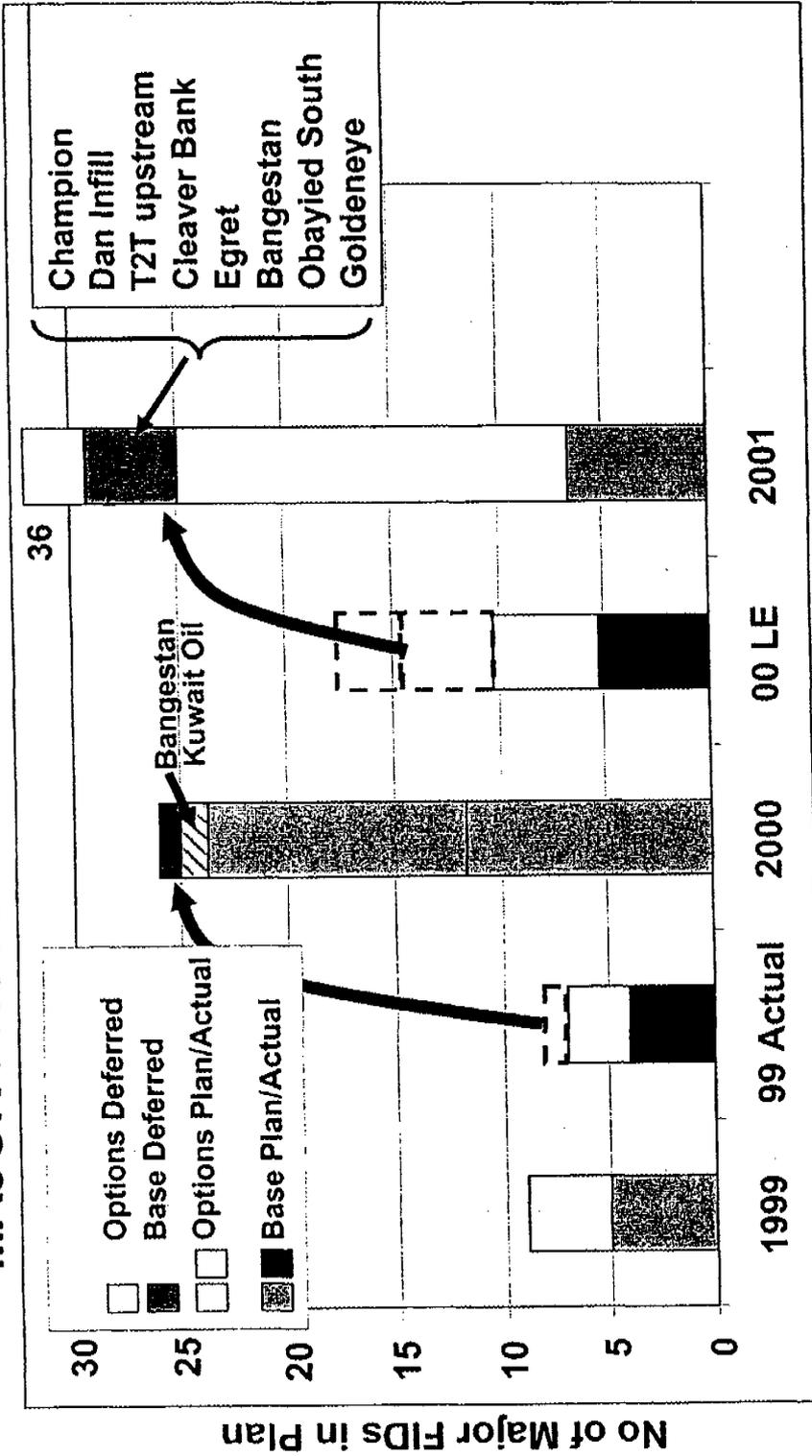


# MAJOR PROJECT FIDs 2000 from BP'99



• 12 major Base Plan projects planned for FID in 2000 (BP 99) - 5 will now take FID  
 • 13 major Options projects planned for FID in 2000 (BP 99) - 6 will now take FID

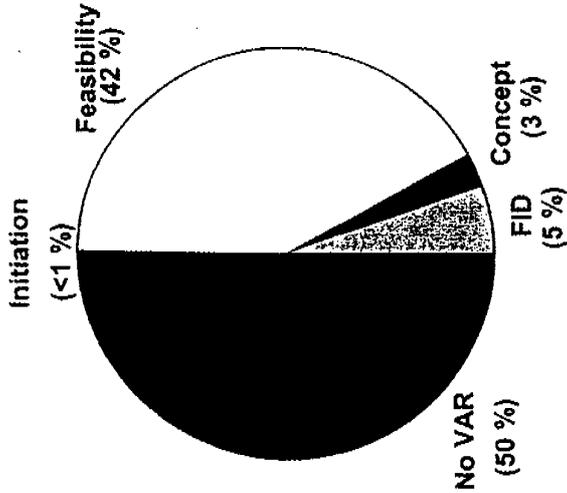
DB 07484

# MAJOR PROJECTS WITH PROMISES OF FID IN 2001.....

2001 2001-2005  
Capex Capex (Risky)

Country	Project	2001	2001-2005
		Capex	Capex (Risky)
Australia (Direct)	Gorgon SMDS Upstream	0	46
Brunei	Champion West Central Platform Dev	1	75
Brunei	East Gas Expansion	4	38
Brunei	Egret Development. Phase 1	3	40
Denmark	Halfdan Phase III	102	475
Denmark	Halfdan Phase II	41	65
Denmark	GSA4	13	75
Denmark	Dan Infill and Debottlenecking	8	42
Denmark	Skjold Phase II	32	32
Egypt	Obaiyed South & Compression I	26	85
Malaysia	96 PSC : BT/ISF Stage IV(SF30) WJ Int.	1	31
New Zealand	Pohokura Development	3	26
Nigeria (SNEPCO)	Erha Main	48	902
Nigeria (SNEPCO)	EWTF (Extended Well Test Facility)	118	128
Nigeria (SPDC)	92 Offshore Pipeline AF - NLNG 1-5	87	184
Nigeria (SPDC)	49 UGHELLI	24	122
Nigeria (SPDC)	66 OTUMARA - NLNG 4/5	16	117
Nigeria (SPDC)	67 SAPELE	1	90
Nigeria (SPDC)	45 OGUTA	3	77
Nigeria (SPDC)	61 BONNY - NLNG 3	1	29
Nigeria (SPDC)	98 WAGP	22	22

VAR coverage in 2001  
on Total Capex



Total Capex from 2001 FID projects amounts to \$4 bln in plan period

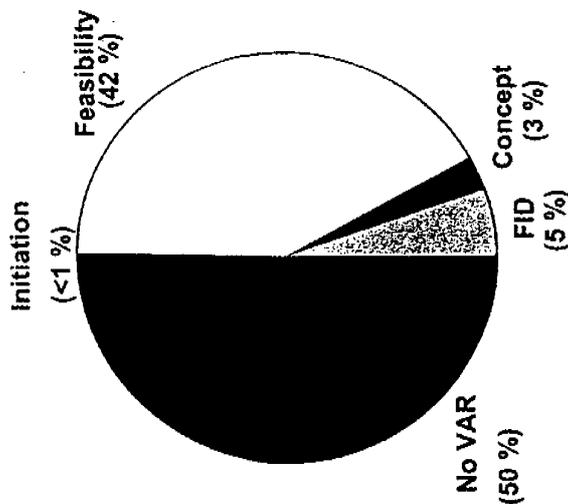
DB 07485

36 Projects with >20 mln spend excluding Major Options e.g. Bangestan, Saudi Gas

# MAJOR PROJECTS WITH FID IN 2001 - continued

Country	Project	2001 Capex	2001-2005 Capex (Risky)
Norway	Kollsnes and Vestpross Upgrade	0	53
Philippines	Malampaya Oil Rim Devt - unrisked	6	83
Russia (Rest of)	Salyr	29	129
Syria	Souedie	0	26
UK	Goldeneye	7	151
UK	Loyal Phase II (W.o.S)	31	65
UK	Puffin Field Development	9	62
UK	Schiehallion Extension Claw	9	57
UK	Scoter	0	55
UK	Schiehallion North Channel	0	21
USA	Holstein	26	327
USA	Habanero	0	39
USA	Manatee	14	33
USA	Alex Gas Devt Phase 2	22	22
Venezuela	02 - 05 Further Dev. (1)	0	64

VAR coverage in 2001 on Total Capex



Total Capex from 2001 FID projects circa \$4 bln in plan period

DB 07486

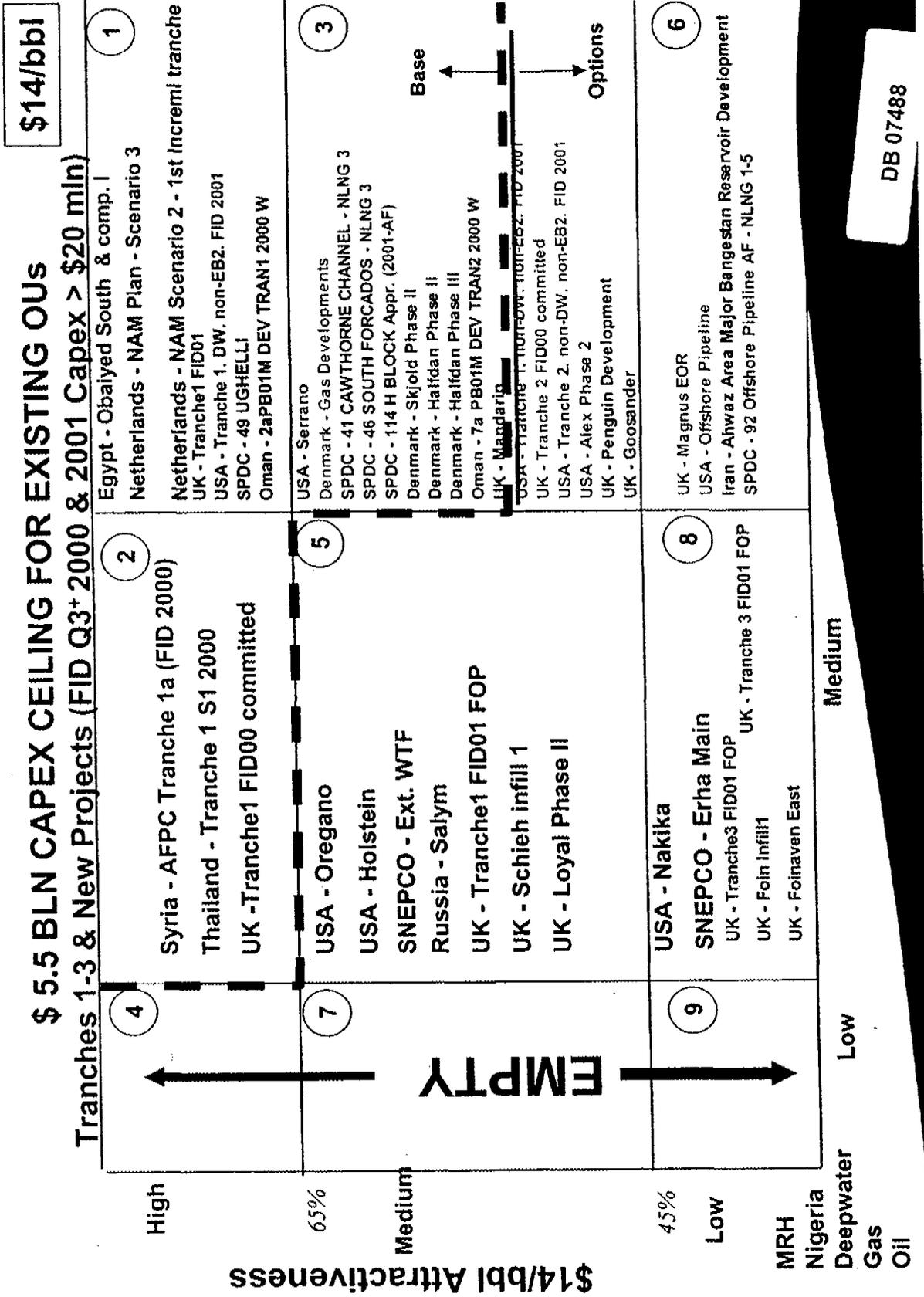
36 Projects with >20 mln spend excluding Major Options e.g. Bangestan, Saudi Gas

