

# Future in motion.

HIT Hamburg Investors Days

TION



# History and status quo





# Growth track record

We built a strong track record as a dynamically growing renewable energy company...

+67%

Portfolio size  
CAGR 2019–2021

+40%

Revenue growth  
CAGR 2019–2021



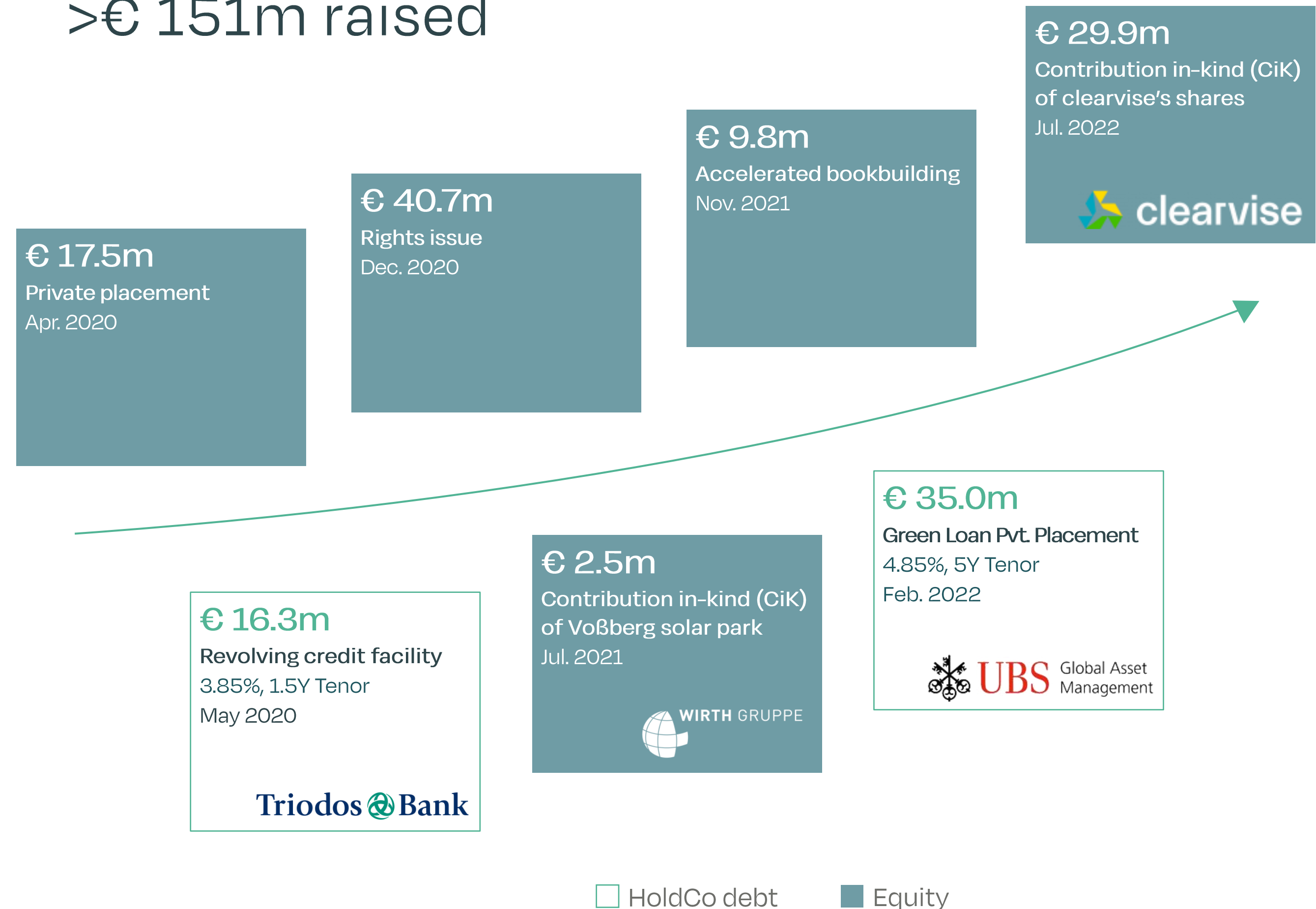


# Funding track record

...and we have successfully raised capital to finance our growth story.

>€ 151m raised

+483%	+40%
Market cap. Since stock market debut	Share price Since stock market debut

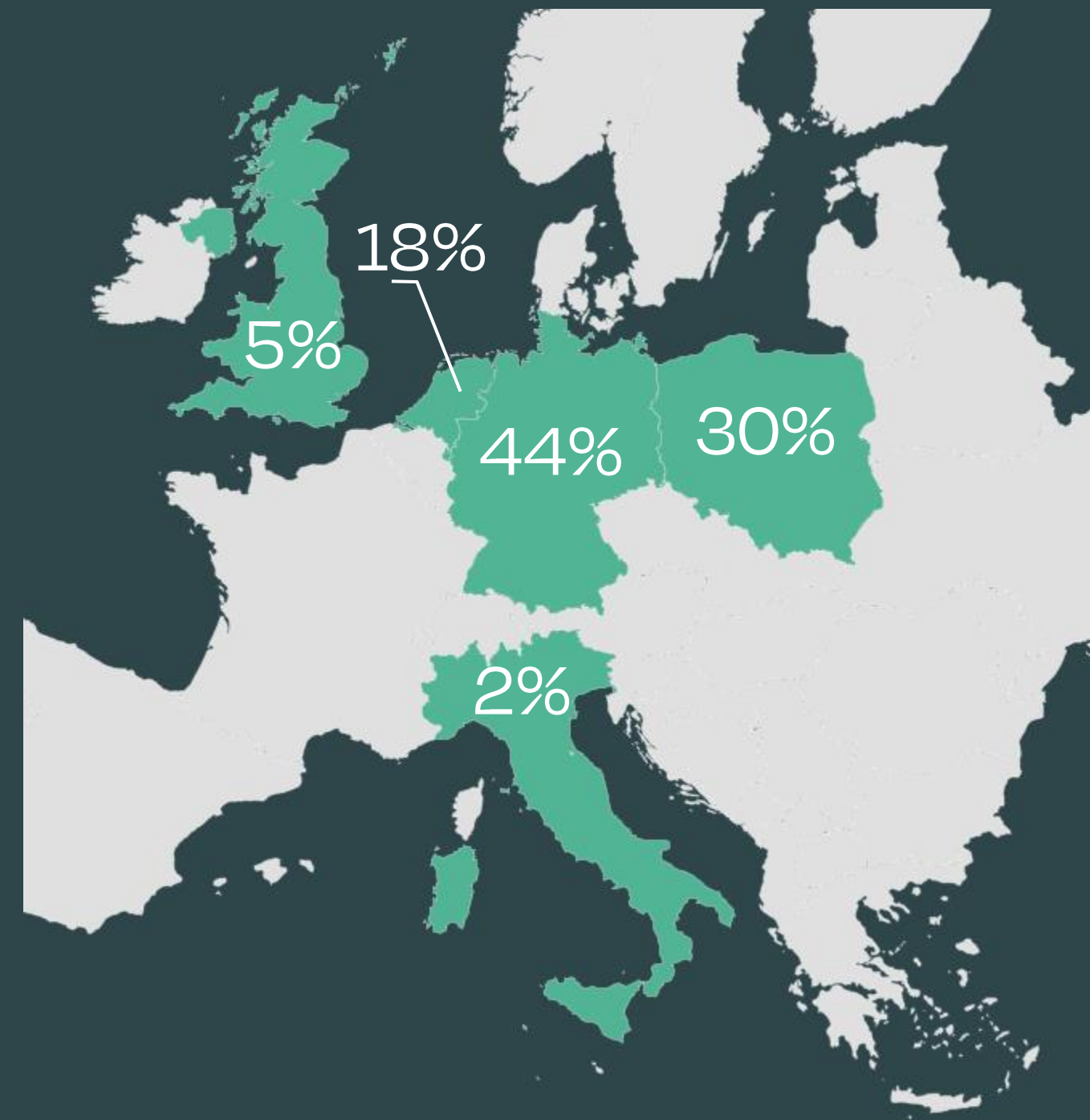
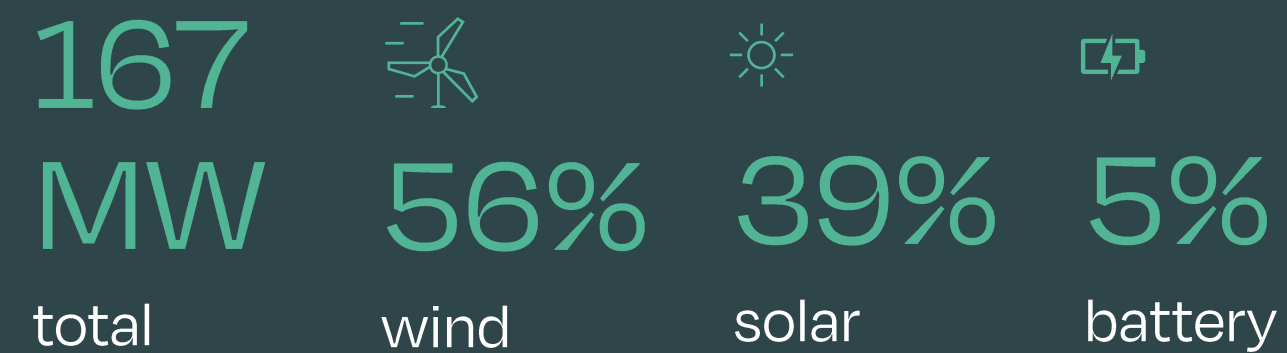




