The Oil Market Context
2006 Out of Step with Past and Future

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Key Oil Market Developments

- **Short Term Factors**
  - Geopolitics
  - Weather, demand elasticities
  - Non-Opec Recovery
  - Opec holding action
- **Medium Term Influences**
  - Non-OECD demand growth and mix
  - Opec upstream capacity additions
  - New and better refineries

Oil Market Force Diamond

Geopolitics, Weather
Past, Present and Future

"Demand Destruction" vs. Price Elasticity

"Peak Oil" vs. Non-Opec Plateau

"China Thesis"

Q: What's This Diamond Worth?

A: $55-$65 per barrel

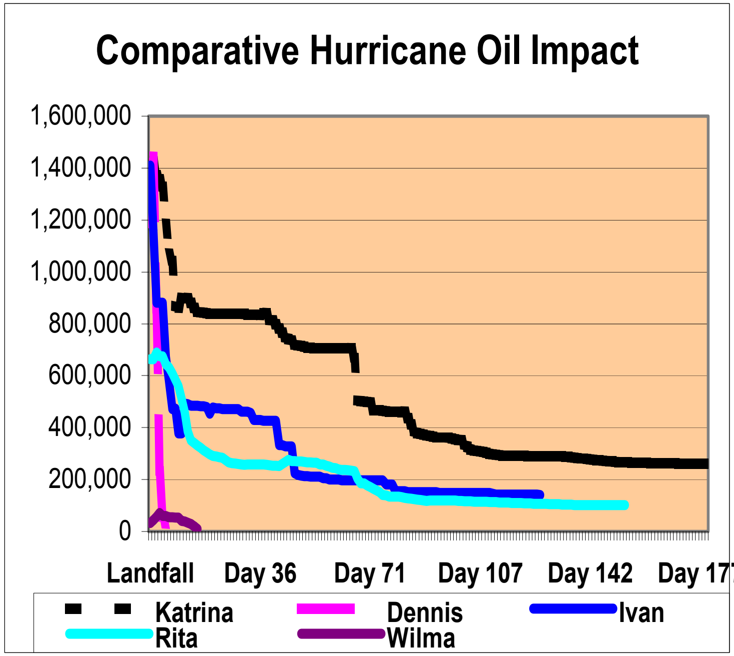
Geopolitics Stay in the Forefront

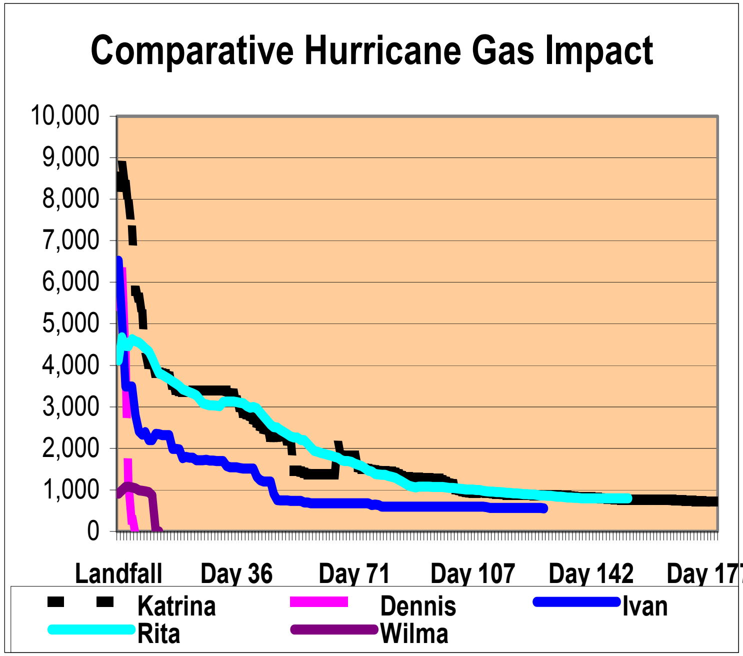
- **Nigeria**
  - history is for sporadic, not major outages
  - this disruption better organized; conditions, political cycle ripe for generalized strife
  - Shell's Bonga helps
- **Iran**
  - leadership less pragmatic, threat could last
  - impact on oil market probably slow to come
- **Others**
  - Russia, Venezuela, Ecuador, West Africa

