

# The Spectacular Energy Storage Growth

Keeping the Power On: Sparking Energy  
Storage Solutions in Developing Countries

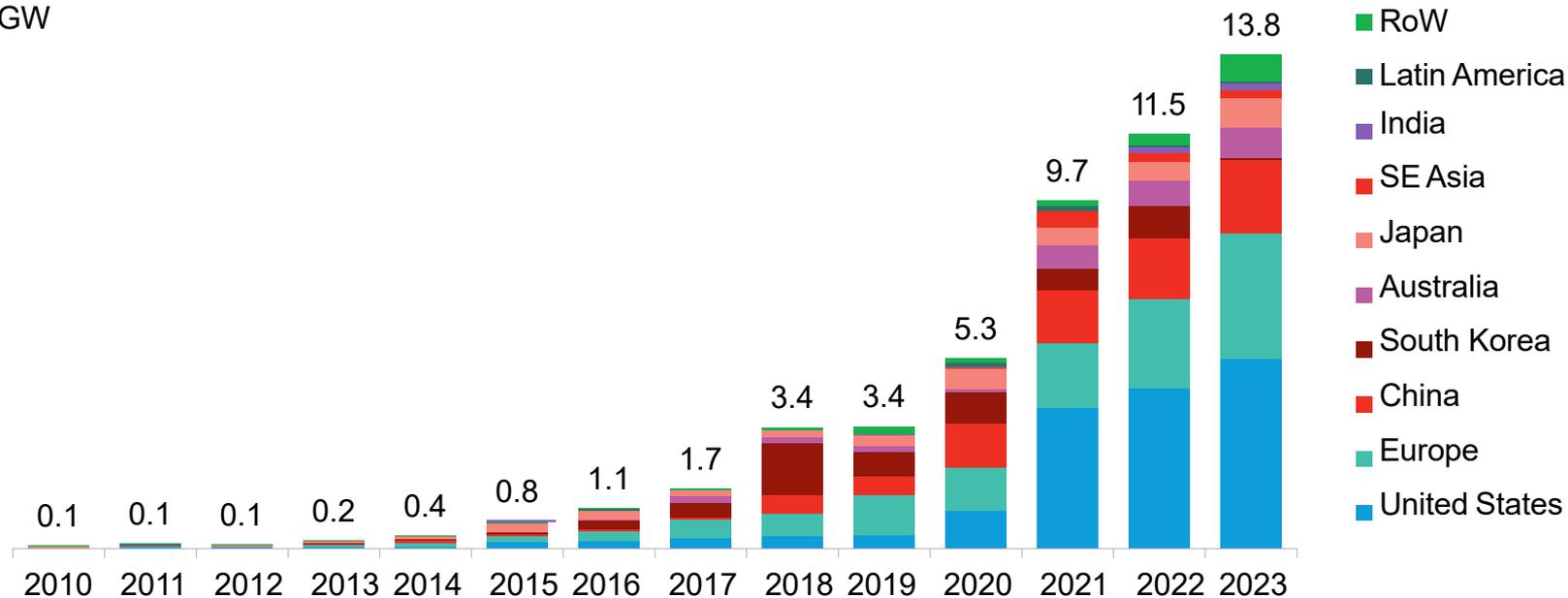
Yayoi Sekine

May 12, 2021

# Global energy storage market on a record-setting spree

## Global energy storage build

GW

