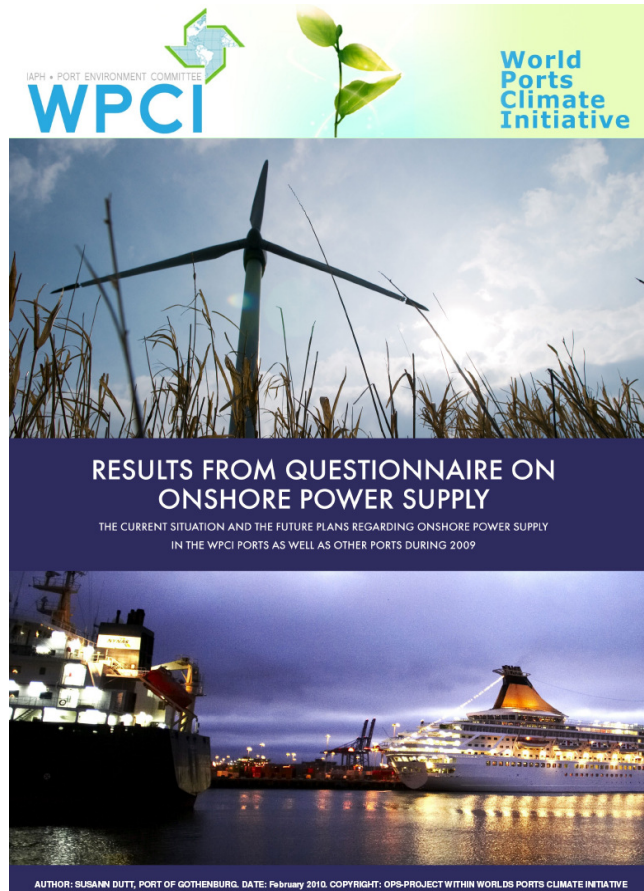


Results from Questionnaire on Onshore Power Supply, 2009



The current situation and future plans regarding Onshore Power Supply

Content of PPT-presentation:

Executive Summary

Introduction

Results

OPS = Onshore Power Supply

WPCI = World Ports Climate Initiative

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Executive summary

- The questionnaire is a part of the Onshore power supply (OPS) project within World Ports Climate Initiative, WPCI (www.wpci.nl)
- To take part of the full report see www.portgot.se (World Ports Climate Initiative or www.wpci.nl)

Executive summary

- The aim was to:
 - get an idea about the current status and future plans regarding OPS
 - give important input to the upcoming work within the OPS project
 - be reference information to use when evaluating the project
- 53 ports answered the questionnaire, Europe (41), North America (4), Asia (3), Australia/Oceania (3), Africa (2)
- 24 out of these 53 ports were WPCI members:
 - Europe (14), North America (4), Asia (3), Australia (3)

The result shows great interest in the OPS technology!

Executive summary – current status

- 17 ports provide OPS today, 7 high voltage, 13 low voltage, 3 both high & low voltage
- Main arguments for using the technology are:
 - Environmental benefits (94%)
 - Customers (70%)
 - Reputation/goodwill (59%)
- When indicating environmental benefits as an argument, nitrogen oxides (83%), carbon dioxide (81%) and sulphur (81%) are the most important

Executive summary – current status

- A majority (93%) do let private operators have to pay for the use of the OPS investment when the OPS infrastructure is in the port authority's control
- 38% of the responding ports have carried out a feasibility study for introducing/increasing the use of the OPS technology, 13% do have a feasibility study in progress
- The WPCI ports are showing even higher interest in the technology, 55% have already carried out a feasibility study and 23% do have a study in progress

Executive summary – future plans

- 85 % answer yes or maybe on the question if they plan to introduce/expand the technology within 5-10 years
- 96% of the WPCI ports are responding either yes or maybe on the same question
- Main arguments for introducing/expanding the technology:
 - Environmental benefits (85%)
 - Reputation/goodwill (63%)
 - Benefit for the society (48%)

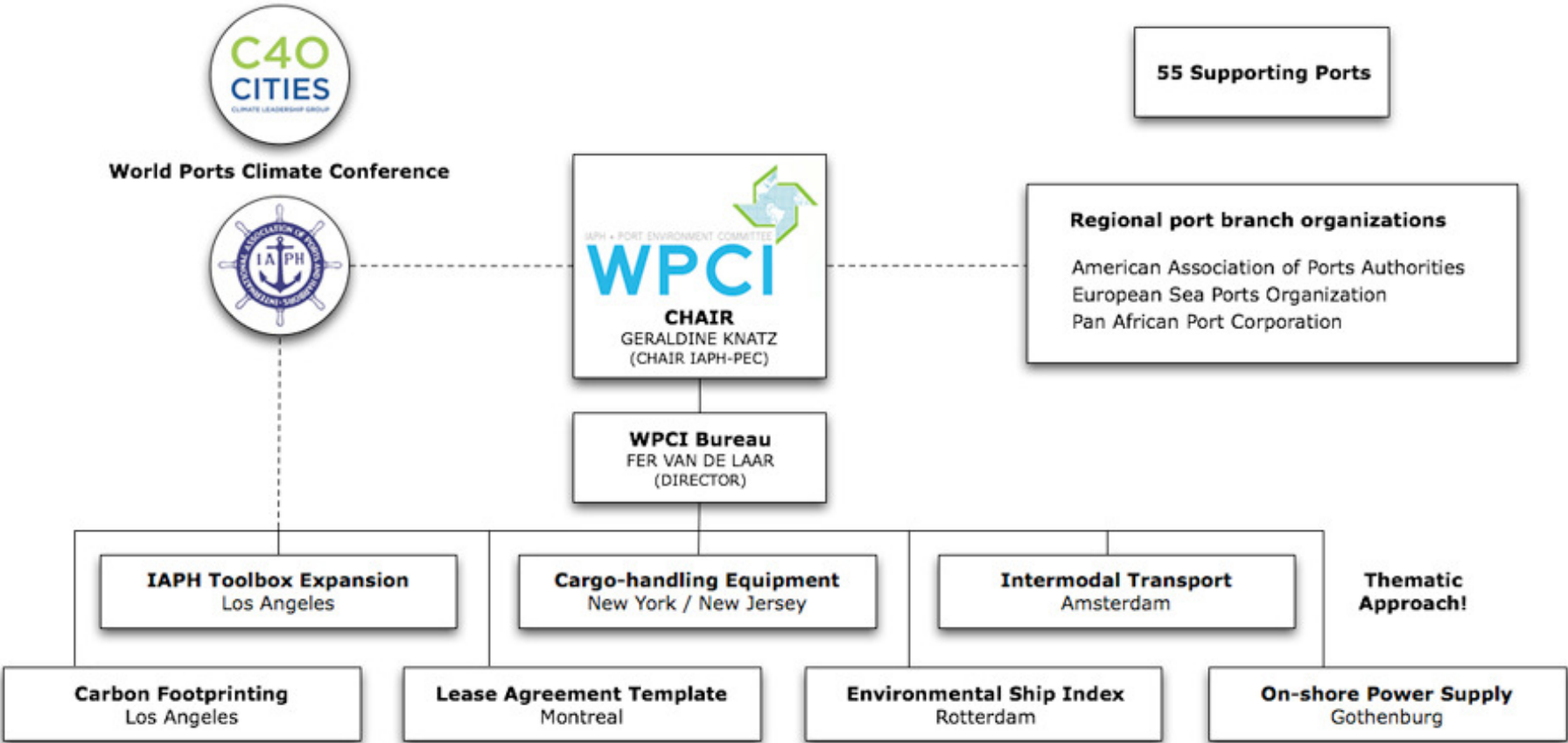
Executive summary – future plans

- A majority, 86%, will invest in OPS high voltage
- 18 ports are planning to introduce/expand OPS for Container, 14 for cruise, 21 for ro/ro and 16 ports for other kind of ships
- Main arguments for not introducing the technology are:
 - Other reasons not specified (100%)
 - No feasibility study carried out (88%)
 - Cost effectiveness is too low (75%)
 - Lack of enough power (75%)

Executive summary – future plans

- The WPCI ports seem to be more proactive in looking into other environmental measures besides OPS like environmental differentiated harbour dues, environmental ship index, exhaust scrubbers...
- About 80% of the corresponding ports would like to share experience with the OPS project
- All except one port would like to be informed about the progress within the WPCI Onshore Power Supply project
- The OPS project will set up a website with practical information, available from March 2010
- A similar questionnaire could be interesting to execute on shipping lines and terminal operators

World Ports Climate Initiative - Organisation



Introduction – Onshore Power Supply project

Overall goal –

Reduce local air pollutants, greenhouse gas emissions & noise by stimulating as many ports, terminal operators and shipping lines worldwide to implement the technology of OPS where practical and useful.