\$14/bbl

Existing Assets / Post FID Ranking (2001 Capex > \$20 million)

<p>High</p> <p>65%</p>	<p>4</p> <p>Syria - AFPC Existing Facilities</p> <p>UK - Existing assets</p>	<p>2</p>	<p>1</p> <p>Australia - NWS Existing US</p> <p>Canada Existing Assets</p> <p>Malaysia - MLNG PSC New (F23/F6/E11 Comp.)</p> <p>Netherlands -NAM Plan - Scenario 1</p> <p>Abu Dhabi - Existing Oil Business</p> <p>Denmark - Halfdan Phase I</p> <p>Oman - 1a PB01M NFA TRAN1 2000 W</p>
<p>Medium</p> <p>45%</p>	<p>7</p> <p>USA - Brutus</p> <p>USA - Crosby</p>	<p>5</p>	<p>3</p> <p>Oman - GISCO</p> <p>Philippines - Malampaya Gas Devt</p> <p>SPDC - 42 FORCADOS YOKRI - NLNG 3</p> <p>SPDC - 48 SOKU - NLNG 1-2</p>
<p>Low</p> <p>MRH</p> <p>Nigeria</p> <p>Deepwater</p> <p>Gas</p> <p>Oil</p>	<p>9</p> <p>USA - Ursa</p> <p>UK - ExAss Brent Gas Contract</p> <p>SNEPCO - Bonga-Main</p> <p>SPDC - 02 Value Preservation</p> <p>SPDC - 03 Bonny Terminal</p> <p>Norway - Troll Oil</p> <p>Russia - Caspian Pipeline Consortium</p> <p>Sakhalin - Moikpaq</p> <p>UK - ExAss Skua</p> <p>USA - Aera Equity</p>	<p>8</p>	<p>6</p> <p>Argentina - VALLE MORADO</p> <p>Egypt - POST FID Obaiyed</p> <p>Malaysia - MLNG Dua PSC New (M4, B11, etc)</p> <p>Iran - Sorroosh/Nowrooz Integ.</p> <p>SPDC - 90 EA Equity and Carry - NLNG 3</p> <p>SPDC - 91 Offshore Pipeline - NLNG 1-5</p> <p>Canada - Athabasca Oil Sands Project</p> <p>Brunei - Ampa Fairley Rationalisation Phase 1</p>
			<p>Medium</p> <p>Low</p> <p>DB 07487</p>

\$14/bbl Attractiveness



\$14/bbl

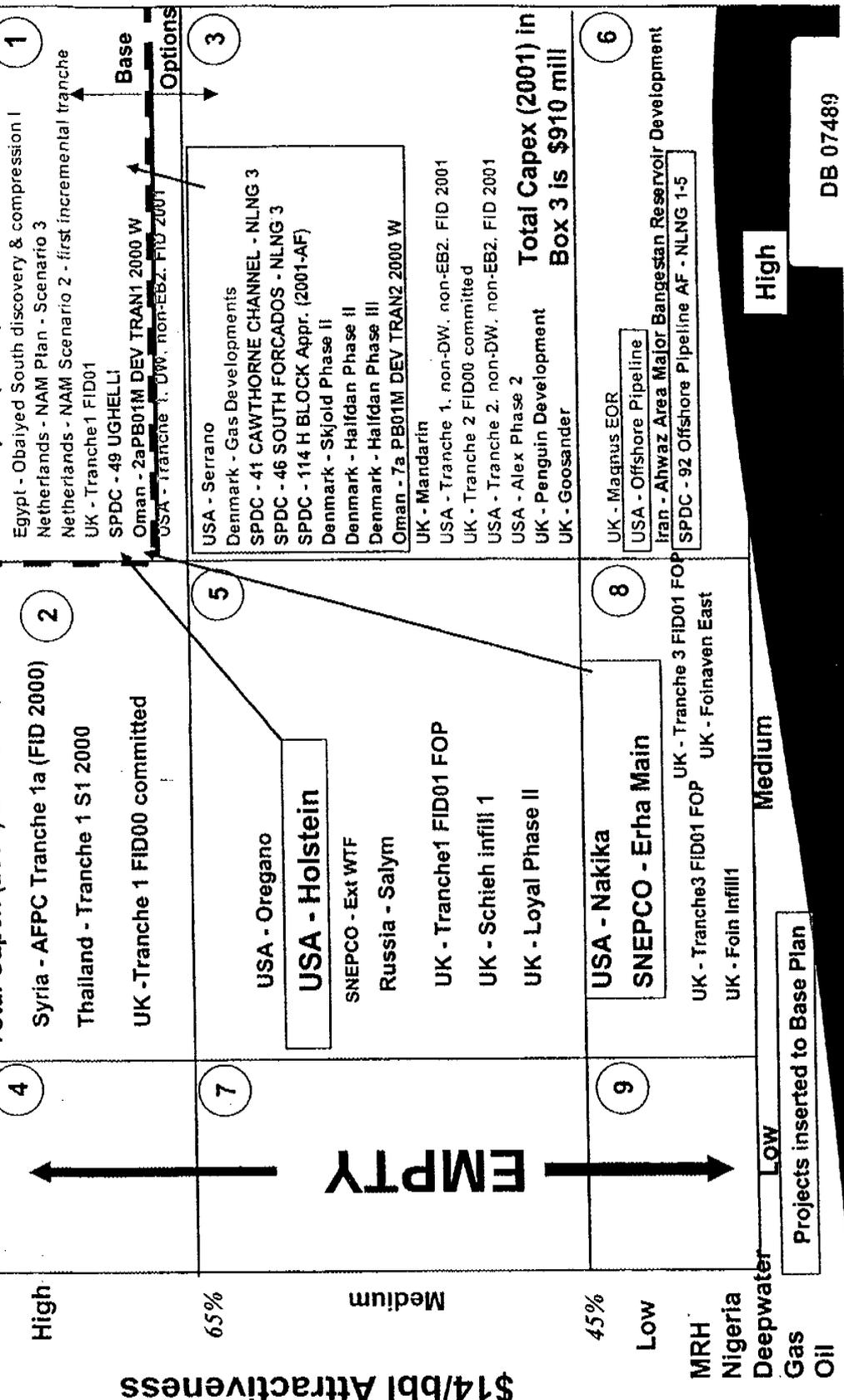
**\$ 5.5 BLN CAPEX CEILING.....DENMARK & BIG PROJECTS IN**

**Tranches 1-3 & New Projects (FID Q3+ 2000 & 2001 Capex > \$20 mln)**

**Total Capex (2001) in Box 1 is \$470 mln**

**Total Capex (2001) Box 2 is \$200 mln**

**Total Capex (2001) Box 3 is \$910 mill**



**\$14/bbl Attractiveness**

**EMPTY**

**High**

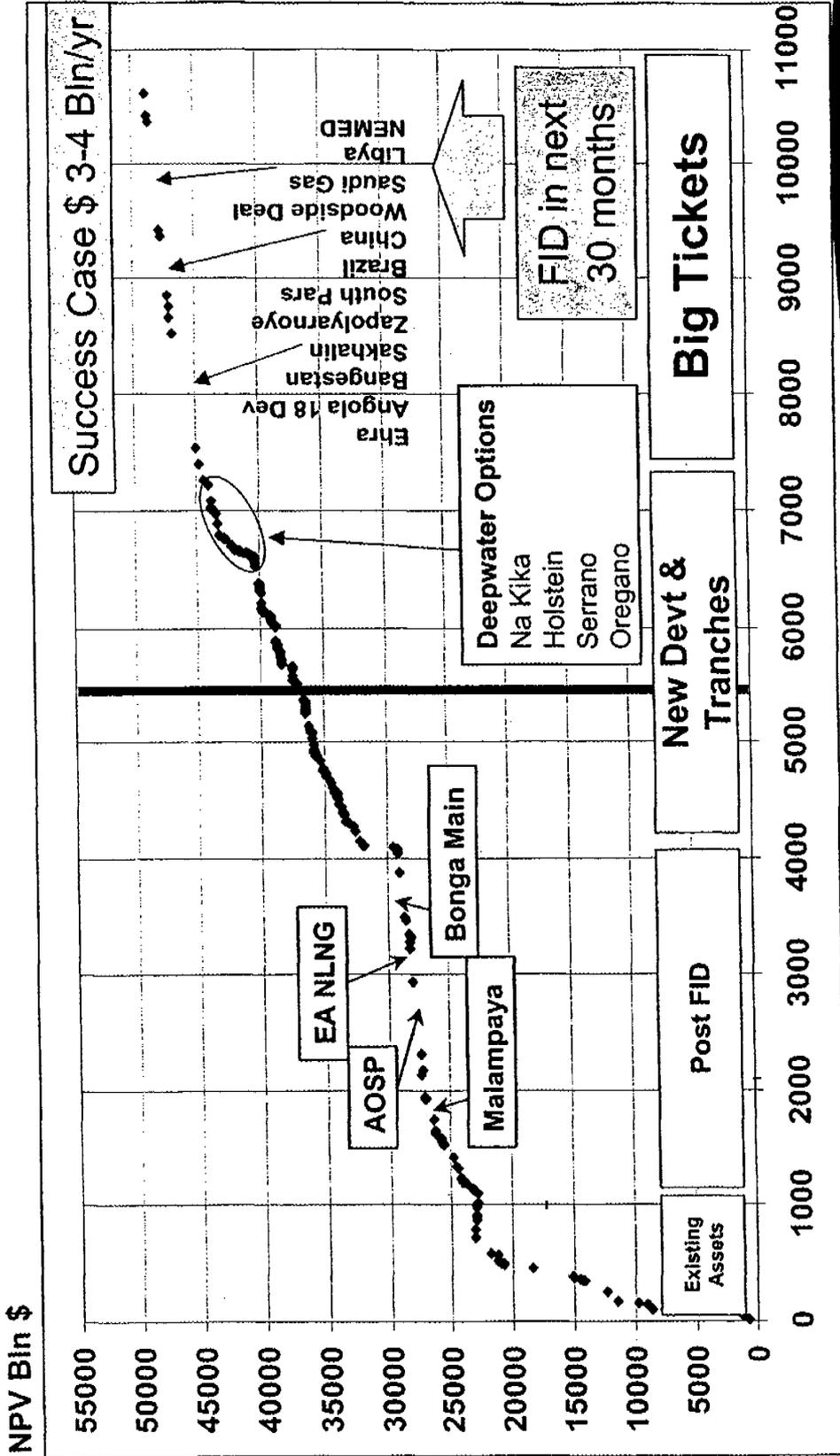
**Medium**

**Low**

**Projects inserted to Base Plan**

DB 07489

# CAPEX CREAMING CURVE



Cumulative Capex in 2001

DB 07490

# The Way Forward..(1)

- We accept the flaws in the process, challenge the submissions at the workshop, build the 2000 Plan and make a "promise adjustment" at

