Developing qualified workforce for greener ports

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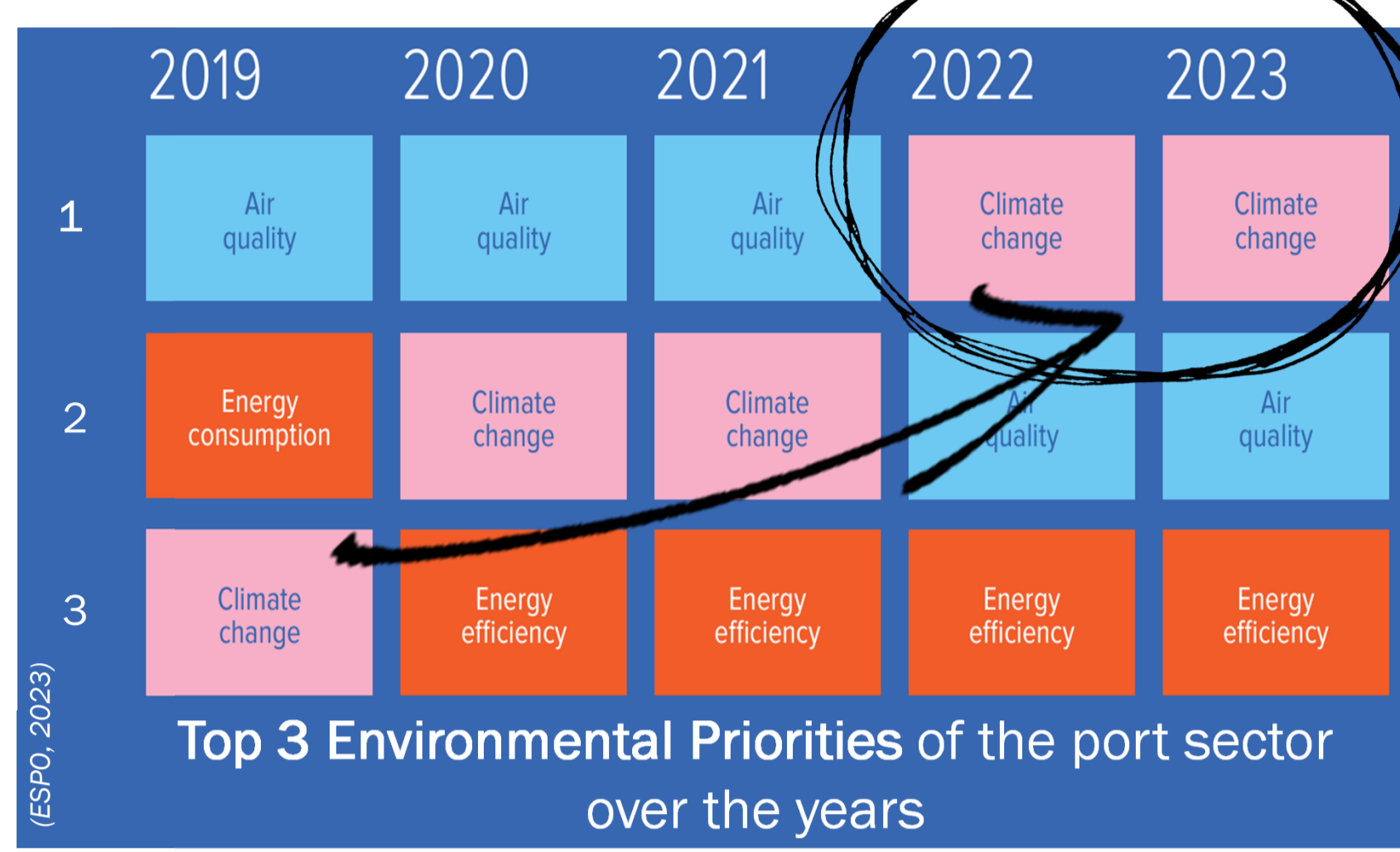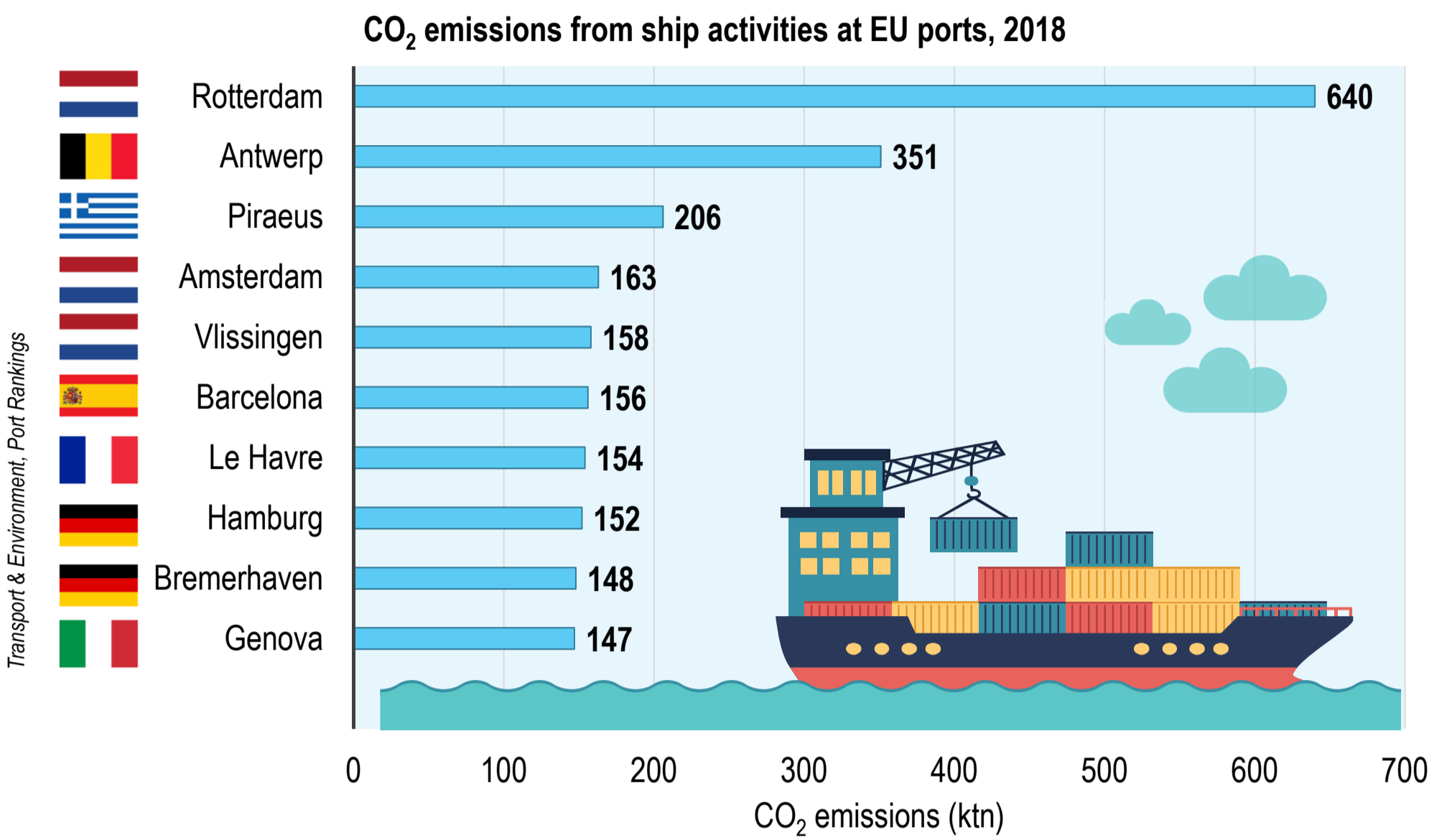
BLUE PORTS
TRAINING AND CERTIFICATION

