



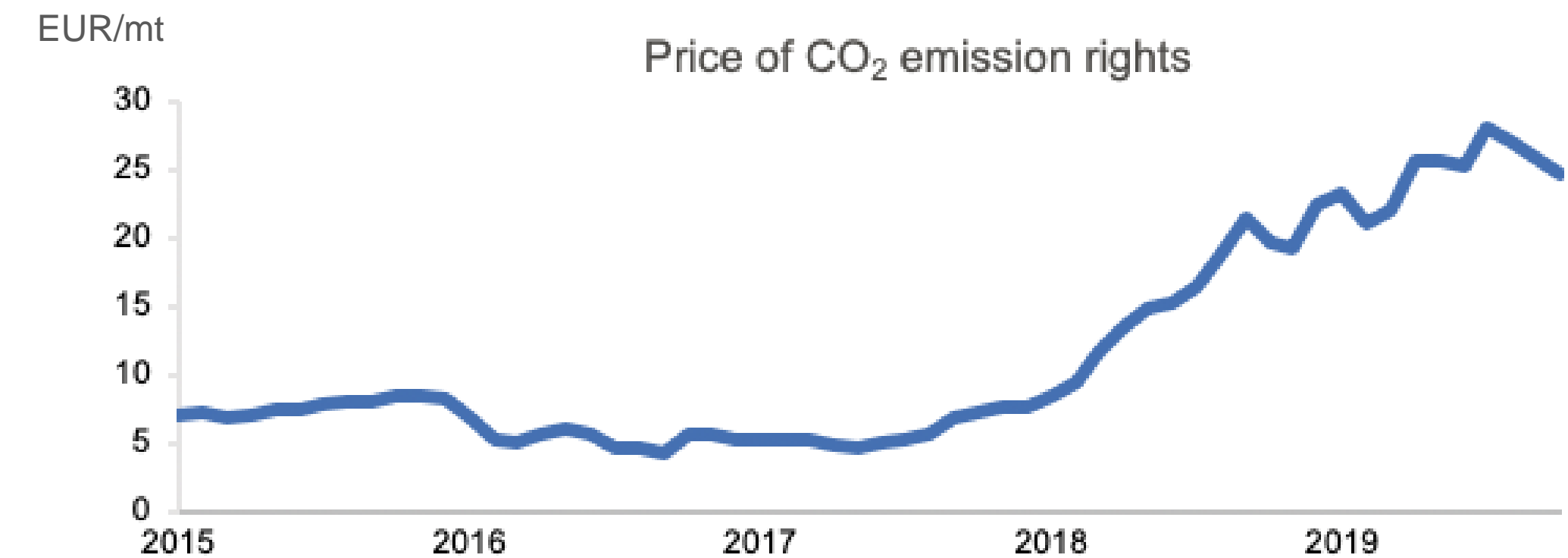
ANNA BORG

SUCCESSING AS A FOSSIL-FREE UTILITY

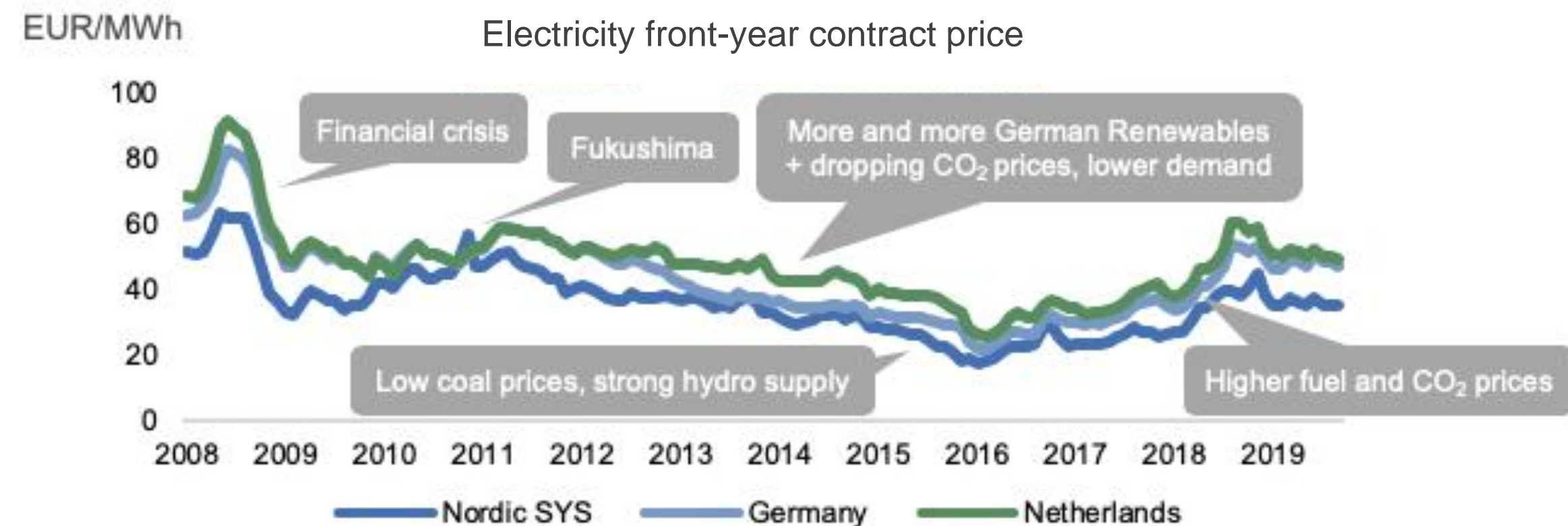
UTILITIES NAVIGATING THROUGH A PARADIGM SHIFT