## Excom level:

- existing assets minus 200 Million US\$
- post-FID minus 400 Million US\$
- weed out "false promises" to the tune of 400 Million US\$
- adjust production promise

Manage Improvement through the scorecards

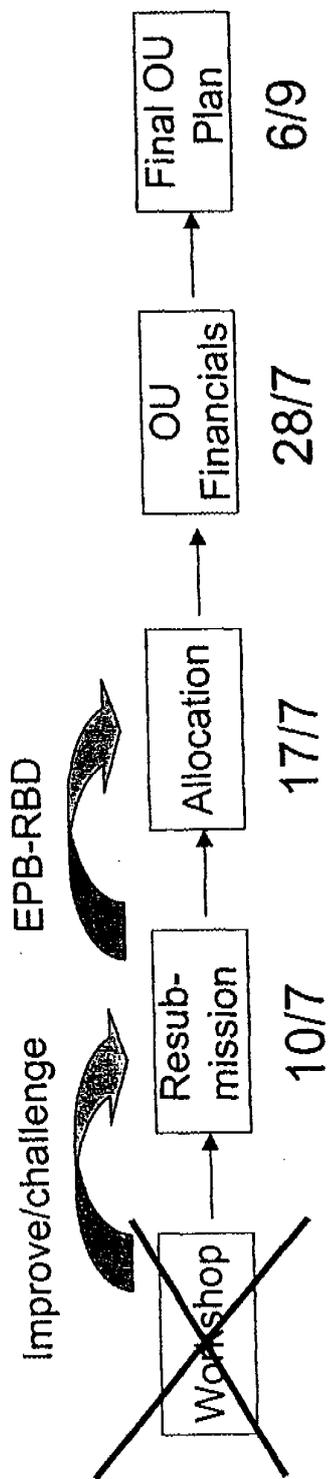
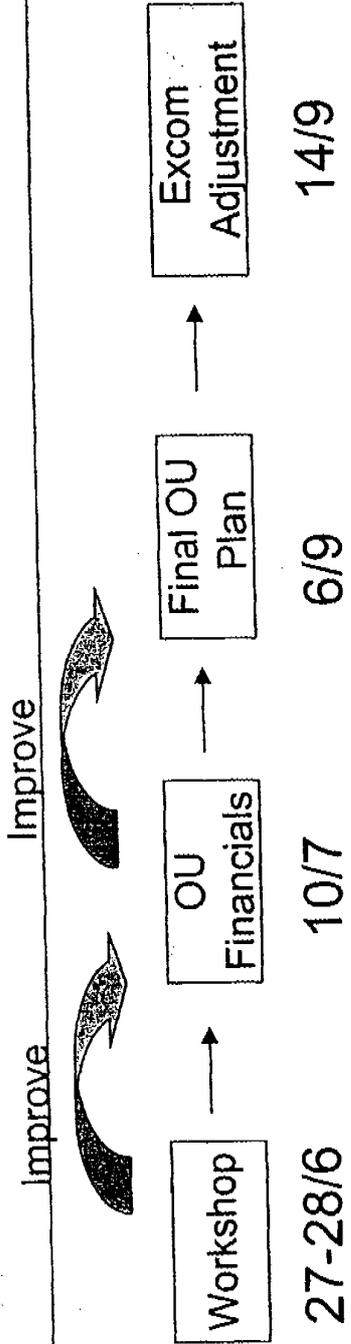
***We must address the integrity flaws in the CA process and send a very strong signal...***

DB 07491

# The Way Forward..(2)

- We demand a resubmission....we change the workshop:
  - We explain our problems to the delegates at workshop.
  - We ask the delegates to return to their OU/NVOs and rework their submissions and restore reality
  - Key OU/NVOs will be invited for a hard challenge session with the Excom (large OUs) or their RBD.
  
- After resubmission of sanitised data, a final ranking will be done with the RBA/RFA community.

# Two Possible Schedules



DB 07493

# BACKUPS ...DETAILS



DB 07494

# KEY METRICS - RAW DATA

## Base

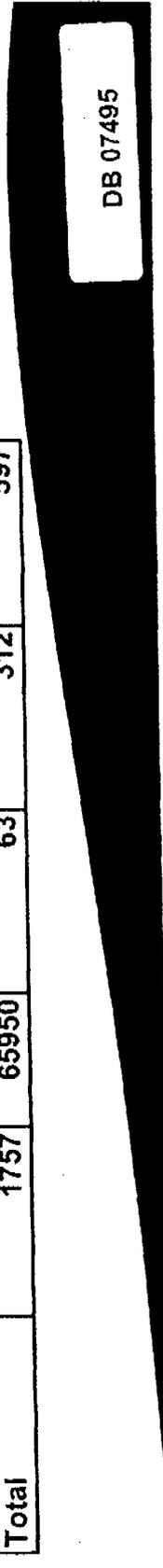
	Capex 2001	IBV \$14	Boe/d 2001	Boe/d 2002	Boe/d 2003
Deepwater	454	5418	395	438	386
Gas	1238	16551	1351	1323	1361
MRH	278	34	139	180	205
Nigeria	1291	4509	265	288	494
Oil	2308	14271	1586	1524	1438
Total	5570	40783	3735	3754	3884

Value continues to be dominated by traditional OUs in Nigeria dominance of production growth not reflected in value

## Options

	Capex 2001	IBV \$14	Boe/d 2001	Boe/d 2002	Boe/d 2003
Deepwater	520	29176	2	33	100
Gas	469	20702	12	65	139
MRH	83	1582	0	5	12
Nigeria	220	4116	7	38	59
Oil	466	10374	41	169	286
Total	1757	65950	63	312	597

Deepwater excludes SNEPCO Ranked out production in 2001 63,000 bbls/d Does not reflect OUs outside EP control - (SOGU)



DB 07495

# SHORT TERM OPPORTUNITIES ....RANKED OUT

Short Term Oil Projects are predominantly in Shell Expro.....

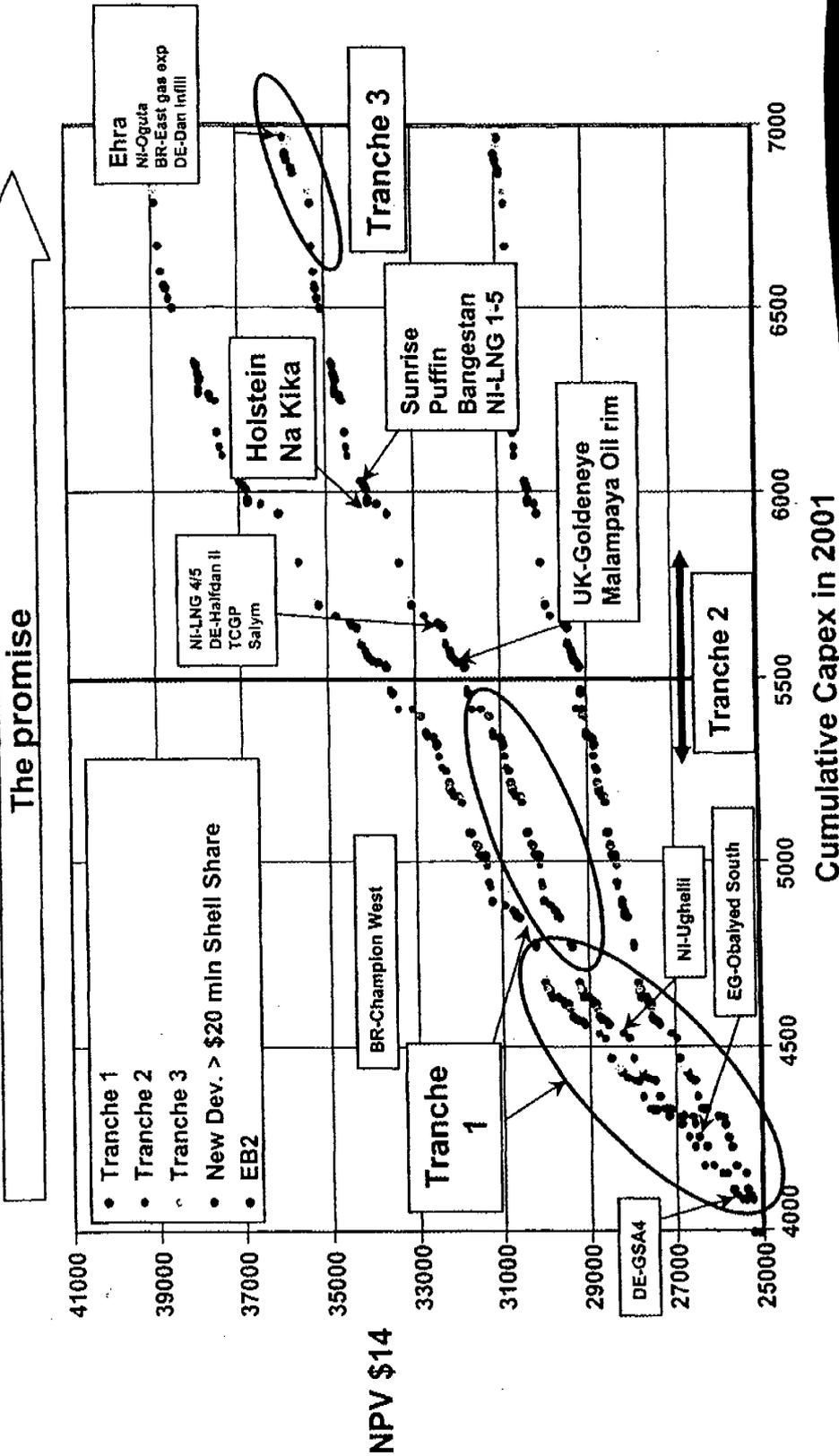
Country Name	Project Name	CA Cat	FID yr	Status	2001 Capex	2001 MBOE/d
UK	Tranche 2 FID00 FOP	Tranche 2	2000	Option	5.96	4.40
UK	Tranche 3 FID00 FOP	Tranche 3	2000	Base	12.60	21.27
UK	Tranche1 FID00 FOP	Tranche 1	2000	Base	15.46	22.73
UK	Tranche1 FID01 FOP	Tranche 1	2001	Option	25.23	5.08
UK	Tranche1 FID02 FOP	Tranche 1	2002	Option	0.29	0.00
UK	Tranche2 FID01 FOP	Tranche 2	2001	Option	8.51	1.03
UK	Tranche2 FID02 FOP	Tranche 2	2002	Option	0.00	0.00
UK	Tranche3 FID01 FOP	Tranche 3	2001	Option	31.91	2.39
UK	Tranche3 FID02 FOP	Tranche 3	2002	Option	0.00	0.00
			Sum:		99.94	56.89

UTCs \$3.5 - 5.5/bbl  
 VIRs [\$14] 0.4 - 0.8  
 low / medium strategic fit. ....



