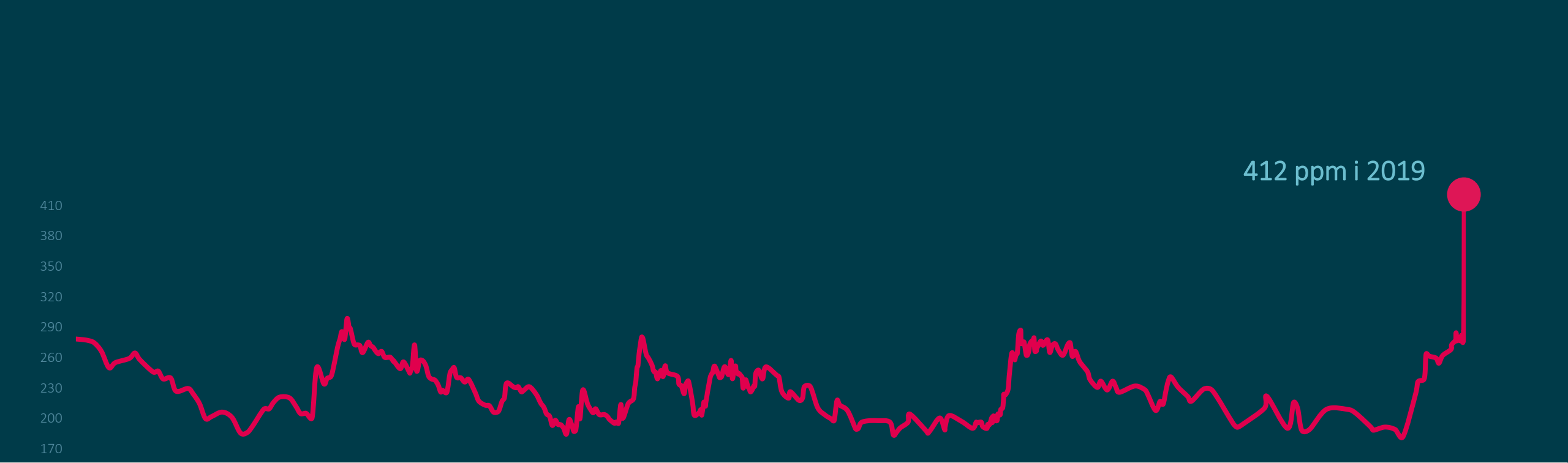


Klimainvesteringer

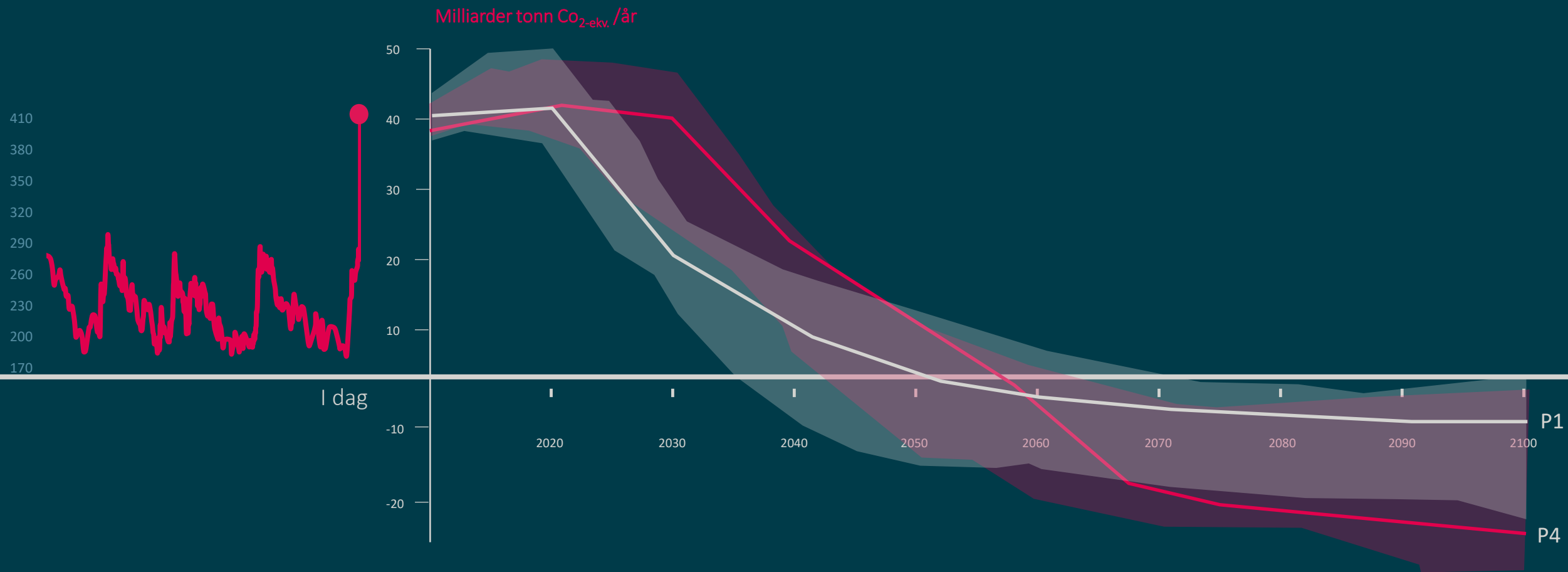
Lene Elizabeth Hodge – Bærekraftsrådgiver