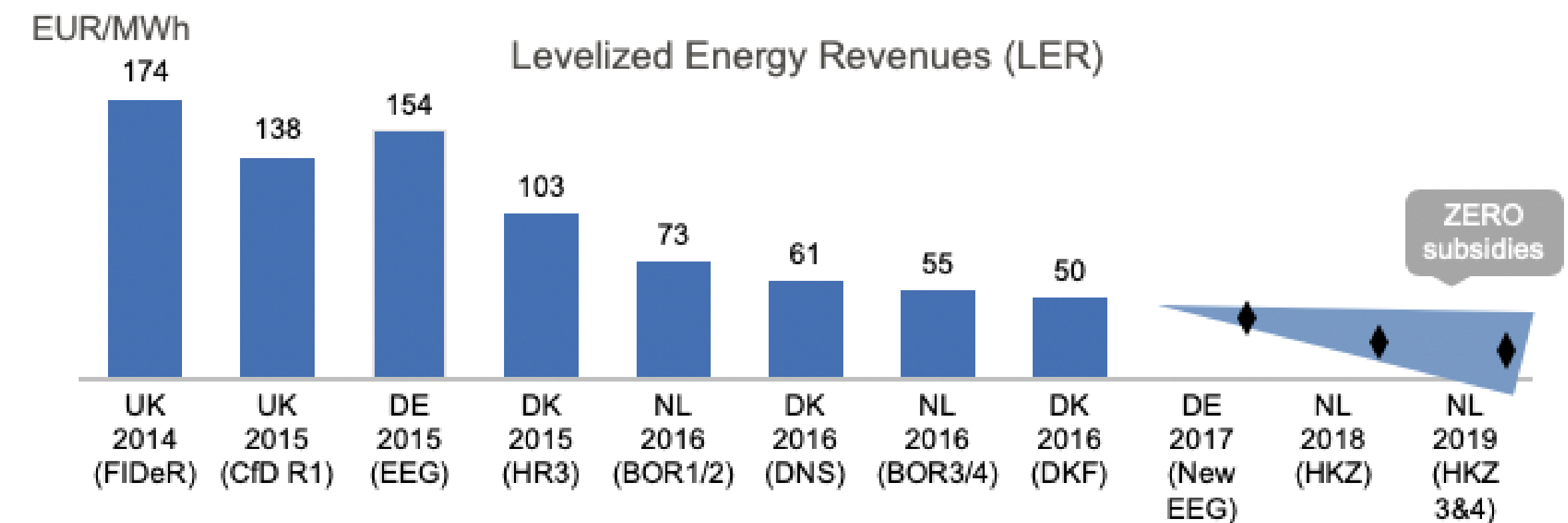
Strong rally in CO₂ prices challenging the merit order



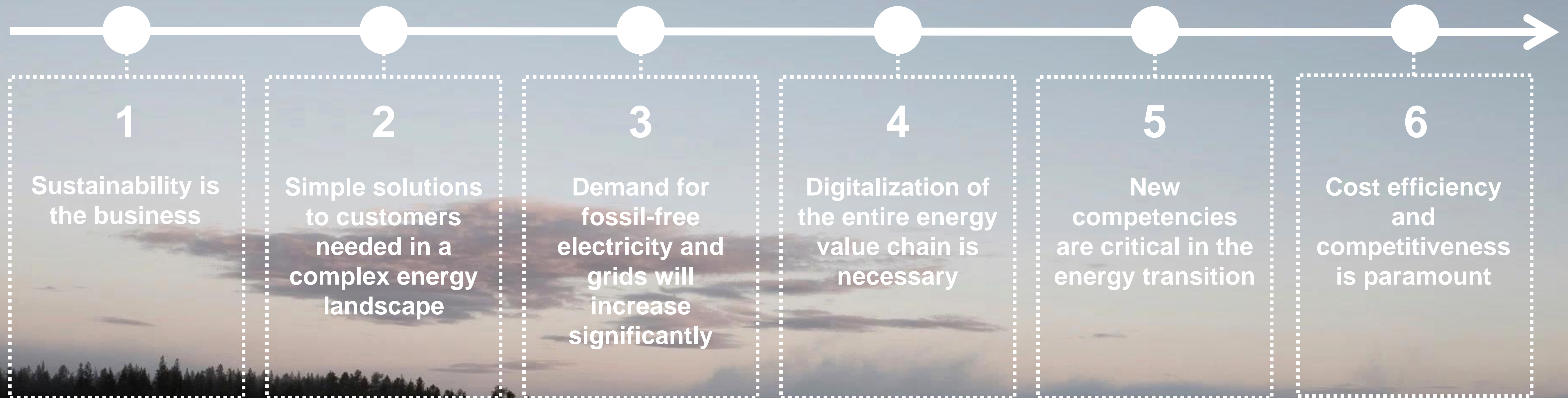
Rebound in electricity prices preceded by a prolonged decline



Falling costs and subsidies for renewables



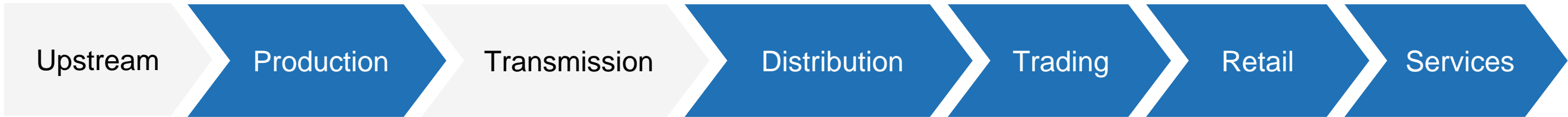
OUR BELIEFS ABOUT THE FUTURE



WHERE WE ARE TODAY

ACTIVITIES IN THE VALUE CHAIN

● Active ● Inactive



IN BRIEF:

- Vattenfall is a leading European energy company
- We want to make **fossil-free living possible within one generation**
- We are driving the transition to a more sustainable energy system through growth in renewable production and climate smart energy solutions for our customers
- **100 per cent owned by the Swedish State**
- Our long term credit ratings are **BBB+ stable outlook by S&P and A3 negative outlook by Moody's**
- We have been electrifying industries, powering homes and transforming life through innovation for **more than 100 years**



