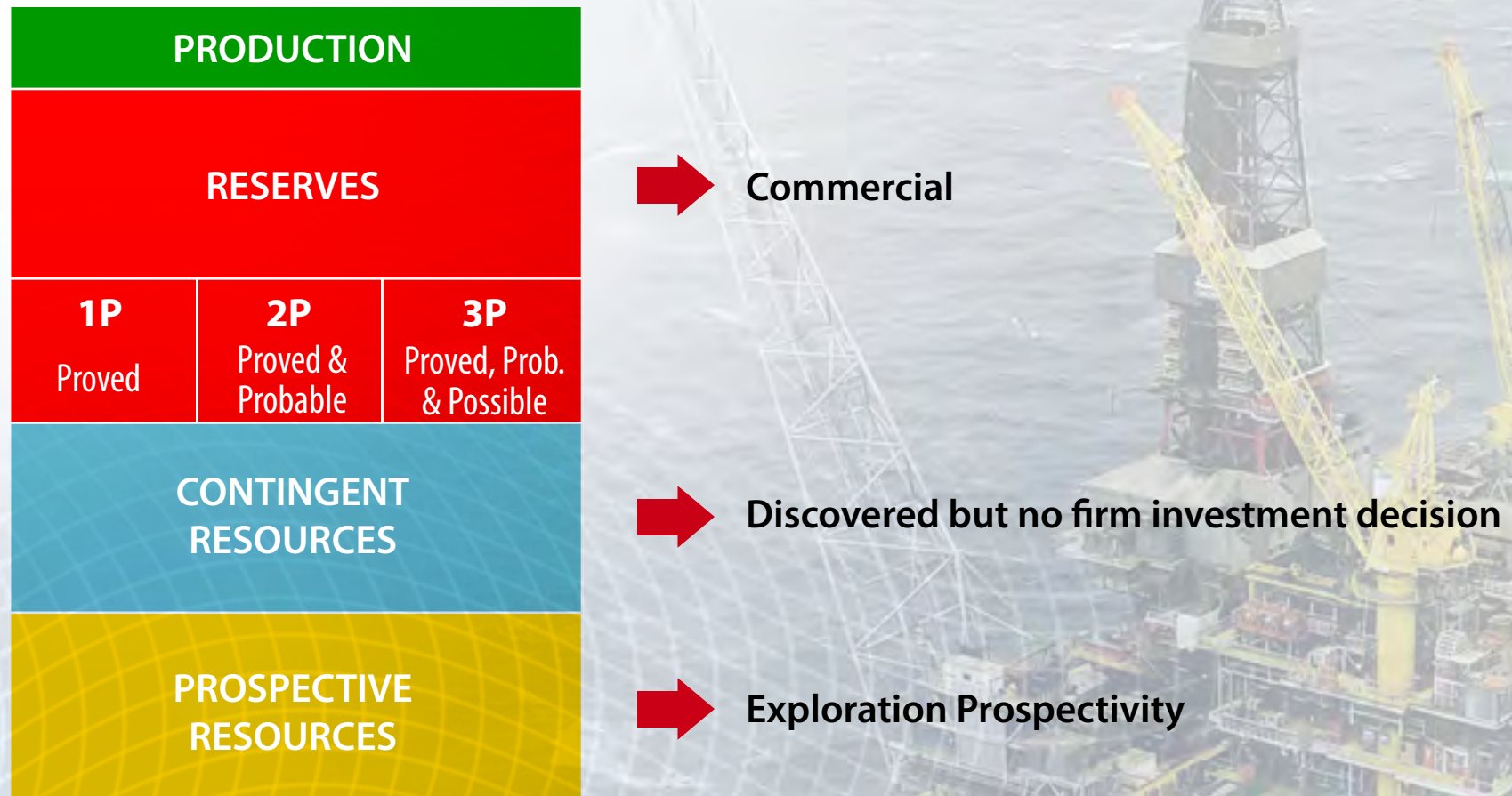


Production and Development



*Chris Bruijnzeels, Vice President Reservoir & Production
January 2008*

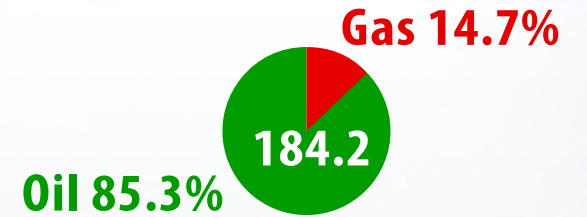
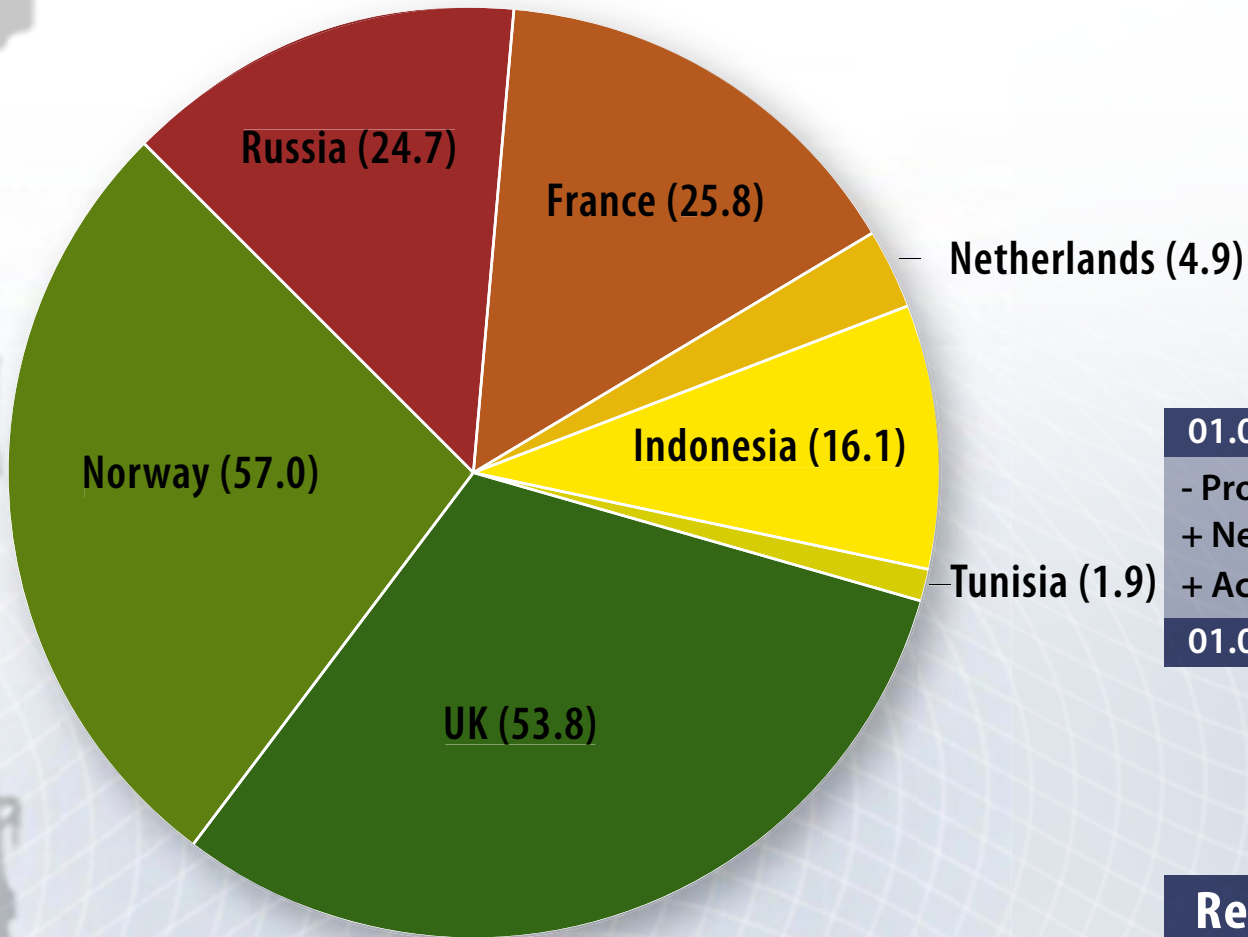
Society of Petroleum Engineers/World Petroleum Council Classification



2008 Proven & Probable Reserves



Total 184.2 MMboe



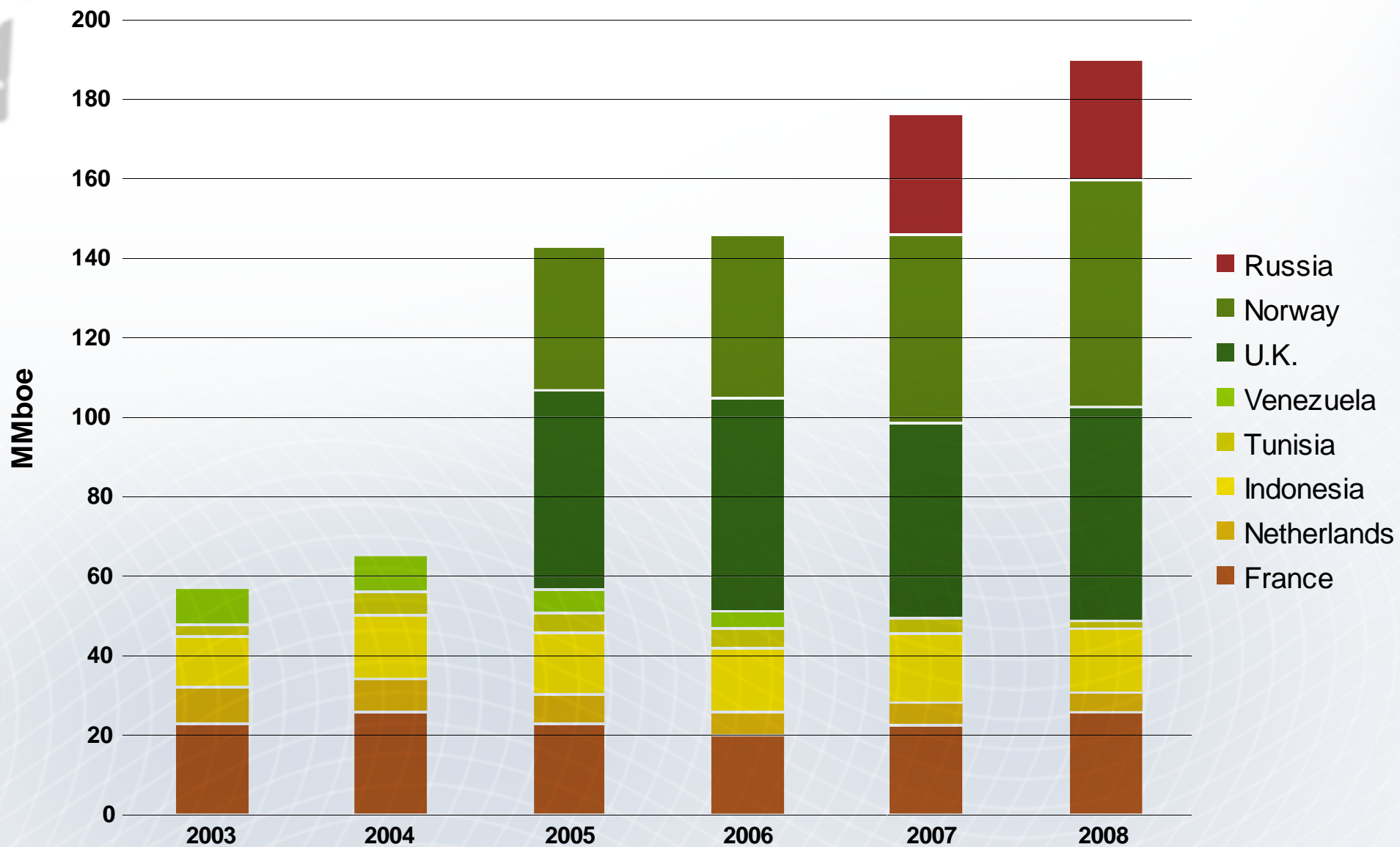
	mmboe
01.01.2007	176.4
- Produced (forecast)	-12.4
+ New reserves	18.4
+ Acquisitions	1.8
01.01.2008	184.2