Avfallsforum Rogaland 19. februar 2020

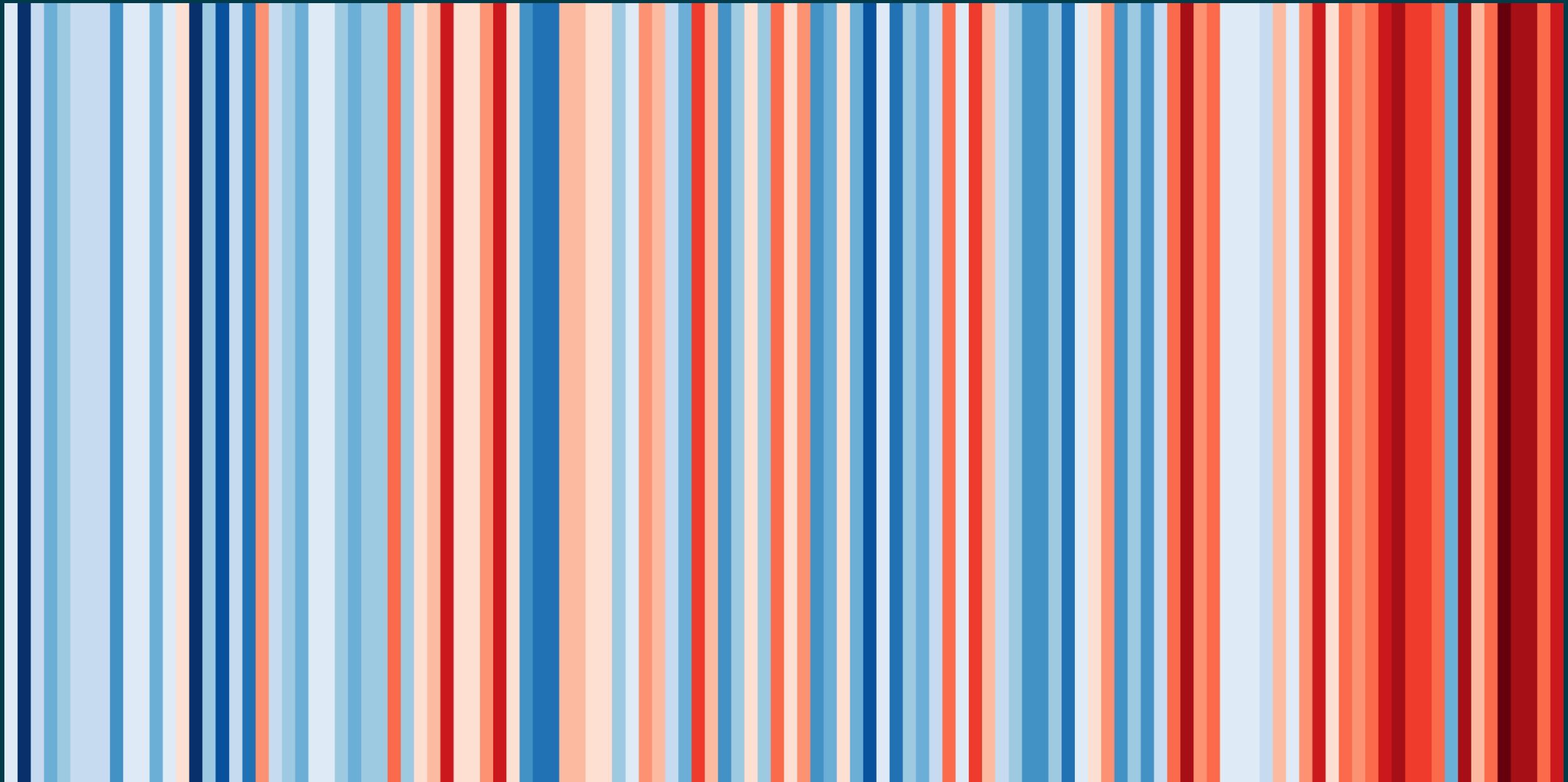


- 400,000

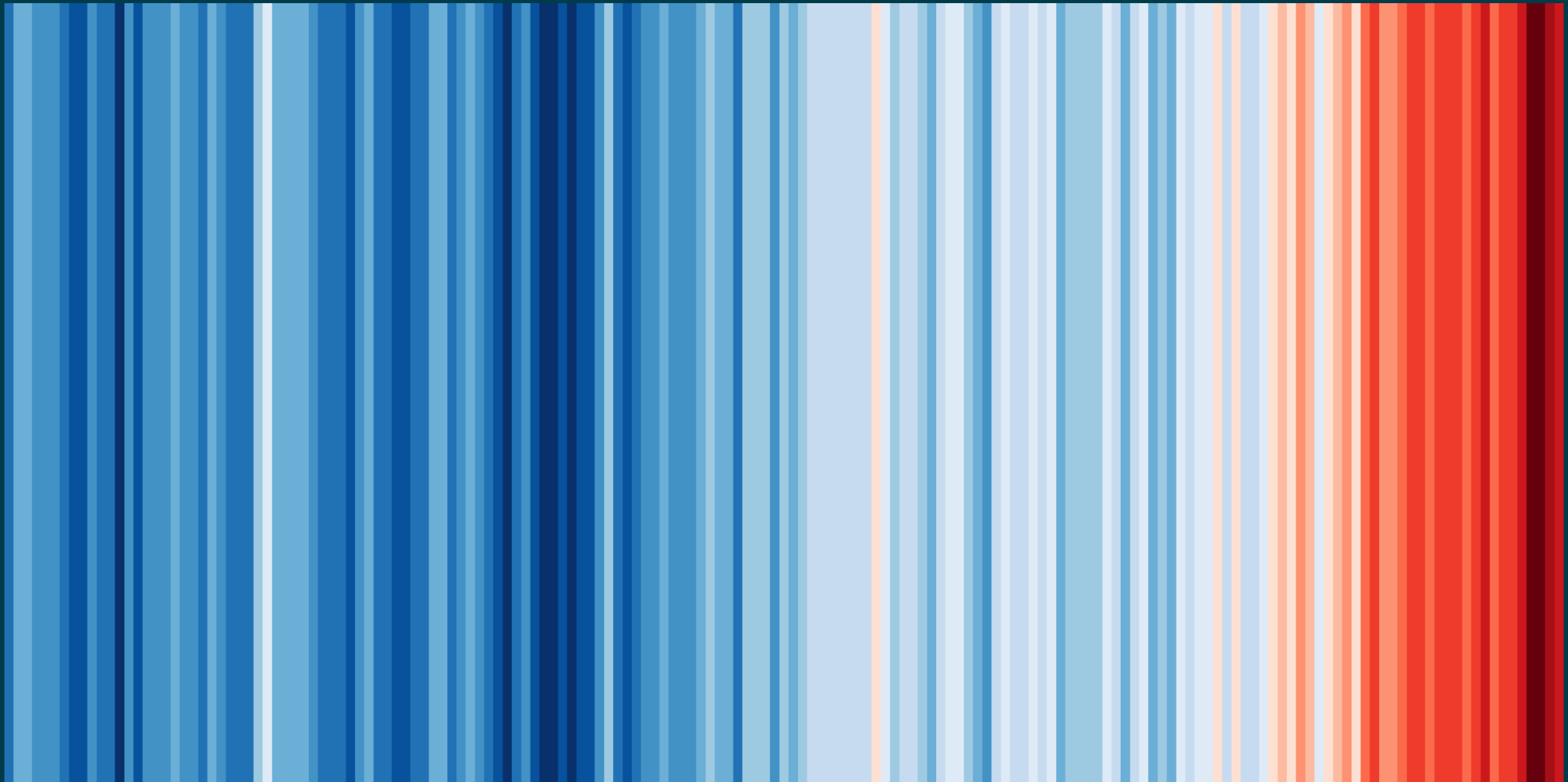
I dag



Kilde: IPCC 2018 Model Pathways (P1 / P4) in limiting global warming to 1.5°C by reducing CO₂ emissions to net zero by 2050



Annual average temperatures for Norway from 1901-2018 compared with the average from 1971 - 2000
Source: Berkley Earth



Annual average temperatures for the globe from 1850-2018

Source: UK Met Office

Hovedmålene i Parisavtalen