6.6 Million
Electricity Customers



2.1 Million
Heat Customers



3.3 Million
Electricity
Network Customers



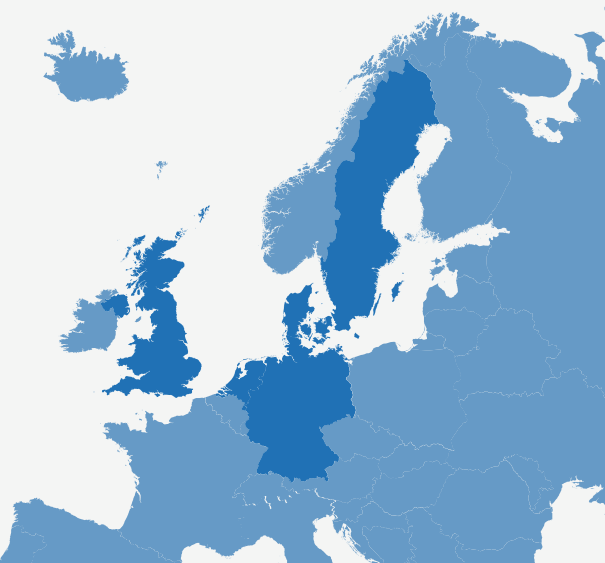
2.4 Million
Gas Customers



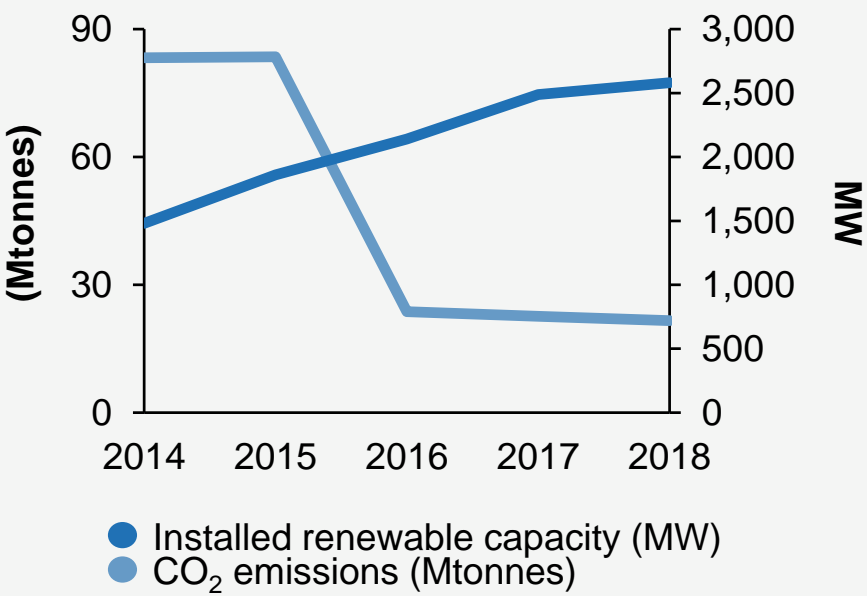
19,910
Employees

MAIN MARKETS:

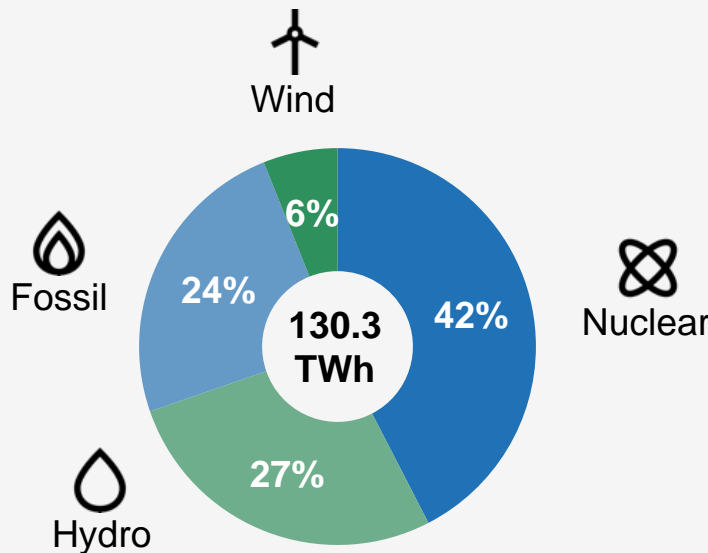
Sweden
Germany
Netherlands
Denmark
United Kingdom



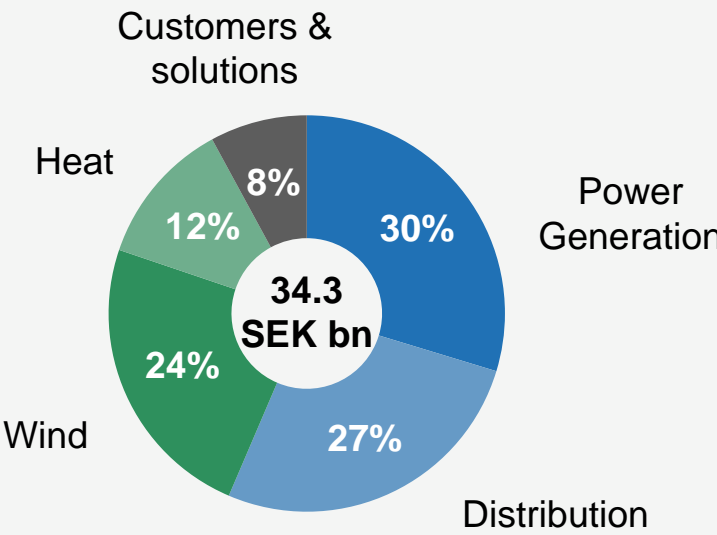
CO₂ REDUCTION & RENEWABLES GROWTH



ELECTRICITY GENERATION BREAKDOWN BY TECHNOLOGY, 2018



EBITDA BREAKDOWN BY SEGMENT, 2018





**WE ARE REINVENTING
OURSELVES**

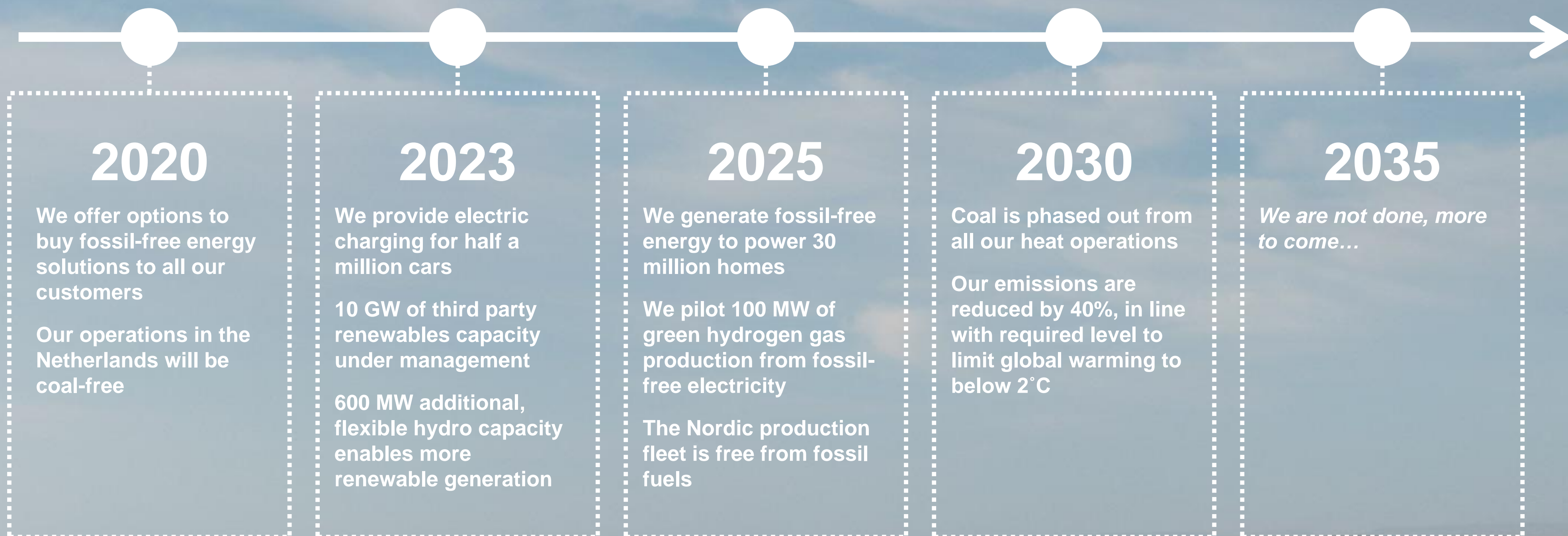
FOSSIL-FREE LIVING WITHIN ONE GENERATION

At Vattenfall we exist to help all of our customers power their lives in ever climate smarter ways and live free from fossil fuels within one generation



MILESTONES TOWARDS 2030

Fossil-free living within one generation



A photograph of a wind farm in a grassy field. Several wind turbines are visible in the background under a clear sky. In the foreground, two people are standing in the tall grass; one person is pointing towards the turbines. The text "ACTIONS SPEAK LOUDER THAN WORDS" is overlaid in large white capital letters.

