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Unleashing the  
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maritime industry



# Maritime Green Corridors

## Opportunities for First Movers in Spain

Futureport Bilbao, 22 March 2023

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## Global Maritime Forum

- An international not-for-profit organization
- Committed to shaping the future of global seaborne trade to increase sustainable long-term economic development and human wellbeing
- A platform for collaboration for industry and thought leaders
- Identifies key issues and facilitates collaborative projects that deliver sustainable change
- Supported by industry partners who share our ambition

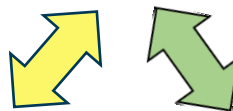


# Shipping's transition to zero is moving up the agenda



## Ambition:

- Call to Action on full shipping decarbonization by 2050 signed by 240+ industry leaders
- coZEV cargo owners' initiative: full decarbonization by 2040
- Poseidon Principles to align with 1.5 trajectory

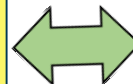


## Policy:

- Clydebank declaration on Green Corridors
- EU Fit for 55 proposal
- Impending revision of IMO GHG Strategy and discussion of MBM

## Action:

- 300+ zero-emission pilots & demos
- 20+ Green Corridor initiatives
- First orders for dual-fuel MeOH and NH3 vessels

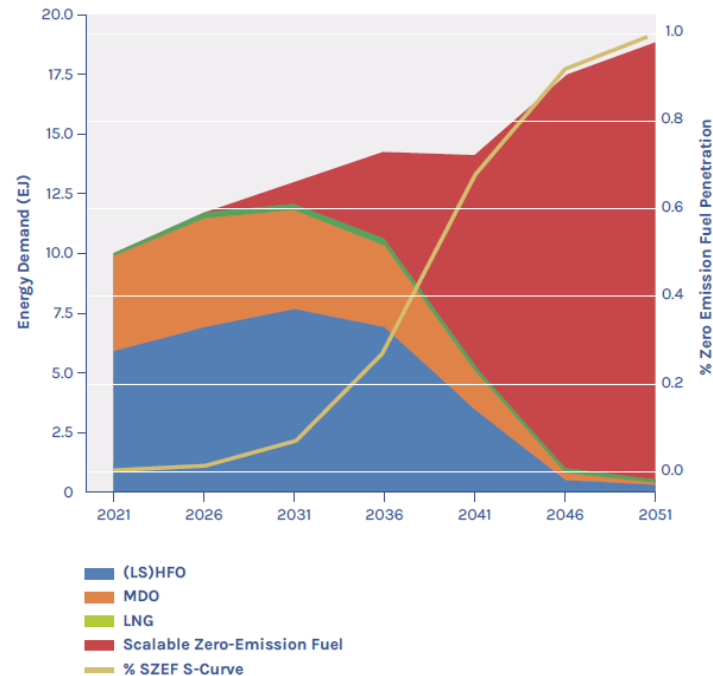




## The Transition will be steep but doable

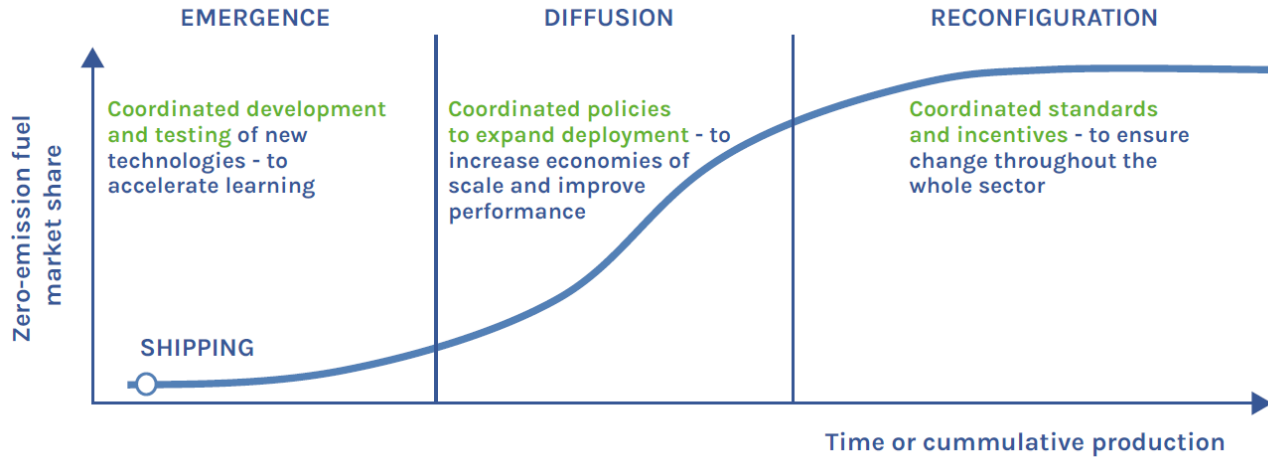


- The nature of transitions imply an S-shaped curve for zero-emission fuels and vessels
- S-shaped technology transitions are common and the different phases well understood
- The rate of change from 2030 will be steep: the whole ecosystem should get ready now



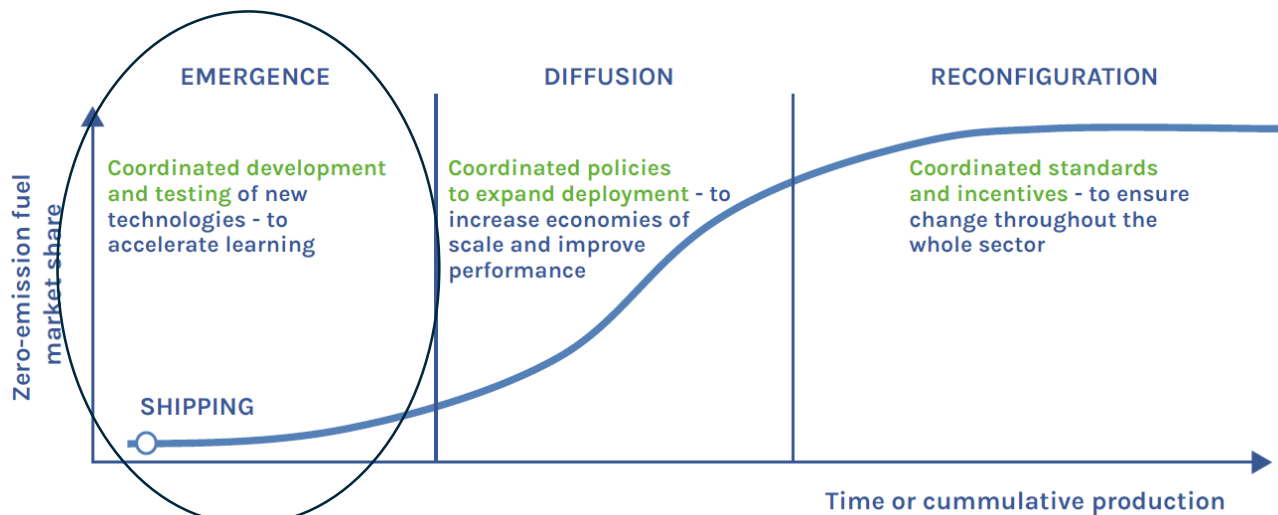


# What needs to happen when





# What needs to happen when



Green Corridors





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## A GREEN CORRIDOR

is defined as a shipping route on which the technological, economic, and regulatory feasibility of the operation of zero emissions ships is catalysed through public and private actions.

For technologies not available today, there is a chicken-and-egg problem, since development fuels, vessels and bunkering is interdependent.

Green Corridors offer one approach to solving this problem by aligning different stakeholders and concentrating efforts along pre-identified routes with favorable conditions.

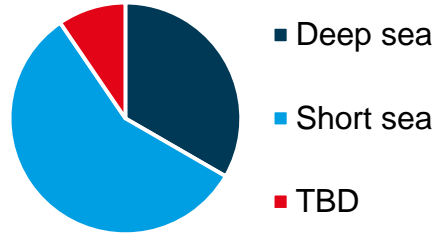
Green Corridors can accelerate decarbonization; they can also help establish 'first mover advantages' for companies, ports, and whole economies.





