

/// Shore Power

Low-Hanging Fruits to Go Green

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Head of Shore Power

/// Good Reason for Going Green?

I must

- Defined by law/regulations (f.e. California, Norway, IMO, EU)

I want

- It is cheaper (price kw/h, taxes, port fees)
- Corporate target: going green
- Practical advantage (i.e. 24h work)

I should

- Pressure from various stakeholders (local/national politics, NGO's local residents)
- I get quite some money for funding



/// EU parliament votes to make ships pay for their pollution

APAC | SEPTEMBER 15, 2020 | 16:23 PM | UPDATED 2 HOURS AGO

EU parliament votes to make ships pay for their pollution

By Kate Abnett

3 MIN READ



BRUSSELS (Reuters) - The European Parliament on Tuesday voted in favour of including greenhouse gas emissions from the maritime sector in the European Union's carbon market from 2022, throwing its weight behind EU plans to make ships pay for their pollution.

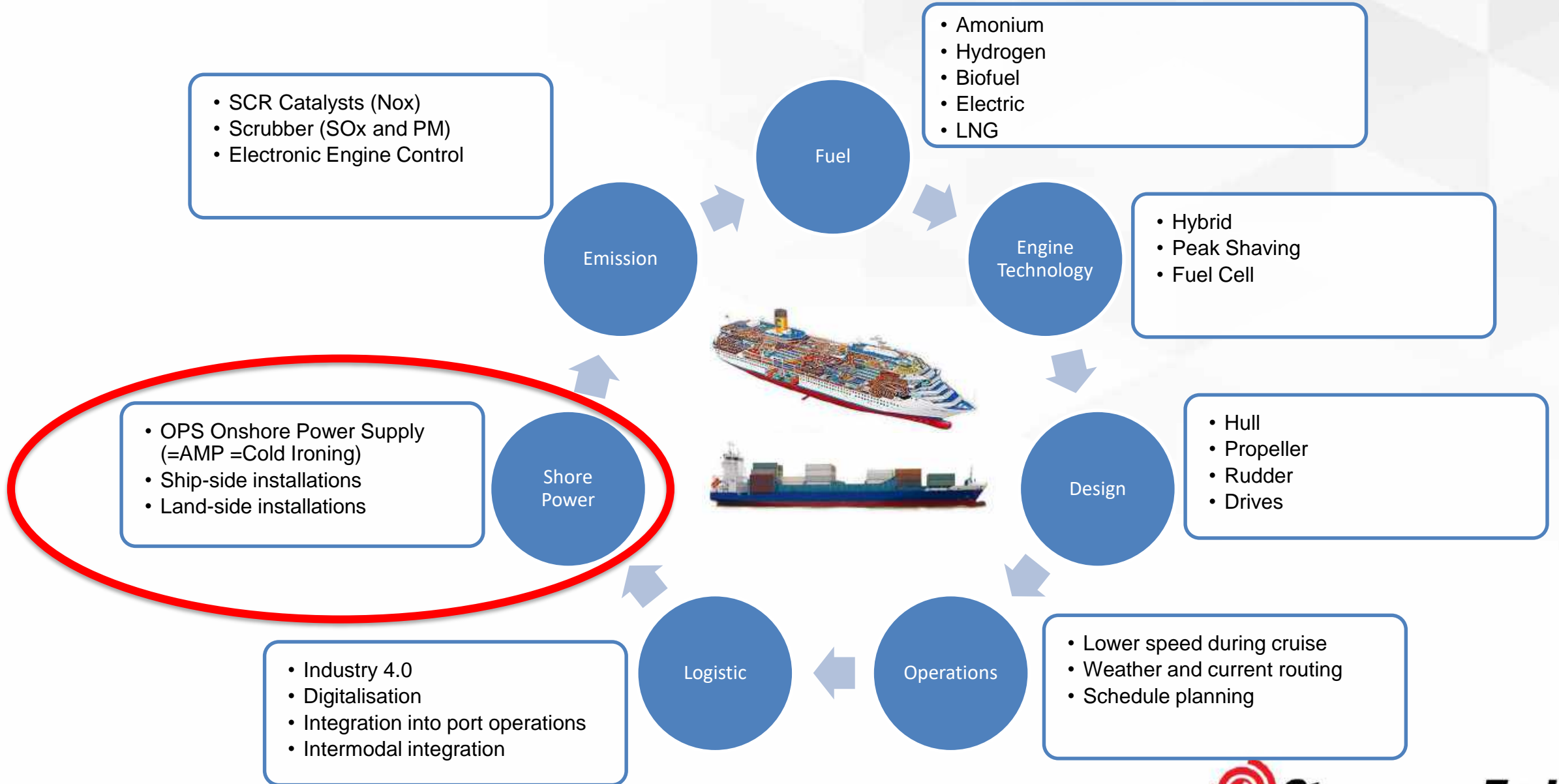


FILE PHOTO: Shipping containers are being loaded onto Xin Da Yang Zhou ship from Shanghai, China at Pier 7 at the Port of Long Beach in Long Beach, California, U.S., April 4, 2010. REUTERS/Bob Riba Jr File Photo