Detailed goal –

To stimulate the further use of Onshore Power Supply (OPS) by designing and building a web based application, which provides practical guidance on OPS, available for all ports. The application should also contain information for other stakeholders such as terminal operators and shipping lines.

Project leader: Susann Dutt, Port of Gothenburg, susann.dutt@portgot.se

Working group: Amsterdam, Antwerp, Gothenburg, Hamburg + IAPH

For more information about the project & WPCI see:

www.portgot.se, www.wpci.nl



Introduction – The questionnaire

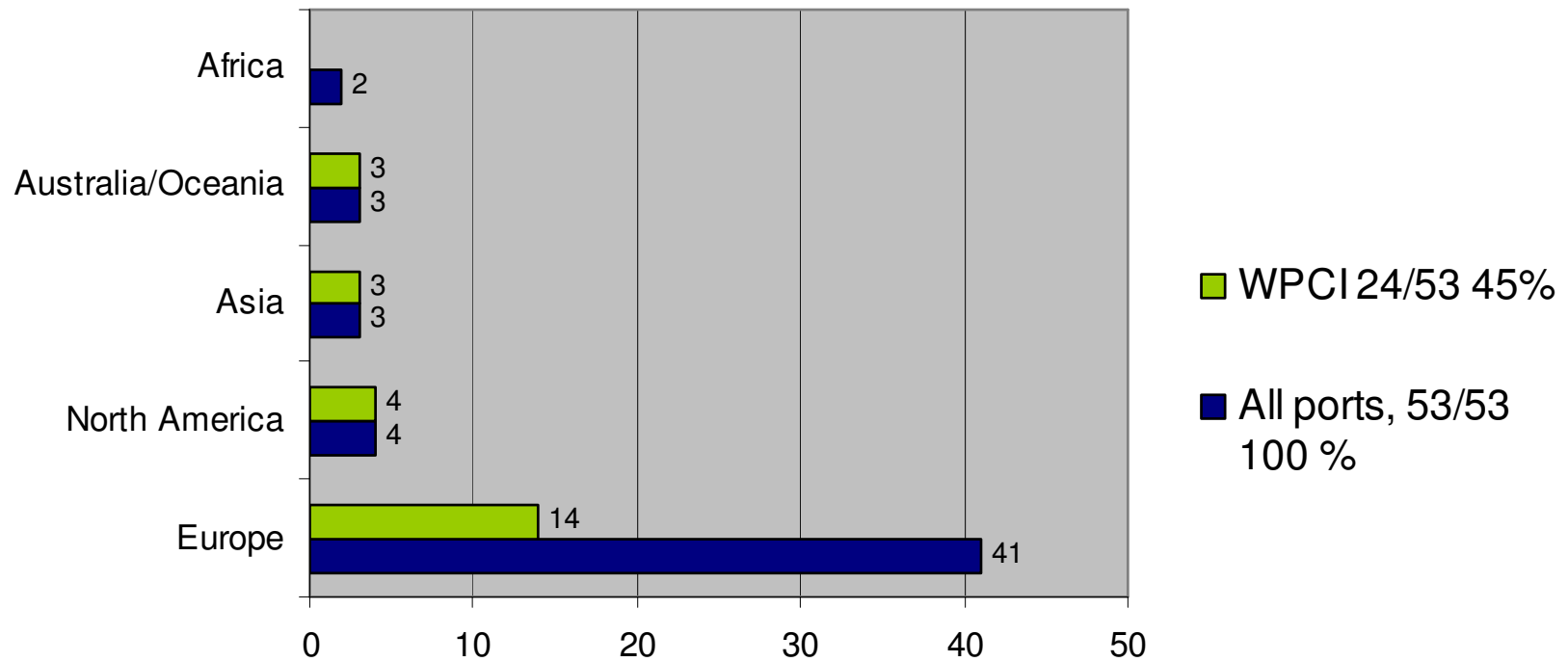
- Spring/summer 2009
- Aim:
 - To get an idea about the current status and future plans regarding OPS
 - To give important input to the upcoming work within the OPS project
 - Be reference information when evaluating the project
- Was sent out to all WPCI members + port community via ESPO, Green Port Journal, WPCI website, Port of Gothenburg website and via different Port Associations
- 53 responding ports, about half of them WPCI ports

Introduction – The questionnaire

- The result will not be presented for all questions (see the full report)
- When the result differs a lot in between the overall result and WPCI ports this is presented under each question
- The result is sometimes also presented based on the ports offering high and/or low voltage today.
- The graphs will always indicate the number of ports which responded to a certain question and also the percentage rate based on responding ports/expected ports to respond a certain question, for example 53/53 ports (100%).

Respondents

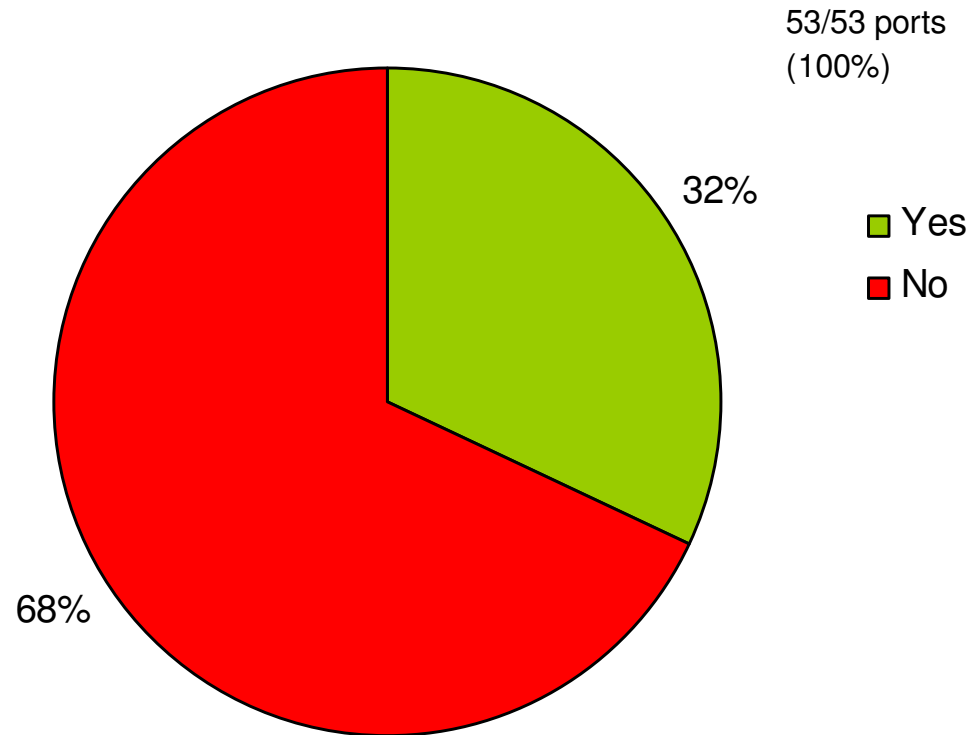
Responding ports in different continents (number of ports)



Note: Additional questionnaires have been received after the closing date, which are not included in the result.

