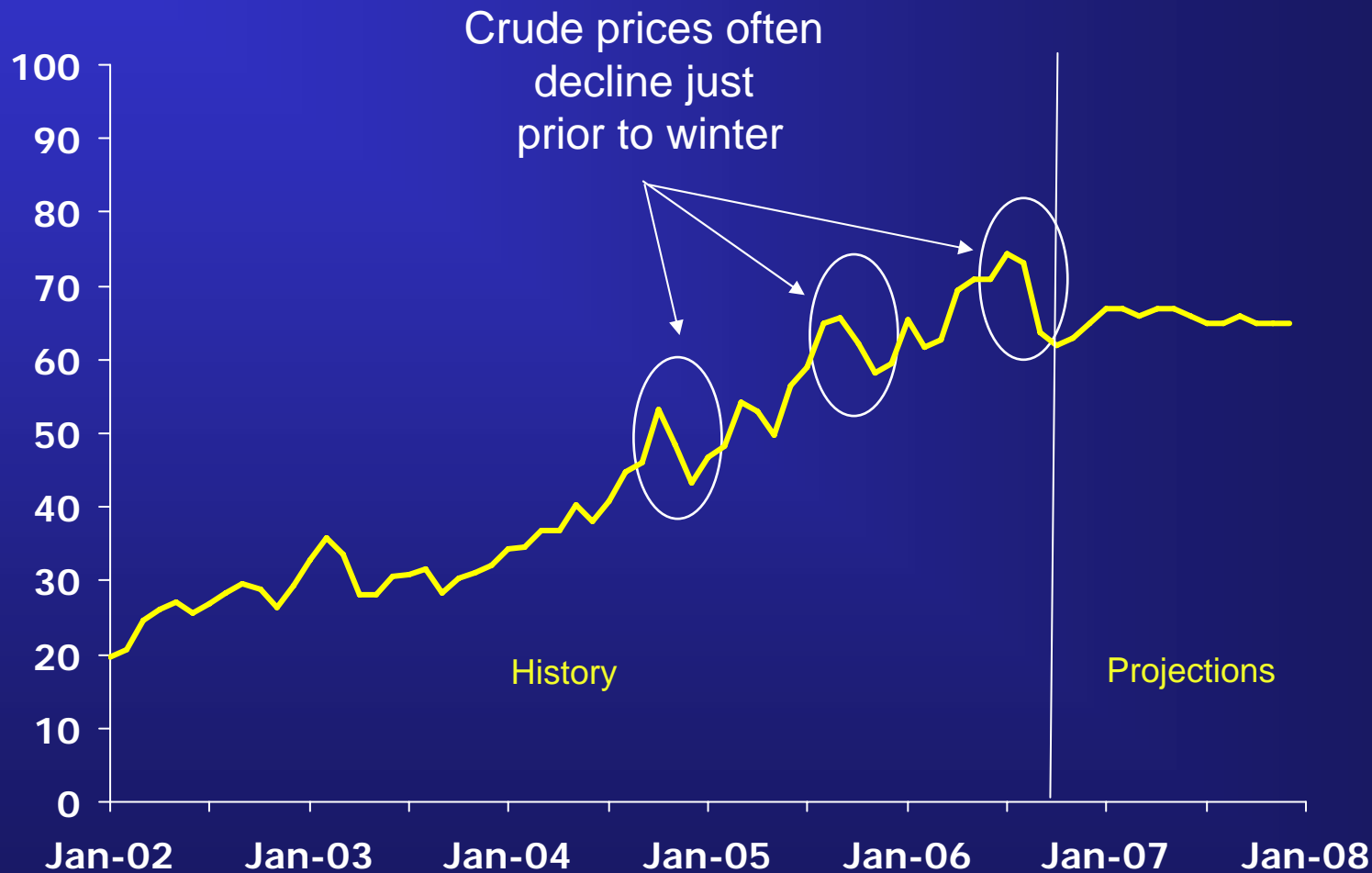


# U.S. crude oil stocks are at very high levels



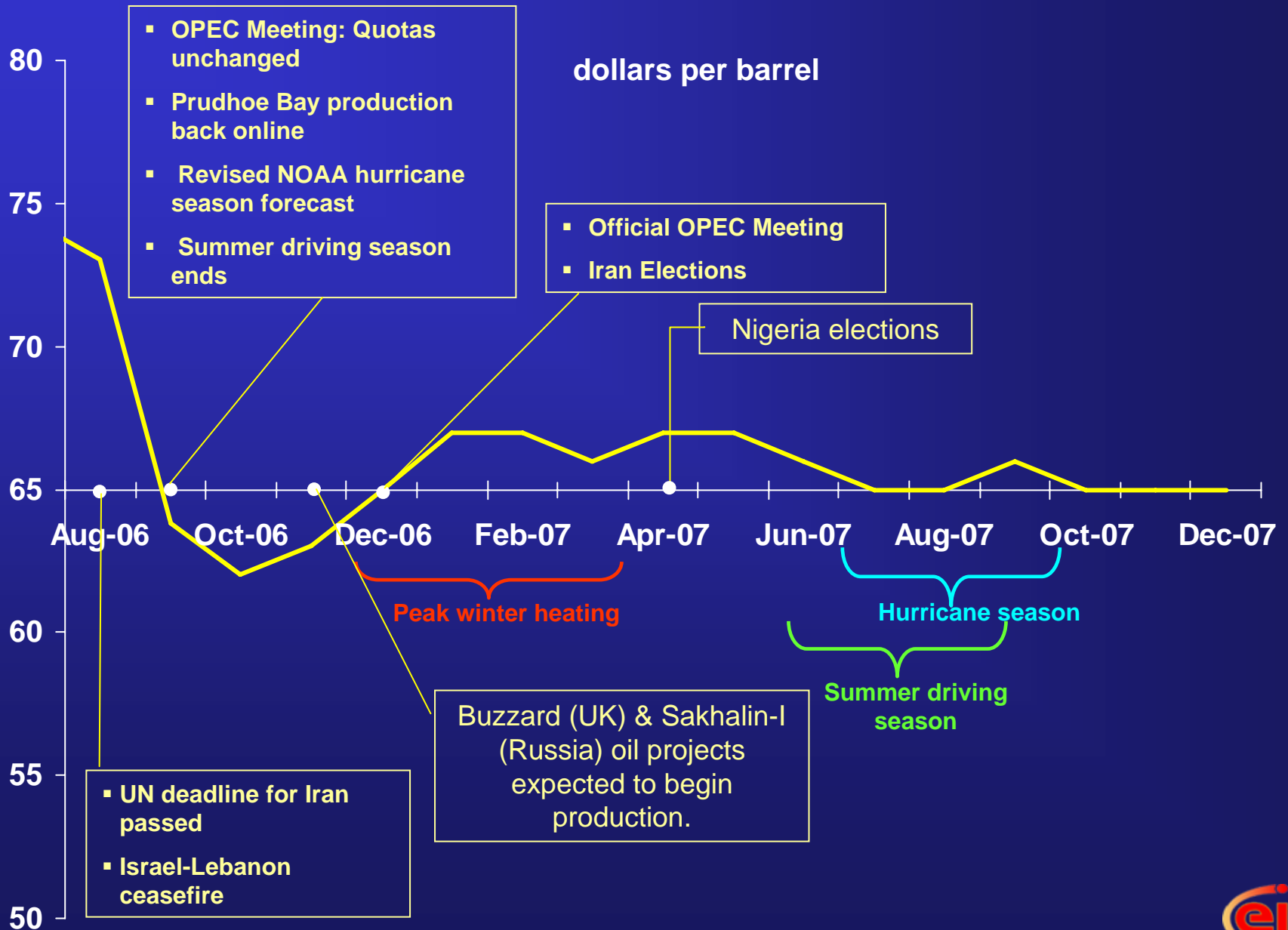
# *Recently declining crude prices are projected to increase during winter, but not to last winter's highs*