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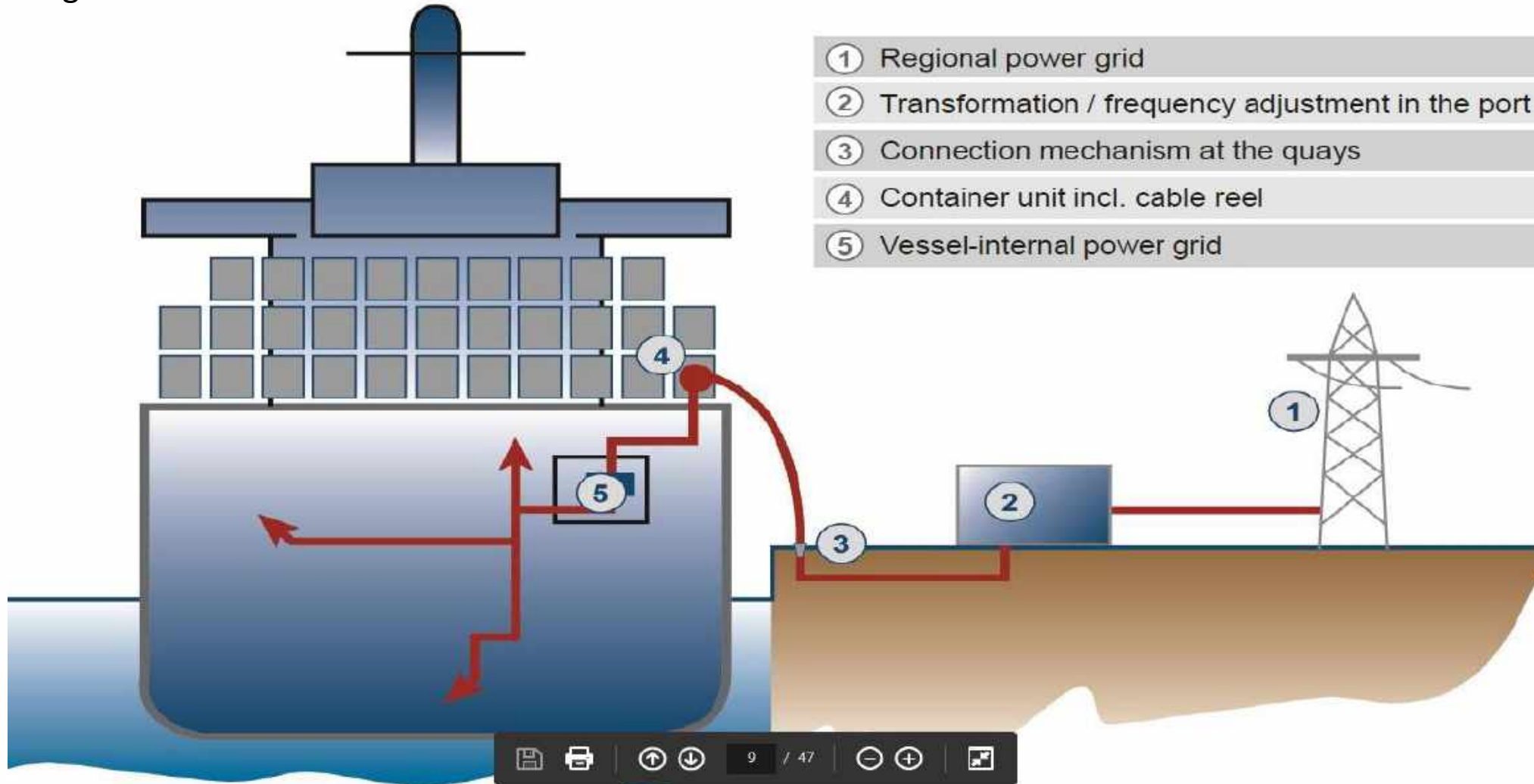
Sept. 15th 2020