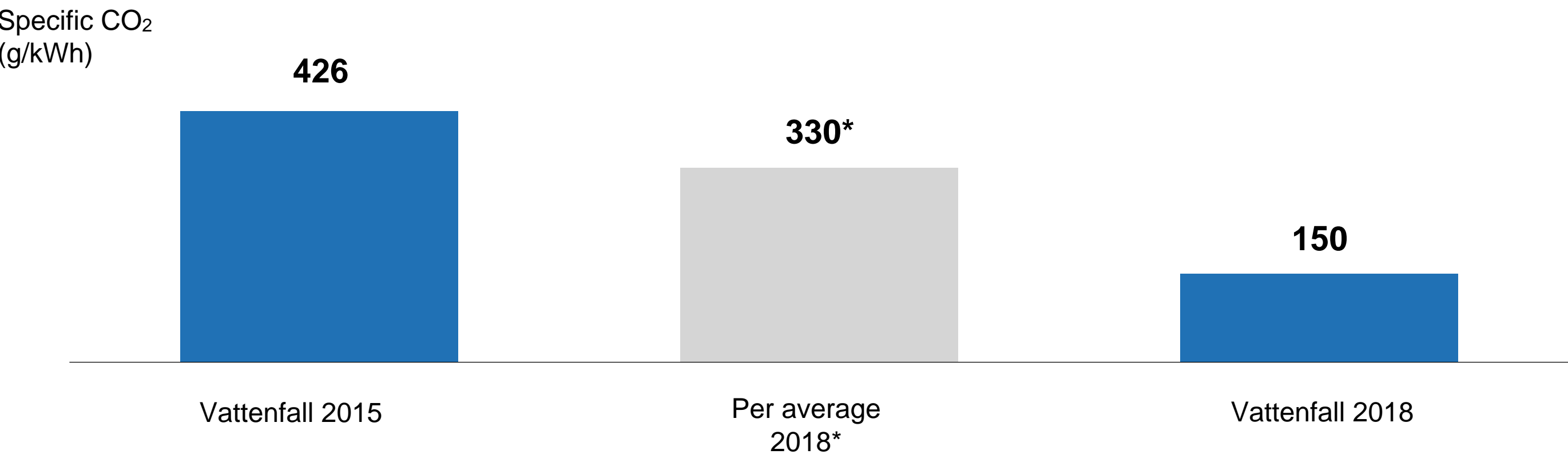
**ACTIONS SPEAK
LOUDER THAN WORDS**

1. WE RESTRUCTURED OUR PORTFOLIO

- We sold lignite in 2016, causing our CO₂ footprint to drop significantly
- We continue to identify further actions, e.g. retiring our coal-fired power plant Hemweg in the NL earlier than planned and phasing out coal from all of our Heat operations latest by 2030
- In 2030, the Nordic production fleet will be free from fossil fuels

VATTENFALL’S PORTFOLIO TRANSFORMATION

Major shift in 2016 following lignite divestment



*EDF, Engie, ENEL, RWE, Iberdrola, Vattenfall, Uniper, Fortum, EDP, Statkraft, CEZ, EnBW weighted by production volume

