



An Ocean of Opportunities

Gisle Nondal

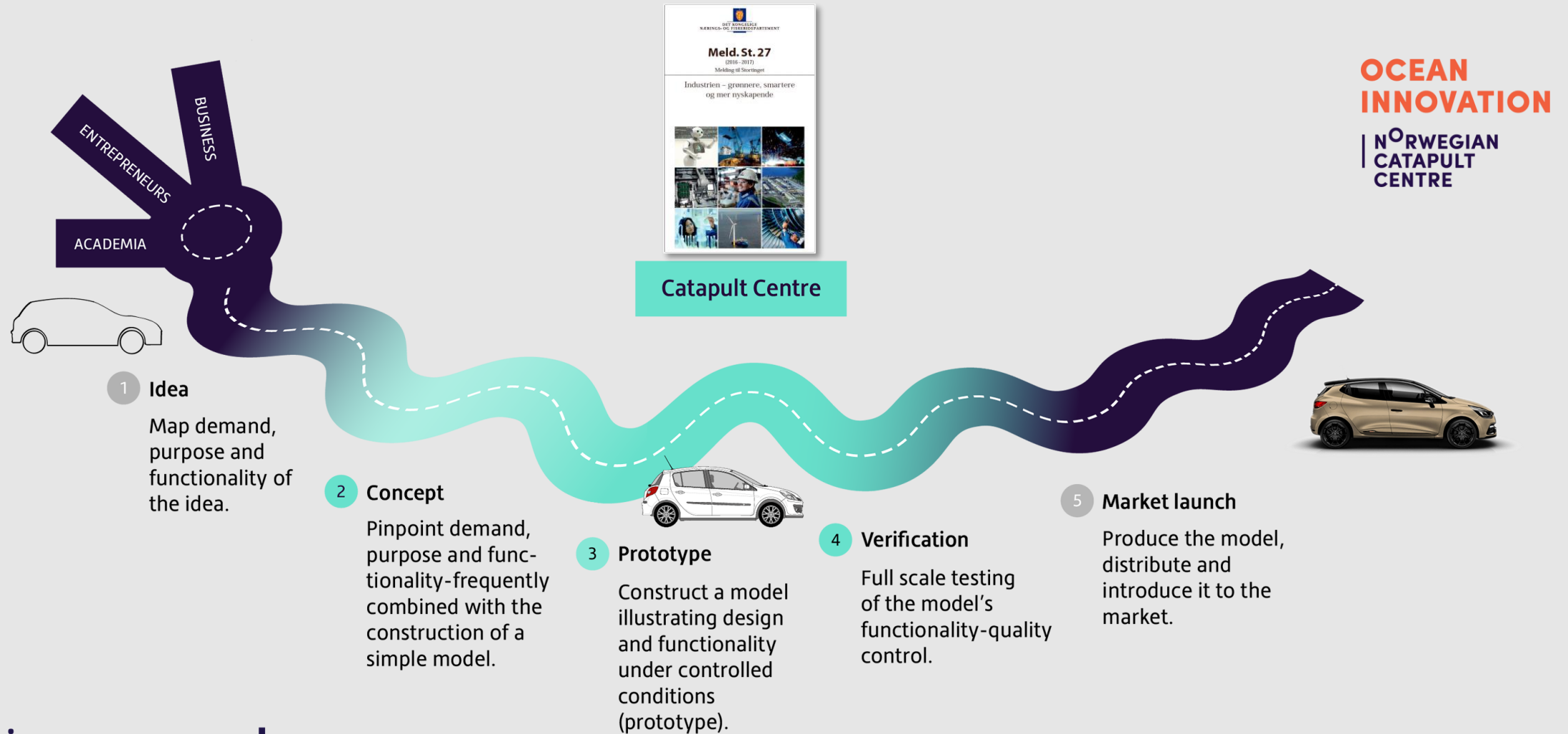
Daglig Leder



Ø N RSK KATAPULT



Reduced risk and easier market access



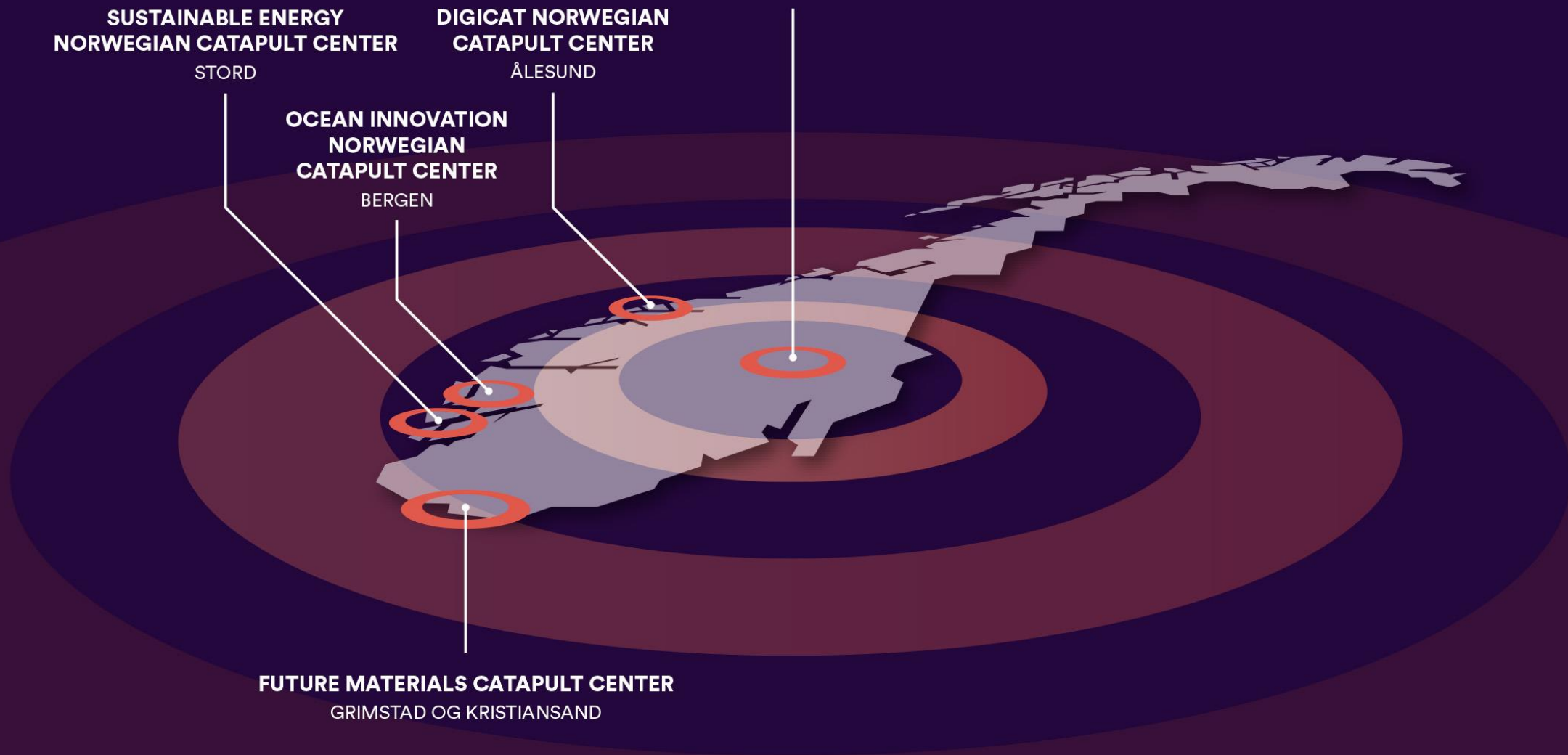
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NORWEGIAN CATAPULT CENTER**
RAUFOSS

**SUSTAINABLE ENERGY
NORWEGIAN CATAPULT CENTER**
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**DIGICAT NORWEGIAN
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FUTURE MATERIALS CATAPULT CENTER
GRIMSTAD OG KRISTIANSAND