Question 1:

Does your port provide OPS at any of its berths?



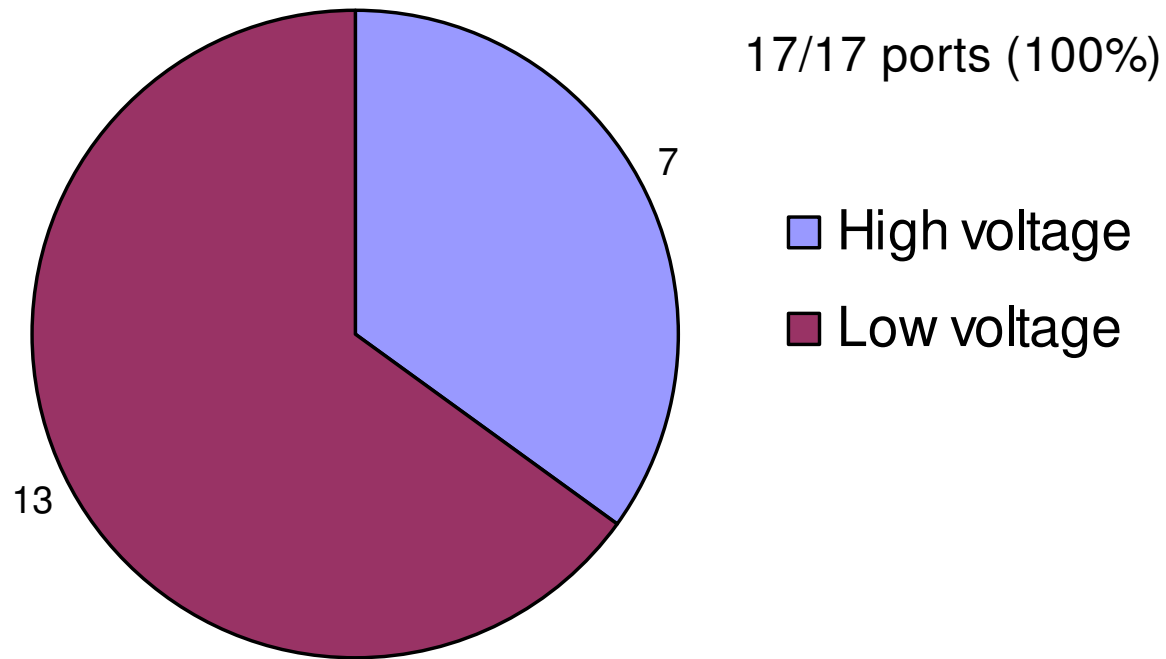
Question 2:

If yes for what kind of ships?

Inland barges	5 ports (out of 17 ports)
Ro/ro	8 ports (2 WPCI)
Container	2 ports (1 WPCI)
Cruise	3 ports (3 WPCI)
Ferry	3 ports (1 WPCI)
ROPAX	4 ports (1 WPCI)
Other	9 ports (5 WPCI)

Question 5&6:

Does your port offer OPS with high voltage or OPS with low voltage*?

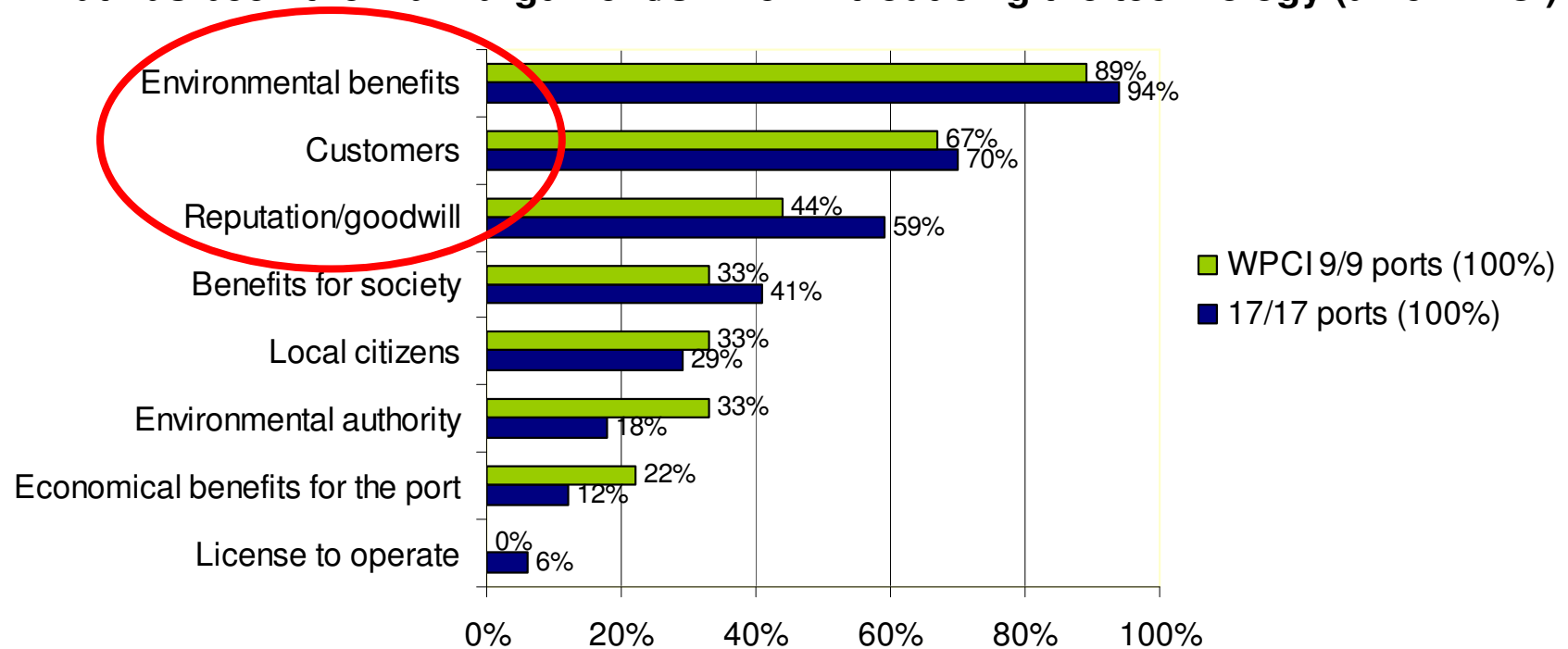


* High voltage (above 1kV)
Low voltage (below 1 kV)

Question 7A:

What has been the main argument/s when introducing the technology?