Weather: Past, Present & Future

- **Past**
  - **Recovering from Katrina and Rita**
  - **Mild autumn, late winter**
- **Present**
  - **Late harsh winter? (beyond Russia, Japan)**
  - **North Sea storms**
- **Future**
  - **Severe storms again this year?**
  - **Global warming responses**

Hurricane Impacts





- Easy part of recovery may be over
  - destroyed platforms, processing plants not coming back
  - delayed new field start-ups
  - potential for major rig retrofits

Short-Term Demand

- "Demand destruction" argument over
- US Q4 demand rebound part downstream restocking
  - hurricane impacts on pipes, plant = downstream stockdraws
- Reconstruction boom likely in 2006, strong economy
  - GDP = C + I + G; this year US big help from "G"
- Price-related demand erosion softens non-OECD rise
  - removal of price caps/subsidies in developing countries in Asia
  - less help from weak dollar
- A few demand wild cards
  - bird flu effects in Asia and elsewhere
  - Government demand-side intervention

OECD a Bit Better, Still Sluggish

2006 OECD Demand

million b/d	Q1'06	Q2'06	Q3'06	Q4'06	2006	Changes 2006	2005
North America	**25.55**	**25.57**	**26.04**	**26.24**	**25.85**	**+0.37**	**+0.14**
US	20.83	20.87	21.37	21.48	21.14	+0.34	+0.07
Canada	2.04	2.11	2.06	2.10	2.08	+0.03	+0.08
Mexico	2.34	2.25	2.27	2.32	2.29	+0.01	-0.02
US Terr.	0.35	0.34	0.34	0.34	0.34	-0.01	+0.01
Euope	**15.73**	**15.35**	**15.75**	**15.90**	**15.68**	**+0.10**	**-0.04**
Big Four	8.17	8.04	8.31	8.31	8.21	-0.01	-0.12
Other Europe	7.57	7.31	7.44	7.59	7.48	+0.11	+0.08
Asia-Pacific	**9.59**	**8.15**	**8.16**	**8.94**	**8.71**	**+0.08**	**+0.10**
Japan	6.11	5.04	5.10	5.57	5.45	+0.05	+0.05
Korea	2.41	2.04	2.02	2.25	2.18	+0.01	+0.02
ANZ	1.07	1.07	1.04	1.12	1.07	+0.02	+0.03
Total OECD	**50.87**	**49.08**	**49.95**	**51.08**	**50.25**	**+0.56**	**+0.20**

Source, Oil Market Intelligence, March 2006 (forthcoming).

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Non-OECD Back on the High Road?

2006 Non-OECD Demand

Non-OECD million b/d	Q1'06	Q2'06	Q3'06	Q4'06	2006	Changes 2006	2005
Non-OECD Asia	**14.33**	**14.28**	**14.21**	**14.66**	**14.37**	**+0.56**	**+0.50**
China	6.81	6.70	6.85	7.05	6.85	+0.38	+0.25
India	2.70	2.60	2.47	2.56	2.58	+0.08	+0.09
Other Asia*	4.83	4.98	4.90	5.05	4.94	+0.11	+0.15
Opec	**7.84**	**7.76**	**7.95**	**7.85**	**7.85**	**+0.21**	**+0.36**
Other Non-OECD	**12.31**	**12.53**	**12.33**	**12.27**	**12.36**	**+0.27**	**+0.10**
Total Non-OECD	**34.48**	**34.57**	**34.50**	**34.77**	**34.58**	**+1.05**	**+0.95**
Global Demand	**85.35**	**83.65**	**84.45**	**85.85**	**84.82**	**+1.61**	**+1.15**

** excluding Indonesia.*

Source, Oil Market Intelligence, *March 2006 (forthcoming)*.