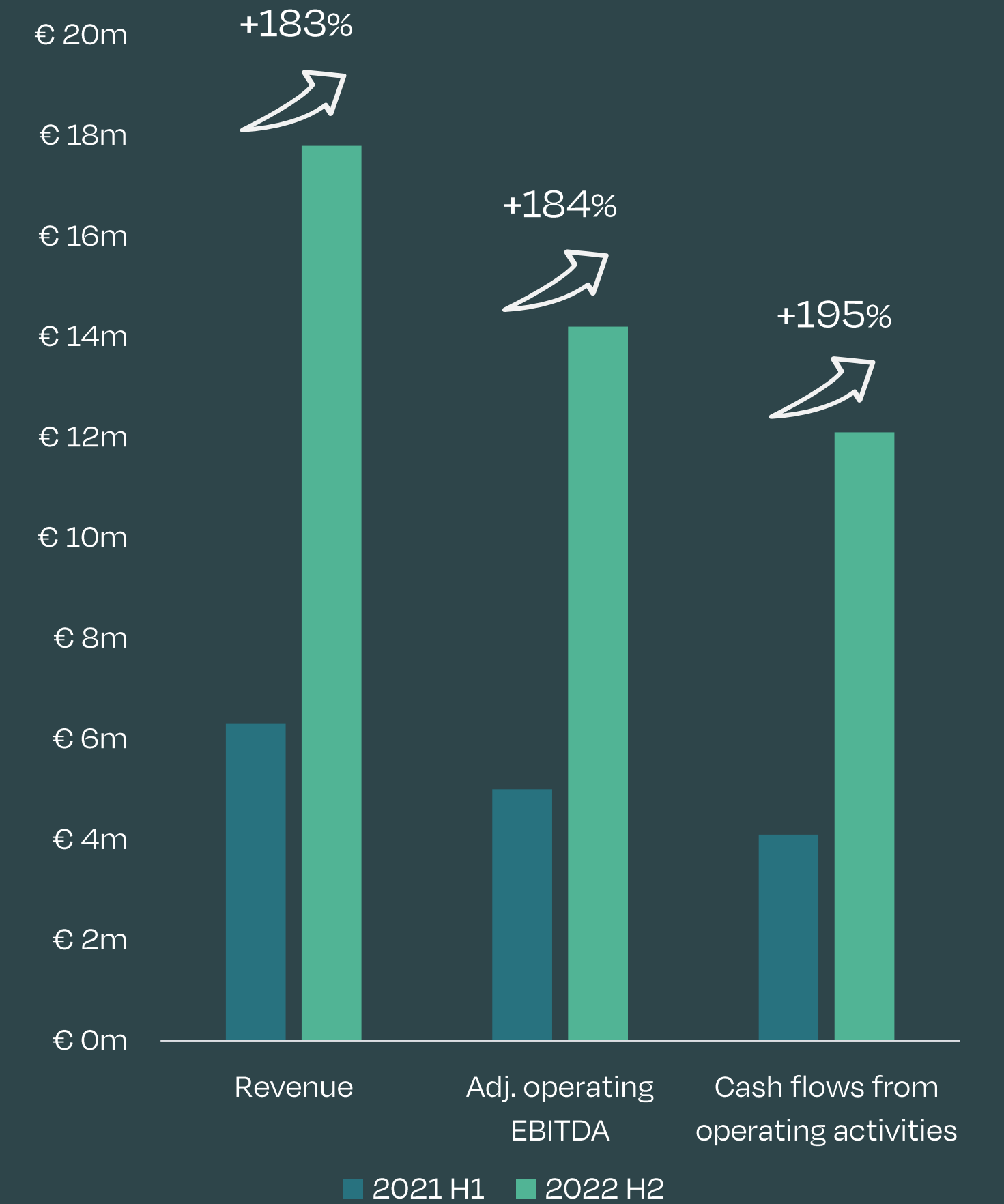
# Tion portfolio

We built a well-diversified European utility-scale solar and wind portfolio providing us a wealth of strategic opportunities.

## Solar & wind parks and battery storage



## Financials

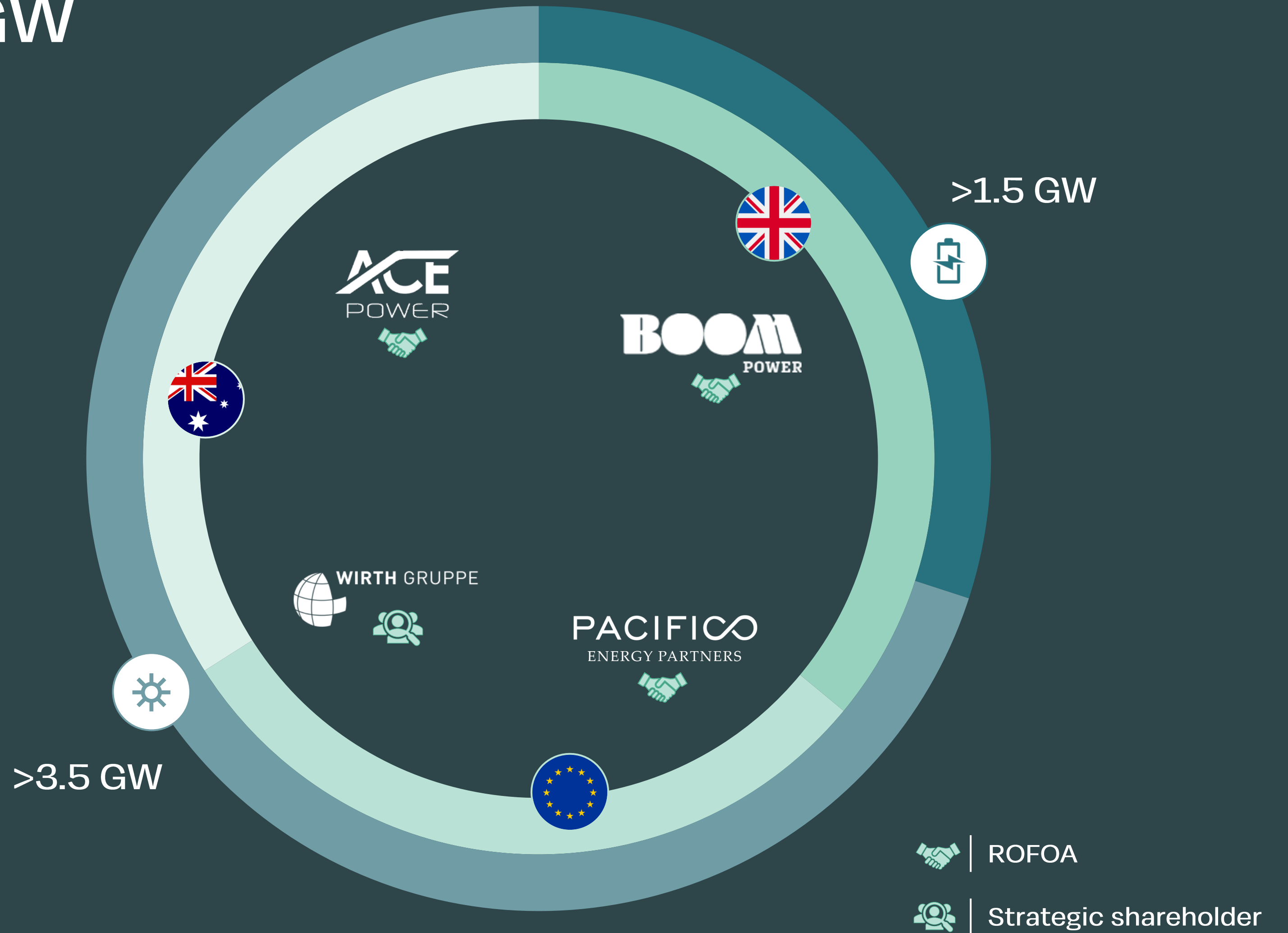




# Pipeline

We have built priority access to a pipeline of >5 GW including > 1.5 GW battery storage projects.

>5 GW





# Next leap forward



# Strategic initiatives

We have defined three strategic initiatives to take the next leap forward.