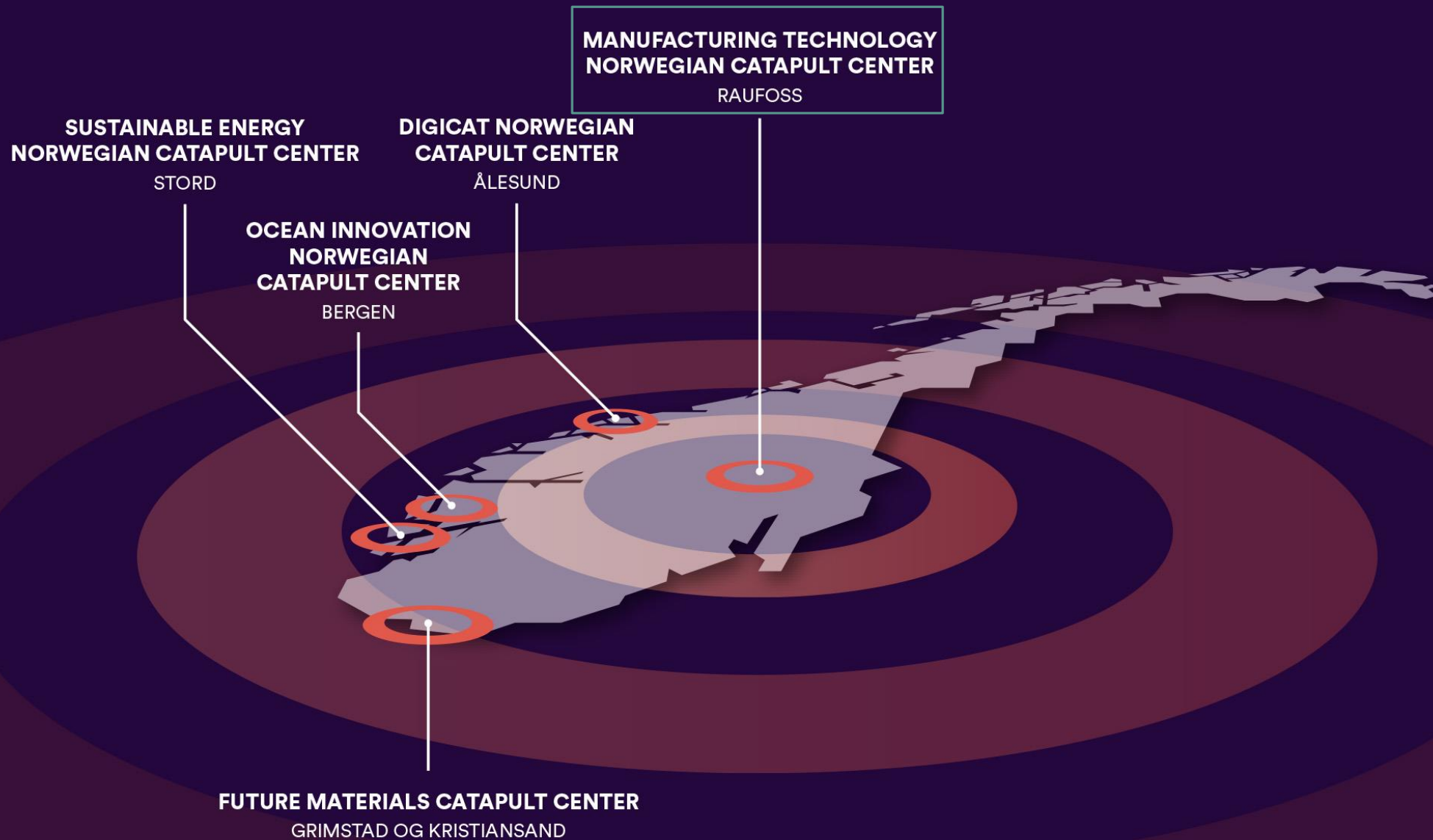


Partner for; **Advanced materials**

- Develop sustainable advanced materials and associated processes for the companies' next products
- Specialised expertise in nano- and power manufacturing for new manufacturing methods
- Offer test facilities, expertise and network for testing, simulation and verification
- Offer services through the whole value chain from raw material to complete product
- Owned by Elkem AS, Arendals Fossekompani, ReSiTec and the University Agder, and is operated in cooperation with industrial partners and clusters



