22-23 SEPTEMBER 2021



CONFERENCE PROGRAMME

FINANCING AND IMPLEMENTING **GREEN TECHNOLOGIES FOR PORTS** AND TERMINALS

Join us on the 22-23rd September 2021 at the GreenTech for Ports & Terminals Conference, focused on the implementation and financing of sustainable technologies and the collaboration that will be required to drive industry wide progress on decarbonisation.

The agenda will showcase the leading projects, regulations and initiatives advocating for lower emissions and how collaboration between ports, terminals and shipping liners will be essential to achieve sustainability goals.

Green projects and energy efficient practices require significant capital, and our aim is to bring together the different financial institutions involved to discuss port expansion, infrastructure investments, risk profiles, green & sustainability-linked financing and more.

If you are interested in registering for this event and haven't done so already, you can do so by visiting **atpt.events**. We look forward to seeing you there.

Ana Condulet and Benjamin Heather **Conference Producers**







Day One

1.55pm – 2.00pm CHAIRPERSON INTRODUCTION

An introduction to the inaugural edition of Port Technology's GreenTech Ports and Terminals event.

2.00pm - 3.00pm COLLABORATION: HOW TERMINAL AND PORT OPERATORS
MUST COOPERATE TO MEET THE IMO EMISSIONS TARGET

The IMO target states that players in the maritime industry must reduce their emissions by 40% by 2030. This goal will require ports, terminals, and shipping liners to collaborate in ways that have previously been considered at odds with the competitive market environment in maritime.

- Will the competitive market and lack of cooperation be the biggest obstacle to ports and terminals in reducing emissions by 2030?
- What are the unique and shared challenges for ports and terminals?
- How can data sharing and standardisation can accelerate industry-wide progress?
- The key to minimising emissions from docked vessels.
- Collaboration throughout the supply chain.

Moderator:

Lamia Kerdjoudj-Belkaid, Secretary General, FEPORT

Speakers:

Antonis Michail, WPSP Technical Director, International Association of Ports and Harbours (IAPH)
Shalin Shah, Head – Sustainability & Environment, Adani Ports & SEZ LTD. and Adani Airport Holdings LTD
Ben van Scherpenzeel, Director Nautical Developments – Policy and Plans, Port of Rotterdam
Dita Bruijn, Head of Operations, PortXchange

3.00pm - 3.30pm NETWORKING OPPORTUNITIES AND REFRESHMENT BREAK

3.30pm – 4.45pm ELECTRIFICATION: OUSTING DIESEL FOR A MORE SUSTAINABLE ALTERNATIVE

Eliminating the use of diesel in ports and terminals can dramatically reduce C02 and greenhouse gas emissions, find out how port operations can be electrified, from large-scale container handling equipment to electric vehicles and other technology. This session will

investigate how ports and terminals can make informed decisions when transitioning away from diesel.

- How can ports and terminals retrofit and replace older diesel engines and replace them with newer technologies and cleaner fuels?
- The role of battery and fuel cell storage.
- Shore Power: sustainable energy supply to vessels moored along the quayside.
- The adoption of Electric Vehicles and the emergence of autonomous vehicles in the port.

Moderator:

Pat O'Leary, *Head of Technology*, PEMA – Port Equipment Manufacturers Association

Speakers:

Niranjan A. Patil, *Project Application and Hardware engineering manager*, **TMEIC**

Ashley Woods, Global Head of Environmental Improvement, APM Terminals

Alexandru Duca, Head of Design and Automation, APM Terminals Patrick Bol, Head of Port Expansions and Special Projects -Global Operations, DP WORLD

4.45pm - 5.15pm

NETWORKING OPPORTUNITIES AND REFRESHMENT BREAK

5.15pm - 6.30pm

INFORMING SUSTAINABLE DECISIONS WITH BIG DATA AND IOT

This session will discuss how big data and analytics projects and accompanying technology can increase the environmental efficacy of ports and terminals by improving visibility and informing sustainable data-backed decisions.

- How big data and digitalisation can allow ports and terminals to manage their resources and take control of their carbon footprint.
- How IoT technology can use operational data to improve port efficiency and reduce environmental impact.
- The use of big data and predictive analysis to schedule the arrival and departure of vessels to improve overall port efficiency.
- How environmental monitoring can provide key data on carbon emissions and other pollutants in the port.

