

# Renewable energy solutions for sustainable industries

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Olivier Girardot, CEO

# Building the preferred supplier of renewable energy solutions for industrials

2.6 GW

in operations

8.4 GW

gross capacity in portfolio

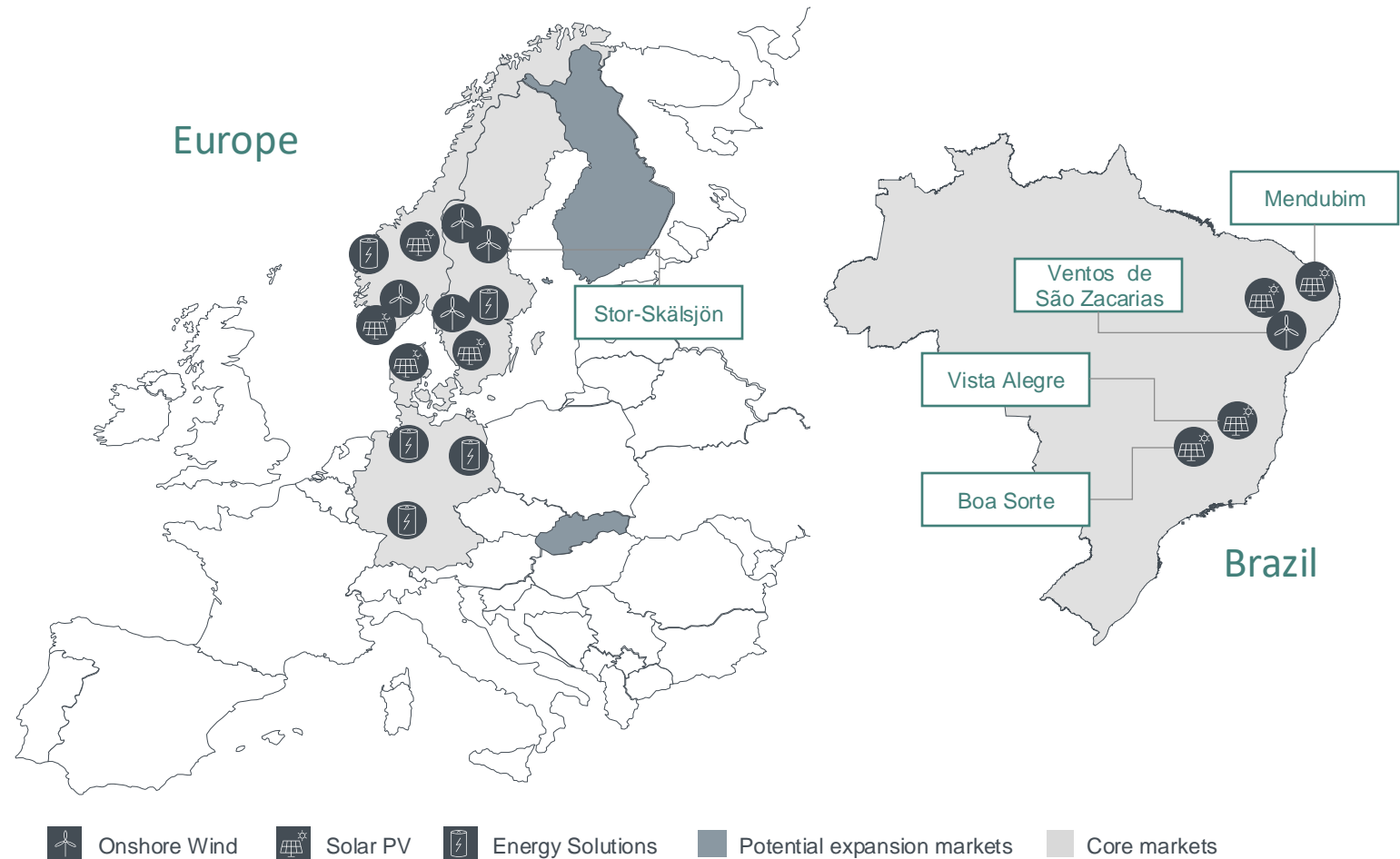
~15 GWh p.a.