## Beyond balance sheet

- 1 | Explore capital solutions
- 2 | Join forces with clearvise

## Beyond renewables

- 3 | Invest in green technologies ready to scale

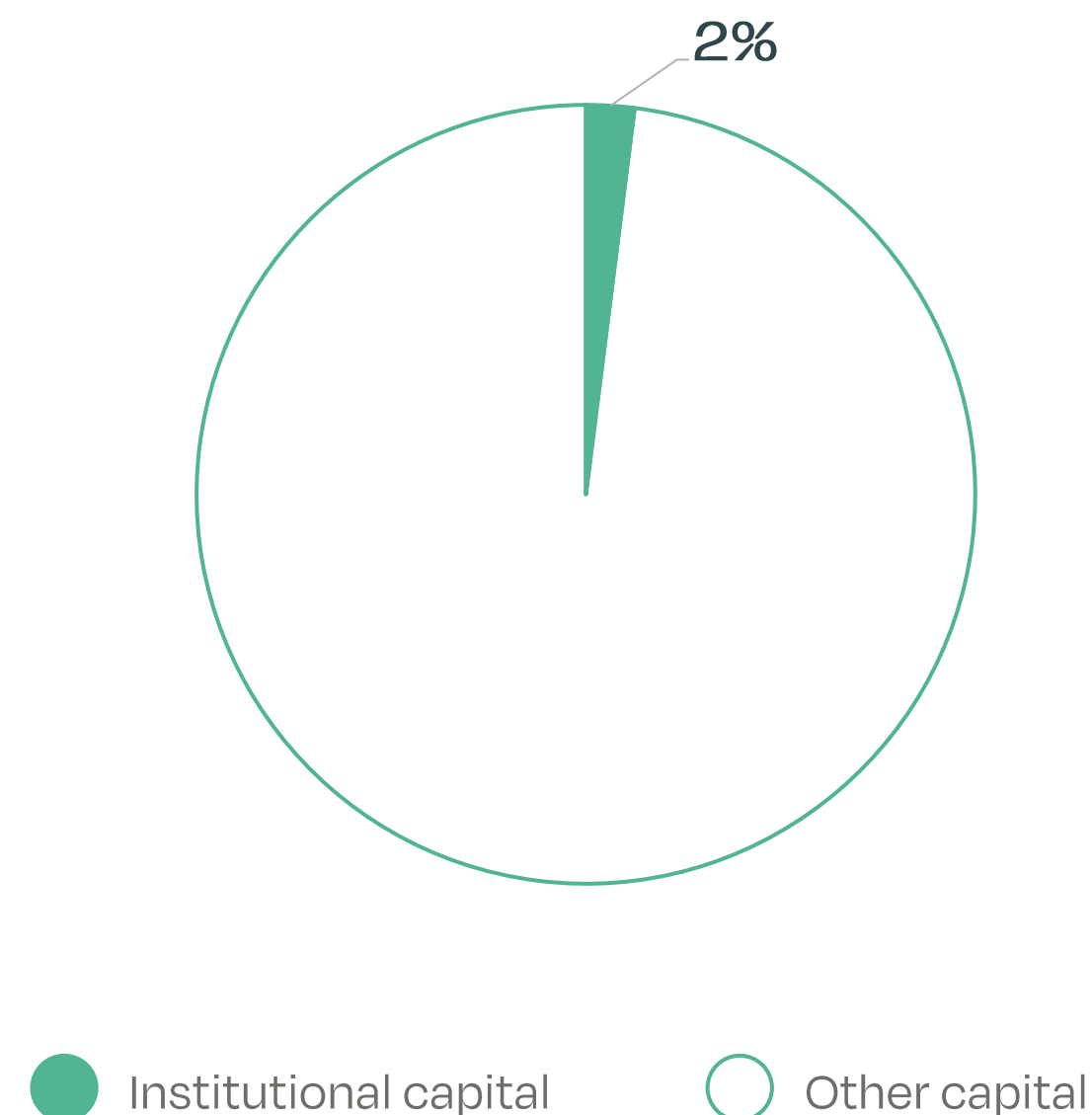


# Explore capital solutions

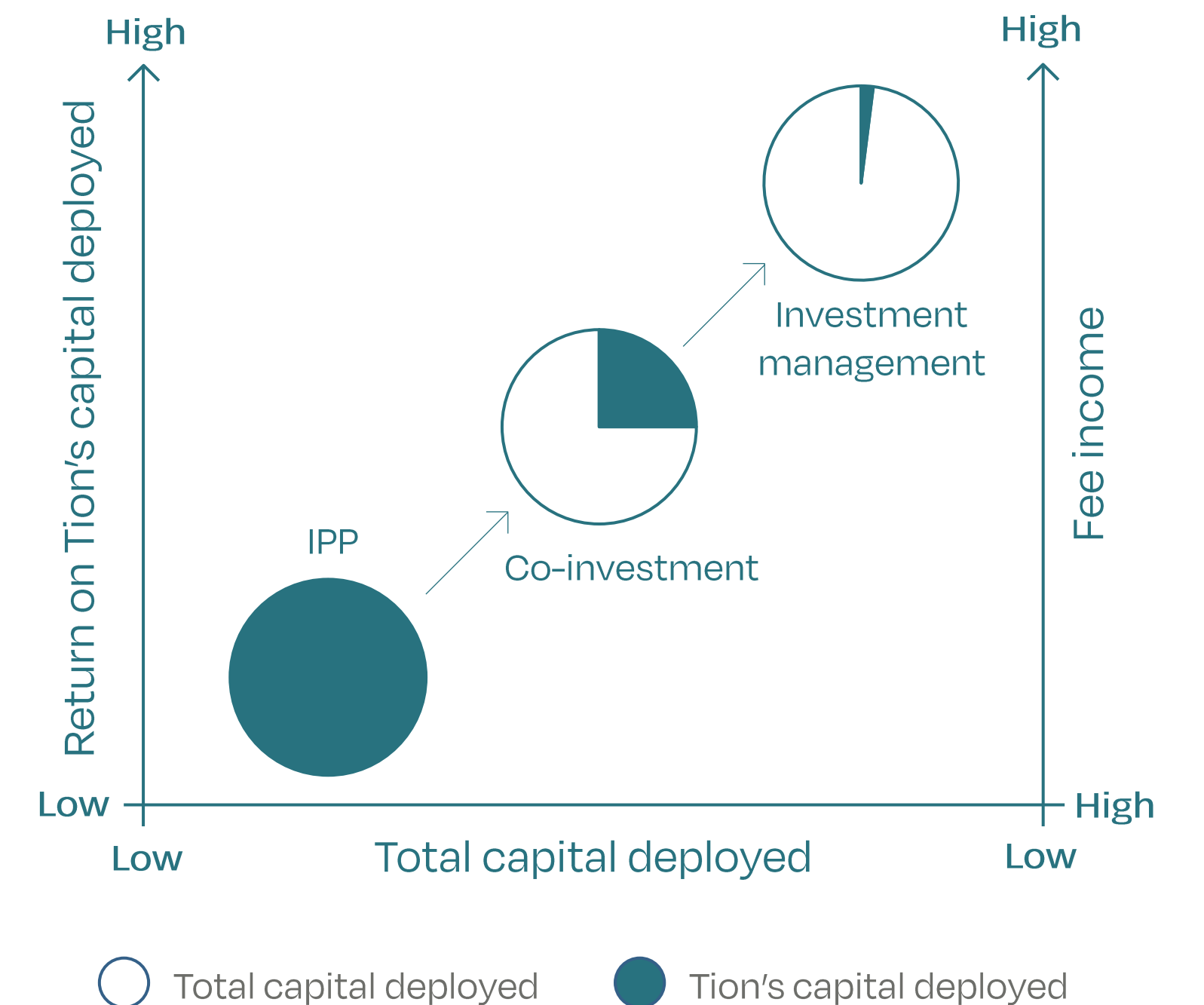
We aim at channeling more institutional capital directly into energy transition assets and deploying our own balance sheet more efficiently.