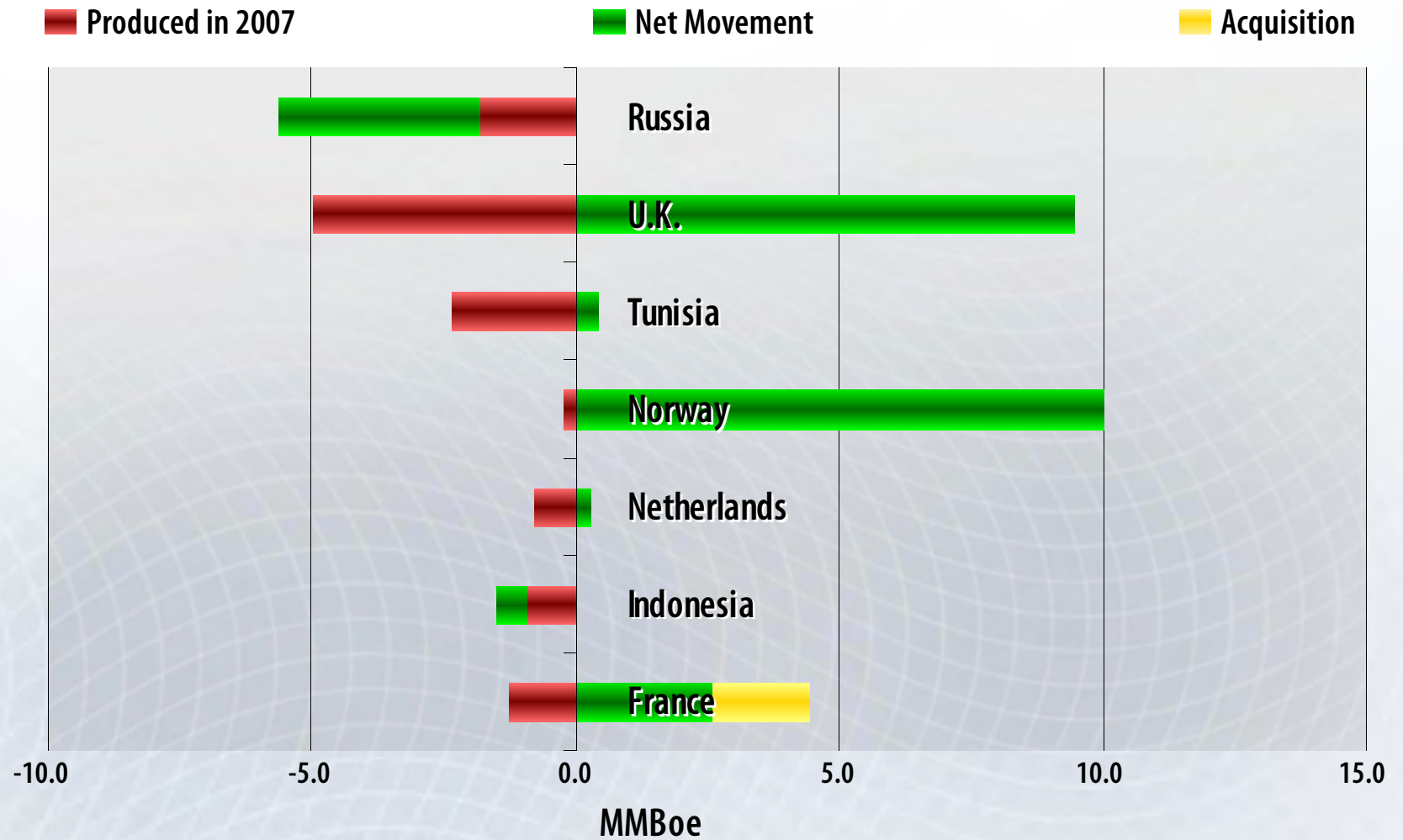
Increase in Reserves 12%

Reserves Replacement Ratio 148%

Reserves Growth



Reserves Changes



Main Reserves Changes



➤ UK

- ➔ Peik development moved from Contingent Resources to Reserves (4.8 MMBoe)
- ➔ Thistle South block infill drilling moved from Contingent Resources to Reserves (3.2 MMBoe)

➤ Norway

- ➔ Peik development moved from Contingent Resources to Reserves (6.4 MMBoe)
- ➔ Alvheim (East Kameleon) moved from Contingent Resources to Reserves (3.9 MMBoe)

➤ France

- ➔ Rheathian fields infill drilling moved from Contingent Resources to Reserves (2.4 MMBoe)

➤ Russia

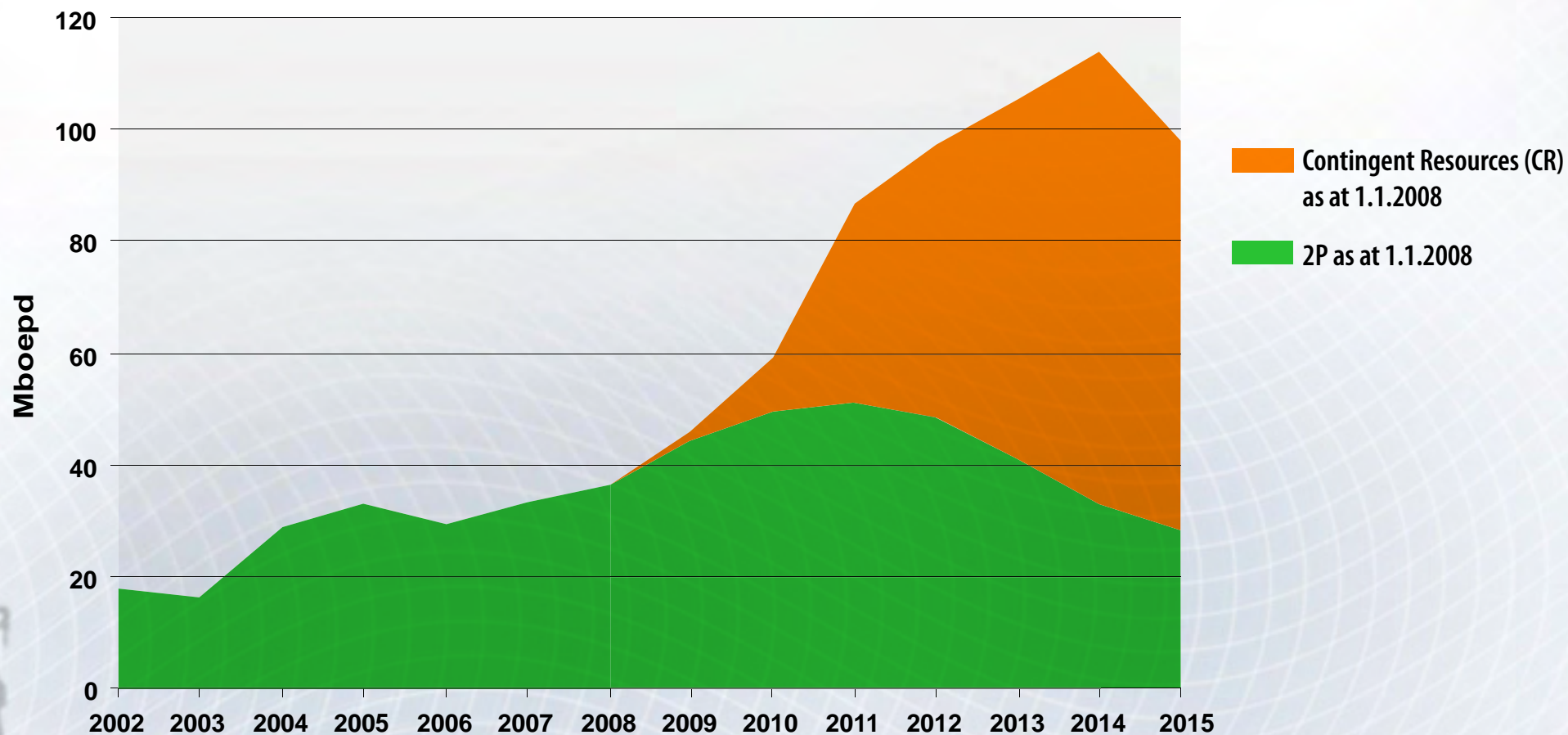
- ➔ First time audited by Gaffney, Cline and Associates. Reduction compared to pre-acquisition D&M* audited reserves (-3.8 MMBoe)