dollars per barrel





# Many factors may affect oil prices in upcoming months



# *Retail heating oil prices are projected to show little change from last winter*

cents per gallon

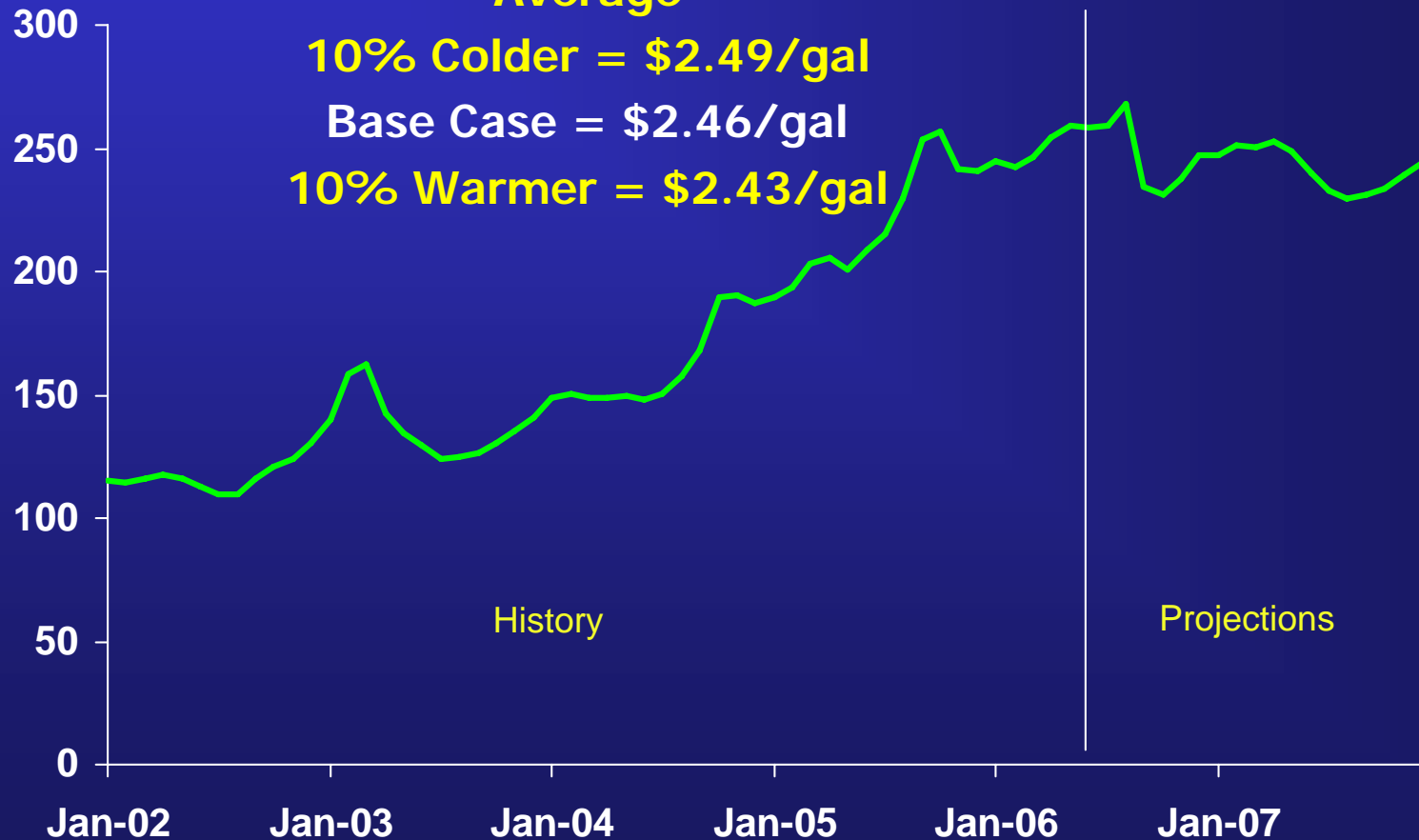
**Oct 2006 – March 2007**

**Average**

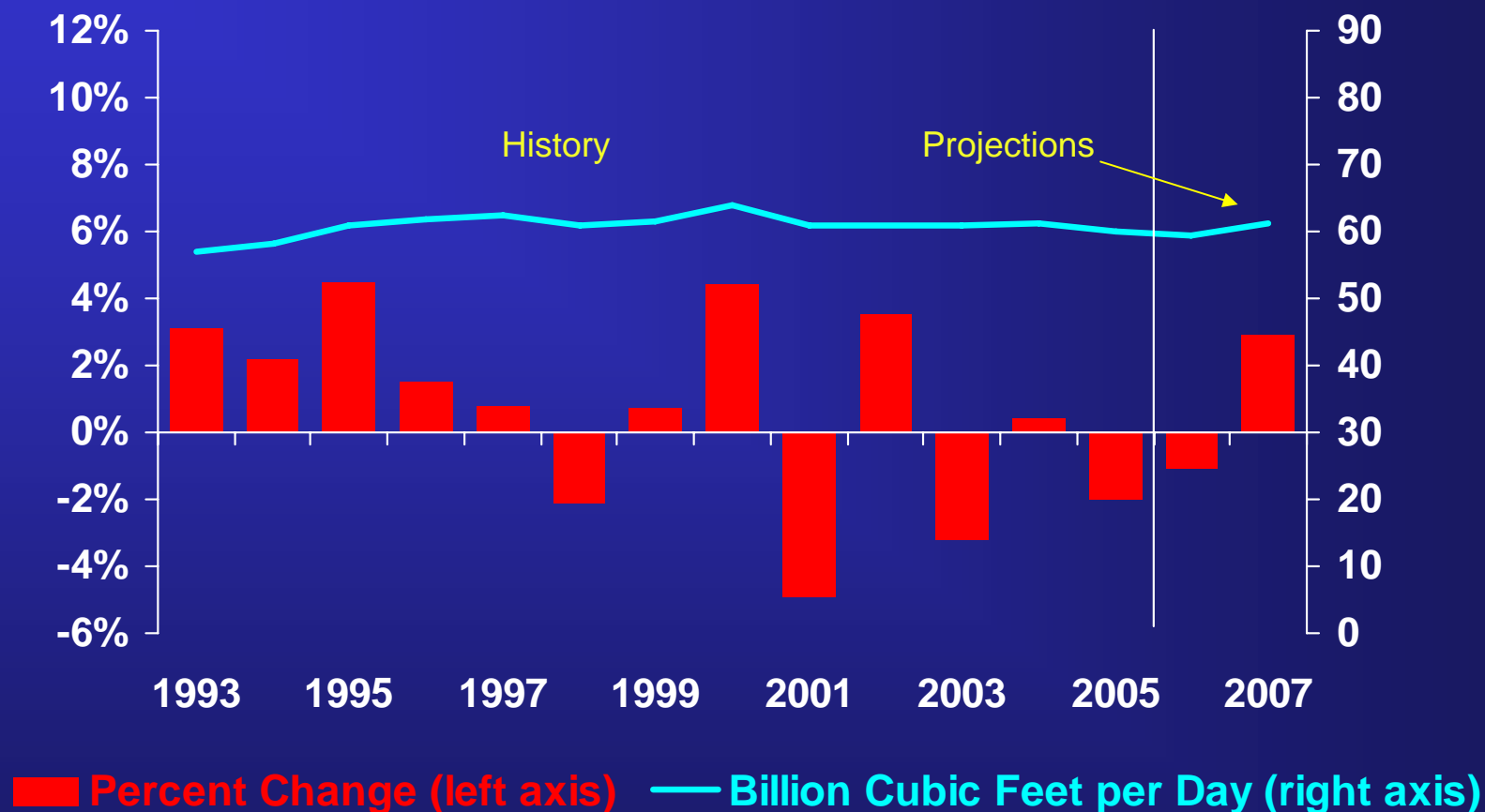
**10% Colder = \$2.49/gal**

**Base Case = \$2.46/gal**

**10% Warmer = \$2.43/gal**



# U.S. natural