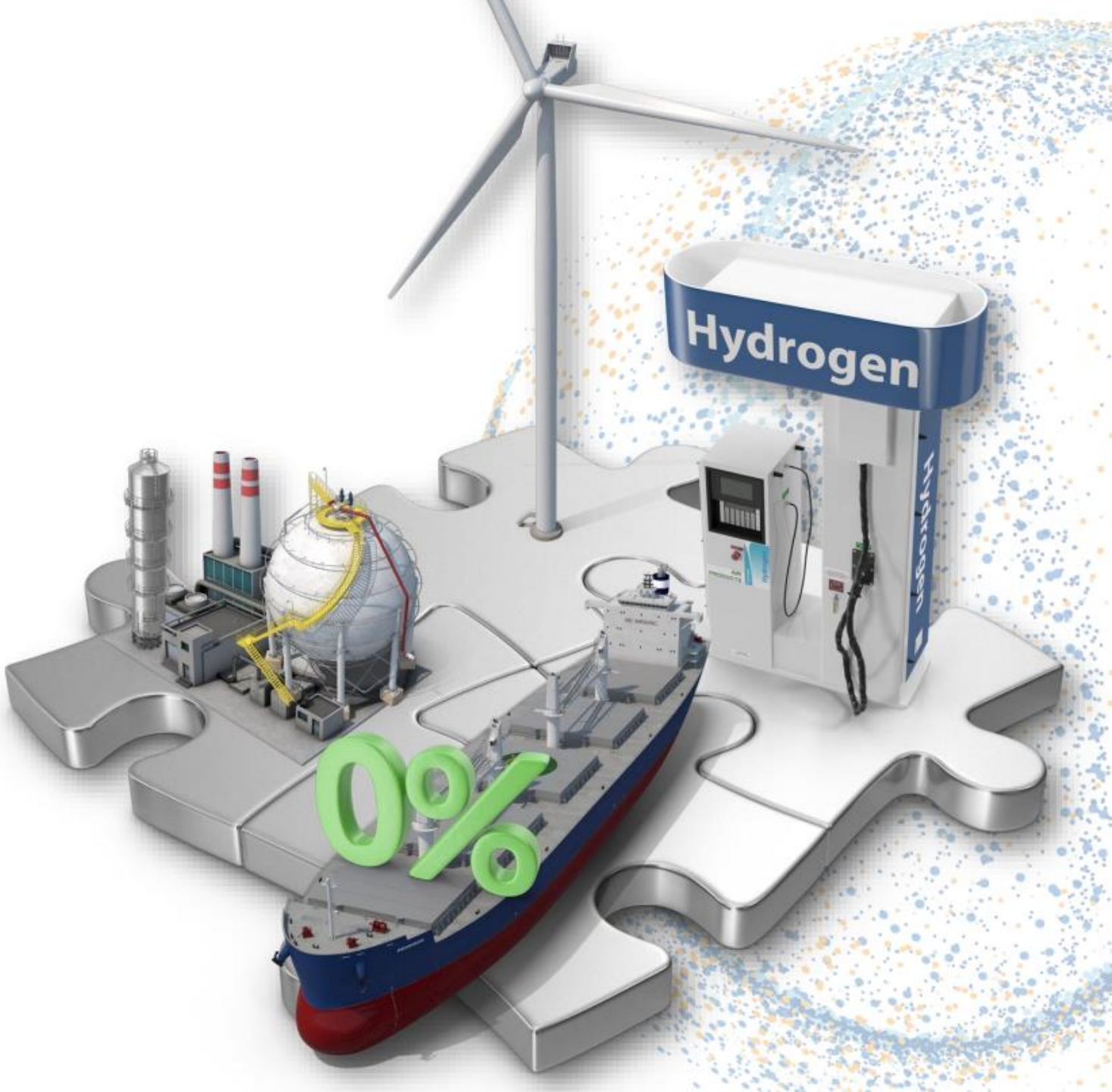
Wilhelmsen

Wilhelmsen New Energy – Putting the pieces together



Tomas Tronstad

Status of hydrogen in zero emission shipping

The core technology and products are there, or about to be rolled out

What is missing:

- Some logistical elements in the fuel value chain

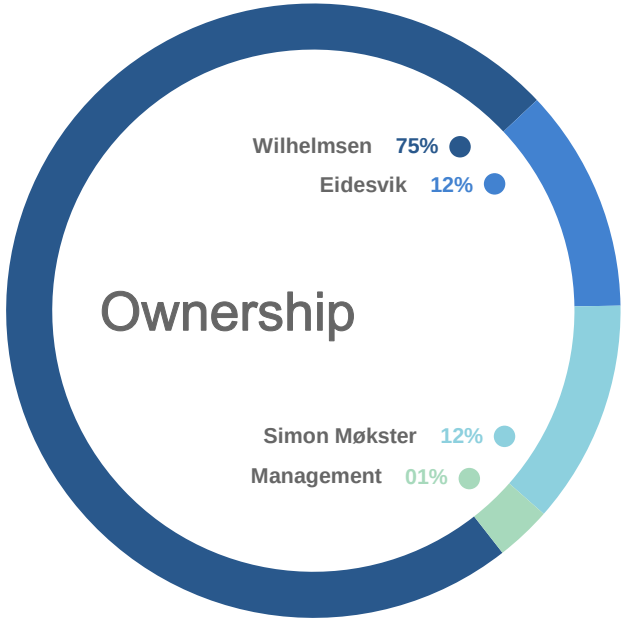
  Under development: Container storage and LH2 shape flexible tanks, bunkering of liquid and compressed H2 …

- A good business case for the new fuels

  But will come with economy of scale and with regulation
  Norway: Carbon tax of 200€/ton from 2030 (confirmed) – contracts of difference up to 2030 (under debate)

- The availability / infrastructure and the applications to use them – *see next slides*

NorSea



Founded in 1965

1000+ Employees

2.1B NOK Revenue (2019)