Artikkel 2

- a) Begrense global oppvarming til under 2°C, og helst under 1.5°C.
- b) Tilpasse oss klimaendringene og bygge robusthet og lavere utslipp.
- c) Endre verdens kapitalflyt for å ivareta målsetningene over.

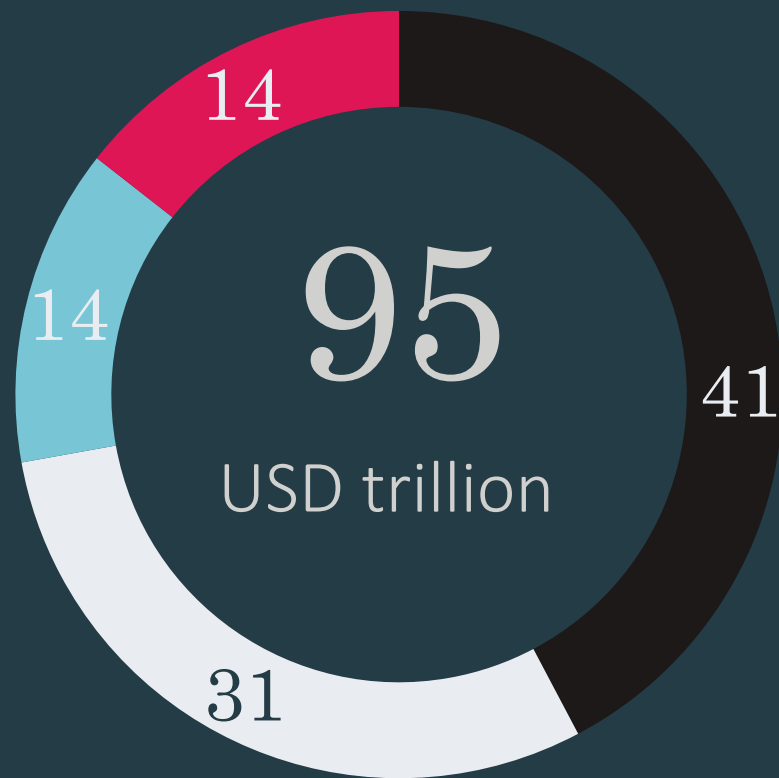
Investeringsbehov

110.000.000.000.000

USD fra 2016 og 2050

Investeringer for å endre energisektoren i tråd med Parismålene

Investeringsbehov globalt



% ■ Fossil mm. ■ Energieffektivisering ■ Fornybart ■ Elektrifisering og infrastruktur

