The proposed (draft) NECP targets are set to include up to 8 GW of energy storage systems in BESS and pumped hydro by 2030

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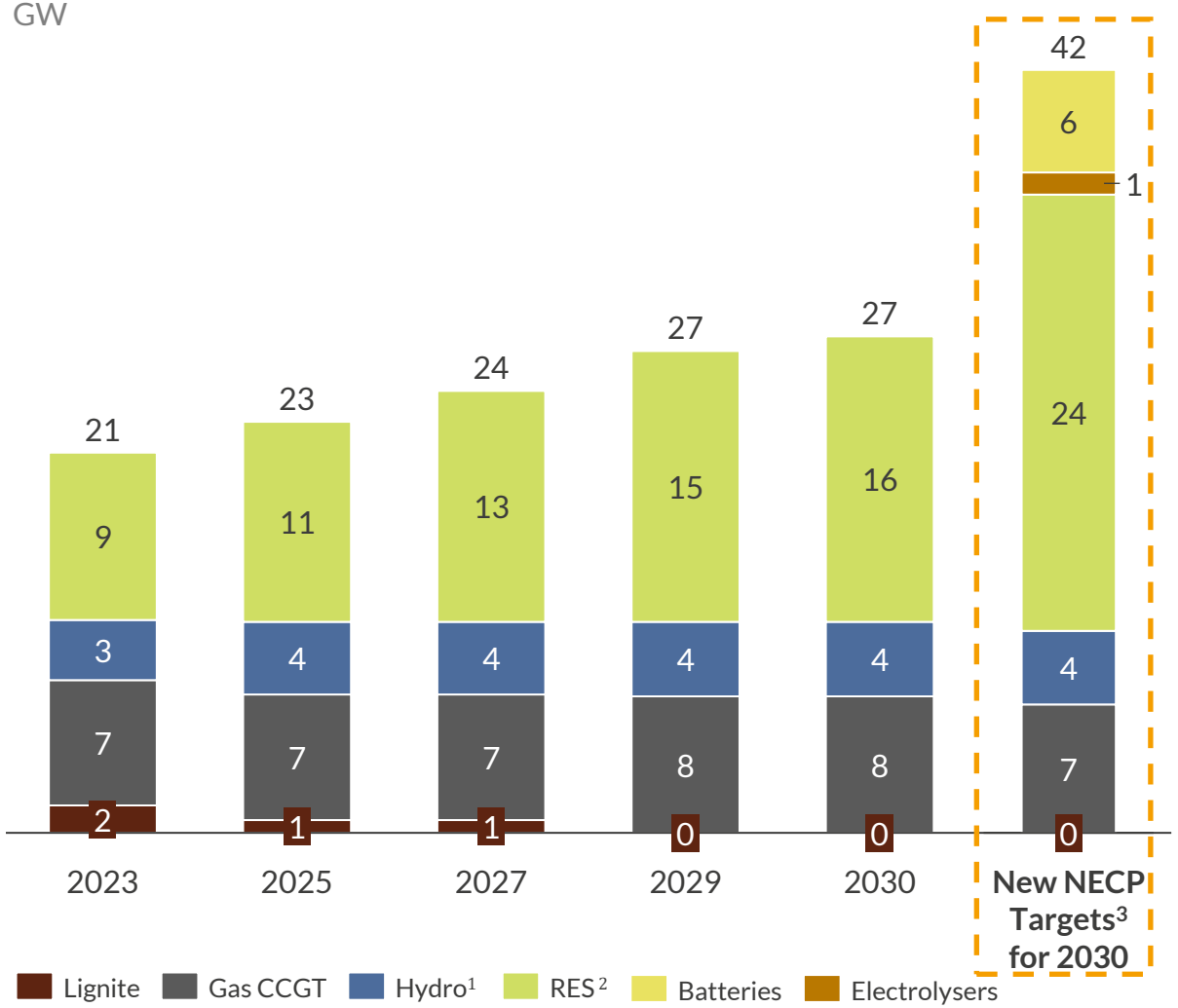
Forecasted capacity of current NECP targets vs newly proposed NECP

GW



Amendments on NECP targets for 2030	
Renewables (wind and solar assets)	14.1 GW of solar 2.7 GW of offshore wind Onshore wind targets remain unchanged
Energy storage systems	8 GW (with up to 5.6 GW for battery storage and the rest for pumped hydro)
Electrolysers	1.2 GW

- Targets for **solar PV increased from 7.7 GW to 14.1 GW**. Additionally, a target of **2.7 GW offshore wind** has been included for 2030
- Updated NECP includes for the first time a target for substantial **battery energy storage (5.6 GW) by 2030**
- The large increase of renewables is expected to also complement the case for batteries since technically the grid will need more flexibility to accommodate the new capacity
- Hydrogen officially enter the plans with a **1.2 GW of electrolysers by 2030**

1) Including both battery energy storage systems and pump hydro units. 2) Including both solar and wind assets 3) Updated NECP targets for 2030 as announced in January 2023.

