

# Clean Energy Auctions

European experience and challenges

Dario Traum

October 16, 2018

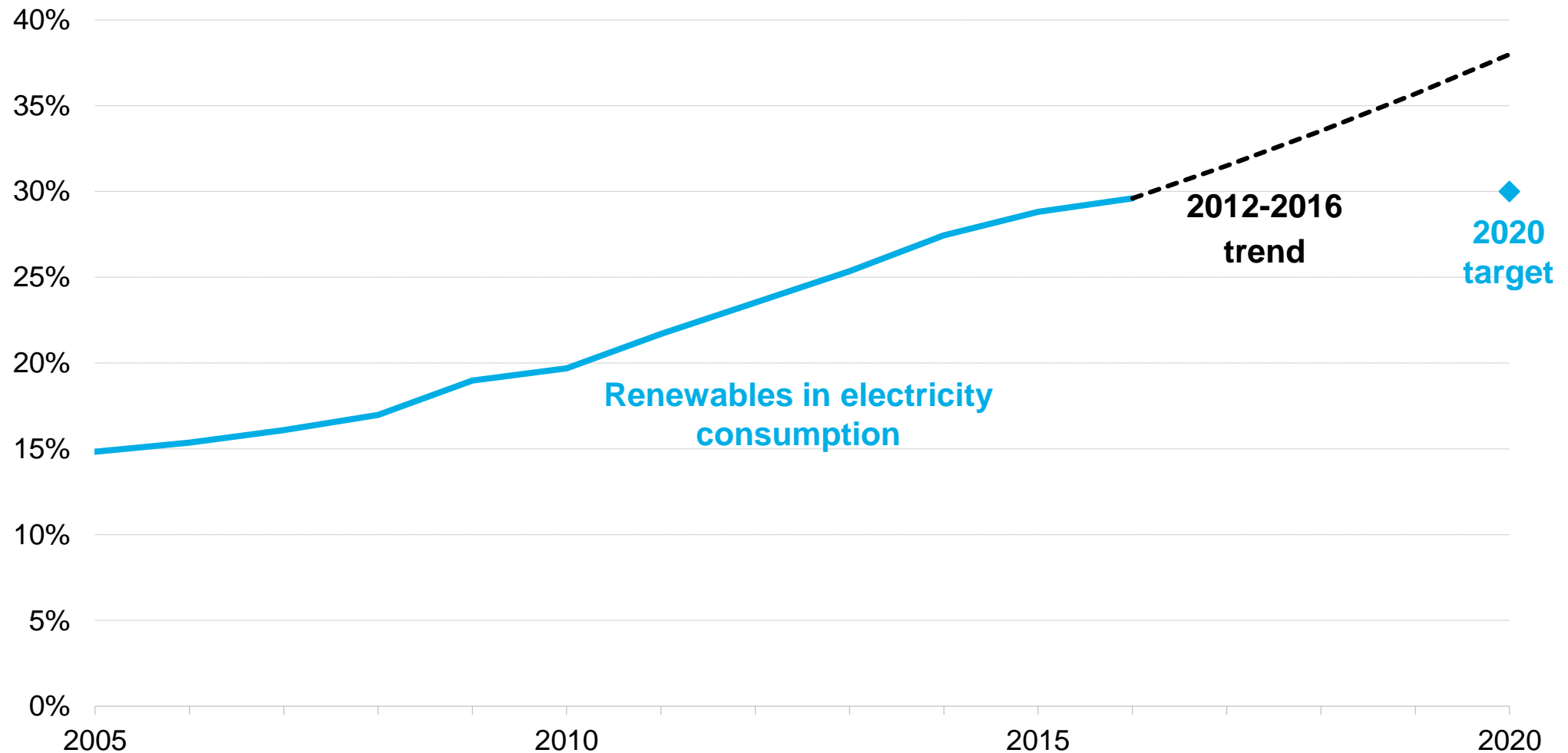


BloombergNEF

# EU 2020 RES target to be extended to 2030

The EU's 2020 objectives are met

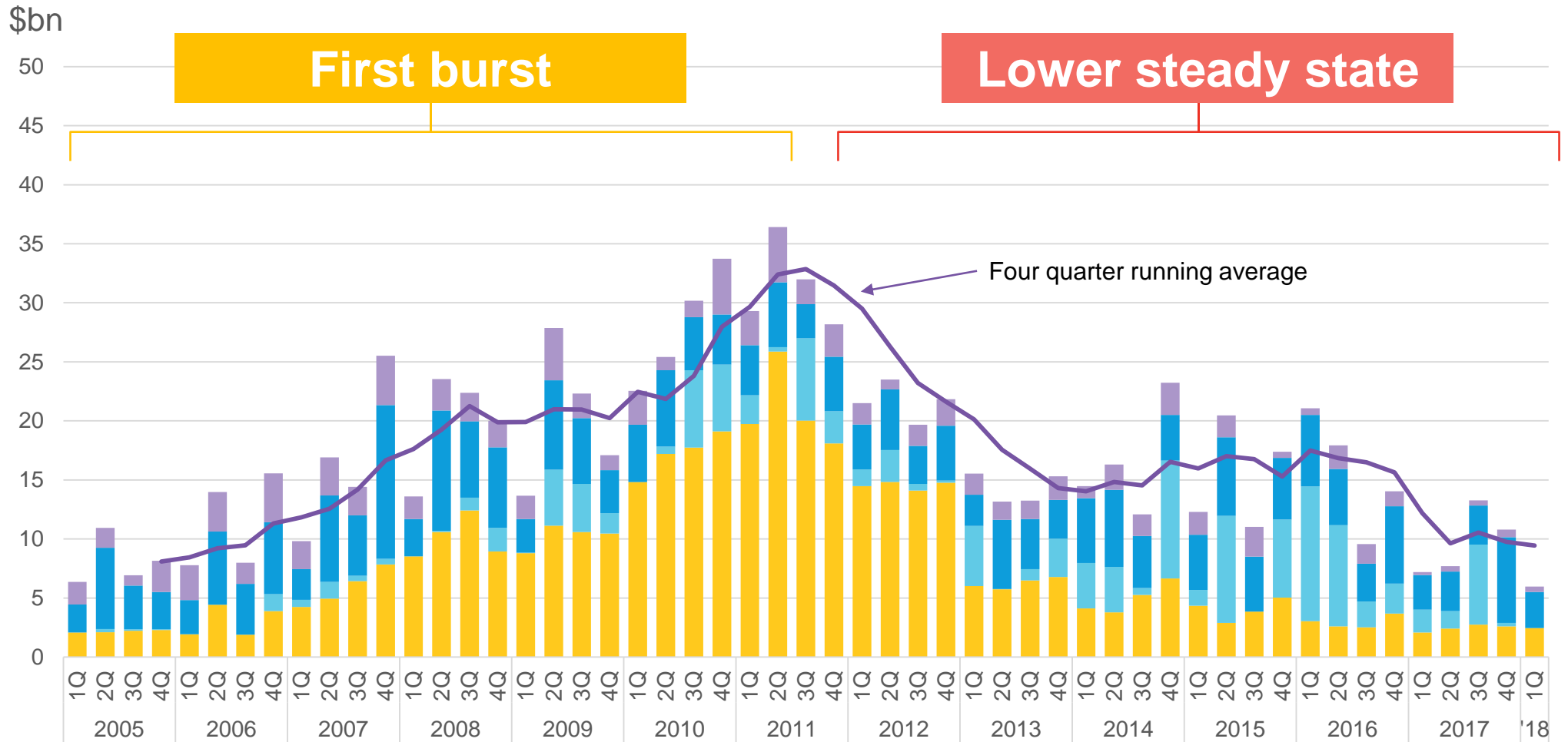
Share of renewables in electricity consumption