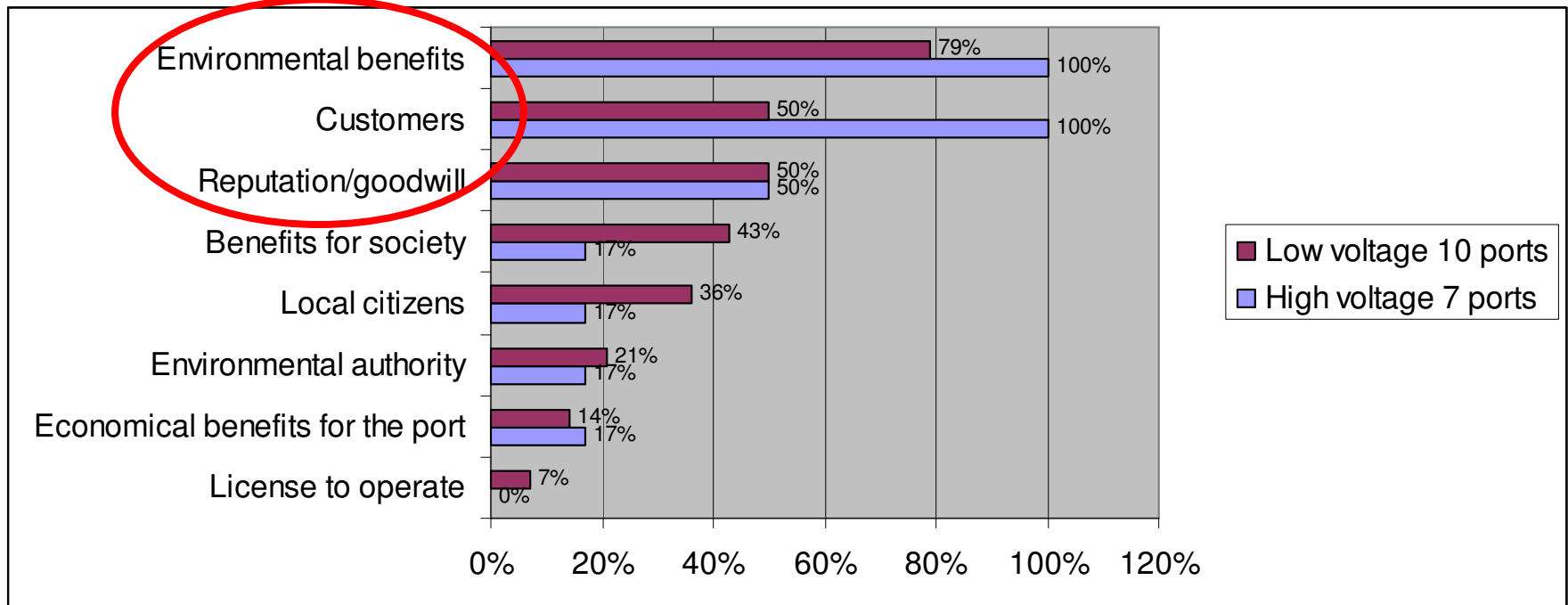
What has been the main argument/s when introducing the technology (all & WPCI)?



Question 7A:

What has been the main argument/s when introducing the technology?

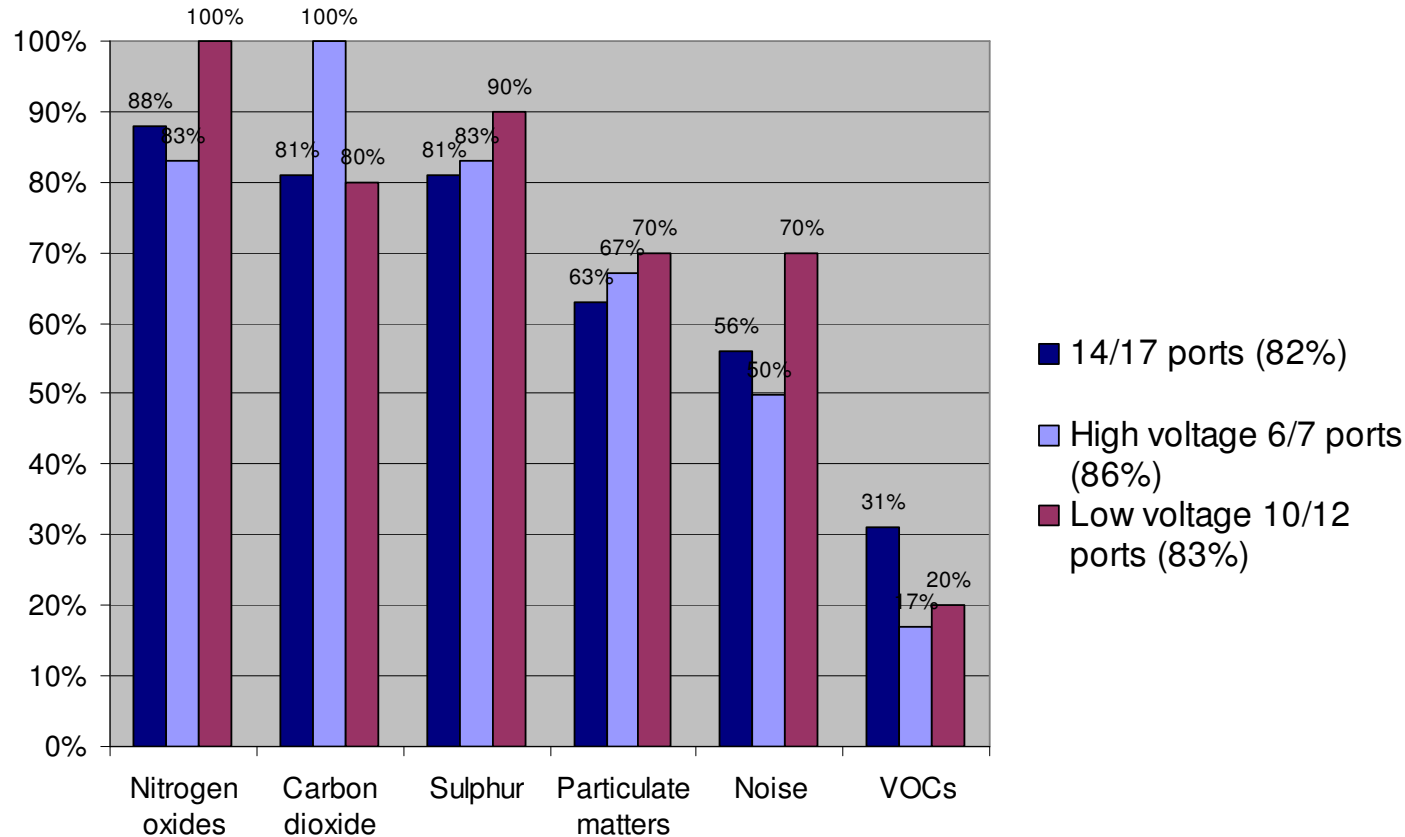
What has been the main argument/s when introducing the technology (low & high voltage)?



The result differs quite a bit in between the ones offering OPS with low and high voltage respectively.

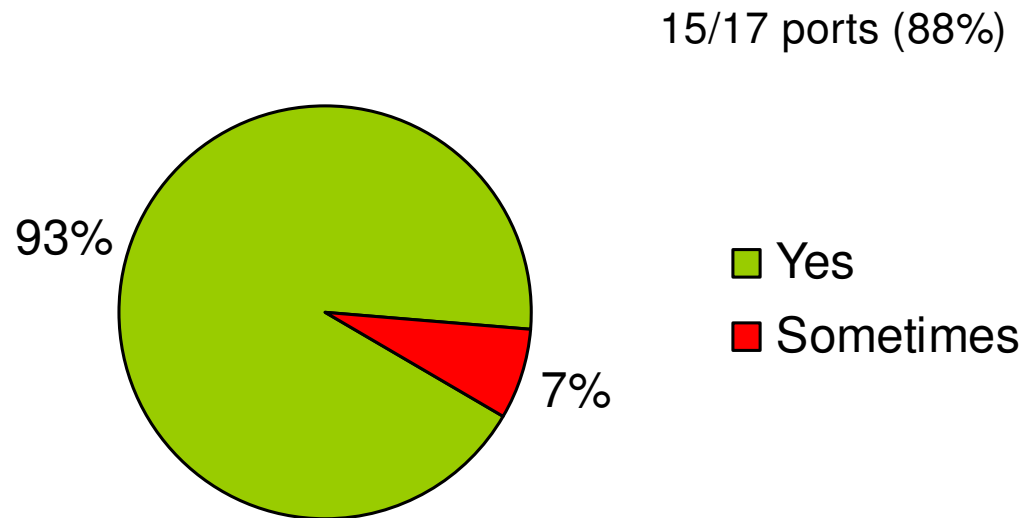
Question 7B:

If environmental benefits is an argument please indicate for what kind of pollutants?



