

# OFFSHORE WIND REVENUE TRENDS

Shimeng Yang | December 2021



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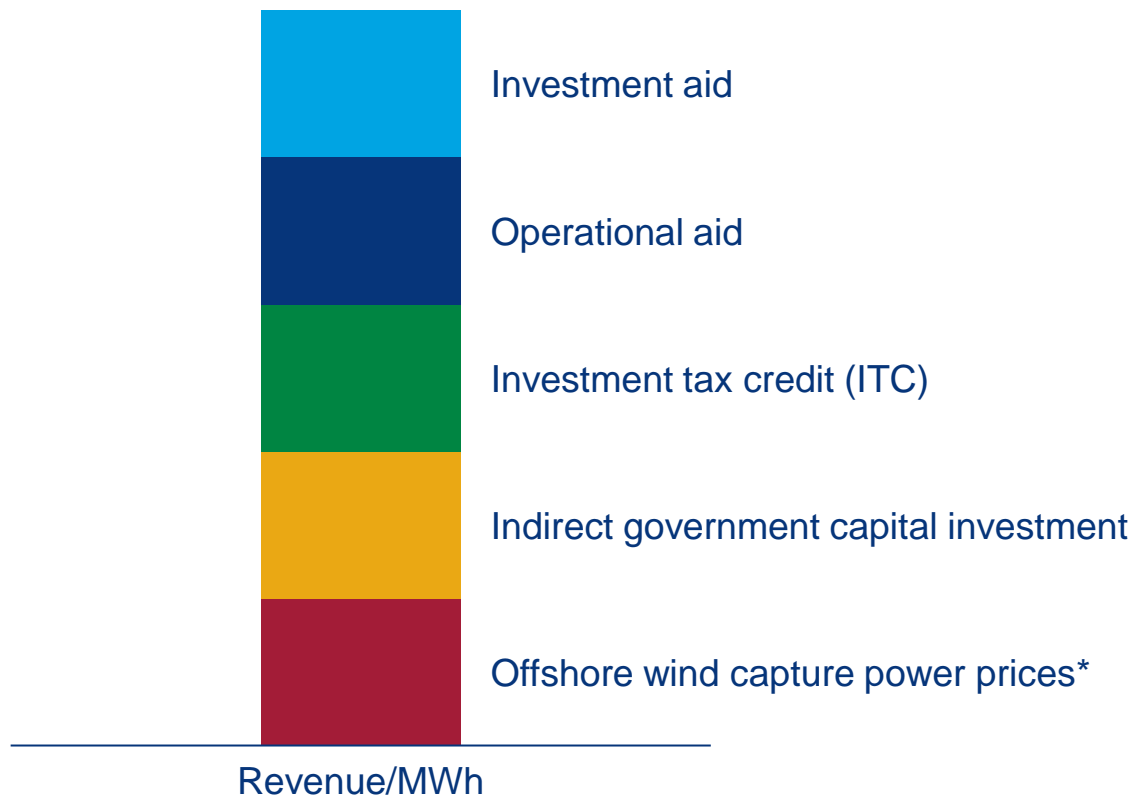
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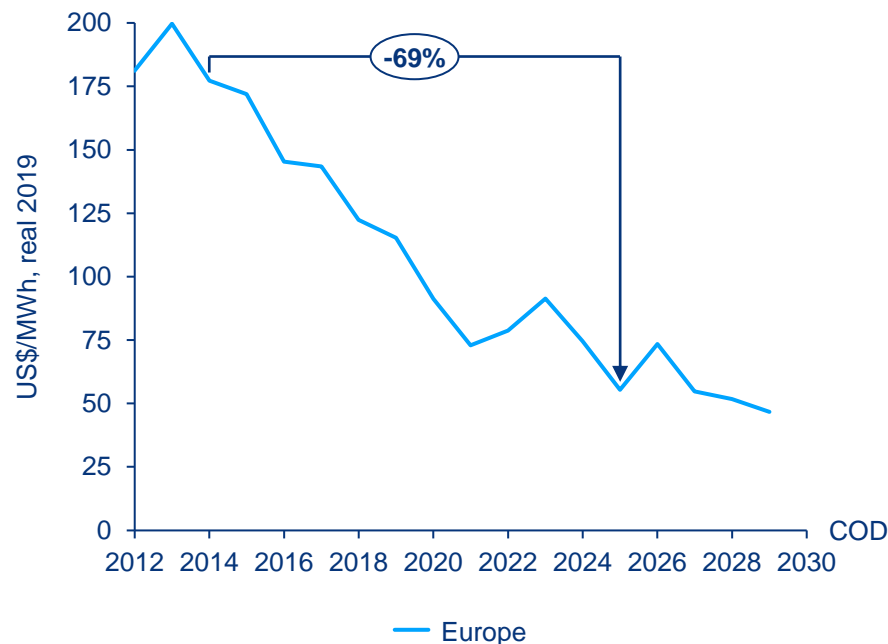
## Definition of revenue/MWh in the analysis