Sources: Aurora Energy Research , Greek NECP, IPTO, Ministry of the Environment and Energy

The first demarcated offshore wind park besides the area of Alexandroupoli hosting a total capacity of 600 MW

	Offshore wind location	Details
1	Alexandroupoli	Sea area beside Alexandroupoli (already demarcated) – 600 MW
2	Central Aegean	Three sea area near either mainland or Dodecanese – 300 MW each (total of 900 MW)
3	Crete	Sea area from Sitia to Xirokampos on the northern coast of the eastern end of the island, and east of Ierapetra – 600 MW
4	Northern Aegean	Sea area between Limnos and Agios Efstratios
5	Dodecanese	Sea area on the Ikaria-Patmos-Leros axis and near Chios
6	Cyclades	Sea area between Tinos and Syros

Demarcated area Area under development – Phase 1 Area under development – Phase 2

Sources: Aurora Energy Research, Ekathimerini, Energypress.

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Offshore wind farms development

- Alexandroupoli has been already demarcated as a ”Resource First-Choice Area”, where a total capacity of 600 MW offshore wind farms will be hosted
- Copelouzos Group holds the only production license for offshore wind parks in Greece since 2012, with a total capacity of 216 MW. The project has characterized as pilot, so it will not participate in the auctions
- The Hellenic Hydrocarbons Management Authority is about to finalize, by the end of July, the program with the marine zones where the first 2, 1 GW of offshore wind farms will be developed (Phase 1)
- The Phase 1 of offshore wind development refers to five areas

Several factors affect the PPA's real value, pushing downwards its fair value

Driver	Description	Impact on price development
1 **Grid connection priority**	▪ Grid connection priority artificially pushes prices downwards as it's an incentive to bring a project online and given the competition levels developers prefer to get it on the ground with lower returns versus not at all or risking a long delay	
2 **Supply & demand**	▪ Supply is expected to be significantly higher than demand given the limited number of industrial in the country and also the pipeline of new capacity coming online is very large	
3 **Credit worthiness**	▪ Credit worthiness could be a constraint in finding the right off-taker as there are many smaller industrial companies where official credit checks are challenging to make and likely not widely acceptable by banks. Therefore, that contributes more to the imbalance between supply and demand	
4 **Aggregators & utility PPAs**	▪ The emergence of aggregators and utility PPAs can affect significantly the market conditions in the next few years. Aggregators and utilities could merge different client groups together, diversify risk and eventually increase significantly the total available volume for PPAs which could drive prices downwards	

Source: Aurora Energy Research

The subsidy support comprises of an investment grant and an annual operating support; the auction determines the operation support only

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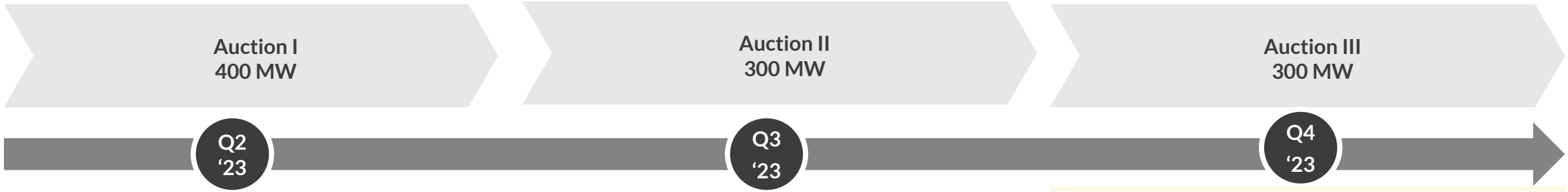


- **The minimum storage duration is set at 2h**
- For auctions 1 and 2, there is a **limit of 300 MW of projects per regional unit** of the country. This is likely to affect mostly the second auction

- The **minimum storage duration is set at 4h**
- The third auction will be **dedicated for projects in lignite mine locations** such as Kozani, Florina and Megalopoli