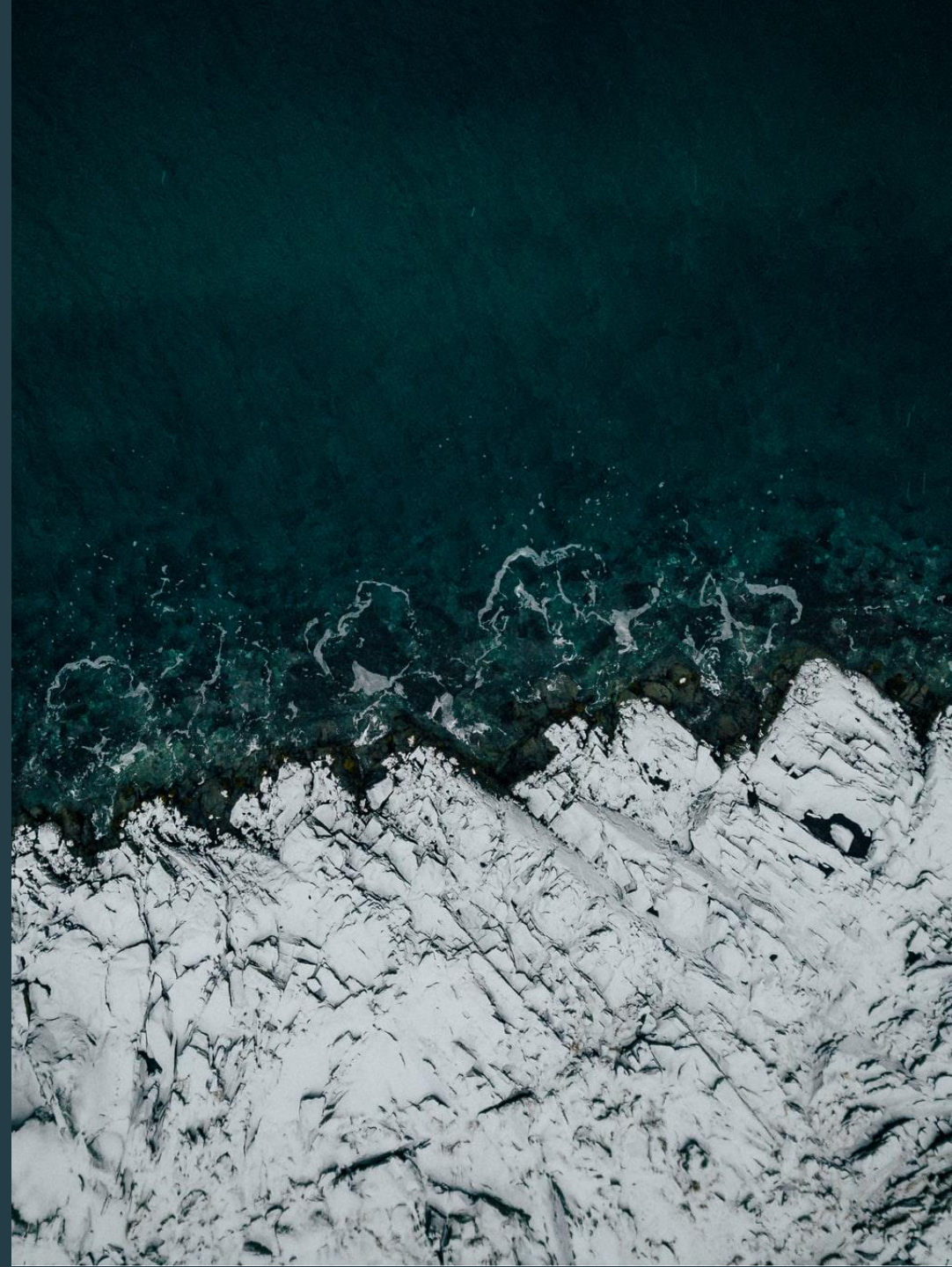
nysnø

Kilde: IRENA Global Landscape of Renewable Energy Finance (2019)

Nysnø

Klimainvesteringer

- ▶ Opprettet 2017, driftet siden 2018
- ▶ Kontor i Stavanger
- ▶ 9 ansatte
- ▶ 1,4 mrd NOK forvaltningskapital
- ▶ Eies og forvaltes av staten