**FUTURE
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Partner for;

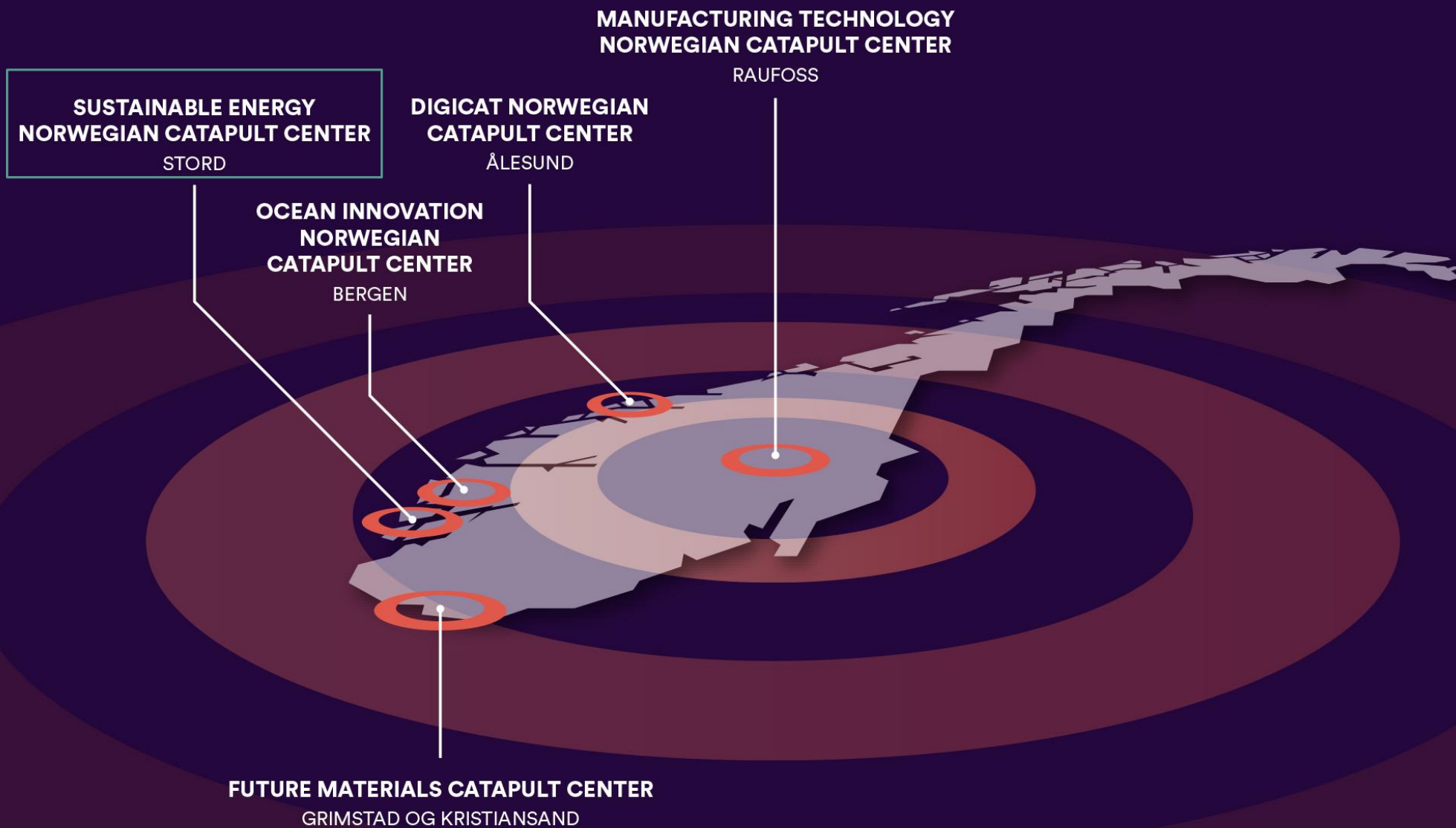
Advanced manufacturing methods

- Assist further development, simulation and testing of the production line before full scale manufacturing
- Offer facilities, expertise and network for testing, simulation and verification – e.g. module-based and flexible mini factories with an industry 4.0 standard
- The centre aims to be a driving force to make the Norwegian manufacturing industry greener, smarter more innovative and more productive
- SINTEF Manufacturing has the main responsibility for MTNC. The core partners are members of NCE Raufoss, SINTEF, NTNU and Fagskolen Innlandet (Innlandet Technical College)

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Partner for;

Sustainable energy solutions

- Accelerating the future's energy systems and products to the market
- Specialised in maritime and decentralised energy systems
- Test facilities, expertise and network for production, storage, distribution and energy management
- Unitech, The Switch, Haugaland Kraft, Bergen Teknologioverføring (BTO) –in collaboration with NCE Maritime CleanTech, NMEC and leading R&D communities