Offshore Supply Basis

Located around the North Sea – owned by NorSea Group

Wilhelmsen

ccb energy holding

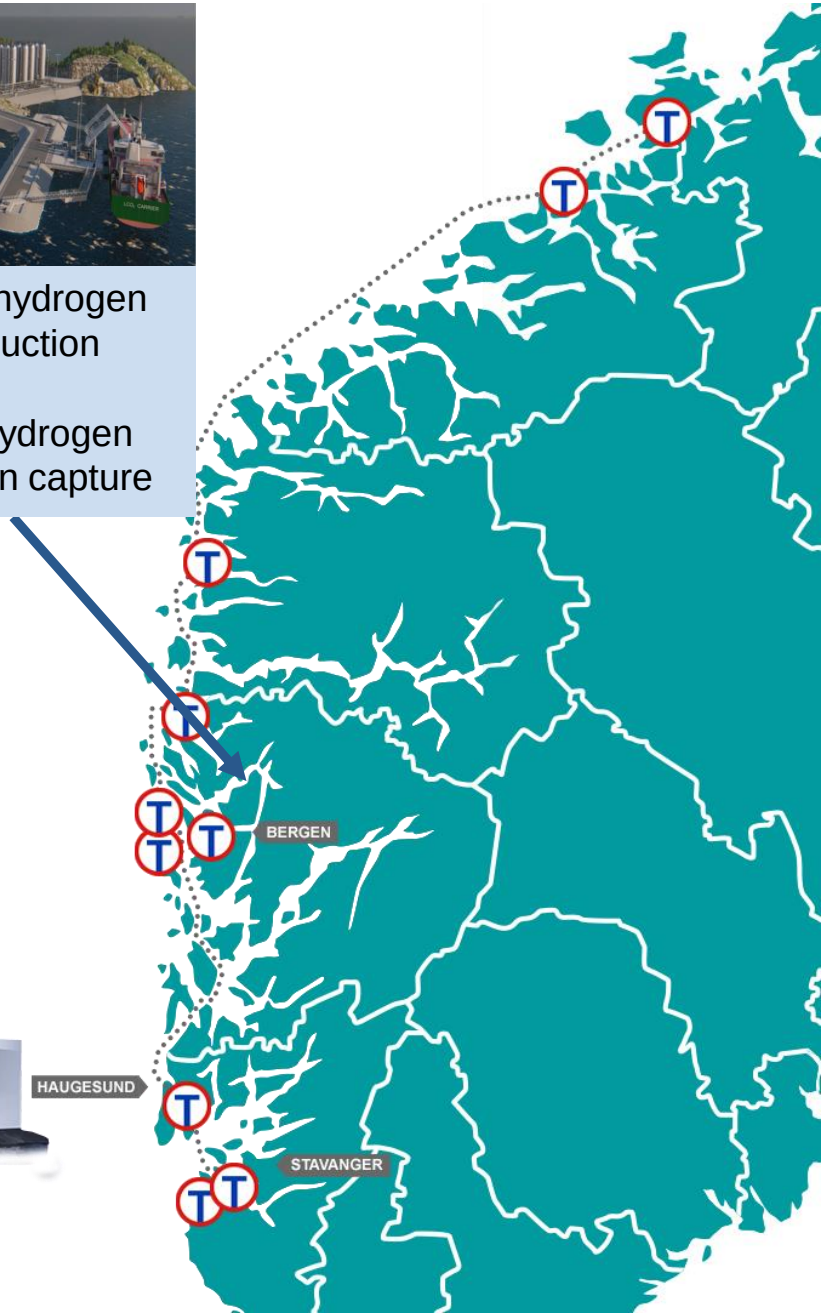
Z·E·G

equinor

NorSea

Green hydrogen production

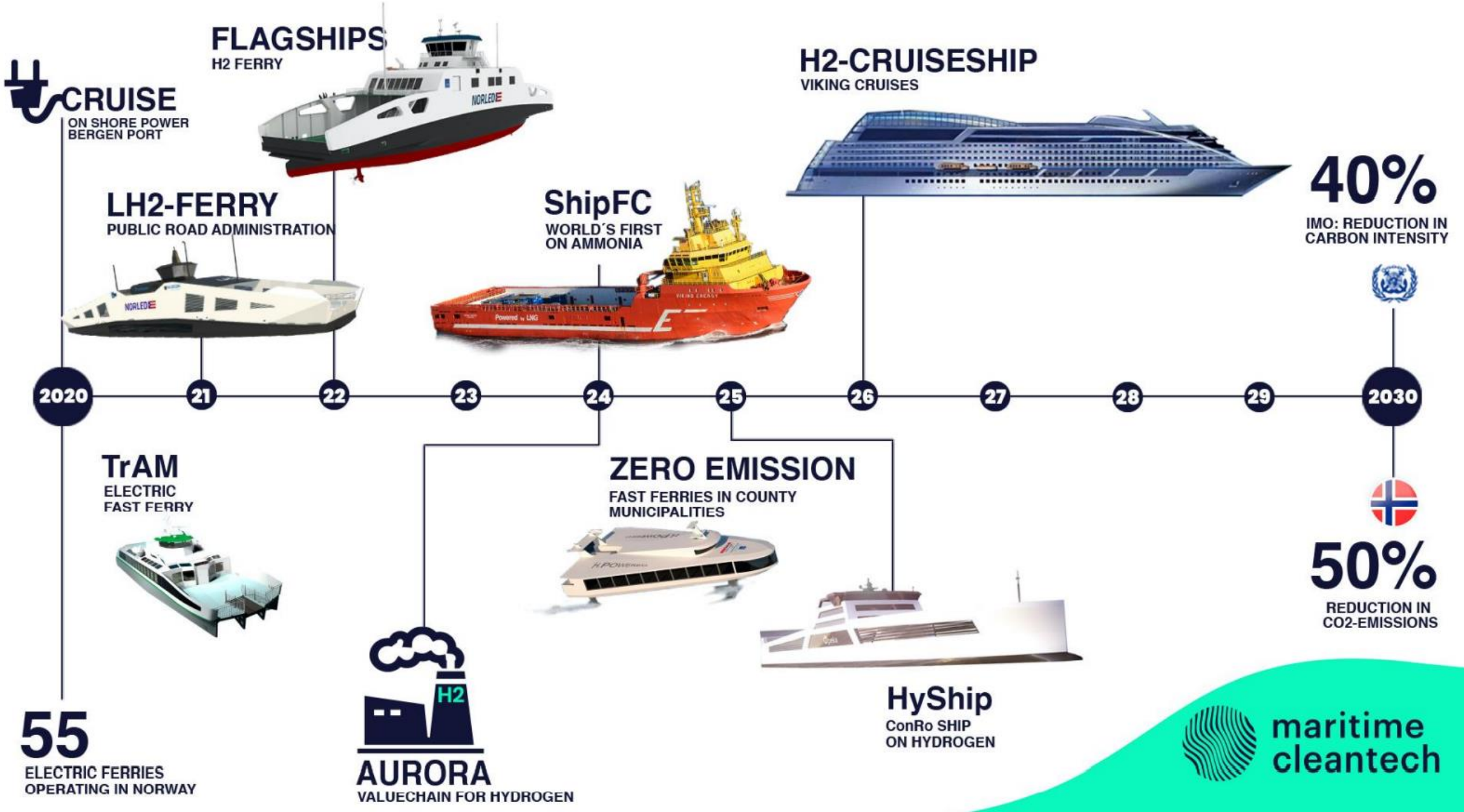
Blue hydrogen + carbon capture



Topeka - Base to Base

- Two vessels being developed
- Each will utilize 1,5 ton H2 daily for operation
- Vessels will transport LH2 from production centrally to energy bases along the coast

In operation from 2025


FLAGSHIPS
H2 FERRY
CRUISE
ON SHORE POWER
BERGEN PORT
H2-CRUISESHIP
VIKING CRUISES
40%
IMO: REDUCTION IN
CARBON INTENSITY
LH2-FERRY
PUBLIC ROAD ADMINISTRATION
ShipFC
WORLD´S FIRST
ON AMMONIA
2020
21
22
23
24
25
26
27
28
29
2030
TrAM
ELECTRIC
FAST FERRY
ZERO EMISSION
FAST FERRIES IN COUNTY
MUNICIPALITIES
50%
REDUCTION IN
CO2-EMISSIONS
55
ELECTRIC FERRIES
OPERATING IN NORWAY
H2
AURORA
VALUECHAIN FOR HYDROGEN
HyShip
ConRo SHIP
ON HYDROGEN
maritime
cleantech

Will Europe succeed in transforming shipping?