DB 07496

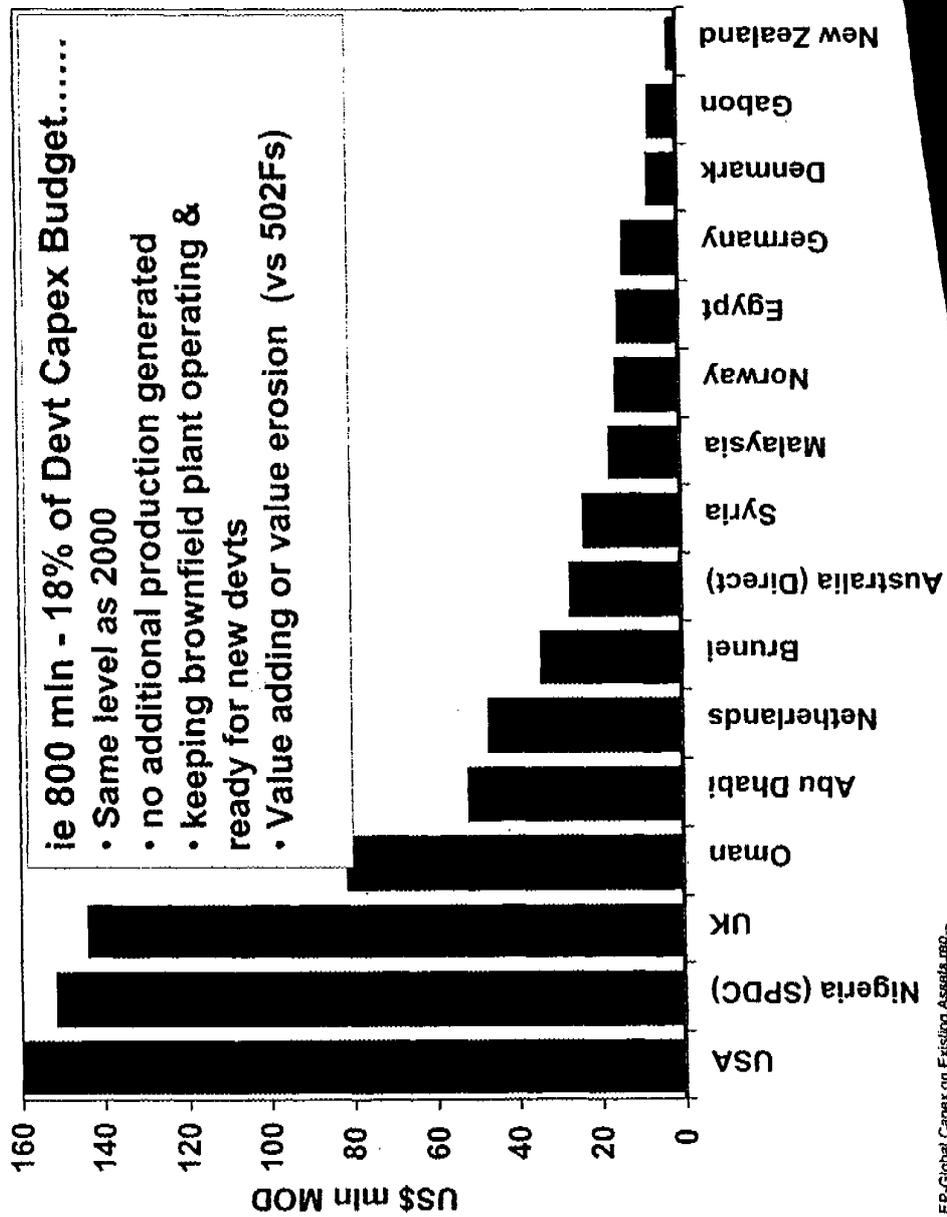
# CAPEX CREAMING CURVE - THE BUILDING BLOCKS



On merit NaKika, Holstein & Ehra do not rank

DB 07497

# "EXISTING ASSET" CATEGORY CAPEX 2001

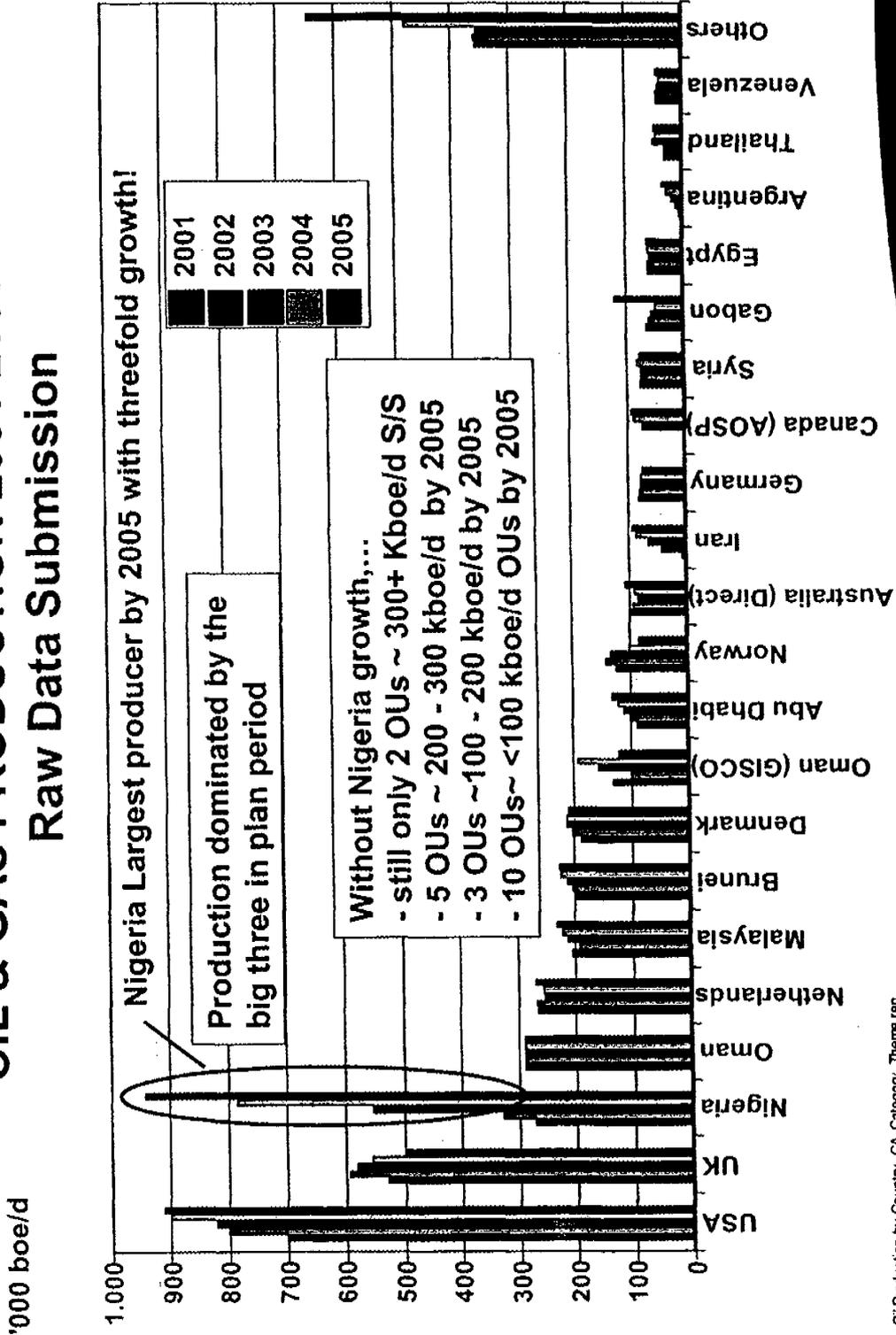


EP-Global Capex on Existing Assets.mpl

DB 07498

# OIL & GAS PRODUCTION 2001-2005 BY OU

## Raw Data Submission



Oil Production by Country, CA-Category, Theme.rep

DB 07499

## **A few Outcomes from the Raw Data.....**

**Raw data quality is good,  
.....but there is a large request will be a tough competition for funds  
.....Large number of attractive new devts & tranche funds**

**Large amount of funds for existing assets & Post FIDs ca \$4 Bln  
To maintain oil production requires ca \$5 Bln, with 100 % delivery**

***Before we consider more capex funds.....there are some issues....***

**But new devt "promises" are different from Vol- 1 findings  
.....Most post FID projects have been under delivering production  
.....Most projects have aggressive schedules vs Vol-1 reality  
.....VAR programme will have to be accelerated to meet FID planned  
.....Last years E&A followup developments have largely not materialised**

**How do we avoid an "over promise & under delivery" cycle...?**

DB 07500

## KEY ISSUES

### CURRENT PERFORMANCE

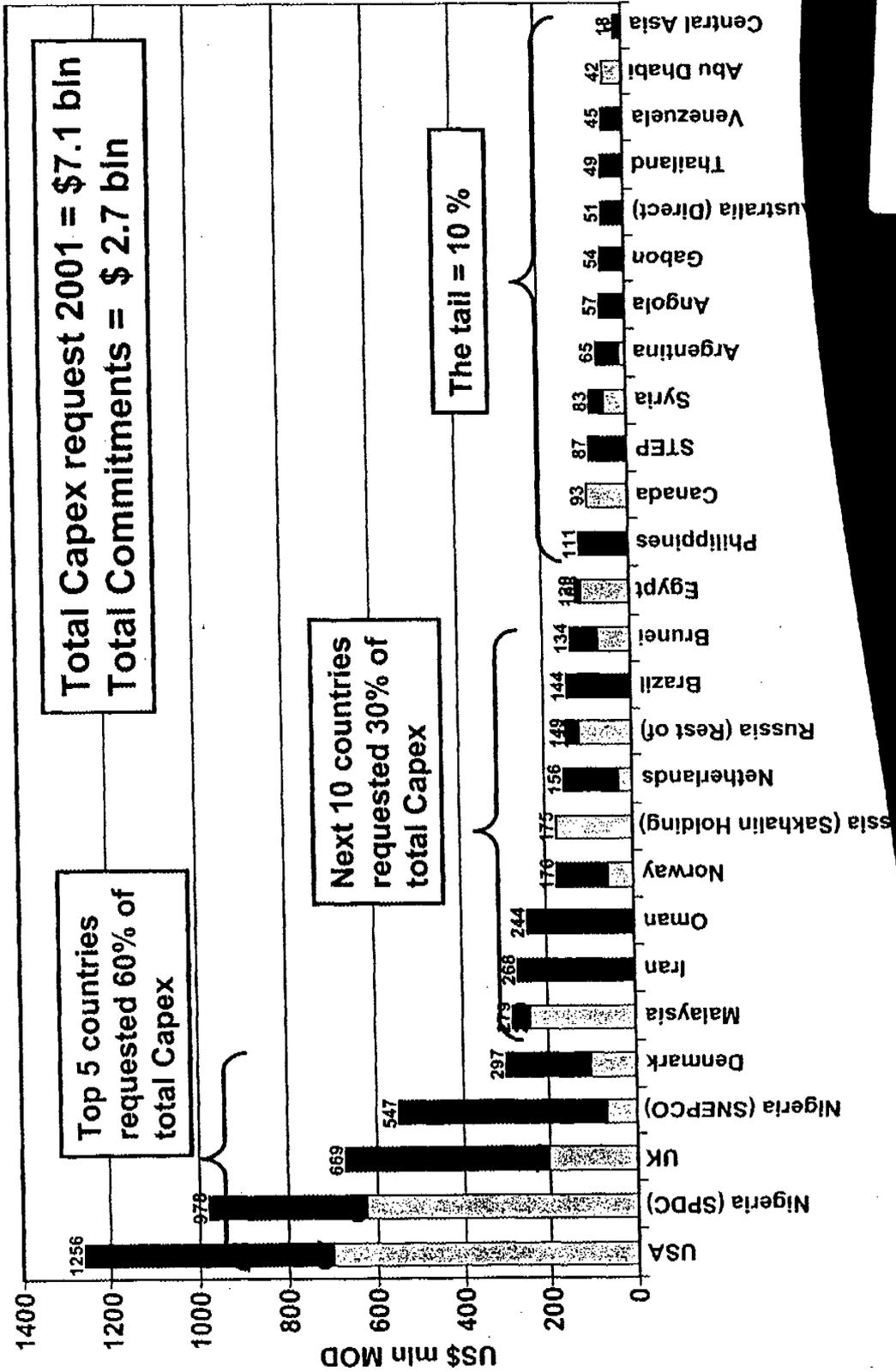
- Production under-performance
  - 1999: UK, Egypt, SPDC, Syria, Netherlands
  - 2000 LE: Oil : Essentially on target but SPDC,  
Gas : Egypt, Argentina, Netherlands, US
- Major New Project Delivery
  - 1999 on-stream disappointments due mainly to project schedule delays
  - 2000 onwards (CA 2000) suggests production under-delivery (sub-surface & facilities)
  - Reserves Replacement
  - 2000 LE 24 % with major concerns throughout Plan Period