## Large and growing potential of more institutional capital directly invested into energy transition assets

Share of direct investments on total renewable project investments, 2018



## Creating opportunities to co-invest alongside Tion



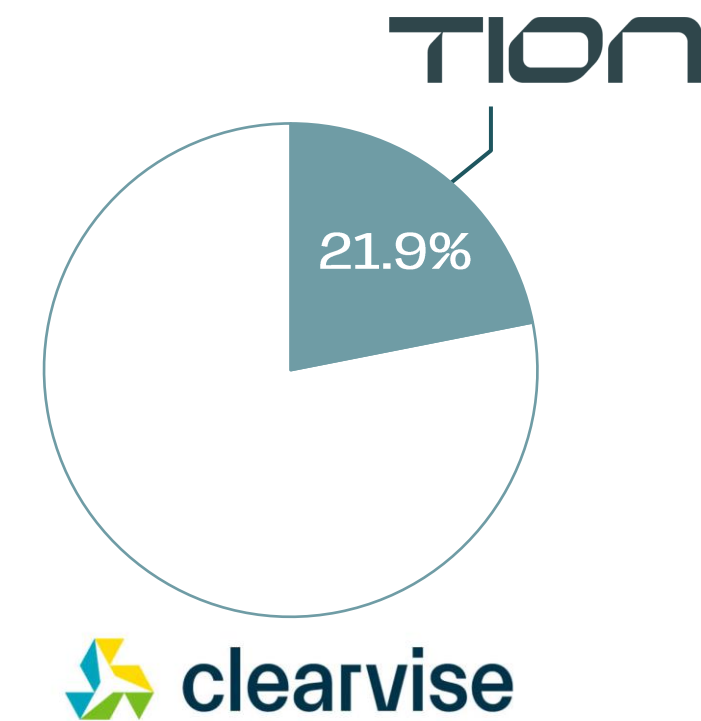


# Join forces with clearvise

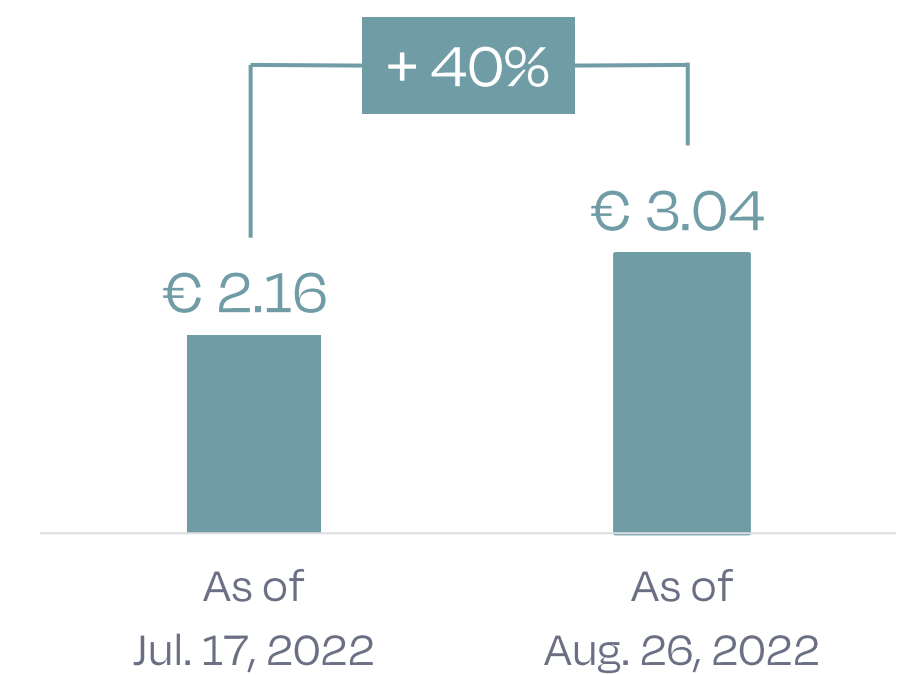
## Accretive investment...

- Exchange ratio: 13,897,848 clearvise shares received at € 2.16 against 1,024,915 newly issued Tion shares at € 29.25
- Increased exposure to renewables benefitting from historically high electricity prices

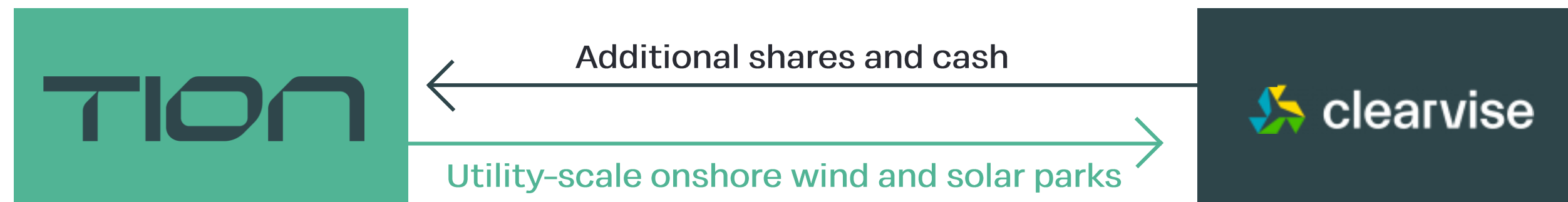
## Initially acquired equity stake



## clearvise's share price



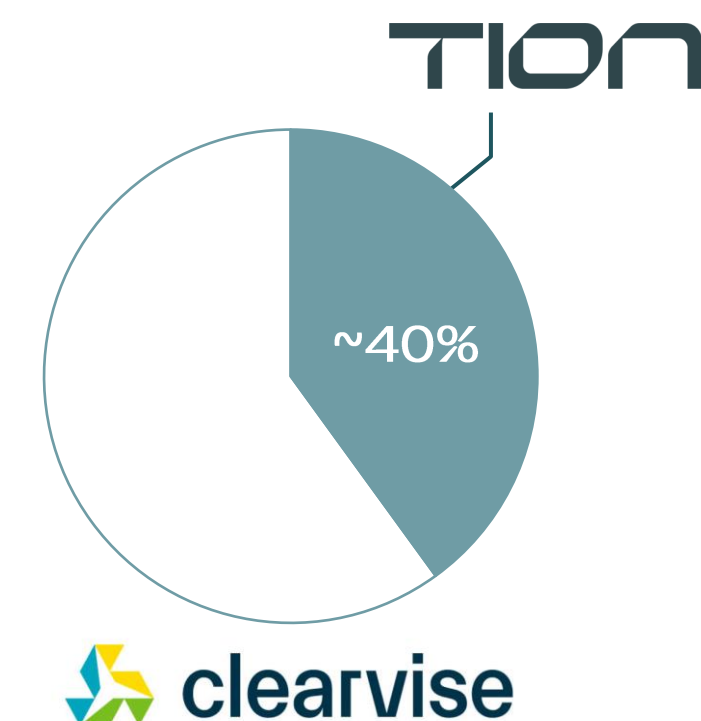
## ...with a strategic agenda



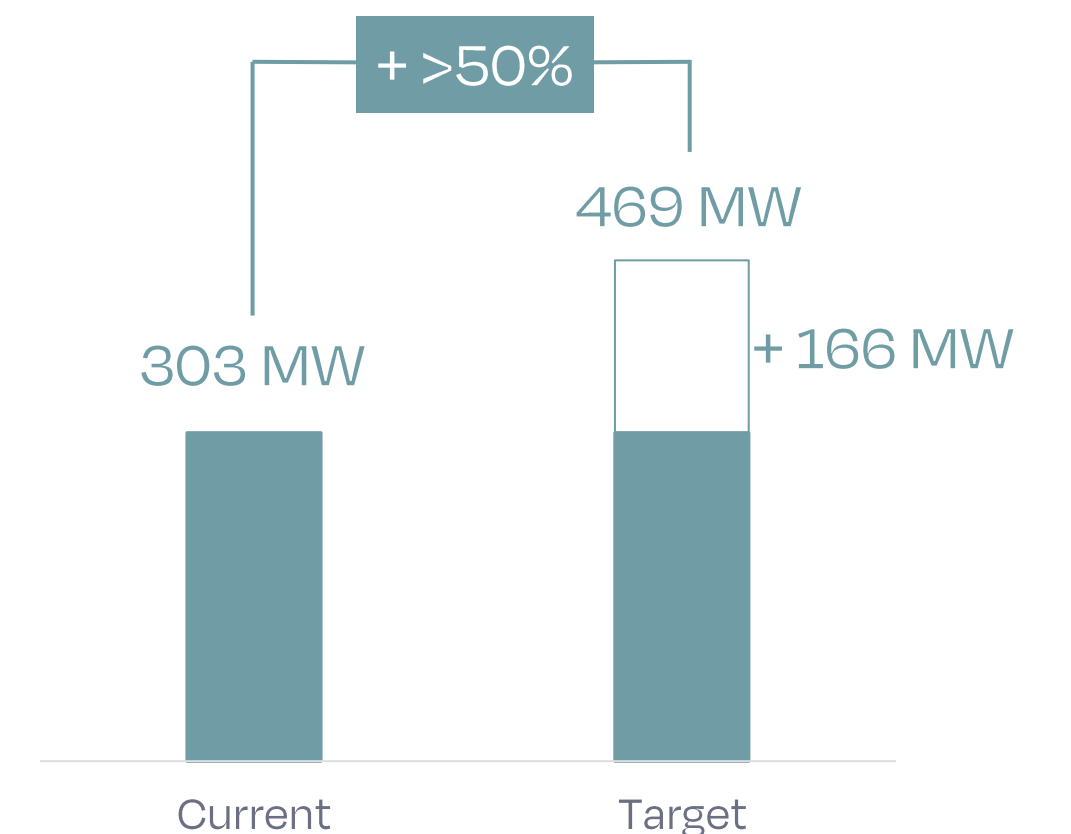
- Focuses on strategic initiatives
- Anchor shareholder in Germany's 2<sup>nd</sup> largest public IPP
- Cash proceeds and dividends to be invested straight away beyond renewables

