

Sustainable Port Development

Patrick Verhoeven

Webinar Ports SE Asia / Oceania

29 September 2020

About IAPH

- Founded in 1955
- Today:
 - 170 ports
 - 140 associate members
 - 90 countries
- Role:
 - Leadership through collaboration
 - Raising global standards through knowledge exchange
 - Interest representation at global level (IMO, ILO, UNCTAD, UNEP, ECOSOC, WCO)
- Initiated World Ports Sustainability Program (WPSP) in 2018
- Focus areas:
 - Climate and Energy
 - Data Collaboration
 - Risk and Resilience





Overview

- 1. UN Sustainable Development Goals
- 2. World Ports Sustainability Program
- 3. Devising a Sustainability Strategy
- 4. IAPH Focus Areas



1. UN Sustainable Development Goals





2. World Ports Sustainability Program



www.sustainableworldports.org





















Objectives

- Global library of best practices
- Portal for projects and initiatives of partner organisations
- Think-tank and breeding ground for new collaborative projects
- Reporting about sustainability performance of the global ports sector



Demonstrating global leadership of ports in contributing to Sustainable Development

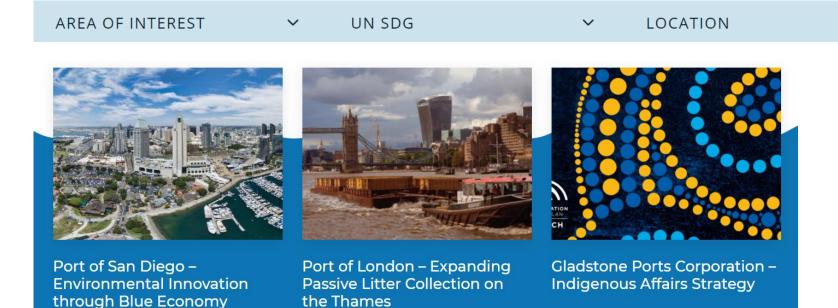
Ports must respond to worldwide, regional and local challenges, such as climate change, mobility, digitalisation, migration and social integration.

Thematic areas

- Resilient infrastructure
- Climate and energy
- Safety and security
- Community outreach
- Governance and ethics



Portfolio: individual port projects



https://sustainableworldports.org/submit-your-project/

Incubator Program











WINNER 2020

Green and Connected Ports



SAFETY AND SECURITY

WINNER 2020

Port of Açu Emergency Preparedness



COMMUNITY OUTREACH & PORT CITY DIALOGUE
Port Development and License to Operate

WINNER 2020

Maritime and Port Authority of Singapore's Next Generation Tuas Port Project

WORLD PORTS SUSTAINABILITY AWARDS









COMMUNITY OUTREACH & PORT CITY DIALOGUE
Addressing Externalities of Port Operations

WINNER 2020

Port Authority of Vigo Sunset Docks



GOVERNANCE AND ETHICS

WINNER 2020

Dutch Seaports
Responsible Business Conduct



CLIMATE AND ENERGY

WINNER 2020
LOOP-Ports

Portfolio analysis: UN SDGs





Portfolio analysis: thematic areas

Theme	Focus areas	Number of projects	SDGs
Resilient Infrastructure	IT-assisted optimisation of port operations IT-assisted optimisation of the supply chain Adaptation of infrastructure to climate change Adaptation of port planning to market and stakeholder demands	38	8, 9, 13, 14
Climate and Energy	Initiatives to reduce GHG emissions of shipping Increasing efficiency of port operations Clean and renewable energy production Carbon capture and adaptation to climate change Circular economy	43	7, 9, 12, 13
Community Outreach and Port City Dialogue	Environmental externalities (air, water, noise, waste) Societal needs and demands (recreation, education, culture, heritage) Protection of ecosystems and biodiversity Sustainable port management, planning and development	68	3, 6, 11, 14, 15
Safety and Security	Health and safety emergency preparedness and response Port area security Cybersecurity	11	3, 4, 8, 16
Governance and Ethics	Corporate Social Responsibility initiatives Sustainability policy, planning and reporting Fostering innovation Gender equality initiatives	19	1, 2, 4, 5, 10, 16



Platform: projects partner organisations

Project Partners	Resilient Infrastructure	Climate and Energy	Community Outreach and Port-City Dialogue	Safety and Security	Governance and Ethics
IAPH / WPSP Cruise Project		•	•		•
SDGs and Port Governance	•	•	•	•	•
Environmental Ship Index		•	•		•
PortXL Accelerator	•	•	•	•	•
World Ports Climate Action Program		•	•		•
Clean Marine Fuels		•	•	•	
Womens' Forum					•
GloMEEP		•	•		
Navigating a Changing Climate	•	•			
Port Call Optimization	•	•	•		
Maritime anti- corruption Network					•