**DeGolyer and MacNaughton*

Production Profile based upon 2008 Resource Position



➔ Existing resources have the potential to triple existing production

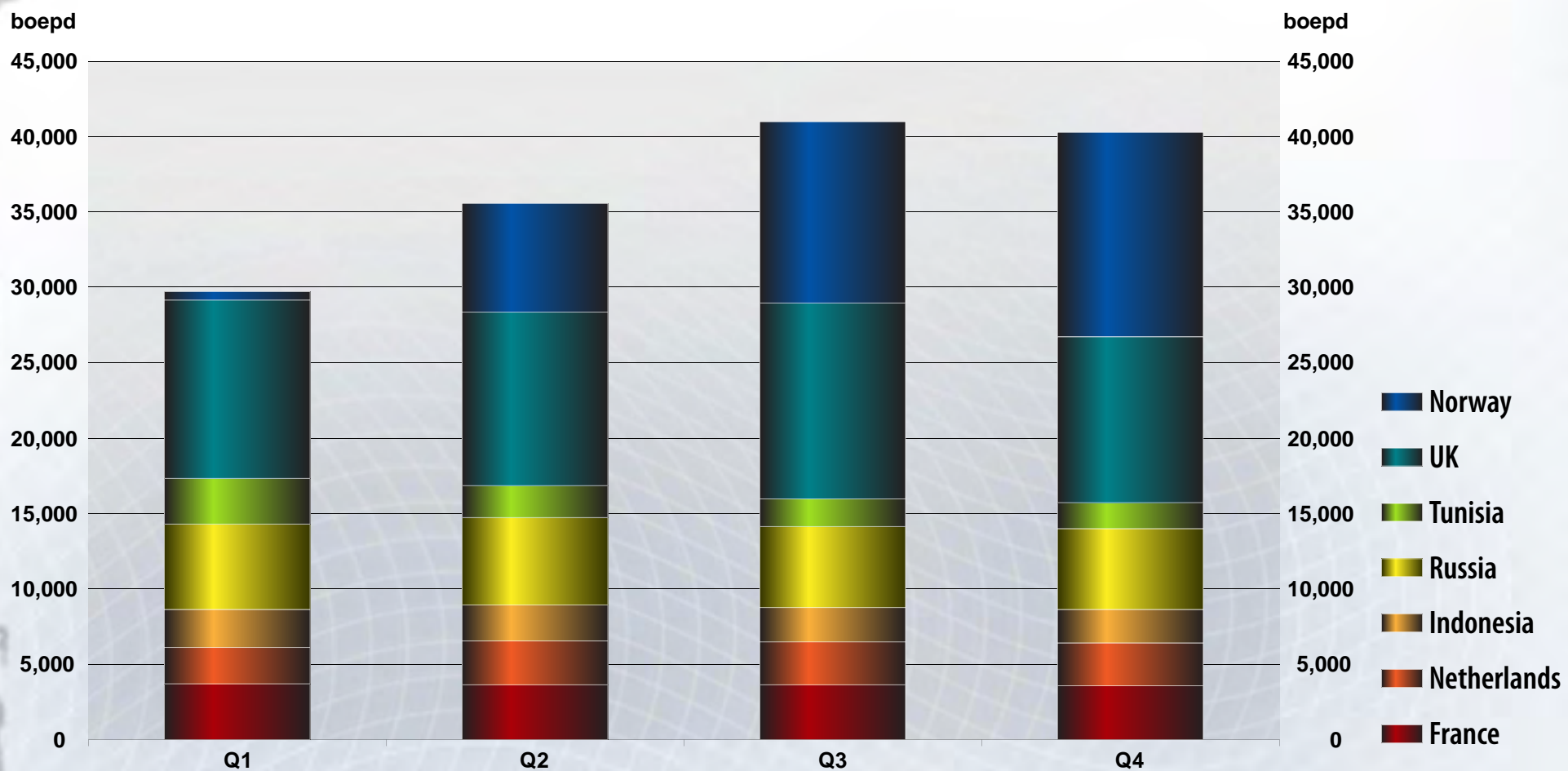


➔ excludes any exploration success or acquisitions

2008 Production Forecast



➔ Yearly Average : 36,500 boepd

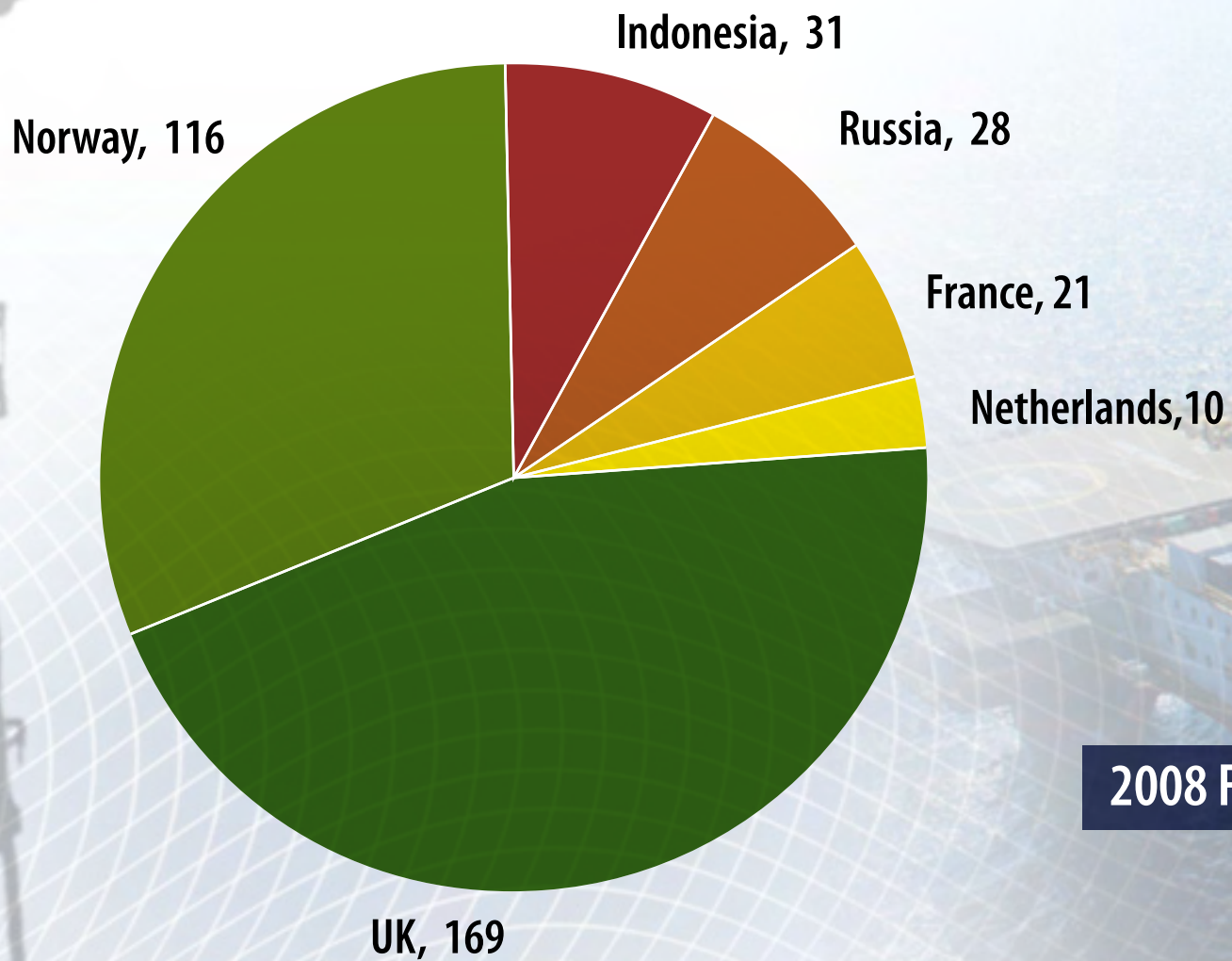


2008 – Why not over 50,000 boepd?



- ➔ **Norway** - Alvheim delay to 1 April 2008 **6,200 boepd**
- ➔ **Indonesia** - Delay of Singa first gas from 2008 to 2009 **1,100 boepd**
- ➔ **United Kingdom**
 - ➔ **Broom** - 2007 performance better than expected, leading to no requirement for additional water injection well in 2008 **1,800 boepd**
 - ➔ **Thistle** - Deferment of gaslift facilities on platform **2,900 boepd**
 - Shutdown in 2008 related to redevelopment
 - Lower uptime assumption as result of the generator module fire
- ➔ **Russia** - 2007 study work and drilling delays resulted in lower expectations for 2008 **3,000 boepd**

2008 Development Capital Expenditure



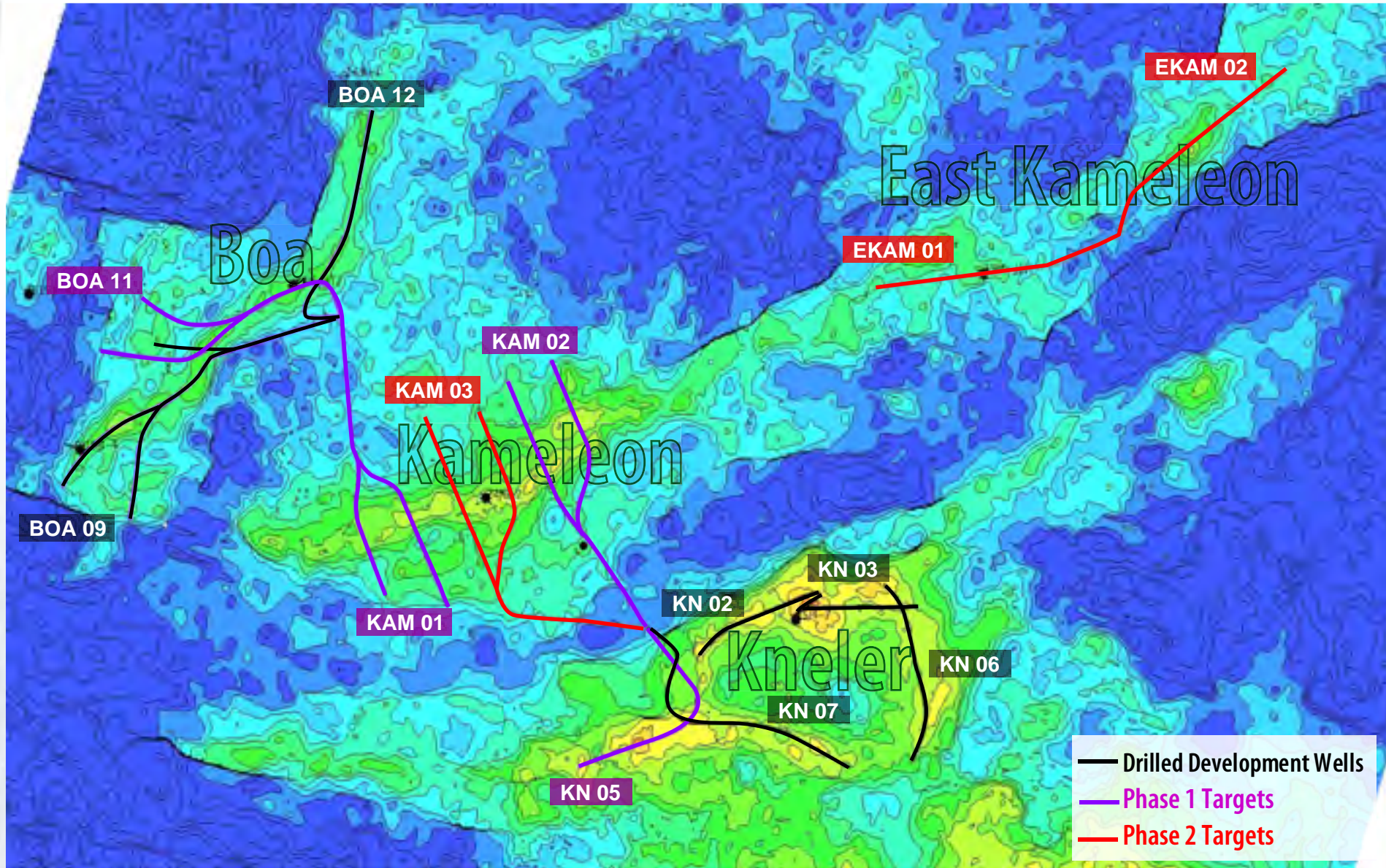
2008 Forecast 375 MMUSD

2008 Projects - Norway Alvheim



- ➔ **Alvheim (WI 15%)**
- ➔ **FPSO status**
 - ➔ Sail away from Haugesund February
 - ➔ Deep water testing in Amoyfjorden during February
 - ➔ Offshore installation and hook up in March
 - ➔ On stream end Q1 2008
- ➔ **2006-2007 drilling**
 - ➔ Drilled and completed 4 Kneler and 2 Boa wells (one Multi Lateral)
 - ➔ Drilled and completed 2 water disposal wells
 - ➔ Drilled KN5 and KAM2 to top reservoir
- ➔ **2008 Drilling**
 - ➔ Redrill KN3 due to casing integrity problem
 - ➔ Drill and complete 1 Kneler, 1 Boa and 2 Kameleon wells (three Multi Laterals)
- ➔ **2010 Drilling**
 - ➔ Drill and complete 1 Kameleon and 2 East Kameleon wells (one to three Multi Laterals)