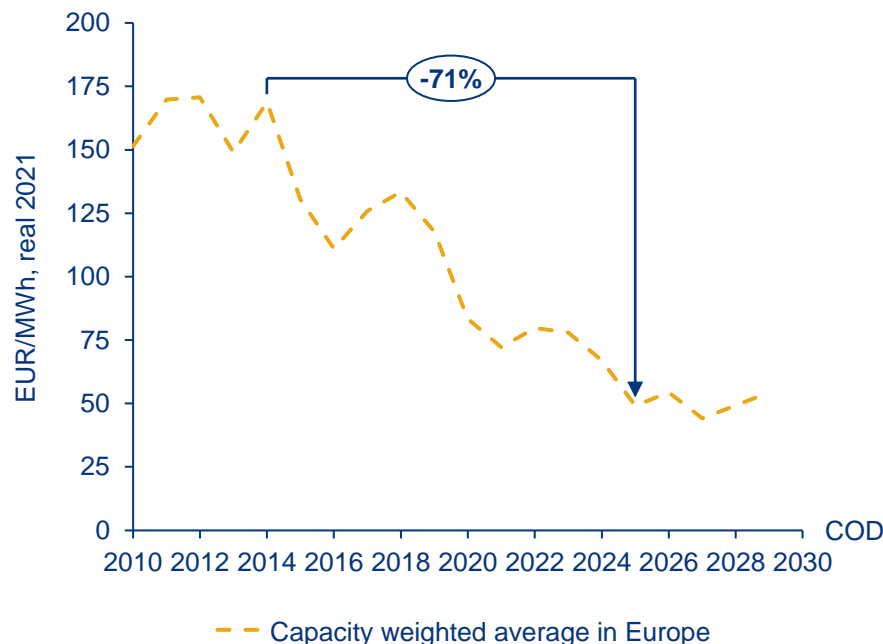
## Revenue/MWh dropping by 71% between 2012 and 2025 challenge project returns

With the expanding offshore wind industry, global offshore wind projects' LCOE anticipates reducing 69% by 2025 compared to the 2014 level. However, revenue/MWh have outpaced LCOE reduction

