

Port of Göteborg AB



Göteborg the obvious and the green hub



Port support for sustainable solutions



- Shore-side electricity
- Vapor Recovery Unit
- Collaboration

Åsa Wilske

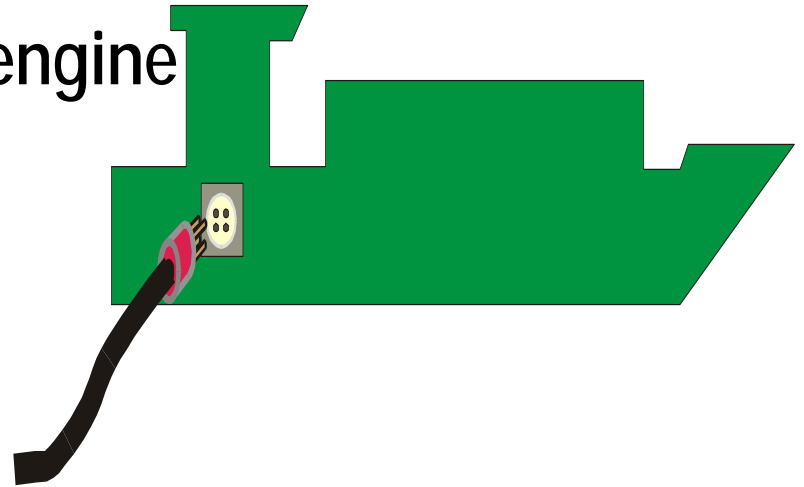
Environmental Manager

Port of Göteborg www.portgot.se

asa.wilske@portgot.se

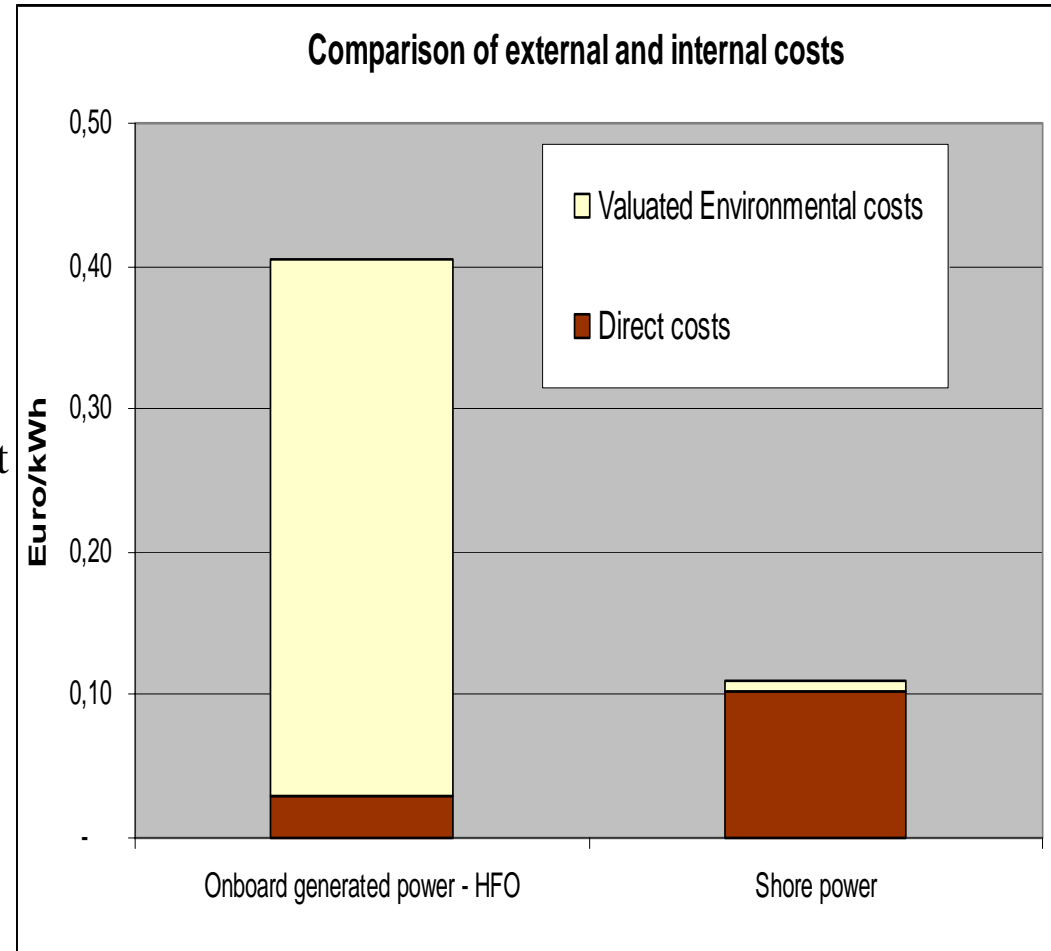
Shore-side electricity for ships

- Electrical power needed for all functions on board is supplied from land, no auxiliary engine is used during port stop
- The technique is used for
 1. Ferries and ro/ro vessels with regular calls to a given terminal
 2. Container ships (LA)
 3. Tankers (coming up soon in Long Beach)
- **In following ports**
Göteborg, Helsingborg, Houston, Los Angeles, New York/New Jersey, Oakland, Philadelphia, Piteå, Richmond (Virginia), Seattle, Stockholm, Tacoma, Vancouver, Zeebrugge...