gas consumption growth is expected to resume



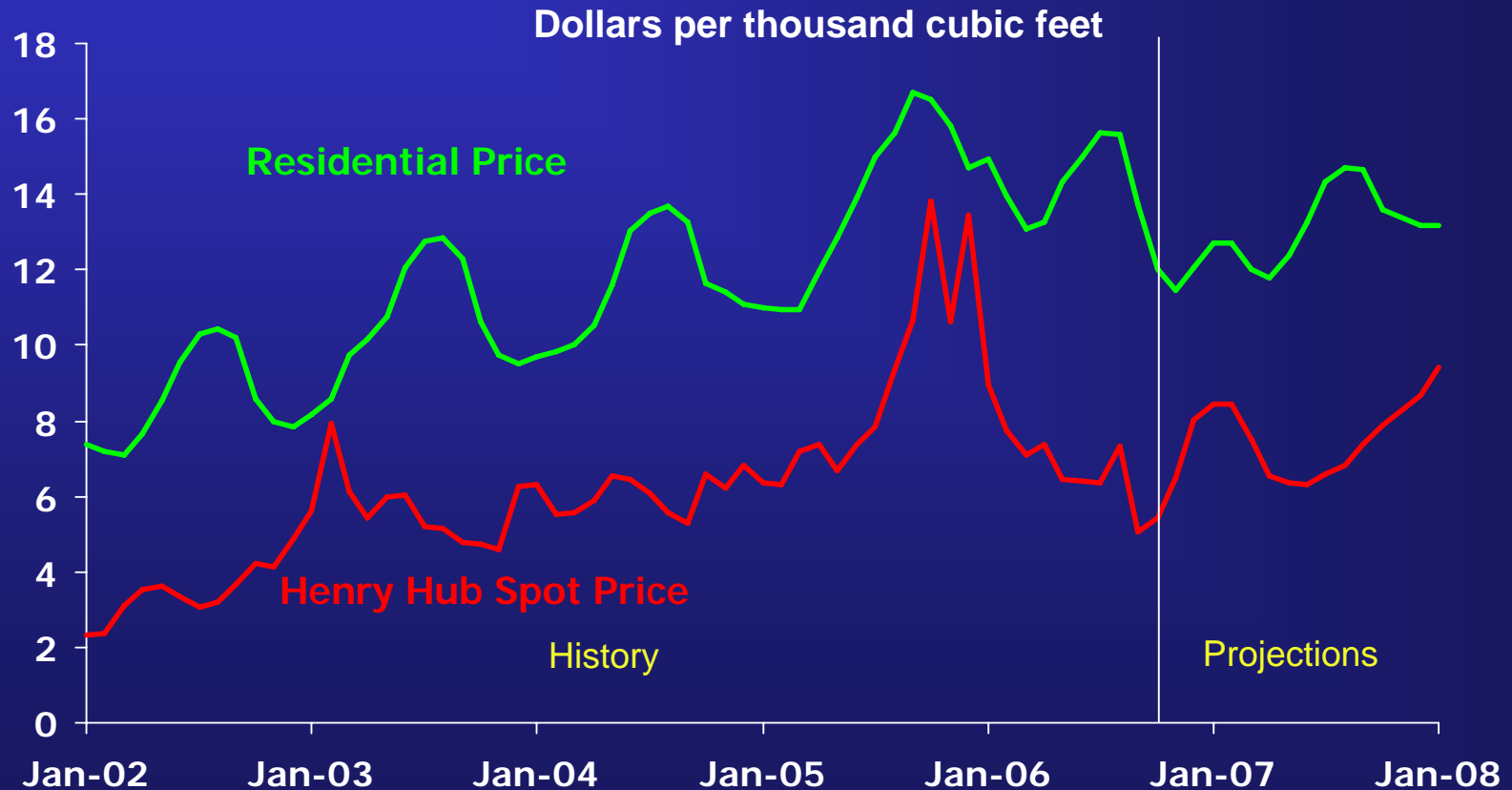
# *U.S. natural gas in storage is projected to remain above historical averages, even in cold weather case*