Mål



Avkastning

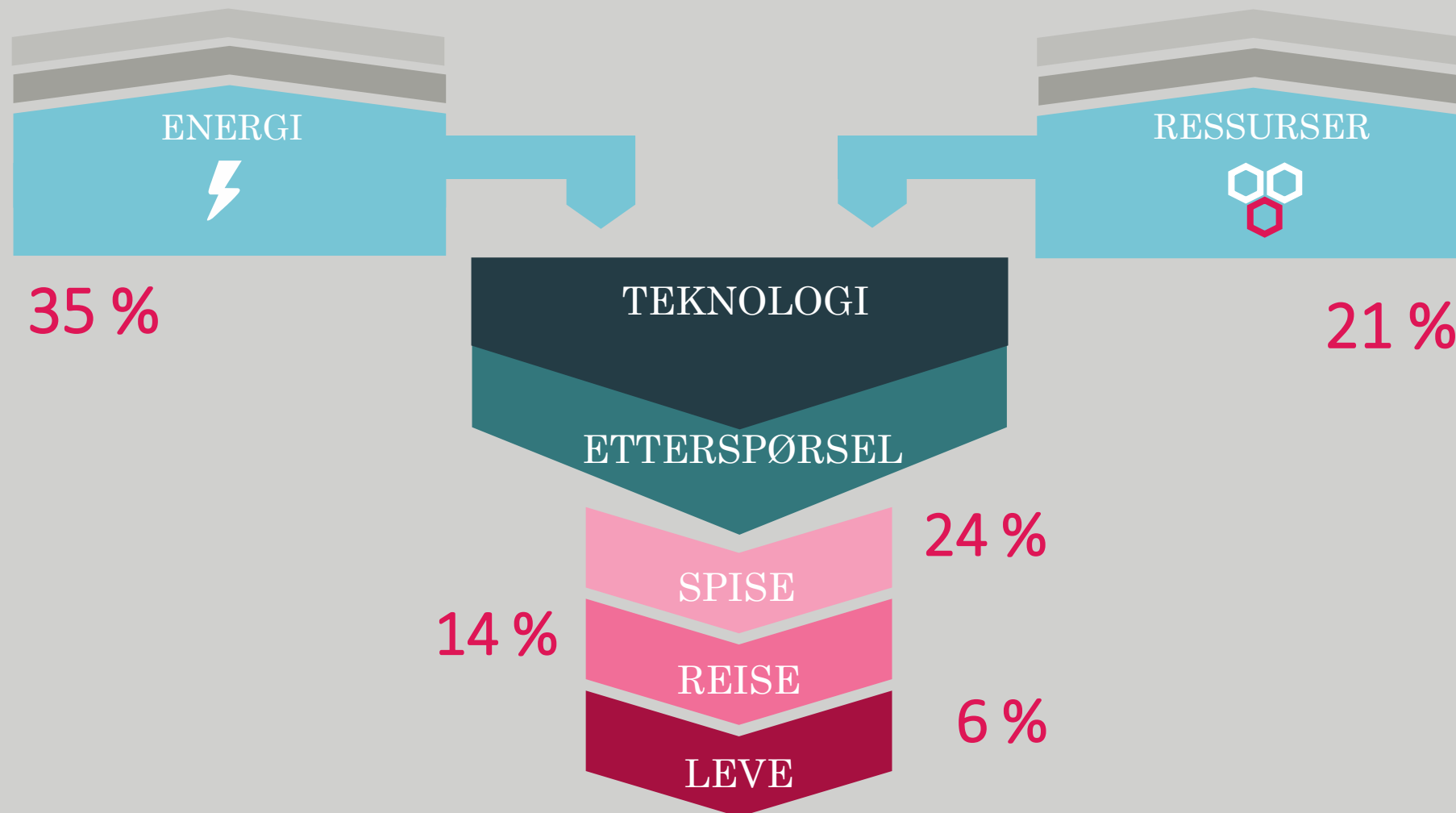


Reduserte utslipp

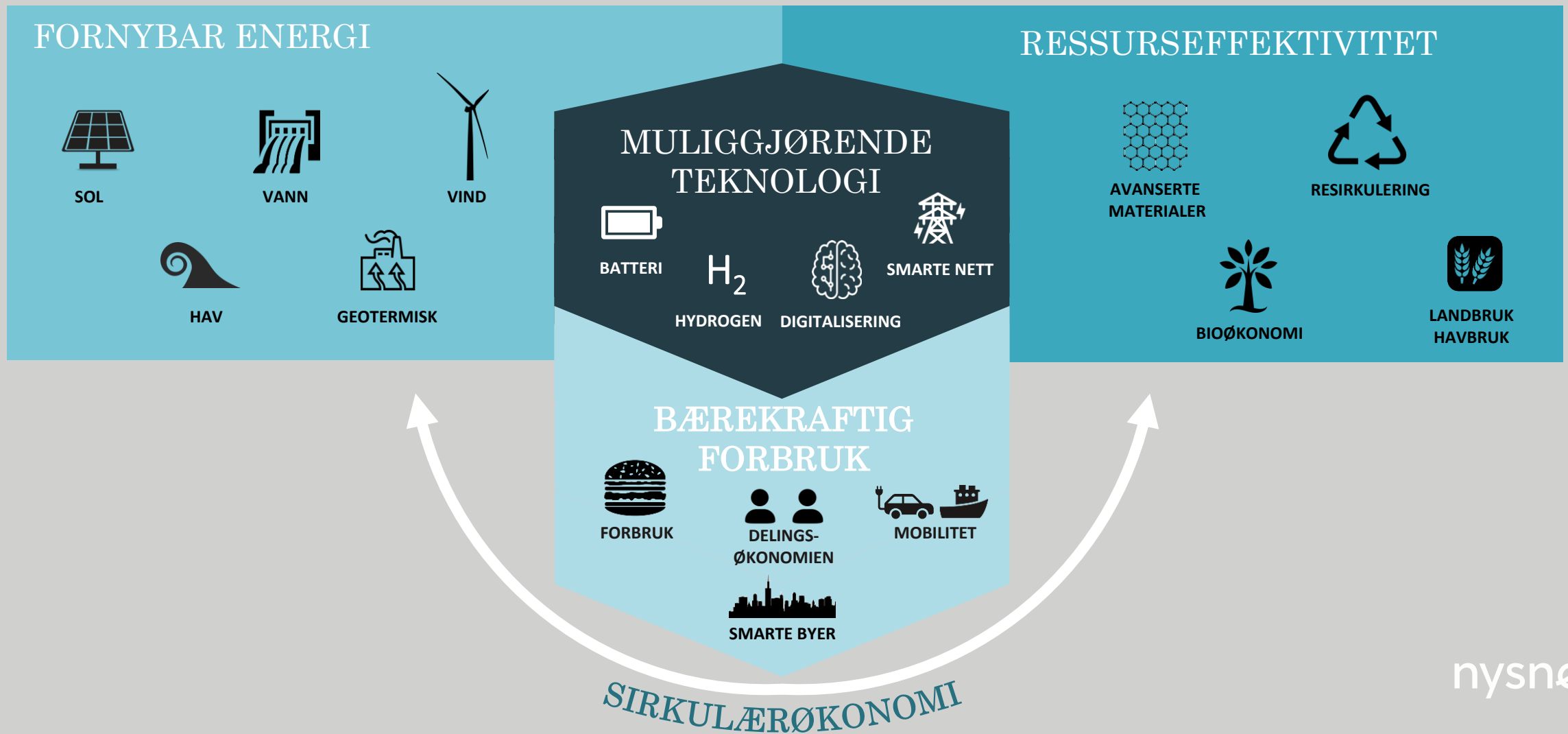


Positive ringvirkninger

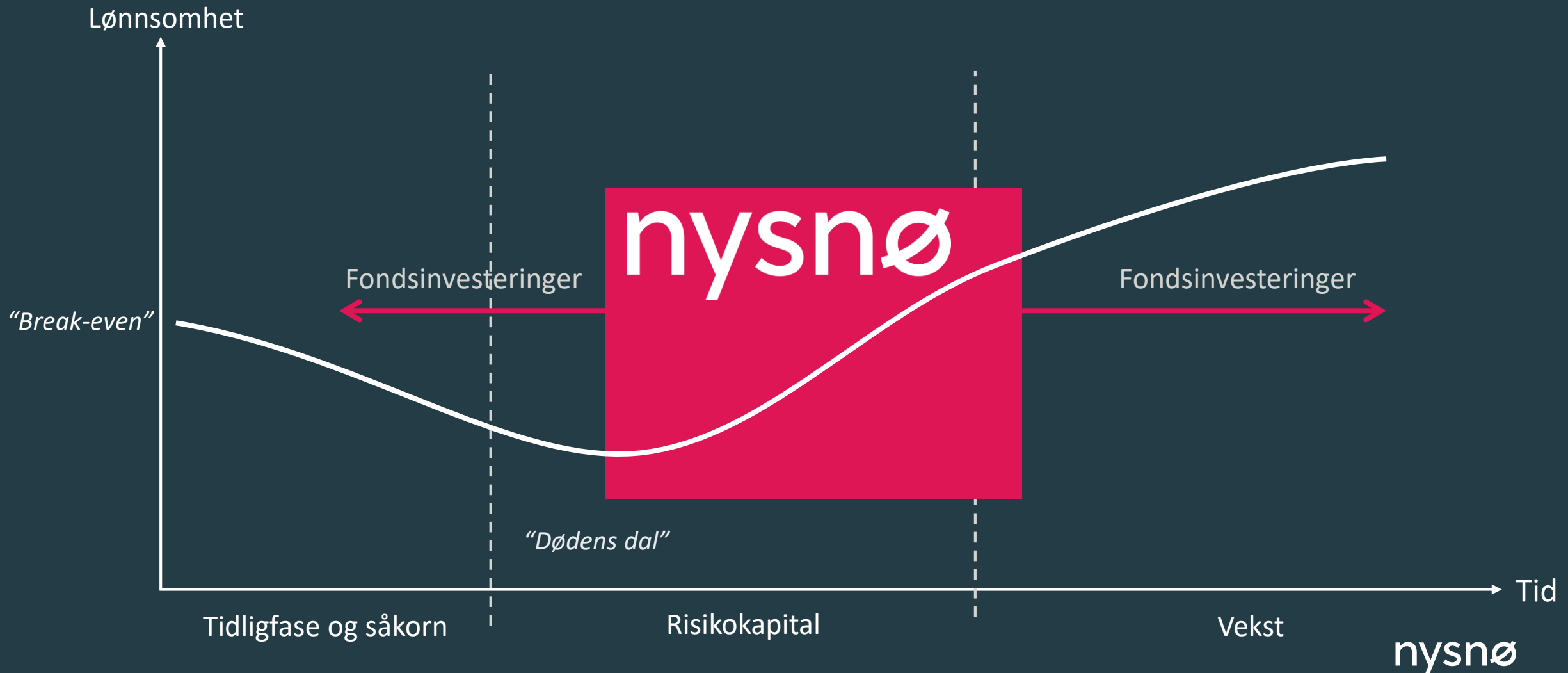
Vi ser etter reduserte klimautslipp



Investeringsmuligheter



Investeringsfokus



Klimakur 2030

- ▶ Økt bruk av biodrivstoff
- ▶ Karbonfangst- og lagring
- ▶ Fange bio-CO₂
- ▶ Øke uttaket av metan fra deponi
- ▶ Økt sortering av plast



ENOVA



Statens vegvesen



KYSTVERKET



Landbruksdirektoratet



NVE

DRAWDOWN THE MOST COMPREHENSIVE PLAN EVER PROPOSED TO REVERSE GLOBAL WARMING

NEW YORK TIMES
BESTSELLER

EDITED BY
PAUL HAWKEN



MATERIALS HOUSEHOLD RECYCLING

#56

RANK AND RESULTS BY 2050

2.77 GIGATONS
REDUCED CO₂

\$366.92 BILLION
NET IMPLEMENTATION COST

\$71.13 BILLION
NET OPERATIONAL SAVINGS

IMPACT: As mentioned above, household and industrial recycling were modeled together. The total additional implementation cost of both is estimated at \$734 billion, with a net operational savings of \$142 billion over thirty years. On average, 50 percent of recyclable materials come from industrial and commercial sectors. At a 65 percent recycling rate, the commercial and industrial sectors can avoid 2.8 gigatons of carbon dioxide by 2050.