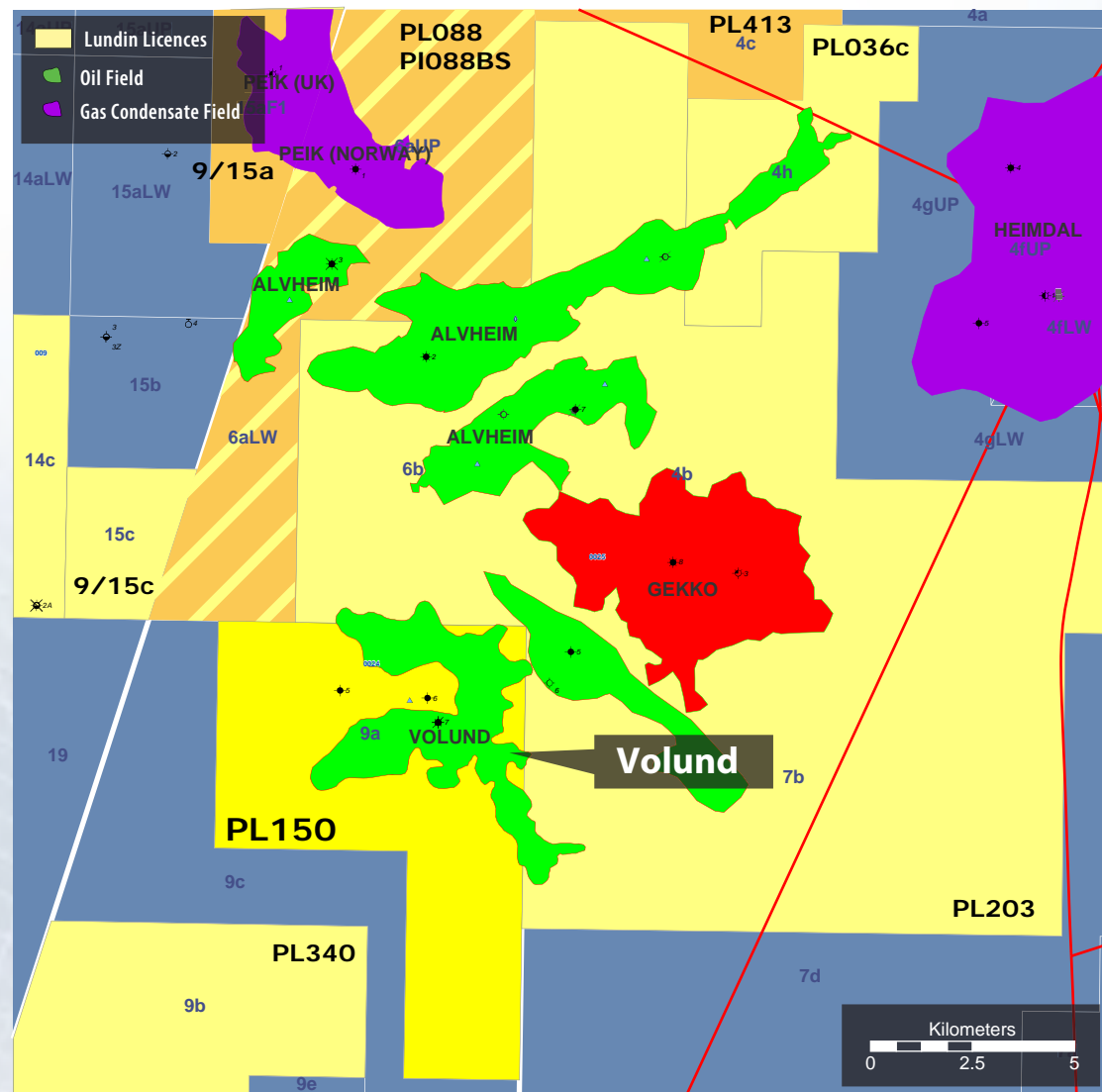
2008 Projects - Norway Alvheim



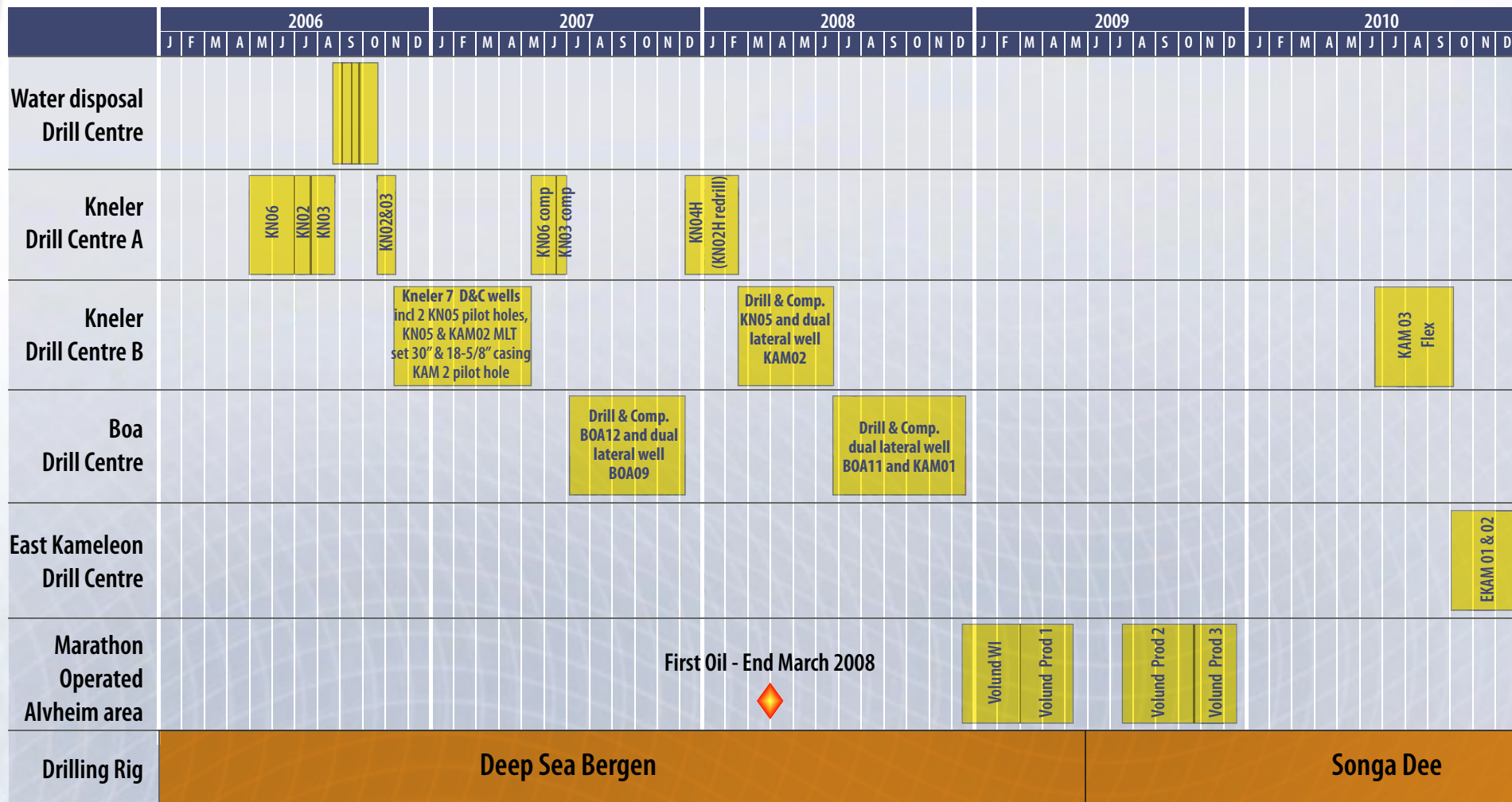
2008 Projects - Norway Volund



- ➔ **Volund (WI 35%)**
- ➔ **2008 Work Programme**
 - ➔ Subsea facilities
 - ➔ Long lead well items
- ➔ **2009 Drilling**
 - ➔ 1 water injector, 3 producers
- ➔ **First production 2nd half 2009**



2008 Projects - Alvheim/Volund drilling schedule



Kneler 7 D&C wells
incl 2 KN05 pilot holes,
KN05 & KAM02 MLT
set 30" & 18-5/8" casing
KAM 2 pilot hole

