



# Financing Europe's Green Ports: Choices & Challenges

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# About Us

- **Non-profit** financial research & advisory for healthy oceans
- **Advice** on Green Shipping, Ports, Energy & Seafood

*Current mandates include:*



**Blue Economy Investment  
Platform:**

Evaluated 500 SMEs for EC & EIB financing.  
Presented to investors in multiple forums.



**Pacific Ocean Finance Program:**

Advising 11 Pacific Island States on financing marine reserves & local Blue Economy enterprises.  
Funded by The World Bank & Global Environment Facility

**Climate**  
INITIATIVE  
**Bonds**

**Green Bond Standards** for maritime issuers into high-growth global market.  
Setting standards based on scientific & industry inputs.  
*Now: Shipping & Ports*

# Global Infrastructure Market



**\$14tr**

**Global Transport Infra Spending to 2025**

*Europe's Share = 10%*

**Asia-Pacific taking 60%**



## Infra Sub-Categories

- **Transportation:** airports, seaports, roads, bridges, rail
- **Energy-related:** power plants, oil and gas pipelines, oil terminals, renewable energy assets
- **Utilities:** gas / electricity / water distribution, communications infrastructure
- **Social infrastructure:** hospitals, schools

## Projected Infra Growth

**Globally:** 5% annual growth to 2025

**Ports @ 5.8% = Highest Growth in Transport Sector**

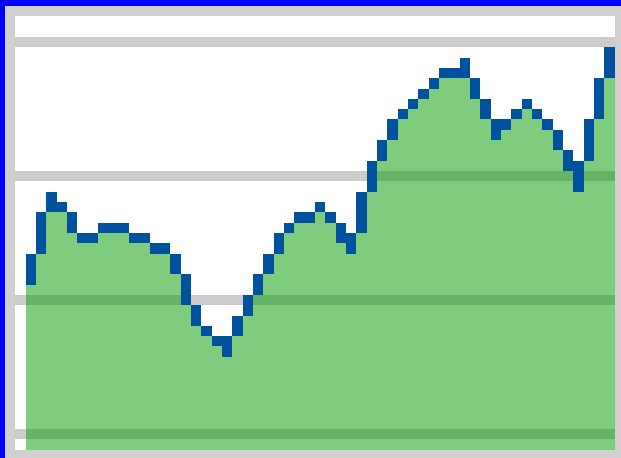
**Europe:** Only 1% growth, due to:

- Limited needs relative to other regions
- Still recovering from fiscal austerity

# Expected Returns



- **Low Risk:** Low Volatility & Protected Downside
- **Strong** Cash Yield from operations
- **Macro Links:** GDP, Inflation, Population Growth
- **Low Correlation** to other financial assets
- **Returns:** Higher than bonds, Lower than Equities
- **Rates:** Fixed vs floating over LIBOR



S&P Global Infrastructure Fund

5-yr Return: +26.7% (Feb2014 - Feb2019)

1-yr Return: +4.76% (Feb 2018 - Feb 2019)

## Infra Risk Categories & Returns

- **Core:** Boring operating assets, returns from cash dividends. *Returns: 5%+*
- **Non-Core:** Operating assets + Growth story. *Returns: 5-10%*
- **Value-Add:** Requires operational or strategy change. *Returns: 10-15%*
- **Opportunistic:** Highest risk, no cash dividends.- *Returns: 15%+*

# Europe's Ports Need

€750bn

**Investment needed by 2030** to realise core ports network

According to TEN-T Policy - 2014 Strategic framework for Connecting Europe Facility (CEF II)

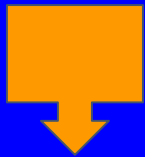
**But...**Ports got only **4%** of investment from CEF budget (2014-17)

Now...