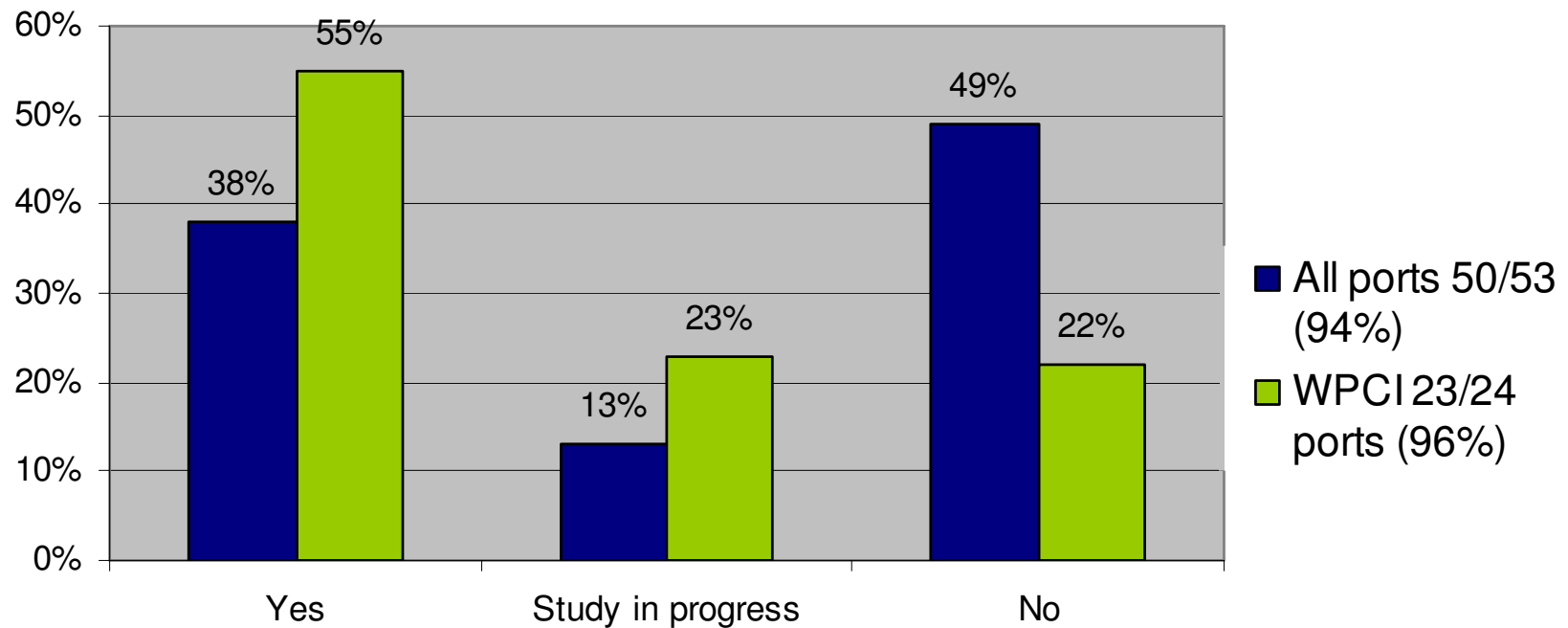
Question 9A:

If the OPS infrastructure is the port authority's property do private operators have to pay for the use of the investment?



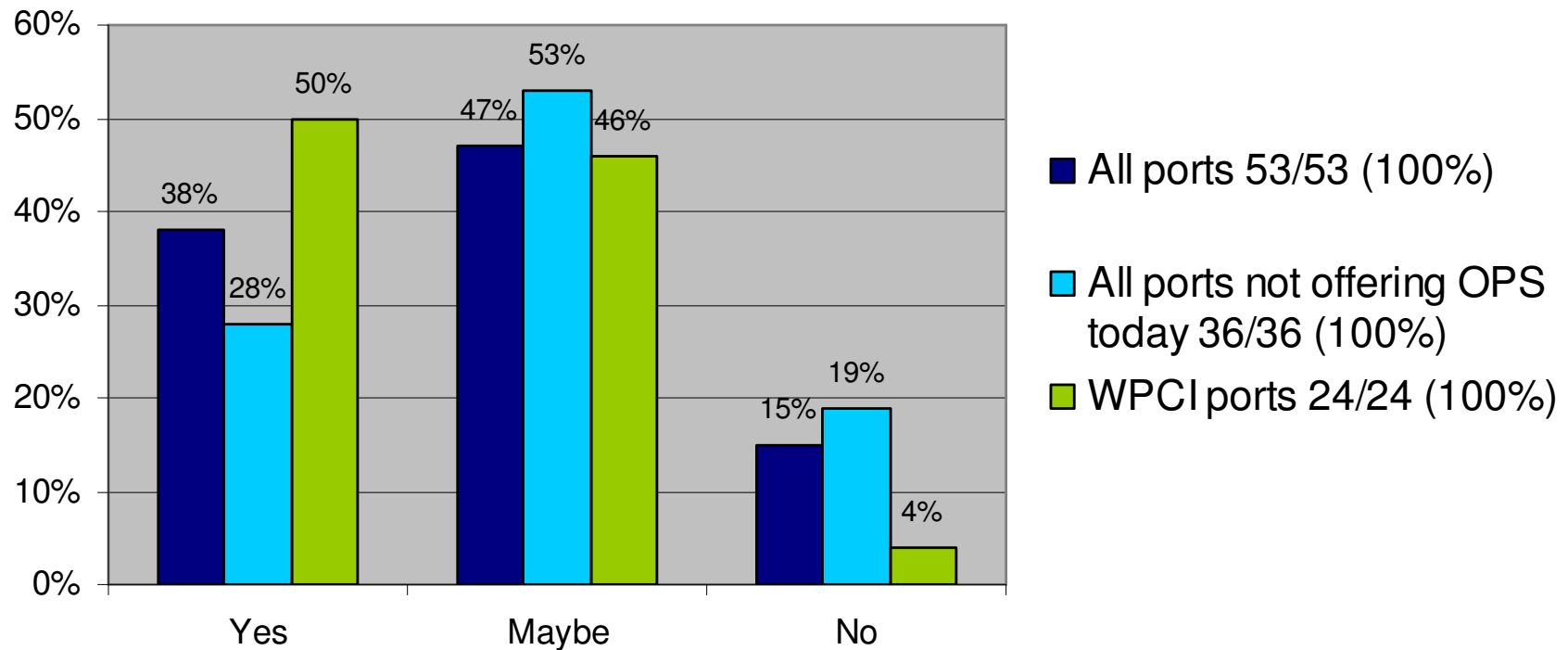
Question 11:

Has your port carried out a feasibility study for introducing/increasing the use of the technology?