**SUSTAINABLE
ENERGY**

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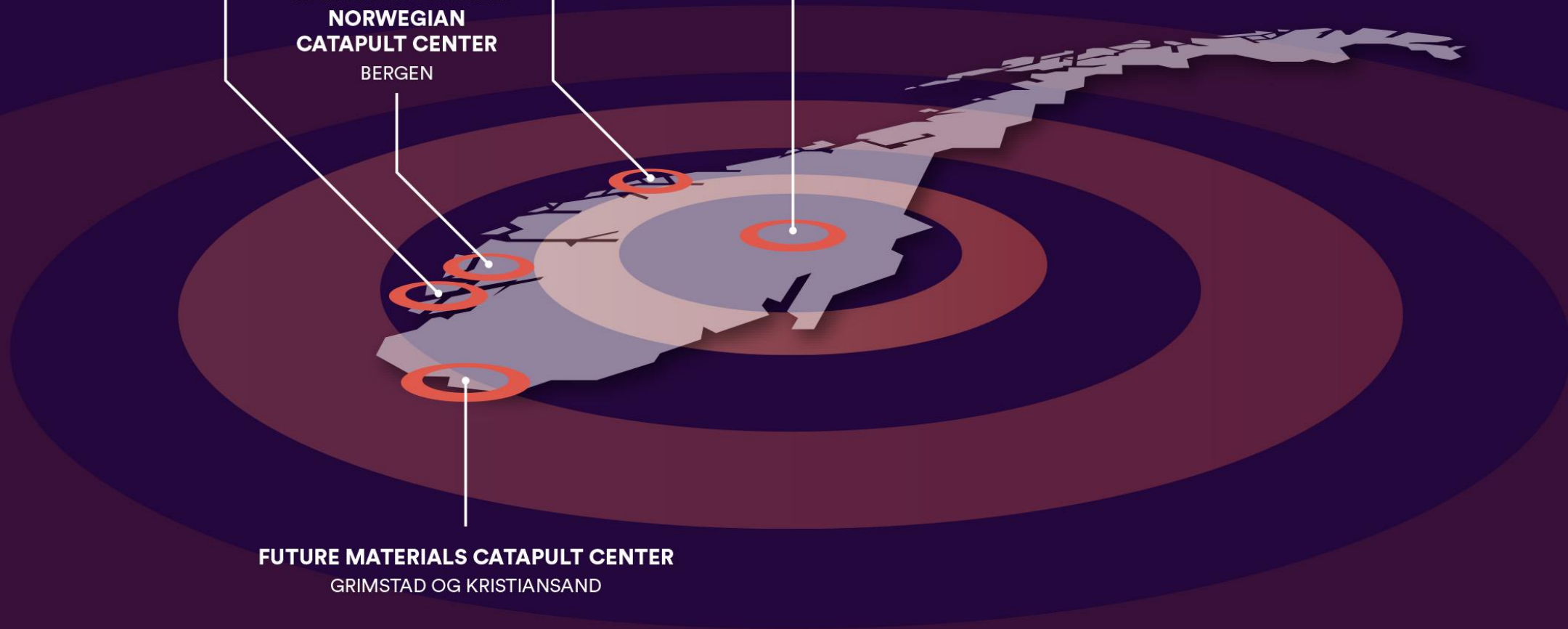
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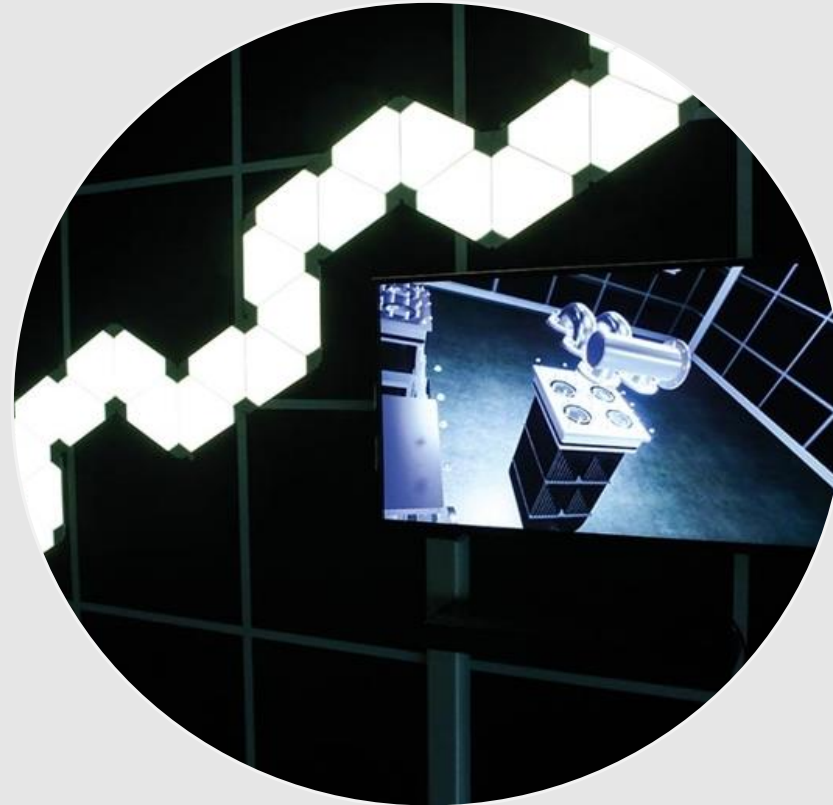


Partner for:

Digital testing and simulation

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- Offer test facilities, expertise and networks for virtual prototyping.
- Specialised in virtual prototypes, digital twins and autonomous operations
- At the centre you can test and validate ideas, concepts and products in a digital world faster and more effectively, with less risk than in the physical world.
- Operated by ÅKP Blue Innovation Arena, Rolls-Royce, Inmarsat, Ulstein and Offshore Simulator Centre in collaboration with industrial partners and clusters