€5bn

**Annually  
urgently needed**  
By Europe's ports to 2027

**How to fill the gap?**



**Private Investors**



# Port Investment Options

## Box 14: Categories of Port Assets

### Basic Port Infrastructure:

- Maritime access channels.
- Port entrance.
- Protective works, including breakwaters and shore protection.
- Sea locks.
- Access to the port for inland transport (roads and tunnels).
- Rail connection between the hinterland and the port.
- Inland waterways within the port area and connecting port areas with their hinterland

### Operational Port Infrastructure:

- Inner port channels and turning and port basins.
- Revetments and slopes.
- Roads, tunnels, bridges, and locks in the port area.
- Quay walls, jetties, and finger piers.
- Aids to navigation, buoys, and beacons.
- Hydro and meteorological systems.
- Specific mooring buoys.
- Vessel traffic management system.
- Patrol and fire-fighting vessels.

- Docks.
- Port land (excluding superstructure and paving).
- Access roads to general road infrastructure.
- Rail connection to general rail infrastructure, and marshalling yards.
- Dry docks for ship repair.

### Port Superstructure:

- Paving and surfacing.
- Terminal lighting.
- Parking areas.
- Sheds, warehouses, and stacking areas.
- Tank farms and silos.
- Offices.
- Repair shops.
- Other buildings required for terminal operations.

### Port Equipment:

- Tugs.
- Line handling vessels.
- Dredging equipment.
- Ship and shore handling equipment.
- Cargo handling equipment (apron and terminal).

Source: Author.

# Private Investors Need



## Mainstream Investors *standard criteria:*

- **Min Expected yield:** 5% (*Higher according to projected risk level*)
- **Adequate debt/equity structure** (*Minimum 25% equity*)
- **Strong sponsorship:** Political Support
- **Solid legal contracts:** Transparent legal framework
- **Fair and open bidding** procedures
- **Credible feasibility** analyses (technical, financial, institutional)
- **Credit rating:** Higher is better... it's a competitive market



## Sustainable Investors *add more criteria:*

- **Environmental impacts** on Air, Water, Sound, Habitats
- **Social impacts:** Job creation, gender/race, health/safety
- **Themes:** Clean Energy, Waste Mgt, Social Impacts, etc

# Who are Private Investors?

## Independent asset managers

- **Pure play infrastructure** (eg: Global Infrastructure Partners new fund \$11bn)
- **Adding other real assets** like real estate, timber (eg: Brookfield new fund \$14bn)
- **Diversified asset managers** with infra funds (eg: KKR Global Infra II = \$3.1bn)



## Large banks: Many have private equity business with infrastructure PE franchise

- **Deutsche Bank's** new Pan-European Infrastructure Fund II = \$2bn
- **Macquarie Infrastructure & Real Assets:** Largest infra player with \$100bn under management. Specialise in regional funds. Europe-focused fund has \$4bn



