

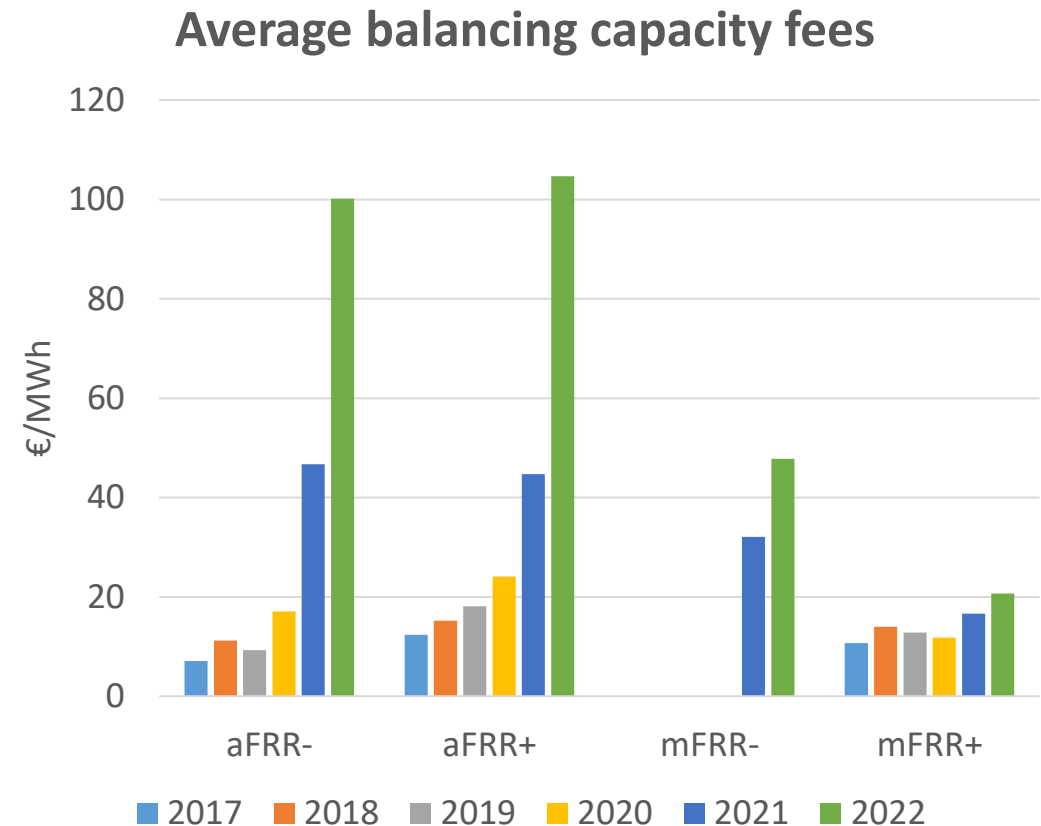
# STRATEGIES AND PATHWAYS FOR INCREASED FLEXIBILITY

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# Fast renewable (mostly PV) penetration resulted in scarcity of flexibility in Hungary

## Symptoms:

- Exploding balancing capacity fees
- Long queues, high fees for grid access
- Peak prices in evening hours
- Ramping import demand in evening hours



# New battery support scheme is about to launch



- BESS can provide:
  - grid boosting, balancing, load levelling and more
- Ministry is about to launch a Battery support scheme:
  - Batteries contracted one day in advance, not allowing locking in long-term revenue streams
  - No capacity market or long term TSO inertia products are available
  - Batteries deliver positive externalities for the system difficult to monetize
- Capex subsidy + Contract for Difference for 10 years
  - Capex from RRF
  - CfD to provide a firm revenue floor to ensure bankability
  - Projects still need to optimize against all available markets

- MEKH is responsible for setting the benchmark revenue for CfD valuation
  - How to track/reflect changes in market needs and optimal revenue stack over 10 years horizon (DSO flexibility platform is not launched yet)
  - Should we differentiate between asset classes (technology, sizing, energy capacity)
- Should flex assets get priority at grid access?
- Should players with existing grid access have priority?
  - Hybrid power plants: to facilitate better scheduling
  - Gas fired power plants: to reduce must run and save gas consumption
  - Consumers: to support their energy optimization
- **Public consultation will be launched soon**

- Should the TSO offer special storage product?
  - Primary reserves (FCR) market got saturated
  - Storage can do better (in terms of ramping) than standard aFRR product
- Removing entry barriers for small units:
  - Reducing TSO bid size for stand alone units or supporting aggregators
- Requested delivery duration as entry barrier?
  - What are the gradient, ramping requirements for storage technologies? (without gas fired powerplants or independent aggregators?)
- Barriers for revenue stacking:
  - How to organize TSO and prospective DSO markets?
- Should the TSO/DSO drive the decisions on BESS location?
  - What is the best way to communicate forward looking information on network congestions?