Source: Bloomberg New Energy Finance

# New EU renewables investment

1Q 2005 – 1Q 2018



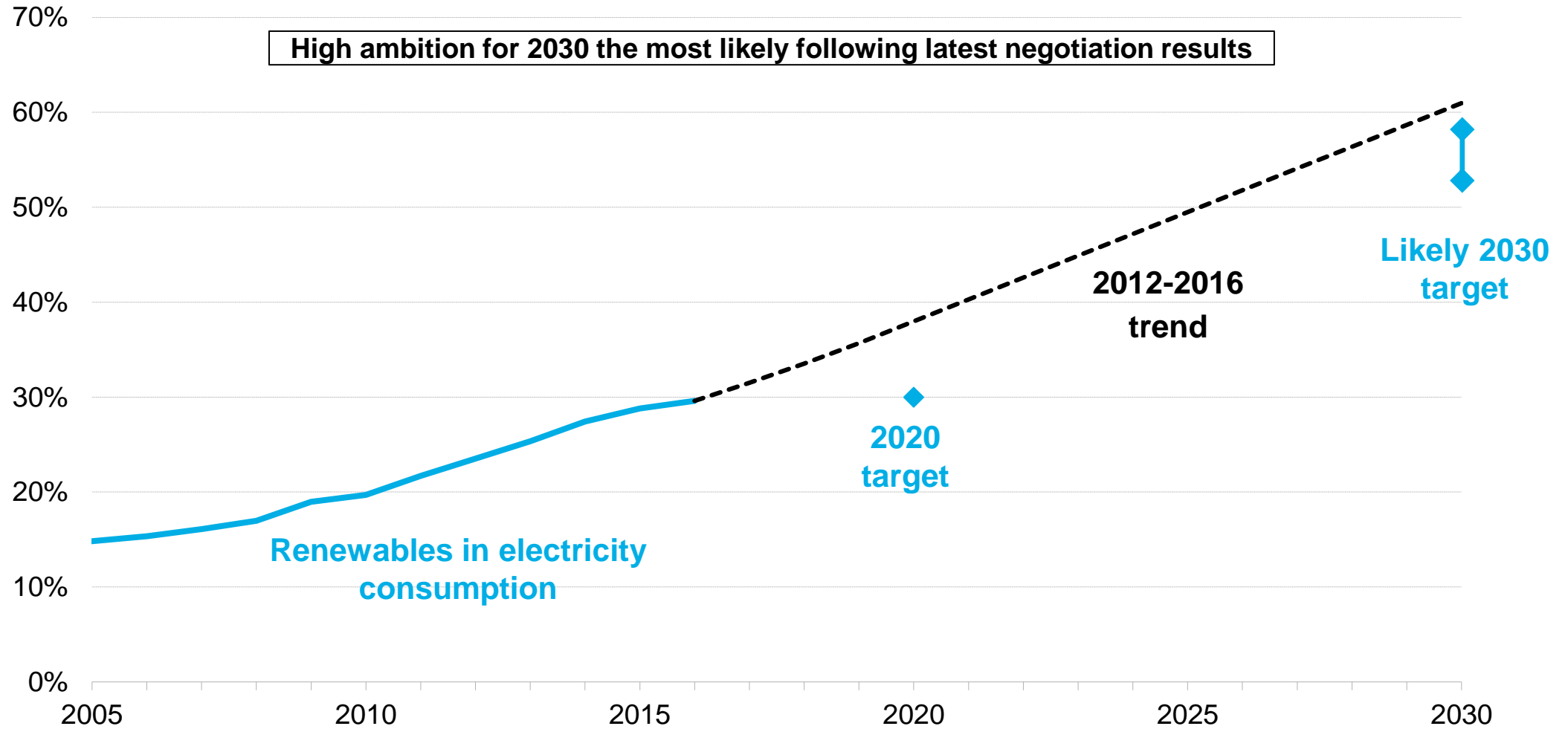
Version WF18.04  
All values nominal

■ Solar ■ Offshore ■ Onshore ■ Other

Source:  
Bloomberg New Energy Finance

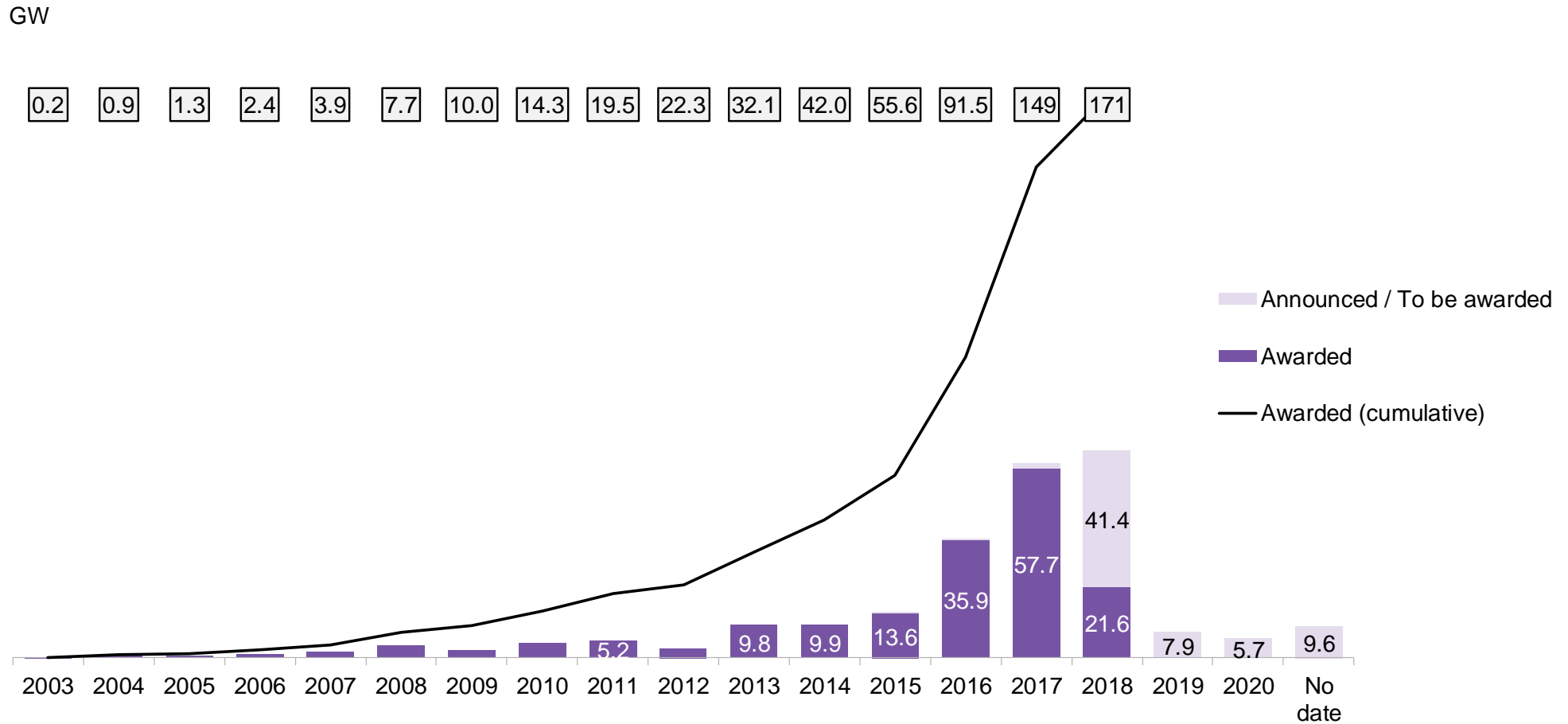
# EU 2030 RES target

Share of renewables in electricity consumption



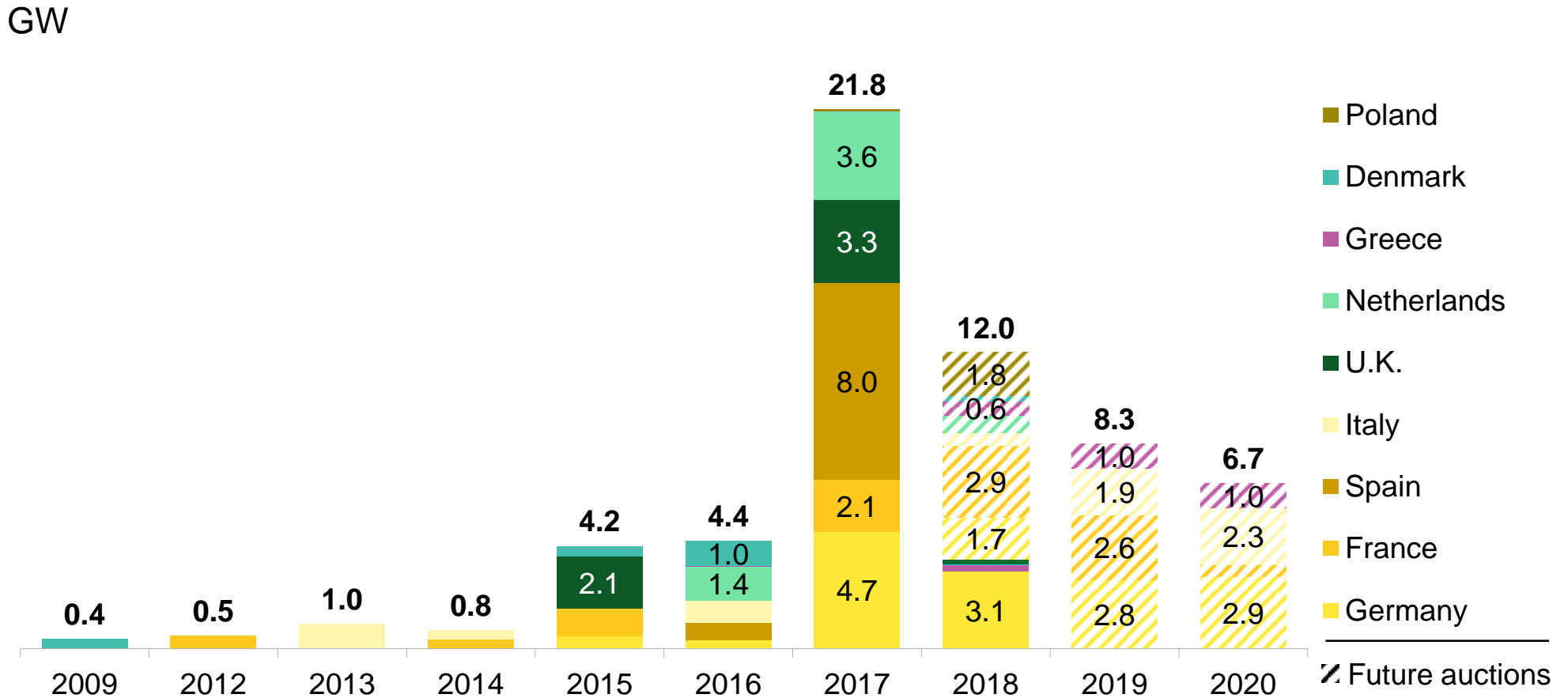
Source: Eurostat, Bloomberg NEF

# Global auctioned and announced renewables capacity



Source: Bloomberg NEF. Note: Plant level data used for Latin American auctions where support is awarded for generation, excludes renewables subsidy auctions in the Netherlands.

# EU renewables auctions volumes growing rapidly



Source: Bloomberg NEF. Note: auction results and announcements as of 11 July 2018.

# EDF commits to deliver 30GW by 2035

“

It is time (for EDF) to participate in a major change of scale. Solar is where the potential is the largest.

Jean Berarnd Lévy  
EDF CEO  
One Planet Summit, 2018



# TOTAL purchases Direct Energie

“

Through this transaction,  
Total is actively pursuing  
its development in  
electricity and gas  
generation and  
distribution in France  
and Belgium...”