Moderator:

Boris Wenzel, Founder, Terminal Industry Committee (TIC) 4.0

Speakers:

Boris Wenzel, Founder, Terminal Industry Committee (TIC) 4.0 Jorge Martin, International HSSE Professional Joan Meseguer, Head of Big Data and AI, Fundación Valenciaport Ajay Bharadwaj, Sr. Director, Product Management, Navis

6.30pm – 6.35pm CHAIRPERSON DAY ONE CLOSING REMARKS

Day Two

8.55am – 9.00am CHAIRPERSON INTRODUCTION

An introduction to the Green Financing morning as part of Port Technology's wider Green Ports and Terminals event.

9:00am - 10.00am WHAT DOES GREEN FINANCING MEAN FOR PORTS?

The term green finance has become increasingly used in the maritime industry and ports are looking to obtain funding from both public and private sectors. Sustainability, automation, zero-emission investments- just a few of the key elements for green financing.

- What does green financing entail and what are the expectations today?
- What are the views of port authorities, operators on green finance and climate change mitigation and how can it be sustainable in the long term?
- Transition path for newcomers: what steps do you need to take when looking to obtain investment?
- How could green financing be provided to the private operators and terminals and what kind of support system is there?

Moderator:

Dr. Arjan Hijdra, Managing Director, VitalPorts.org

Speakers:

Jackie Spiteri, Senior Manager ESG, Port of Newcastle, Australia Elisa Oyonarte Gómez, Head of Internal Audit and European Funding Management, Port of Seville Polite Laboyrie, President, Central Dredging Association (CEDA)

10.00am - 10.30am NETWORKING OPPORTUNITIES AND REFRESHMENT BREAK

10.30am – 11.30am PORT EXPANSION AND INFRASTRUCTURE INVESTMENTS

Looking at how ports can finance mega investments that have a significant impact on the energy landscape and include renewable energy sources of production. Infrastructure involves one of the biggest costs for port stakeholders. Discussing different funding models, government incentives and research. How are some project applications more successful than others?

Looking at ports that are in different phases of development.

- Would the government give you reduction on fixed fees and variables if your terminal would be climate neutral?
- Discussing the difference between the public and private sector and their infrastructure funding models

Moderator:

Sue Barrett, Director and Head of Infrastructure for Turkey, ME & Africa, European Bank for Reconstruction and Development (EBRD)

Speakers:

Jens-Oliver Schünzel, Director, KfW IPEX Bank Yesim Elhan-Kayalar, Advisor | Office of Chief Economist, Asian Development Bank Alistair Perkins, Head of Infrastructure & Project Finance, NN Investment Partners B.V Lars Erik Mangset, Chief Climate Change Advisor, KLP

11.30am – 12.00pm NETWORKING OPPORTUNITIES AND REFRESHMENT BREAK

12.00pm – 1.00pm WHICH PROJECTS ARE BEING FUNDED AND WHAT'S THE CRITERIA?

Government grants and private financiers have certain criteria when it comes to which type of projects receive funding. Lately, operations that are smart, efficient, innovative and look to reduce emissions seem to have more visibility in the context of energy transition and backed by government legislation.

- Providing clarity on what is stipulated in the grants and who is involved in putting together the requirements.
- Considering Environmental, Social and Governance (ESG) as one of the main criteria
- Comparing green criteria to technical criteria, done in the context of EU taxonomy for sustainable finance
- Ports sector view- are they appealing more to lenders by designing the projects with green elements?
- Greenfield vs brownfield projects: investment perspectivehow to get ROI from some of the big investments.
- What is a winning proposal? What will investors look at and what kind of conditions they would want to see, to seriously consider investing?
- From the commercial banking sector- Getting more funding for green investments; longer term financing or more competitive pricing by linking to KPI's such as Scope 1/2 emissions
- Options of issuing bonds for specific target development sector or expansion

Moderator:

Bogdan Ołdakowski, Secretary General, Baltic Ports Organization

Speakers:

Berend Paasman, Global Head of Logistics, DNB Bank Johan Wallén, Chief Commercial Officer, Ports of Stockholm Tim de Knegt, Manager Strategic Finance & Treasurer, Port of Rotterdam

David Jenkins, *Global Head of Sustainable Finance*, **National Australia Bank**

1.00pm - 1.55pm NETWORKING OPPORTUNITIES AND LUNCH BREAK

1.55pm - 2.00pm CHAIRPERSON INTRODUCTION

An introduction to the final afternoon session of the inaugural edition of Port Technology's Green Ports and Terminals event.