# *Natural gas prices are expected to be significantly lower than last winter*

**Henry Hub Spot Price**  
10% Colder = \$8.97/mcf  
Base Case = \$7.39/mcf  
10% Warmer = \$5.89/mcf






**Residential Price**  
10% Colder = \$13.05/mcf  
Base Case = \$12.23/mcf  
10% Warmer = \$11.46/mcf



# *Natural gas heating bills are projected to be lower for all regions this winter*

## Percent Change from Last Winter (Projected)

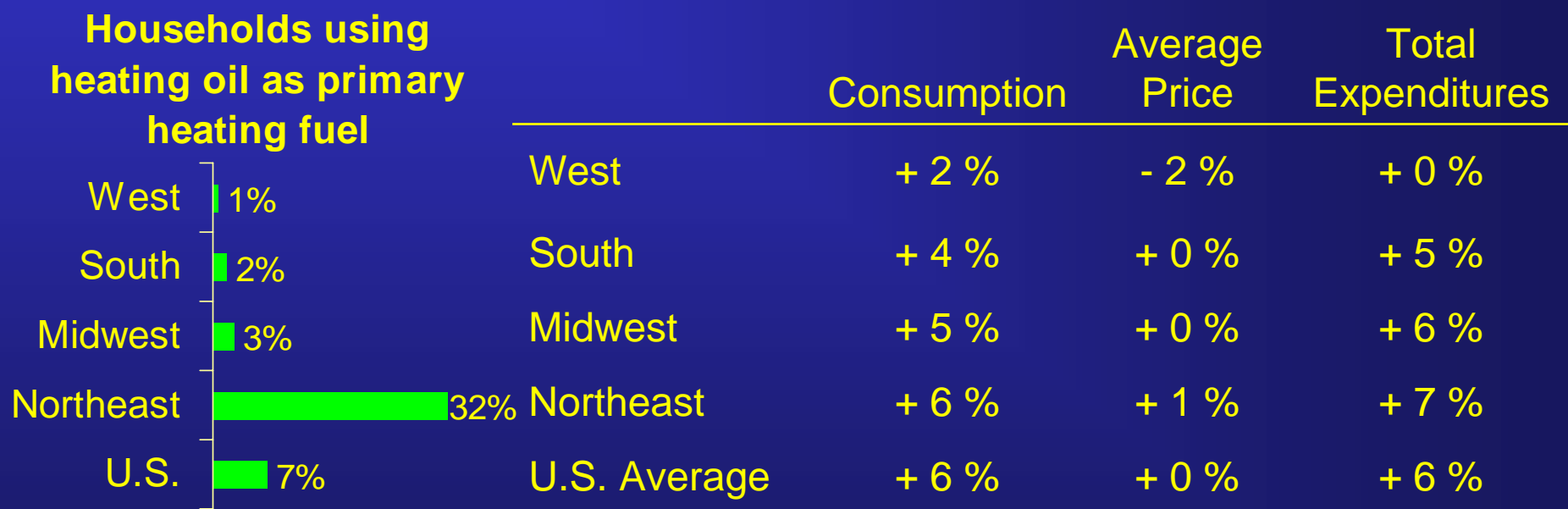
### Households using natural gas as primary heating fuel

		Consumption	Average Price	Total Expenditures
West	 66%	West	+ 2 %	- 12 %
South	 41%	South	+ 6 %	- 19 %
Midwest	 79%	Midwest	+ 4 %	- 18 %
Northeast	 55%	Northeast	+ 7 %	- 15 %
U.S.	 58%	U.S. Average	+ 5 %	- 16 %