potential of power savings or production behind the meter

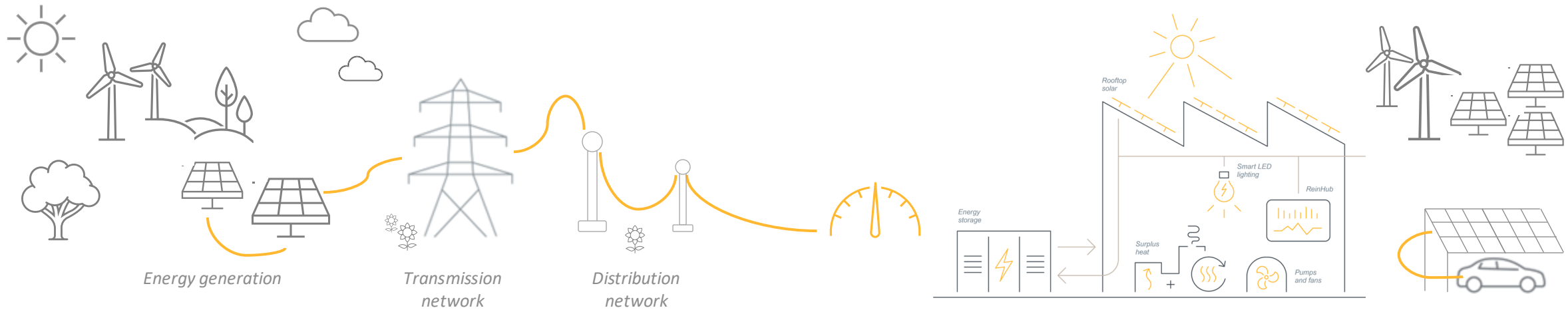
>60

total # of renewable projects in portfolio

Backed by industry leaders



# Decarbonizing industries requires support in front and behind the meter



← Front of the meter →

← Behind the meter →

## REIN | Hydro Renewable Energy

- Commercial developer into utility-scale wind and solar assets
- Long-term, affordable renewable energy supply in the shape and in the area needed



## REIN | Hydro Energy Solutions

- Innovative developer, owner, operator & optimizer of decentralized energy assets behind-the-meter, on- & near-site
- Energy efficiency and optimisation

# Supporting our customers on their road to net zero: some concrete examples



## Partnership with Fritzøe to develop renewables in Norway

- Renewable energy development in an area with large industrial power demand
- Low impact on nature as well as co-existence with existing forestry activities



## Decarbonizing Hydro's alumina production in Brazil

- PPAs between Alunorte refinery and Mendubim (solar PV) and Ventos de São Zacarias (wind) projects
- Enabling switch from fossil fuels to electric boilers as part of a large-scale decarbonization













## Enabling energy efficiency at Norwegian aluminium plants

- Supporting Hydro on switching to LED lights and smart controls in large electrolysis halls
- Reducing energy use by up to 90% while also improving safety and working conditions for employees

# Status after 4 years: 2.6 GW of renewables in operations

## Projects in operations by end of 2024

Stor-Skälsjön Sweden 	Ventos de São Zacarias Brazil 	Mendubim Brazil 	Boa Sorte Brazil 	Vista Alegre Brazil 
				
Location: SE2 area Inst. capacity: 260 MW Generation p.a.: 807 GWh Rein ownership: 25%	Location: Northeast Inst. capacity: 456 MW Generation p.a.: 1957 GWh Rein ownership: 44.9%	Location: Northeast Inst. capacity: 531 MWp Generation p.a.: 1227 GWh Rein ownership: 30%	Location: Southeast Inst. capacity: 438 MWp Generation p.a.: 964 GWh Rein ownership: 30%	Location: Southeast Inst. capacity: 902 MWp Generation p.a.: 2000 GWh Rein ownership: 20%