### FUTURE PROMISES

- Continued reliance upon Nigeria (and our ability to grow oil production there)
- Need to avoid over promising and under delivering cycle.
- Continued pursuit of major Capex spend outside of existing portfolio ..are regretting oil?

DB 07501

# CAPEX SPEND 2001 BY COUNTRY - Raw Data Submission



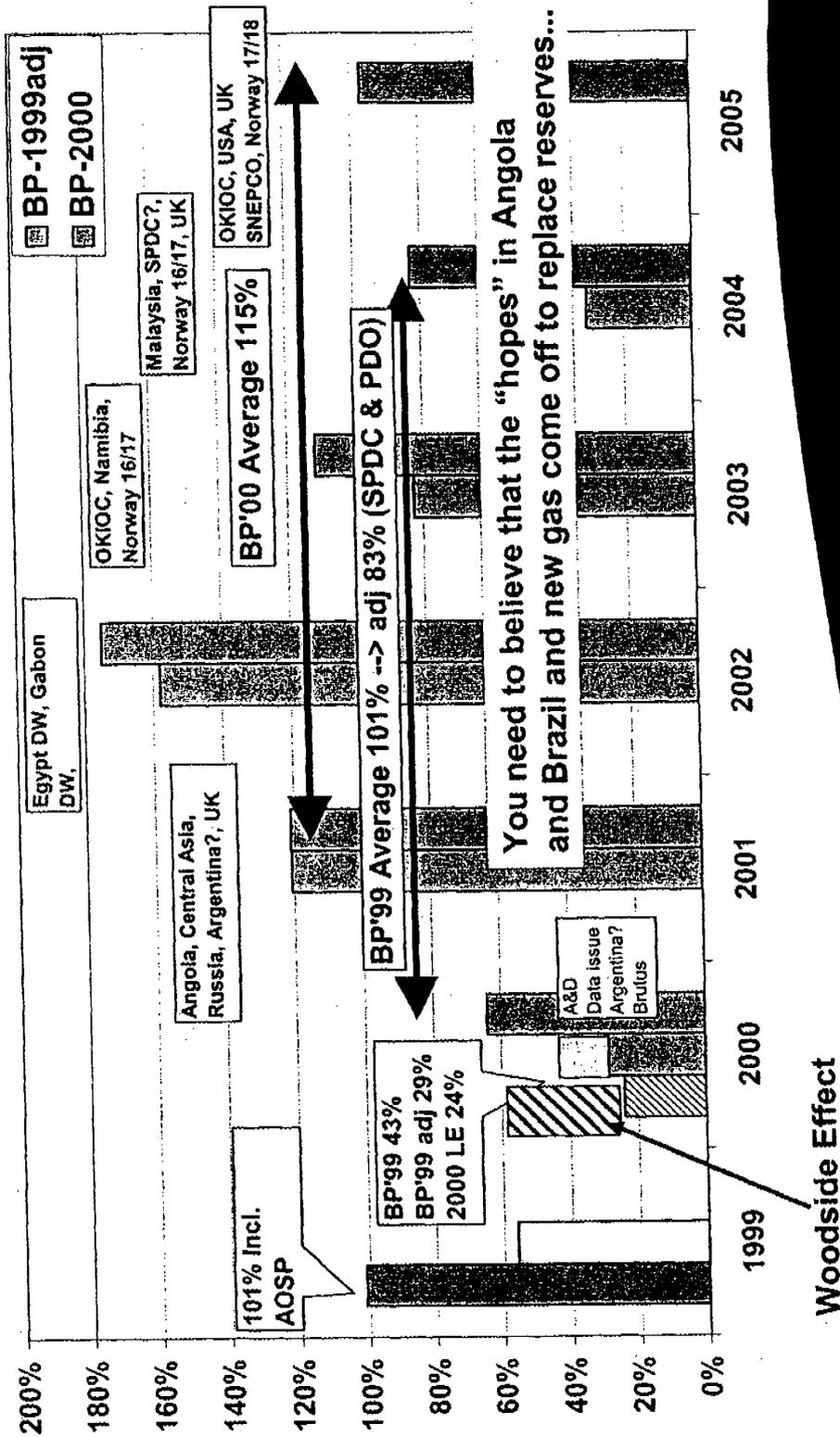
DB 07502

EP-Global Committed Capex in 2001 by CA-Category, re

# RESERVES REPLACEMENT - RAW DATA

## Proved Reserves Replacement Ratio

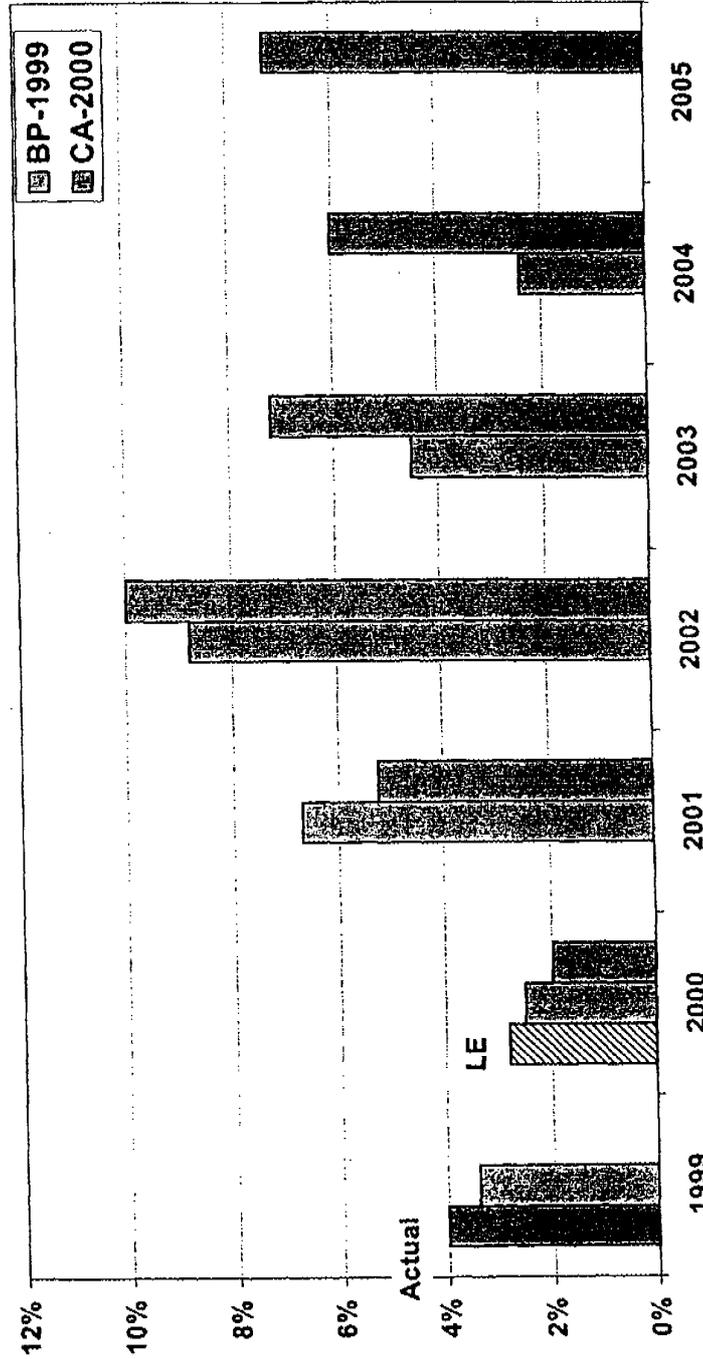
(BP-2000 raw data excl Canada & Woodside - SPDC to be updated)