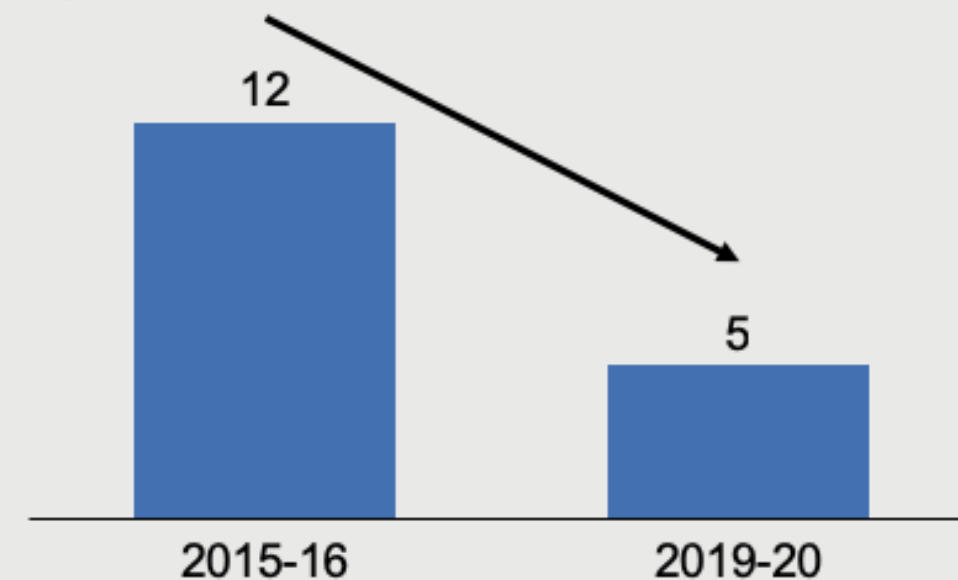


2. WE DRAMATICALLY CHANGED OUR INVESTMENTS

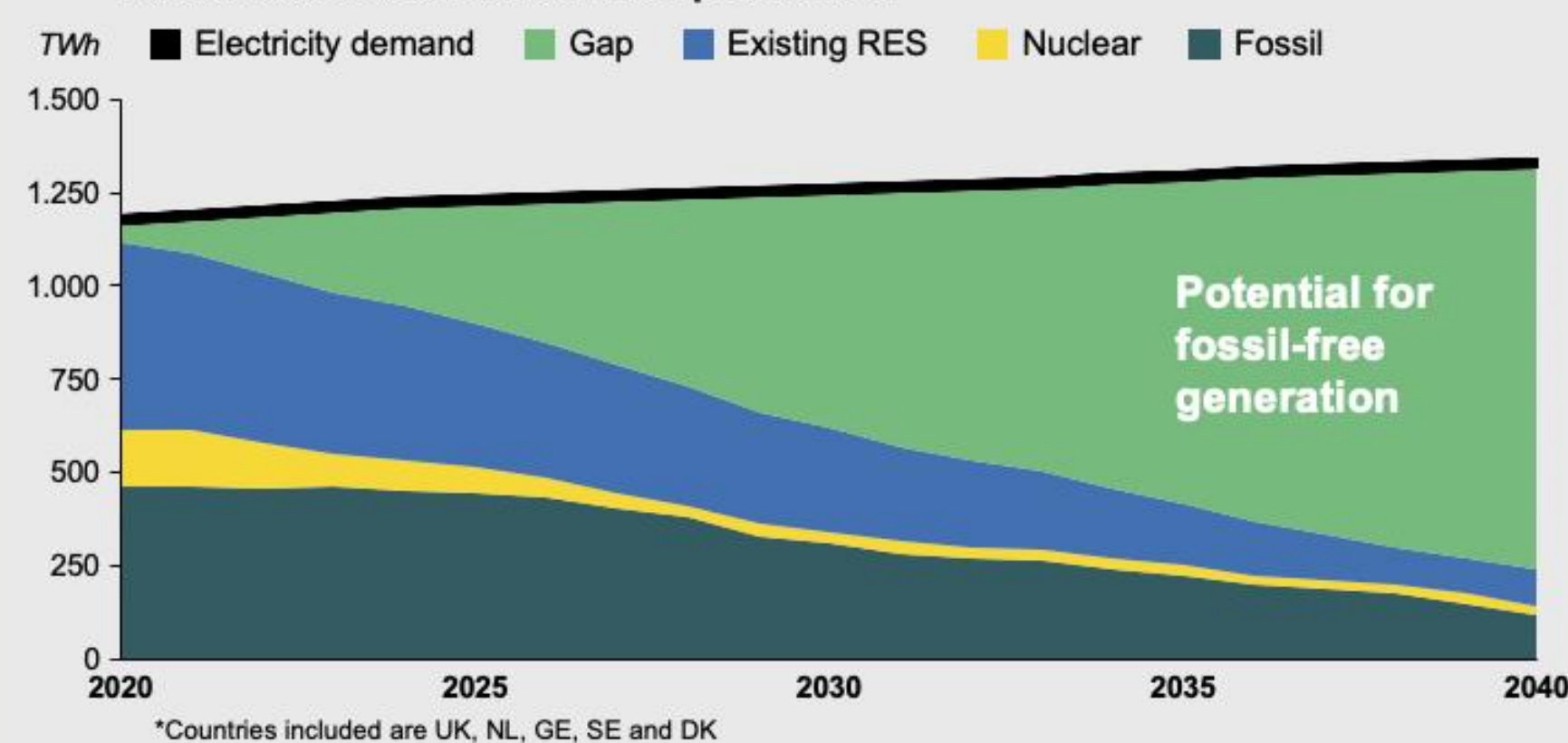
- Strong wind growth: 3.2 GW installed capacity, 1.7 GW under construction and >5GW in development
- Nuclear, hydro and grids as core and enabling the transition
- Phase-out of coal and achieving climate neutrality
- First large-scale solar farm commissioned in 2016, Parc Cynog (5 MW)
- Increased focus on decentralized production, storage and EV charging

INVESTMENT PLAN FOR FOSSIL-BASED GENERATION DECREASED BY ~60%

SEK bn



Future outlook on demand vs. production*



WHAT WE SEE HAPPENING AROUND US:

Global investments in renewable energy reached 288.9 B\$ in 2018¹

189 GW wind capacity installed in Europe² in 2018 and an additional 330GW to be installed worldwide³ 2019–2023

¹ Source: BloombergNEF














² Source: windeurope.org

³ Source: GWEC.net

⁴ Marzahn gas-fired CHP, Reuter heat-only boiler, Lichterfelde gas-fired CHP (updated to a more efficient and environmental compatible combined cycle gas turbine)

3. WE ARE AN ACTIVE PARTNER IN THE ENERGY TRANSITION

Examples of partnerships we are in

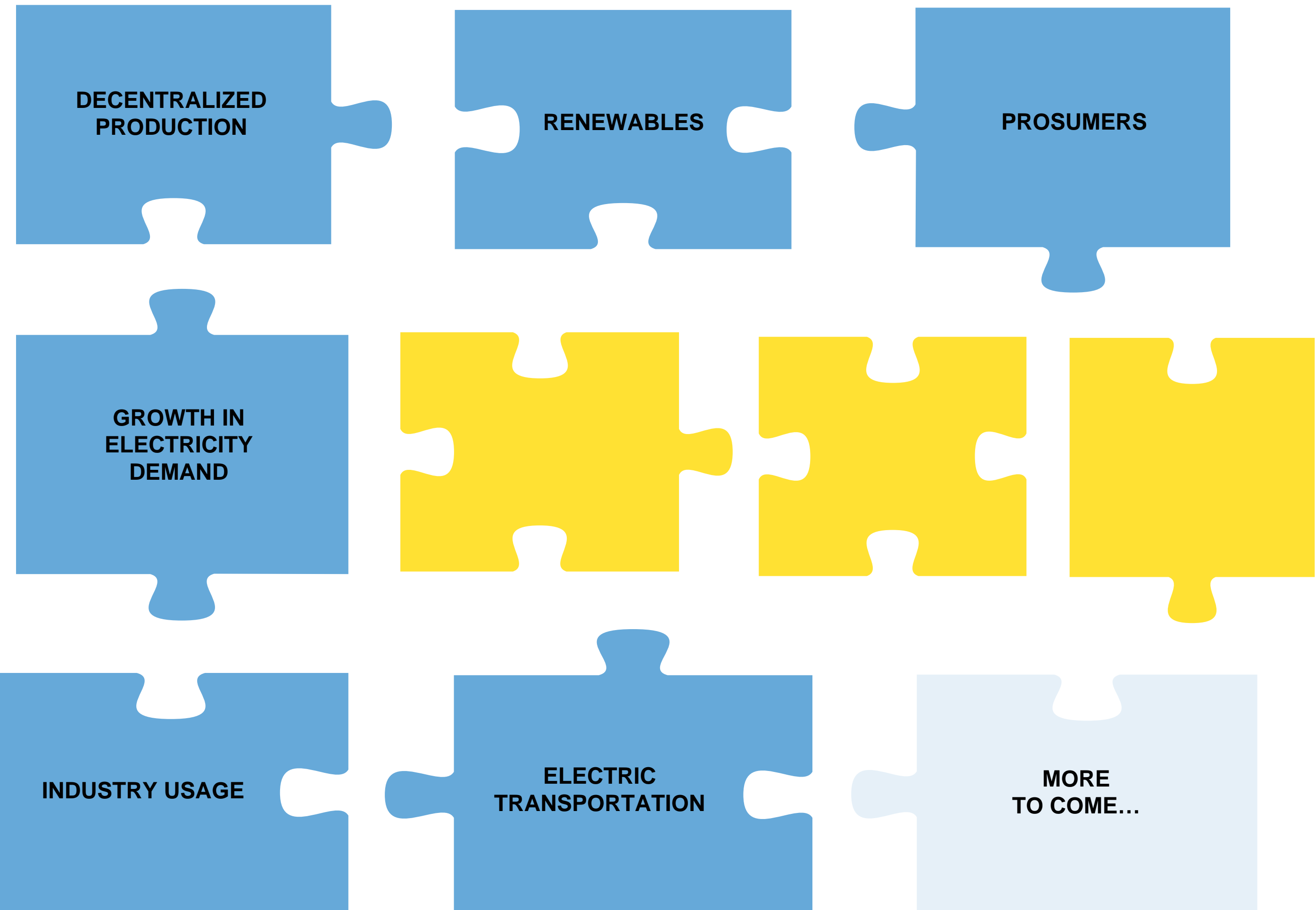
<p>Research project for a carbon dioxide-free steel industry</p> <p>HYBRIT ▶▶▶ FOSSIL-FREE STEEL</p> <p>VATTENFALL </p>	<p>Cooperation in large scale bio-diesel production</p> <p></p> <p>VATTENFALL </p>	<p>Study on electrified cement production</p> <p>CEMENTA HEIDELBERGCEMENT Group</p> <p>VATTENFALL </p>	<p>Storage projects at a number of wind parks</p> <p></p> <p>VATTENFALL </p>
<p>Market place for energy sharing</p> <p> powerpeers share your energy</p> <p>VATTENFALL </p>	<p>Support of a major enterprise for battery production in Sweden</p> <p>northvolt[®]</p> <p>VATTENFALL </p>	<p>Northern Europe's largest charging network for e-vehicles</p> <p>InCharge </p> <p>VATTENFALL </p>	<p>Attract industries to Sweden</p> <p> NODE POLE</p> <p>VATTENFALL </p>

