

# International discussion seminar

CZ-AT EEG

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**AKU-BAT CZ**  
Asociace pro akumulaci energie



# ASSOCIATION FOR ENERGY STORAGE AKU-BAT CZ

- › Established in 2017
- › 121 members
  - › Energy companies and utilities, BESS manufacturers and integrators, RES investors, EPC companies, banks, EMS/BMS solution providers, district heating operators, universities, research institutes and consulting firms

**Legislation forming – Influence – Business – Information – Media & Conferences – Cooperation – Touch with members**





# How it started - first utility scale ESS installations

- › E.ON – Mydlovary  
0,99 MW / 1,75 MWh  
In operation from 2/2018  
Original application: Trading imbalances + black start



- › C-energy – Planá nad Lužnicí  
4 MW / 2,5 MWh  
In operation from 9/2019  
Original application: ancillary services in VPP with gas turbines, Q regulation, power quality, black start

# First legislative breakthrough

- › BESS ČEZ – Tušimice  
4 MW / 2,8 MWh  
In operation from 12/2019  
Original application: „R&D platform“ for FCR
- › Project BAART  
ČEZ + ČEPS (TSO)



Evaluation project with main goal to evaluate behaviour of BESS in different operations scenarios during provisioning of FCR.



Recognition of energy storage in Rules for TSO ancillary services from 1.1.2021

# 2021 –2024: The dark period for utility scale ESS

- › Possibility to provide ancillary services
- › Possibility to operate standalone ESS
- › Possibility to connect standalone ESS to grid



All ESS were built as accessory to generation units

However

Golden age for residential and C&I BESS + PV due to subsidies



# Trend in past – ESS with PV

**2023**

**945 MWh**

Connected in 2023

**73 371**

PV installations with BESS

**95 %**

Year-on-year change

**2024**

**506 MWh**

Connected in 2024

**36 246**

PV installations with BESS

**-46 %**

Year-on-year change

**H1 2025**

**174 MWh**

Connected in H1 2025

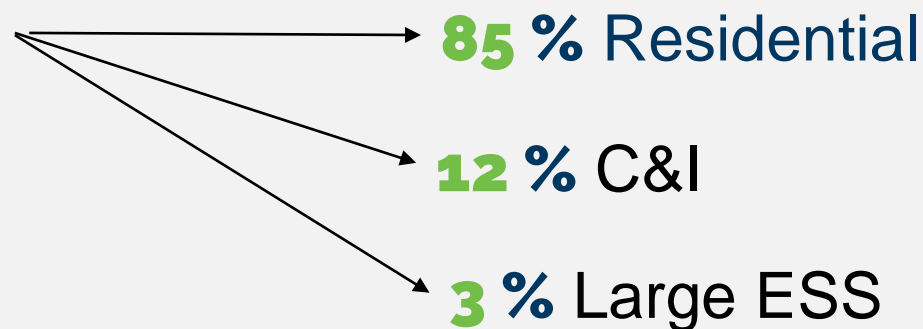
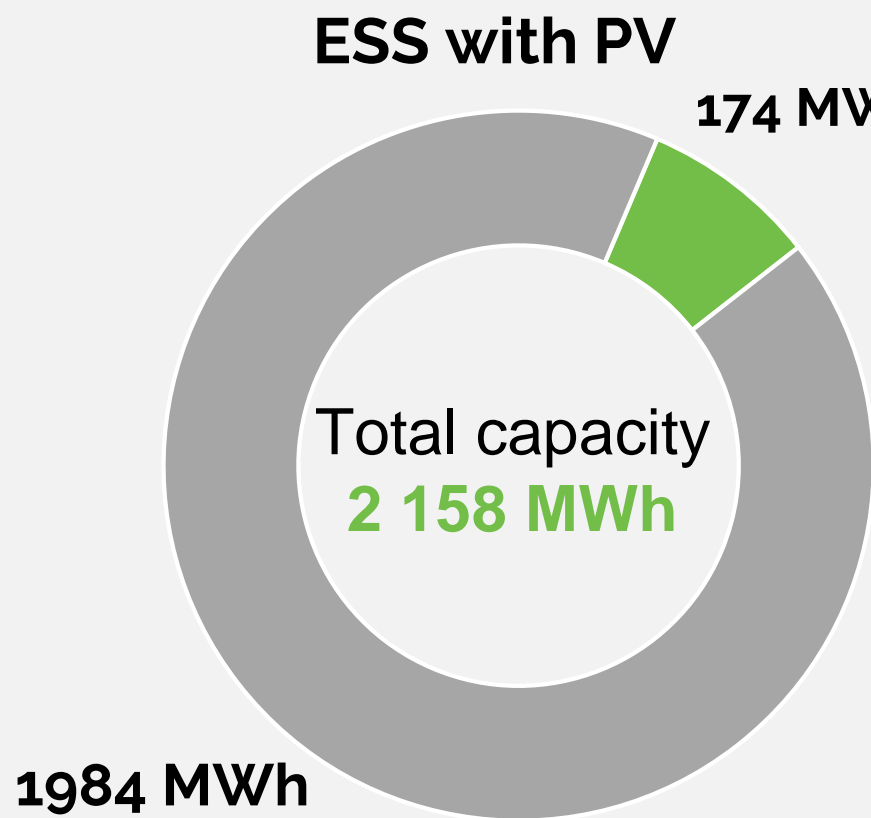
**11 236**

PV installations with BESS

**-37%**

Change compared to H1 2024

# Actual situation



## Notable projects – ESS without relation to PV:

- › Decci – Energy Nest (Vraňany): 22 MWh
- › C-Energy (Planá nad Lužnicí): 22 MWh
- › ČEZ (Vítkovice): 9,45 MWh

## 4.3.2025 – the date which changed everything

### › Approval of new energy law (LEX RES III)

- › First recognition of energy storage in CZ legislation
- › Possibility of connection of standalone ESS to grid
- › Possibility to obtain license to operate ESS in energy environment
- › In effectivness from 1.10.2025

### › First day of new rules from perspective of ČEZ Distribuce (DSO)

- |                         |                              |  |
|-------------------------|------------------------------|--|
| › 1335 new applications | › 600 applications are valid | › 15% of applicants ask for 50% of grid capacity |
| › 5,45 GW power         | › 2,5 GW power               | › 2/3 are new applications                       |





# Actual trends and opportunities

- › **Ancillary service fewer + flexibility boom**
  - › ESS ROI in 2024 + H1 2025 1-4 years for aFRR
  - › CZ Ancillary Service Market size is only ~960 MW for positive and 350 MW for negative services
  - › 3.9.2025 – ČEPS joined Alpaca - cross border ballancing capacity cooperation
  - › 1.10.2025 – 15 minute interval on Day-ahead market
- › **Growing number of flexibility aggregators**
- › **Focus is slowly changing to trading applications**
- › **Niche residential and C&I market**



# Challenges and obstacles to be addressed in near future

## › Administrative grid congestion

- › 22 GW+ is blocked by connection contracts for RES (5/2025)
- › 7 GW+ connection requests for RES (5/2025)
- › Unused DSO grid capacity is blocked by existing contracts for consumptions
- › New connection rules from 1.10.2025
- › New tariff structure from 1.1.2027

## › Grid compliance and RfG 2.0

- › CZ specific requirements outside RfG scope
- › Introduction of grid forming capability

## › Technical grid congestion

- › Growing number of locations with real congestion
- › Interest of DSO in BESS for U/Q regulation, especially on MV level

## › Financing and project delivery

- › CZ specific commercial conditions
- › Too many new players with no experience
- › Unknown technology for banks and firefighters

# Thank you for your attention

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