



## Hydrocarbon Values

### Value of the hydrocarbons

A major component in determining the 'potential' of a region is to determine its economic potential: the value of what is there.

The price of the hydrocarbon's in the world market is a crucial determining factor in the 'value' of the 'potential' for the ANWR region, as this is the factor that will ultimately make the distinction between drilling or not drilling in a cost-benefit analysis.

According to the Bloomberg energy prices, the current value of hydrocarbons are:

Petroleum (\$/bbl)

Type	Price	Change	% Change	Time
Nymex Crude	30.16	-0.14	-0.46	10/24
IPE Crude	28.58	-0.05	-0.17	10/24
Dated Brent	30.02	0.55	1.87	10/24
WTI Crushing	29.98	-0.14	-0.46	10/24

Natural Gas (\$/MMBtu)

Type	Price	Change	% Change	Time
Nymex Henry Hub	4.79	-0.13	-2.58	10/24
Henry Hub	4.8	-0.11	-2.24	10/24
NYC Gate	5.12	-0.4	-7.25	10/24

As the numbers above demonstrate, there are different types of oil and natural gas that sell for different prices. These prices are, however, very near each other, and so in the long run can be considered the 'same price.'

According to the OPEC tables of 'global oil trends' the lowest value of oil is around \$20 a barrel and the highest value peaks nearer to \$35 a barrel. This figure is subject to change due to political events, fluctuating oil reserves/production, and to the health of the oil market at the time.

When coupled with the volume estimates for the 1002 region of ANWR, the value of oil in billion of dollars is

	5% probability	50% probability	95% probability
Higher end	412.97	268.38	148.89
Current value	366.83	238.40	132.27
Lower end	294.98	191.70	106.35

For natural gas, in trillion cubic feet, is

	5% probability	50% probability	95% probability
Higher end	61.17	16.57	0
Current value	54.61	14.80	0
Lower end	44.45	12.05	0

The values used for the above price estimates are

Oil (\$/barrel)		Natural Gas (\$/MMBtu)	
Higher end	\$35	Higher end	\$5.5
Current value	\$31.09	Current value	\$4.91
Lower end	\$25	Lower end	\$4

The above tables give an idea of how much revenue can be expected from ANWR, bearing in mind that it is a probabilistic estimate and should be treated carefully.

## Comparison with other world sources

To get a general idea of the placement of the hydrocarbons in ANWR in the context of the international oil market, a comparison of the proven reserves of different regions of the world and of the expected reserves of the 1002 area was set up.

Region	Natural Gas (billion cubic meters)	Crude Oil (million barrels)
North America	6898	27646
Latin America	7507	111173
Eastern Europe	57493	79190
Western Europe	6955	18268
Middle East	71546	698906
Africa	13207	93550
Asia and Pacific	14118	38434
<b>1002 Area</b>	<b>301.9</b>	<b>11790</b>