European bottom-fixed offshore wind LCOE



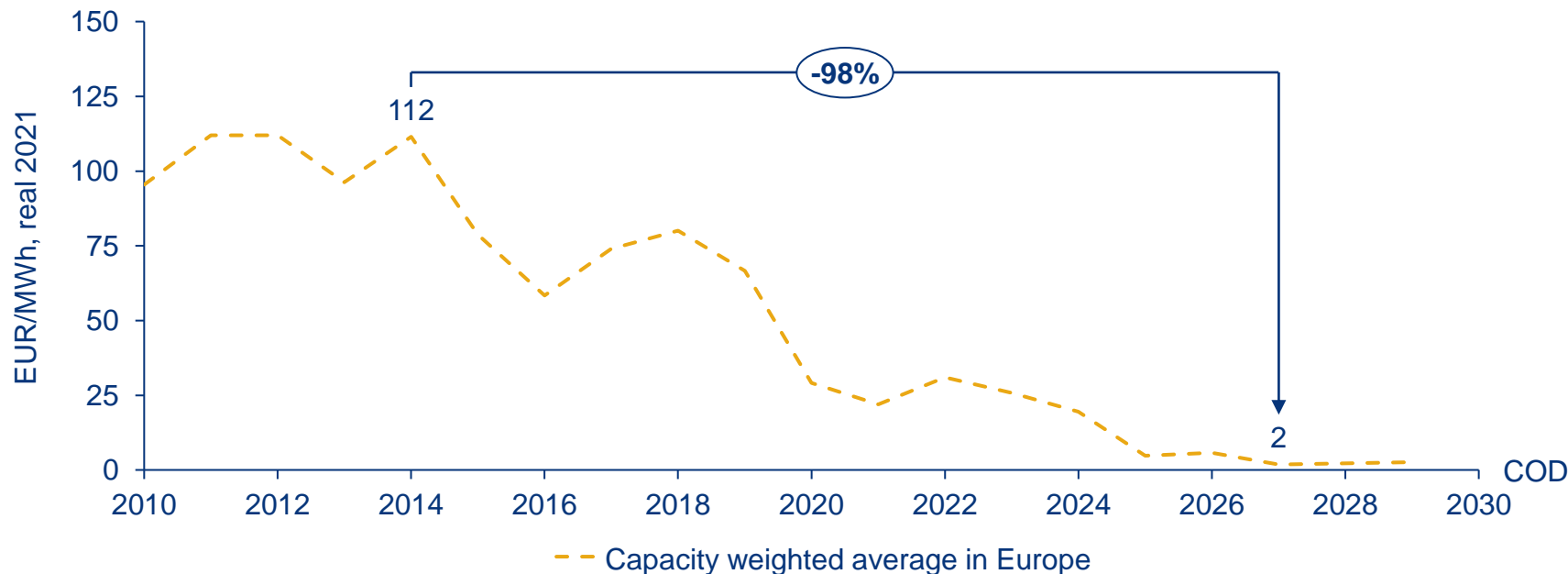
Revenue per MWh for European offshore wind projects with an awarded support scheme



## Revenue reduction are starting to subdue as projects are weaned off subsidies

The delta between the revenue and capture prices in establish markets will drop from €112/MWh in 2014 to €2/MWh in 2027. Emerging markets are following similar trends but with a greater variance

The delta between revenue and capture prices for offshore wind projects across the globe with an awarded support scheme

