LNG Powered port equipment

...During this half day seminar we will be looking into actions supporting the continuous LNG development in the Baltic Sea Region by exploring innovations to open up new markets and adding on new end-users to the existing infrastructure...
One in four container movements around the globe is handled by a Kalmar solution.
Kalmar in brief

- Kalmar is the market leader in container handling equipment, port automation and services.
- One in four container movements around the globe being handled by a Kalmar solution.
- Our customers include port and terminal operators, distribution centres and heavy industry.
- Kalmar’s sales totaled EUR 1.5 billion in 2014 and we employ 5,200 people globally.
- Kalmar is part of Cargotec. Cargotec’s sales in 2014 were EUR 3.4 billion and it had approximately 11,000 employees.
The market’s widest product portfolio
With a global reach
Operations in more than 130 countries
Reachstacker applications

- Container handling
- Barge handling
- Intermodal
- Industrial

Customer interest:
Move cargo. Cost efficient and reliable

We deliver:
Cost efficient products both at date of purchase, and during operation
Forklift applications

- Wood handling
- Ports and terminals
- Steel handling
- Industrial handling
Terminal tractor applications

Distribution

Ports and terminals

Steel handling

Industrial handling
Kalmar and green technology
LNG powered port equipment
Why LNG?

- **Reduce the exhaust emissions**
  => Support ports and terminals with their green visions

- **Reduce operation costs**
  => Support ports and terminals operating profits

- **More and more ports is having LNG available**
  => Gives an opportunity to run other terminal products on LNG
  => Enables access to cheap fuel

- **The LNG opportunity is already being explored**
  - China has come some way – 1 port run some port equipment on LNG
  - Europe has started exploration – Green Cranes (Spain, Italy, Slovenia)

- **Technology exist**
  - Serial production ongoing of TT’s
  - Protos built for RST’s
  - Customers around the world rebuild ECH’s to LNG
Technology is available for TTs. and China is already there..
Technology is available for TTs. and China is already there..
Dual fuel – Diesel/LNG powered Reachstacker prototyped together with GreenCrane – Global Service

- Demonstrated for the public at the Port of Livorno, Italy, on 16 January 2014. The
Concerns reg LNG

- Infra structure for LNG
  - Does it exist?

- LNG original engines are limited
  - We need to start lobbying towards Volvo Penta, Cummins, MTU, etc