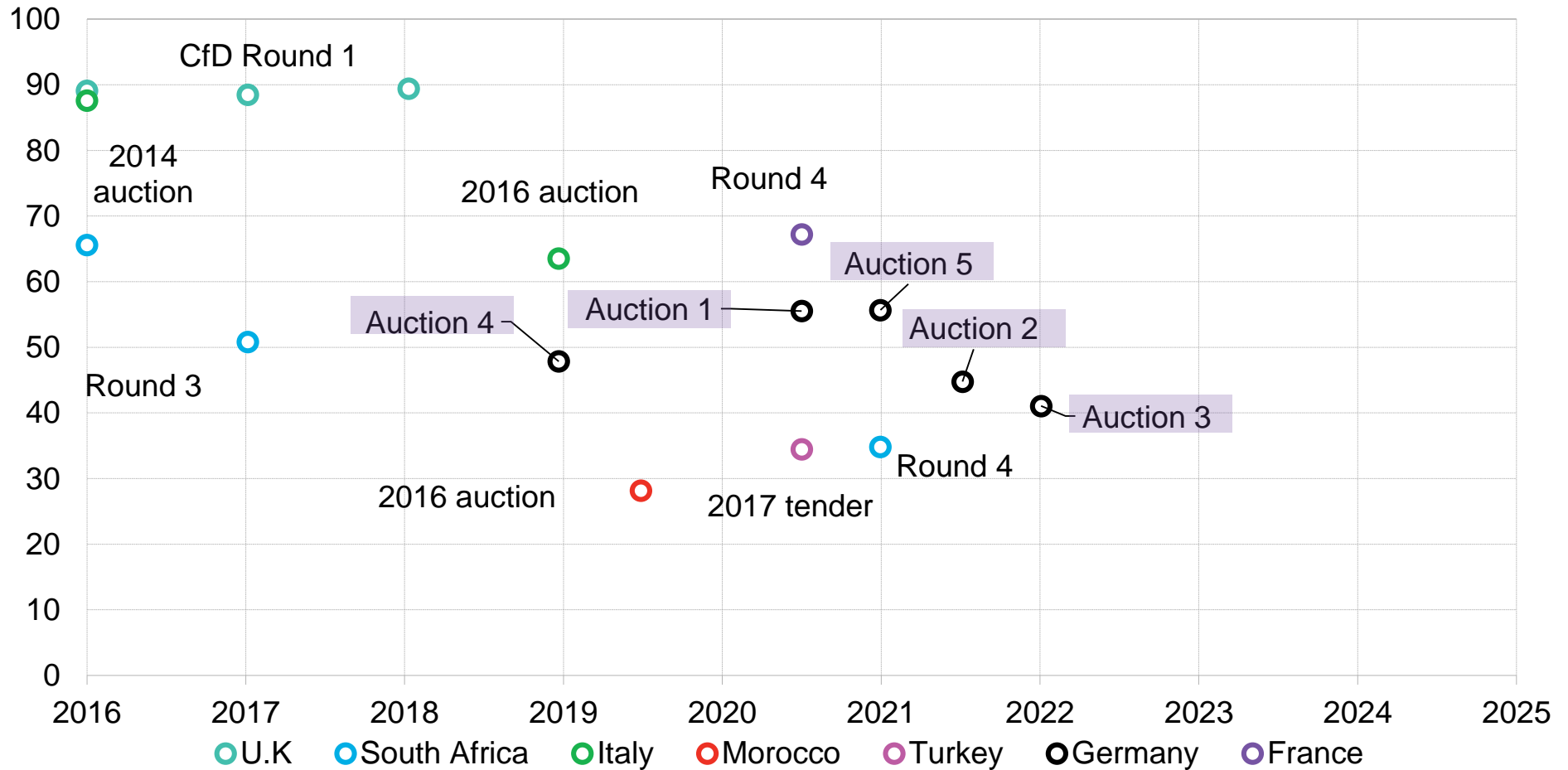
Patrick Pouyanné  
TOTAL CEO  
Press release, 2018





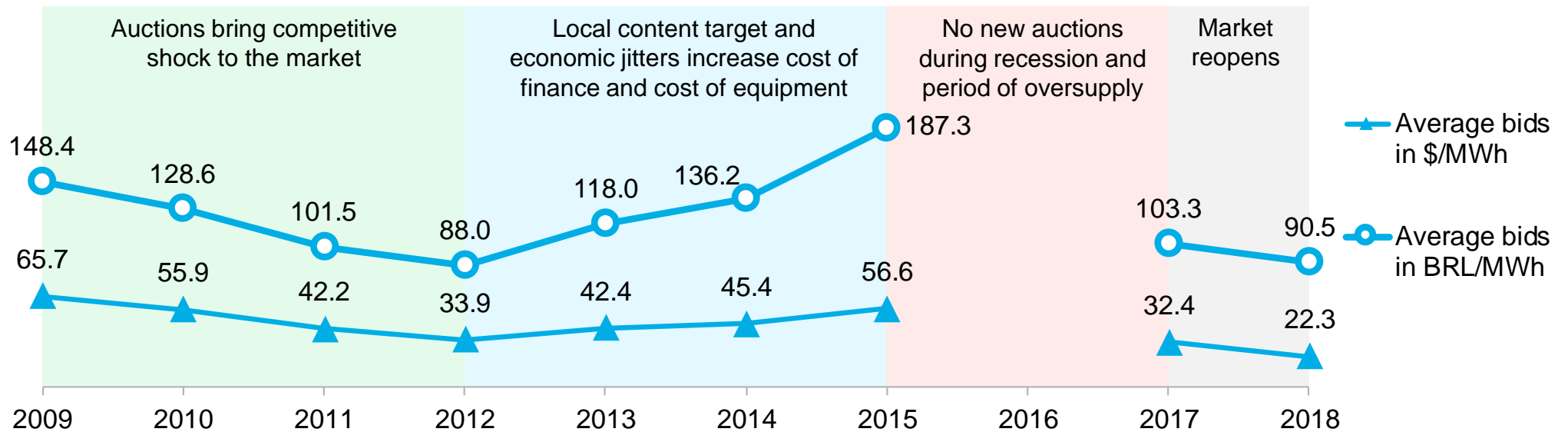
# Onshore wind turbulences

\$2017/MWh



Source: Bloomberg NEF

# Brazil onshore wind auction results (nominal exchange rate)



Source: Bloomberg NEF. Note: exchange rate at time of auction result announcement.