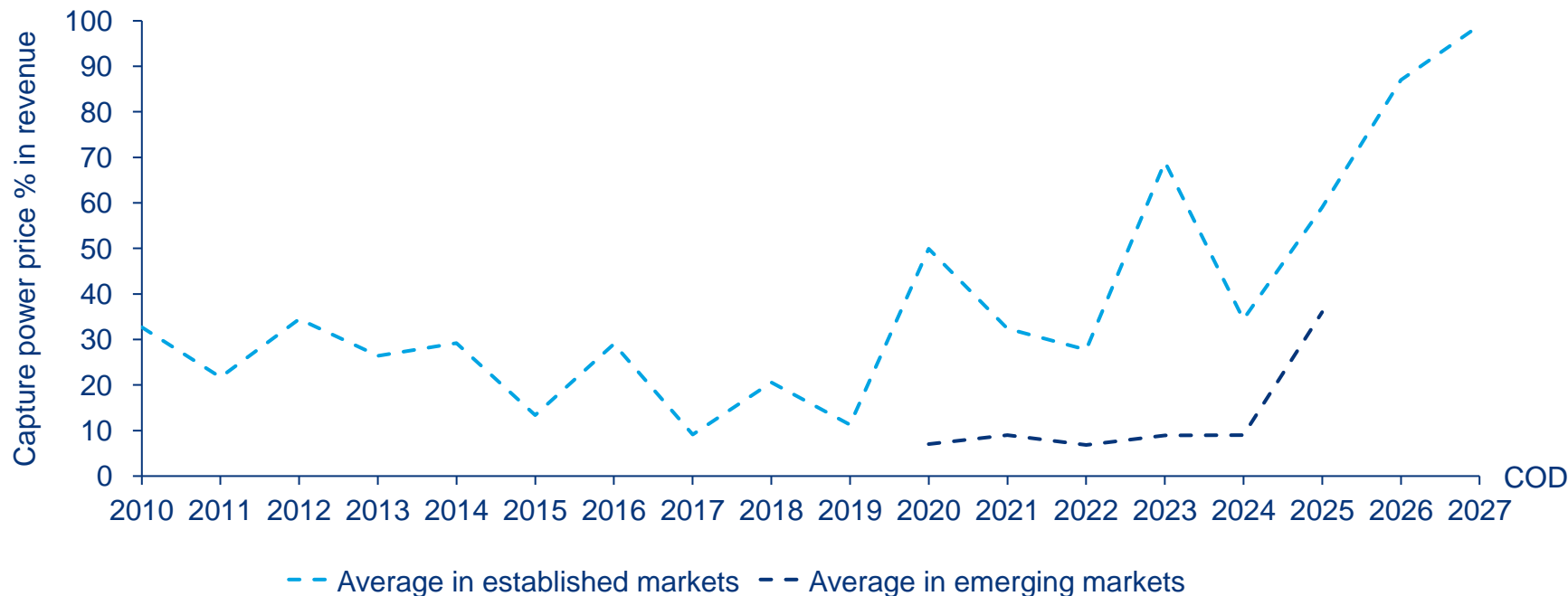


Note: Revenue demonstrated in the graph includes investment aids, operational aids, investment tax credit, capital expenditure (capex) borne by a third-party such as capex for project development cost, transmission system construction, power price, etc.

## In established markets, power prices are quickly becoming the main source of revenue

As power prices' share of revenue rise, so does the uncertainty which will change the pool of investors unless the projects find alternatives to stabilise the revenue such as CPPAs or innovative business models

Offshore wind capture prices' share of total revenue/MWh over the project lifetime" for projects with awarded support scheme



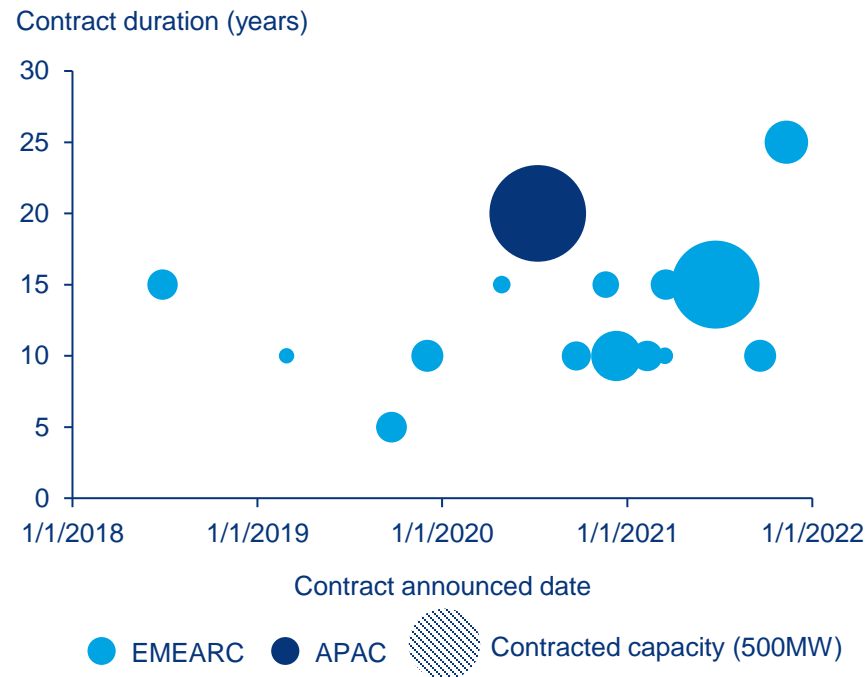
## Over 4 GW of CPPA has been signed for offshore wind projects since 2020