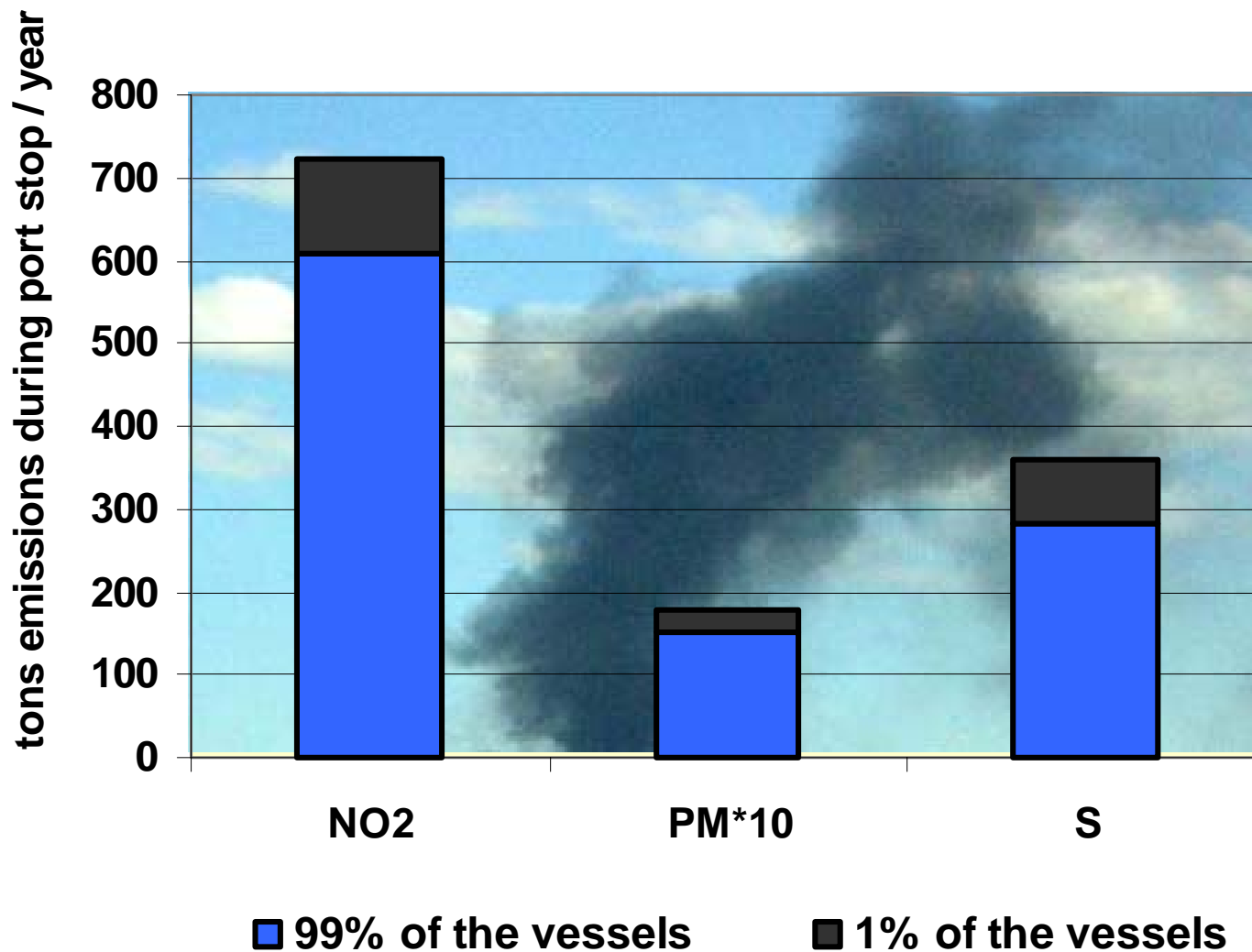
Environmental benefits/constrains

- Reduce air emissions (NO_x, SO₂, VOC, PM) with 94-97 % in the port often close to densely populated areas
http://europa.eu.int/comm/environment/air/pdf/task2_shoreside.pdf
- No noise
- Offer a fossil free alternative
- No benefit on the journey in between ports