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Short-Term Supply

- 2005 special factors inhibited supply
  - Hurricanes Katrina & Rita plus 5 smaller others
  - leaks at offshore fields in No. Sea, Canada, Mars
  - fire at Suncor oil sands plant
- 2006 non-Opec supply spurt, last hurrah
- Opec capacity additions under way
  - Saudi Arabia, Nigeria, Kuwait, Libya, Algeria

The 2006 Non-Opec Surge

- What it is not:
  - not a price responses
  - not policy driven – by governments or companies
  - not the beginning of a trend
- What it is:
  - primarily undoing 2004-05 impacts
    - hurricanes, North Sea problems & field delays
  - bunching up of new field start-ups
    - US Gulf, Brazil, West Africa, Caspian (BTC line)
  - limiting the Yukos damage in Russia

2006 Bounce, A Last, Last Hurrah

2006 Non-Opec Oil Production Outlook

1,000 b/d	Q1'06	Q2'06	Q3'06	Q4'06	2006	Changes 2006	Changes 2005
FSU	11,684	11,993	12,177	12,450	12,078	+575	+359
Africa	4,041	4,171	4,364	4,445	4,257	+559	+286
So. & C. Amer.	4,369	4,570	4,612	4,643	4,549	+316	+212
North America	14,394	14,374	14,297	14,667	14,433	+324	-505
North Sea	5,355	5,218	4,766	5,375	5,177	-50	-469
Asia	6,901	6,761	6,769	6,850	6,820	-19	+146
Other Europe	570	566	561	557	563	-32	-7
Non-Opec ME	1,632	1,598	1,564	1,540	1,583	-68	-44
Processing Gains	1,920	1,890	1,875	1,920	1,901	+53	+14
Total Non-Opec	**50,868**	**51,140**	**50,986**	**52,446**	**51,363**	**+1,657**	**-6**

Source, Oil Market Intelligence, March 2006 (forthcoming).

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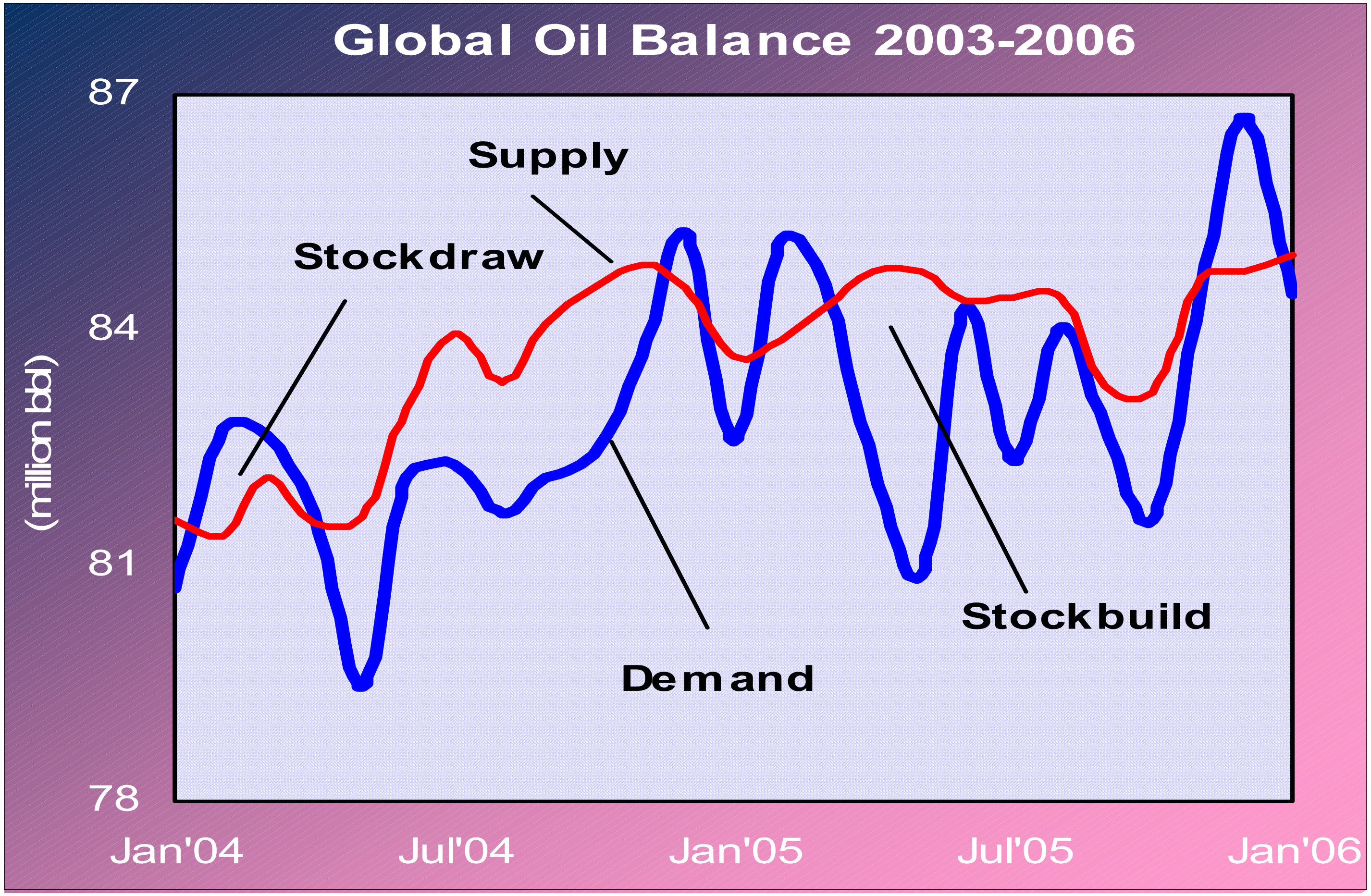
Short Term Balances