#55

RANK AND RESULTS BY 2050

2.77 GIGATONS
REDUCED CO₂

\$366.92 BILLION
NET IMPLEMENTATION COST

\$71.13 BILLION
NET OPERATIONAL SAVINGS

IMPACT: The household and industrial recycling solutions were modeled together and include metals, plastic, glass, and other materials, such as rubber, textiles, and e-waste. Paper products and organic wastes are treated in separate waste management solutions. Emissions reductions stem from avoiding emissions associated with landfilling and from substituting recycled materials for virgin feedstock. With about 50 percent of recycled materials coming from households, if the average worldwide recycling rate increases to 65 percent of total recyclable waste, household recycling could avoid 2.8 gigatons of carbon dioxide emissions by 2050.

TRANSPORT **TRUCKS**

#40

RANK AND RESULTS BY 2050

BUILDINGS AND CITIES **LANDFILL METHANE**

#58

RANK AND RESULTS BY 2050

BUILDINGS AND CITIES **NET ZERO BUILDINGS**

#79

RANK AND RESULTS BY 2050

MATERIALS **REFRIGERANT MANAGEMENT**

#1

RANK AND RESULTS BY 2050

89.74 GIGATONS
REDUCED CO2

DATA TOO VARIABLE TO BE
DETERMINED

\$-902.77 BILLION
NET OPERATIONAL SAVINGS

IMPACT: Our analysis includes emissions reductions that can be achieved through the management and destruction of refrigerants already in circulation. Over thirty years, containing 87 percent of refrigerants likely to be released could avoid emissions equivalent to 89.7 gigatons of carbon dioxide. Phasing out HFCs per the Kigali accord could avoid additional emissions equivalent to 25 to 78 gigatons of carbon dioxide (not included in the total shown here). The operational costs of refrigerant leak avoidance and destruction are high, resulting in a projected net cost of \$903 billion by 2050.

Investeringer

DIREKTE		FORNYBAR ENERGI	Norsk solenergiselskap som leverer høyeffektive wafere til den globale solenergiindustrien.	80 MNOK
		TEKNOLOGI	Leverer sensorer med 15 års batteritid og utallige bruksområder som bidrar reduserte klimagassutslipp i bygg.	20 MNOK
		TEKNOLOGI	Kunstig intelligens og softwareløsning som analyserer data for bedre drift av kraftnettet.	60 MNOK
		FORNYBAR ENERGI	Digital plattform for salg og installasjon av solceller på hustak.	60 MNOK
FOND		RENE TEKNOLOGIER	Tidligfase teknologifond som retter seg mot innovative vekstbedrifter innen ren energi og helse.	45 MNOK
		RENE TEKNOLOGIER	Teknologifond for innovative selskap som reduserer klimagassutslippene og løse bærekraftsutfordringene	140 MNOK