20+ initiatives

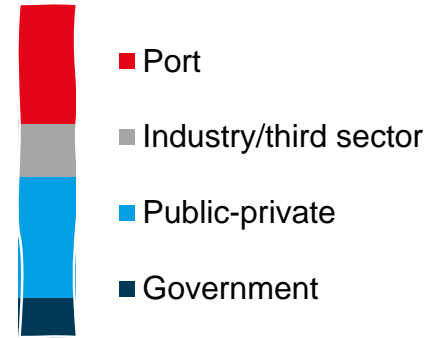
110+ stakeholders covering the whole value chain



### Existing targets

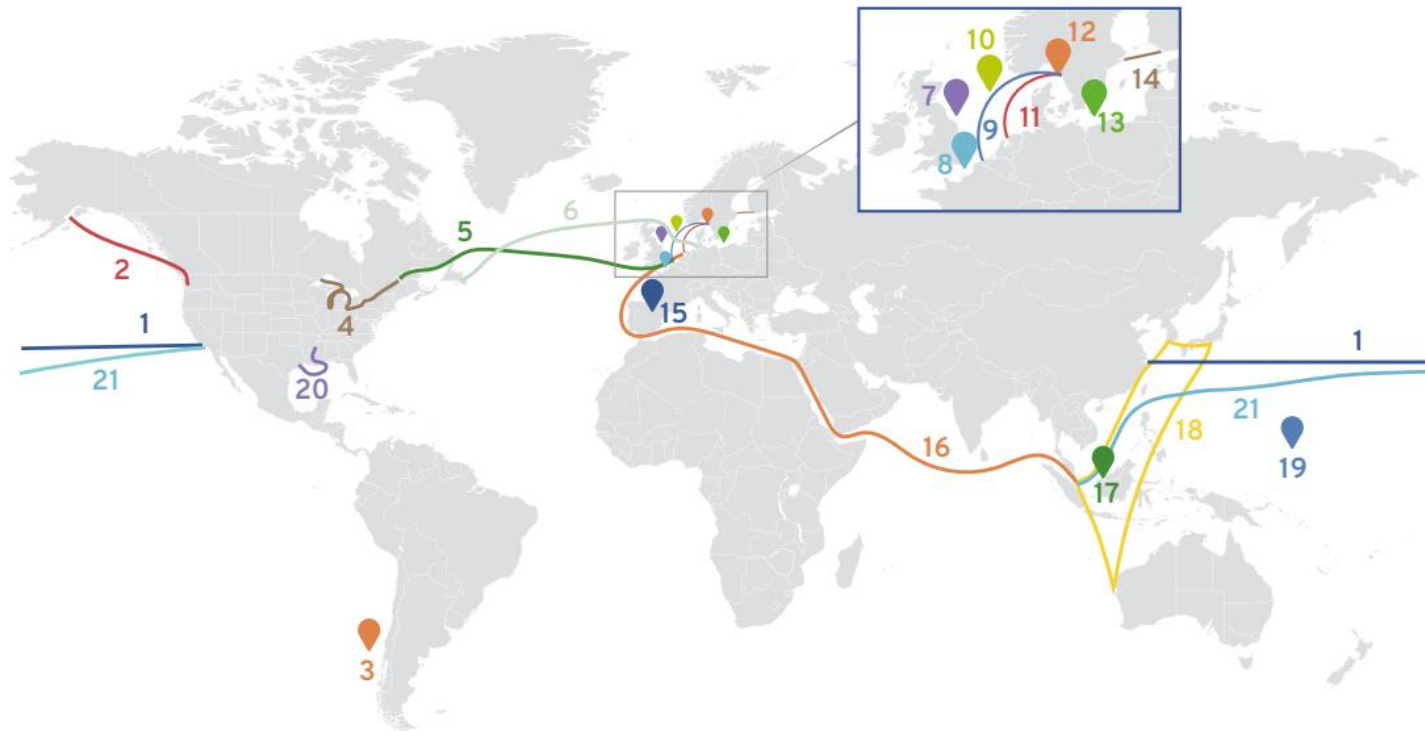
- operation by 2027-2030
- most are TBD

### Leadership



Source: 2022 Annual progress report on green shipping corridors, GMF





- 1. Shanghai- LA
- 2. Alaska, British Columbia, Washington
- 3. Chilean Green Corridor Network
- 4. Great Lakes- St. Lawrence
- 5. Antwerp-Montreal
- 6. Halifax-Hamburg
- 7. Clean Tyne Corridor