- Vattenfall collaborates with the mining company LKAB and the steel manufacturer SSAB to reduce the climate impact of the Swedish steel industry
- By using hydrogen instead of coke and coal when manufacturing steel, the ambition is to create a process that emits water instead of carbon dioxide
- The aim is to have a completely fossil-free process for steel production in 2035
- The initiative can reduce Sweden's total carbon dioxide emissions by 10% and in Finland by 7%
- The steel industry stands for 7% of the total global CO₂ emissions, and therefore the potential for spreading the HYBRIT technology could be an important contribution also on a global scale
- Highlighted as one of the UN industry projects



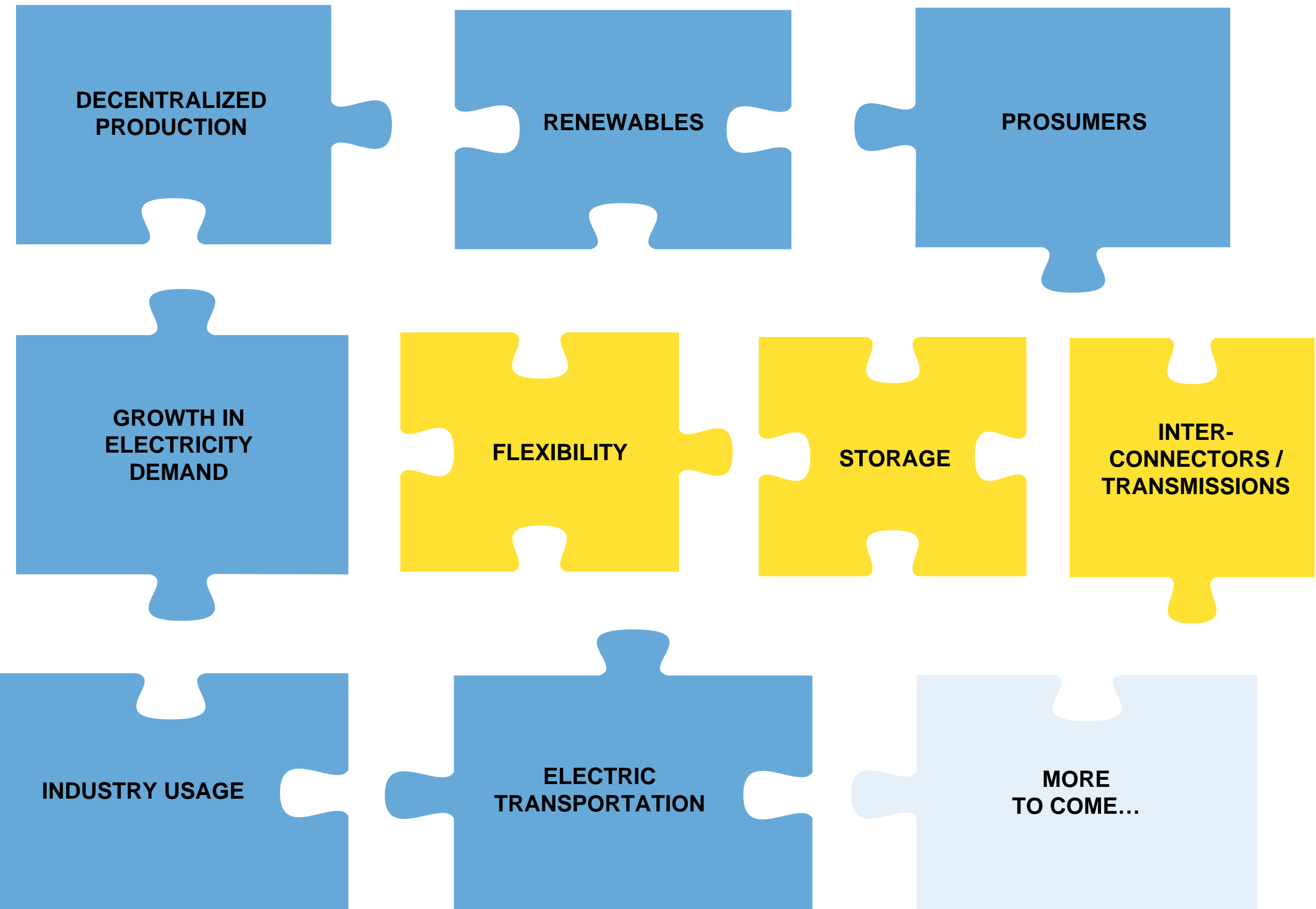
4. THERE ARE MANY PIECES OF THE PUZZLE

- Balancing nuclear, hydro, wind and solar whilst phasing out fossil fuels
- Enabling customers (households as well companies) to become energy efficient
- Developing climate-smart production processes (e.g. HYBRIT)
- Electrifying society and transport