# Winter heating oil expenditures projected to increase for all regions

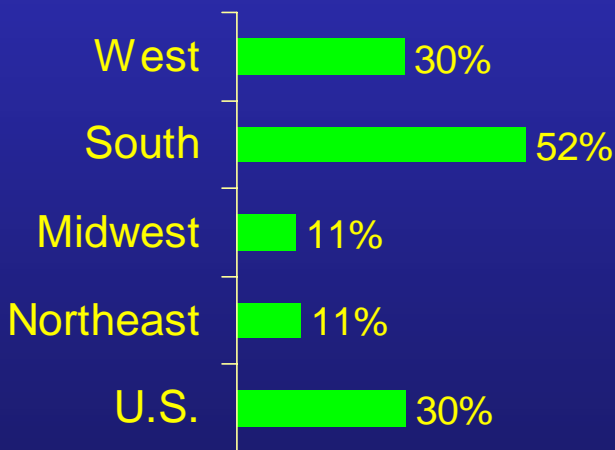
## Percent Change from Last Winter (Projected)



## *Winter electricity expenditures are projected to increase for all regions*

### Percent Change from Last Winter (Projected)

#### Households using electricity as primary heating fuel



	Consumption	Average Price	Total Expenditures
West	+ 1 %	+ 10 %	+ 11 %
South	+ 3 %	+ 3 %	+ 6 %
Midwest	+ 3 %	+ 5 %	+ 8 %
Northeast	+ 5 %	+ 5 %	+ 10 %
U.S. Average	+ 3 %	+ 5 %	+ 7 %