- Increased and more diversified portfolio
- Backed by Tion as anchor shareholder
- Benefits from economies of scale

## Target equity stake



## clearvise's portfolio



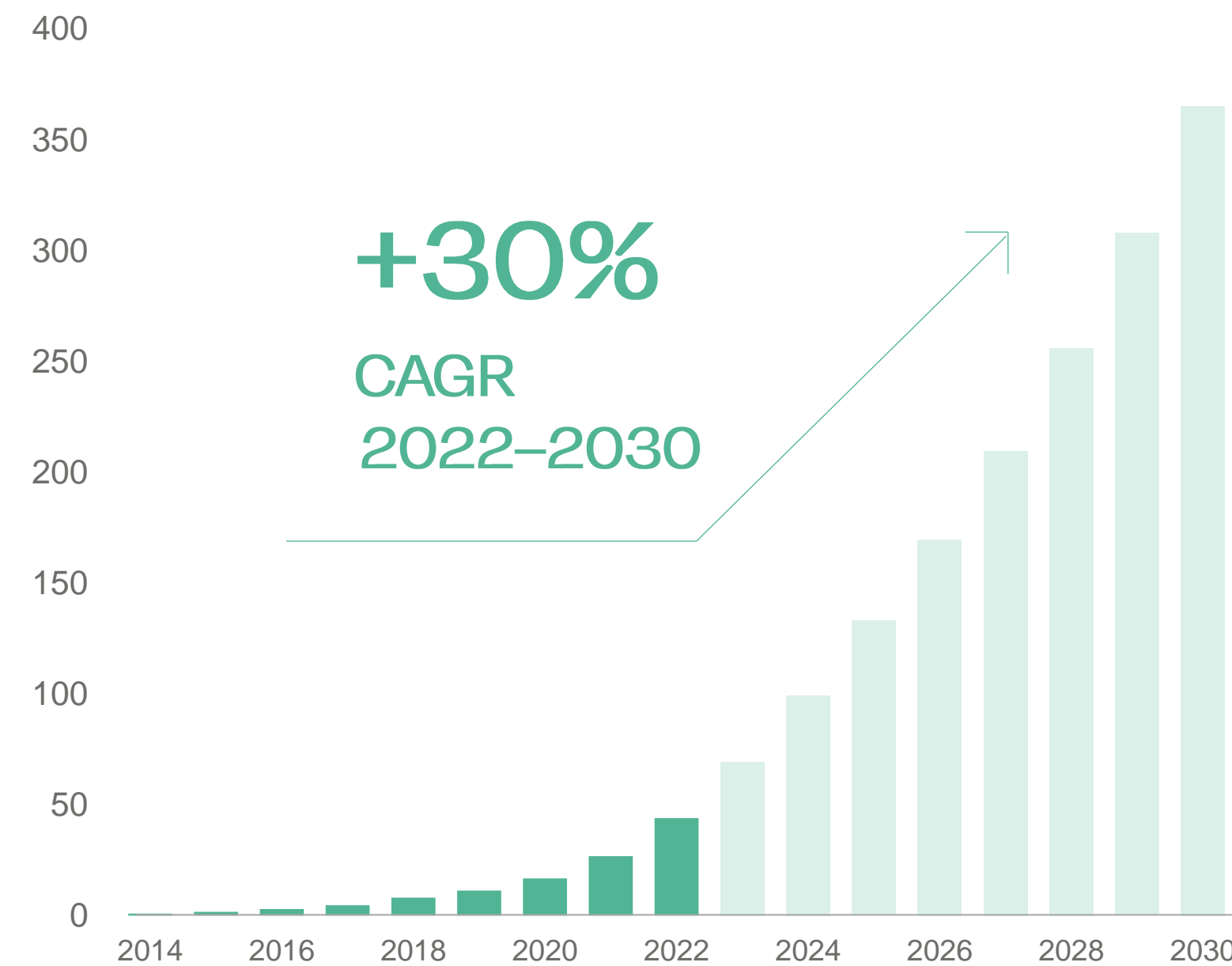


# Beyond renewables

We have identified battery storage as our next key growth area.

## Battery storage build-out is accelerating

Global battery storage capacity (GW)



## We have built priority access to a large battery storage pipeline

> 1.5 GW battery storage pipeline



**BOOM**  
POWER



**ACE**  
POWER



**PACIFIC**  
ENERGY PARTNERS



# Acquisition of our first battery storage project

Bacup, UK  
8.0 MW/9.3 MWh





# Battery Energy Storage Systems (BESSs)



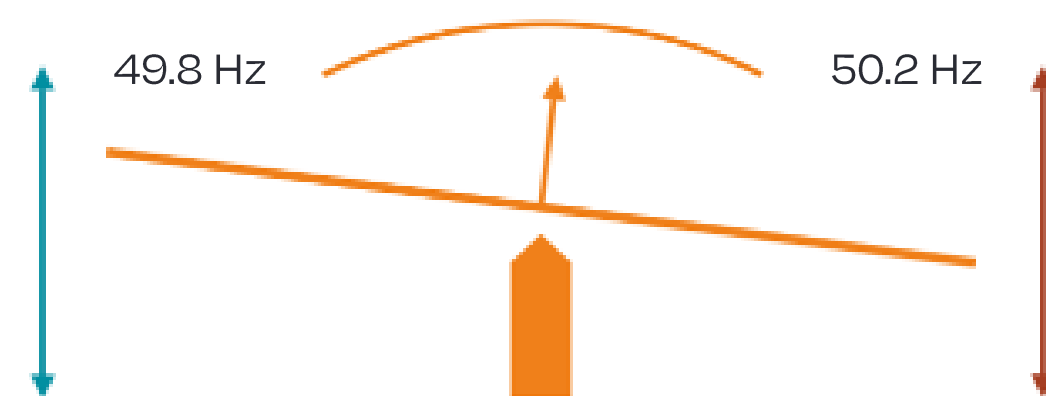
# System imbalances by renewables

Rising renewables cause three types of imbalances in the energy system which need to be compensated

1

## Short-term imbalances

Generation and demand of electricity in the grid must always match, down to milliseconds, even if weather conditions change

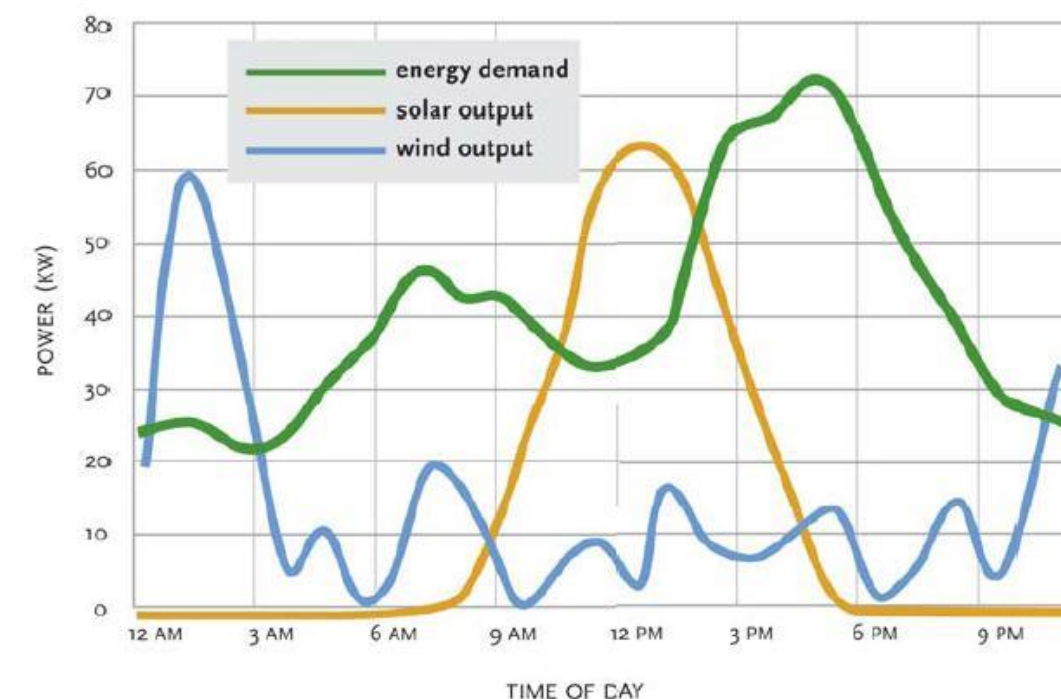


Mitigatable by BESS

2

## Intra-day imbalances

Generation from renewables (e.g., peak at noon) rarely matches the daily demand pattern for electricity (e.g., peak at evening)