3. Devising a Sustainability Strategy

Application of the 17 UN SDGs in ports



- · Setting a good minimum wage for the port employees and encouraging similar practices in the port community
- · Taking responsibility for the application of ethical standards throughout the supply chain (e.g. working conditions and human rights in developing countries)
- Including sustainability requirements (e.g. Fairtrade (abei) in procurement
- Supporting local communities in need through social projects targeting sustainable growth
- Supporting local social institutions (e.g. schools, orphanages, NGOs)



- · Supporting local projects targeting the provision of food to families/communities
- Encouraging the transfer of food surpluses out of the warehouses in the port to charities, food banks and community organizations
- · Supporting the trade/storage of Fairtrade and other ethically-produced agricultural products in cooperation with NGOs and
- · Sourcing Fairtrade food products for own



- · Improving health and safety awareness of employees and local communities through training and transparent communication on health and safety risks
- Minimizing environmental externalities (e.g. air pollution, water pollution, noise) of port operations and greening of the port and urban areas
- Initiatives on sustainable / safe mobility and projects targeting congestion
- · Enhancing port safety and security and
- · Awareness raising and actions against the use of addictive substances (e.g. tobacco, alcohol, drugs)
- Brotection hebitets and hindliversity in and around the port area



- Competence and talent policy for port employees
- Enhance life-long learning for the port Cooperating with local schools,
- universities and research centres in educational programs, Internships and
- Offering training to port professionals through dedicated institutions
- · Creating synergies with universities in port research and development projects



- Gender-neutral hiring and remuneration
- Promoting women to leadership roles: training and hiring more women for port operational positions (e.g. crane operators)
- · Leveling the male/female ratio of port employees for operational and managerial positions
- Taking measures that make the port working environment more attractive to women (e.g. separate tollets, promotional campaigns, family-friendly HR-policy)



- Providing drinking water and clean sanitation facilities for port employees and visitors (e.g. vessels crew, truck
- Minimizing/optimizing water consumption In the port area
- Harvesting rainwater for port use
- Protecting water-related ecosystems (e.g. estuaries, wetlands, mangroves) in and around the port area
- Projects protecting freshwater resources (e.g. wastewater and stormwater



- Locally producing and/or sourcing renewable energy
- Supporting research and development on clean energy technology Producing and/or recovering energy from
- Industrial waste streams
- Investing in energy-efficient port equipment (stationary and mobile material handling equipment, lighting and
- Encouraging clean energy initiatives from third parties (vessels, tenants and operators) through appropriate Instruments (Incentives, clauses in lease) concession agreements:
- Providing Onshore Power Supply from renewable sources
- Providing cleaner (marine) fuels in a safe and efficient manner
- Optimizing port operations and processes (logistics, port calls)



- Achieving economic growth through diversification, innovation and technological modernization
- Generating economic growth in an environmentally sustainable manner
- Ensuring that economic growth positively Impacts local communities economically and socially
- Promoting employment, including apportunities for disadvantaged groups and young people
- Striving for a healthy and safe working environment for all: specific actions related to safety and ergonomics, and creating a good work/life balance
- Generating a sustainable model for
- Taking responsibility for applying ethical standards throughout the end-to-end supply chain (e.g. working conditions and human rights in developing countries)



- · Devising sustainable port development policies supported by relevant key performance indicators
- Digitally optimizing infrastructure and port operations/processes/services
- Piloting, testing and implementing Innovative IT and digital technologies in the port for public and private use · Foreseeing the adaptation of port
- Infrastructure to withstand climate change Adapting port Infrastructure and
- processes to meet market demands (such as increasing ship size)
- Sustainable port development projects Investing in infrastructure for all transport modes to enable a balanced model split
- · Minimizing environmental impact of the port activities



- · Achieving equality within the port Independent of gender, origin, belief, conviction etc.
- · Port community initiatives being allinclusive irrespective of socio-economic background (e.g. supporting sensitive sacial groups)
- Social background-neutral hiring and renumeration policies
- Taking responsibility for the application of ethical standards throughout the supply chain (e.g. working conditions and
- human rights in third world countries) Financial support to local communities In need and social projects targeting sustainable growth of neighboring communities
- Ethical investment and banking



- · Improving sustainable mobility and reducing congestion for both employees
- · Restoring ecosystems and making the
- port accessible and attractive for people In neighboring urban areas Minimizing environmental externalities of port operations (e.g. air pollution, water pollution, noise)
- Disaster recovery planning Community engagement programs and
- Supporting local communities in need through social projects targeting decent living and working opportunities that generate sustainable growth of
- nelahborina communities Supporting local social institutions (e.g. schools, orphanages, NGOs)