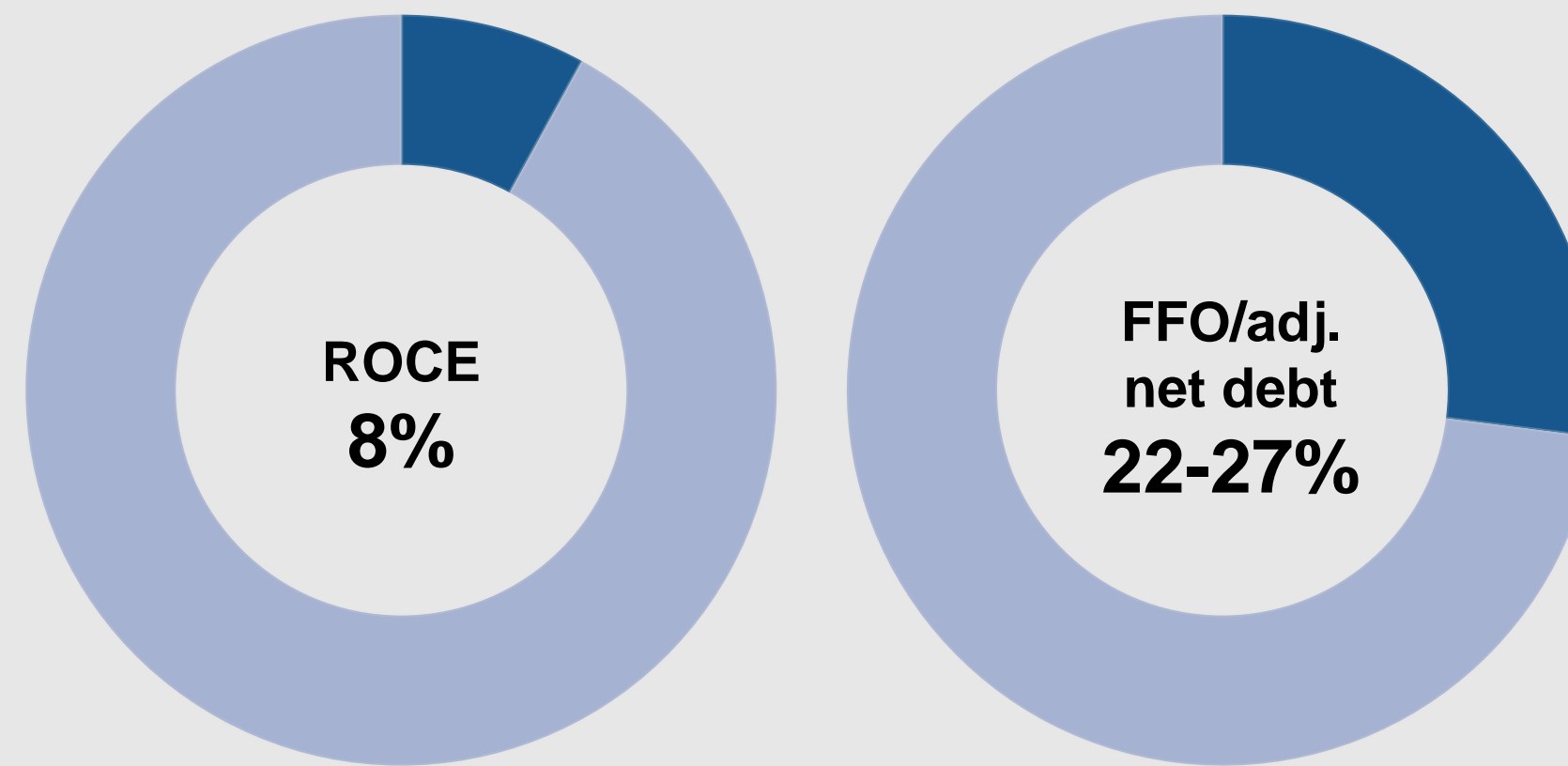
5. AND THEY NEED TO FIT TOGETHER

- A functioning grid, able to handle renewables growth, is key (the grid needs to become smarter)
- In addition, interconnectors to promote market integration and add flexibility will be essential



6. FINANCING IS KEY

- Implementation of Vattenfall's strategy requires **significant investments**
- The best way to **finance the future** is by making **money today**
- We focus on increasing internal cash flow generation whilst maintaining a prudent capital structure



VATTENFALL LAUNCHED A GREEN BOND

- Vattenfall's first green bond
- First corporate bond under the EMTN framework ever issued under Swedish law and listed in Stockholm
- Issuance of a green bond articulates Vattenfall's sustainability commitment also in our funding