2.00pm – 3.00pm EMERGING TECHNOLOGY: HOW CAN NEW TECH BE IMPLEMENTED FOR QUICK WINS AND CONTINUOUS SUSTAINABLE IMPROVEMENT

Emerging technologies provide much of the buzz when discussing efficiency and continuous operational improvement in ports and terminals, but just how important are they to the discussion of sustainability? This session will unpack how emerging technology such as AI, machine learning and digital twin can stack up to more direct efforts to decarbonise in ports and terminals.

- How the gains in operational efficiency from AI, machine learning and other emerging technologies can be a key factor in reducing emissions.
- Is continued automation is the key to a highly efficient port terminal?
- Should emerging tech be considered secondary in importance to clean power?
- How to determine which technologies deserve to be implemented first
- Drone technology: the key to visibility and environmental monitoring in ports and terminals?

Moderator:

Jack Donnelly, Multimedia Editor, Port Technology International

Speakers:

Alex Van Winckel, Senior Consultant, INFORM
Oscar Pernia, Leader and Founder, Nextport Tech
Joao Costa, Innovation Manager, Pixel Ports
Piet Opstaele, Innovation Enablement Manager, Port of Antwerp

3.00pm - 3.30pm NETWORKING OPPORTUNITIES AND REFRESHMENT BREAK

3.30pm – 4.45pm ALTERNATIVE FUELS: POWERING PORT AND TERMINALS OF THE FUTURE

The potential for alternative fuels is clear but the search of a successor to diesel is not a simple one, with plenty of competing technologies such as LNG, hydrogen, ammonia, and even next gen diesel. In this session we will hear from proponents of these technologies and discuss their advantages and disadvantages for use in ports and terminals.

- Which of the competing technologies will win to become the widely adopted alternative fuel? Analysing the advantages and disadvantages to the most popular options such as hydrogen, LNG and ammonia.
- Hearing about successful implementations of alternative fuels and storage systems.
- Is next-generation diesel an unnecessary half step?

Moderator:

Jose Sanchez, International Project Manager, AIVP

Speakers:

Jan Egbertsen, Innovation Manager, Port of Amsterdam Veronica Chan, Senior Advisor Air Quality and Climate Change, Port of London Authority

Joanne Allday, Strategic Business Development Manager, Port of Cromarty Firth

Maria Manuel Cruz, Environmental Manager, Port of Aveiro

4.45pm - 5.15pm NETWORKING OPPORTUNITIES AND REFRESHMENT BREAK

5.15pm – 6.30pm C-LEVEL PANEL DISCUSSION: INDUSTRY LEADERS ANTICIPATE THEIR PATH TO IMO 2030

C-level representatives from ports and terminals provide a realistic picture of what the next decade looks like up to the 2030 target of a 40% reduction in emissions, outlining their immediate priorities (2-3 years) and longer-term ambitions (up to 10 years).

- Industry stakeholders from ports and terminals discuss their sustainability roadmap for the next 10 years.
- Anticipating which alternative fuel will be most widely adopted.
- Which emerging technologies can provide the most exciting environmental benefits?
- Understanding how to strike a balance between competition and collaboration.

Moderator:

Beth Maundrill, Head of Editorial, Port Technology International

Speakers:

Carles Rua, C/O, Port of Barcelona Captain Allan Gray, President and CEO, Halifax Port Authority Oscar Pernia, Leader and Founder, Nextport Tech

6.30pm - 6.35pm CHAIRPERSON CLOSING REMARKS

Register to attend GreenTech for Ports and Terminals 2021 today by visiting our website

Register Today

For All Sponsorship & Media Enquiries Please Contact:

info@porttechnology.org

For Speaker Enquiries Please Contact:

events@porttechnology.org