- 8. Dover-Calais/Dunkirk
- 9. Gothenburg-North Sea Port
- 10. H2 powered North Sea Crossing
- 11. Gothenburg-Rotterdam
- 12. European Green Corridor Network
- 13. Nordic Regional Corridors
- 14. Decatrip

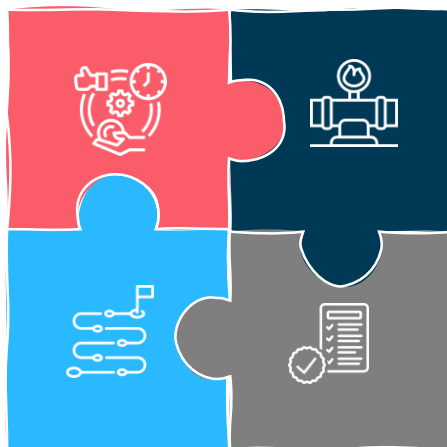
- 15. Green Corridors Spain
- 16. Rotterdam- Singapore
- 17. SILK Alliance
- 18. Aus-Asia Iron Ore
- 19. QUAD Shipping Taskforce
- 20. Gulf of Mexico
- 21. Los Angeles-Long Beach-Singapore



## What is needed to establish a green shipping corridor?

Cross-value-chain collaboration

Customer demand



A viable fuel pathway

Enabling policy environment

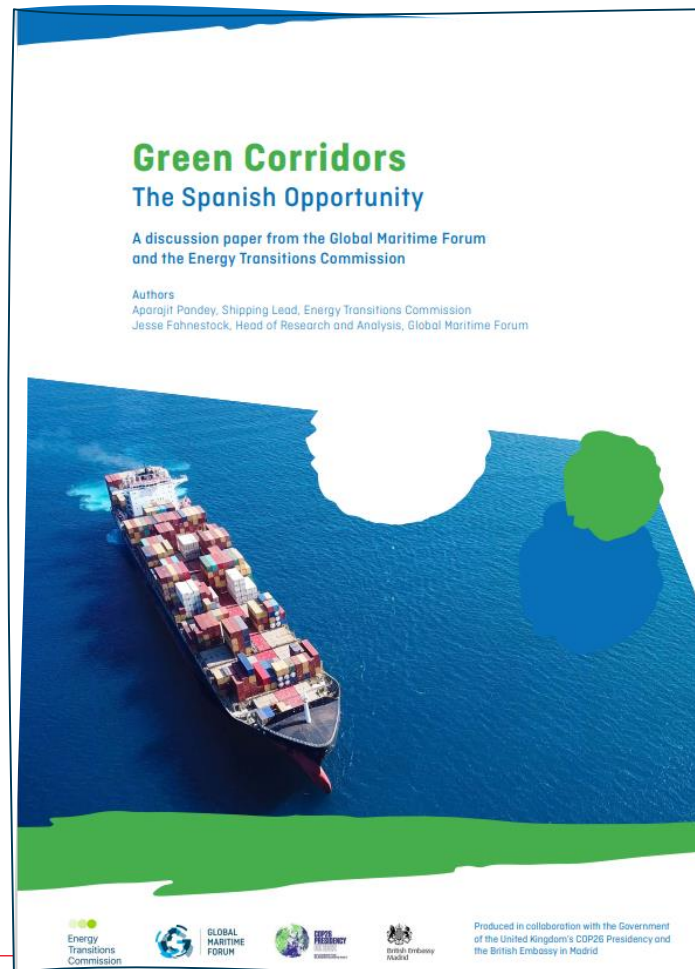
Source: *The Next Wave: Green Corridors. A special report for the GtZ Coalition, 2021*



## Why Spain?

- Signed Clydebank Declaration – signal of **intent**
- Significant **opportunities** for the industry and the economy, if moved quickly
- Favorable **conditions** for the creation of green corridors:
  - strong companies throughout the **value chain** for international shipping
  - clear advantages in the production and distribution of future bunker **fuels**
  - potential **demand** for decarbonised freight
  - constructive arena for **policy** action