- Short-term, Q4 looks “oversupplied”
  - Oct., Nov. global supply > demand by 1.8 mil. b/d, 0.8 mil. b/d, respectively
  - Dec. demand still only 0.6 mil. b/d higher
- Still some concerns about Q1 cold snaps
- US market most susceptible, refinery storm outages, diesel standards, need for imports
- Europe structurally long gasoline but not diesel capacity

2005 Supply-Demand Balances

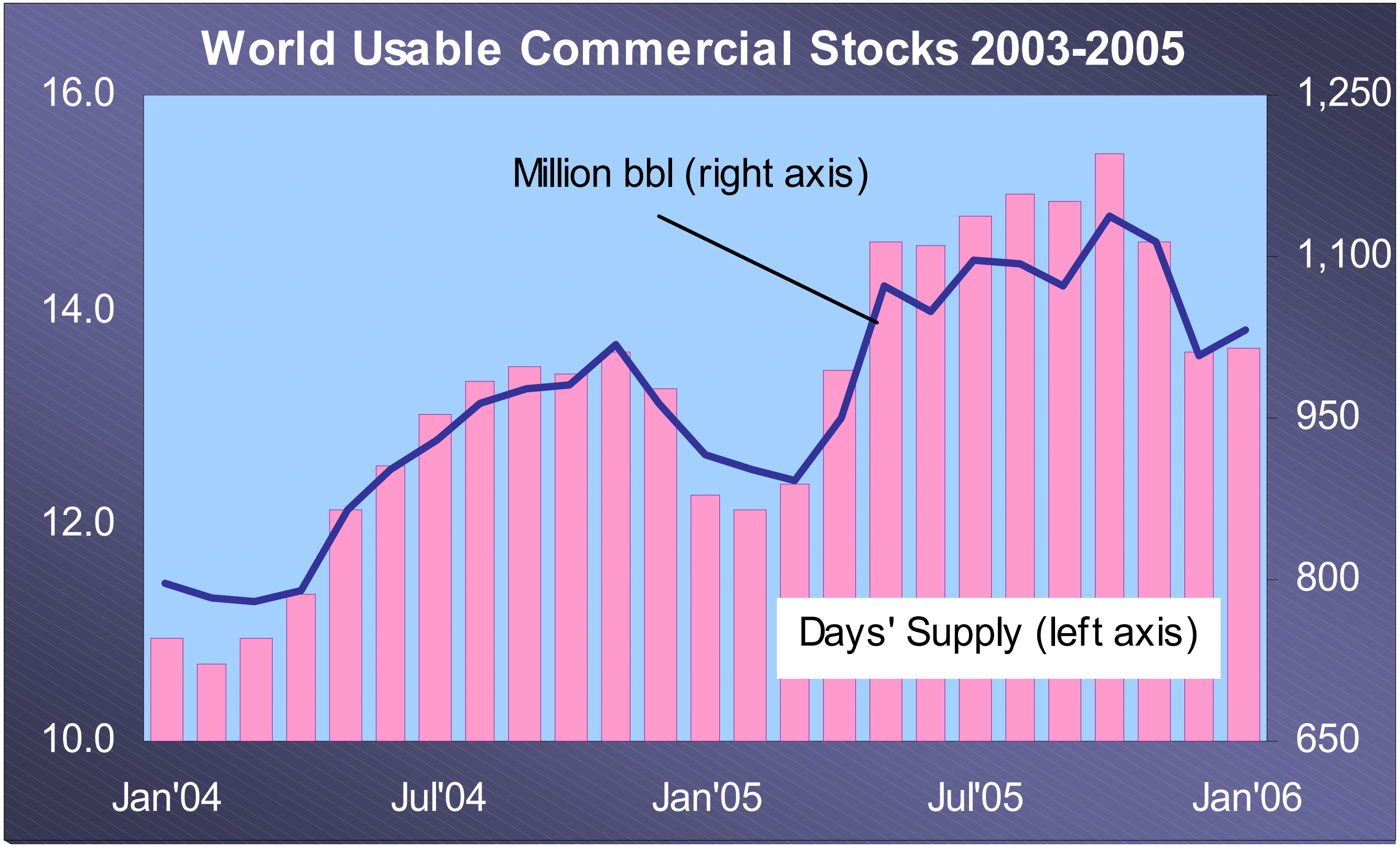


***Source*, Oil Market Intelligence, *February 2006*.**

"Observed" Stock Changes

- Out of step w/ Supply/Demand balances
  - 4Q04 Supply 0.9 mb/d >Demand; no draw
  - 1Q05 Sup-Dem = -0.1 mb/d; -0.6 mb/d observed
  - closer in Q2; +2.3 mb/d difference; +2.1 mb/d obs.
  - but 3Q05 S>D by 1 mb/d, only 0.2 mb/d build
- Worst last quarter with 1 mb/d discrepancy
  - S>D by 0.2 mb/d, but +0.8 mb/d observed draw
  - large upward revision in October OECD
  - not reversed in Nov. build, or softer Dec. draw

2005 Global Stock Changes



***Source*, Oil Market Intelligence, *February 2006*.**

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Looser 2006 Sup-Dem Balances

2006 Call on Opec Crude

Non-OECD						Changes	
million b/d	Q1'06	Q2'06	Q3'06	Q4'06	2006	2006	2005
OECD Demand	50.87	49.08	49.95	51.08	50.25	+0.56	+0.20
Non-OECD Demand	34.48	34.57	34.50	34.77	34.58	+1.05	+0.95