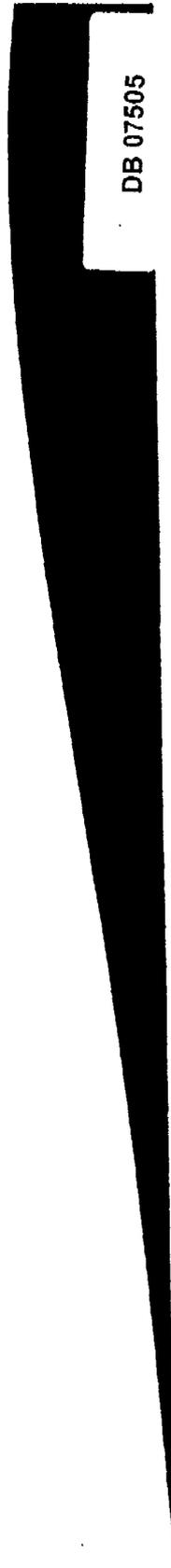
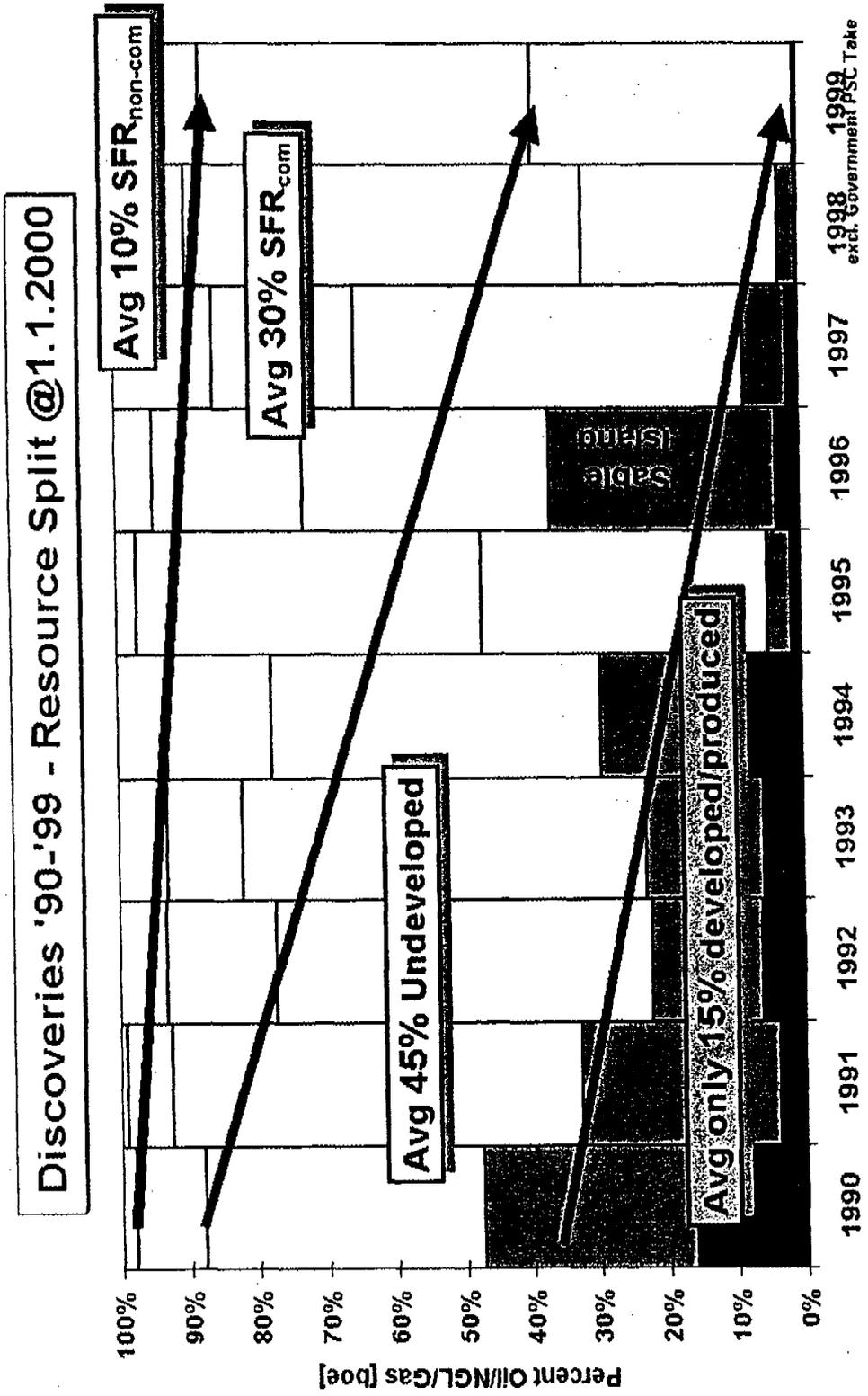
DB 07503

# SFR MATURATION RATES - RAW DATA

SFR<sub>com</sub> Maturation to Expectation Reserves



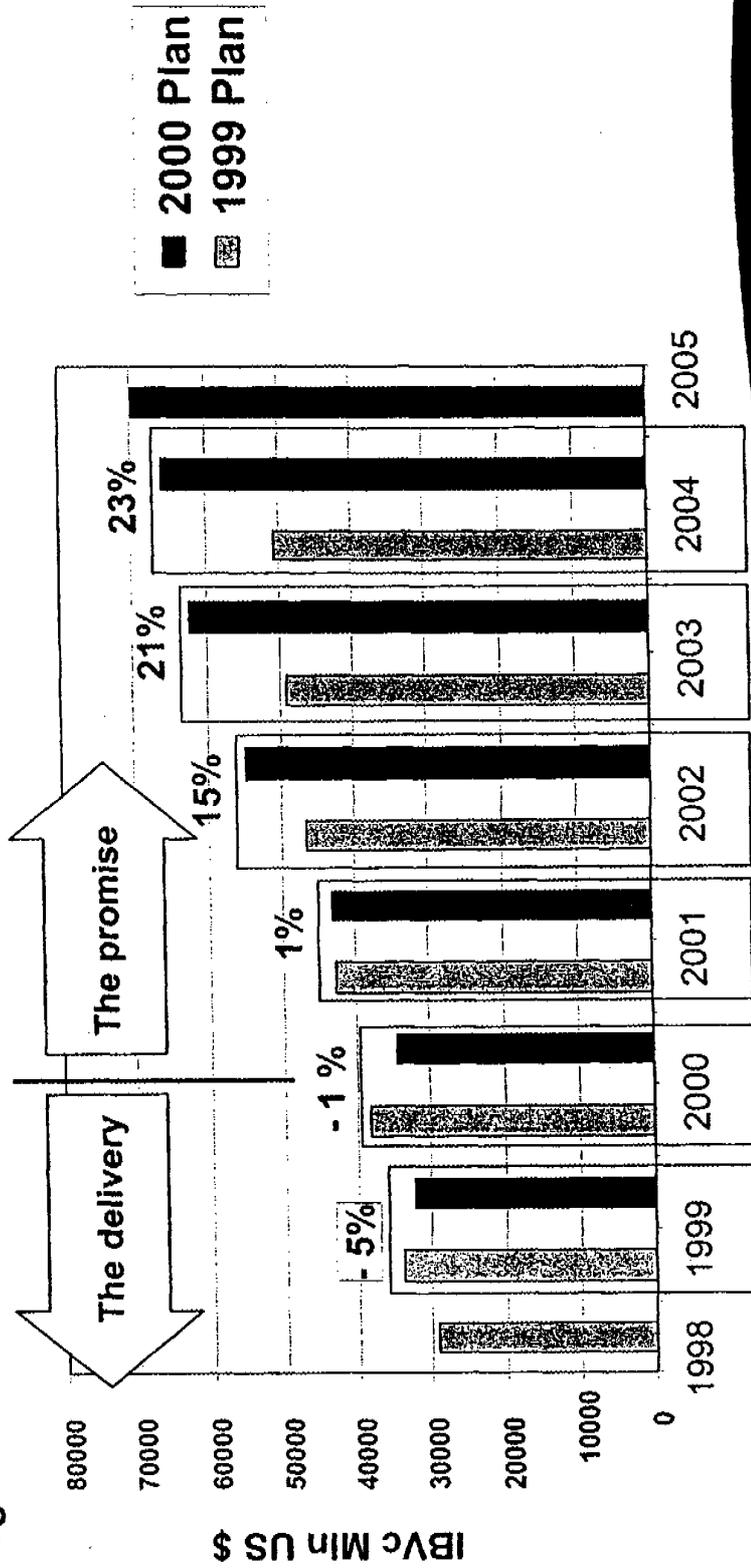
DB 07504



DB 07505

## IBV raw data submission versus 1999

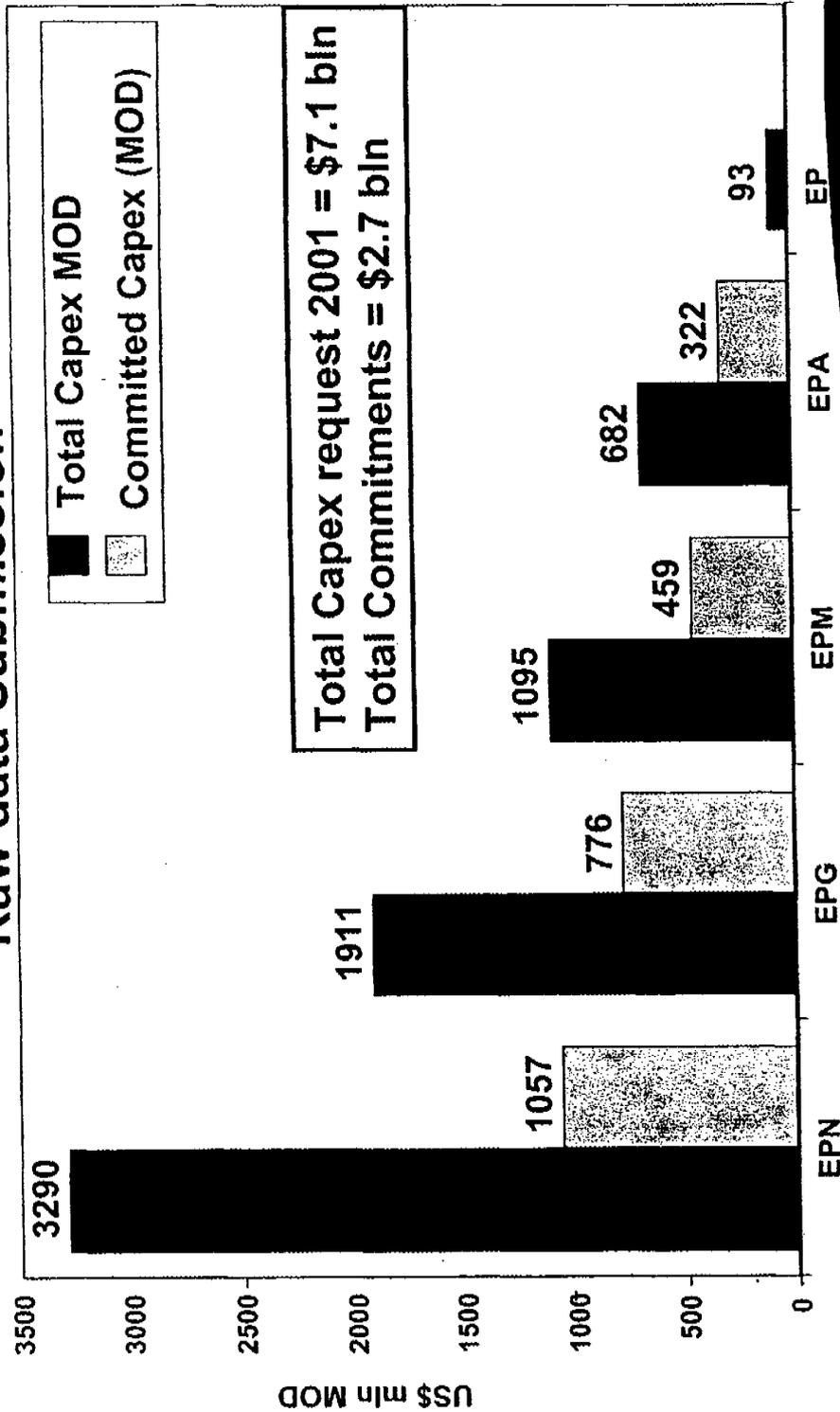
- 1999 & 2000 value creation is limited.....
- data assumes all planned 2000 FIDs are achieved ....unlikely based on LE
  - highly optimistic forward looking 2001 to 2005 (Nigeria assumed growth not likely....)
  - eg 2001 assumes we take roughly one big project FID per month (ranked in)....