Auction design & technical requirements

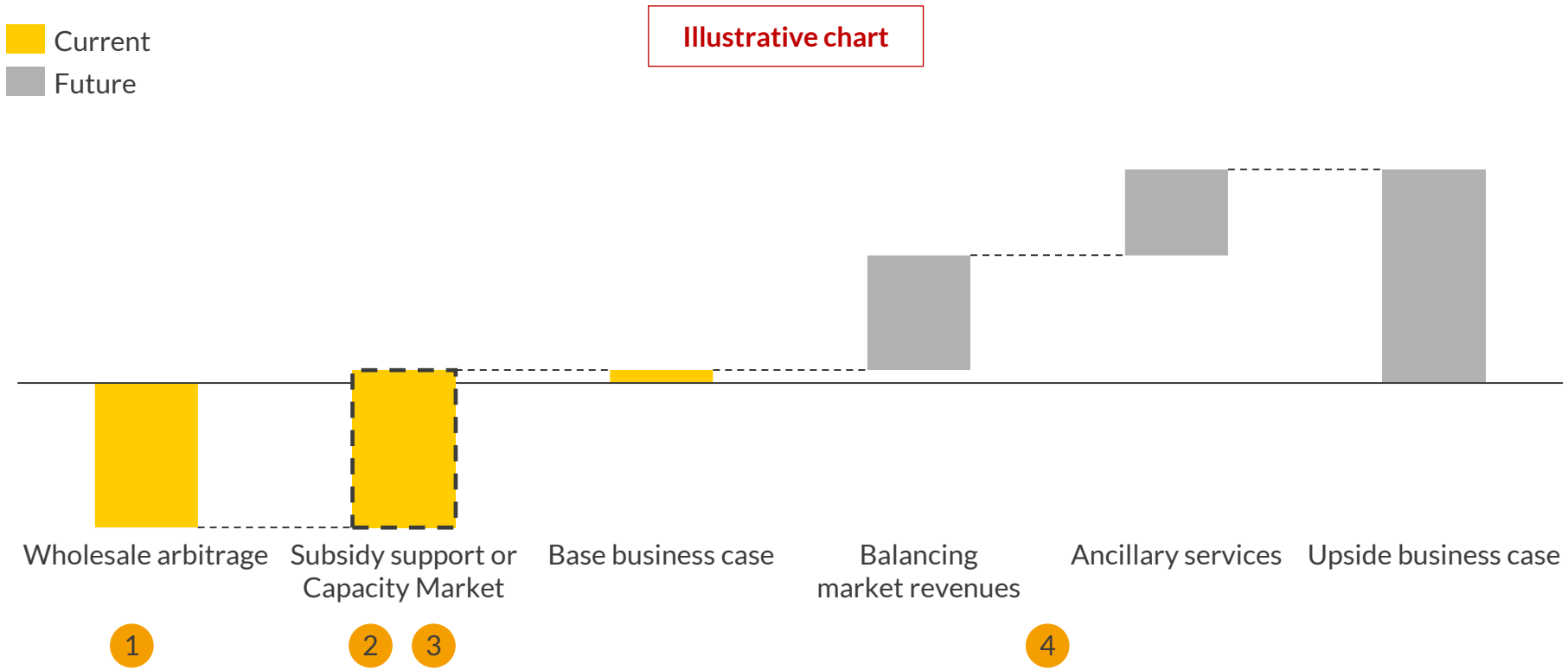
- All auctions are for standalone battery systems, the projects must be able to participate in the **aFRR, mFRR and FCR** balancing services
- Maximum project size is 100 MW; for auctions 1 and 2 combined, each participant **cannot secure more than 100 MW of capacity**
- **The subsidy support comprises of an investment grant and an annual operating support; the auction determines the operation support only**
  - **The annual support offer** is the format of **€/MW/year** and corresponds to the annual reference revenue of the project; a starting price for the auction is expected as part of the ministerial decision
  - Winning projects from auctions 1 and 2 will receive an investment grant of **200,000 €/MW;** to receive the grant, a guarantee of proper and timely delivery is required (the amount of which is set by the announcement of each auction round)

Source: Aurora Energy Research

Fully understanding revenue stacking for batteries is crucial for developing battery projects; Aurora deep dives into these markets

As new markets open in Greece, we have conducted a detailed analysis of business cases for batteries based on revenue stacking across different market segments

Illustrative revenue streams for new-build Greek battery entering in 2025[1]
IRR%, pre-tax real



1) Assets receiving the subsidy support from the auctions would not be eligible for participating in the capacity market and/or potentially other revenues streams. This is an indicative chart showing the different revenue streams that could be available in the Greek market.
Source: Aurora Energy Research

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Key Market Segments

1. Wholesale market volatility is rising due to high commodity prices and fast renewable buildout and capacity tightness
2. **The expected auctions and subsidy support** are key to the first few projects that will enter the Greek market
3. A potential launch of a **capacity market** as depicted in the market reform plan of Greece could be a pillar for the deployment of merchant batteries. Such a market is expected in the middle of this decade
4. The participation of batteries in the balancing and ancillary services markets will provide additional revenue for battery projects and will be a key source of revenue for merchant assets