



# Local Flexibility Market

## Challenges

- How to unlock the business potential of flexible and distributed resources in the energy sector?
- How to utilise local production, consumption and demand-response at the best possible way?
- How to utilise local small-scale production in electricity grid?

## Results

In a Nordic electricity market environment, the need for local flexibility markets is challenged by:

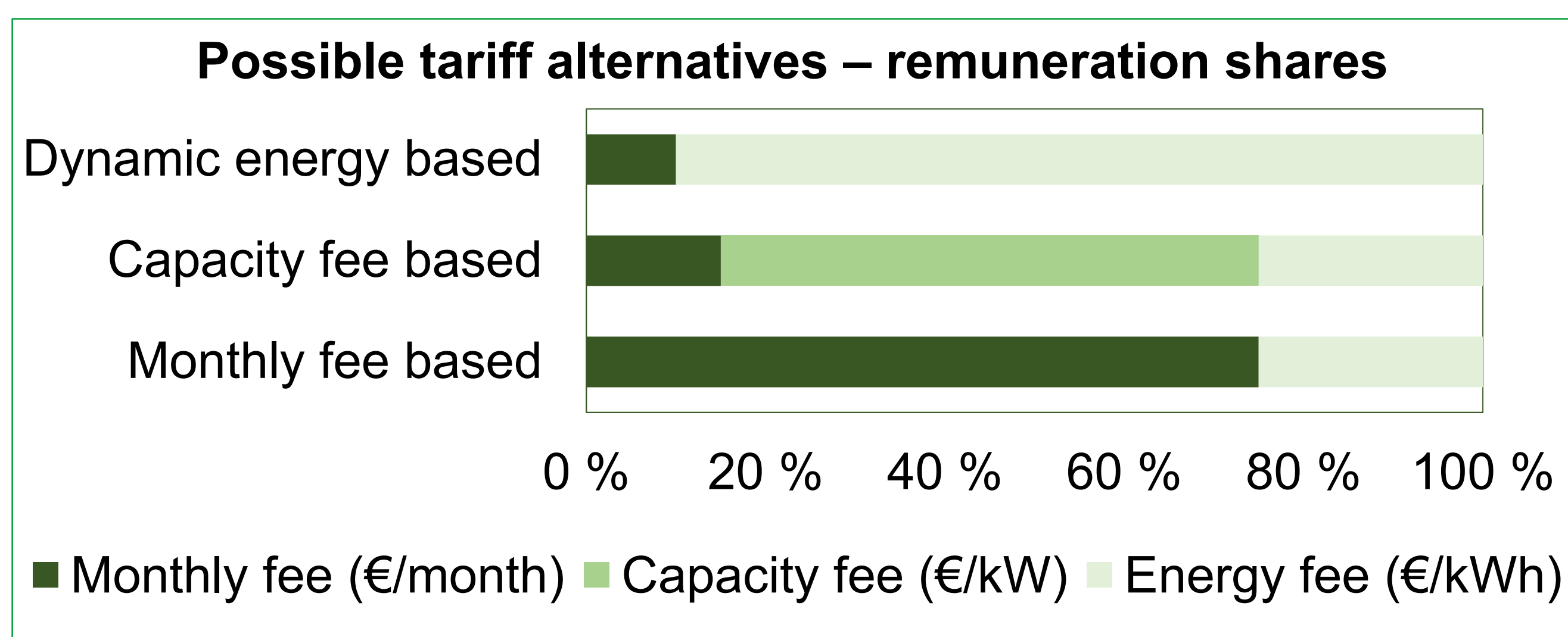
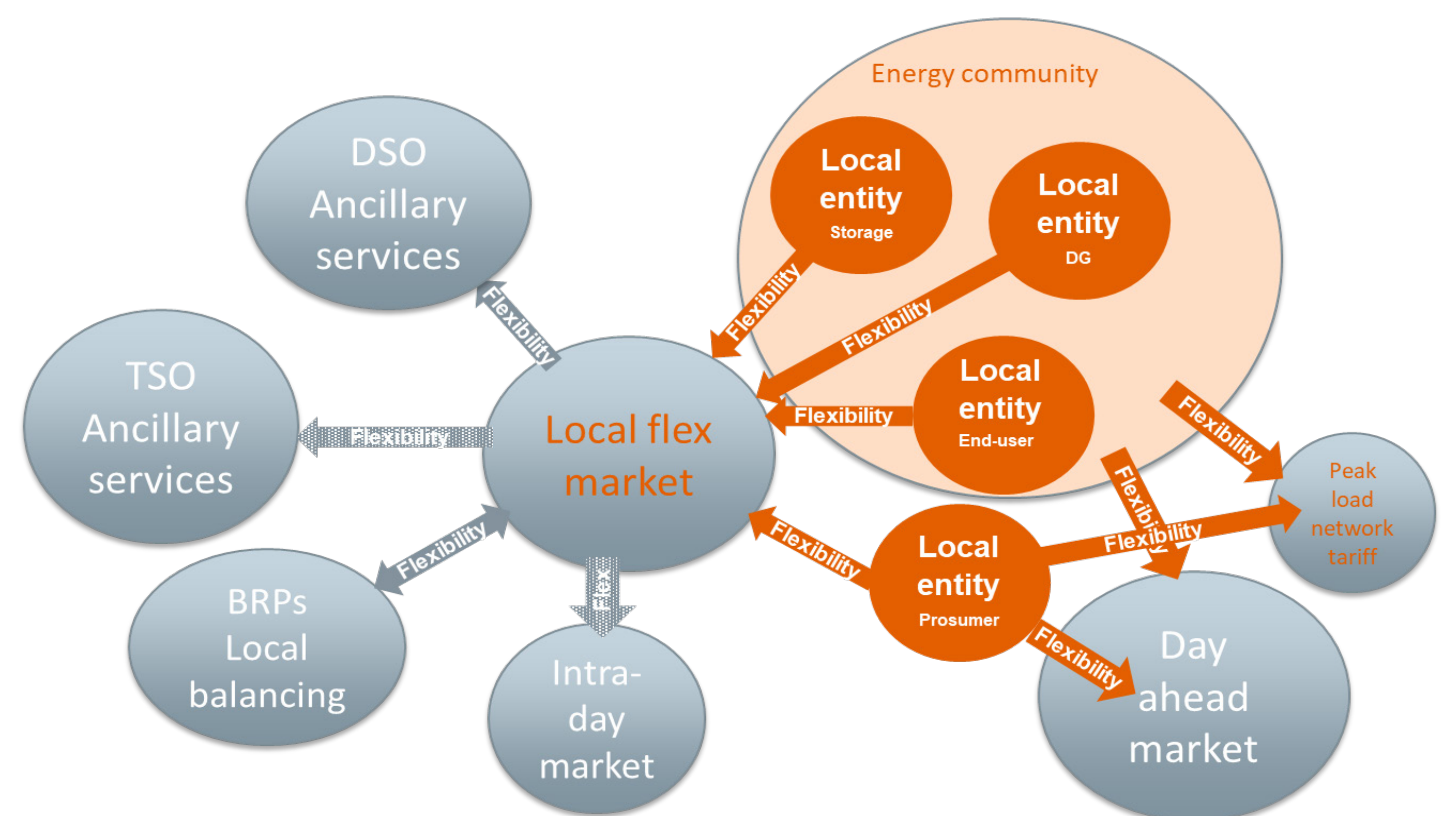
- Local peer to peer trading is not found to benefit the power system in general
- Flexibility should be used where it is most valuable and that is quite often on the system level