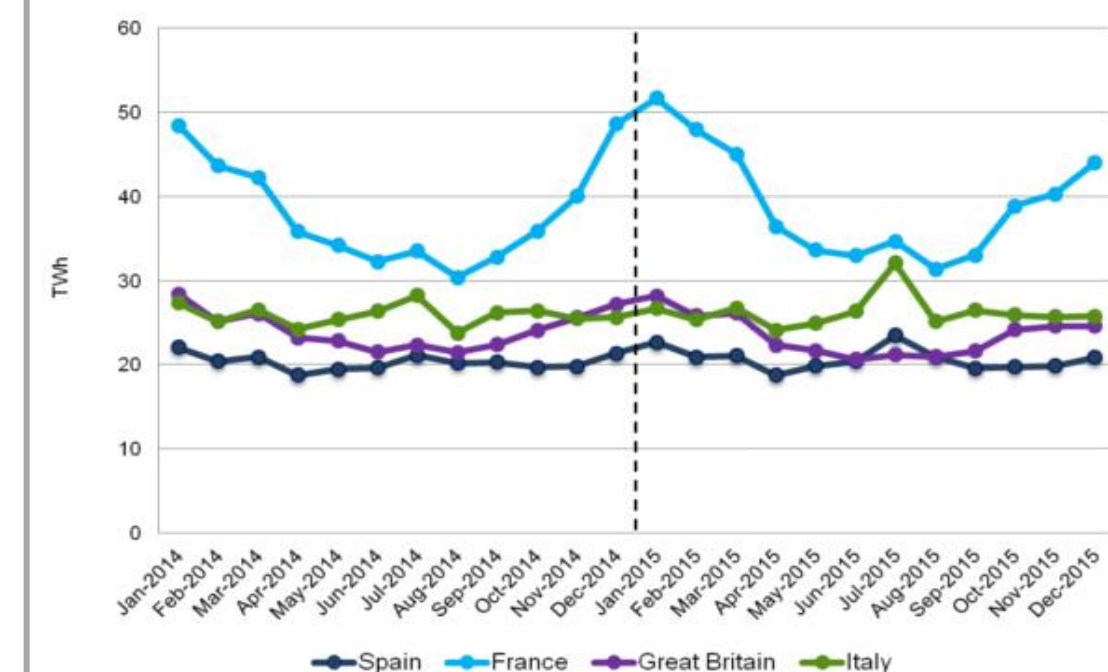


Mitigatable by BESS

3

## Seasonal imbalances

Distribution of renewable power generation over the course of the year does not match seasonal consumption patterns