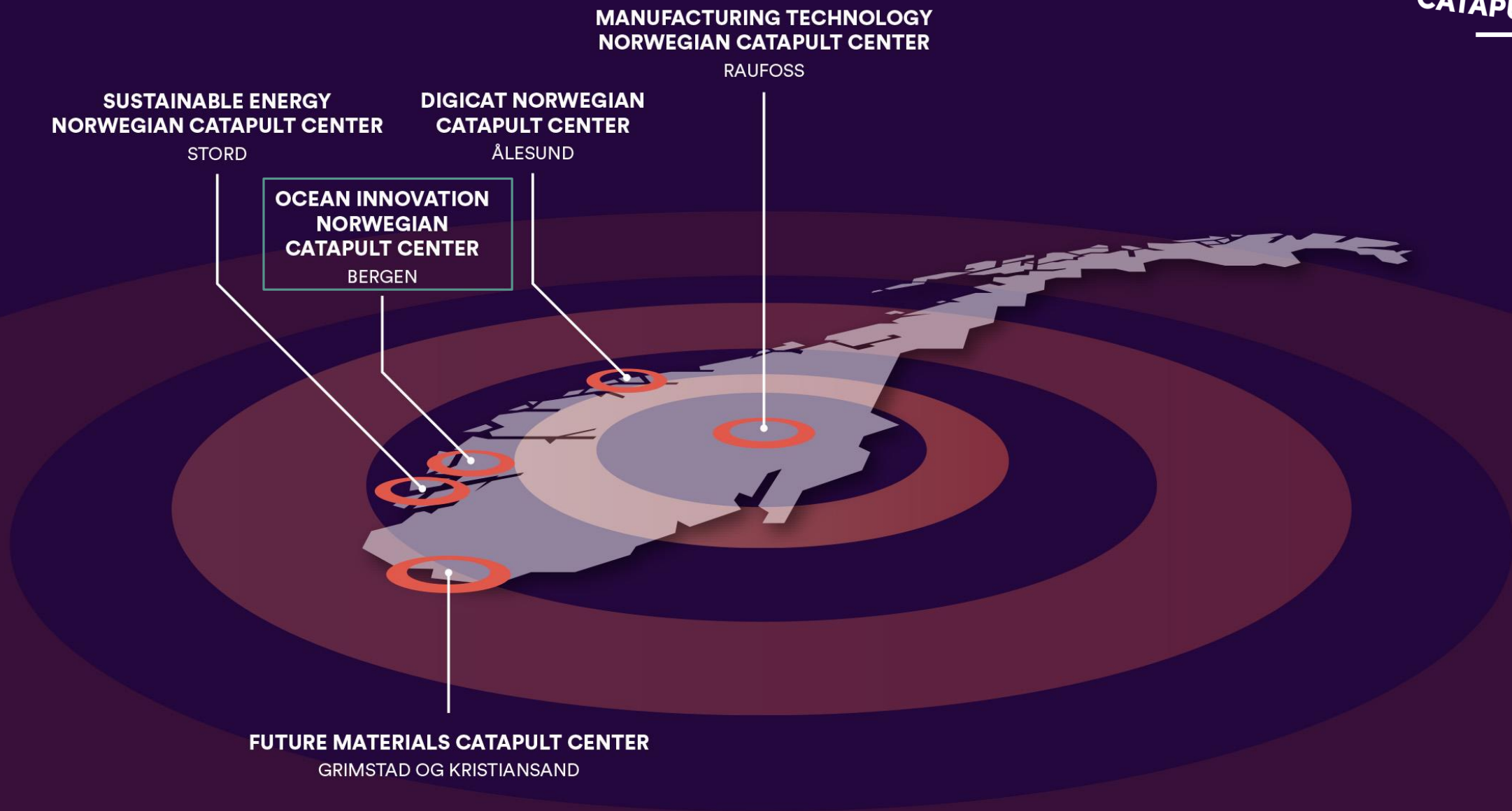
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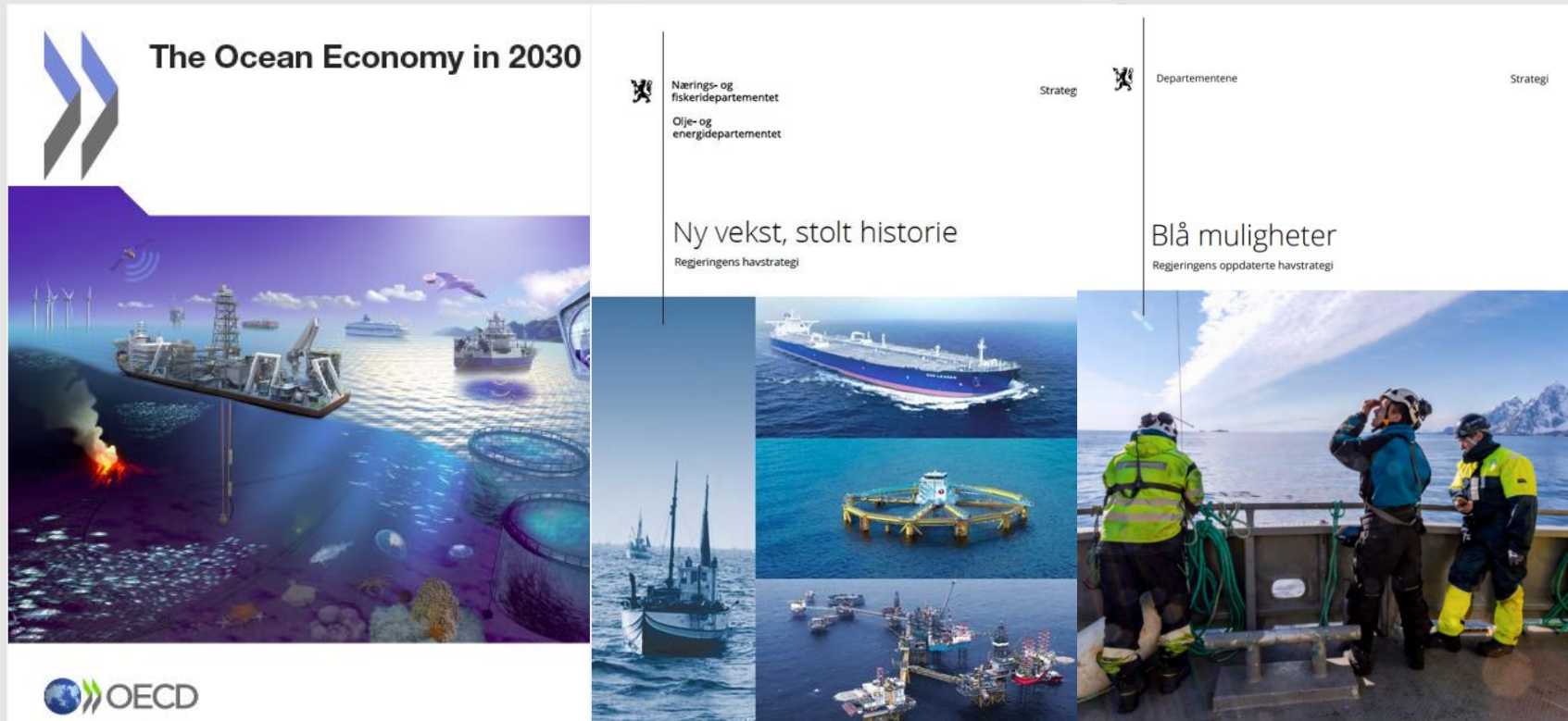
