



Building a Market for Hydrogen

CIEP/NOPEGA Gas Day, The Hague

Classification: Open

7 september 2017

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Forward-looking statements

This report contains certain forward-looking statements that involve risks and uncertainties. In some cases, we use words such as "ambition", "continue", "could", "estimate", "expect", "focus", "likely", "may", "outlook", "plan", "strategy", "will", "guidance" and similar expressions to identify forward-looking statements. All statements other than statements of historical fact, including, among others, statements regarding plans and expectations with respect to market outlook and future economic projections and assumptions; Statoil's focus on capital discipline; expected annual organic production through 2017; projections and future impact related to efficiency programmes; capital expenditure and exploration guidance for 2016; production guidance; Statoil's value over volume strategy; Statoil's plans with regard to its acquisition of 66% operated interest in the BM-S-8 offshore license in the Santos basin; Statoil's expected report on helicopter safety on the Norwegian continental shelf; organic capital expenditure for 2016; Statoil's intention to mature its portfolio; exploration and development activities, plans and expectations, including estimates regarding exploration activity levels; projected unit of production cost; equity production; planned maintenance and the effects thereof; impact of PSA effects; risks related to Statoil's production guidance; accounting decisions and policy judgments and the impact thereof; expected dividend payments, the scrip dividend programme and the timing thereof; estimated provisions and liabilities; the projected impact or timing of administrative or governmental rules, standards, decisions, standards or laws, including with respect to the deviation notice issued by the Norwegian tax authorities and future impact of legal proceedings are forward-looking statements. You should not place undue reliance on these forward-looking statements. Our actual results could differ materially from those anticipated in the forward-looking statements for many reasons.

These forward-looking statements reflect current views about future events and are, by their nature, subject to significant risks and uncertainties because they relate to events and depend on circumstances that will occur in the future. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements, including levels of industry product supply, demand and pricing; price and availability of alternative fuels; currency exchange rate and interest rate fluctuations; the political and economic policies of Norway and other oil-producing countries; EU developments; general economic conditions; political and social stability and economic growth in relevant areas of the world; global political events and actions, including war, political hostilities and terrorism; economic sanctions, security breaches; changes or uncertainty in or non-compliance with laws and governmental regulations; the timing of bringing new fields on stream; an inability to exploit growth or investment opportunities; material differences from reserves estimates; unsuccessful drilling; an inability to find and develop reserves; ineffectiveness of crisis management systems;

adverse changes in tax regimes; the development and use of new technology; geological or technical difficulties; operational problems; operator error; inadequate insurance coverage; the lack of necessary transportation infrastructure when a field is in a remote location and other transportation problems; the actions of competitors; the actions of field partners; the actions of governments (including the Norwegian state as majority shareholder); counterparty defaults; natural disasters and adverse weather conditions, climate change, and other changes to business conditions; an inability to attract and retain personnel; relevant governmental approvals; industrial actions by workers and other factors discussed elsewhere in this report. Additional information, including information on factors that may affect Statoil's business, is contained in Statoil's Annual Report on Form 20-F for the year ended December 31, 2015, filed with the U.S. Securities and Exchange Commission, which can be found on Statoil's website at www.statoil.com.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot assure you that our future results, level of activity, performance or achievements will meet these expectations. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. Unless we are required by law to update these statements, we will not necessarily update any of these statements after the date of this report, either to make them conform to actual results or changes in our expectations.