Total Demand	**85.35**	**83.65**	**84.45**	**85.85**	**84.82**	**+1.61**	**+1.15**
Non-Opec supply	50.87	51.14	50.99	52.45	51.36	+1.66	-0.01
Opec NGLs & Other	4.50	4.50	4.50	4.50	4.68	+0.29	+0.24
Call on Opec Crude*	**29.99**	**28.01**	**28.96**	**28.90**	**28.78**	**-0.34**	**+0.91**

* *plus stock change.*

Source, Oil Market Intelligence, *March 2006 (forthcoming)*.

Opec's Dilemma

- Maintaining long term markets
- Adding sufficient capacity to handle chronic geopolitical risks
- Making reserve estimates credible
- Dealing with global quality issues
- "Counting the money"

Impacts Oil Markets

- Fickle market, high volatility
- Higher prices with bigger swings
- Likely overreactions both up & down
- Unusual demand-driven sellers' market
- Changing players, shifting geography
- Resetting priorities for countries and companies

The New Sellers' Markets

- Past dominated by buyers' markets
- Previous sellers' markets: '20s, '40s, '70s
- Tended to be brief, unstable
- Current demand-led, emerged gradually
- Looks more durable
- Supply surge not apt to come to the rescue

Conclusions

- “Peak oil” and “demand destruction” are more myth than reality
- Demand erosion and non-Opec plateau are real
- China thesis has legs
- Seller’s market looks durable
- Opec is likely to opt for slower capacity growth at higher prices