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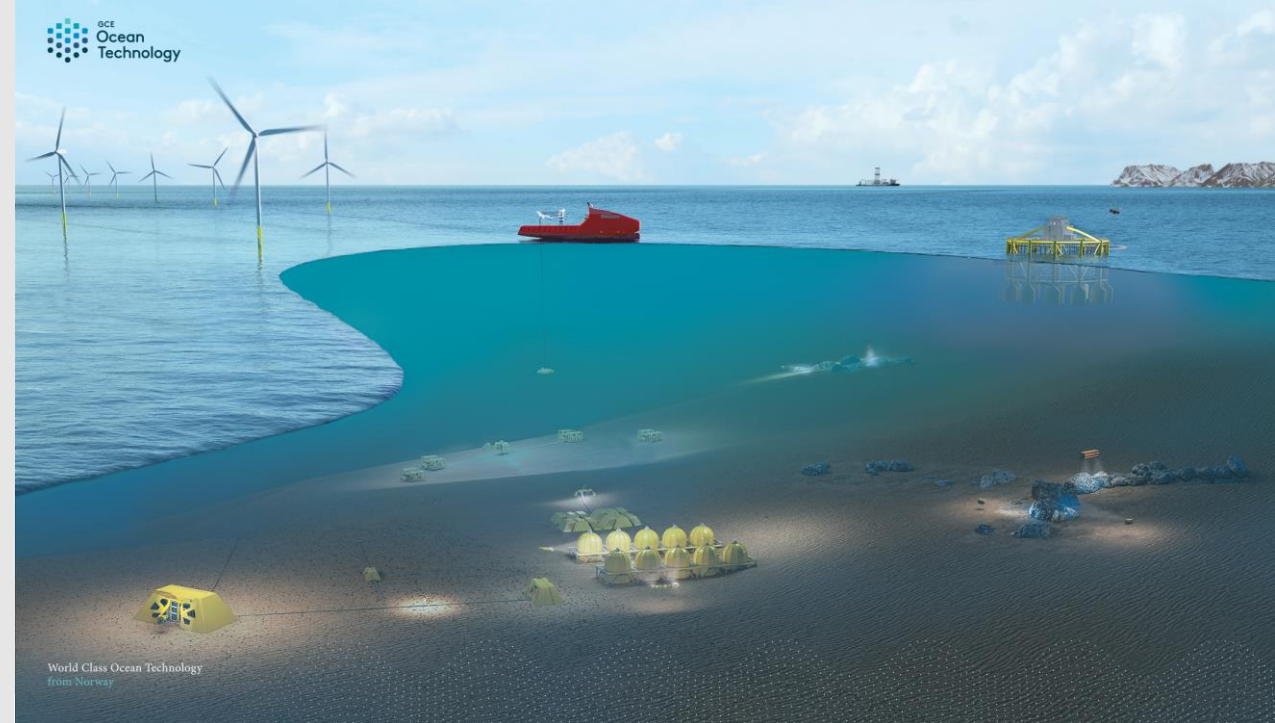
An Ocean of Opportunities