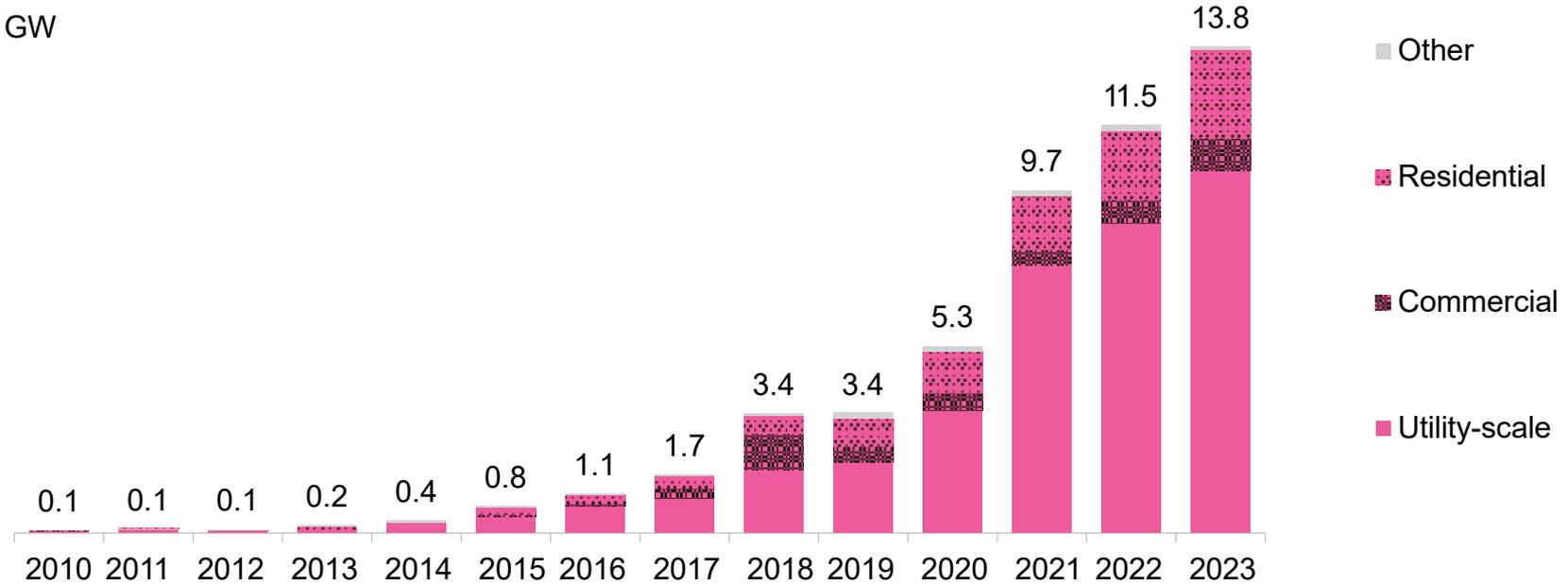


Source: BloombergNEF

# Global energy storage market on a record-setting spree

## Global energy storage build

GW

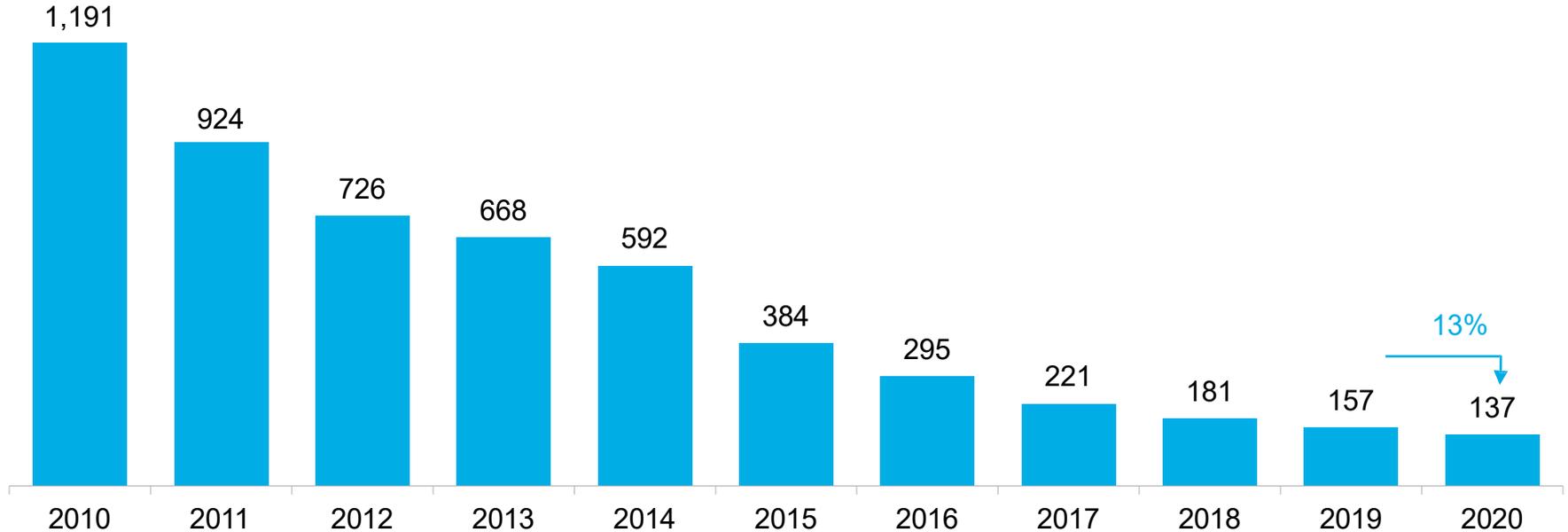


Source: BloombergNEF

