

NCS

# Maximising value from th

Torstein Hole

Classification: Internal 2011-05-08

### Innovation Subsea technology - enabler for growth



2011 Åsgard Subsea gas compression



2006 **Kristin** High pressure,



2007 Tordis Subsea water removal & injection, oil & gas boosting

2007 Ormen Lange /

Snøhvit Long range subsea to shore in deep / "arctic"



**Tyrihans** Subsea raw seawater injection



1986 Gullfaks First subsea short oil wellstream transfer

1999 Åsgard Complex subsea development; advanced flowline concepts

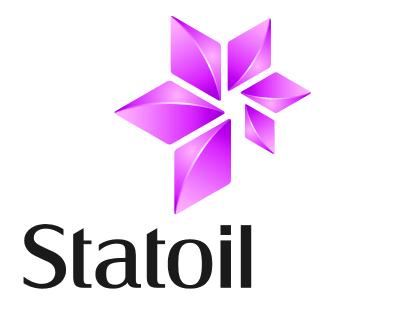
high temperature

\*beslutningsdato



Classification: Internal 2011-05-08

Congratulations, Petoro!





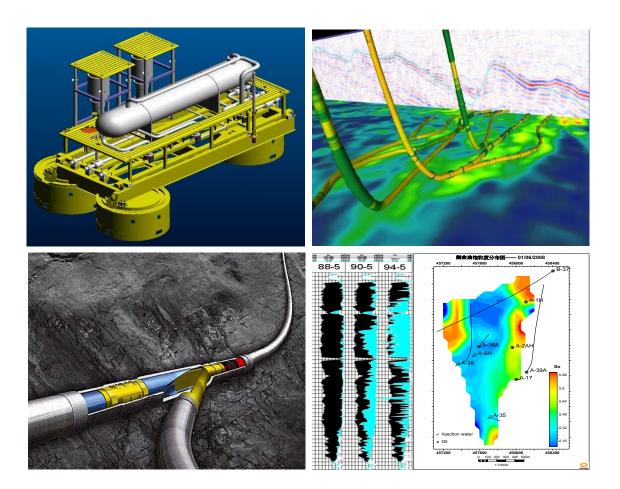


Classification: Internal 2011-05-08

#### Increased recovery

- examples of ongoing technology development

- Compression
- Permanent 4D seismic
- Drilling
- Well interventions
- Low salinity pilot at Heidrun
- Flow diversion pilots at Heidrun, Snorre and Gullfaks





#### Category A and B - Increased recovery from subsea wells



Ambition: Increase subsea recovery



**Category A** 



**Category B** 



#### Fast track project development

- Earlier production reduced costs
  - 50% reduced development time and 30% reduced costs for sub sea installations
- 5 projects in production next 2 years
- New production from ongoing projects ~70.000 boe/d i 2014

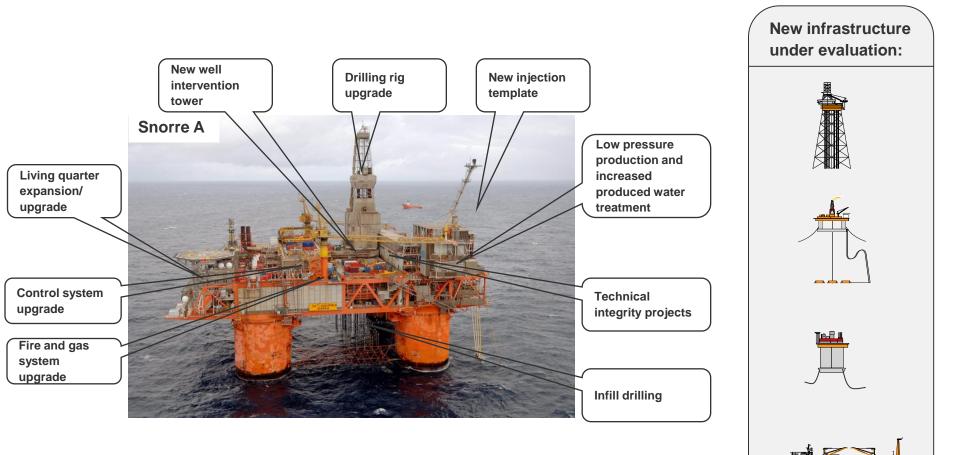
Fast track projects	
Smørbukk NØ (2010)	Katla (2011)
Visund Sør (2011)	Visund Nord (2011)
Vigdis NØ (2011)	Vilje Sør (2011)
Hyme (Gygrid) (2011)	Gamma/Harepus (2012)
Fossekall/Dompap (2011)	Snorre B Template (2012)





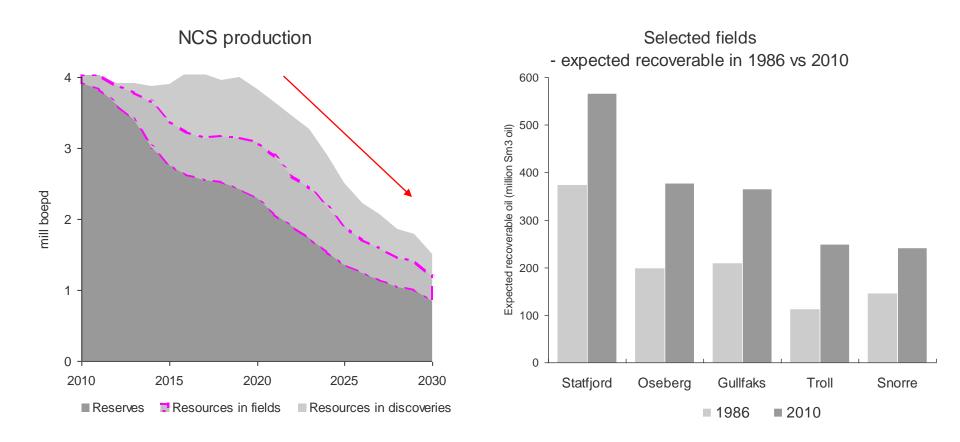
#### Developing and making Snorre robust in a 2040 perspective

- executed and planned projects for improved HSE and increased recovery





Increased recovery is important, but not sufficient



#### Source: NPD



## Thank you

Maximising value from the NCS

Torstein Hole SVP DPN www.statoil.com