Statoil New Energy Solutions



Build a **profitable renewables business**

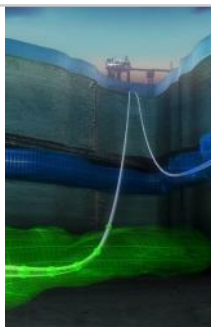


Develop **new lower-carbon business opportunities** for Statoil's core products

CCS proven technology

Playing to Statoil's strengths

- Leveraging our oil & gas competence and experience



Potential market






- CCS to deliver 13% of CO2 emission cuts by 2050 in IEA 2DS
- Commercial models needed



COP21 drives momentum on climate action

Tenders for concept studies

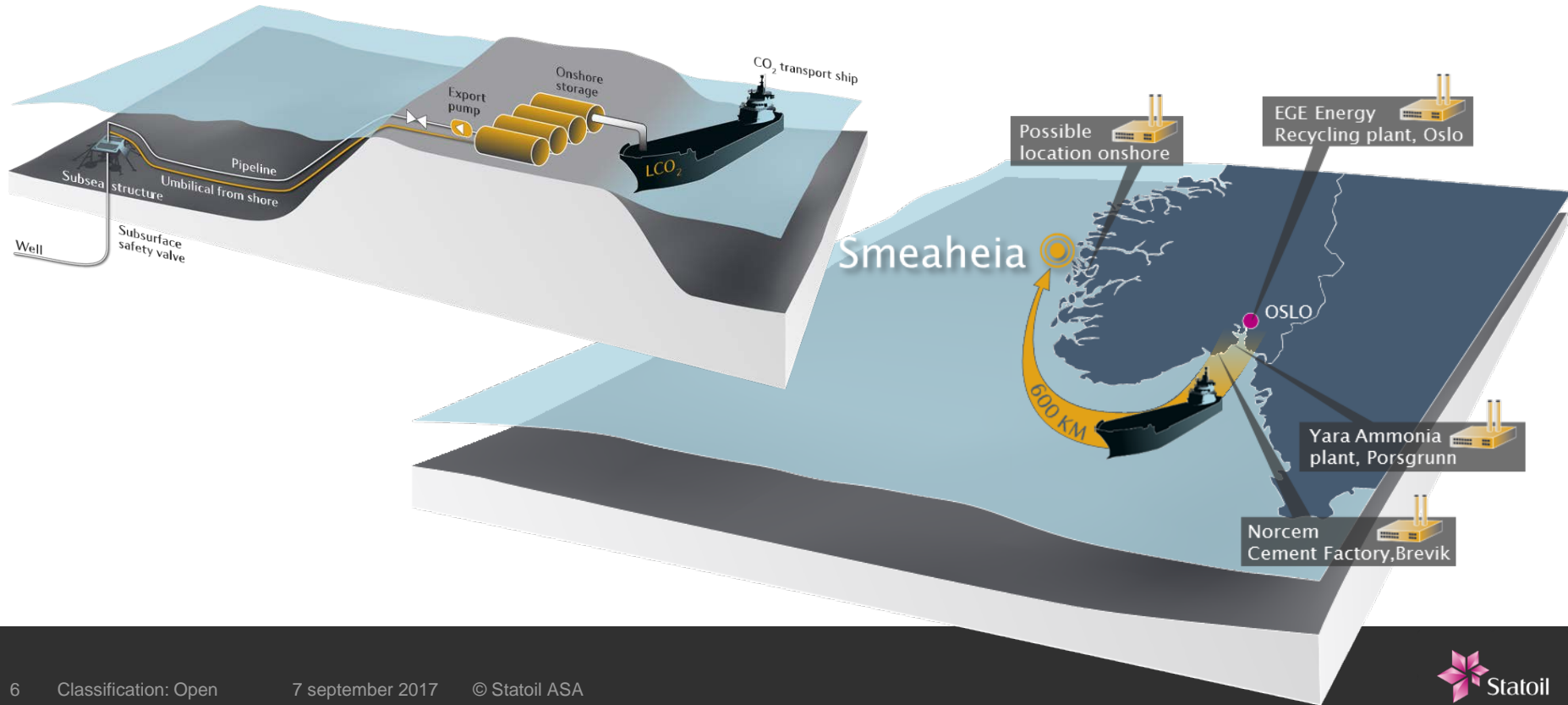
New

Sleipner	In Salah	Snøhvit LNG	TCM	New NCS CO2 storage
				
In operation	Injection stopped*	In operation	CO2 capture	Feasibility studies
1 MT/yr.	~1 MT/yr.	0.7 MT/yr.	0.1 MT/yr.	
1996-	2004-11	2008-	2012-	2016-