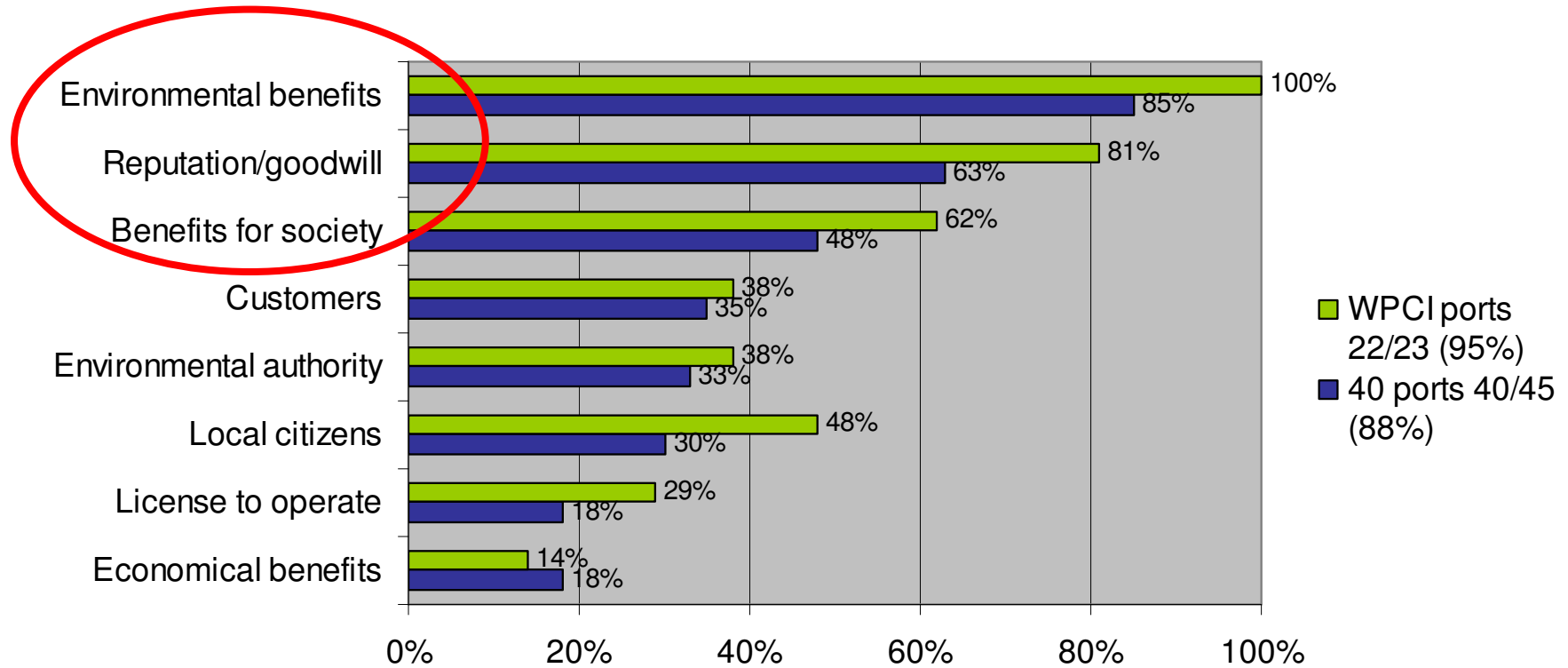
Question 12A:

Is your port planning to introduce/expand the technology to more quays within 5-10 years?



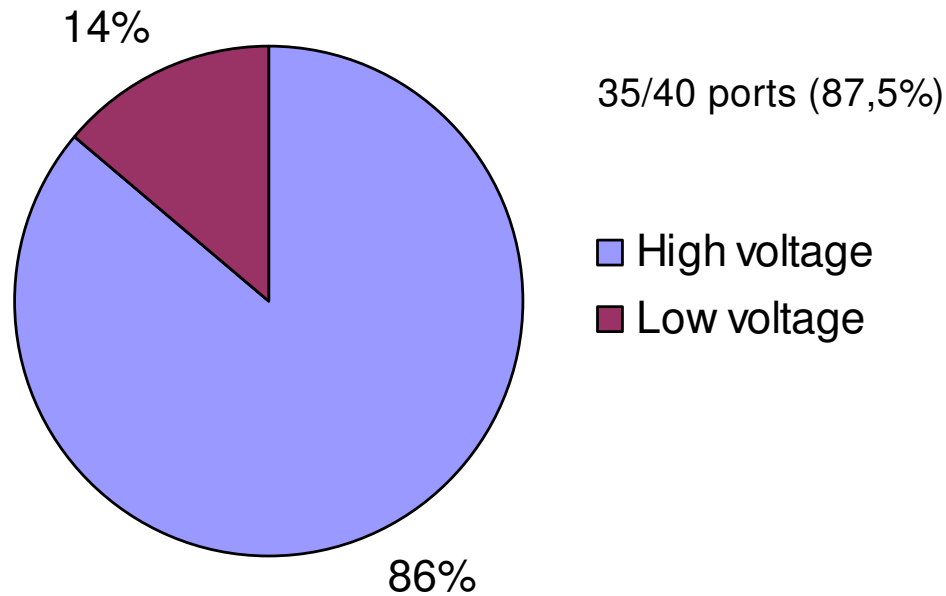
Question 12B:

If yes/mabye what is the main argument/s to introduce/expand the technology?



Question 12C:

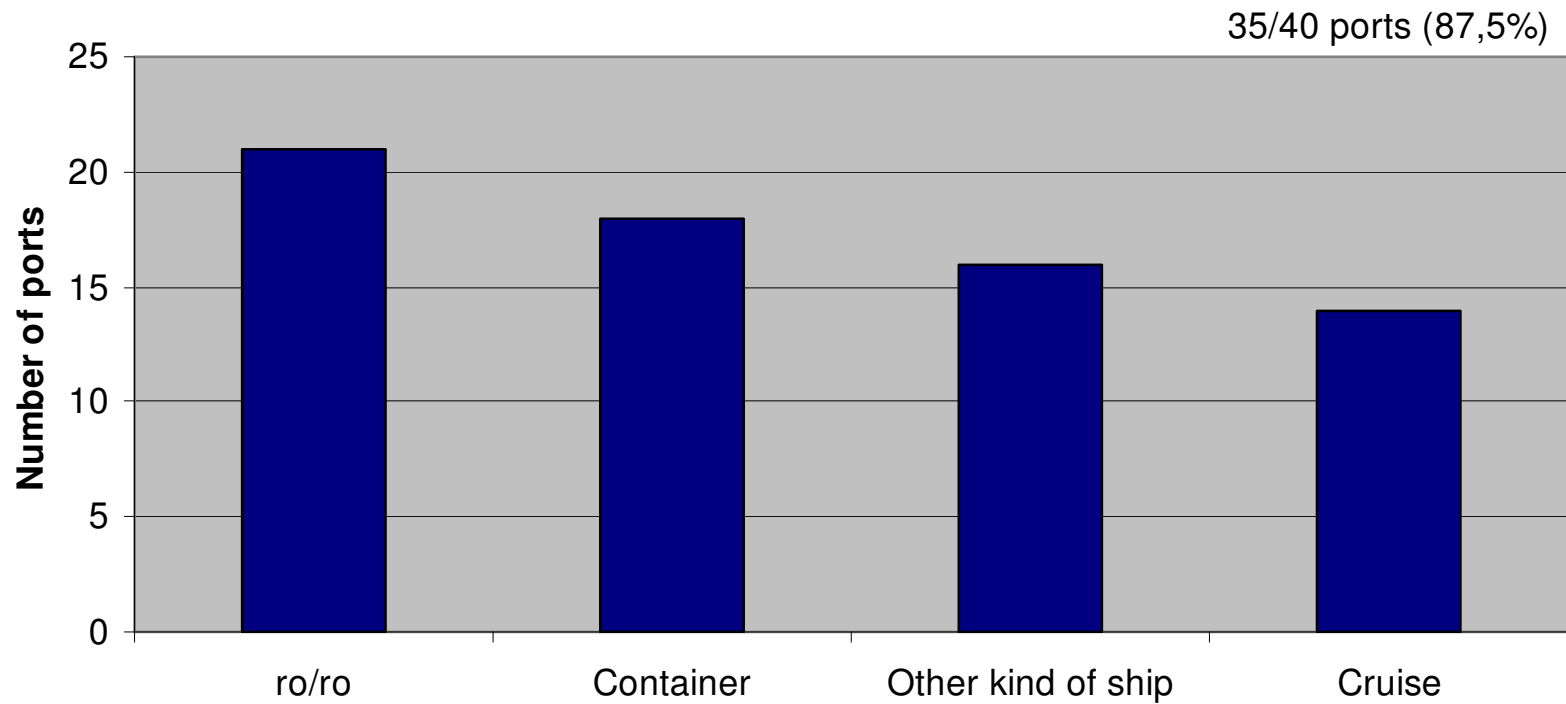
If yes are you planning to introduce/expand the technology with high voltage or low voltage*?