DB 07506

# CAPEX REQUEST 2001 BY REGION

## Raw data Submission

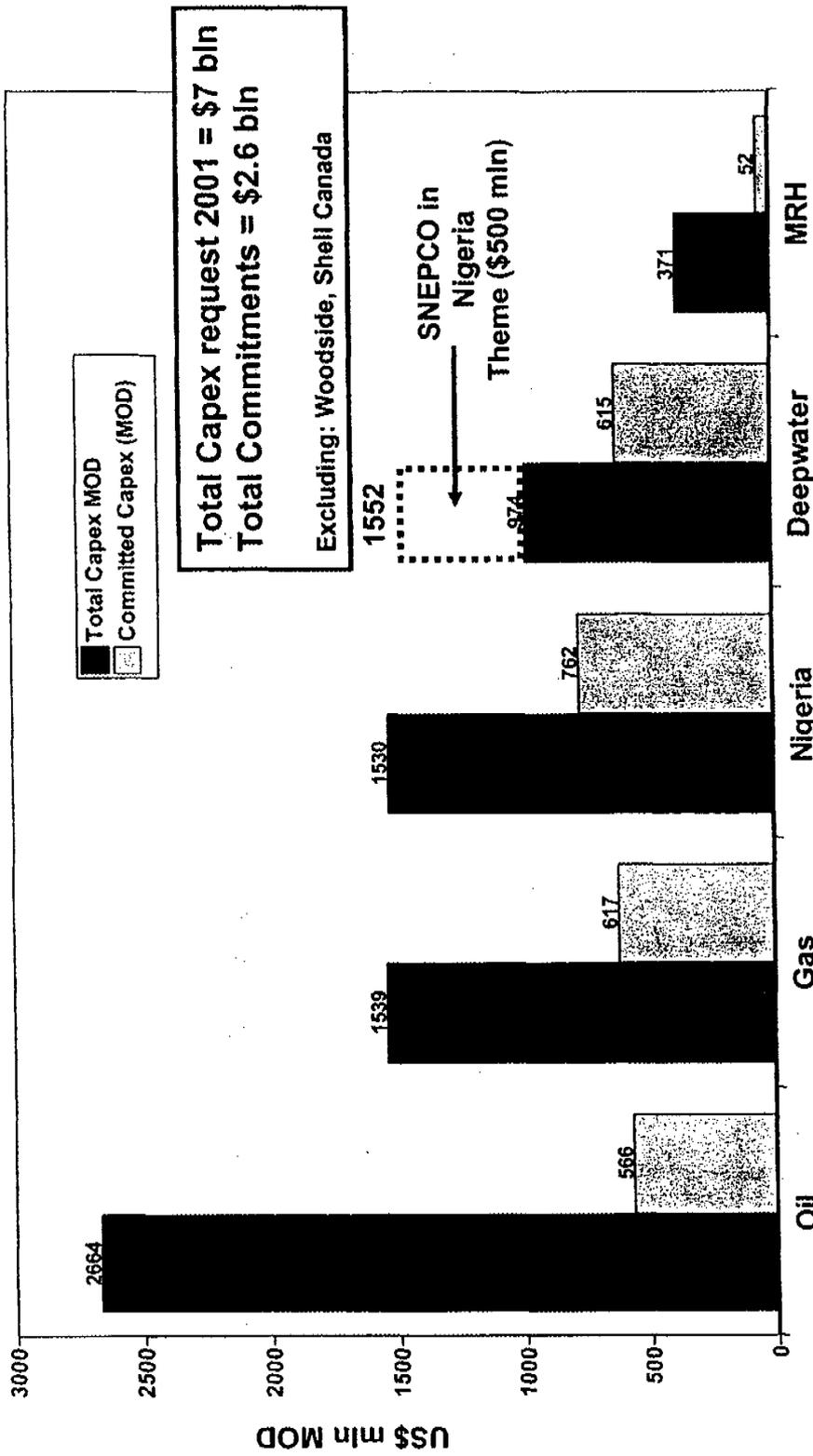


EP-Global Committed Capex in 2001 by CA-Category

DB 07507

# CAPEX REQUEST 2001 BY THEME

## Raw data Submission

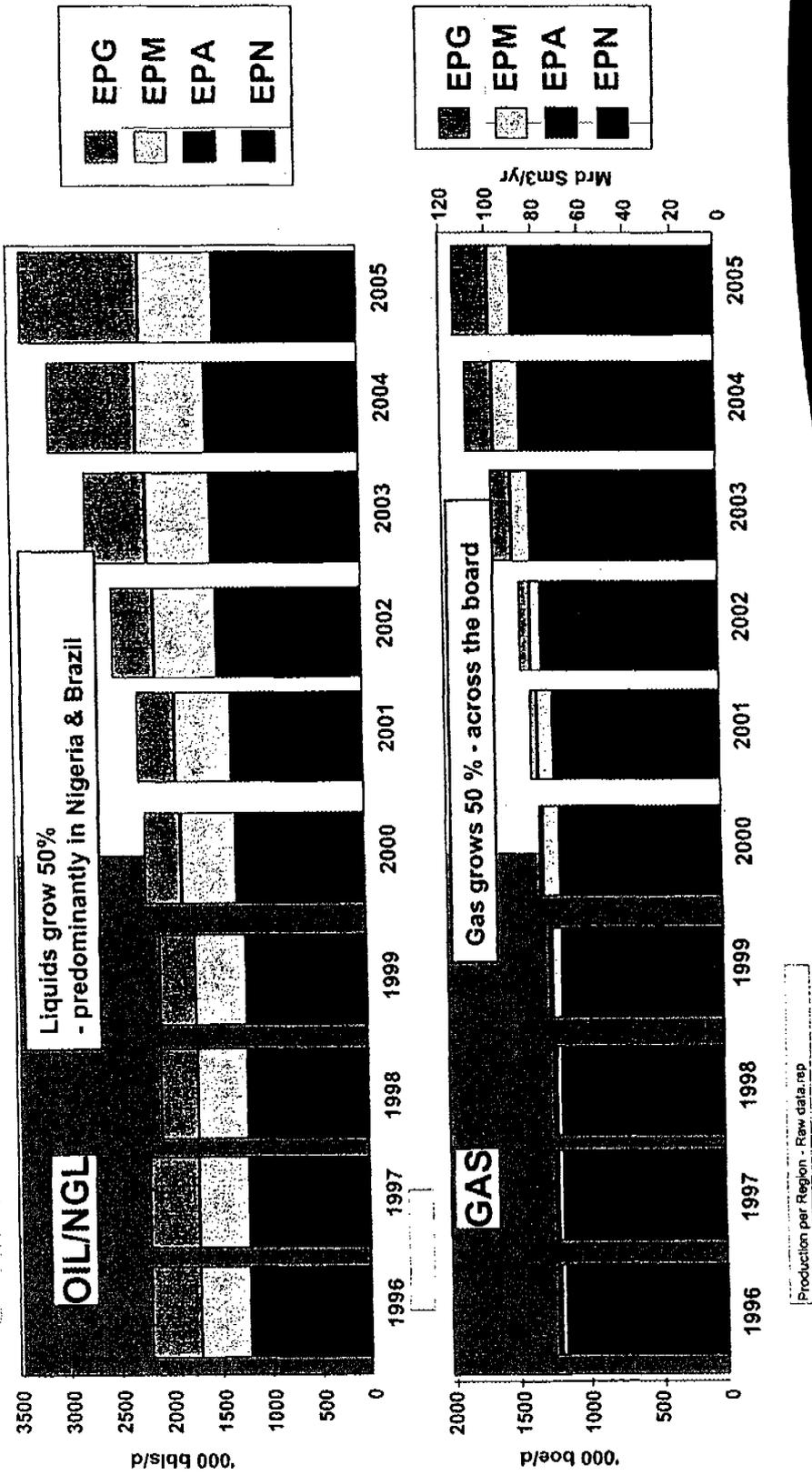


EP-Global Committed Capex in 2001 by CA-Category.rep

DB 07508

# OIL & GAS PRODUCTION 2001-2005 BY REGION

## Raw Data Submission

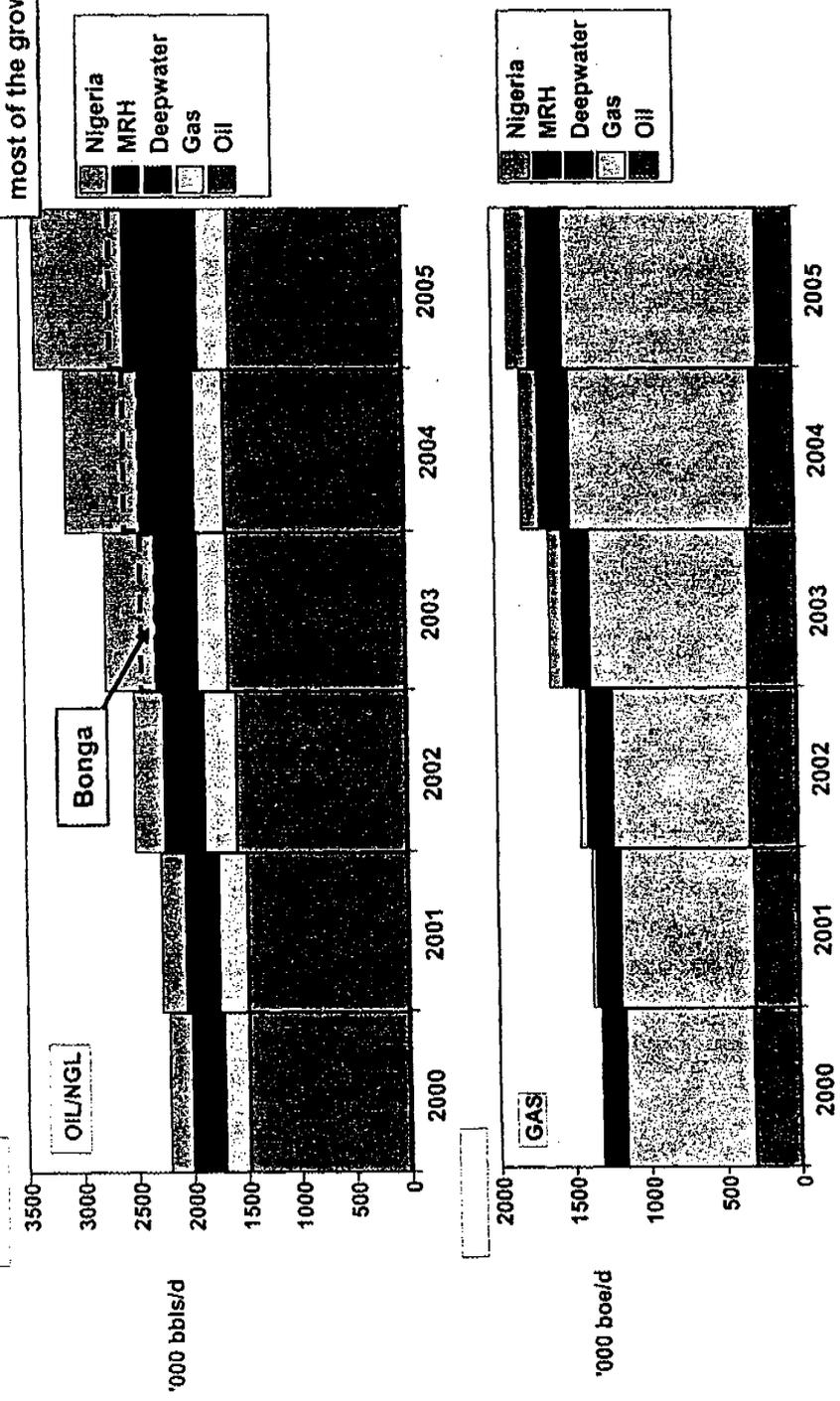


DB 07509

# OIL & GAS PRODUCTION 2001-2005 BY THEME

## Raw Data Submission

Nigeria accounts for most of the growth in liquids



DB 07510

## KEY METRICS - RAW DATA

Value continues to be dominated by traditional OUs.....  
 Nigeria dominance of production growth not reflected in value

IN						
	Capex 2001	IBV \$14/bbl	Boe/d 2001	Boe/d 2002	Boe/d 2003	
DW	570	5758	396	464	423	
NIGERIA	1252	5091	262	299	514	
OIL	1317	13946	1727	1699	1635	
GAS	2327	15233	1149	1158	1212	
MRH	38	-363	43	44	11	
TOTAL	5504	39665	3577	3665	3821	

OPTION						
	Capex 2001	IBV \$14/bbl	Boe/d 2001	Boe/d 2002	Boe/d 2003	
DW	319	86	0	6	39	
NIGERIA	178	1005	0	21	23	
OIL	546	2021	28	167	236	
GAS	172	2152	15	26	53	
MRH	83	943	0	0	1	
TOTAL	1375	6988	43	220	352	

Needs to be updated yet correct...!