Oil Markets Beyond 2006

- Demand growth accelerates led by Asia
- Plateau in Non-Opec Supply
  - declines in No. America, No. Sea, Asia eat-up much of gains in FSU, Africa, So. America
- Opec measured approach to capacity adds
- Prices stay high but costs also rise
- Investment grows with NOC's at the fore
- Non-conventional becomes conventional
  - more mined & *in-situ* bitumen, shale, CTL & CTG

SUPPLEMENT DETAILS on 2006 Non-Opec Oil Supply

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2006 North American Oil Supply

North America						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
US Gulf Crude	1,384	1,535	1,532	1,792	1,562	+278	-175	-45
Alaska Crude	850	850	766	797	816	-93	-48	-62
Other Lower 48*	5,083	5,059	5,024	5,088	5,063	-60	-157	-45
US	**7,317**	**7,445**	**7,321**	**7,677**	**7,441**	**+125**	**-379**	**-152**
Mined Synthetics	632	638	740	683	674	+148	-100	+125
In Situ Bitumen	502	490	501	523	504	+45	+93	+5
Eastern Offshore Crude	388	381	401	414	396	+78	-4	-24
Other Canada*	1,737	1,635	1,633	1,663	1,667	-62	-52	-4
Canada	**3,259**	**3,144**	**3,276**	**3,283**	**3,240**	**+209**	**-63**	**+101**
Offshore Crude	2,790	2,780	2,752	2,765	2,772	+14	-71	+15
Other*	1,027	1,005	948	942	980	-24	+9	+21
Mexico	**3,818**	**3,785**	**3,700**	**3,707**	**3,752**	**-11**	**-62**	**+36**
Total	**14,394**	**14,374**	**14,297**	**14,667**	**14,433**	**+324**	**-505**	**-15**

****including NGLs and Other***

- **recovery in US Gulf, return, delayed start-ups new fields**
- **Canada synthetics, East Coast and *in situ* bitumen growth**
- **Mexico's Cantarell struggling**

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2006 North Sea Oil Supply

North Sea						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
Brent-Ninian	225	226	195	220	212	-35	-28	-32
Forties	604	539	431	535	528	-64	-52	-70
Flotta	76	70	72	80	75	-14	-13	-8
West of Shetlands	172	182	176	185	179	+32	-27	-27
Other UK*	820	774	711	842	789	+25	-93	-91
UK	**1,896**	**1,791**	**1,585**	**1,861**	**1,783**	**-56**	**-213**	**-228**
Statfjord	314	653	577	532	261	-22	-26	-35
Troll	232	219	214	311	275	+5	+5	-5
Oseberg	271	567	446	420	181	-29	-36	-15
Ekofisk	331	195	236	241	330	-11	-7	+1
Gullfaks	401	487	483	438	244	-36	-31	-32
Other Norway*	1,492	887	830	1,162	1,694	+125	-141	+17
Norway	**3,041**	**3,008**	**2,787**	**3,104**	**2,985**	**+32**	**-237**	**-69**
Denmark	384	378	379	375	383	+2	+1	+5
Netherlands*	35	44	44	45	149	+6	+5	+7
Germany	20	20	20	20	20	+1	+0	-0
Total	**5,376**	**5,242**	**4,815**	**5,405**	**5,320**	**-17**	**-444**	**-285**

** including natural gas liquids.*

- **accelerating decline rates in older fields**
- **few, generally small satellite fields**

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2006 Other OECD Oil Supply

Other OECD						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
Australia	520	510	546	573	537	-12	-1	-94
Italy	120	120	120	120	120	-5	+14	+20
Other OECD Europe	298	293	289	284	291	-22	-11	+18
Other OECD Asia	41	38	40	42	40	-1	-2	-3
Total	979	961	995	1,019	988	-40	+	-59

- **Australia dominates "Other OECD"**
- **start-up of Australia's Enfield late in the year, some new onshore**
- **not expected to be enough to stem Aussie decline**
- **Roc Oil's Cliff Head just started, full year of Mutineer-Exeter helps**

2006 FSU Oil Supply

FSU						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
Russia	9,495	9,730	9,877	10,109	9,805	+374	+241	+702
Azerbaijan	600	635	665	685	646	+153	+94	-14
Kazakhstan	1,230	1,266	1,263	1,277	1,259	+27	+52	+149
Other Republics	1,588	1,628	1,635	1,656	1,627	+48	+24	+147
Total	**11,684**	**11,993**	**12,177**	**12,450**	**12,078**	**+575**	**+359**	**+835**