## Pension funds: Long-term fund LPs, not direct. Modest return requirements

## Sovereign Wealth Funds: Similar story to pension funds. Some investing directly

## Insurance companies: Own balance sheets & external clients of investment arms

## Strategics: Corporates & family offices with strategic interests in shipping & ports



# The China Factor

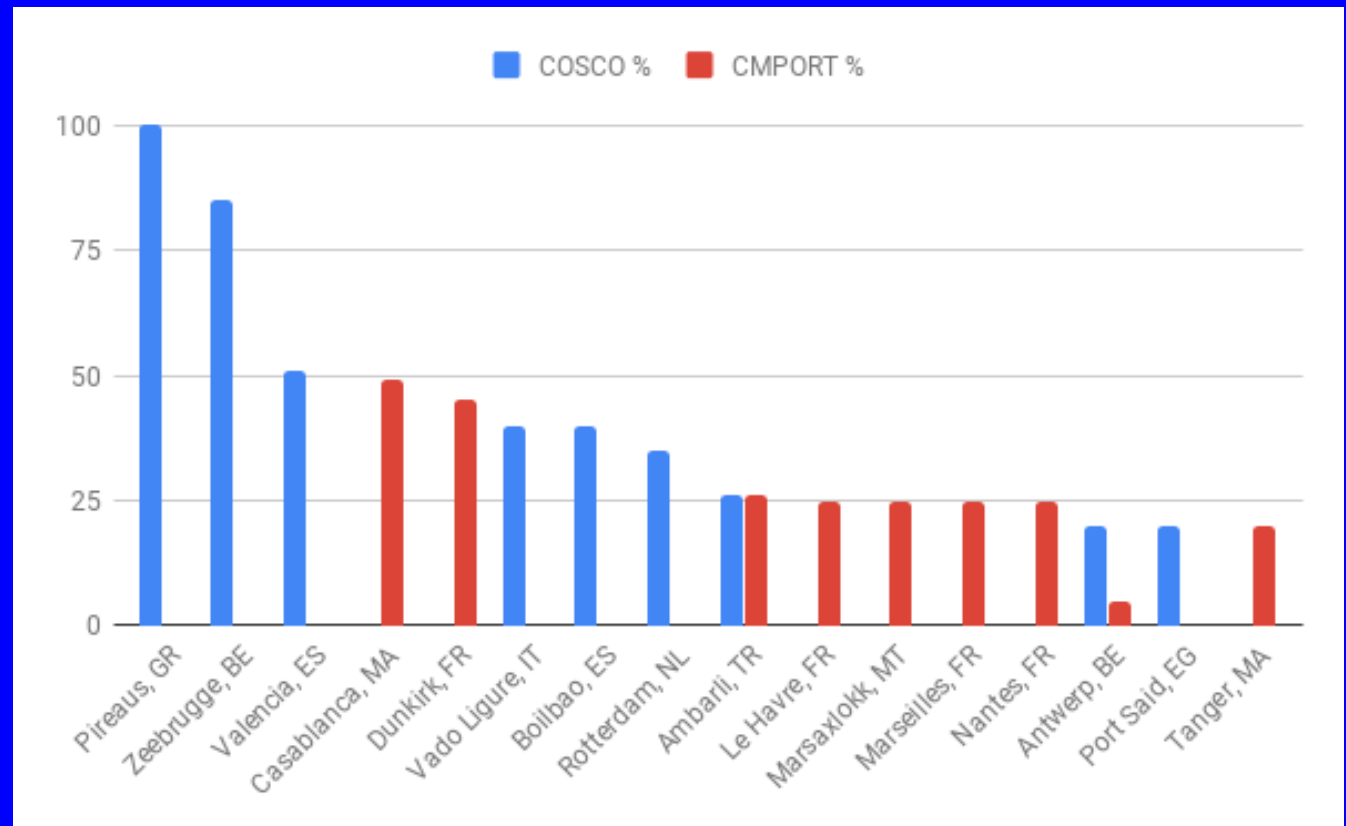


## Chinese investments in Europe & Med Ports

### COSCO Shipping Ports & China Merchants Port Holdings

#### Why?

- **Economic:** EU is China's biggest source of imports. 2nd largest export market.
- **Military:** China as maritime superpower
- **Anaconda Strategy:** *Surround & Squeeze.* Investing on Europe's periphery.



Source: [Olaf Merk, Revue internationale et stratégique \(2017\)](#)

# Green Port Priorities



Source: European Seaports Organisation (ESPO)

# Green Port Investments



**Clean Energy** for onshore power  
**Servicing & Decomm** offshore platforms  
**Wind & Solar** installations  
**Tidal & Wave** tech goes commercial



**Shipyards** tech & servicing  
**LNG** terminals, equipment & training  
**Expansion** with dredging, docks, support  
**Upgrades** for clean air, water, noise regs



**Recycling** port & municipal waste  
**Waste** to energy & to product  
**Prevention** of waste entering the sea



**Digital Tech** for port mgt & supervision  
**Monitoring** emissions & waste  
**Marine Drones & ROVs** take on key tasks  
**Health & Safety** issues addressed