* High voltage (above 1kV)
Low voltage (below 1 kV)

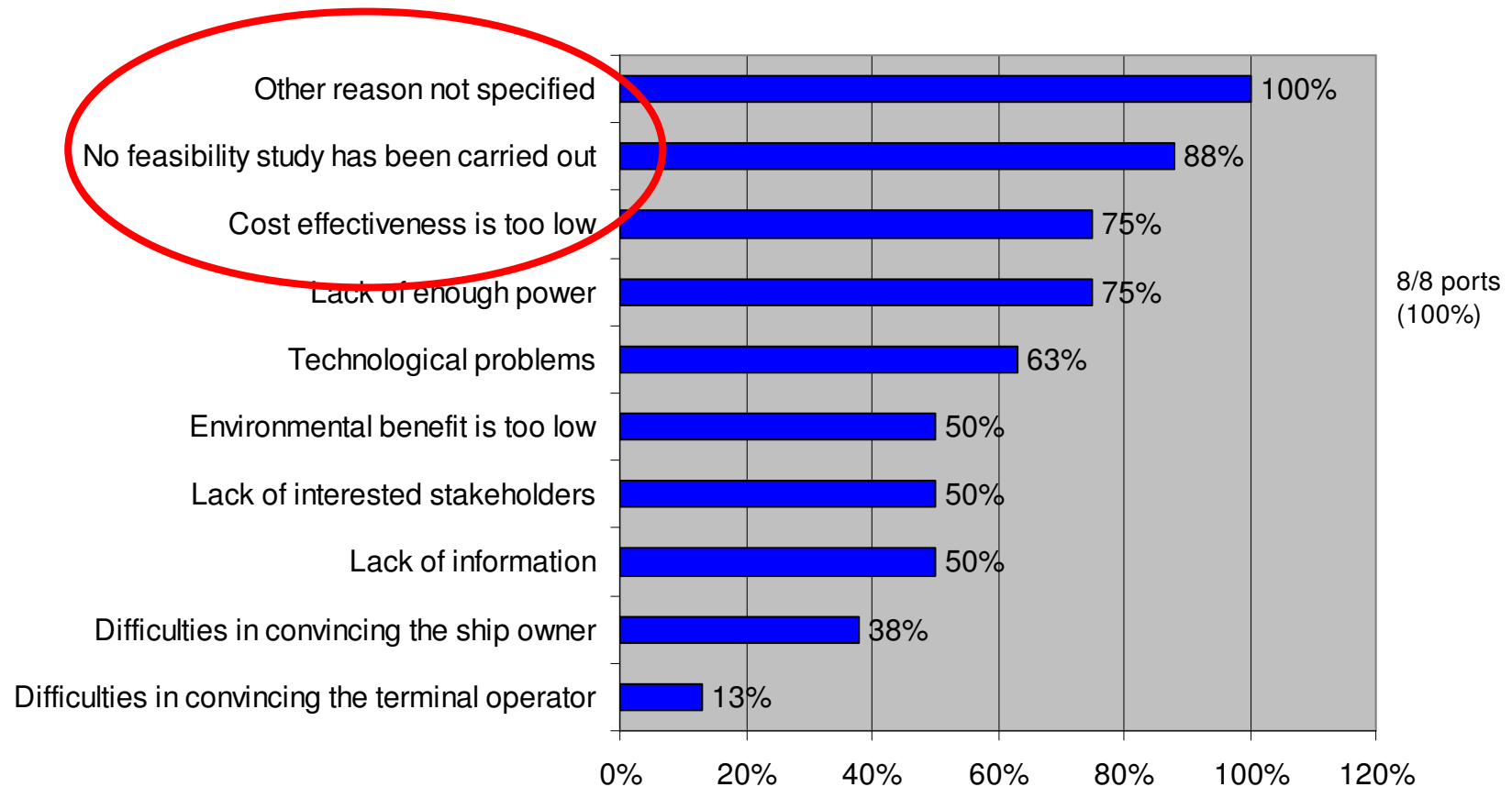
Question 12D:

If yes for what kind of ships?



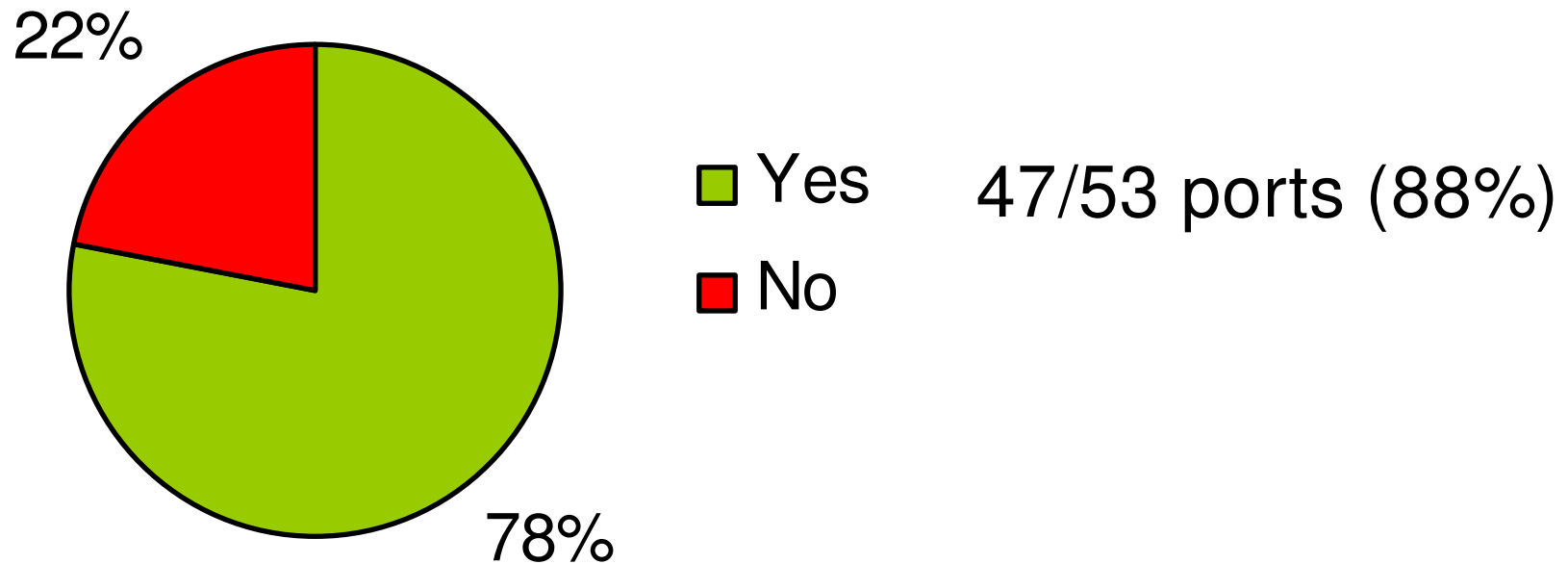
Question 13A:

If no what is the reason for not introducing the technology in your port?



