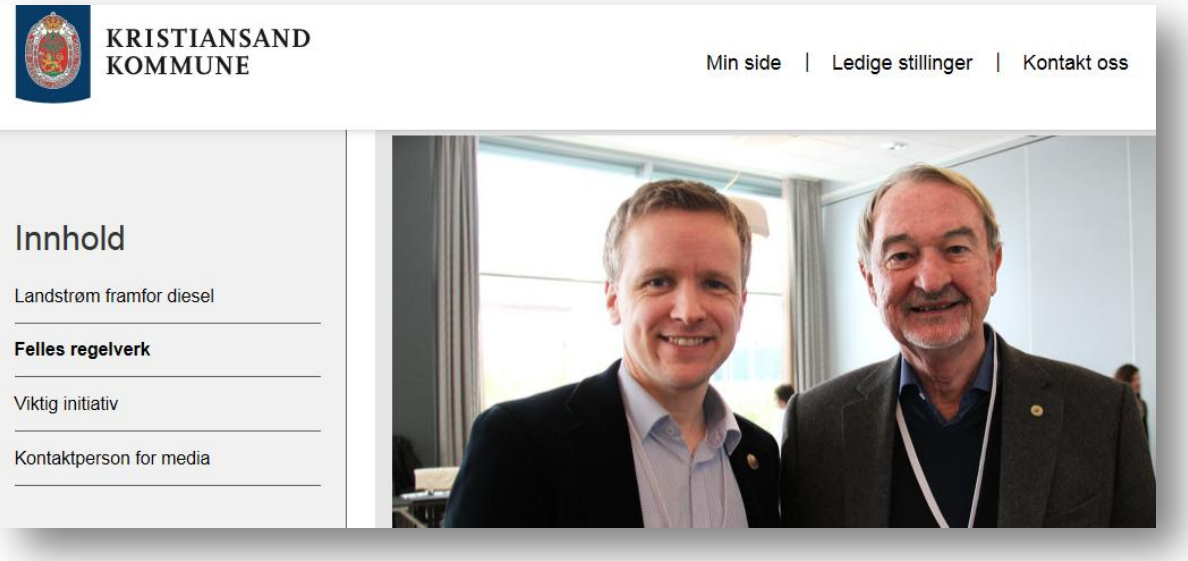
MAYOR OF
KRISTIANSAND

Onshore Power Supply and the Cruise Industry

Vice Mayor of Kristiansand
mr. Jørgen H. Kristiansen

Board meeting in Kristiansand in February 2017



Statement:

- The Executive Board of Union of Baltic Cities underlines the importance of green energy and reduced emissions within the cruise industry.
- The Executive Board of Union of Baltic Cities recommends the development of international regulations and framework concerning the implementation of shore power to cruise ships within the Baltic Sea, English Channel, North Sea and the Norwegian Sea

One container ship (the largest one) emits the same amount of SOx and NOx as 50 million cars

Onshore Power Supply – Cruise Industry

- Significant reductions in Co2-emissions.
  - One cruise ship equals energy use of 1500-2000 standard apartments
- Lack of international regulations and standards
- The industry must be “pushed” to make the necessary investments on the vessels
  - Stronger together. Ports and Regions must join forces.
  - North Sea-region and the Baltics as pioneers?
  - SECA as an example to follow?

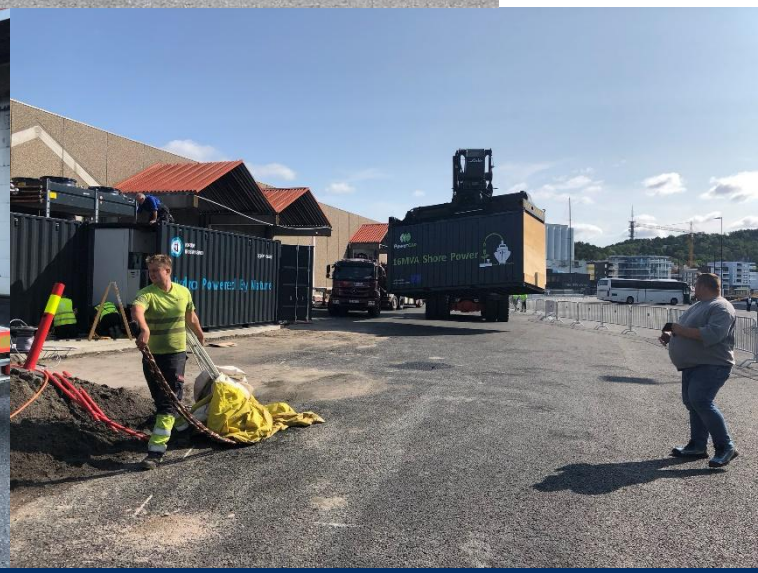
Europe`s largest shore power system

Total investment: 4 million Euro

Horizon 2020

Port of Kristiansand, PowerCon, Agder Energi and OneCo

Facility arrives Kristiansand



Shore Power - Cruise

Europe`s largest shore power facility

- **Technical specification**
- **11kV or 6,6kV high voltage effect - 60Hz to ship**
- **International standard IEC 80005-1**
- **Facility Integrated in standard 20¨ containers – Mobile and movable**
- **Build and planned for connection of container ships in the future**