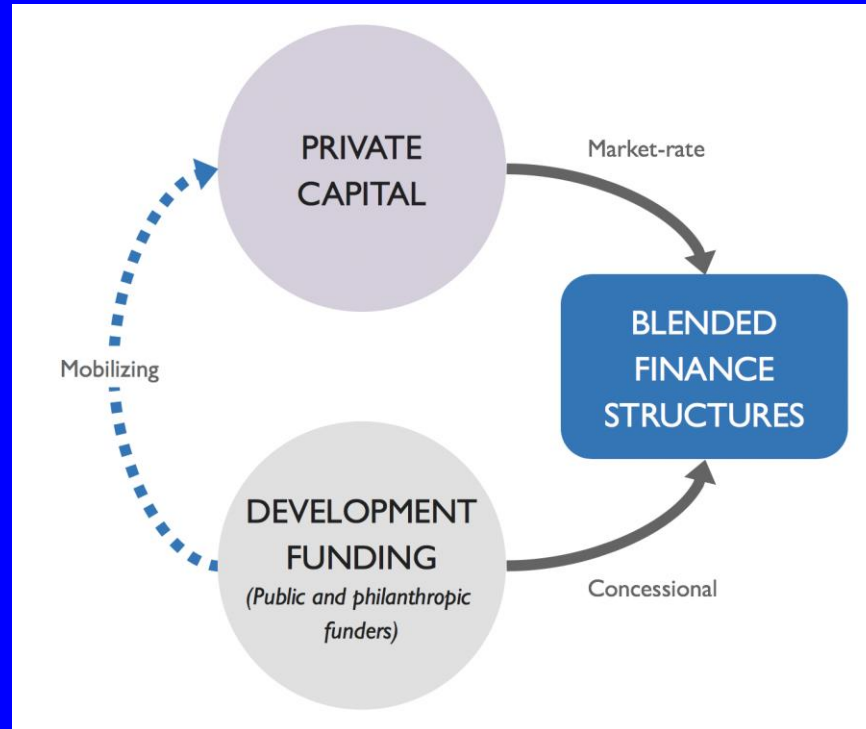
**Coastal Resilience:**  
Storms, rising seas... Bonds & insurance on the market



# Blended Finance to Reduce Risk

## Goals

- **Returns:** Positive!
- **Sustainability:** Very important but no trade-offs vs return
- **Market:** Attract Private Investors!



## Tools

- **Repayment** guarantee
- **First Loss** covered
- **Coupon Payments** covered
- **Anchor Investment**

# Toolkit: Port Finance

## Bank Loans & Leases

*Primary source for shipping*

**Pros:** Relationships. Good rates if Blended Finance (EIB, grants). Collateral?

**Cons:** Limited appetite since 2008. Selling off loan portfolios = loss of control.

## Public Bonds

*Primarily Government issues*

**Pros:** Diversified investor base. Visibility.

*Green Bonds:* High demand, high loyalty.

**Cons:** Costs & Compliance. No control over who buys. Competitive global market.



## PE Infra Funds

*Ports are sub-sector of Transportation*

**Pros:** Low-cost, low compliance

**Cons:** Mega funds. Fixed investment cycle = forced exits. Asian assets preferred now.

## Private Placements

*Directly with few institutions*

**Pros:** Lowest cost, lowest compliance, negotiate directly, few investors, hold to maturity, fixed rate, privacy & control....

**Need:** Structuring & placement agent



# How We Can Help

**Ocean Assets team** structures & places capital to align ports & shipowners with responsible investors:

## **1. Maritime Private Equity Fund**

We partner with a leading maritime fund manager to invest in European companies with proven technologies for green shipping and ports. Zero-emission technologies, marine digital, waste and water innovations. We target revenue-generating companies, using criteria and networks developed by our work on the EC Blue Economy Investment Platform.

## **2. Coastal Resilience Finance**

We propose to partner with a select group of institutions to lend to ports and conservation partners who can improve coastal resilience in developing countries by restoring natural assets (mangroves, reefs, etc) and generating revenues from local enterprises. We seek to achieve measurable impacts with carbon sequestration, coastal protection and community health.

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