# Falling costs have been crucial

## Lithium-ion battery price survey results (volume-weighted average)

Battery pack price (real 2020 \$/kWh)

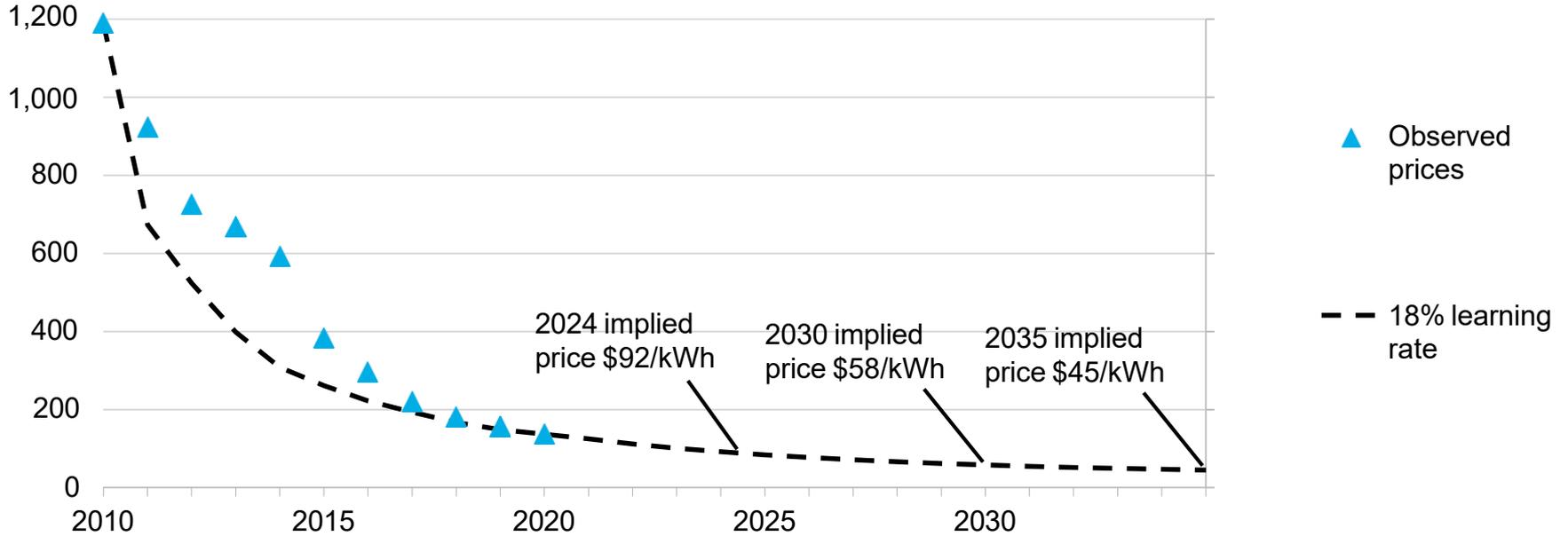


Source: BloombergNEF Note: This is based on the 2019 Battery Price Survey. The 2020 results shown here are a projection.