# Vista Alegre: Brazil's largest single-phase solar development



**Capacity:** 902 MWp



**Production:** ~2 TWh/year



**PPA:** 21-year power contract with Albras



**Partners:** Atlas Renewable Energy & Albras



**Hydro Rein share:** 20 % ownership

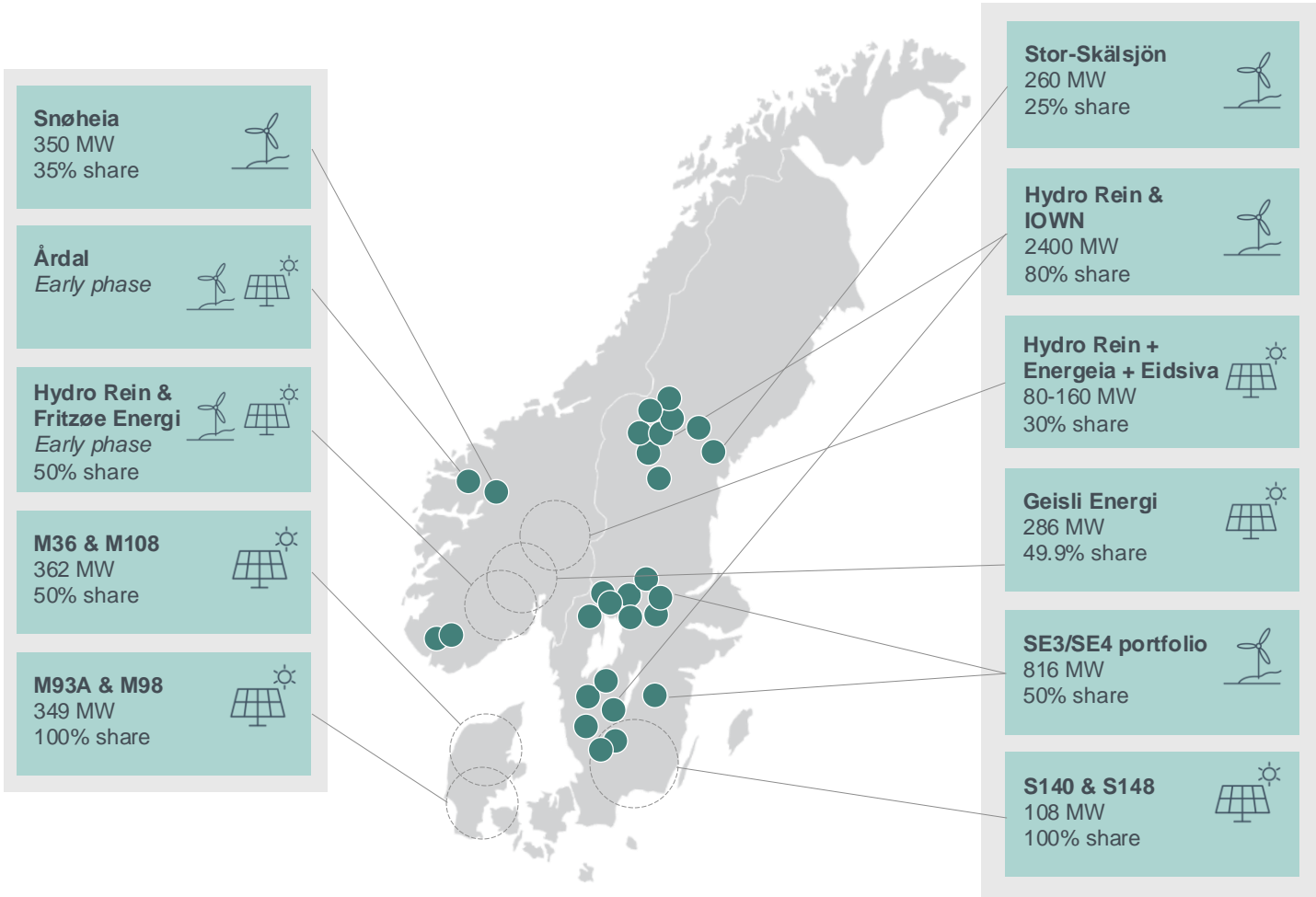