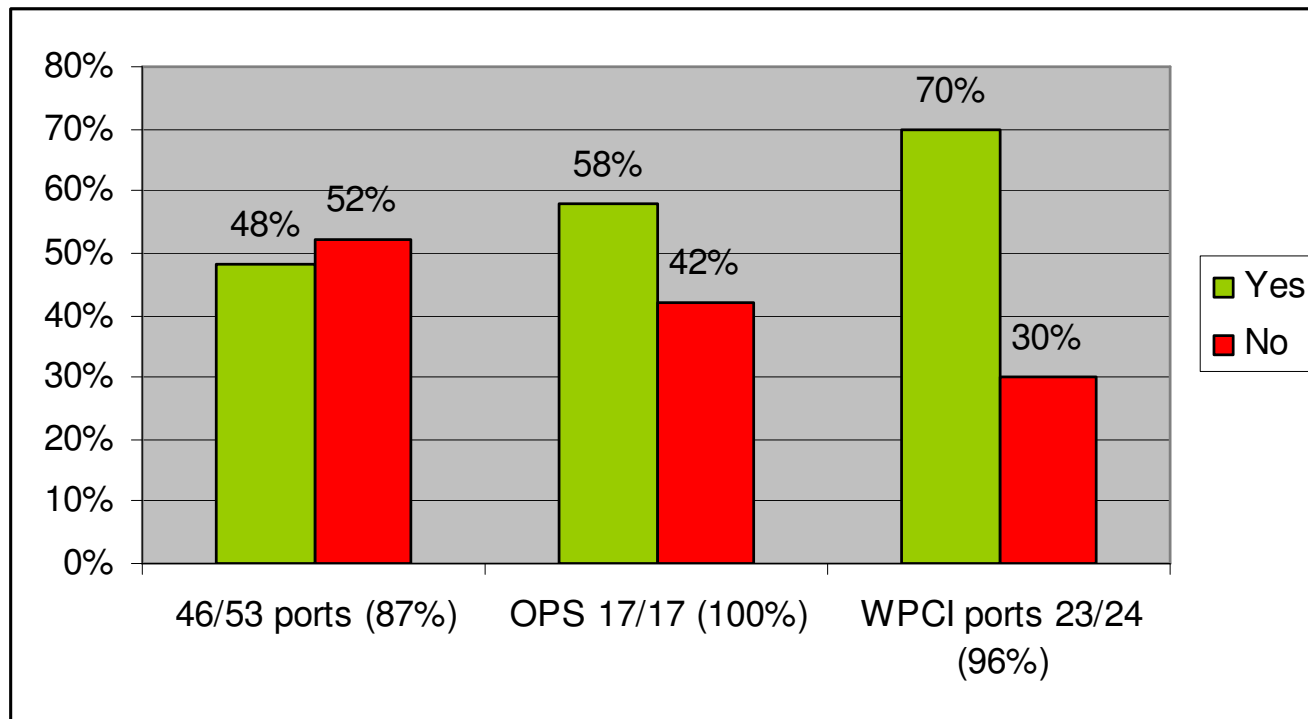
Question 14:

Would you like to share your experience with the OPS project within World Ports Climate Initiative?



Question 15A:

Is your port considering other measures to improve the environmental performance from shipping while at berth?

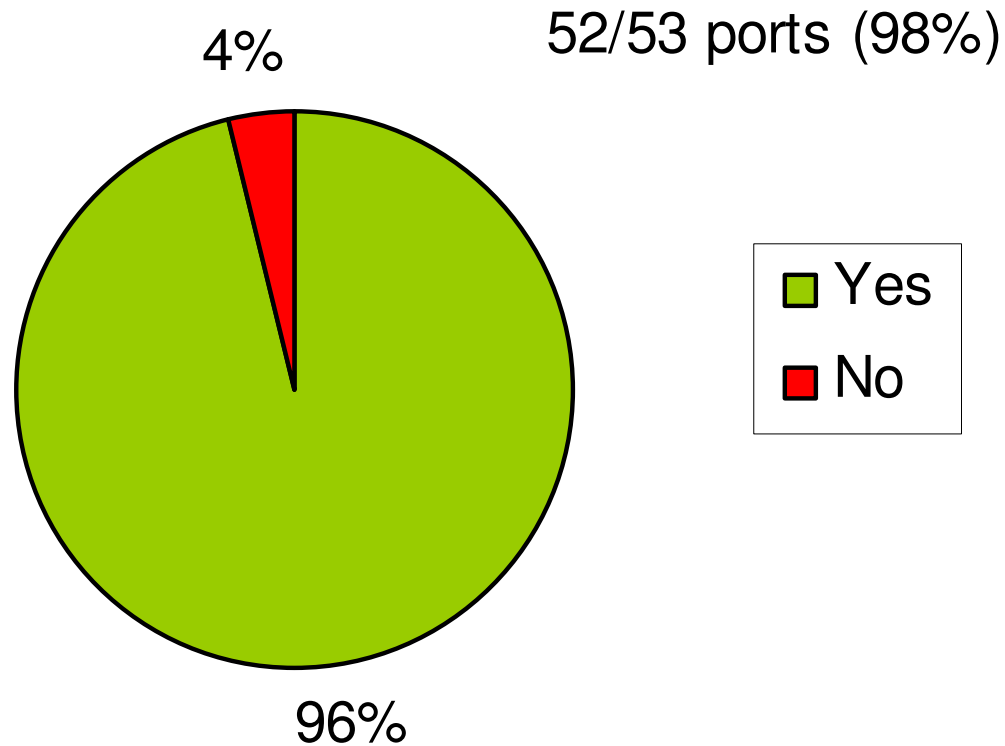


Other measures:

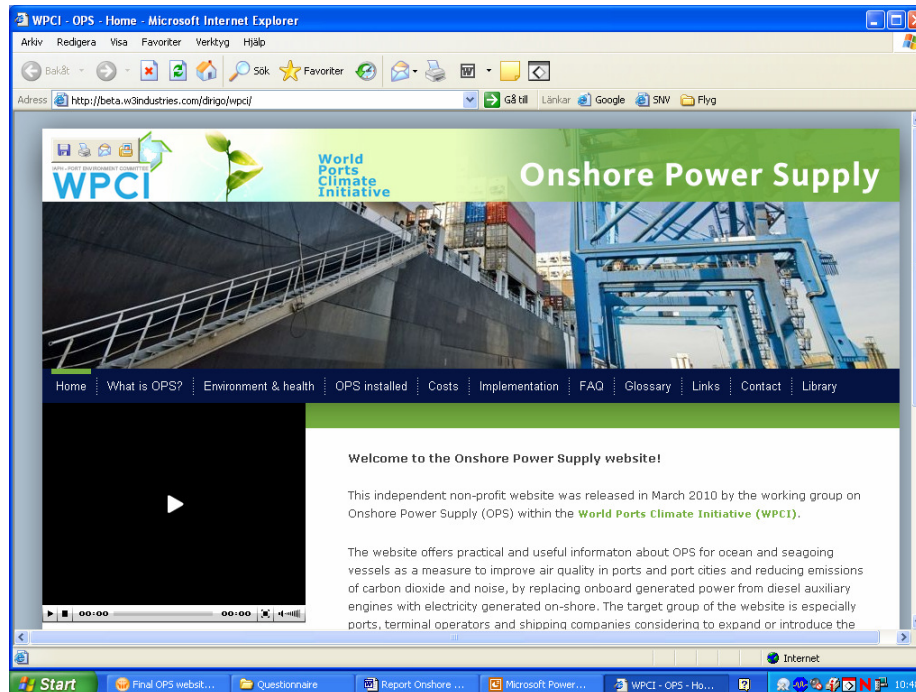
Environmental differentiated harbour dues to stimulate the clean shipping, Alternative fuels, scrubbers, non-grid based power supply, ESI study, AMECS, environmental ship indexing system, energy efficient equipment in the port....

Question 16:

I would like to be informed about the progress within the WPCI Onshore Power Supply Project.



Next step



A beta version of the Onshore Power Supply website will be launched at the GreenPort 2010 conference in Stockholm, 24 February 2010: <http://beta.w3industries.com/dirigo/wpci/>

During summer 2010 the final website will be found at: www.wpci.ops.nl and www.onshorepowersupply.org