CPPAs are an increasingly common way for large corporates to decarbonise their electricity sources. CPPAs also provide financial certainty for projects with zero or even negative subsidy or facing merchant risks

Global offshore wind CPPAs



Contract terms for corporate offshore wind PPAs



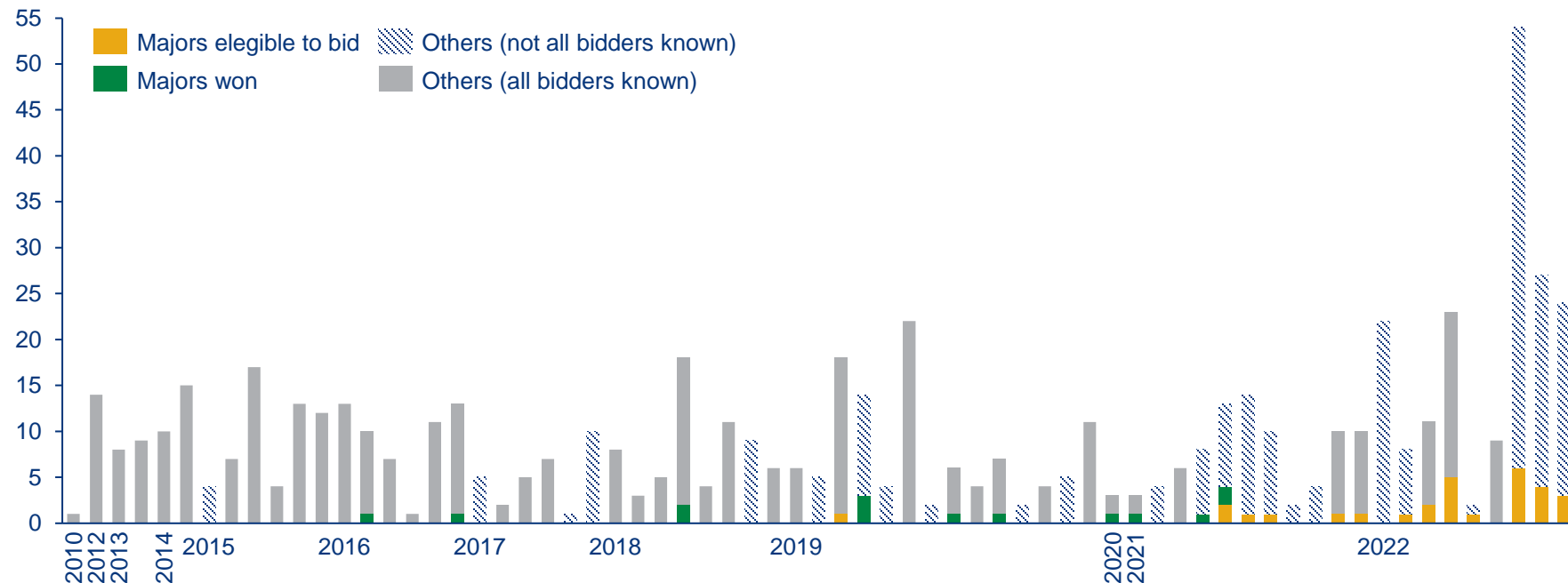
Note: For further PPA data, please refer to "Global offshore wind power purchase agreements (PPA) tracker".