- **increased Russian upstream spending; growth of Rosneft & Russneft**
- **filling the Azerbaijan's BTC pipeline**
- **better performance at Kazakh's Karachaganak, Tengiz**
- **end of gas flaring restriction in Kazakhstan, growing China presence**
- **undoing Yukos damage in Russia; Sakhalin 1 start; full-year Sakhalin 2**

2006 Non-Opec Africa Oil Supply

Non-Opec Africa						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
Angola	1,463	1,478	1,508	1,513	1,491	+222	+231	+106
Sudan	339	418	503	582	461	+134	+28	+37
Equatorial Guinea	324	372	416	424	384	+73	-25	+77
Gabon	273	275	287	300	284	+38	+11	-38
Congo (Brazzaville)	261	201	242	221	231	+13	+3	-25
Chad	216	213	217	207	213	-0	+57	+132
Egypt	687	684	679	677	682	-14	-12	-32
Other Africa	479	529	514	521	511	+94	-6	+4
Total	**4,041**	**4,171**	**4,364**	**4,445**	**4,257**	**+559**	**+286**	**+260**

- **Angola adds BBLT to growth at Kizomba**
- **Sudan's delayed pipeline expansion to 600,000 b/d end-2006**
- **start of Mauritania's Chinguetti, expanding Baobab in Cote d'Ivoire**
- **small gains in Equatorial Guinea, Gabon, Congo (B); flat Chad**

2006 S. & C. America* Oil Supply

Non-Opec S.&C. America						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
Brazil	2,097	2,231	2,237	2,282	2,212	+268	+184	+9
Ecuador	511	575	624	629	585	+51	+10	+111
Trinidad	211	215	215	215	214	+29	+29	+1
Argentina	692	685	683	656	679	-33	-34	-43
Colombia	520	507	496	494	504	-34	+1	-11
Other	858	865	853	860	859	+1	+23	+10
Total	**4,369**	**4,570**	**4,612**	**4,643**	**4,549**	**+316**	**+212**	**+88**

- **Brazil belatedly growing Campos Basin, plus new Santos Basin**
- **Ecuador steal dealing with protest to use of new pipeline capacity**
- **Trinidad's Angostura consolidating initial plateau**
- **Colombia, Argentina past their peaks**

2006 Asian* Oil Supply

Non-Opec, Non-OECD Asia						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
Thailand	230	223	225	242	230	+36	+33	-7
Vietnam	389	391	404	417	400	+35	-36	+35
Malaysia	893	891	898	894	894	+27	-9	+34
Brunei	208	212	217	220	214	+16	+7	-3
India	753	735	724	735	737	-23	-23	+8
China	3,591	3,491	3,444	3,460	3,496	-115	+125	+78
Other	277	270	271	267	271	+17	+52	+33
Total	**6,341**	**6,213**	**6,183**	**6,236**	**6,243**	**-7**	**+149**	**+179**

- **small increases in Thailand, Vietnam, Brunei and Malaysia**
- **mostly offset by China drop after surprise offshore boost in 2005**
- **India declines continue**

2006 Non-Opec Mideast Oil Supply

Non-Opec Mideast						Annual Changes		
1,000 b/d	Q1 '06	Q2 '06	Q3 '06	Q4 '06	2006	2006	2005	2004
Oman	756	721	702	681	715	-61	-13	-55
Syria	392	386	380	374	383	-32	-31	-25
Yemen	462	468	458	462	463	+29	+7	-15
Other	23	23	23	23	23	-4	-6	-3
Total	1,632	1,598	1,564	1,540	1,583	-68	-44	-98

- **Oman and Syria seeing accelerating declines**
- **some help from new fields in Yemen**