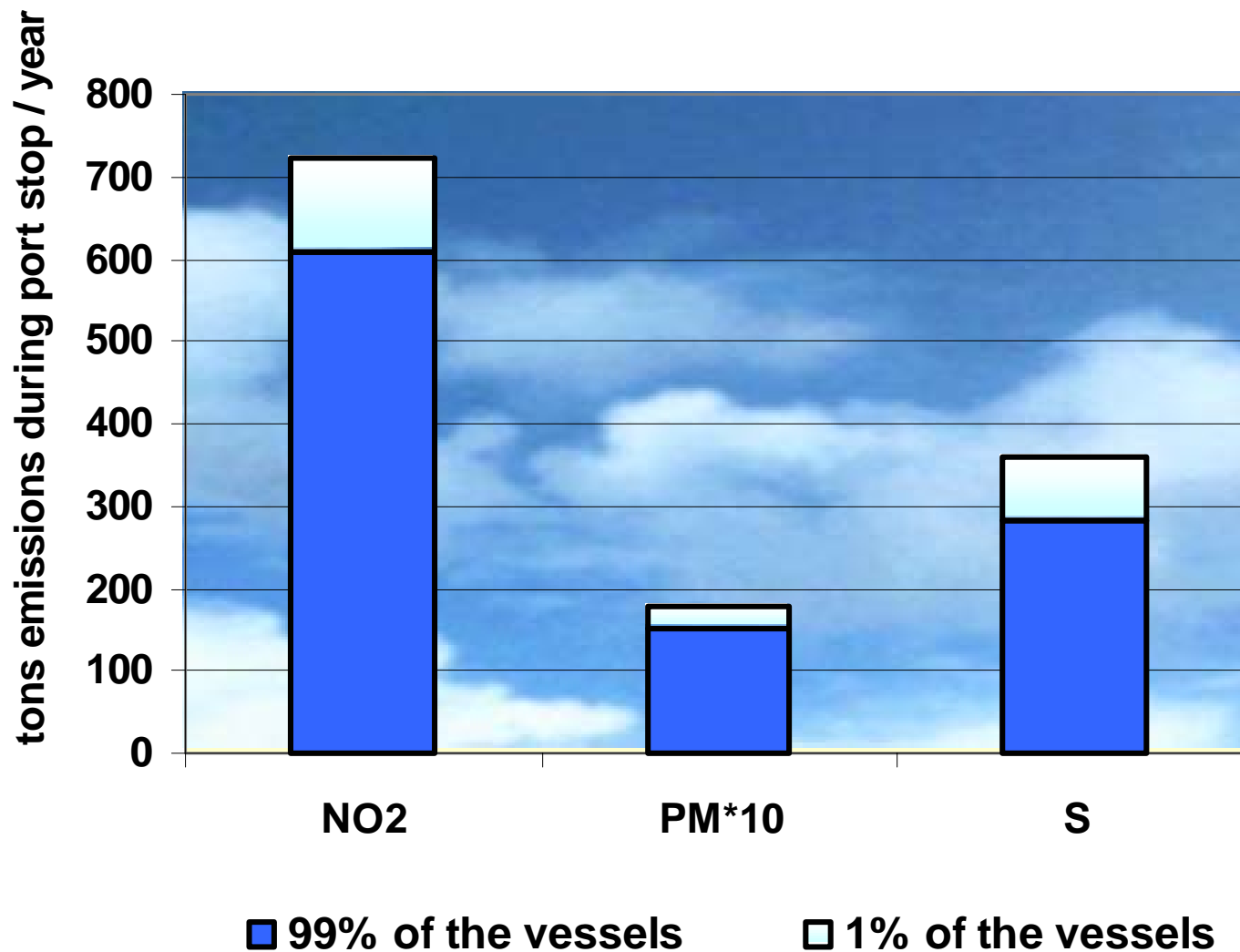




Vessels calling Port of Göteborg

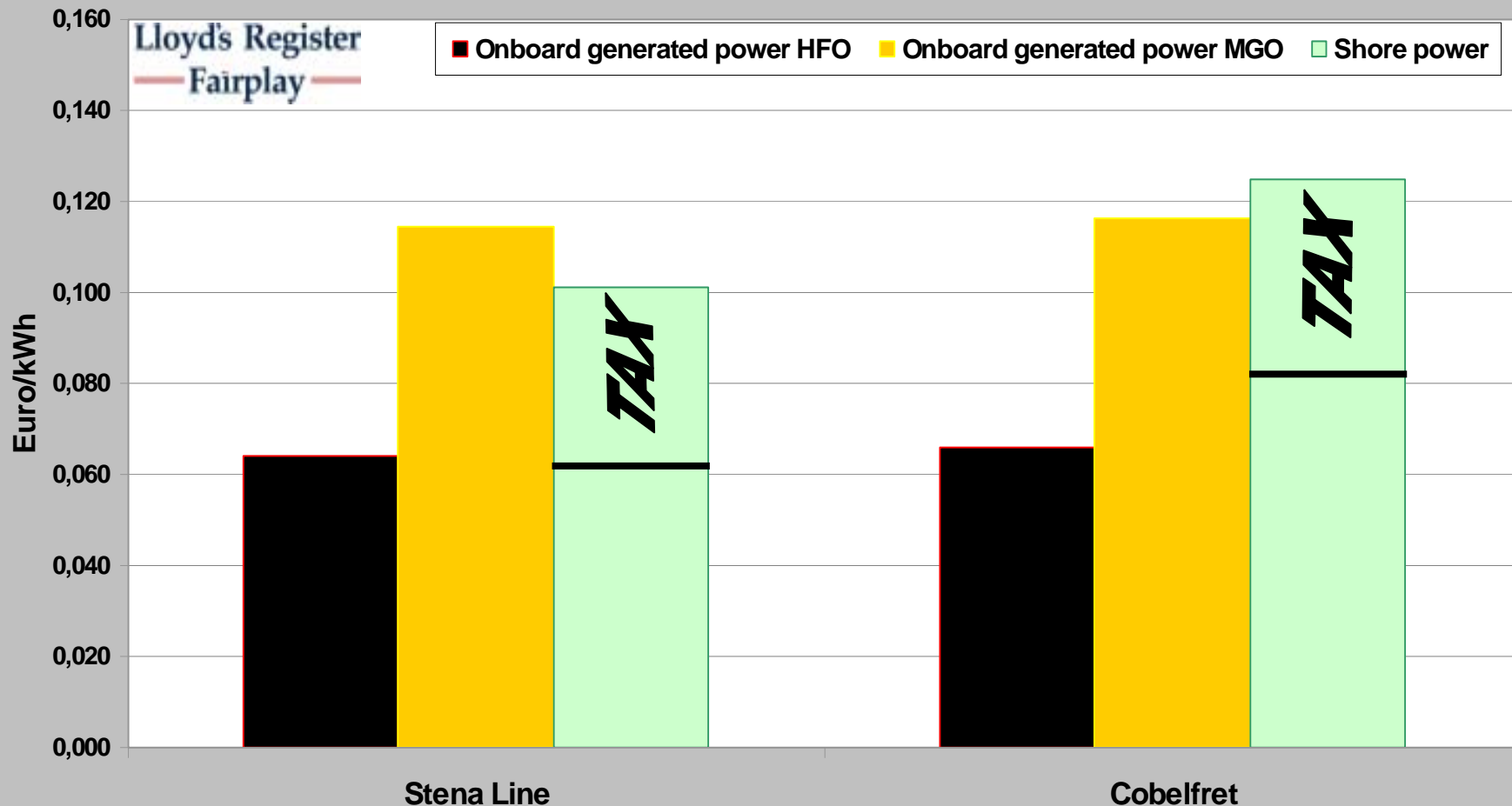


Vessels calling Port of Göteborg