Source: Wood Mackenzie

# Auctions will continue to be the dominant driver of capacity growth in the next decade. Competitions is intensifying – both in quantity and quality

Bidders in offshore wind tenders and lease zones

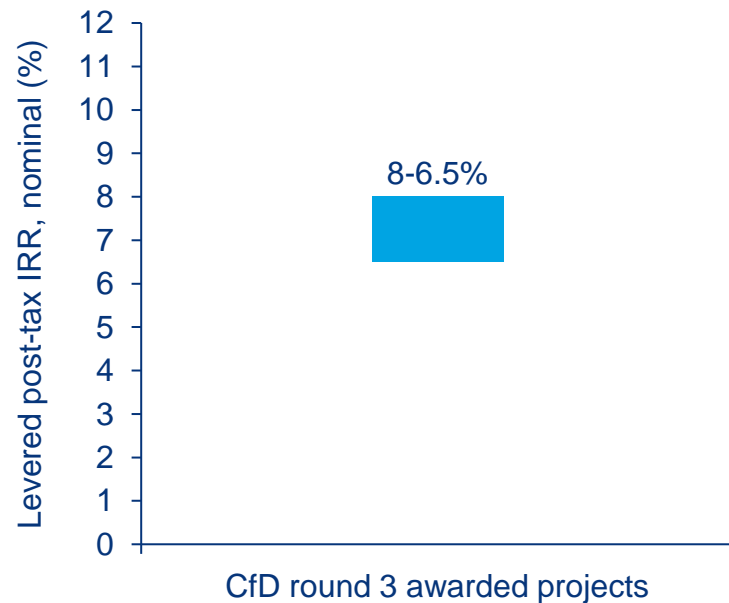
Number of bidders



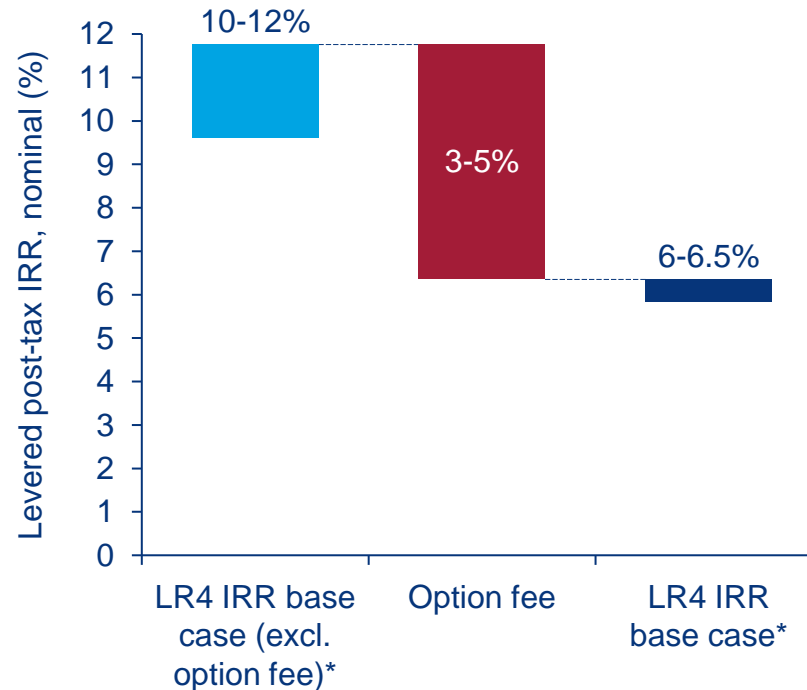


## Whether the falling investment return in offshore wind project will settle out?

IRR range for CfD round 3 awarded projects



IRR range for leasing round 4 awarded projects



## Contact

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