# Costs will continue to fall to new lows

## Lithium-ion battery price outlook

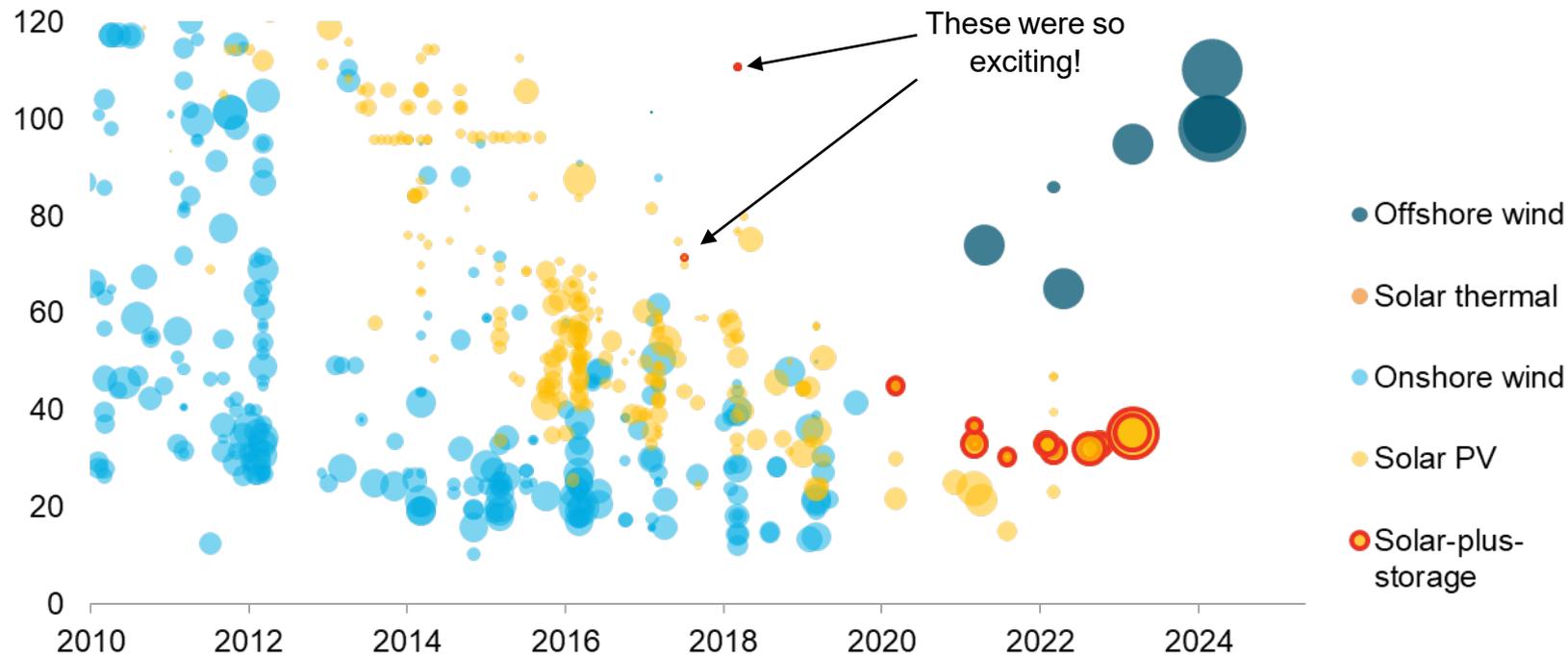
Lithium-ion battery pack price (real 2020 \$/kWh)



Source: BloombergNEF Note: This is based on the 2019 Battery Price Survey.