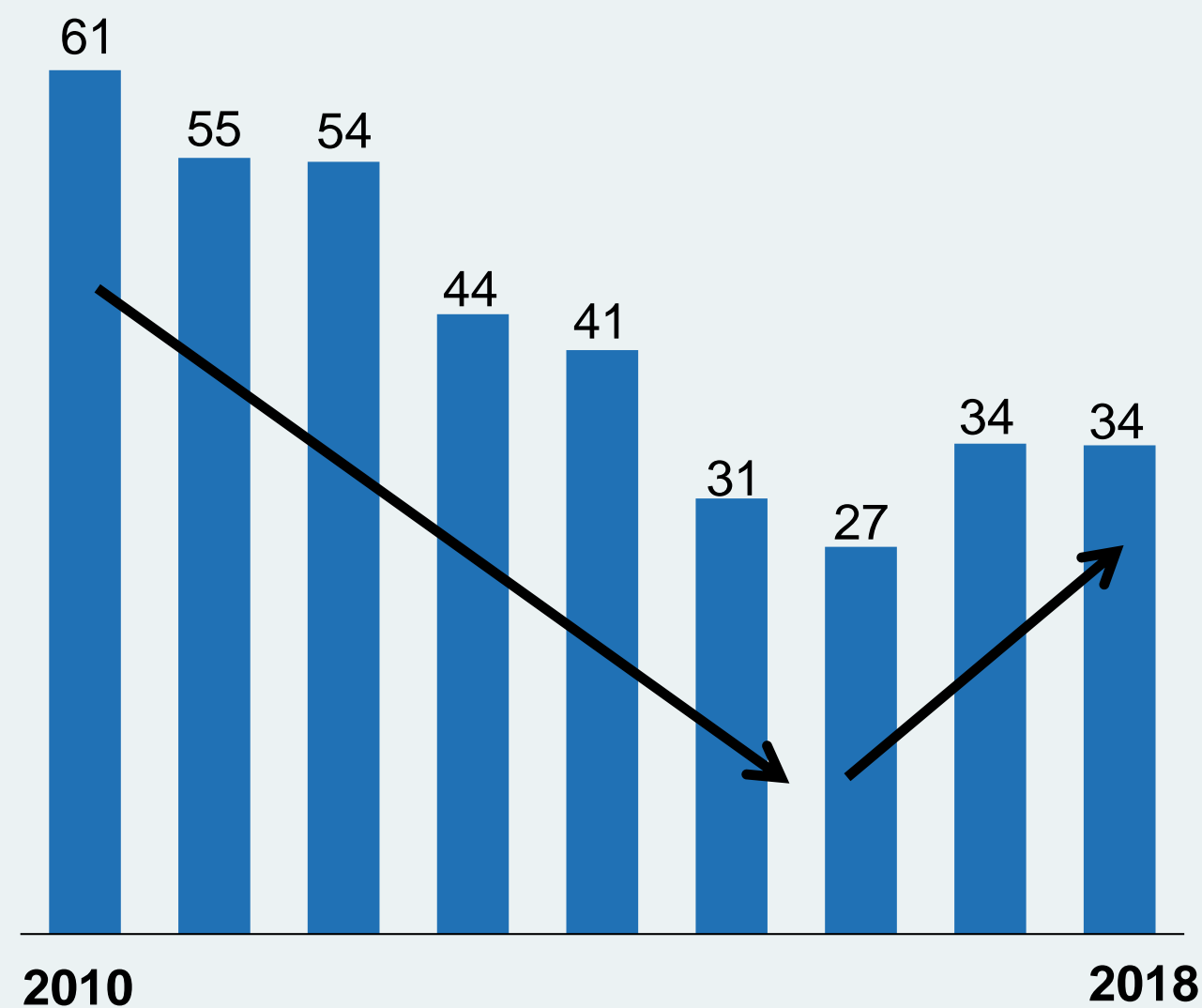
TERMS

- Senior green bond, EUR 500 mn, 7yr
- Coupon: 0.5%
- Yield: 0.55%
- Rating: S&P BBB+/ Moody's A3
- Maturity Date: 24 June 2026



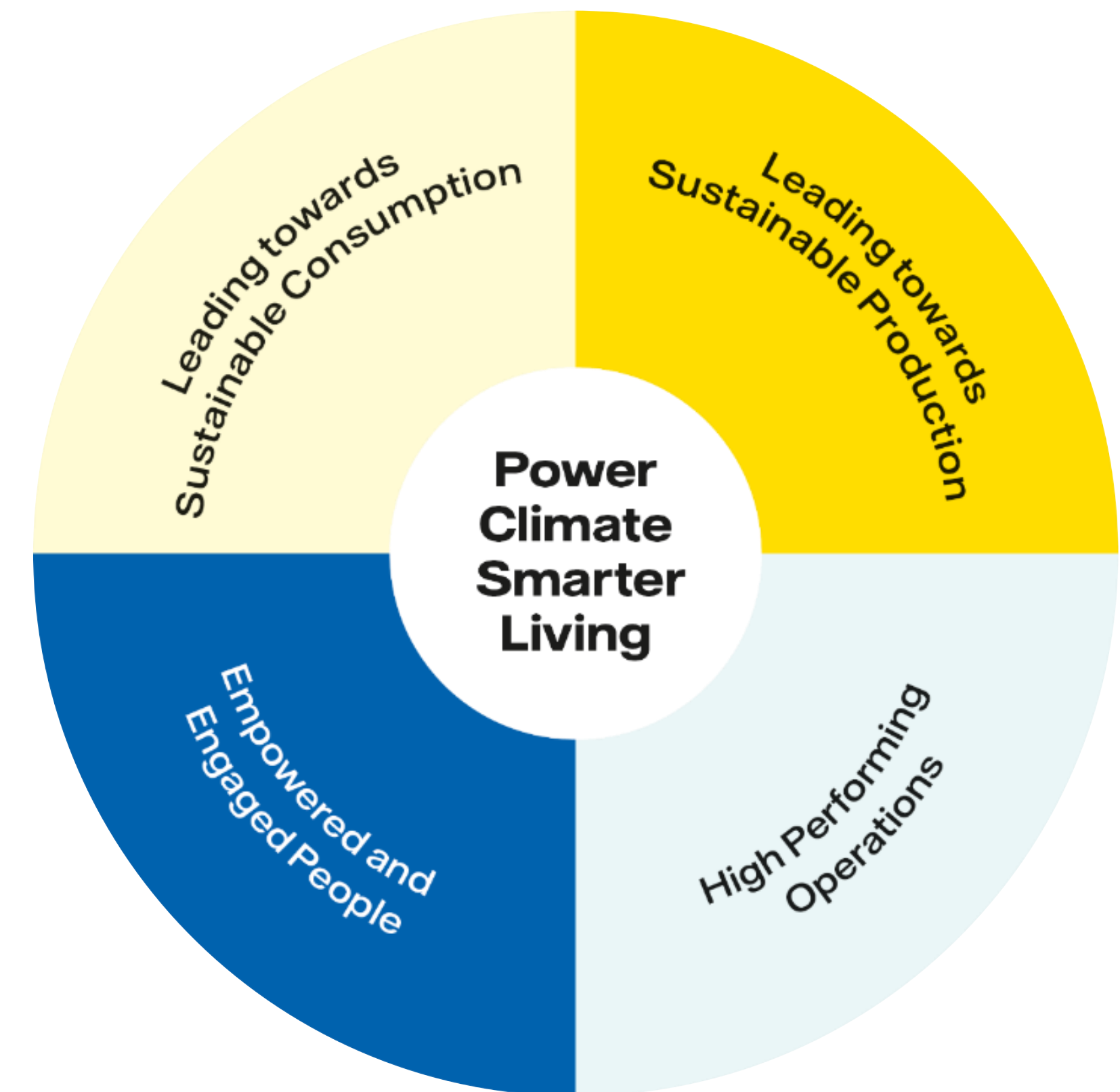
WE ARE ON THE RIGHT TRACK

EBITDA SEK bn



MARKED RESULT IMPROVEMENT, 9M 2019

- Underlying EBIT increased by SEK 1.6 bn to SEK 16.9 bn
- Profit for the period increased by SEK 5.5 bn to SEK 14.4 bn
- Main contribution from Power Generation and Wind
- Delivery on financial targets - ROCE at 9.2% and FFO/Adjusted net debt at 24.5%



A young girl with long dark hair, wearing a grey long-sleeved shirt and blue shorts, stands on a sandy beach. She is holding a large, yellow, fringed flag on a wooden pole. The flag is flying in the wind. In the background, the ocean waves are visible under a clear blue sky. The text "WE WILL ENABLE FOSSIL-FREE LIVING" is overlaid in large white capital letters across the center of the image.

**WE WILL ENABLE
FOSSIL-FREE LIVING**