**Environment and social:**

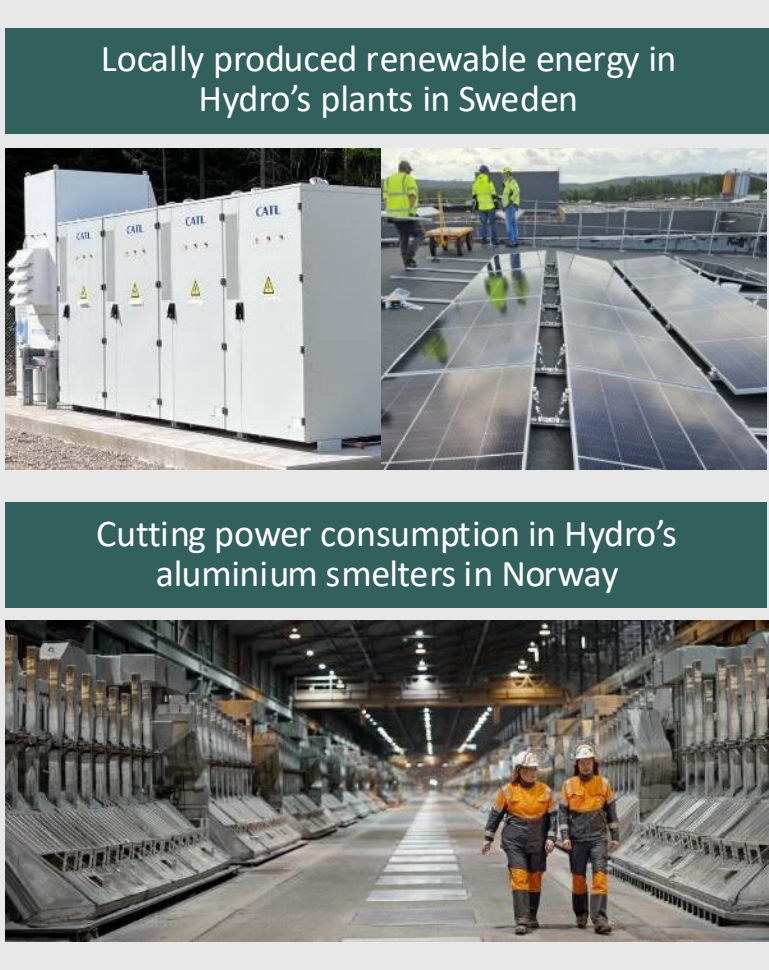


# Nordics: Substantial development pipeline supporting further growth ambitions

## Grid-scale portfolio:



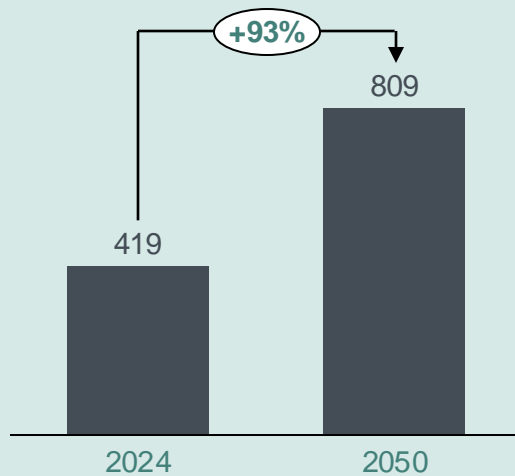
## Behind-the-meter projects:



# Fundamentals for renewables remain strong...

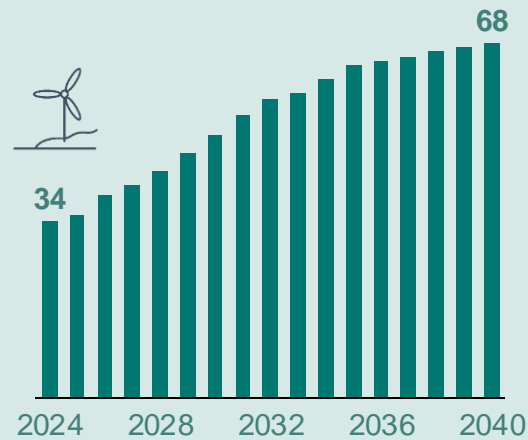
## Strong growth in power demand

Nordic power demand forecast TWh



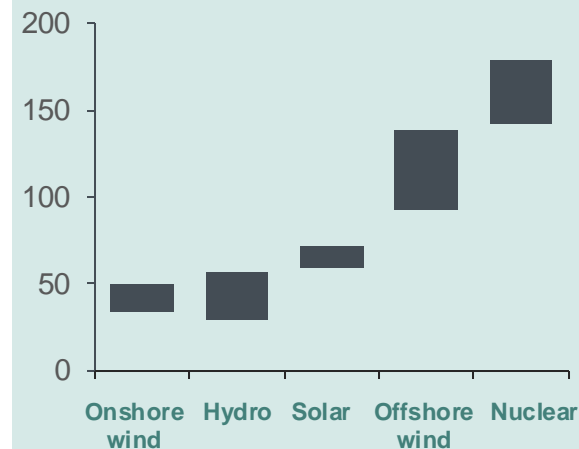
## Significant and expanding opportunity space

Onshore wind capacity in the Nordics GW



## Renewables with competitive LCOE

LCOE range various technologies Øre/KWh



## Integrated, robust and efficient power market

Nordic power market by price zones

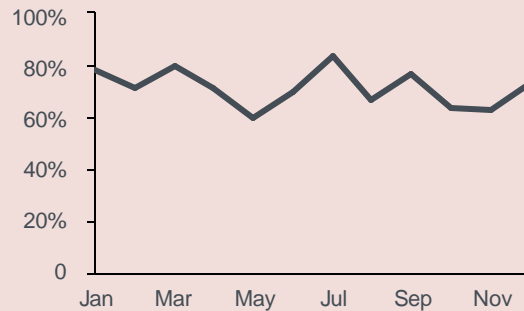




# ... even though the sector is facing significant headwinds

## Price cannibalization

SE1 onshore wind capture rate (monthly avg 2024)



## Grid access and curtailment



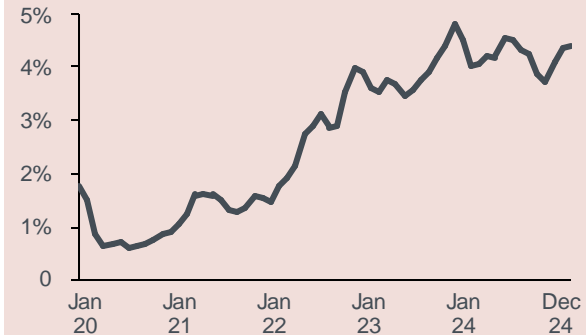
**30 TWh**  
lost to grid curtailment  
across 6 countries  
in Europe in 2023 <sup>1)</sup>



**9 bn Euros**  
cost of constraint  
management in 2023 <sup>1)</sup>

## Interest rates remain elevated

10yr US Gov bond yield



## Negative sentiment and opposition



### What can we do about this?

- Active energy management
- Portfolio synergies
- Hybridization (wind + solar + BESS)

- Flexible supply
- Improved grid access
- Stable and fair sharing of grid cost

- Focus on cash yield
- Attractive risk adjusted returns
- Conservative leverage

- Work closely with communities
- Link local power and industry
- Minimize nature impact

# Our core focus remains the same



Long-term renewable power supply and energy solutions to industry in our core markets Brazil and Nordics



Focus on wind, solar and battery hybrid projects



Power purchase agreements (PPA) as cornerstone, active management of firming risks



Dialogue and cooperation with local communities and stakeholders



Optimize projects to avoid or mitigate impact on nature

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