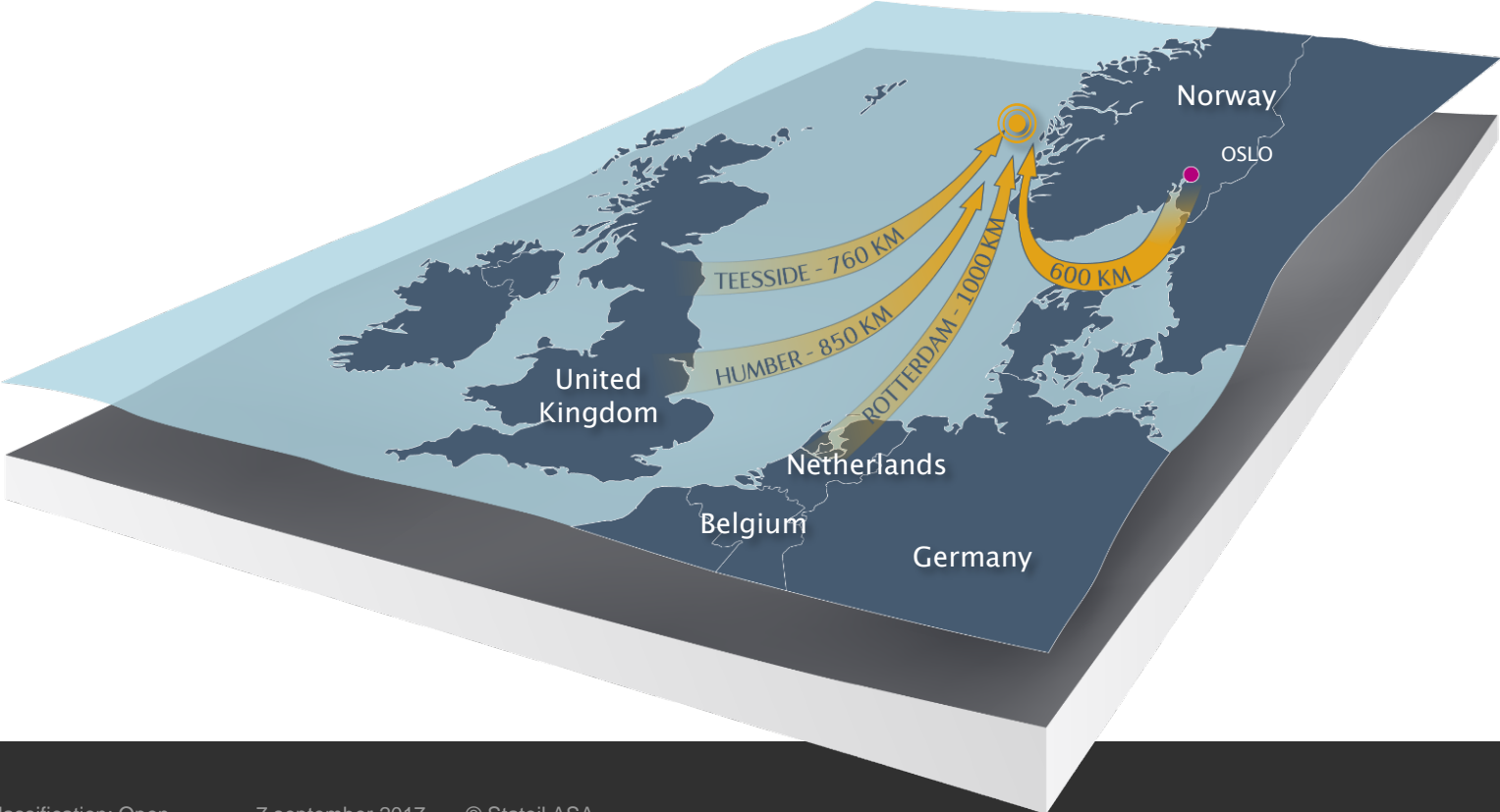


* Due to preliminary conclusions regarding reservoir properties – mainly related to capacity

