

Port change

EmissionInsider



PortXchange Introduction

Mission



We are on a mission to work with the shipping industry to connect port communities worldwide and reduce emissions at large scale and low cost.

We believe that:

- Sustainability
- Operational efficiency
- Digitalization

shape the future of shipping industry

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PortXchange Solutions

Path to decarbonization

We accelerate the transition to a **net-zero maritime industry**, thereby **mitigating** the impact of **climate change on oceans, seas, and communities surrounding the port areas**, by providing tangible services:

Emissions Monitoring

EmissionInsider is a digital solution that empowers ports to **track and analyze emissions** in and around the port to develop an actionable decarbonization strategy.

Annual Emissions Inventories to assist you in meeting upcoming legislation requirements and/or to establish a baseline measurement of in-port emissions.

Emissions Mitigation

Synchronizer is a digital platform that helps ports to facilitate just-in-time arrivals to **optimize operations** and **reduce emissions at anchorage**.

Knowledge Hub

Consultancy services to help ports navigate the complex **regulatory landscape** and guide them through the **decarbonization journey**.

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Awards & Recognitions

Our dedication to sustainability and innovation has been recognized on both sides of the Atlantic:

- Winner **Port Decarbonisation of the Year** Award by Riviera Maritime Media.
- Winner **NAMEPA' 2023 Environmental Innovation Award**
- Selected among the **40 most promising companies for the Tech Tour Growth Sustainability 2023** program
- Recognized as one of the **top 150 startups to drive innovation and sustainability in the maritime industry** by Thetius.





