

Introduction to this document

I'm using this document to build our "roadmap" to complete the project. Each section's purpose is to gain more technical information behind what goes into our oil to lead up to answer the question, "Are we producing more oil than we're using or vice versa?"

How much oil is available? How much is drilled out?

- [US Production
8 million bbl/day,
over 533,000 oil wells averaging less than 17 barrels per well per day] **Comment [N1]:** Brian rulison
- [Saudi Arabia
8-9 million bbl/day
From 750 wells
More than 12,000 bbl per well per day] **Comment [N2]:** Brian rulison
- [2000-2002 World oil supply/production
75,000,000 bbl/day] **Comment [N3]:** vanessa
- [2005 January world oil supply/production
83,645,000 bbl/day] **Comment [N4]:** vanessa
- [Non-OPEC countries produced 60% of the world's oil in 2000.] **Comment [N5]:** brian rulison
- [Saudi Arabia and the United States produce 12% of the world's oil individually.
- Saudi Arabia produces around 10.35 million bbl/d.
- Of countries individually, Saudi Arabia exports nearly 8.57 million bbl/d.] **Comment [N6]:** brian rulison
- [The United States production has gone from 9.2 million barrels per day to 5.39 million barrels per day, which is a 41.4% drop in production.] **Comment [B7]:** will's group
- [April 2005 GASOLINE production
362,124,000 gallons/day] **Comment [B8]:** brian schettler

How much is refined?

- [Oil refineries have run at 91.2% of their capacity this year up from 89.2% a year ago] **Comment [N9]:** What year?
..... **Comment [N10]:** Brian rulison
- [The United States is at a 91.2% capacity up from 89.2% as of April 4, 2005.]

Market Analysis Oil Report

- The World refinery capacity was found to be around 88.3% on average from the past three years. Comment [B11]: Is this of full capacity?
- Africa is said to be the largest oil exporter in the world. Their production from refineries could be hurt by a worker strike over the next few months. Comment [N12]: Brian rulison
- World output of **GASOLINE**
840,000,000 gallons/day Comment [B13]: Brian schettler
- # of refineries:
 - US: 176
 - North America: 176
 - Central and South America: 70
 - W. Europe: 112
 - E. Europe and fmr USSR: 88
 - Middle East: 46
 - Africa: 45
 - Asia and Oceania: 202
 - World Total: 739 Comment [B14]: Brian schettler

Breakdown of barrel of crude oil

What a Barrel of Crude Oil Makes	
Product	Gallons per Barrel
Gasoline	19.5
Distillate Fuel Oil (includes both home heating oil & diesel)	9.2
Kerosene-type Jet Fuel	4.1
Residual Fuel Oil (heavy oils used as fuels in industry, marine transport, and electric power generation)	2.3
Liquefied Refinery Gasses	1.9
Still Gas	1.9
Coke	1.8

Asphalt and Road Oil	1.3
Petrochemical Feedstock	1.2
Lubricants	0.5
Kerosene	0.2
Other	0.3
Figures are based on 1995 average yields for US refineries. One barrel of oil contains 42 gallons. Excess due to "processing gain"	

Comment [N15]: Brian rulison

How much America uses

- On the other hand, the U.S.'s total **imports** has increased from 3.2 million barrels per day to 9.84 million barrels per day, which means the imports for oil have more than tripled in the past thirty years. If the U.S. **produces** 5.39 million barrels per day and **imports** 9.84 million barrels per day, then the total oil used per day is **15.23 million barrels. That means the U.S. is only producing 35.4% of the oil needed..**

Comment [B16]: Will

- Table 11.2 Petroleum Consumption in OECD countries**
2004 United States consumption: 82,000,000 bbl/day

Comment [B17]: vanessa

- Consumption of **GASOLINE**
358,000,000 GALLONS/day

Comment [B18]: brian schettler

World demand for oil

- world consumes 80 million bbl/day in 2004
- possibly include information from oil bubble article in newspaper regarding:
 - oil shortages: have we ever had an oil shortage or has it been all talk? There is always talk of a strike that would hold up production, but has there ever been one?

Comment [N19]: Vanessa

- US reserve: The US Reserve is currently being filled at something like 250k barrels of oil a day. When it's full, how will that extra 250k bbl of oil help?

Comparison and conclusion

- 2005 January world oil supply/production
83,645,000 bbl/day

Comment [N20]: vanessa

vs.

- world consumes 80 million bbl/day in 2004

Comment [N21]: Vanessa

- It appears our supply barely outpaces our demand. Therefore, this is a market-driven bubble.

Forecast:

- A model of the world oil production capacity (Wocap) predicts that world oil output will peak in the next 2 years with over 80 million barrels of oil per day. After this production will decrease at an ever increasing amount while consumption continues to rise.

Comment [N22]: Nathan's group

2020: 113 million bbl /day

Comment [N23]: vanessa

- What can we do to lessen demand?
 - Less gas consumption, of course
 - Carpooling, public transportation
 - More fuel efficient vehicles
 - Better uses of oil (i.e., more efficient manufacturing/refining processes)
 - Two words: Iraq + Halliburton
 - Fill the US Strategic Reserve (excess gas can go to consumers)
 - Measures to prevent oil shortages (better supply carriers, etc)
 - ???