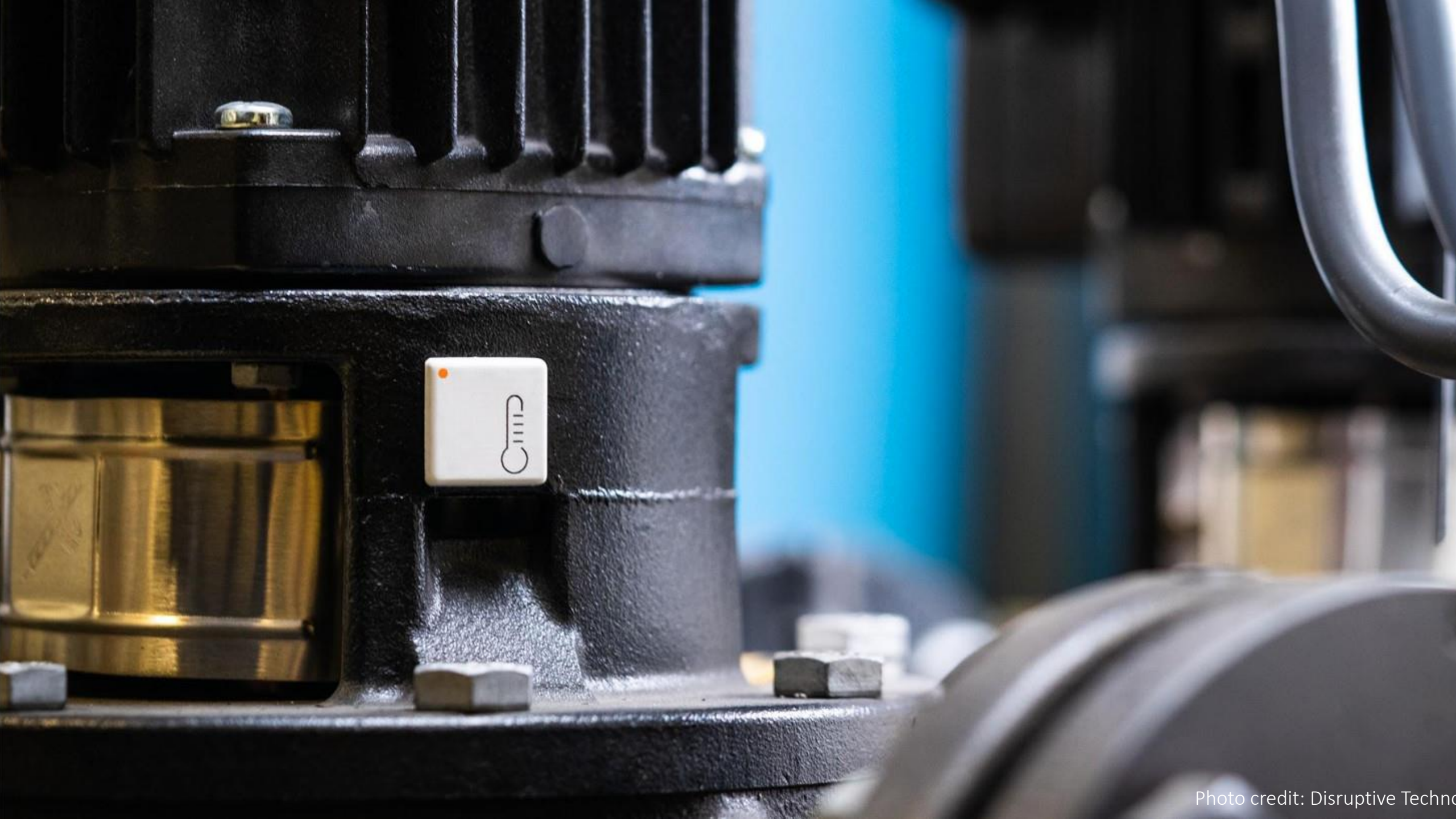


Photo credit: Vettisriket



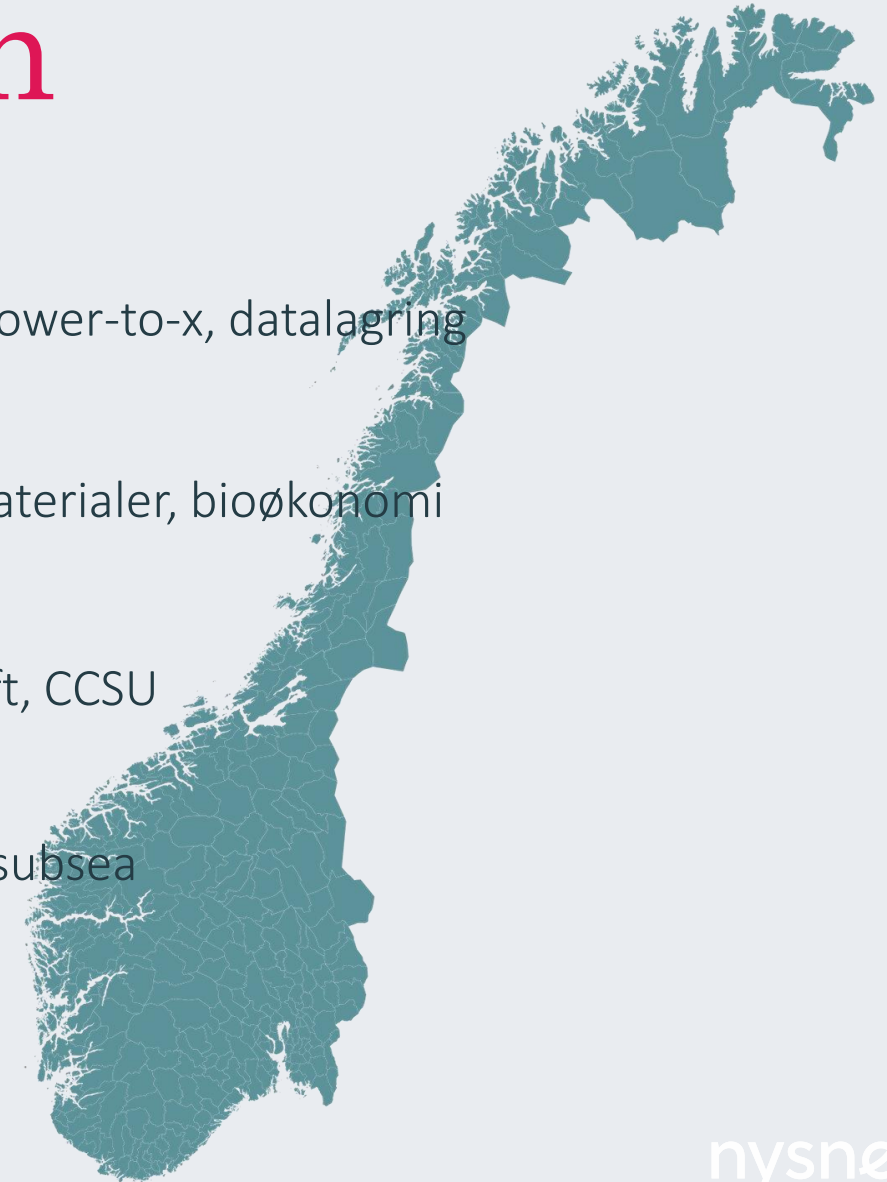


Photo credit: Otovo Solar



Konkurransefortrinn

- ▶ **FORNYBART KRAFTOVERSKUDD** → Elektriske kjøretøy, power-to-x, datalagring
- ▶ **FORSKNING OG UTVIKLING** → Energi, avanserte materialer, bioøkonomi
- ▶ **NATURRESSURSER** → Akvakultur, vannkraft, CCSU
- ▶ **MARITIM EKSPERTISE** → Transport, havvind, subsea
- ▶ **TIDLIG DIGITALISERING** → Smarte nett, IoT



Takk for
oppmerksomheten!



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Bærekraftsrådgiver

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