# Zero-subsidy renewable projects in Europe

Offshore wind

**~2.8GW**

By 2025

Onshore wind

**~9.2GW**

Installed and pipeline capacity

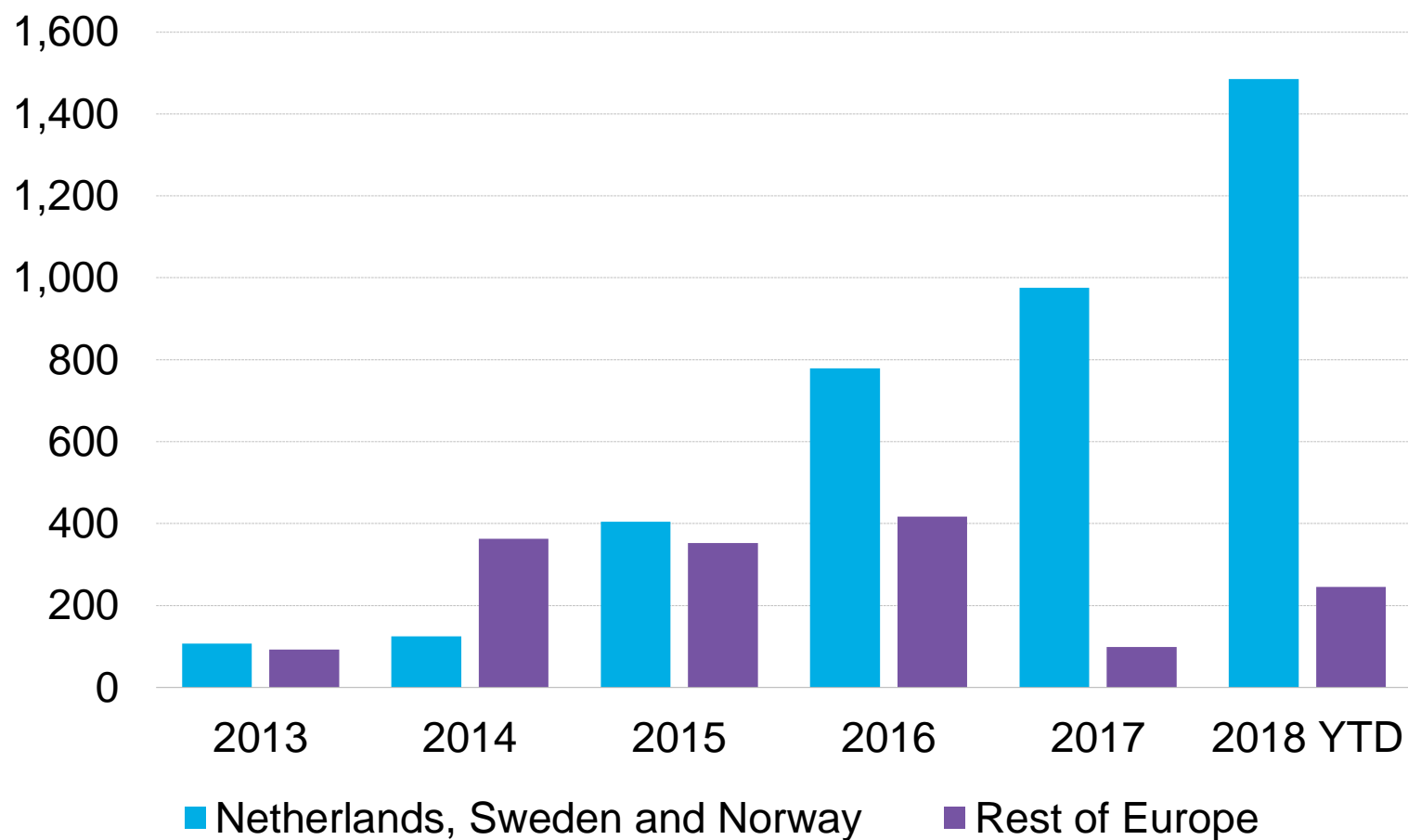
Solar PV

**~700MW**

Installed or under construction

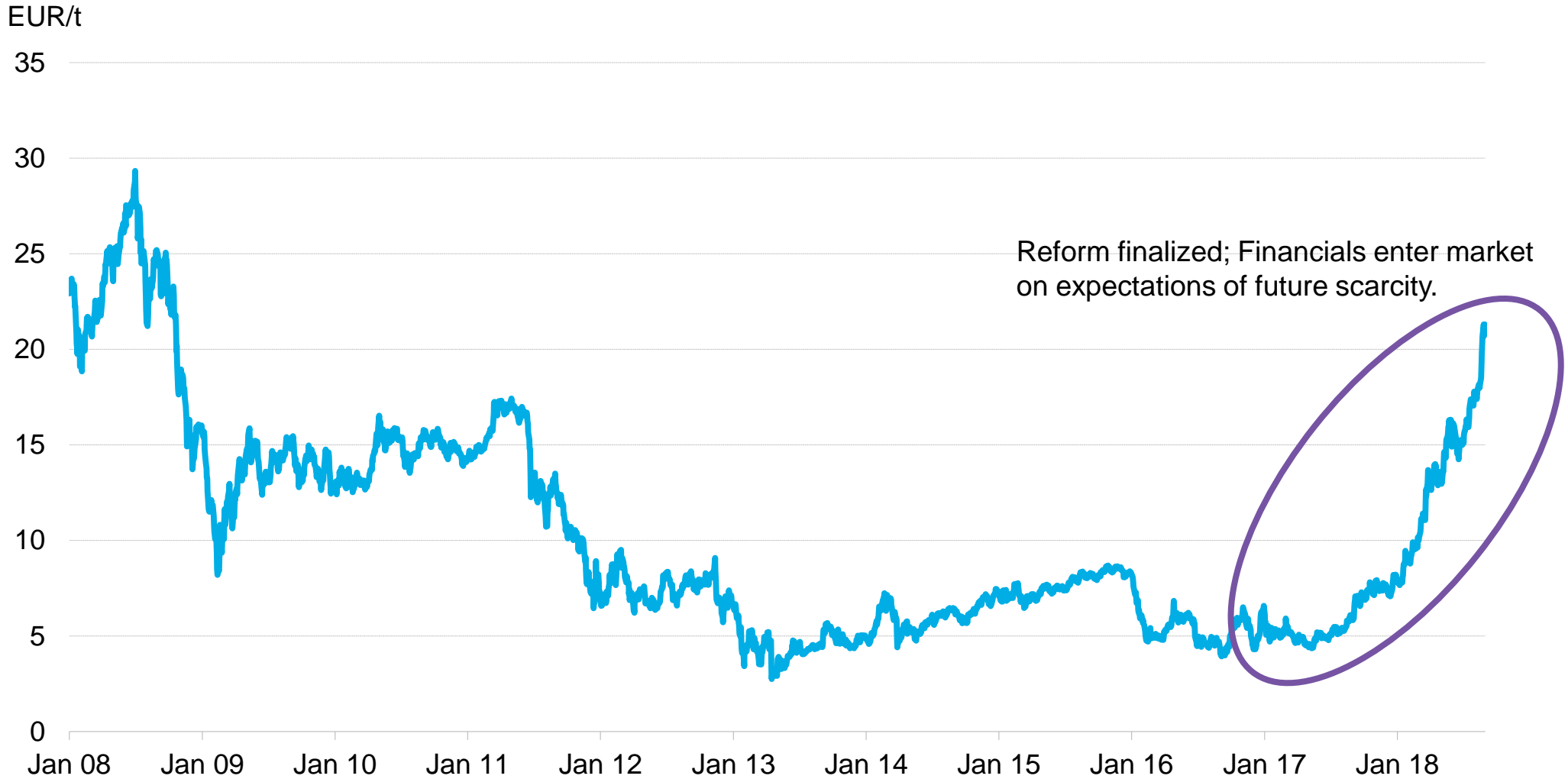
*Source: Bloomberg NEF. Note: right-hand figure is subsidy-free PV built or under construction in EU as of 1Q 2018.*