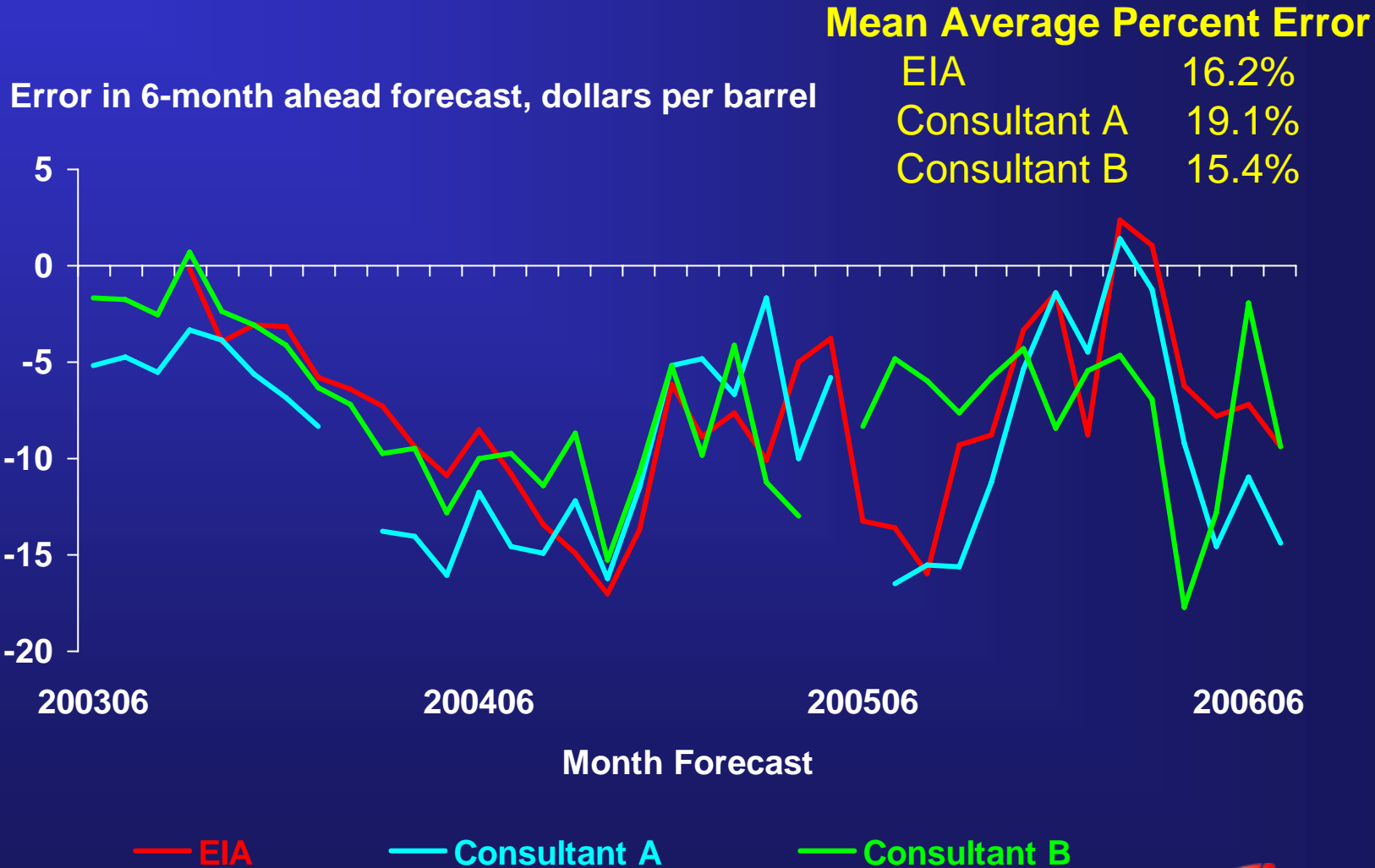


***Average winter fuel expenditures are expected to be lower for natural gas and propane than last year, slightly higher for heating oil and electricity***

Fuel	% Change from last Winter		
	Base Case	If 10% Warmer than forecast	If 10% Colder than forecast
Natural Gas			
Price	<b>-16.4</b>	-21.7	-10.8
Expenditures	<b>-12.5</b>	-25.0	1.2
Heating Oil			
Price	<b>0.4</b>	-0.9	1.7
Expenditures	<b>6.3</b>	-4.4	17.3
Propane			
Price	<b>-5.3</b>	-8.6	-1.6
Expenditures	<b>-1.1</b>	-12.6	11.5
Electricity			
Price	<b>4.6</b>	4.3	4.9
Expenditures	<b>7.4</b>	1.8	12.9
<b>Average Expenditures</b>	<b>-4.8</b>	<b>-15.3</b>	<b>6.5</b>

Winter = October 1 through March 31. Expenditures are based on typical per household consumption adjusted for weather. Warmer and colder cases represent 10% decrease or 10% increase in heating degree-days.

# *EIA, like most forecasters, has underpredicted oil prices during the last 3 years*



## *The Outlook Shows ...*

- The average U.S. household will pay about \$45 less for heating this winter.
- Lower expenditures are driven by lower prices for natural gas which offset the expected increase in consumption brought about by the projected colder weather.
- Under the baseline forecast, natural gas expenditures could be about \$119, or 13 percent, lower for the average U.S. household this winter.
- Heating oil expenditures are projected to be about \$91, 6 percent, higher for the average U.S. household this winter. Electricity expenditures are forecasted to be \$58, 7 percent, higher the average U.S. household this winter.
- A colder winter could substantially raise estimated expenditure increases.

## Periodic Reports

*Petroleum Status and Natural Gas Storage Reports*, weekly

*Short-Term Energy Outlook*, monthly

*Annual Energy Outlook 2006*, February 2006

next reference case, November 2006

*International Energy Outlook 2006*, June 2006

## Examples of Special Analyses

“Economic Effects of High Oil Prices,” *Annual Energy Outlook 2006*

*Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge*,

March 2004

*The Global Liquefied Natural Gas Market: Status and Outlook*, December 2003

“Restricted Natural Gas Supply Case,” *Annual Energy Outlook 2005*

[www.eia.doe.gov](http://www.eia.doe.gov)

Guy F. Caruso

[guy.caruso@eia.doe.gov](mailto:guy.caruso@eia.doe.gov)