Shore Power – Ferry terminal

Opened 2014

Reduction of Co2-emissions: 2300 ton

Reduction of NoX-emission: 34 ton

Reduction of SoX-emission: 1-2 ton

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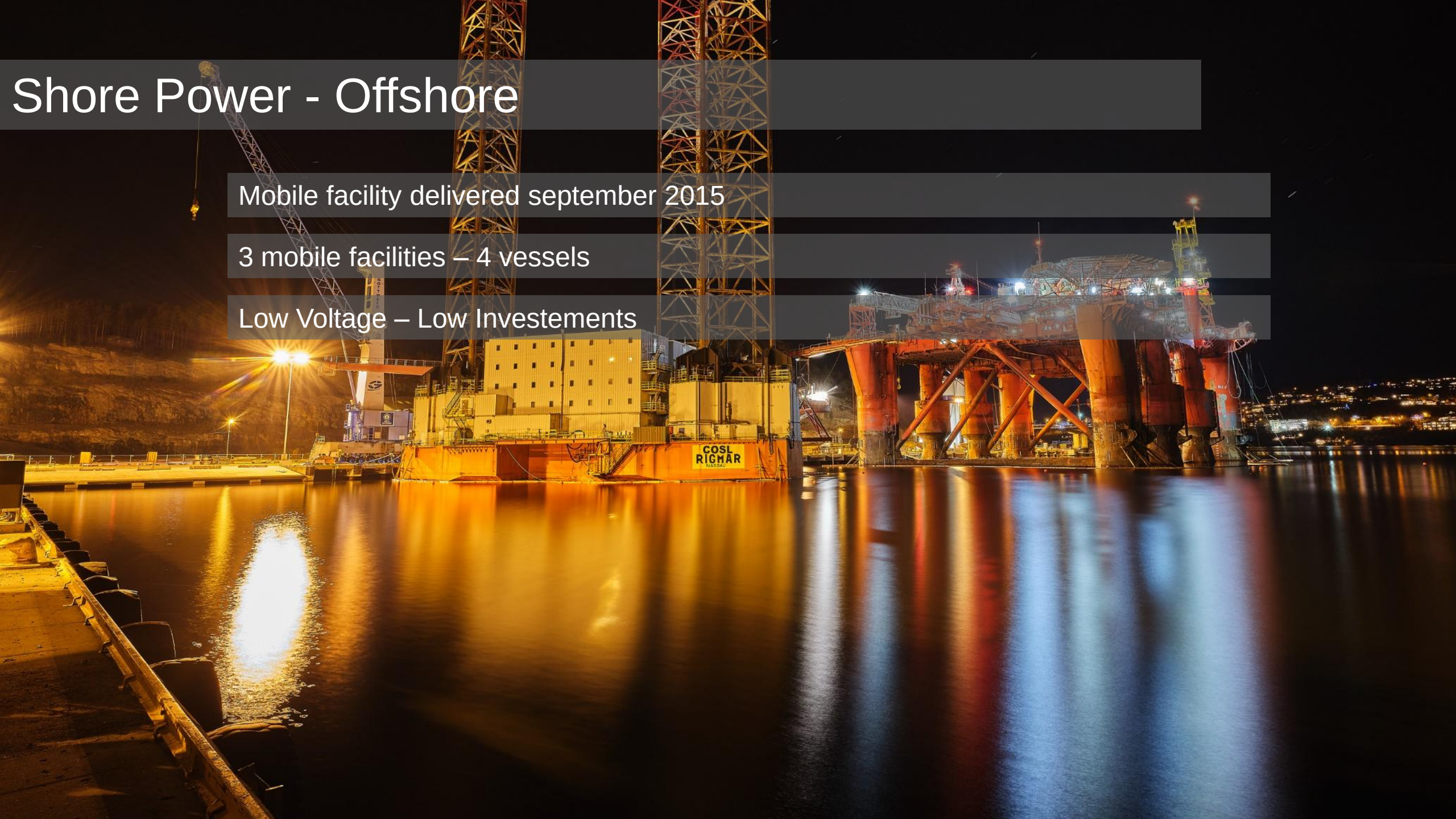
Shore Power - Offshore

Mobile facility delivered september 2015

3 mobile facilities – 4 vessels

Low Voltage – Low Investements



The cruise ship «Braemar» at port in Kirkenes where there are no shore side electricity for vessels this size. Photo: Thomas Nilsen

Ports without shore-power will be losers in future cruise ship market

Norway aims at being in the forefront in Europe of providing shore electricity to cut emission, but that might be a challenge at ports in the high north where power line capacity is limited.

Read in Russian | Читать по-русски

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Port of Kristiansand