Introduction to EmissionInsider

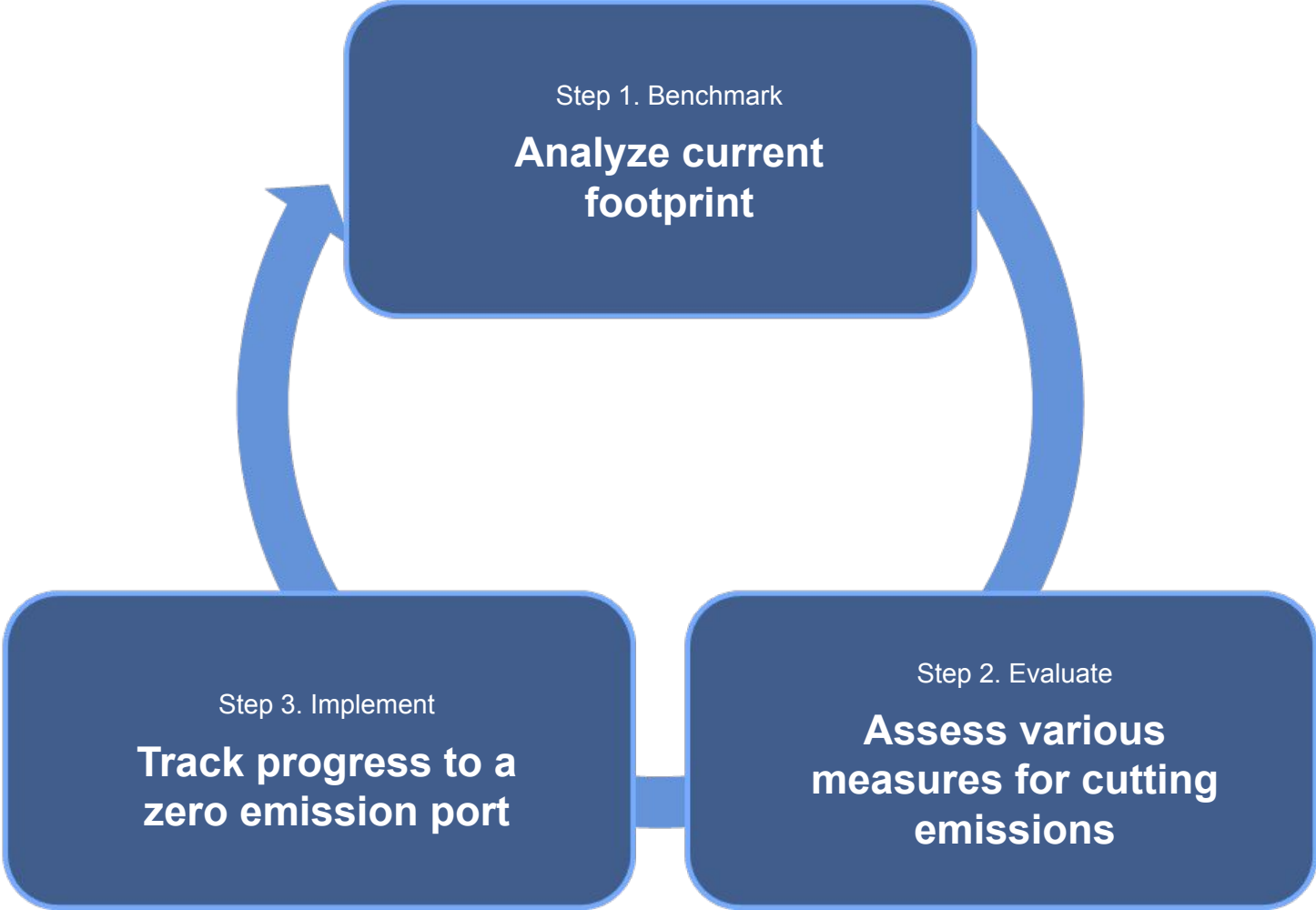
Challenges & Solutions

- Growing pressure at ports around the world to address air pollution generated by cargo movement operations.
- Growing demand from policymakers to measure and report emissions ([EU - European climate law, Corporate Sustainability Reporting Directive, US - Clean Shipping Act of 2022](#)).
- Lack of consistent and reliable ways to track current emission footprint.
- Need to report on the effectiveness of sustainability projects.
- Need to assess the potential impact of decarbonization measures before allocating resources and/or applying for subsidies.

PortXchange EmissionInsider - a digital platform that empowers ports to track and analyze emissions in and around the port to develop an actionable decarbonization strategy.

PortXchange EmissionInsider

Holistic approach to decarbonization



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PortXchange EmissionInsider

Analyze current emission footprint

EmissionInsider leverages **TNO methodology*** to calculate vessel emissions in **near-real-time**, and it can also furnish **historical emissions data** going back up to **3 years**.

How does it work?

1

Together with the port authority we begin by outlining the **port polygon**, which encompasses the anchorage area, berths, and any other points of interest.

2

We utilize **AIS data** to monitor the movements and activities of all vessels within the designated port polygon.

3

We integrate AIS activity data with **vessel specifications** and **emission factors** to create emission profiles for each vessel.

*We can tailor our solution to incorporate specific methodologies that are aligned with your requirement

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Case study

Making the transport emissions transparent in the Port of Rotterdam

Challenges

- Emission calculations were done sporadically through studies that relied on different assumptions and datasets
- Challenging to compare the emission level over time and track the progress toward the net zero target

Benefits

- Standardize reporting
- Prioritize decarbonization projects
- Enable customers and port community to reach their decarbonization goals

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EmissionInsider Benefits

Develop decarbonization strategy that drives results

- Use **reliable data** to prioritize decarbonization initiatives and allocate investments accordingly.
- Lead the transition to a **greener and more sustainable** port and encourage port community to get onboard with initiatives.
- **Evaluate the effectiveness** of environmental policies and sustainability projects.
- **Inform** stakeholders, partners, and the public of **emissions reductions achieved**.
- **Track progress** toward a zero-emission port.

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Emissions dashboard enables us to use solid data to anticipate concrete improvement opportunities, and we are better able to assess the impact of measures in advance.



Annual Emissions Inventory

Create your baseline emissions with ease

Establish a baseline emissions level to use it as a benchmark for tracking progress in reducing emissions.

Scope: Emissions from vessels, truck, and rail

Benefits:

- Identify emission sources, patterns, and areas where emission reduction efforts should be focused.
- Set emissions reduction targets.
- Comply with the reporting requirements.
- Enhance an organization's transparency and accountability regarding its environmental impact.

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Contact Information



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FOR A
BETTER WORLD