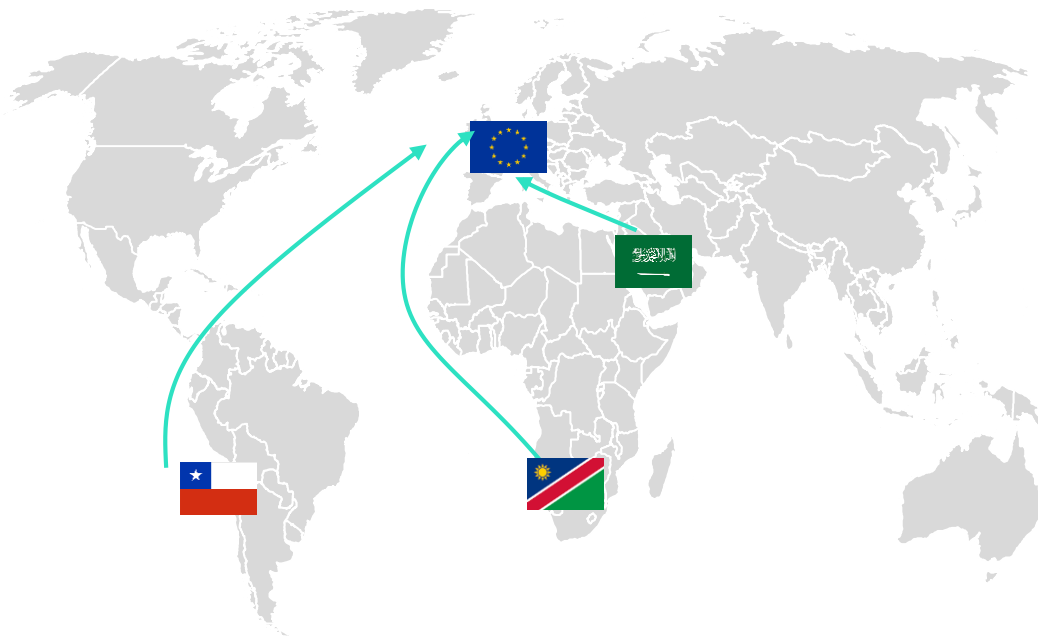
Source: *Green Corridors: The Spanish Opportunity*, GMF, ETC (2022)





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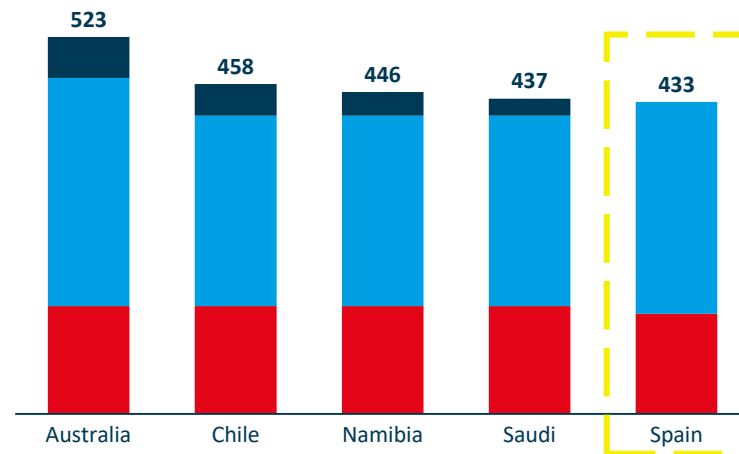
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- Transportation Costs
- H2 Production Costs
- Ammonia Synthesis Costs