# Corporate PPA capacity (MW) signed in Europe as of 1H 2018



Source: Bloomberg NEF

# EU carbon prices have more than quadrupled since May 2017



Source: ICE, Bloomberg NEF

# 0-subsidy renewables

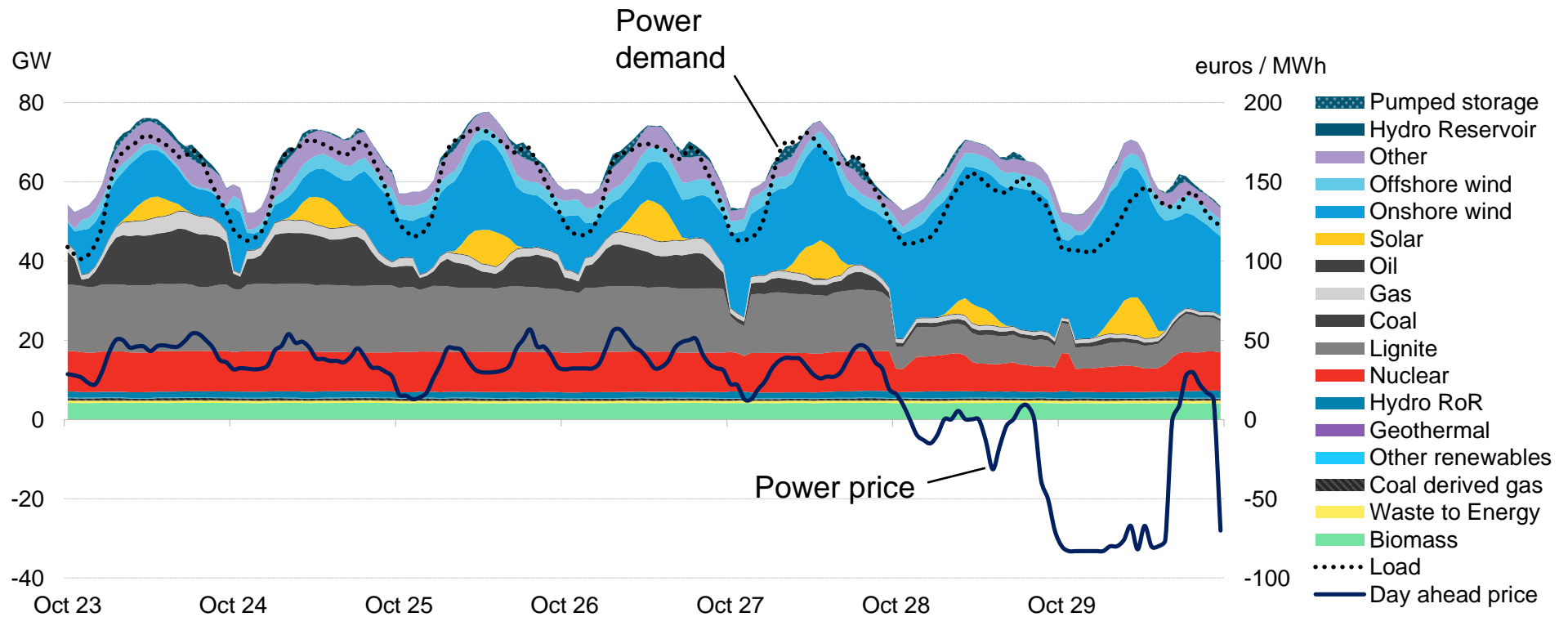
“

I don't get the impression that there are lots of people out there gearing themselves up to invest a lot of money in those sorts of assets.

Mark Muldowney,  
BNP Paribas MD Energy & Infra  
Financial Times, 2017



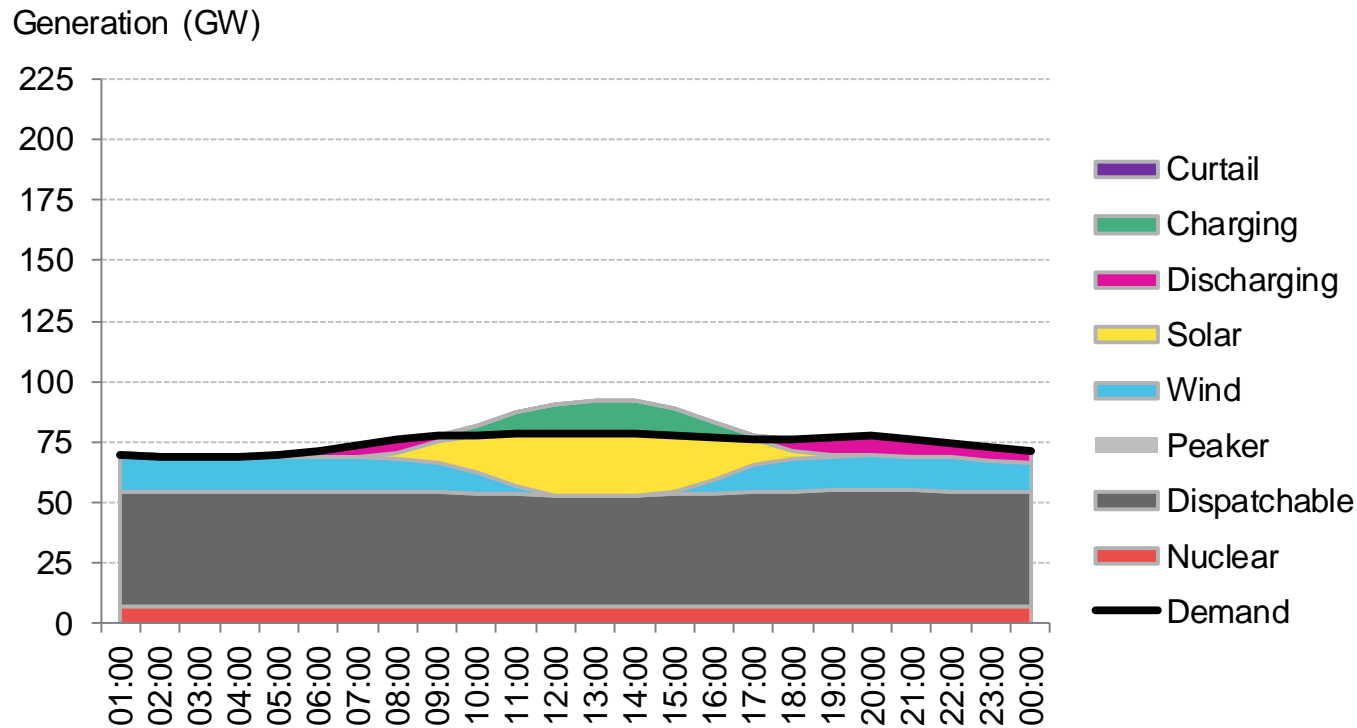
# Germany's negative pricing weekend, October 2017



Source: Bloomberg New Energy Finance.