/// Technological Factors for sustainable emission reduction



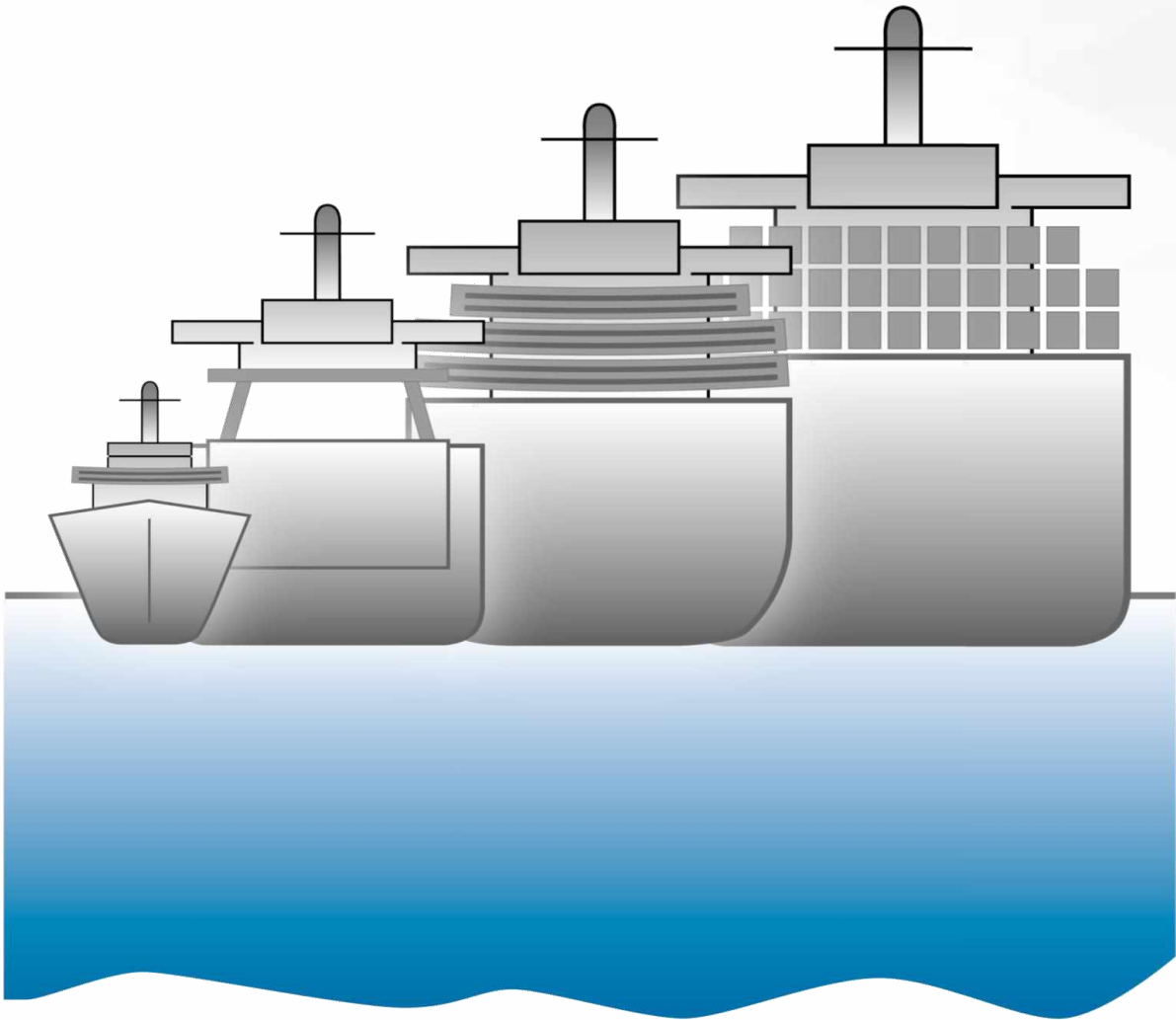
/// Shore Power – Cold Ironing

Shore power or **shore supply** is the provision of shoreside electrical power to a ship at berth while its main and auxiliary engines are shut down.