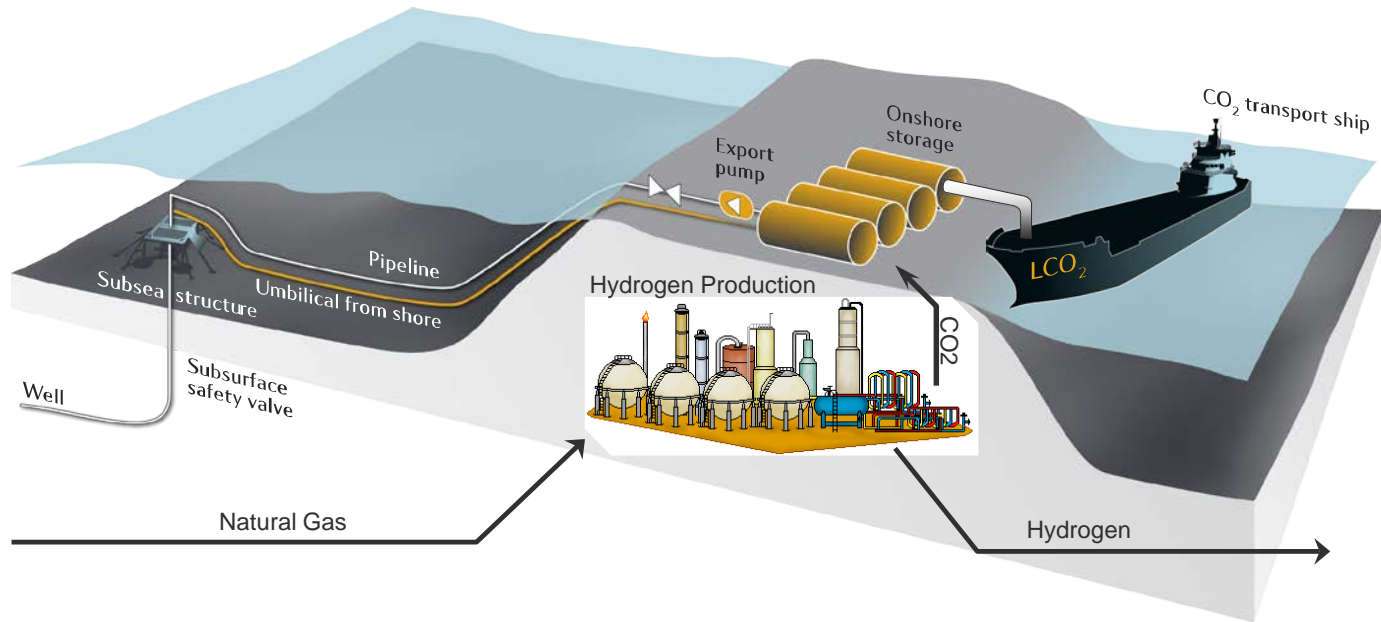
Norwegian CO2 storage



Storage on NCS – potential for Europe



Norwegian CO2 storage w/H2 production



Statoil's Hydrogen BD Portfolio

H2 to Power Generation



H2 to Heat



H2 to Transport



- **Focus on reforming of natural gas with CCS**
- **Focus on large scale production units supplying hydrogen to markets currently consuming natural gas, like power generation sector, industry and the heat segment**
- **Evaluate the potential hydrogen plants both located close to the customers and close to the planned Norwegian CCS infrastructure**

Cruiseships in fjord



Key messages

- **Big scale hydrogen from gas with CCS is technically feasible**
- **Hydrogen provides significant contribution to Dutch climate ambitions**
- **Political willingness an essential enabler**
- **Collaboration across industries and governments needed**

Statoil. The Power of Possible

Building a market for hydrogen

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