- Sustainably managing natural resources, chemicals and waste
- Implementing responsible procurement and sustainable investments in port area management and development as well as the end-to-end supply chain etc. Encouraging circular economy and
- Industrial reuse and mutually beneficial use of resources in the port community Optimizing port operations/processes/
- Reducing food wastage and food loss in the production / supply chain (e.g. connecting the cruise industry with an NGO addressing poverty in your city or



- Improving energy efficiency of part operations, processes and services
- . Enabling the reduction of carbon and greenhouse gas emissions within the port area
- · Adapting port infrastructure and portrelated operations to Climate Change
- Providing services to reduce greenhouse gas emissions at sea and on the waterways, as well as the hinterland part of the supply chain
- Producing and/or sourcing renewable energy
- Encouraging third parties (vessels, tenants and operators) to take clean energy initiatives, by providing incentives and integrating clauses in lease and



- Taking measures to prevent waste from ending up in the oceans (e.g. port reception facilities, fishing for litter, cleanup actions)
- Promoting sustainable fishing activities Supporting research regarding
- sustainable use of maritime resources Reducing the emission of CO2, SO2, NOx, NH3 from port- related activities to avoid acidification of the oceans
- Minimizing water pollution through adequate wastewater treatment facilities Protecting coastal and estuarine
- Minimizing disturbing factors such as underwater noise for marine mammals



- Supporting local projects regarding nature development and blodiversity
- Recovering and protecting nature and
- blodiversity in the port surroundings Preventing deforestation through the usage/procurement of sustainablycertified wood and paper
- Offering nature and environmental
- education programs to employees Port area development in balance with
- ecosystems Minimistra environmental externalities of port operations (e.g. air poliution, noise)



- Constructive dialogue between employer
- and employees Good governance (a clear policy statement, stakeholder analysis, defined
- measurements, consistent reporting ...) Peace Initiatives (e.g. peace education on the work floor, prevention of Illegal arms trafficking)
- Addressing security: cyber security measures, commercial and operational data protection. Improving the careful use
- and protection of personal data Open dialogue and collaboration with all stakeholders (Including emergency services, customs and armed forces) and availability of a hotline for complaints and questions
- Transparent Internal and external communication



- Partnerships with local communities for
- port-city relation initiatives Partnering with other ports and partles in the logistics chain in joint projects of
- Public-private partnerships for funding and implementing sustainability projects Establishing supply chain partnerships
- for ensuring CSR values throughout the
- Cooperating with other ports for educational/training purposes (e.g. joint port training programs and centers)
- Joint research and development projects involving port stakeholders, academia, industry and authorities



Example: Olympic approach Port of Antwerp





Olympic qualification (All 17 SDGs)

3 to 5 KPIs

Olympic medals (Priority SDGs)

Χ

Χ

X

Χ

X

GOLD



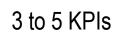








GOLE



Source: Visser (2019)



Port Endeavor: a Port Journey to SDGs









RAVENHILL HARBOR

4. IAPH Focus Areas

	Climate and Energy	Data Collaboration	Risk and Resilience
Topics	Clean marine fuels	Single window	Risk mapping
	Shoreside electricity	Port call optimisation	Port tracker (data)
	Clean ship incentives	Port Community Systems	Pandemics
	Carbon accreditation	Digital trust	Extreme weather
	Circular economy	Emerging technology	Small island ports
		E-bill of lading	Financial resilience
			Anti-corruption
Regulatory	IMO MEPC: GHG	IMO FAL	IMO FAL: Anti-corruption
agenda	IMO MEPC: waste	IMO MSC: ISPS	
		IMO MSC: MASS	
		IMO LEG	
Partnerships	IMO GreenVoyage	World Bank	Navigating a Changing Climate
	World Ports Climate Action	ChainPort	Maritime Anti-Corruption
	Programme	Port Call Optimisation Task	Network
	Getting to Zero Coalition	Force	

Flagship projects



About

Audit Tool

Bunker checklists

Terminal readiness

Environmental performance

CLEAN MARINE FUELS



Reference Documents

News



Antwerp – 23-25 June 2021

Pre-conference webinars Autumn 2020:

- 16 Sep: Port Authorities as Community Builders
- 21 Oct: Sustainable Partnerships with Cargo Interests
- 18 Nov: Globalisation versus Regionalisation



Patrick Verhoeven

patrick.verhoeven@iaphworldports.org
Twitter @PJHVerhoeven

www.iaphworldports.org www.sustainableworldports.org