/// One World – One Norm: IEC 80005-1/-3

...for various vessels types, LVSC/HVSC



Container Ship up to 7 MW

Cruise Ship up to 20 MW

Reefer up to 8 MW

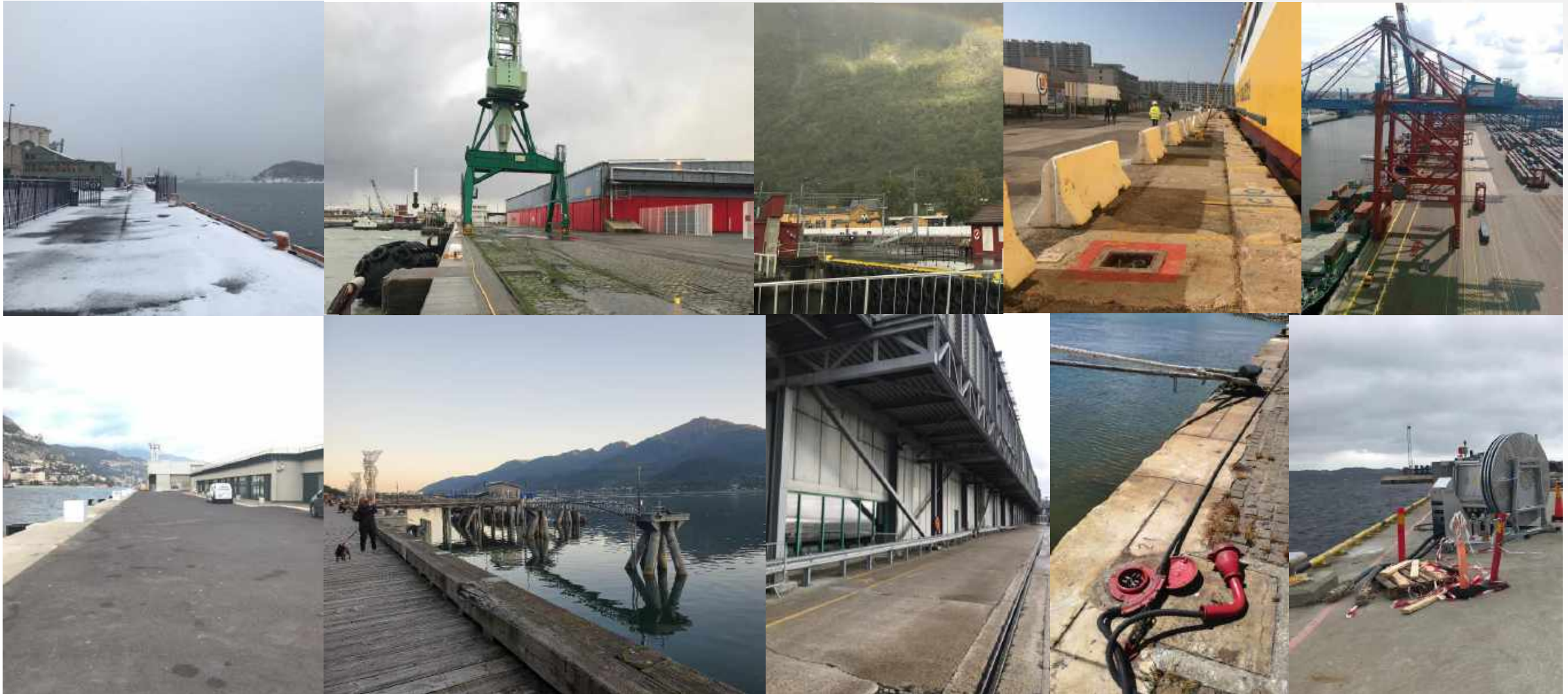
Ro-Ro, Ferry up to 8 MW

Tanker up to 6 MW

Bulk
general cargo ship up to 4 MW

/// All Men are Created Equal – All Ports are Created Different : No Average, no Norm

...every port is different



/// Cable Reel Container Systems

...for container vessels with fixed in the ground or mobile socket



/// ShoreCONNECT Variants: Cable Dispenser

..cable dispenser, low and high voltage for various vessel (ferries, workboats, OSV's, tugboats)



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/// ShoreCONNECT Variants: Cable Reel

for various vessels types including connection box land side and/or onboard unit for OSV's, RoRo's



/// Onshore Power Supply for Cruise Liner: self-propelled vehicles

...fast and simple connection to the cruise ship



/// Onshore Power Supply for Cruise Liner : self-propelled vehicles

...it can be handled by any person



/// Onshore Power Supply for Cruise Liner: : self-propelled vehicles

...junction box can be connected from two sides



/// FerryCHARGING – Fully Automated Connector System

...automatic connection in less than 10 seconds



/// FerryCHARGING – Fully Automated Connector System

...automatic connection in less than 10 seconds



/// Conclusion

- World is facing ecological problems – we need to give some speed:
not more than +1.5° celsius -> go down with CO₂ by zero asap
- Governments all around the globe start acting (money & law)
- Technical solutions are available
- Many solutions to come up – right now and in next future
- We are all equal and we are all different, too



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