# This had helped lead to significant drop in contract prices

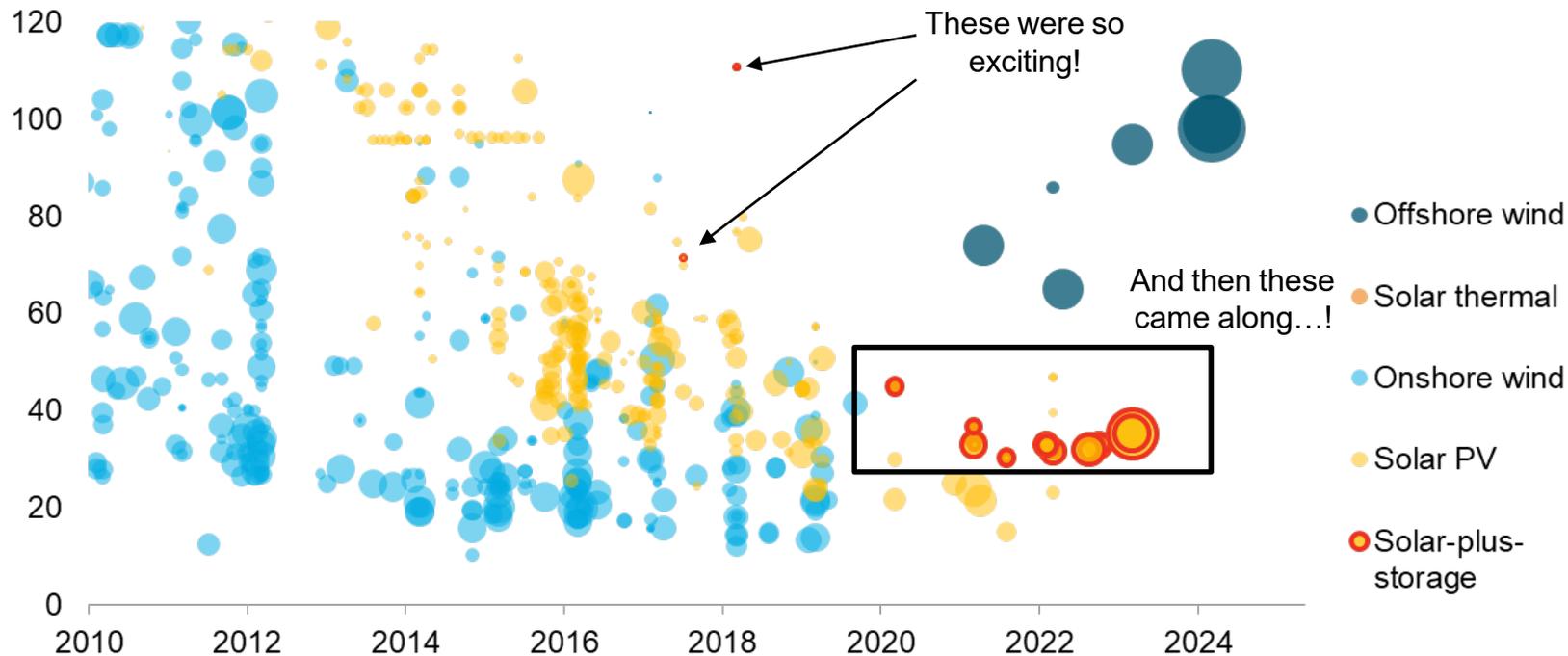
## U.S. renewable PPAs, by operation year (\$/MWh)