Drill & Comp.
BOA12 and dual
lateral well
BOA09

Drill & Comp.
KN05 and dual
lateral well
KAM02

Drill & Comp.
dual lateral well
BOA11 and KAM01

First Oil - End March 2008



Volund WI
Volund Prod 1

Volund Prod 2
Volund Prod 3

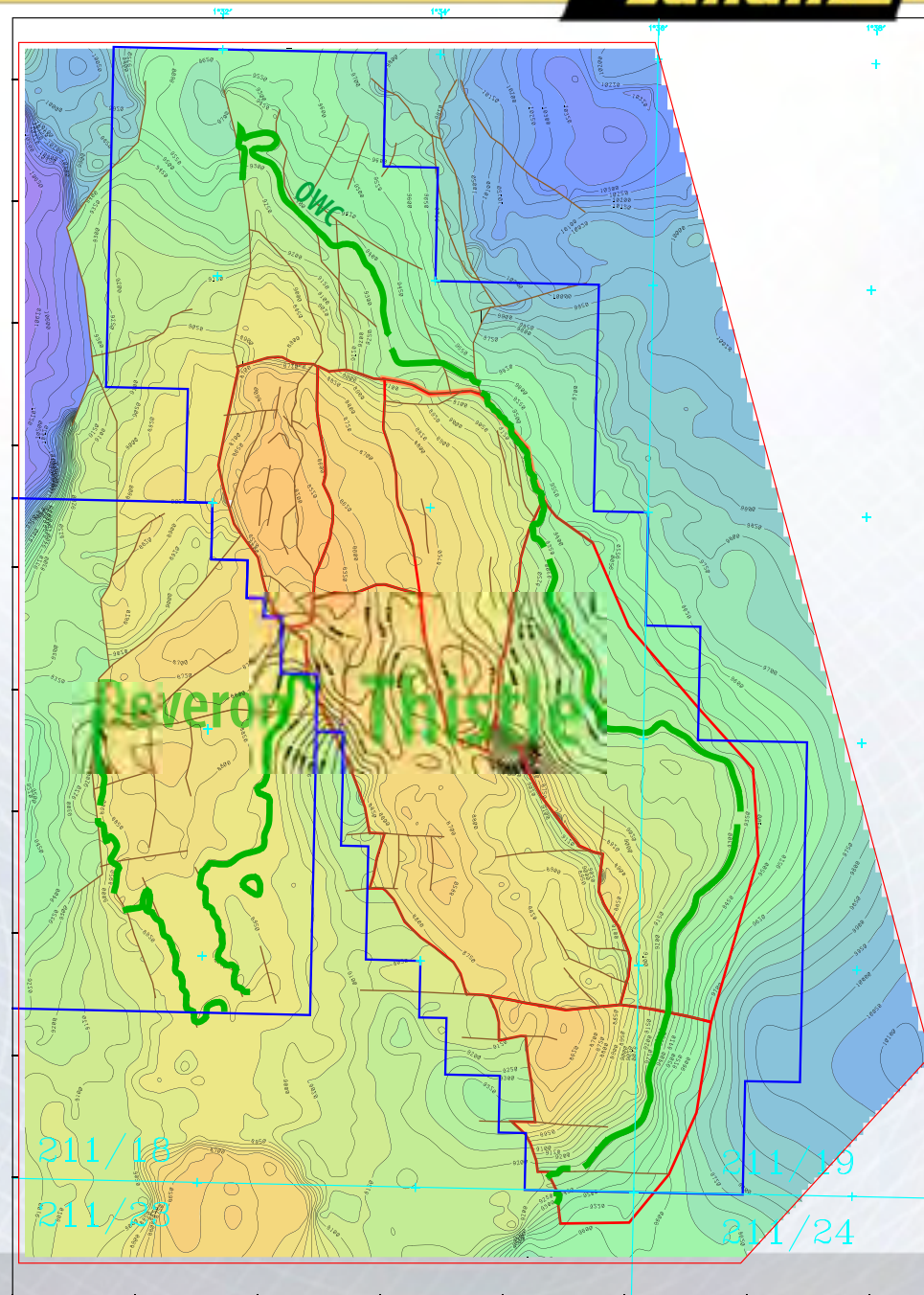
KAM 03
Flex

EKAM 01 & 02

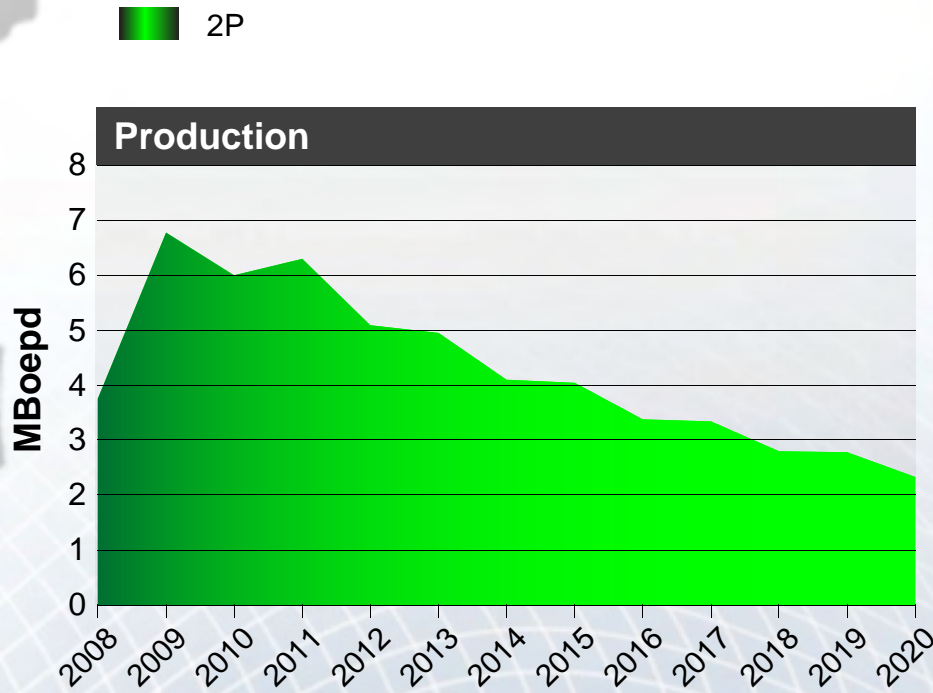
Thistle Redevelopment



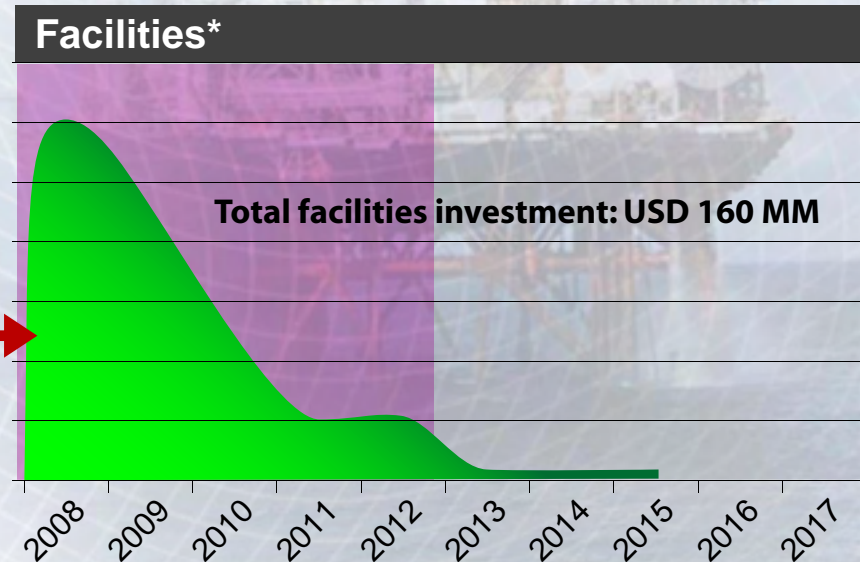
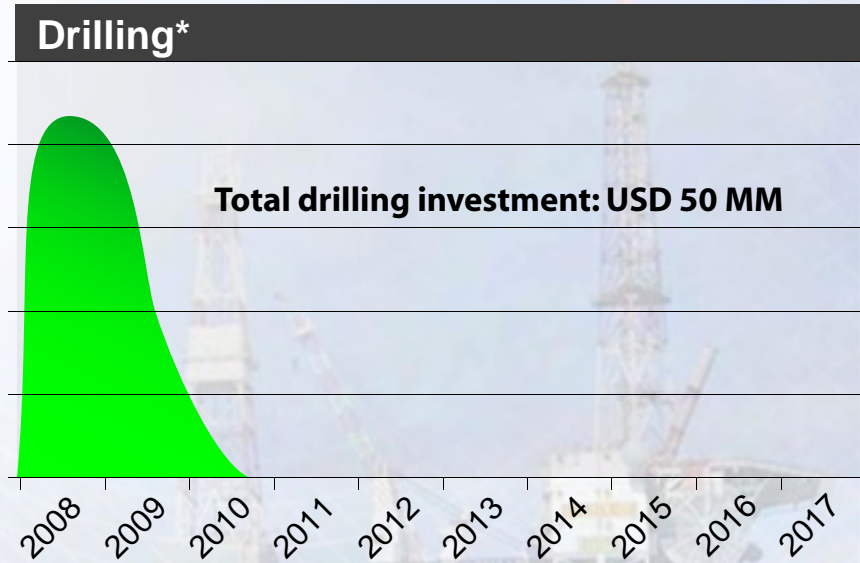
- **STOIIP 846 MMstb**
- **Produced 428.4 MMstb**
50.6% Recovery Factor
- **Certified 2P reserves**
17.4 MMstb
- **Contingent Resources**
18.9 MMstb
- **2P Ultimate Recovery of 52.7%**
- **2P + CR Ultimate Recovery of 55%**
- **Is there additional upside?**



2P Investment



Facilities investment for 2P reserves is not attractive



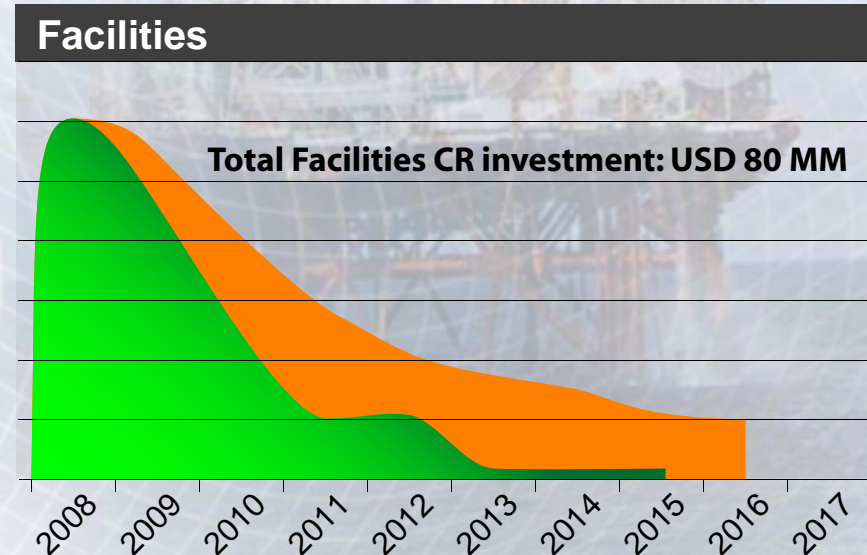
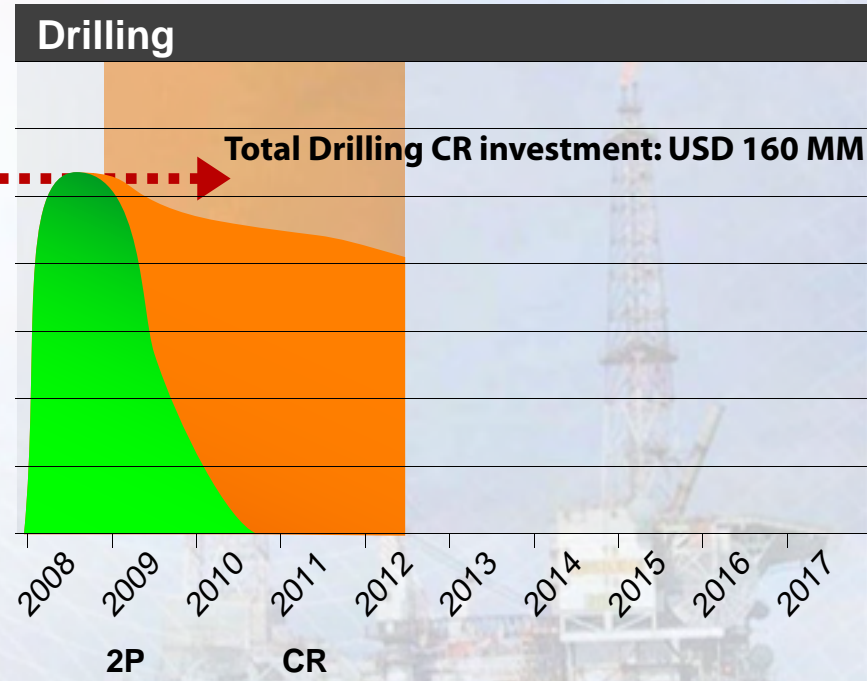
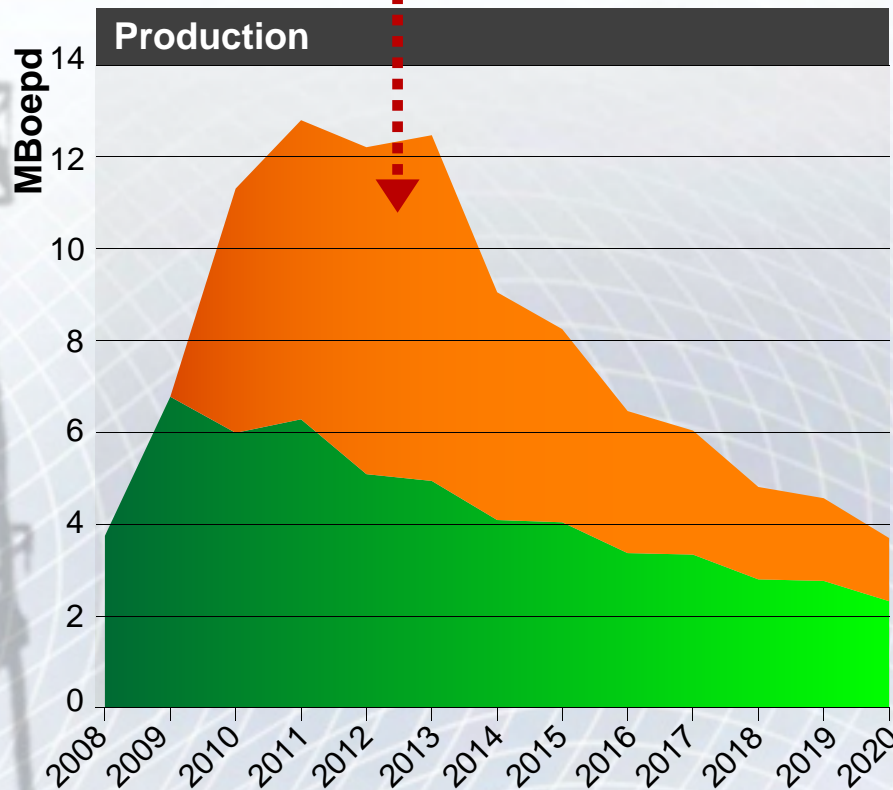
* Pre tax costs

Long Term Investment Plan



➔ Lifting costs for contingent resources negligible

... investing to capture Thistle's upside potential



Thistle's Future



- **Acquired new 3D seismic in 2007**
- **Investment in drilling facilities in 2007/08**
- **Workovers in 2008**
- **Subsurface studies in 2008 ongoing**
 - ➔ Integrate seismic and update models
 - ➔ Define contingent resource infill targets
 - ➔ Move contingent resources into reserves (already moved 3.2 MMBoe in 2007)
- **Start infill drilling in 2009**
- **Attract third party business**