# Germany intraday generation: typical spring day

2020

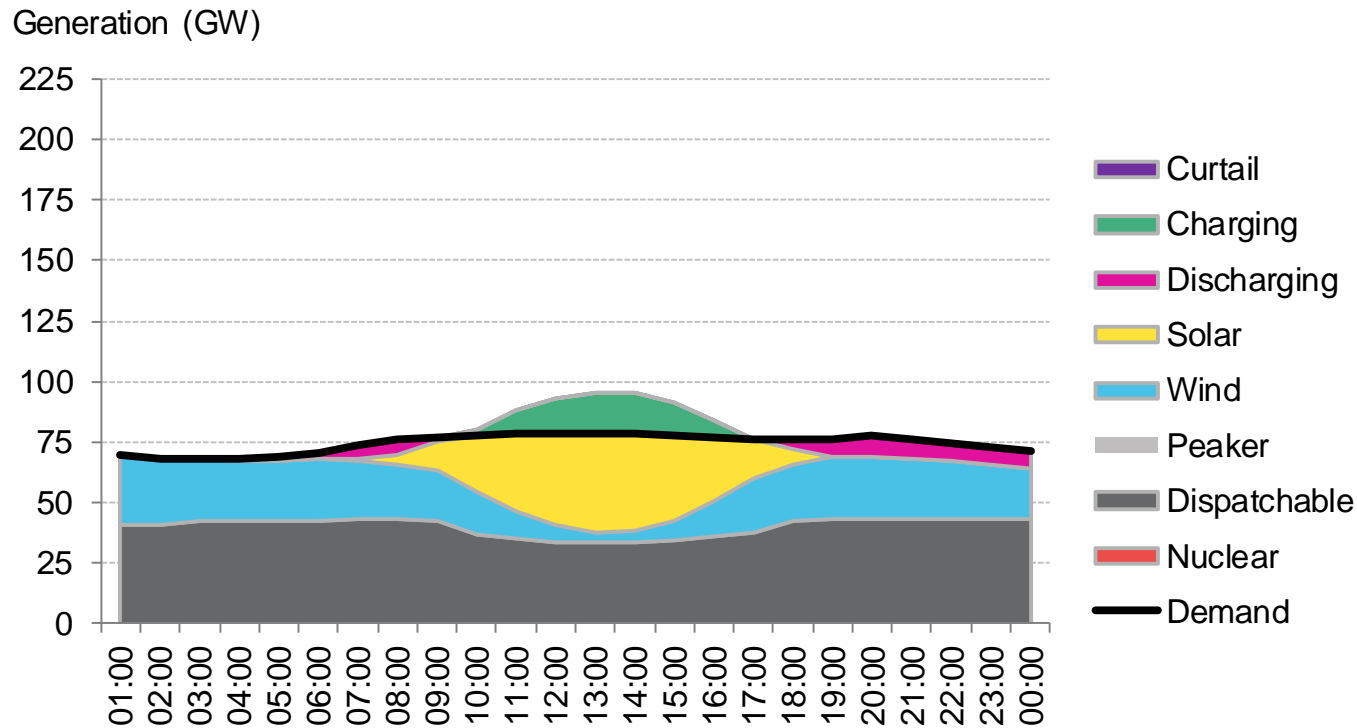


Source: Bloomberg NEF



# Germany intraday generation: typical spring day

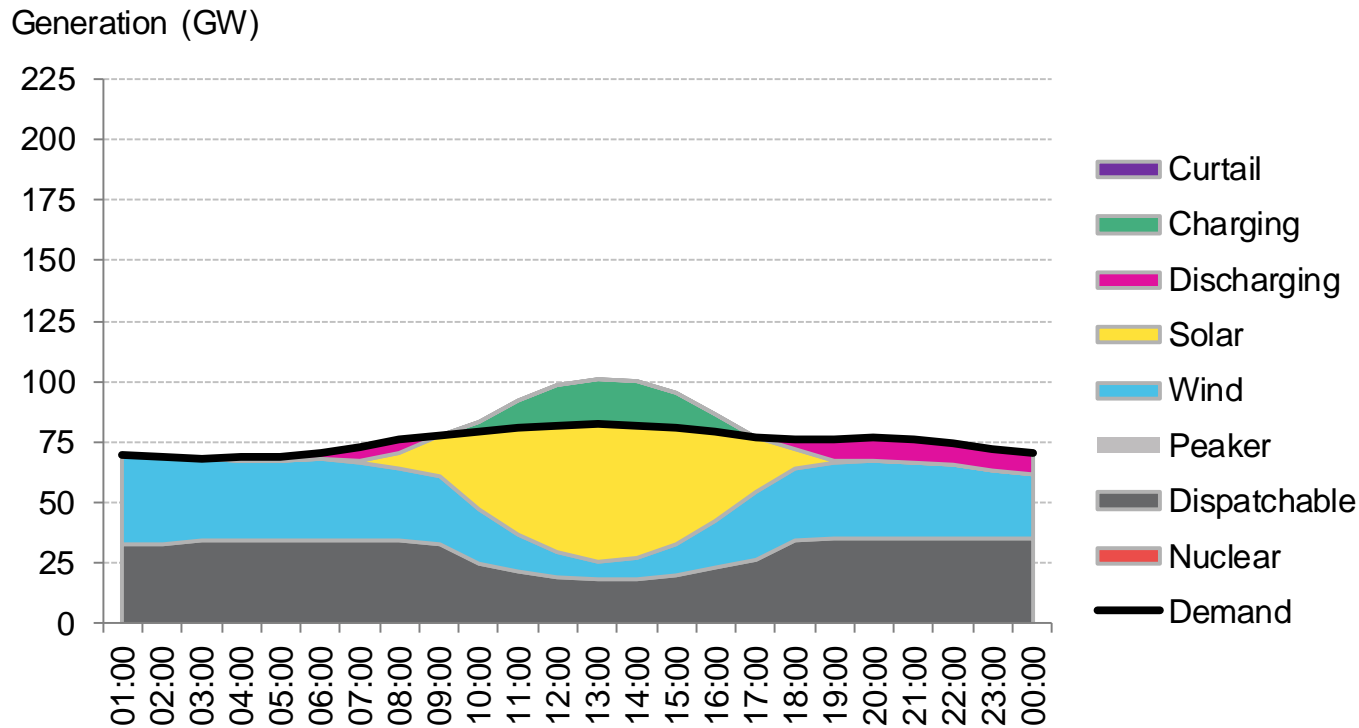
2025



Source: Bloomberg NEF

# Germany intraday generation: typical spring day

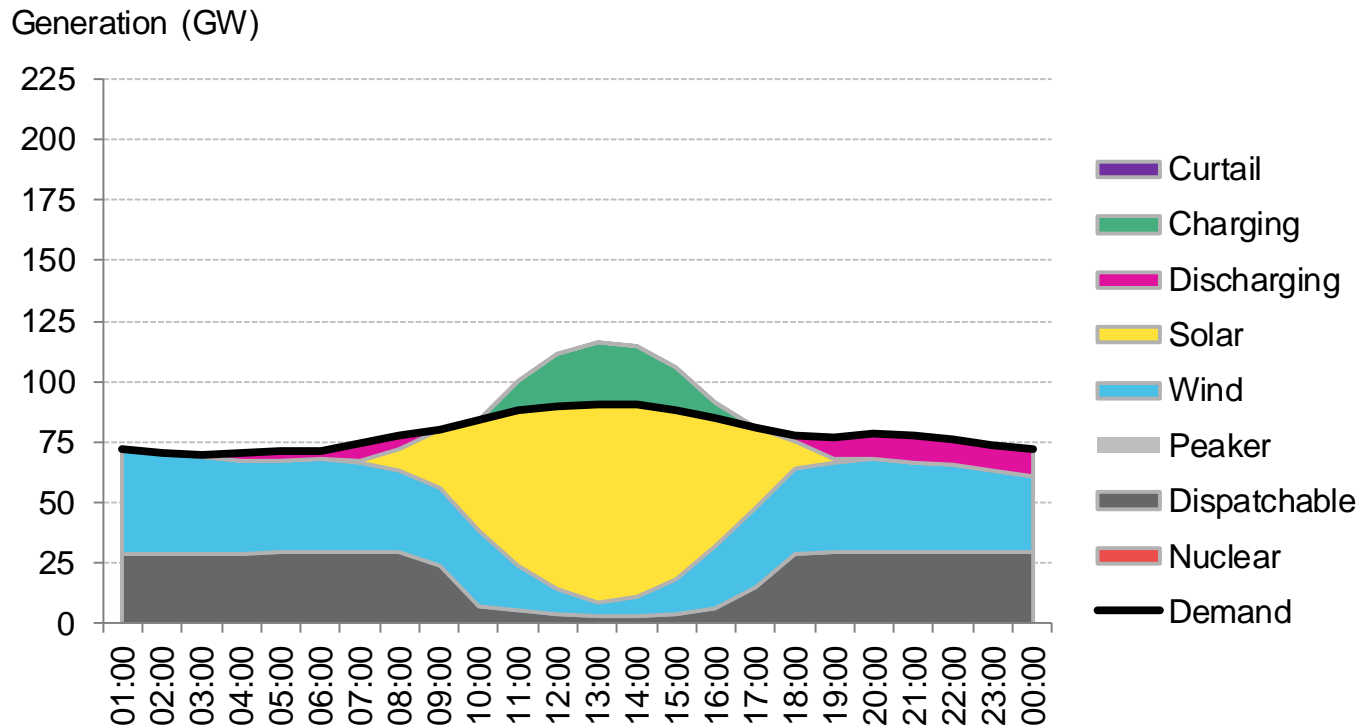
2030



Source: Bloomberg NEF