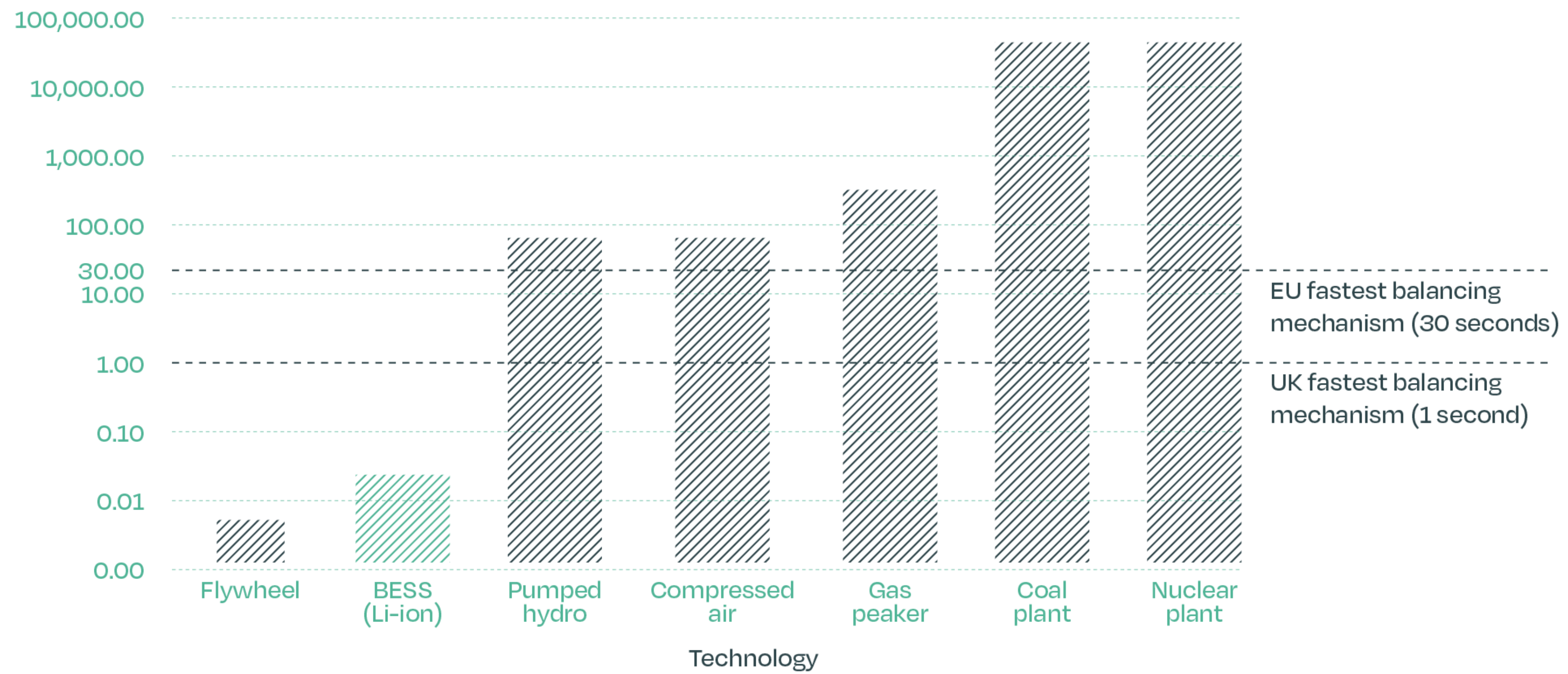


Not mitigatable by BESS



# Ancillary services...

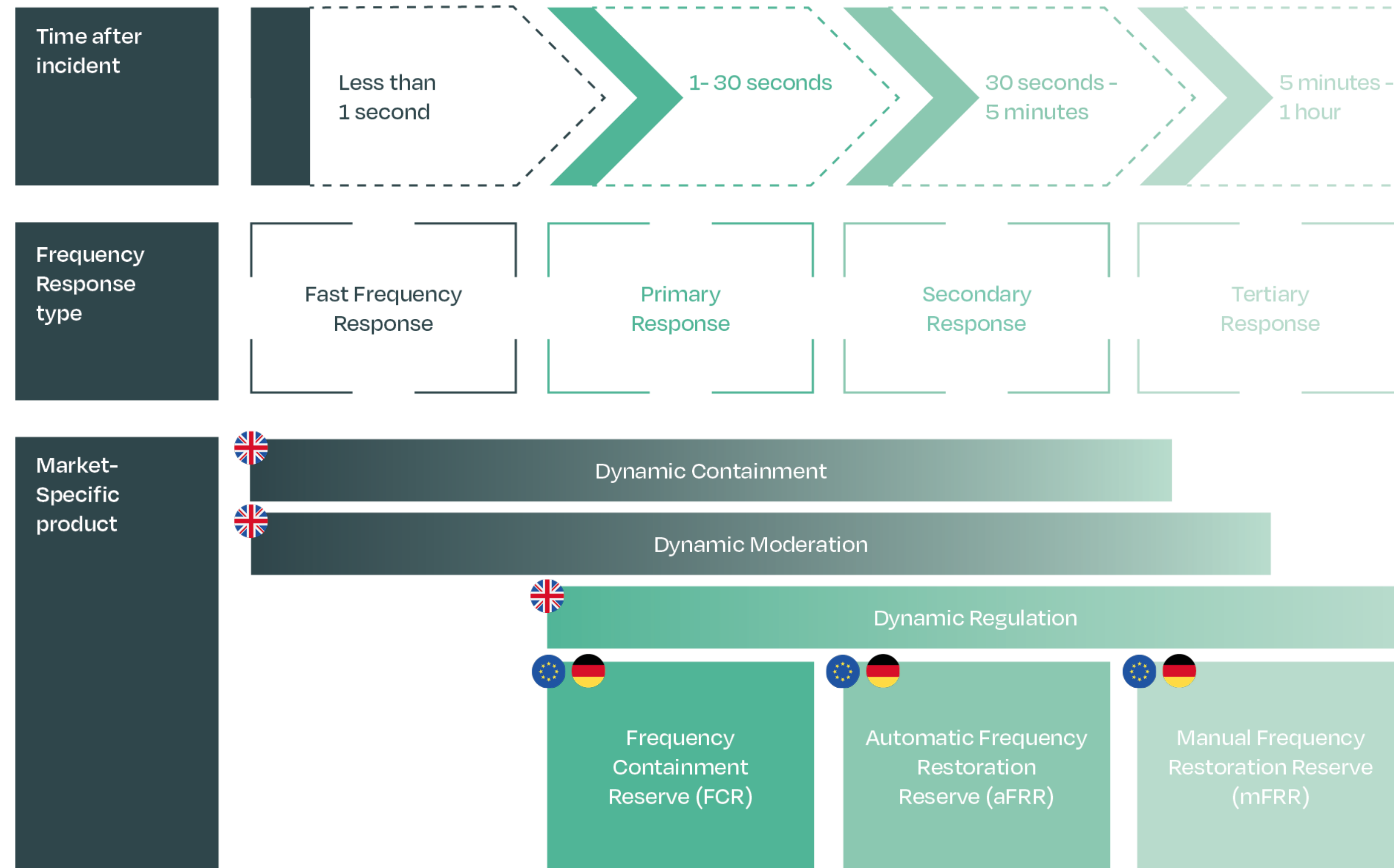
Activation times, in seconds





# ...stabilize the grid

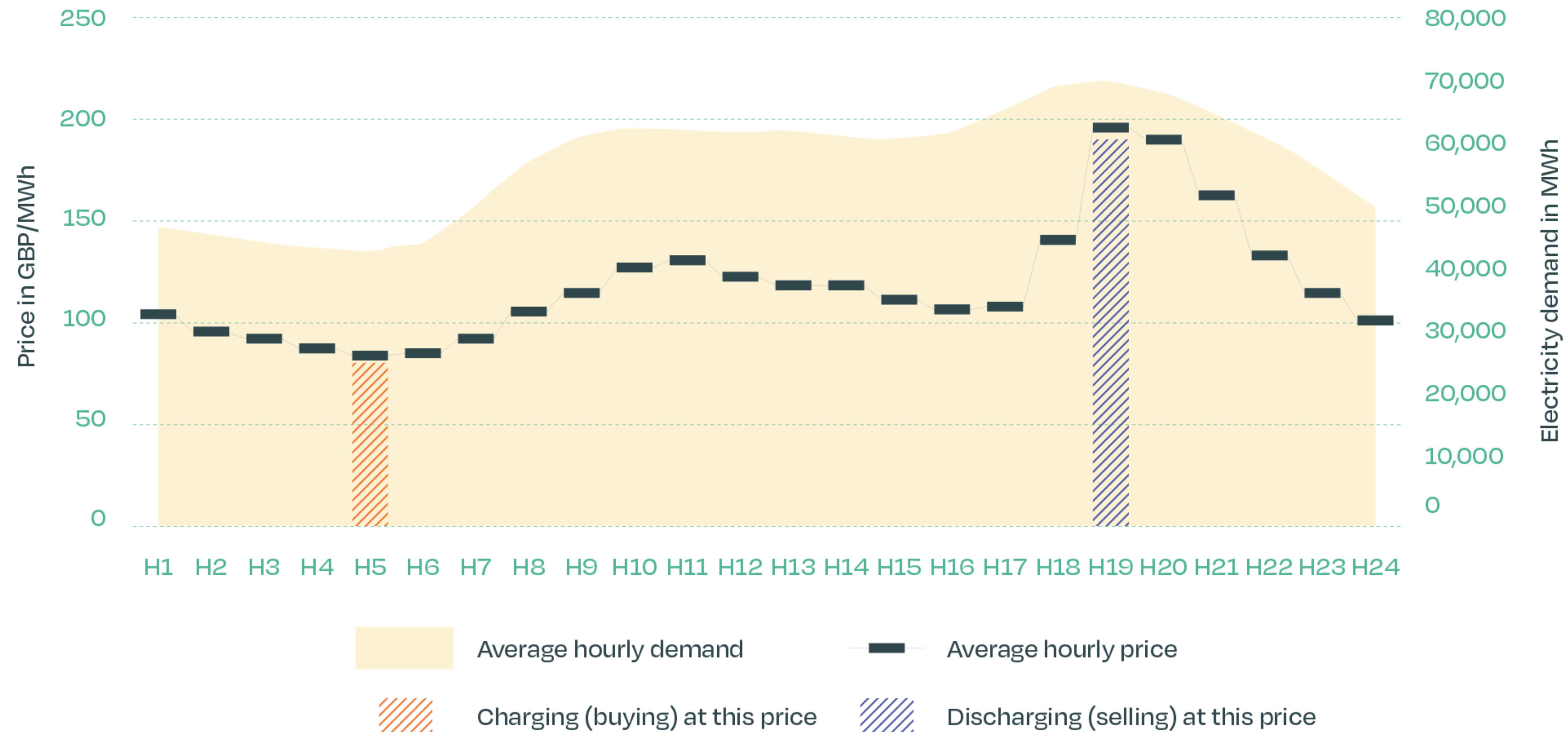
## Frequency response service types





# Wholesale trading: Benefits from price volatility<sup>1</sup>

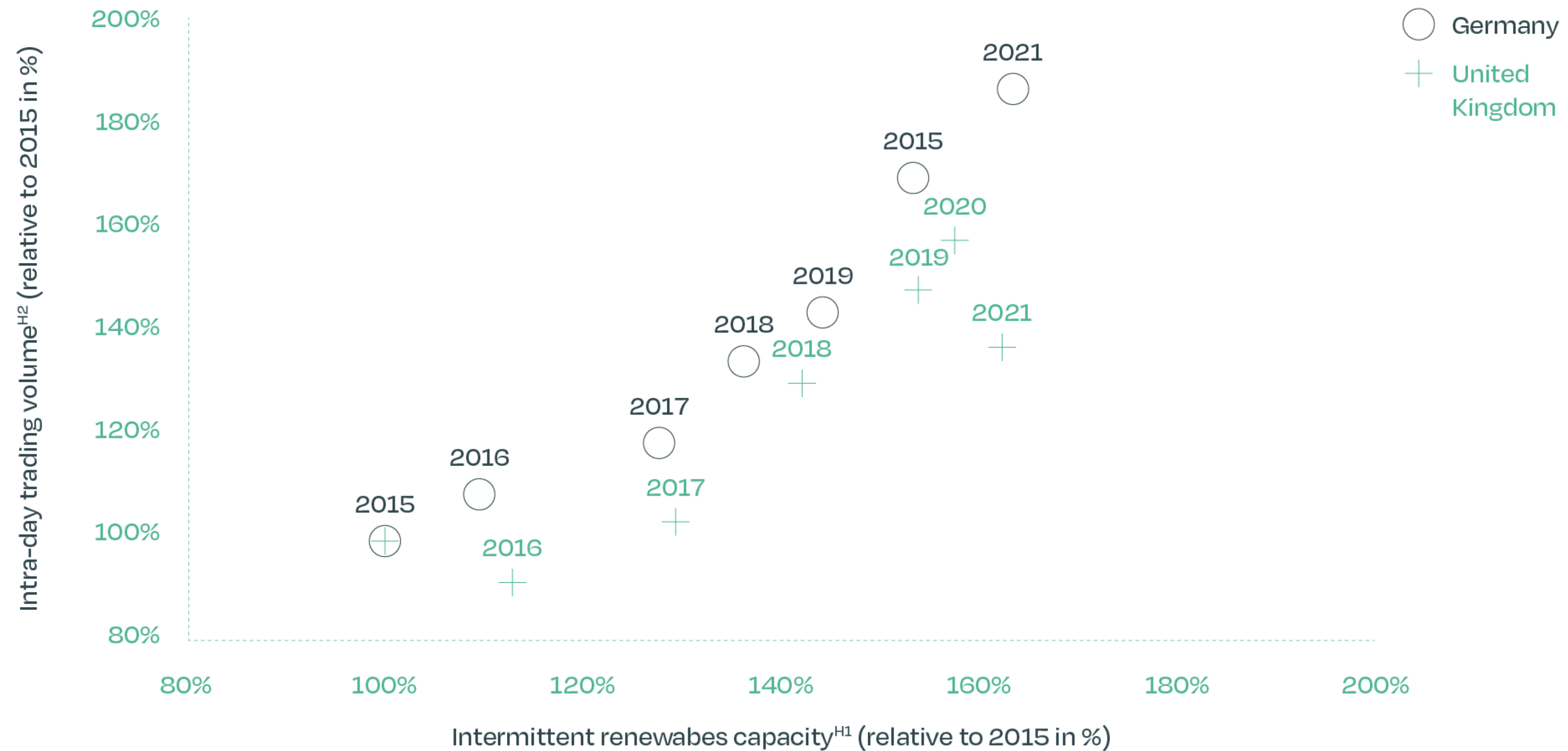
Visualization of an electricity trading opportunity on a representative day in the UK