MRH now includes Venezuela hence no value at \$14  
 Deepwater excludes SNEPCO  
 Ranked out production in 2001 43,000 bbls/d  
 Does not reflect OUs outside EP control - (SOGU)



DB 07511

## SUMMARY

- Growth in production is a major challenge
  - Existing oil assets decline 50% by 2005 1,700- 800 kb/d
  - New project schedules & project forecasts need realism
  - Growth story dominated by Nigeria
  - Still Big 3 and small 15
- Reserves replacement is a key issue
  - Brazil, Angola, CIS - new hope and OKIOC

Given the bullishness of submissions....  
Need to calibrate to ensure BP'2000 does not under deliver.



# Backups

DB 07513

**EP / GP Linked Projects (FID < 3 years)**

Country	Project Name	Capex Ranking	2001 Option Capex (\$ mill)	Capex Matrix Pos.	EP/GP Lead
Malaysia	MLNG Tiga	Base	24	3	GP
Australia	NWS LNG Train 4	Option	4	6	GP
	ALNG Train 1	Option	-	5	GP
China	Ordos / Changbei	Option	-	Expex (in)	EP
Russia	Piitun-Lunskoye	Option	-	Expex (in)	EP
Egypt	NEMed SMDS	Option	-	Expex (in)	EP
Iran	Iran SMDS	Option	2	6	Both
Turkmenistan	T2T Pipeline to Turkey	Option	18	3	EP
Saudi Arabia	Saudi Maturation Project	Option	-	-	EP
Nigeria	NLNG 3	Base	501	misc	EP
	NLNG 4	Option	45	misc	EP
	West Africa Gas Pipeline	Base	6	3	EP
	Abuja Gas Pipeline	Base	2	3	EP
Venezuela	VLNG	Option	7	6	GP
Namibia	Kudu	Base	-	-	EP

Portfolio Matrix

	4	2	1
HIGH			
	7	5	3
MED			
	9	8	6
LOW			
		LOW	MED
			HIGH

65%  
45%

TOTAL (Base) 533  
TOTAL (Options) 76

DB 07514

**Current Capex Ranking Cut-Off is Box 3 @ 50%**

## EP/GP Integrated Economics

EP Ranking		Integrated Ranking (incl NPV)	
Box	Attractiveness	Box	Attractiveness
6	41%	3	54%
5	55%	5	48%
6	21%	6	41%
3	54%	3	48%
6	34%	3	54%

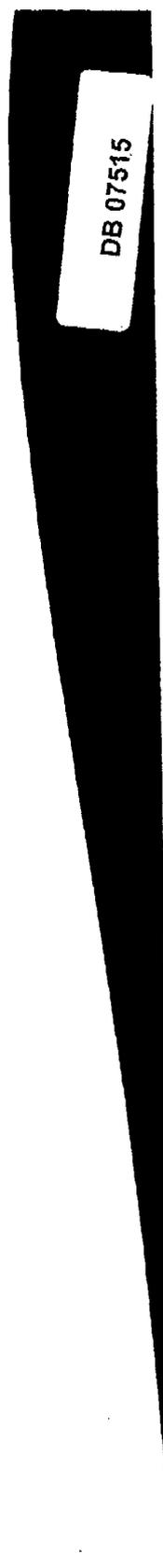
EP Ranking		Integrated Ranking (incl NPV)	
Box	Attractiveness	Box	Attractiveness
6	41%	3	54%
5	55%	5	48%
6	21%	6	41%
3	54%	3	48%
6	34%	3	54%

Australia  
NWS Train 4  
ALNG Train 1

Iran  
Iran SMDS

Turkmenistan  
T2T Pipeline to Turkey

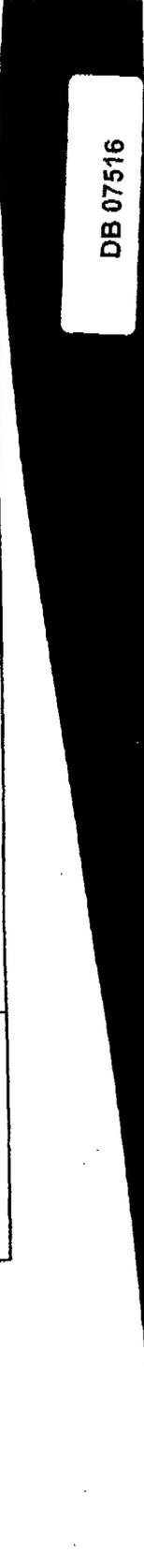
Venezuela  
Venezuela LNG



DB 07515

# KEY ISSUES - EP / GP Linked Projects

Country	Project Name	Upstream Capex
Malaysia	MLNG Tiga	....
Australia	NWS LNG Train 4	....
	ALNG Train 1	....
	ALNG Train 2	....
	NAGV Domgas & FLNG	....
	Gorgon SMDS	....
China	Ordos / Changbei	....
	Kuqa	....
Russia	Sakhalin (Pitun-Lunskoye)	....
Egypt	NEMED SMDS	....
	Iran SMDS	....
Turkmenistan	T2T Pipeline to Turkey	....
Saudi Arabia	Saudi Gas Project	....
Nigeria	NLNG 3	....
	NLNG 4	....
	West Africa Gas Pipeline	....
Venezuela	VLNG	7
Namibia	Kudu	....



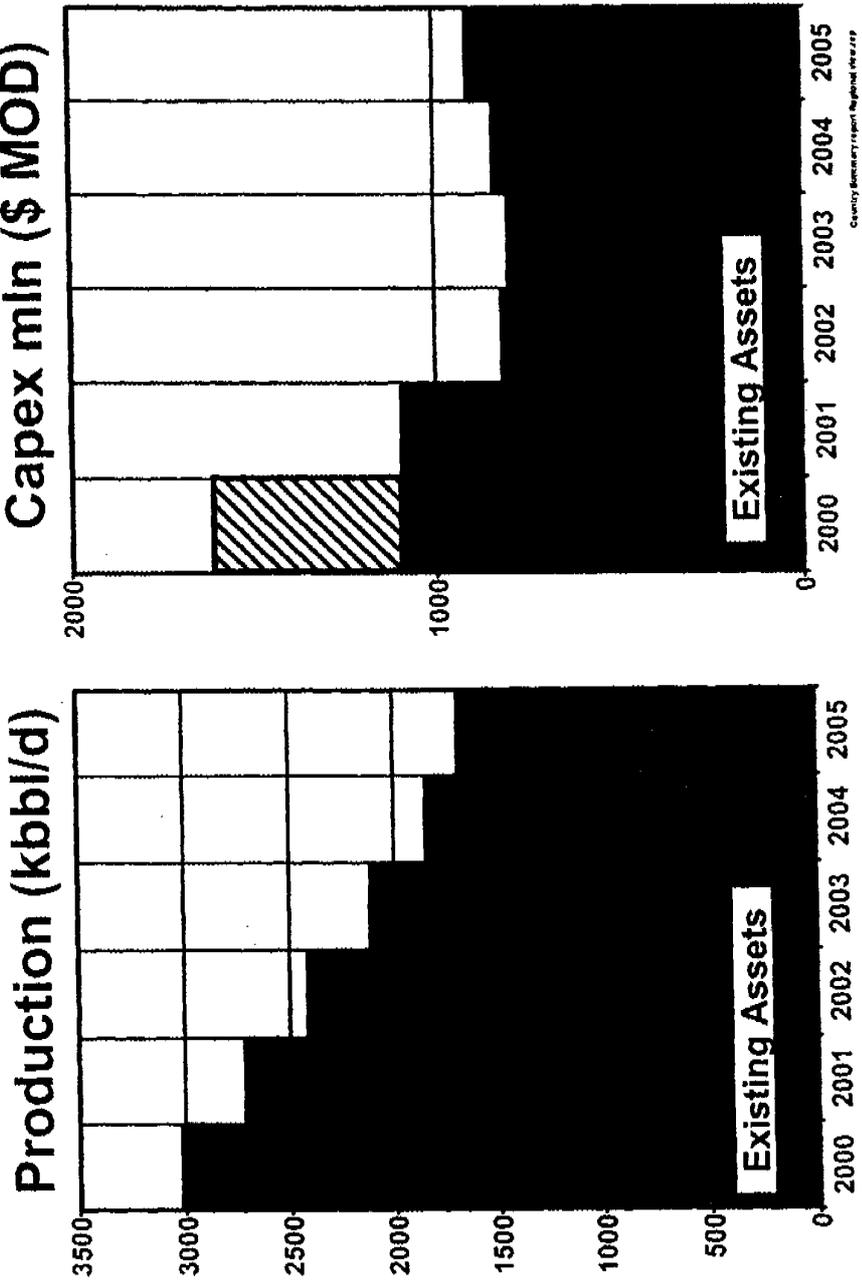
DB 07516

**26th JUNE - Position in CA 2000 Sequence**

- 7th June : Exploration Proto-Forum Discussion on expex ranking
- 13th June : Expex/Capex Data Pack (early rankings/views) to RBAs for Consideration  
(EP / SIG Alignment Meetings take place as required per region)
- 19th June : Some Regions Holding RBAs & OUs Meeting  
(Improve data quality & identify implications of expex & capex ranking)
- 22-23th June : EXPEX Workshop
- 26th June : EXCOM Raw Data and Issues
- 27-28th June : CAPEX Workshop
- 10th July : EXCOM Presentation on Expex, Devt Capex & with Early Financials
- 14th July : OU Investment level letters (Expex, Capex, etc)
- 31st July : EXCOM Presentation on Final Expex & Capex
- 11th Aug : OU Investment Confirmation (as per 2001 Scorecard Outlines)

DB 07517

# KEY ISSUES - Decline of "Existing Asset" base



Decline to by half in the plan period.....  
and cost \$0.8 bln/yr to maintain

DB 07518