Europe

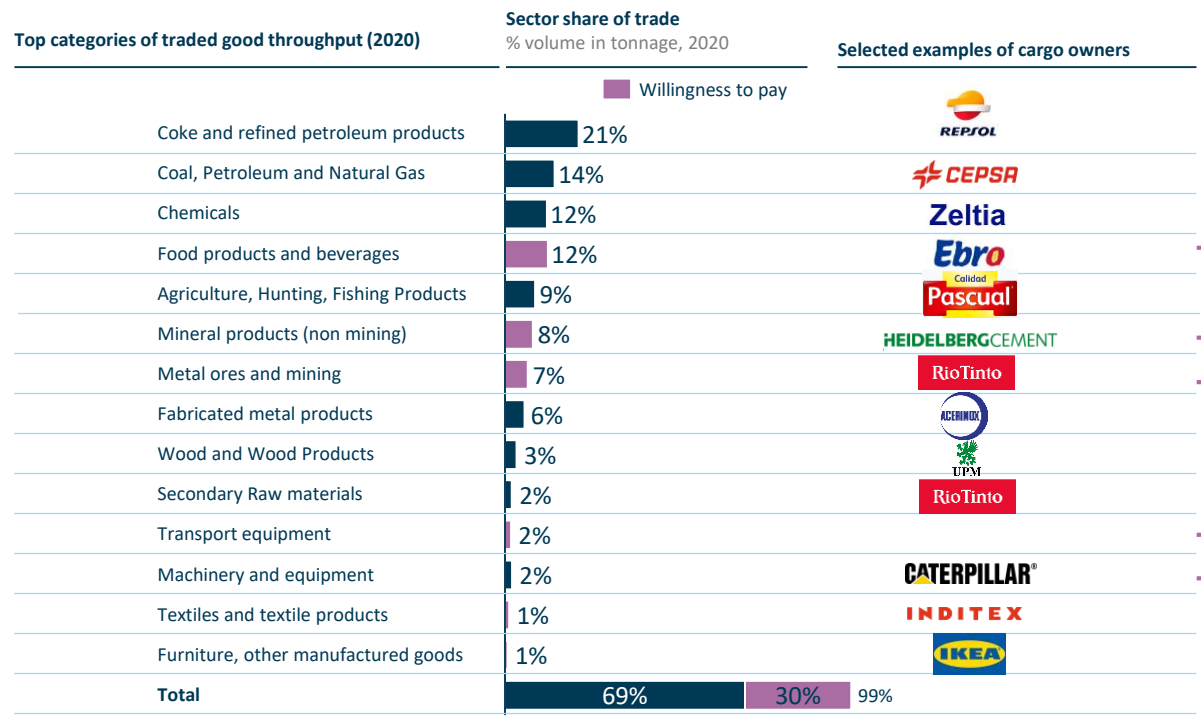
\$/ton ammonia delivered, 2030





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30% of trade is in categories that are primarily “close to the customer” or are willing to pay for Scope 3 emission reductions





## Factors to consider when selecting a route

### Impact

### Feasibility

Scale	Carbon intensity	Fuel potential	Type of cargo	Other route characteristics	Policies	Stakeholders
Cargo volume on the route, expected future growth in the sector(s), energy demand on the route	Carbon intensity and current emissions on the route	Availability and cost of the supply of zero-emission fuel on the route	Traded goods, relative price increase and scope 3 importance within the sector	Age of the fleet Number of ports of call and cargo owners Regularity	Alignment of national policies of the participating countries	Ease of the stakeholder environment on the route

Source: *The Next Wave: Green Corridors. A special report for the GtZ Coalition, 2021*



# Promising countries

## United States

Biggest trade partner,  
diverse sectors

## Brazil

Big trade partner but low value  
goods, low stakeholder readiness

## Morocco

Big trade partner, low value  
goods, low stakeholder readiness

## United Kingdom

Important trade partner, feasible sectors  
(cars, food and beverages), high  
stakeholder readiness

## Turkey

Big trade partner, medium to high  
value goods, low stakeholder  
readiness

## Italy

Important trade partner, feasible sectors  
(food and beverages, cars)



## Activating Green Corridors in practice ...



Assessment of routes



*An evaluation of which routes (cargo, ports, destination) are most promising will be needed to focus resources.*

Engagement of stakeholders



*A dialogue between industry, ports and key regulatory agencies should be initiated*

Feasibility studies



*Targeted studies of supply/demand for new fuels, infrastructure and financing needs for prioritised corridors should be undertaken*

"Route mapping" and  
programme development



*A joint public-private roadmap for the corridor should be developed and targeted support programmes considered*



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# Thank you

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