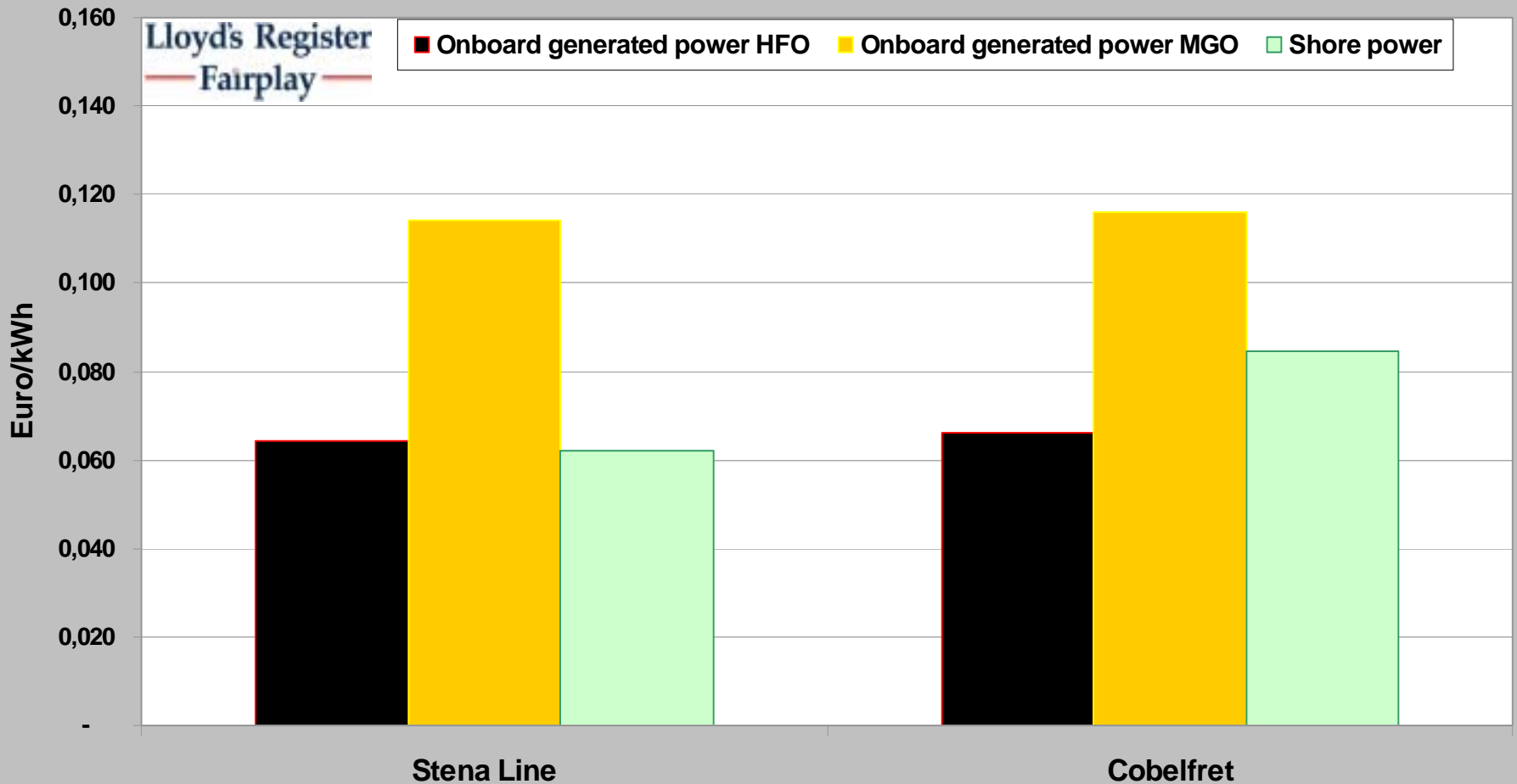
Cost for energy generation

Power generation cost 2006 **incl** energy taxes



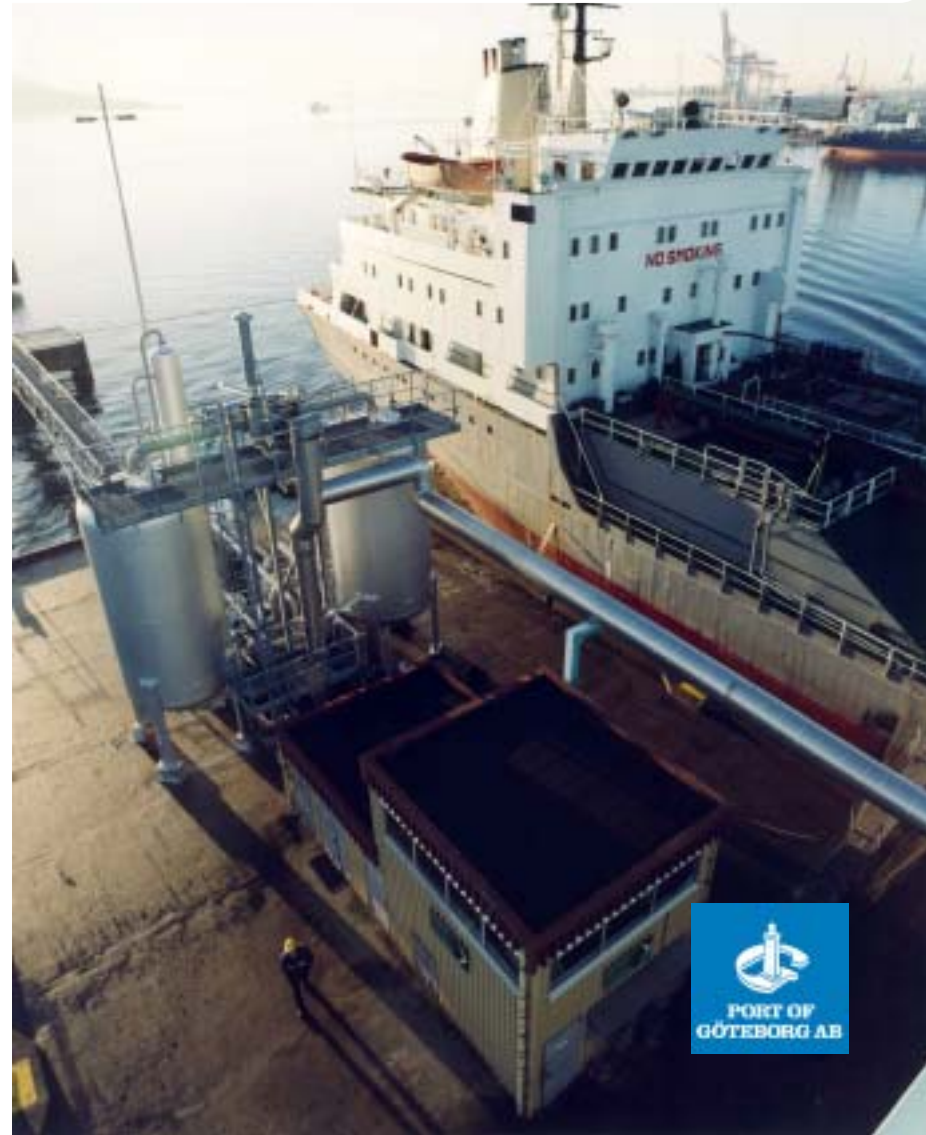
Cost for energy generation

Power generation cost 2006 **excl** energy taxes - Gothenburg



Vapour Recovery Unit

- A measure to reduce emissions (VOC) when loading gasoline with more than 90%
- VRU should be required in all EU-ports
- Success because of Collaboration!



Collaboration for sustainable solutions

