



20TH ERRA ANNUAL CONFERENCE

EN ROUTE TO SUSTAINABLE REGULATION
UNDER NEW MARKET PARADIGMS

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BUDAPEST, HUNGARY



DSO Perspective of Demand Side Flexibility

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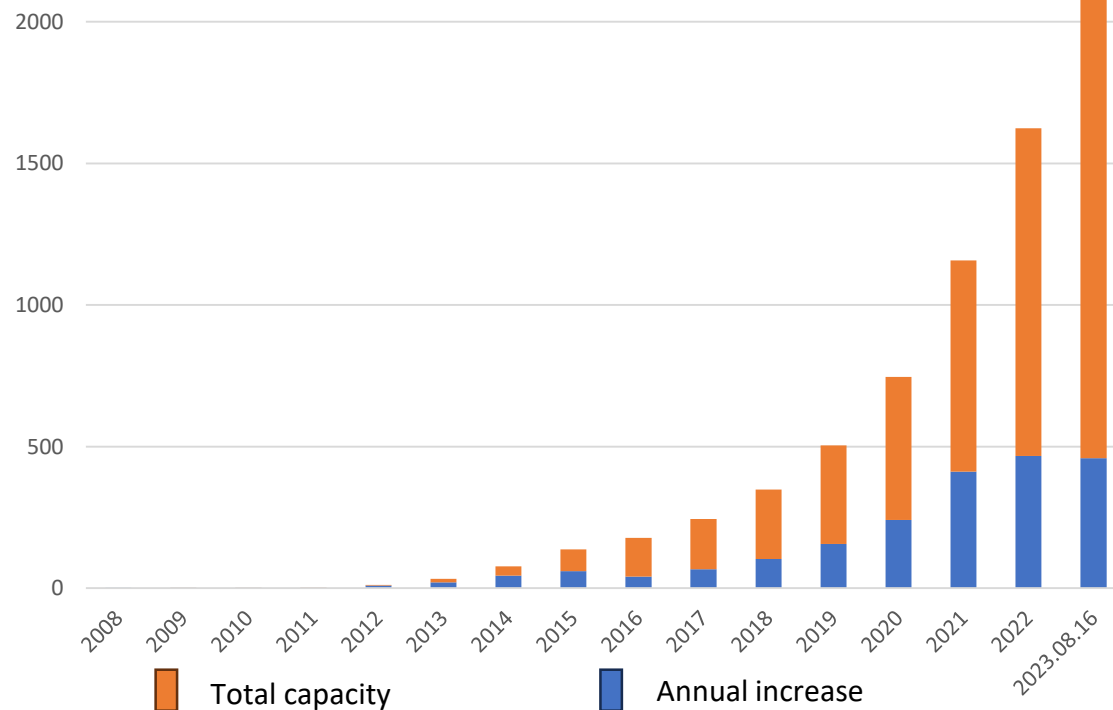
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Hungarian context



Deployment of household PVs
[MW]



- **Price cap** on utility costs
- **Net settlement** of HH PVs
- **Costly** voltage **problems**
- **Feed in ban** for new installations
- **Lack of** market-based **flexibility**

DAPPoD project – technical aspects



DAPPoD = Decentral Autonomous Photovoltaic Power Derating

WHY?

Voltage fluctuation cause **automatic PV inverter swich offs** at 253V.

WHAT?

Reduce voltage parameters' violation by **automated inverter regulation**.

HOW?

91 customers in 7 LV line areas in 3 villages download an **algorithm** that automatically **limits power output** at certain voltage level (249-253V).
The curtailment **decreases linearly until voltage slips back** to standard level.

SUCCESS?

If **voltage** regulation **within standards** in all LV line areas after intervention.

DAPPoD project – regulatory aspects



Moral dilemma of curtailment



Baseline question (expected injection)



Compensation need



Invoicing and Tax issue



Customer engagement challenges



Lowest cost principle & revenue framework



Conclusions so far



Customer engagement is a key for success

Market flexibility can be an option to resolve problems, however, market immaturity and lack of incentives are barrier to effective solutions.

Strong need for streamlined processes with easy-to-use solutions

Simplified offers (standard price) and less administration can open the way to households and small customers.

Less regulation or sandbox

Regulatory barriers hinder pilots, while successful pilots lead to regulatory proposals. Regulation should allow room for experimentation.



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**THANK YOU
FOR YOUR ATTENTION!**

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