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Preferred partner for development of new solutions for the ocean industries (energy, marine seafood production, environmental monitoring, deep sea mining etc.)

- Development of prototypes – from idea to finished product
 - Design
 - Virtual Prototyping, simulation, VR/AR
 - CNC machining
 - **Additive manufacturing** in plastics, composites and metals (**Additech AS**)



Ocean Innovation Norwegian Catapult Centre

State-of-the-art test facilities and expertise

- **Recirculating Aquaculture System (RAS)**
 - Marineholmen Raslab AS
 - Water quality
 - Fish biology
 - Feed research
 - Bioreactors
 - Microbiology
 - Sludge and waste treatment
 - Sensor development
 - Education and training
- **Aquacloud 2.0 – digital infrastructure for the seafood industry (NCE Seafood Innovation)**
 - Standards, data quality, data sharing



Ocean Innovation Norwegian Catapult Centre

State-of-the-art test facilities and expertise

- **Testing**
 - Aquaculture – Havforskningsinstituttet
 - Test tank – Stadt Towing Tank
 - Fjords and exposed waters – Runde Miljøsentter



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State-of-the-art test facilities and expertise

- **DNV GL**
 - Materials and corrosion testing
 - Technology Centre for offshore lifting and mooring
 - Technology qualification



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State-of-the-art test facilities and expertise

- **Pressure testing – NUI AS**
 - The worlds biggest and deepest pressure chambers in their class
 - Asterix 1000 bar
 - Obelix 700 bar
- **Campaign:** tests booked in 2020 and performed at the latest in Q1 2021 – 40% discount!



Case example



Case: Lofoten Vesterålen Observatoriet

- Kunde: Develogic AS
- Katapult partnere: NUI AS og HI
- Test av bunnlandingssystem, inkl. sammenstillingstest og kalibrering av sensorer

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ÅPNET HAVOBSERVATORIUM

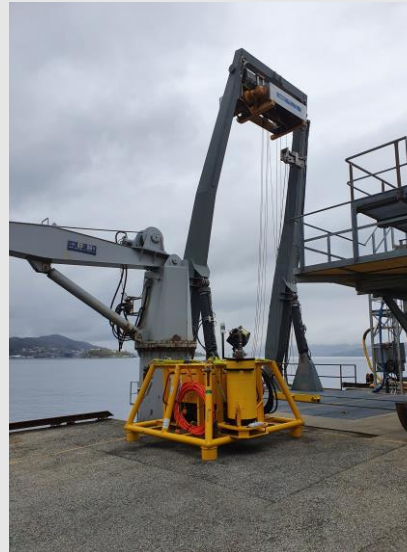
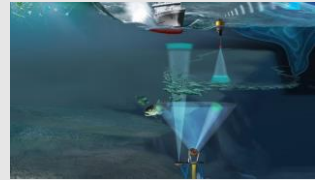
Ser ned i dypet



Slik ser plattformene som står på bunnen ut
Foto: Geir Pedersen, Havforskningsinstituttet

LoVe havobservatorium i Vesterålen er nå i full drift og det ble tirsdag markert at ny teknologi gjør at vi kan følge livet helt ned til 1500 meters dyp direkte via internett. Fiskarlaget er en av partnerne i prosjektet.

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Project Support

We support your product development

- SME's can be granted support of NOK 100.000 in order to use the catapult centres in their product development
- <https://norskkatapult.no/stotte-til-katapult-prosjekt/>

Contact us

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