➔ Netherlands (10.5 MMUSD)

- ➔ K5F development (WI 2.03%)
- ➔ K6GT infill (WI 3.841%)
- ➔ K4A3 infill (WI 2.03%)
- ➔ L4pn (WI 4.34%)

Tie in of two development wells

Two infill wells

One infill well

Pipeline replacement

➔ Russia (28.4 MMUSD)

- ➔ KalmEastern (WI 51%)
- ➔ OilGazTet (WI 50%)
- ➔ Komi assets (WI 50%)

4 development wells plus facilities
facilities

6 development wells plus facilities

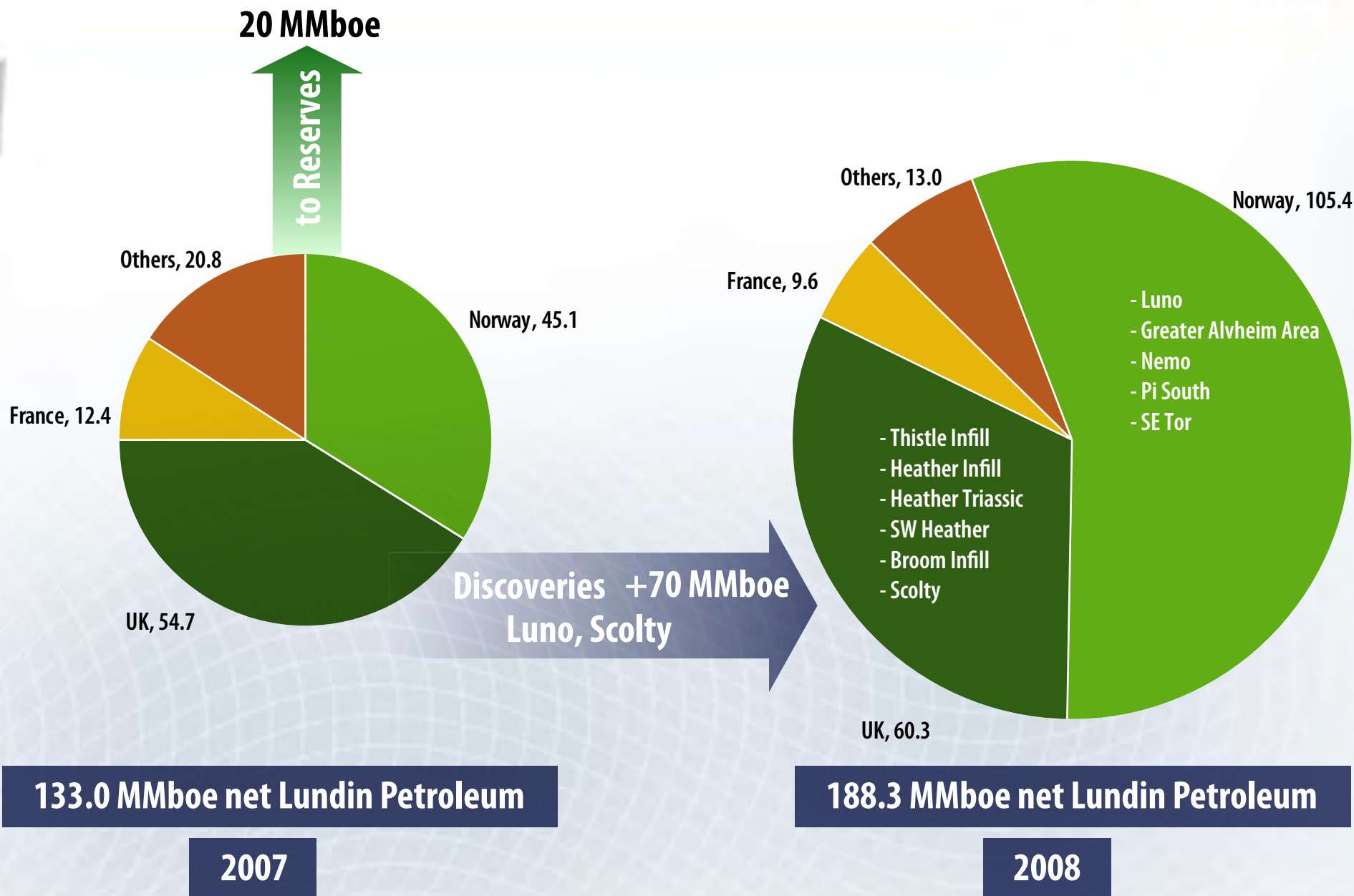
➔ France (21.8 MMUSD)

- ➔ Les Mimosas development (WI 50%) Water injection well
- ➔ Soudron development (WI 100%) Deepen water injector
- ➔ Vert La Gravelle (WI 100%) Drill water injector
- ➔ Grandville Complete water injector

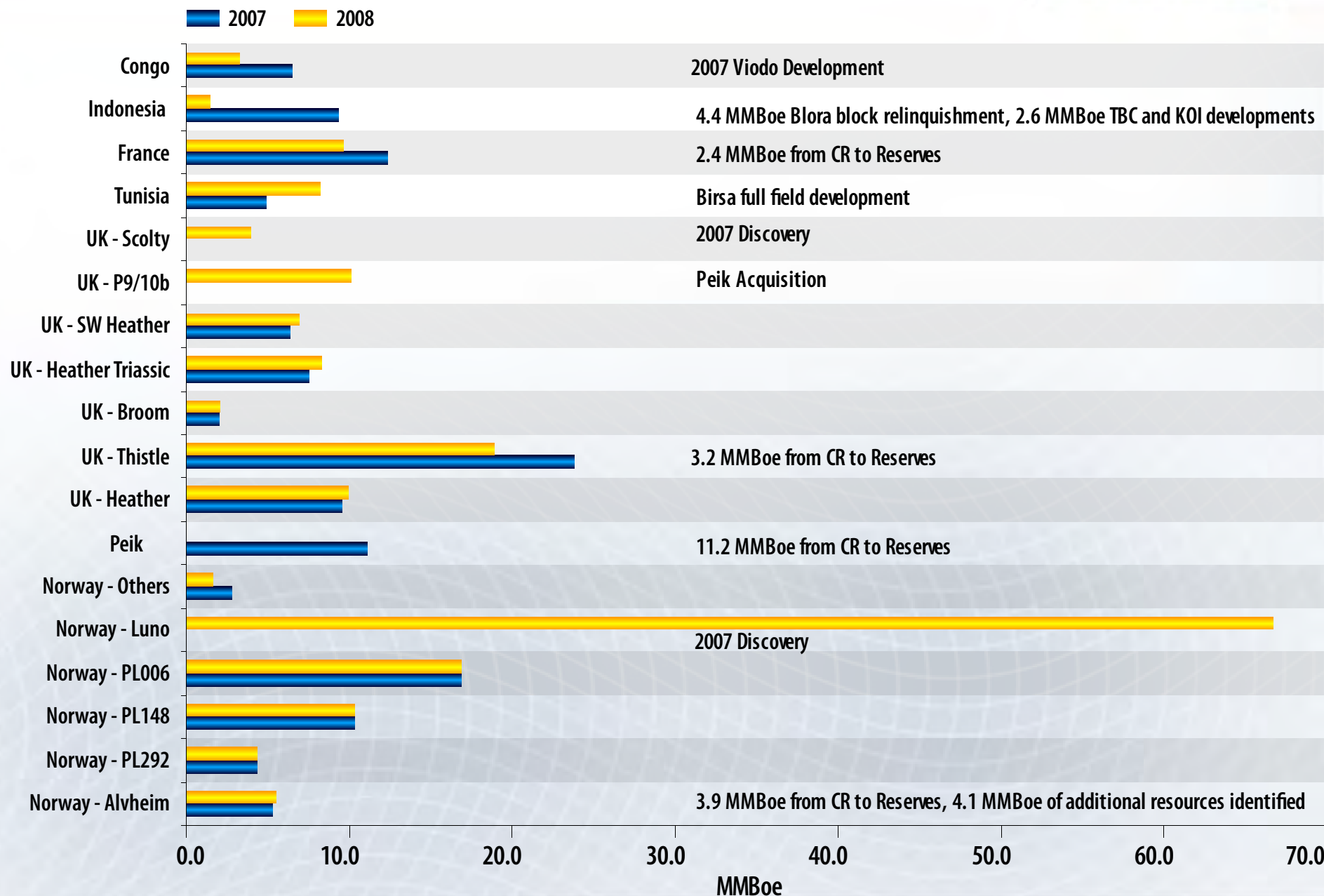
➔ Indonesia (31.9 MMUSD)

- ➔ Singa Development (WI 25.88%) 2 Development wells plus facilities
- ➔ Salawati Basin (WI 25.94%) 8 Development wells
- ➔ Salawati Island (WI 14.51%) 2 Development wells

Contingent Resources - Existing Discoveries



Contingent Resource Movement



UK / Norwegian Undeveloped Discoveries*

* Excludes infill drilling within existing fields

- **PL338**
Luno

 - ➔ 50% interest (operator)
 - ➔ gross resources: 65-190 mmboe
 - ➔ appraisal drilling in 2008
- **PL006c:**
South East Tor

 - ➔ 75% interest (operator)
 - ➔ gross resources: 22.5 mmboe
 - ➔ appraisal drilling in 2008
- **PL148 7/7-2:**
Nemo

 - ➔ 50% interest (operator)
 - ➔ gross resources: 20.6 mmboe
 - ➔ appraisal drilling ongoing
- **PL292:**
Pi South