# Germany intraday generation: typical spring day

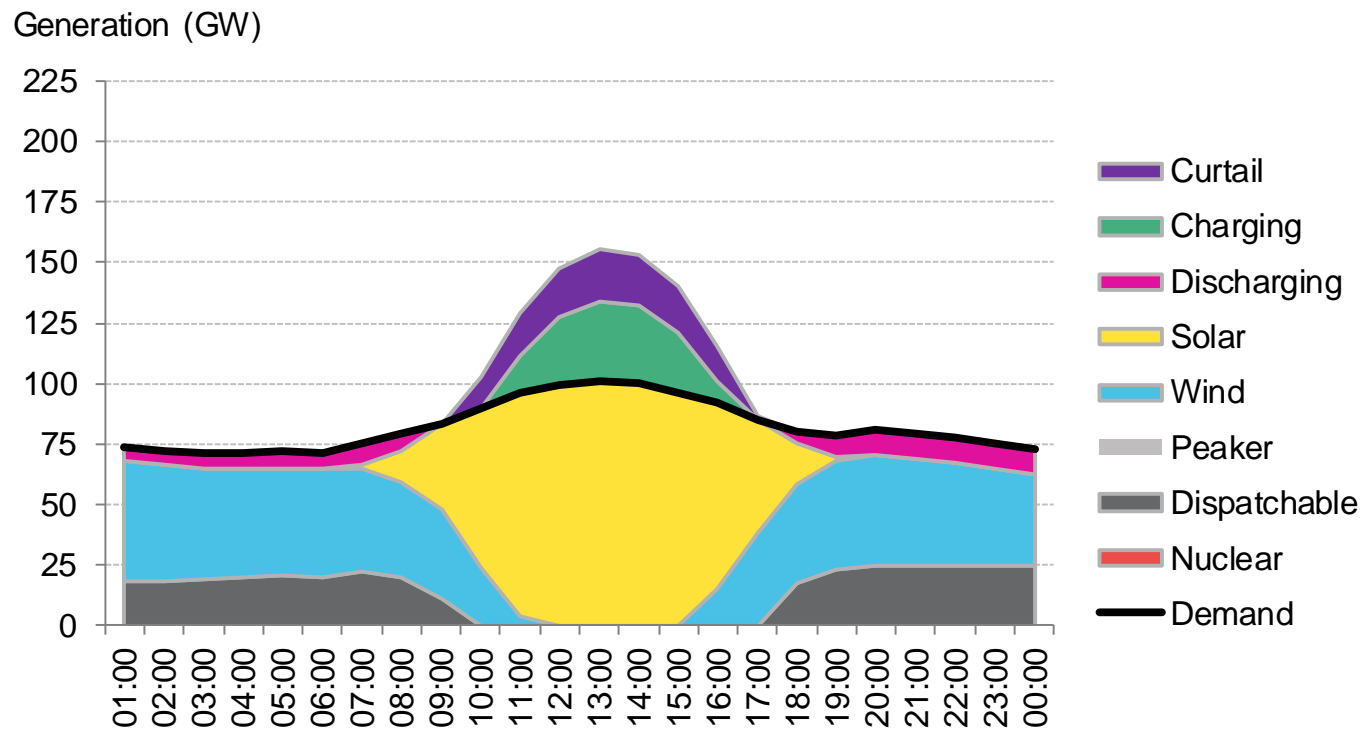
2035



Source: Bloomberg NEF

# Germany intraday generation: typical spring day

2040



Source: Bloomberg NEF

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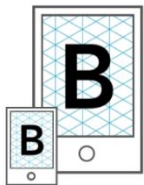
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