Yes! Because…

- Strong, innovative maritime cluster – co-working and competing
- Solid R&D and industrial cluster in all steps in the value chain
- Cargo owners and ship owners that are in the forefront and willing to act
- National and regional (EU) ability to take a leading role in the change

But most of all: Because we must !

Thank you for your attention

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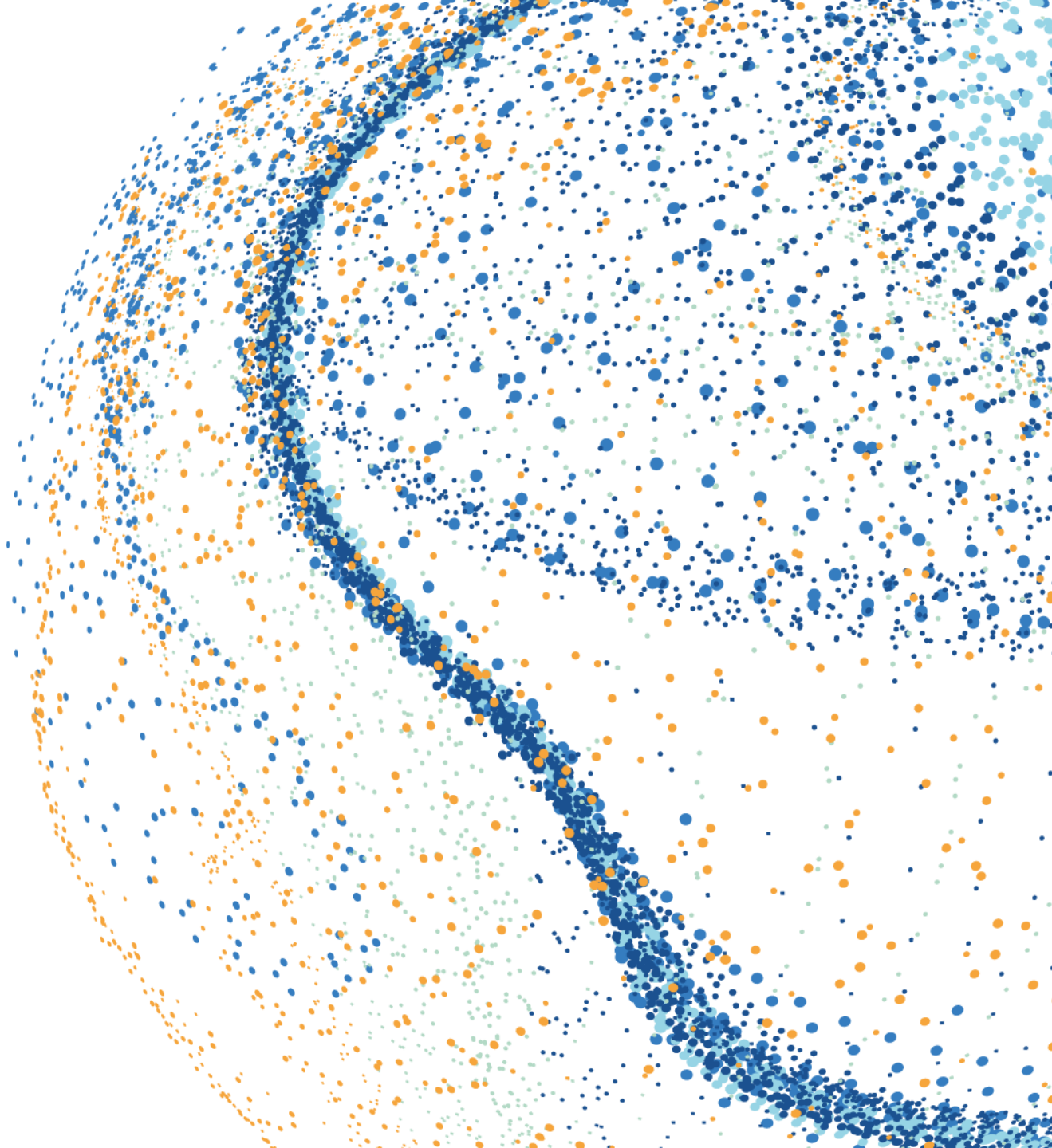
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