Ports in Green Transition: The challenge

1200+ ports in the EU
5.4 million jobs in the EU Blue Economy, by 2030
46% of goods transported between the EU and the rest of the world (74% in volume)

2.9% of human related emissions are attributed to **global shipping** (2018)
3-4% of EU's total CO_2 emissions are due to **maritime transport**, of which **6-7%** are produced **at berth in ports** (2019)

CO_2 emissions from ship activities at EU ports, 2018

Port	CO_2 emissions (ktn)
Rotterdam	640
Antwerp	351
Piraeus	206
Amsterdam	163
Vlissingen	158
Barcelona	156
Le Havre	154
Hamburg	152
Bremerhaven	148
Genova	147

Top 3 Environmental Priorities of the port sector over the years (ESPO, 2023)

	2019	2020	2021	2022	2023
1	Air quality	Air quality	Air quality	Climate change	Climate change
2	Energy consumption	Climate change	Climate change	Air quality	Air quality
3	Climate change	Energy efficiency	Energy efficiency	Energy efficiency	Energy efficiency

> Today, **the Blue Economy workforce lacks the knowledge, skills and competences** required **to promote green pathways** and to efficiently employ recent technologies/techniques in alignment with the **European Green Deal**.
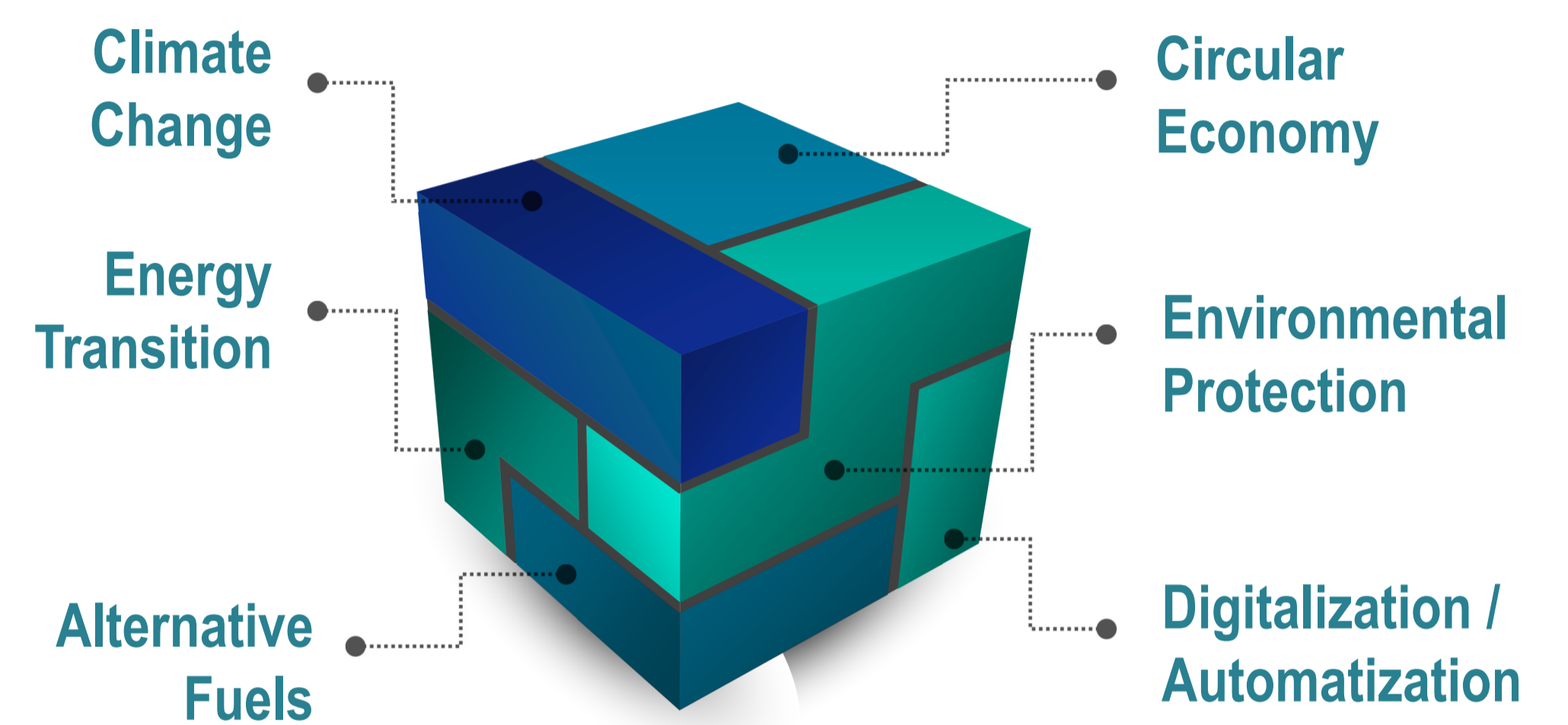
The BLUE PORTS project