Source: FERC, BloombergNEF

# This had helped lead to significant drop in contract prices

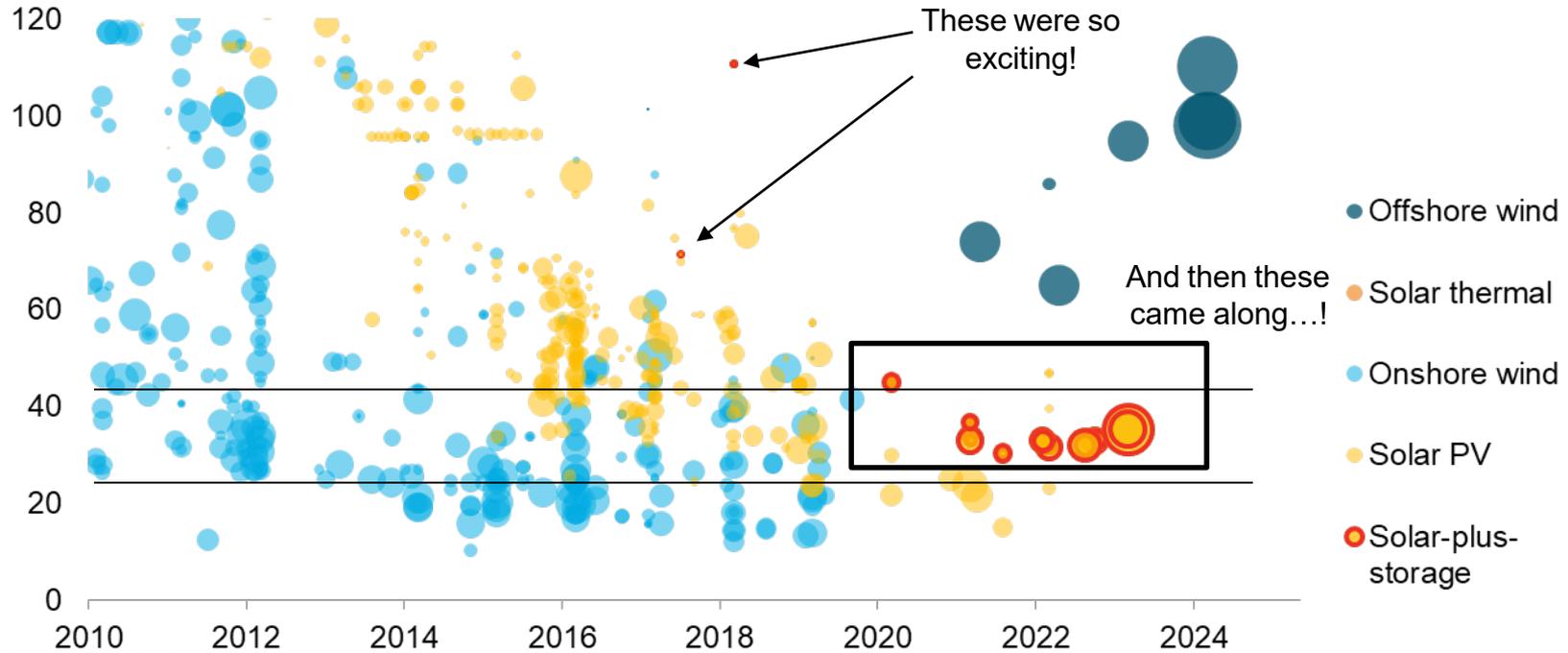
## U.S. renewable PPAs, by operation year (\$/MWh)



Source: FERC, BloombergNEF

# This had helped lead to significant drop in contract prices

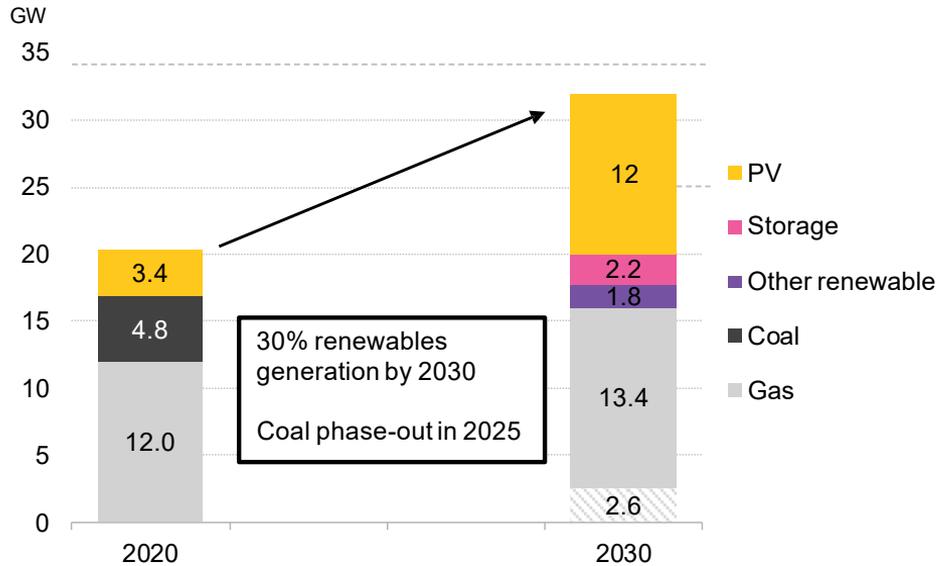
## U.S. renewable PPAs, by operation year



