

MOVING CARBON: HOW SMARTER TRANSPORT UNLOCKS SCALABLE CCUS



DECARBONICE

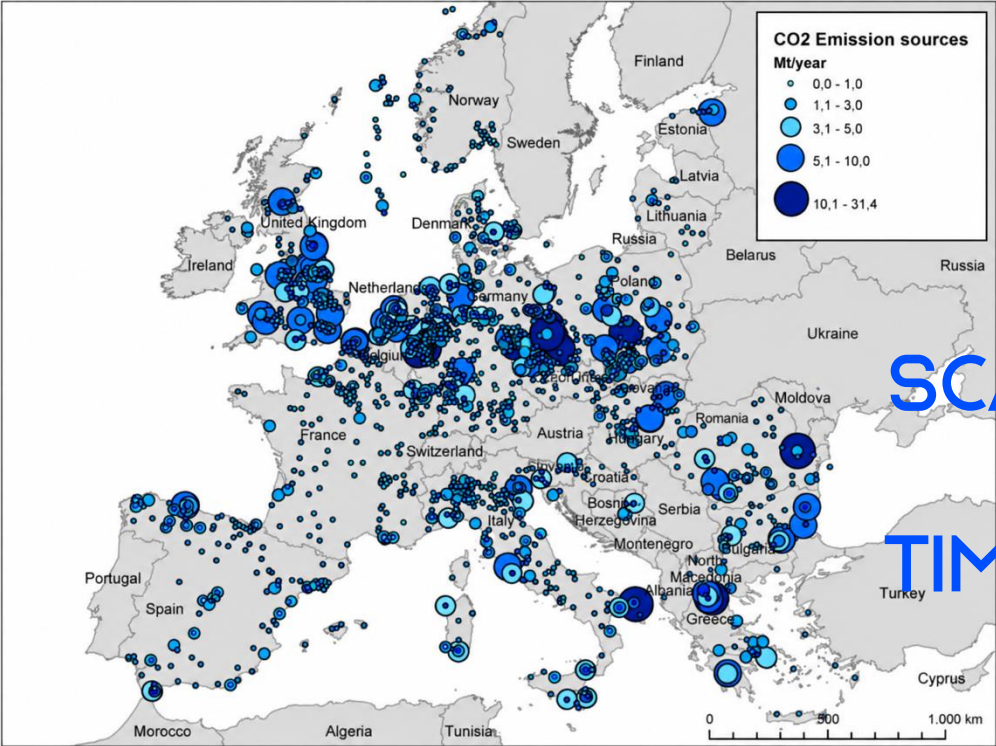


SUSTAIN-ED 2026

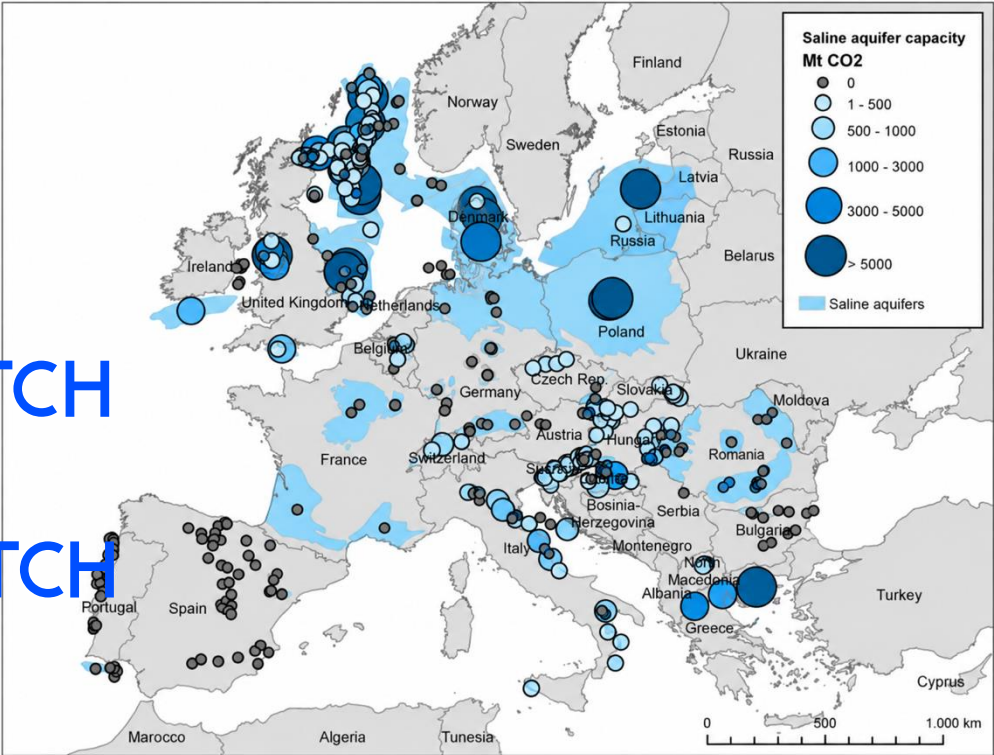
THE CONNECTING CHALLENGE



EMITTERS



SALINE AQUIFER CAPACITY

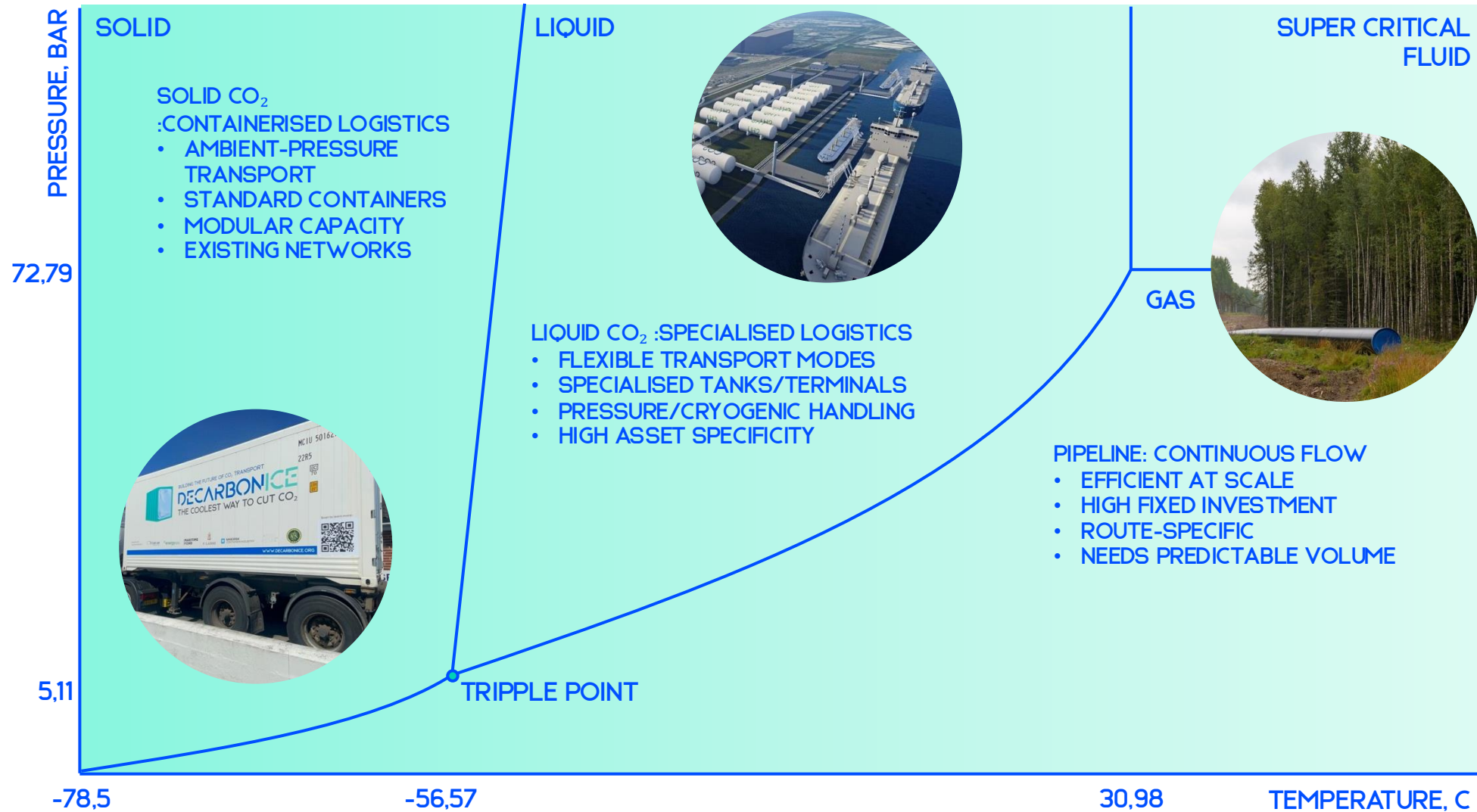


DISTANCE

SCALE MISMATCH

TIMING MISMATCH

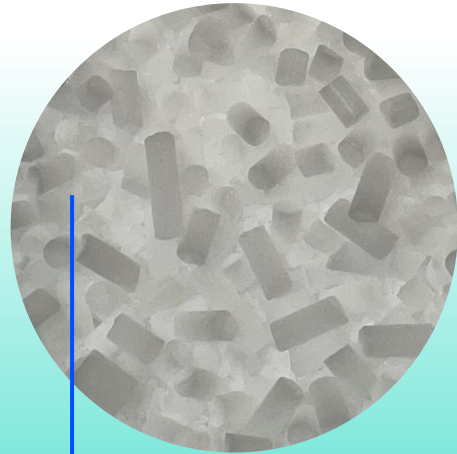
DIFFERENT CO₂ STATES ENABLE DIFFERENT INFRASTRUCTURE ARCHITECTURES



WHAT IF CO₂ COULD USE THE TRANSPORT SYSTEM WE ALREADY HAVE?



CARBON CAPTURE
AT EMITTER



DRY ICE CONVERSION

LOAD IN DECARBONICE
CONTAINER



WORKS WITH EXISTING TRANSPORT
NETWORKS: SHIP, RAIL, TRUCK

RELIQUEFACTION
OF CO₂