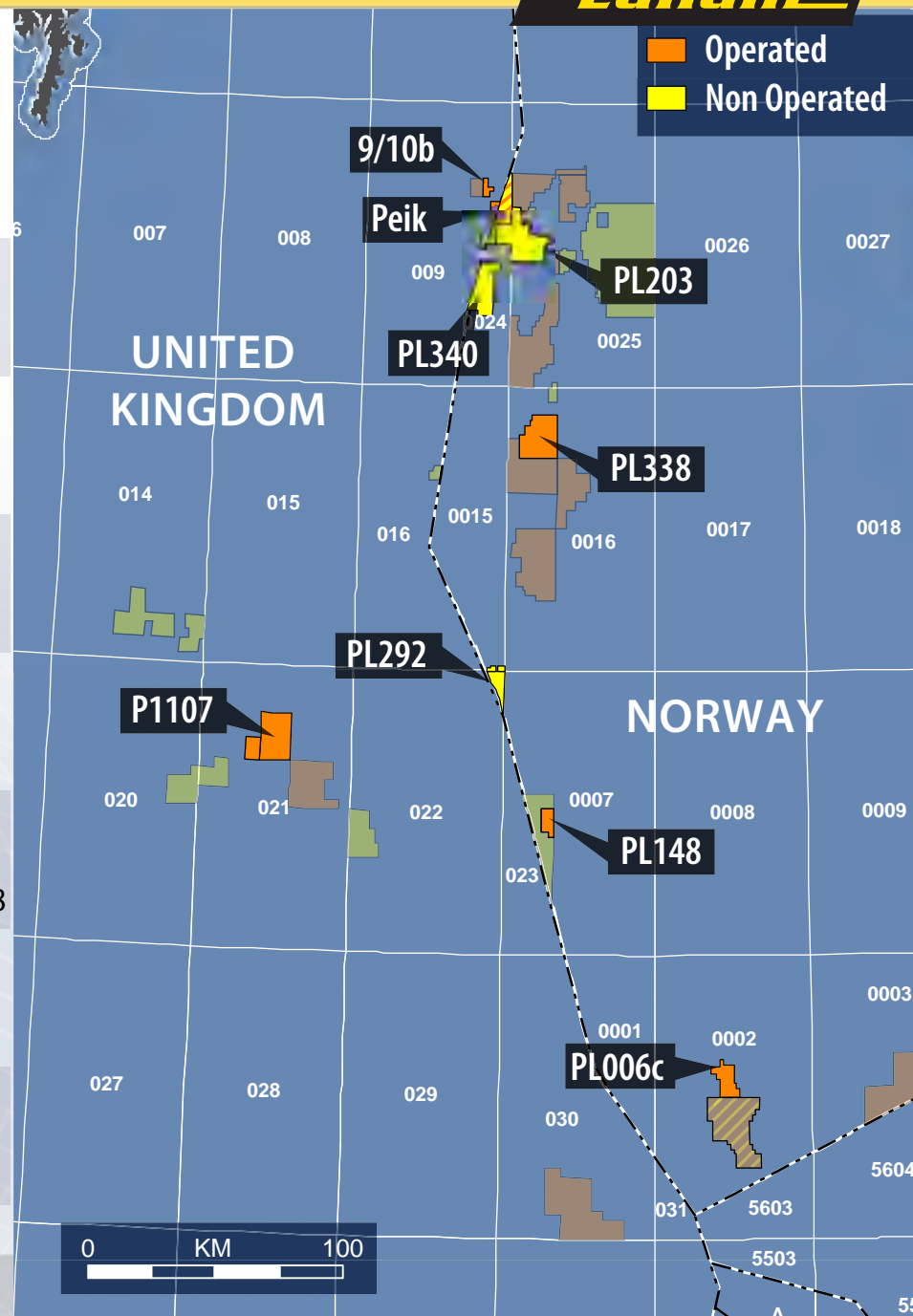
 - ➔ 40% interest
 - ➔ gross resources: 10.9 mmboe
 - ➔ Pi North prospect drilling in Q1 2008
- **PL340**

 - ➔ 15% interest
 - ➔ gross resources: 11.0 mmboe
 - ➔ drilling Marihone prospect in 2008
- **P1107:**
Scolty

 - ➔ 40% interest (operator)
 - ➔ gross resources: ~10 mmboe
 - ➔ drilling amplitude anomaly prospect (Torphins) in 2008
- **PL203**
Gekko/Kobra

 - ➔ 15% interest
 - ➔ gross resources: ~36.6 mmboe
- **P090 (9/10b)**
9/10b discovery

 - ➔ 85% interest
 - ➔ gross resources: ~11.9 mmboe



Net Contingent Resources: 119 MMBOE

➤ Norway Appraisal Drilling

- ➔ PL338 (Luno)
- ➔ PL006C (SE Tor)
- ➔ PL148 (Nemo)

➤ Thistle and Heather Development studies

- ➔ New 3D seismic
- ➔ Update reservoir model
- ➔ Define infill targets

➤ Exploration near contingent resources

- ➔ UK - Torphin exploration near Scolty discovery
- ➔ Norway – Pi North Exploration near Pi South PL292 discovery
- ➔ Norway – Marihone Exploration near PL340 discovery
- ➔ Congo – Exploration near Viodo discovery

➤ France

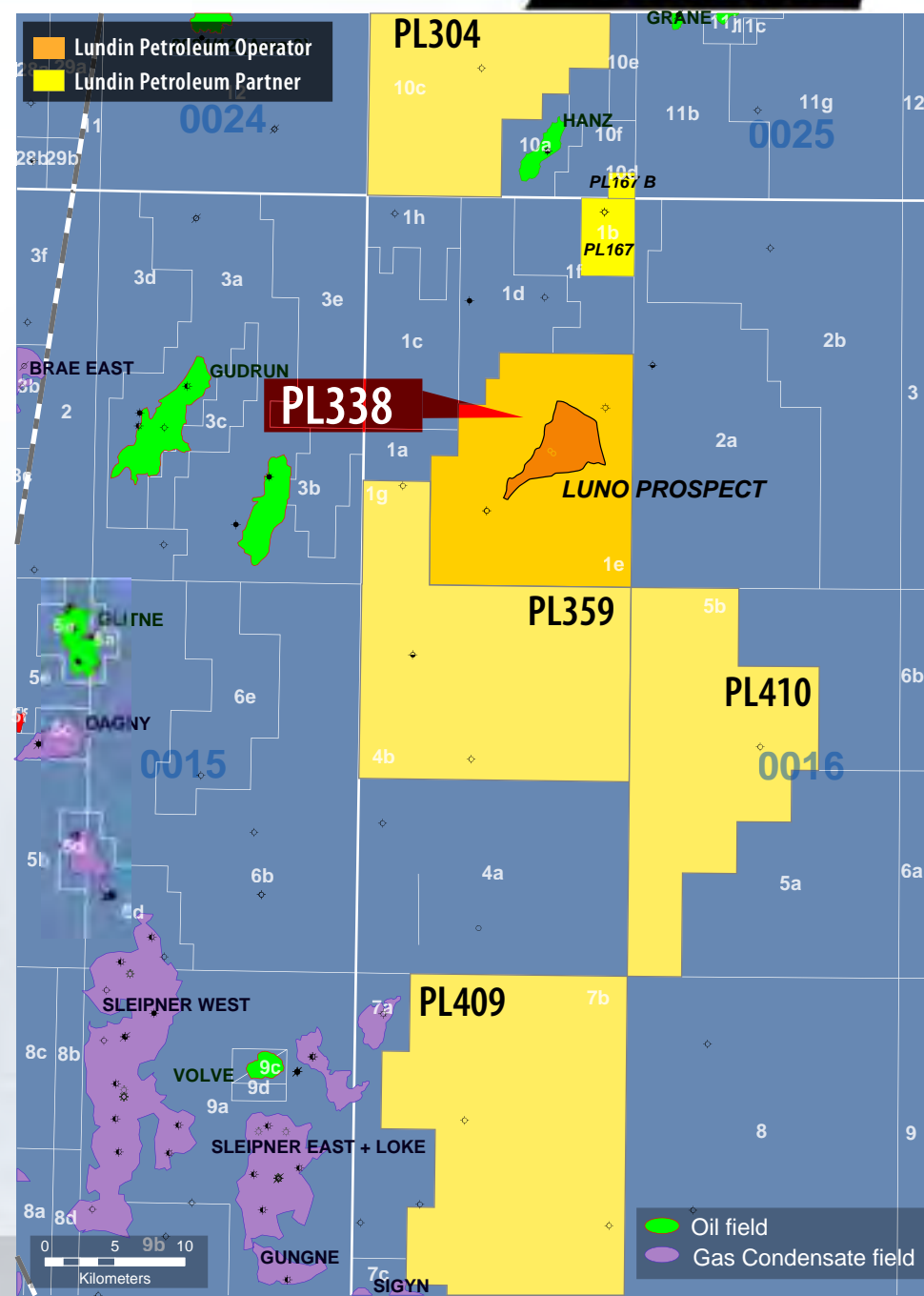
- ➔ Ongoing development studies

Luno Discovery - PL338



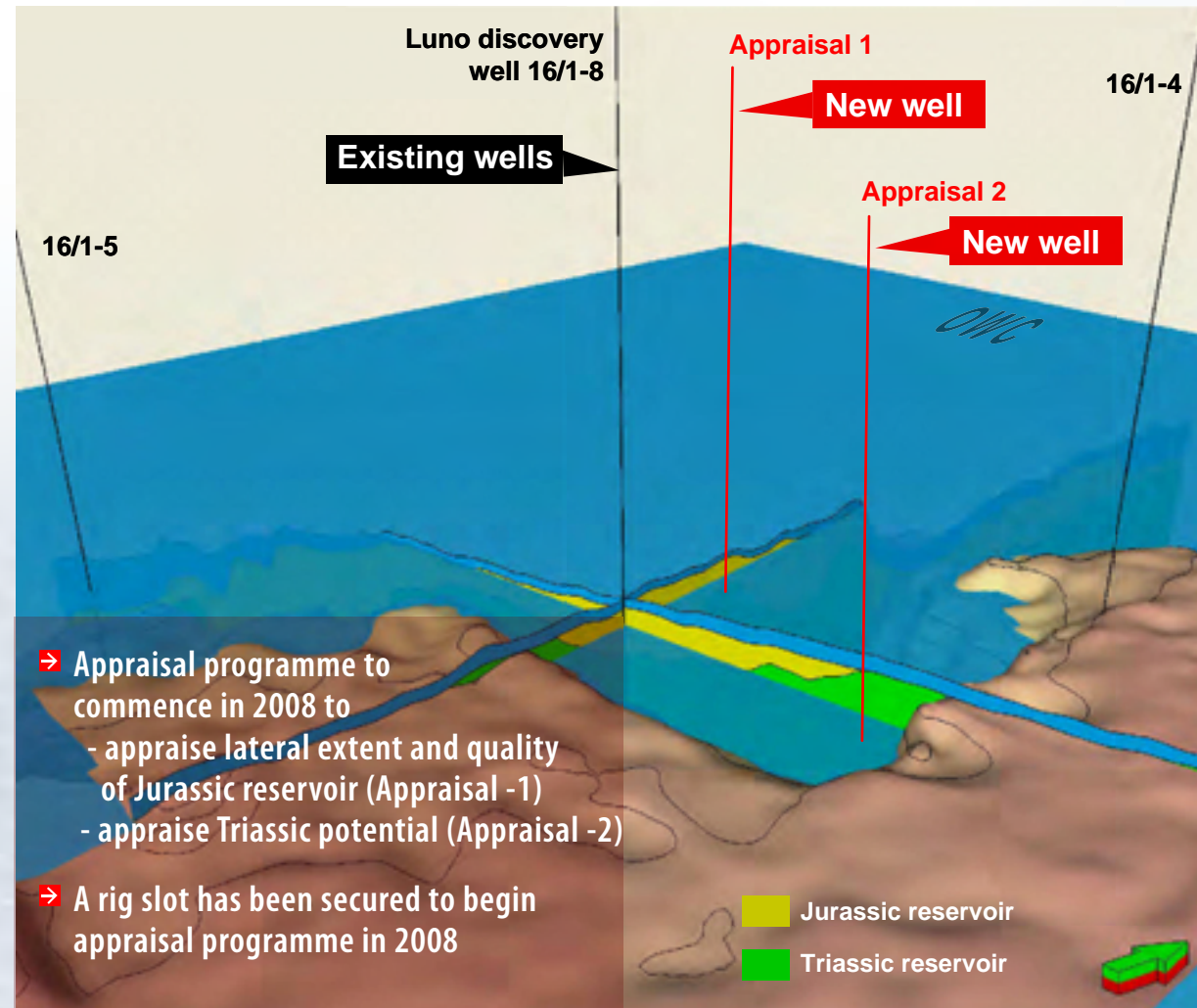
- ➔ **Discovered in 2007**
- ➔ **Lundin Petroleum interest: 50% (Operator)**
 - ➔ **Revus 30%, RWE 20%**
- ➔ **Discovery 16/1-8**
 - ➔ Light oil in Jurassic reservoir
 - ➔ Upside in Triassic
 - ➔ Largest discovery in Norwegian North Sea in the last decade
 - ➔ New play concept proven
- ➔ **Contingent Gross Resources**

Discovery	MMBOE
Luno Jurassic (mean)	133
Luno Jurassic upside	57
Luno Triassic upside	?