Source: FERC, BloombergNEF

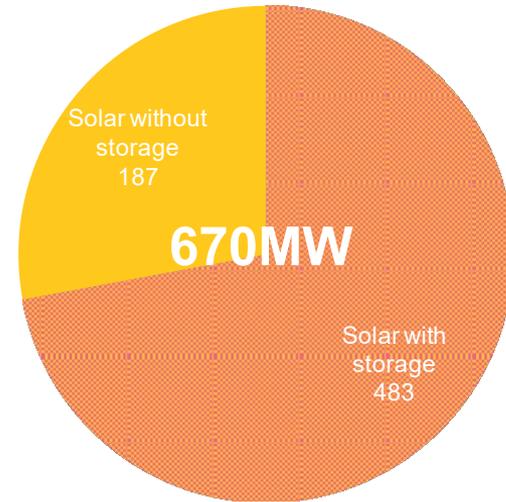
# Solar-plus-storage auctions and RFPs is helping to scale market rapidly

## Change in Israel's electricity generation capacity mix, 2020 - 2030



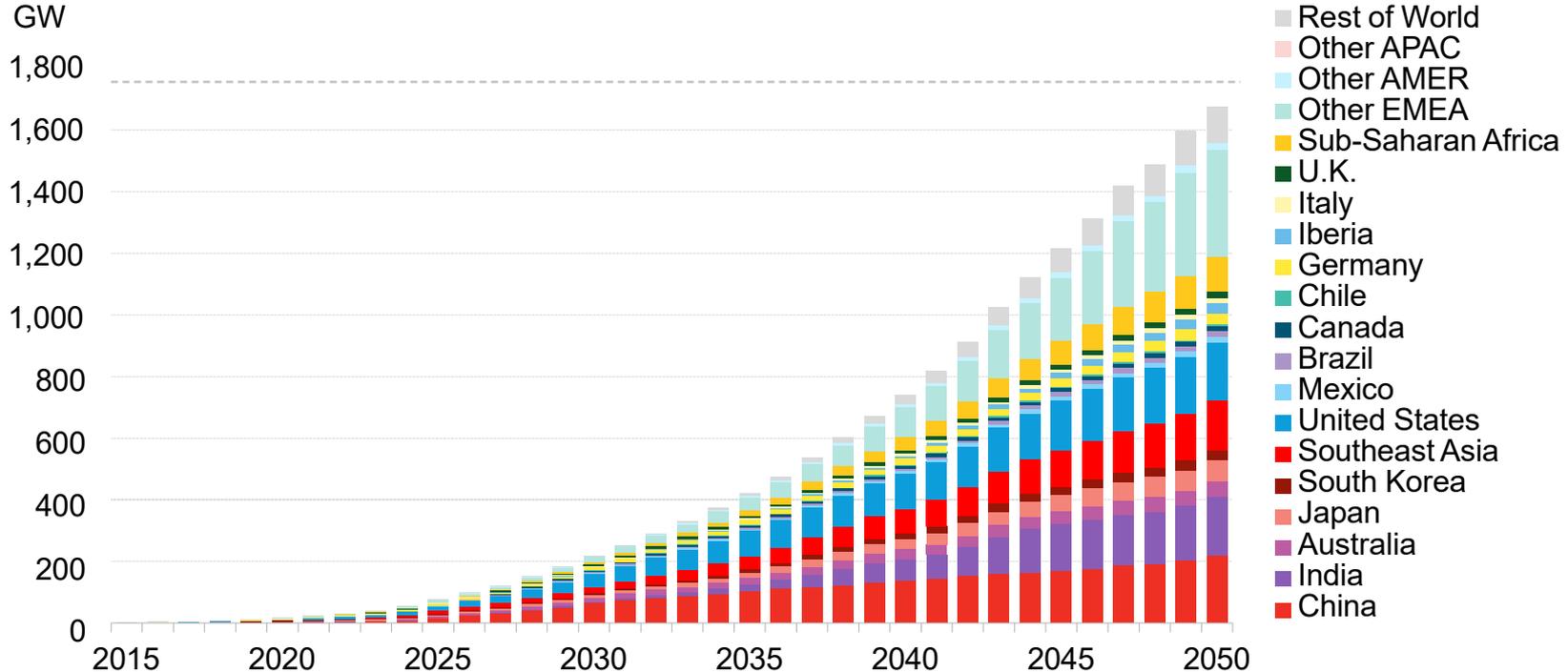
Source: BloombergNEF

## Portugal auction contracts awarded by technology



Source: BloombergNEF. Note: At least 20% of 483MW awarded to solar plus storage must be battery capacity, amounting to at least 96MW

# Opportunities will continue to grow over coming decades



Source: BloombergNEF

# Copyright and disclaimer

## Copyright

© Bloomberg Finance L.P. 2021. This publication is the copyright of Bloomberg Finance L.P. in connection with BloombergNEF. No portion of this document may be photocopied, reproduced, scanned into an electronic system or transmitted, forwarded or distributed in any way without prior consent of BloombergNEF.

