





October 14, 2025 | Ankara, Türkiye

# Aggregation Activity in Türkiye Electricity Market

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ENERGY MARKET REGULATORY AUTHORITY of TÜRKİYE



# OUTLINE

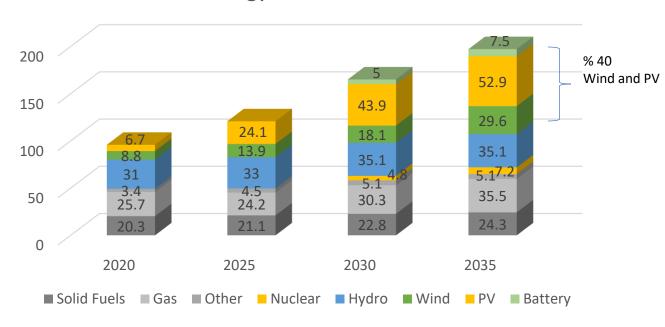


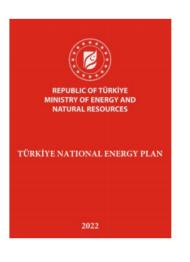
- -National Energy Outlook and 2035 Plan
- -Unlicensed Electricity Generation Mechanism
- -Challenges in Power Grid/Markets
- -Aggregation Activity in Türkiye Electricity Market
- -Expectation from Aggregators

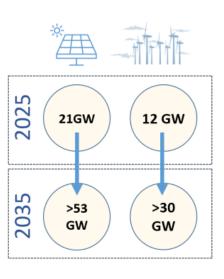
### Türkiye National Energy Outlook and 2035 Plan



Energy Plan for 2035







https://enerji.gov.tr/Media/Dizin/EIGM/tr/Raporlar/TUEP/Türkiye\_National\_Energy\_Plan.pdf

With more supportive policies of the government, by 2035, the total RES capacity is expected to be:

- -30 GW for Wind,
- -53 GW for PV.
- + 14,7 GW PV and 18,3 GW Wind with 33 GWh Battery capacity were allocated after 2022
- + 40 GW RES target with the Green Transition target by the Ministry by 2035.
- -2/3 of the electricity consumption, projected to be 510 TWh in 2035, is planned to be met by renewable resources, including hydro power.

# Unlicensed Generation - Energy Community and RESUM



- ➤ Unlicensed Generation is exempt from obtaining a license and establishing a company.
- ➤ RESUM: It provides financial support for renewable energy projects (Licensed and unlicensed) through feed-in tariffs over a specified period.

	Unlicensed Generation	Energy Community
Porpuse	Generates the energy at its own facilities increasing public acceptance of RES Improves energy efficiency, lowers bills, and reduces energy poverty	
income Model	Selling surplus energy	
Participants	A single consumer with one or more consumption facilities	Citizens, public, and private entities
Manager	-	The participants

### Challenges



- ➤ More renewable energy integration
  - Increasing flexibility needs
  - Consumer participation in the power markets
  - More accurate forecasting
- Status of renewable power plants (licenced and unlicensed) whose purchase guarantee period has expired
  - Power plants whose feed-in tariff period will expire within 10 years:
  - -15 GW of unlicensed RES
  - 17 GW of licensed RES

# Aggregation Activity in Electricity Market Law



Electricity
Market Law;

Aggregation Activity

Aggregator License

**«Aggregation:** Market activity carried out by the aggregator to operate the consumption and/or generation of one or more network users by way of combining the same.»

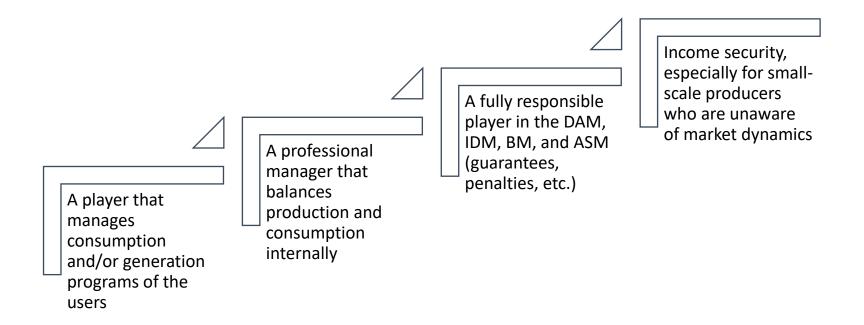
#### «The aggregator;

- Manages the consumption and/or generation programs,
- Carry out market transactions
- Participates in the procurement processes regarding ancillary services

on behalf of its contracted users.»

# Aggregators as a Market Participant





Agregators can only supply electricity for the portfolio.



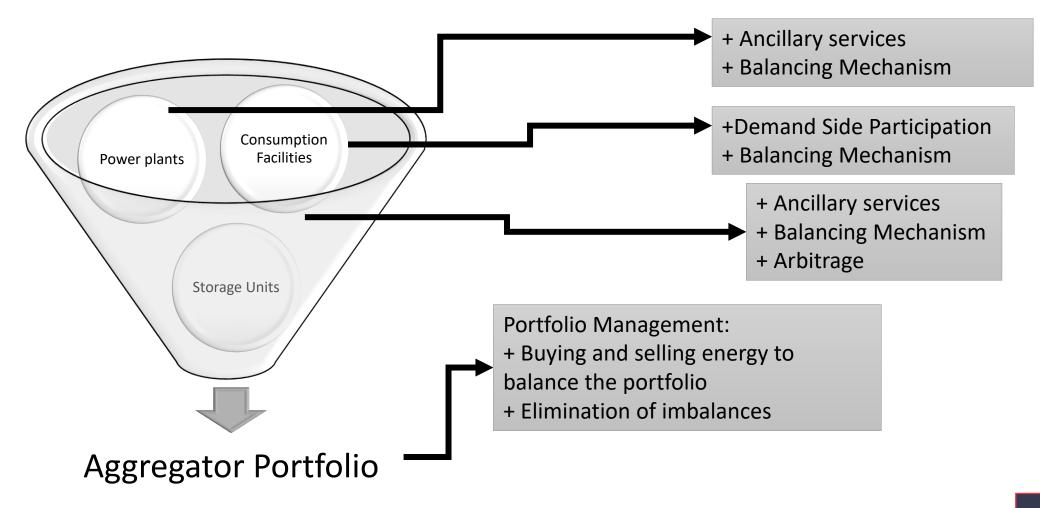
An aggregator can include up to 2,000 MW of production portfolio.



An aggregator can include power plants with a capacity of up to 100 MW in its portfolio

# **Forming Portfolio**





# **Expectation from Aggregators**



- Balancing portfolio internally
- > Participate in procurement processes of the Demand Side
- More reliable forecast (consumption, generation)
- Monitoring users in the portfolio in real-timely for specific services (DSP, BPM, etc.)
- Carrying out market operations on behalf of users who are unaware of market conditions and ensuring income security







# THANK YOU FOR YOUR ATTENTION!

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