# Wholesale trading: Benefits from price volatility<sup>2</sup>

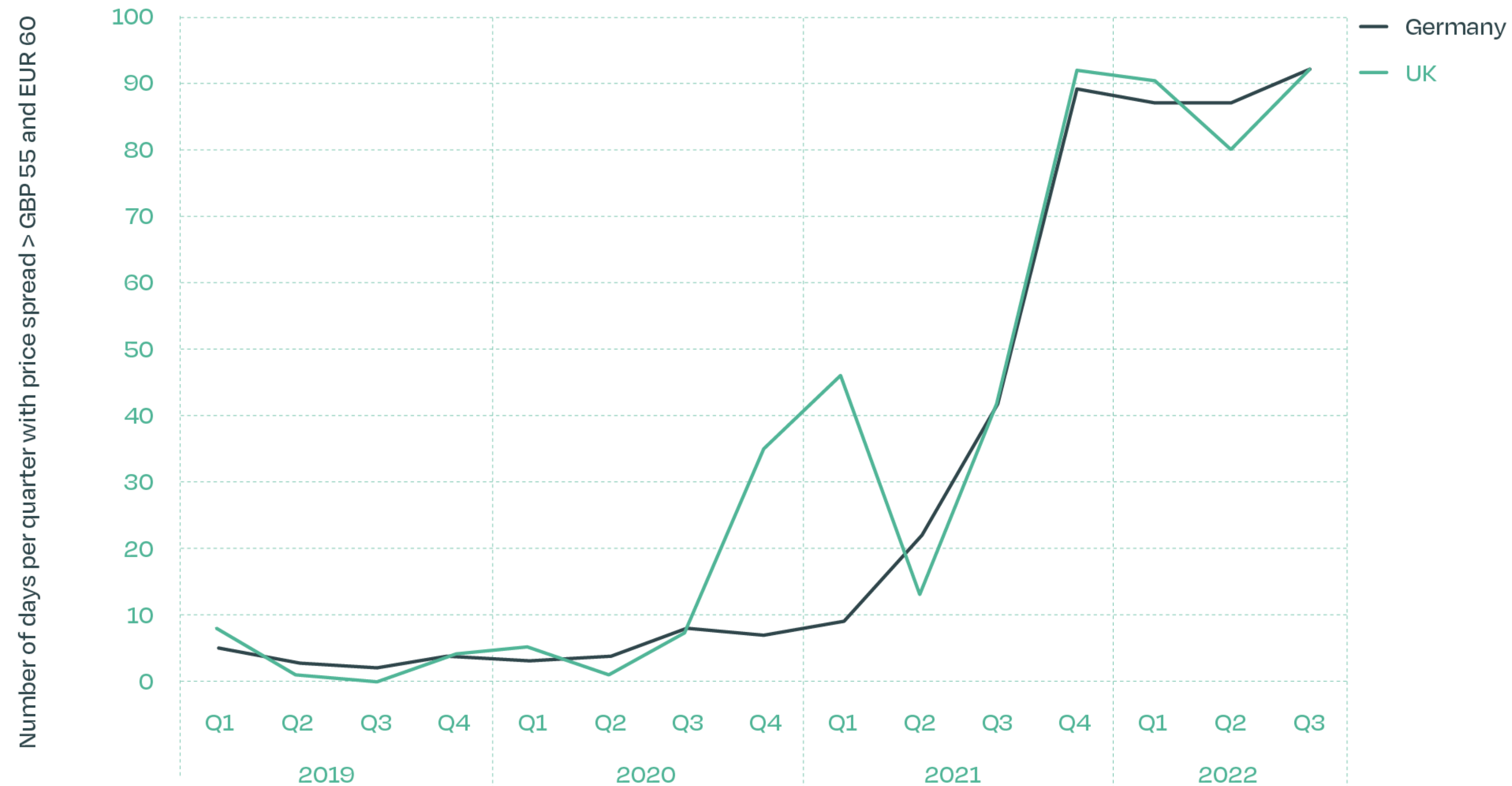
Intra-day trading volume vs. renewables capacity in the UK and Germany





# Wholesale trading: Benefits from price volatility<sup>3</sup>

Trading opportunities for BESS in the UK and German day-ahead market 2019–2022





# The risk/return profile in perspective

	BESS	Wind/Solar
<b>Equity IRR</b>	8–10% <sup>x</sup>	4–8% <sup>x</sup>
<b>Debt ratio</b>	0–30% <sup>x</sup>	60–90% <sup>x</sup>
<b>Main revenue streams</b>	Wholesale markets, ancillary services, capacity markets	Power purchase agreements, subsidies, wholesale markets
<b>Operational life</b>	7,500 cycles (~21 years assuming one cycle per day) <sup>x</sup>	25–30 years <sup>x</sup>
<b>Build-out of renewables</b>	More volatile power markets → Higher revenue potential	More hours with low or negative prices → Lower capture price (price cannibalization)
<b>Other key risks</b>	Changes to market design, nascent technology	Meteorological conditions, grid curtailment



# Outlook<sup>1</sup>

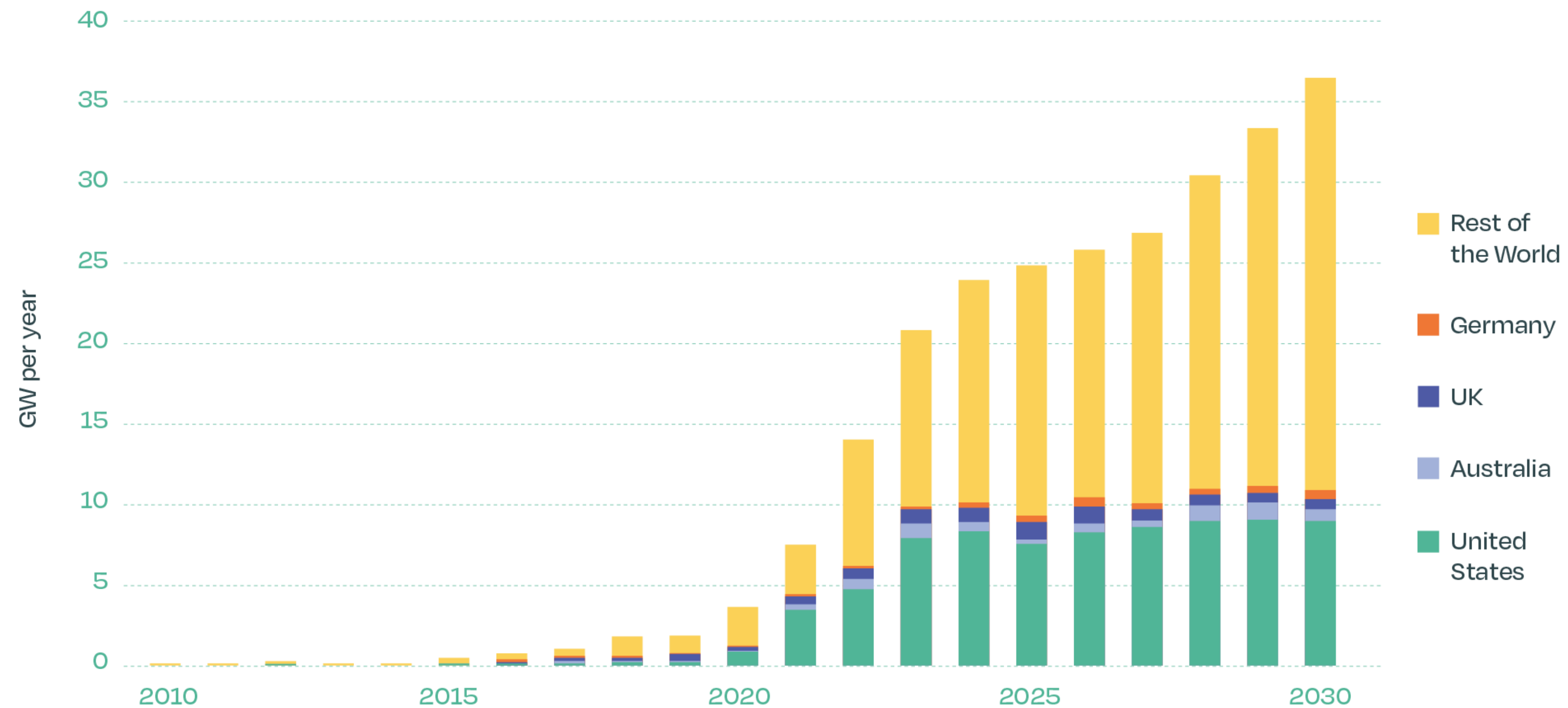
National battery storage targets, by country (Europe)

	Coal phase-out	Renewable electricity target	Current battery storage capacity (2022)	National battery storage target	CAGR
Germany	2030	100% by 2035	~0.9GW	21–26GW by 2037	23–25%
UK	2024	100% by 2035	~2.3GW	20GW by 2030	31%
France	2024	40% by 2030	~0.4GW	2.5GW by 2030	26%
Spain	2030	74% by 2030	~0.1GW	2.5GW by 2030	50%
Italy	2025	70% by 2030	~0.2GW	1.5GW by 2030	29%



# Outlook<sup>2</sup>

National battery storage targets, by country (Europe) Annual addition in energy storage capacity, by country  
(2010–2030e)





# Future in motion.

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