BLUE PORTS enhances the **skills and capacity** of the **human capital** within the **port ecosystem**, focusing on **small and medium ports**, with a view to support and foster their **green transition**.
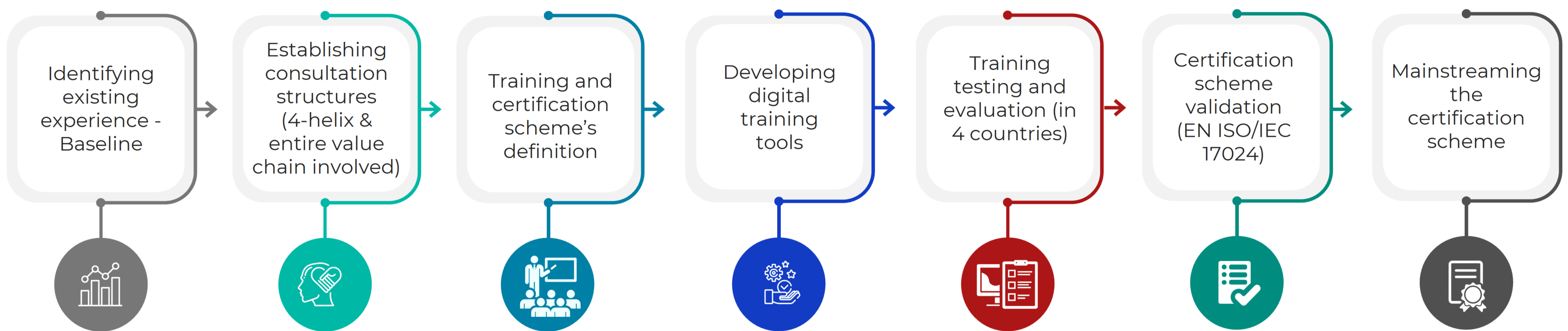
By delivering a **mutually acknowledged training and certification scheme at the European level**, in accordance with ISO/IEC 17024, BLUE PORTS offers a competitive advantage to the workforce and helps **minimize the environmental footprint of ports**.

BLUE PORTS thematic areas

- Climate Change
- Energy Transition
- Alternative Fuels
- Circular Economy
- Environmental Protection
- Digitalization / Automatization

The BLUE PORTS development process

Identifying existing experience - Baseline → Establishing consultation structures (4-helix & entire value chain involved) → Training and certification scheme's definition → Developing digital training tools → Training testing and evaluation (in 4 countries) → Certification scheme validation (EN ISO/IEC 17024) → Mainstreaming the certification scheme

- Employers
- Employees
- Training providers
- End users
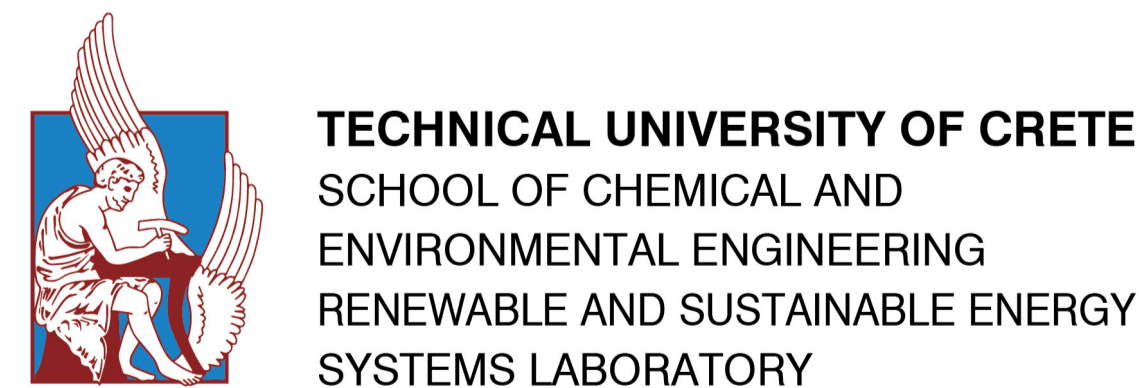- Social partners
- Competent authorities

Expected results

✓ **Skills enhancement** through a comprehensive training program, accessible to port personnel, authorities, academia
✓ **Reskilling and upskilling opportunities** to facilitate career advancement, job mobility and talent retention
✓ **Promoting employability** providing green, digital, soft, transversal, inter-/multi-disciplinary, managerial, and entrepreneurial skills
✓ **Hands-on learning** with practical examples from selected cases
✓ **Increasing awareness and attractiveness** of blue career opportunities

In the long run:
✓ **Reduction** in **GHGs** emissions
✓ **Common quality standards** on Blue Economy staff training throughout Europe
✓ **Competent staff** in an ever-growing sector
✓ **More confidence** in the technology of opinion leaders, planners and consumers
✓ **Improved and cost-efficient** maintenance **procedures**.

The BLUE PORTS team

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TECHNICAL UNIVERSITY OF CRETE
SCHOOL OF CHEMICAL AND ENVIRONMENTAL ENGINEERING
RENEWABLE AND SUSTAINABLE ENERGY SYSTEMS LABORATORY

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