PERMANENT STORAGE



FROM CONCEPT TO EXPERIMENTAL VALIDATION

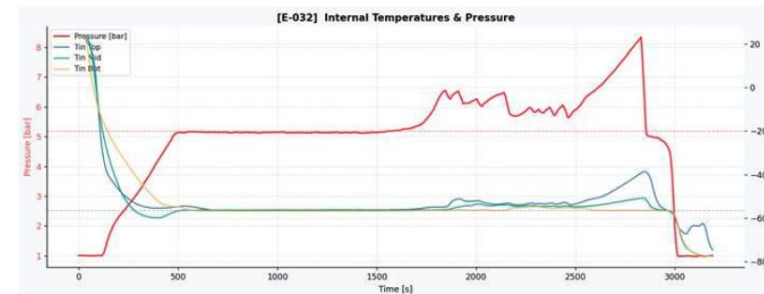


CONTAINER / LOGISTICS DEMONSTRATION



20-FT CONTAINER CONCEPT
SOLID CO₂ TRANSPORT
INTERMODAL HANDLING
CONTAINER TESTED TO TRL6
DEMONSTRATION TRANSPORT, INCLUDING ICELAND WITH EIMSKIP

RELIQUEFACTION / EUDP: CLOSING THE LOOP: SOLID TO GAS/LIQUID CO₂



AT AARHUS UNIVERSITY, FOULUM: SIMPLY SCALABLE CO₂ CONVERSION
NEXT SCALE-UP: 4-TONNE BATCHES AT PORT OF ESBJERG.”

CCUS MUST ALSO WORK FOR THE SMALL EMITTER

50+ BIOGAS PLANTS IN DK CANNOT WAIT FOR PIPELINES

SMALL VOLUMES
FROM 5K T / YEAR

VARIABLE AND UNCERTAIN
VOLUMES - ADD CAPACITY AS NEEDED

EXISTING ROADS
BUT MINIMISE LOCAL DISRUPTION - EFFICIENT PAYLOAD MATTERS IN
RURAL COMMUNITIES

LOW COMMITMENT / FLEXIBILITY
USE ROADS, RAIL, PORTS AND SHIPS ALREADY IN PLACE



SUSTAINABILITY IS ALSO ABOUT
WHAT WE DON'T HAVE TO BUILD



CO₂-SPECIFIC

DRY-ICE PRODUCTION +
RELIQUEFACTION

MODULAR
CONTAINERS
REUSABLE AND MOVABLE.

SHARED INFRASTRUCTURE

TRUCKS • CHASSIS • RAIL •
TERMINALS • CRANES •
CONTAINER VESSELS

THE LOWER THE ASSET SPECIFICITY, THE LOWER
THE RISK OF INFRASTRUCTURE LOCK-IN.



- CCUS IS A NETWORK PROBLEM
- SCALE DOES NOT HAVE TO MEAN BIG FROM DAY ONE
- FLEXIBILITY SUPPORTS SUSTAINABILITY

COO MIKKEL NAVARRO
MBA SHIPPING/LOGISTICS,
MASTER MARINER
MNH@DECARBONICE.ORG