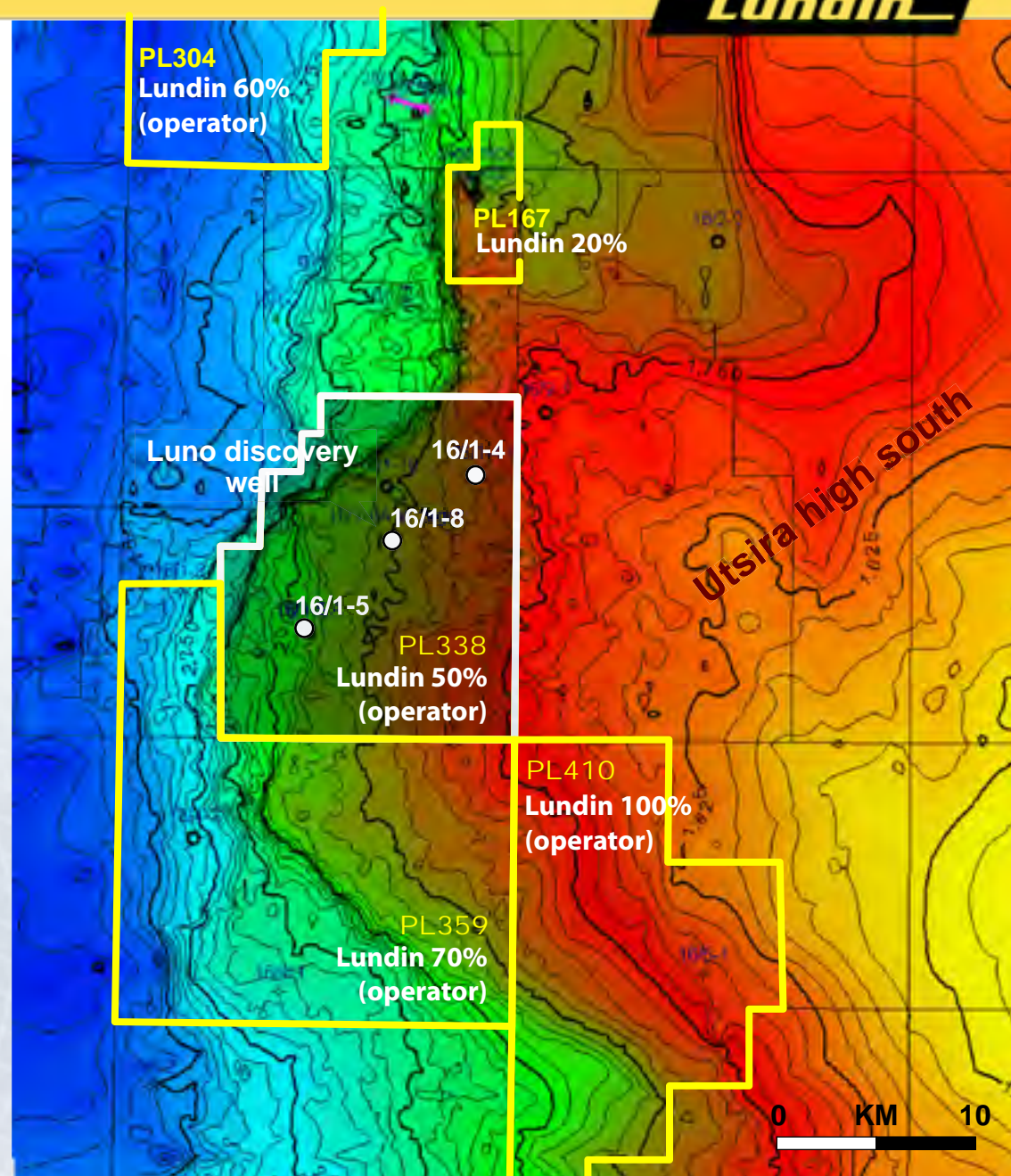
➔ Forward Plan

- ➔ Drill and test delineation well 16/1-10 Q2/Q3 2008
- ➔ Drill second delineation well 16/1-11 and test 16/1-8 in 2008/9
- ➔ Decide on commerciality end 2008
- ➔ Initiate a Plan for Development and Operation in 2009



Norway - Luno Regional

- ➔ Applied for and awarded additional acreage in area on the assumption that the new Luno play concept worked

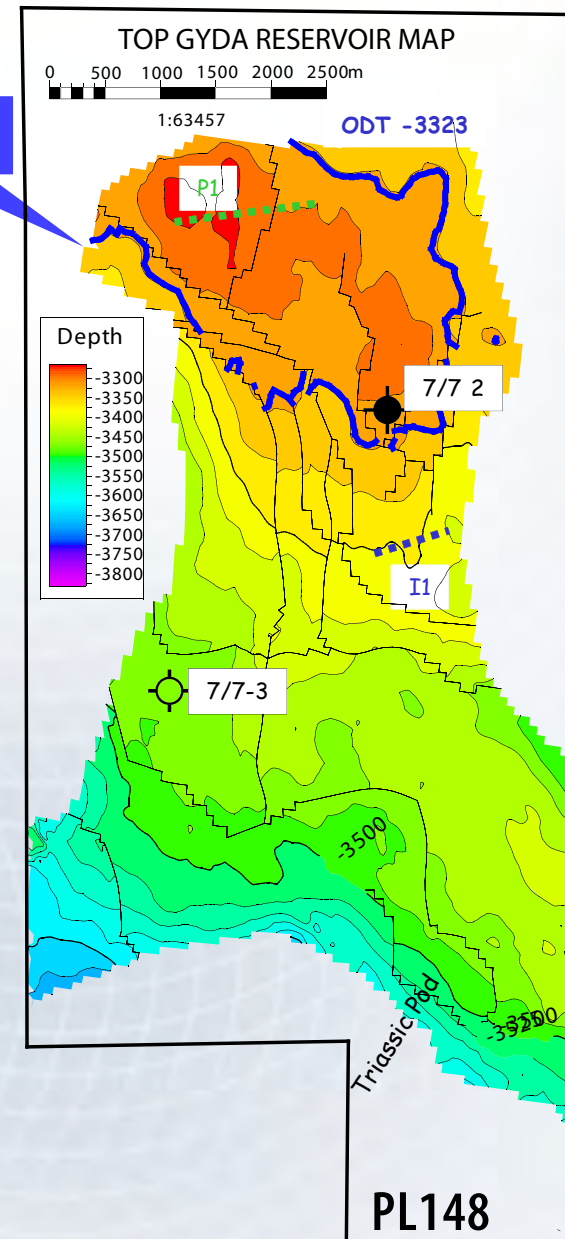


Southern North Sea - PL148 - Nemo



- ➔ 7/7-2 Statoil 1992, oil down to
 - ➔ DST 5000 bbl/d, 36 API,
 - ➔ Pressure 626 bar @3310 m SS
- ➔ 7/7-3 Statoil 1993, only shows (water up to)
- ➔ Contingent gross resources 20.6 MMboe with additional upside
- ➔ Upside volumes 12.4 MMboe
- ➔ Planned appraisal well position to prove up significant upside: OWC, reservoir thickness/quality
- ➔ Mærsk Giant rig commenced drilling on 15th December 2007

Nemo Discovery



Southern North Sea - PL006C



➔ **Lundin Petroleum interest: 75% (Operator)**

➔ **Noreco 25%**

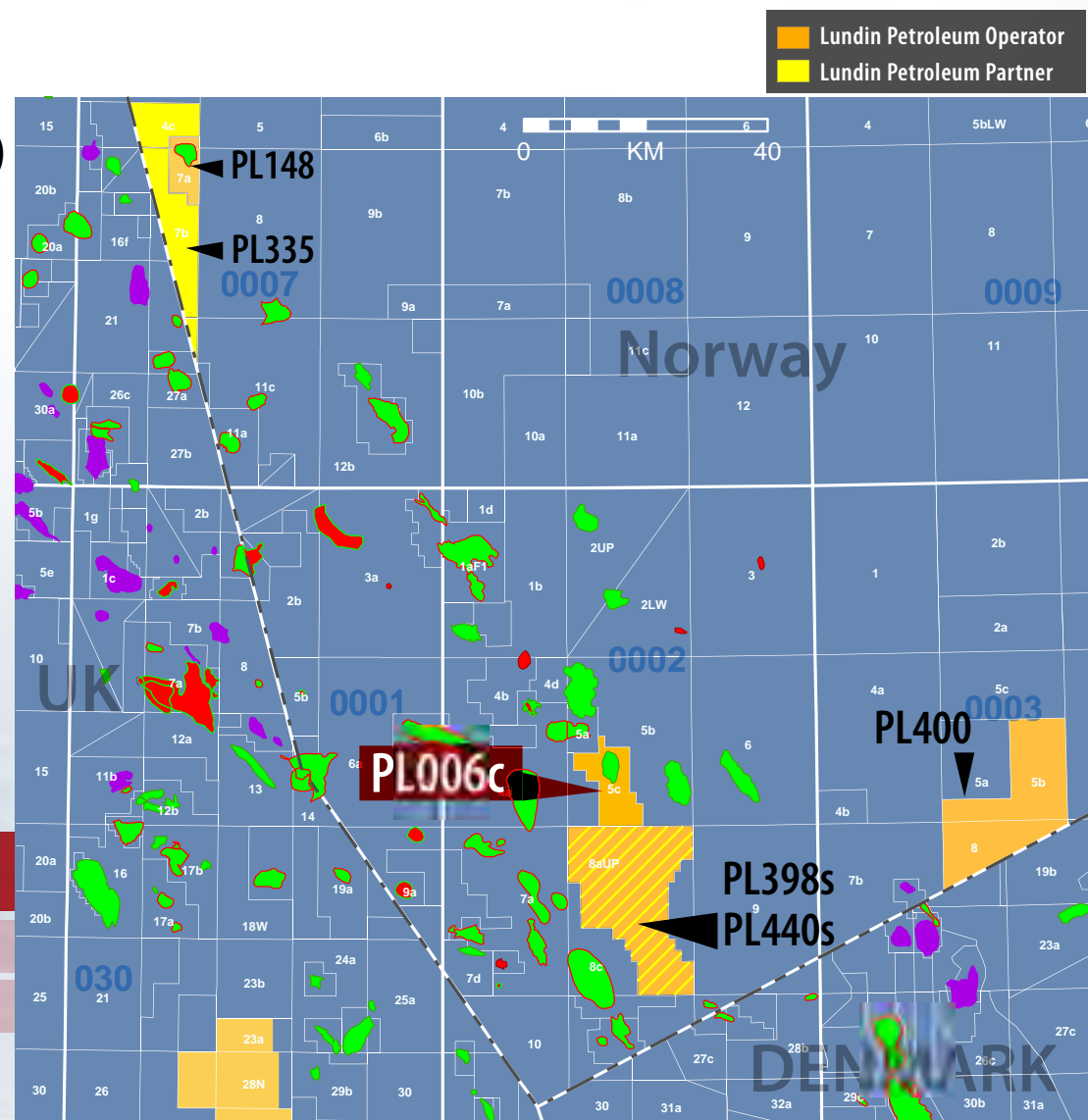
➔ **Info**

➔ **Discovery well 2/5-3 (1972) found light oil in two formations**

➔ **Each formation tested rates in excess of 4,300 bbl/d**

➔ **Contingent Gross Resources**

Discovery	MMBOE
SE Tor	22.5
SE Tor additional upside	5.6



Southern North Sea - PL006C - SE Tor



➔ Forward Plan

- ➔ Possible tie in points for South East Tor are the Tor field, the Ekofisk field (and the Valhall field)
- ➔ Licence plan to drill well with side track (exploration and appraisal targets) in order to prove most likely reserves and potential upside
- ➔ Contract with Mærsk Gallant
- ➔ Expected start drilling: December 2008