SUPPLEMENT DETAILS on 2005-2015 Oil Outlook

OECD Demand Outlook 2000-2010

					Average Ann. Growth		
OECD	2000	2005	2010	2015	'00-'05	'05-'10	'10-'15
North America	**24.06**	**25.48**	**27.16**	**28.50**	**1.2%**	**1.3%**	**1.0%**
US	19.69	20.80	21.93	22.71	1.1%	1.1%	0.7%
Canada	2.03	2.28	2.45	2.59	2.4%	1.4%	1.1%
Mexico	2.04	2.05	2.40	2.78	0.1%	3.2%	3.0%
US Terr.	0.31	0.35	0.39	0.43	2.4%	2.2%	2.0%
Euope	**15.16**	**15.58**	**16.43**	**17.03**	**0.5%**	**1.1%**	**0.7%**
Big Four	8.38	8.21	8.22	8.05	-0.4%	0.0%	-0.4%
Other Europe	6.78	7.37	8.21	8.98	1.7%	2.2%	1.8%
Asia-Pacific	**8.69**	**8.63**	**8.68**	**8.73**	**-0.2%**	**0.1%**	**0.1%**
Japan	5.57	5.40	5.35	5.37	-0.6%	-0.2%	0.1%
Korea	2.14	2.17	2.31	2.38	0.3%	1.3%	0.6%
ANZ	0.99	1.05	1.02	0.98	1.3%	-0.6%	-0.9%
Total OECD	**47.92**	**49.68**	**52.27**	**54.27**	**0.7%**	**1.0%**	**0.8%**

Source: Energy Intelligence Research

Non-OECD Demand Outlook 2000-2010

					Average Ann. Growth		
Non-OECD	2000	2005	2010	2015	'00-'05	'05-'10	'10-'15
Non-OECD Asia	**10.43**	**14.20**	**18.98**	**24.93**	**6.4%**	**6.0%**	**5.6%**
China	4.35	6.48	9.39	12.86	8.3%	7.7%	6.5%
India	1.99	2.50	2.90	3.53	4.6%	3.0%	4.0%
Other Asia*	4.08	5.22	6.69	8.54	5.0%	5.1%	5.0%
Opec	**6.32**	**7.64**	**9.48**	**11.52**	**3.9%**	**4.4%**	**4.0%**
Other Non-OECD	**11.12**	**12.17**	**13.77**	**15.36**	**1.8%**	**2.5%**	**2.2%**
FSU	3.65	3.87	4.23	4.44	1.2%	1.8%	1.0%
Latin America†	4.18	4.45	4.90	5.41	1.3%	1.9%	2.0%
Non-Opec Africa	1.83	2.14	2.62	3.11	3.1%	4.1%	3.5%
Other Mideast	0.87	0.98	1.09	1.20	2.4%	2.1%	2.0%
East Europe	0.60	0.73	0.94	1.20	4.2%	5.1%	5.0%
Total Non-OECD	**27.87**	**34.01**	**42.23**	**51.81**	**4.1%**	**4.4%**	**4.2%**
Global Demand	**75.80**	**83.69**	**94.50**	**106.08**	**2.0%**	**2.5%**	**2.3%**

** excluding Indonesia. † excluding Venezuela.*

Source: Energy Intelligence Research

Medium-Term Supply Outlook

Non-Opec Supply 1995-2015

1,000 b/d	2000	2005	2010	2015	Avg. Ann. Chg. '00-'05	'05-'10	'10-'15
Growth Areas							
FSU	7,918	11,504	14,189	18,597	+7.8%	+4.3%	+5.6%
Africa	2,824	3,694	4,402	5,302	+5.5%	+3.6%	+3.8%
So. & C. Amer.	3,645	4,066	4,927	5,160	+2.2%	+3.9%	+0.9%
Mature Areas							
North Sea	6,309	5,203	4,569	3,128	-3.8%	-2.6%	-7.3%
Non-Opec Mideast	1,976	1,626	1,325	998	-3.8%	-4.0%	-5.5%
Asia	6,234	6,542	6,592	5,216	+1.0%	+0.2%	-4.6%
Onshore Europe	603	596	455	377	-0.3%	-5.2%	-3.7%
North America	14,131	13,887	14,986	13,689	-0.3%	+1.5%	-1.8%
Processing Gain	1,715	1,865	2,350	2,900	+1.7%	+4.7%	+4.3%
Total Non-Opec	**45,354**	**48,982**	**53,796**	**55,367**	**+1.6%**	**+1.9%**	**+0.6%**

- **1.6 million b/d of the 4.7 million b/d 2005-2010 growth in 2006**