## Disclaimer

The BloombergNEF ("BNEF"), service/information is derived from selected public sources. Bloomberg Finance L.P. and its affiliates, in providing the service/information, believe that the information it uses comes from reliable sources, but do not guarantee the accuracy or completeness of this information, which is subject to change without notice, and nothing in this document shall be construed as such a guarantee. The statements in this service/document reflect the current judgment of the authors of the relevant articles or features, and do not necessarily reflect the opinion of Bloomberg Finance L.P., Bloomberg L.P. or any of their affiliates ("Bloomberg"). Bloomberg disclaims any liability arising from use of this document, its contents and/or this service. Nothing herein shall constitute or be construed as an offering of financial instruments or as investment advice or recommendations by Bloomberg of an investment or other strategy (e.g., whether or not to "buy", "sell", or "hold" an investment). The information available through this service is not based on consideration of a subscriber's individual circumstances and should not be considered as information sufficient upon which to base an investment decision. You should determine on your own whether you agree with the content. This service should not be construed as tax or accounting advice or as a service designed to facilitate any subscriber's compliance with its tax, accounting or other legal obligations. Employees involved in this service may hold positions in the companies mentioned in the services/information.

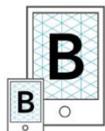
The data included in these materials are for illustrative purposes only. The BLOOMBERG TERMINAL service and Bloomberg data products (the "Services") are owned and distributed by Bloomberg Finance L.P. ("BFLP") except (i) in Argentina, Australia and certain jurisdictions in the Pacific islands, Bermuda, China, India, Japan, Korea and New Zealand, where Bloomberg L.P. and its subsidiaries ("BLP") distribute these products, and (ii) in Singapore and the jurisdictions serviced by Bloomberg's Singapore office, where a subsidiary of BFLP distributes these products. BLP provides BFLP and its subsidiaries with global marketing and operational support and service. Certain features, functions, products and services are available only to sophisticated investors and only where permitted. BFLP, BLP and their affiliates do not guarantee the accuracy of prices or other information in the Services. Nothing in the Services shall constitute or be construed as an offering of financial instruments by BFLP, BLP or their affiliates, or as investment advice or recommendations by BFLP, BLP or their affiliates of an investment strategy or whether or not to "buy", "sell" or "hold" an investment. Information available via the Services should not be considered as information sufficient upon which to base an investment decision. The following are trademarks and service marks of BFLP, a Delaware limited partnership, or its subsidiaries: BLOOMBERG, BLOOMBERG ANYWHERE, BLOOMBERG MARKETS, BLOOMBERG NEWS, BLOOMBERG PROFESSIONAL, BLOOMBERG TERMINAL and BLOOMBERG.COM. Absence of any trademark or service mark from this list does not waive Bloomberg's intellectual property rights in that name, mark or logo. All rights reserved. © 2021 Bloomberg.

BloombergNEF (BNEF) is a strategic research provider covering global commodity markets and the disruptive technologies driving the transition to a low-carbon economy.

Our expert coverage assesses pathways for the power, transport, industry, buildings and agriculture sectors to adapt to the energy transition.

We help commodity trading, corporate strategy, finance and policy professionals navigate change and generate opportunities.

Get the app



On IOS + Android  
[about.bnef.com/mobile](https://about.bnef.com/mobile)

# BloombergNEF

### Client enquiries:

Bloomberg Terminal: press <Help> key twice

Email: [support.bnef@bloomberg.net](mailto:support.bnef@bloomberg.net)

### Learn more:

[about.bnef.com](https://about.bnef.com) | [@BloombergNEF](https://twitter.com/BloombergNEF)