However

- Different and less developed market environments exist
- Local markets could work as siphons of small scale flexibility for wholesale markets
- Local distribution network bottlenecks would be the main target for local markets, although the execution might differ according to if the bottleneck is inwards or outwards. For inward bottlenecks, new tariff structures might be the key.

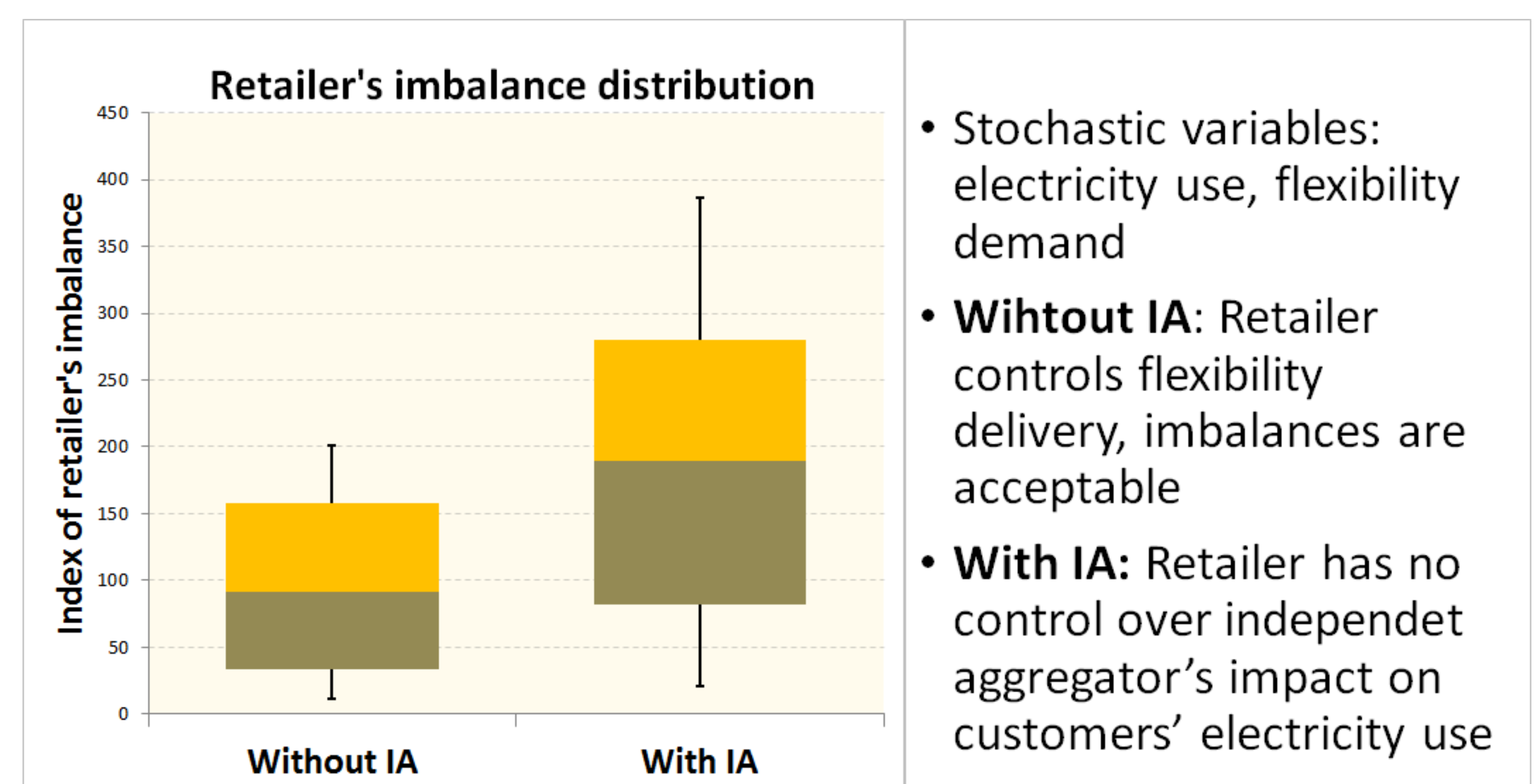
## Goals

- Establish a local market framework for Smart Energy Ecosystems where novel flexibility management services could be demonstrated.
- Test new ways of market operation, including connectivity and data flows, providing wholesale energy market capability and accountability of transactions on both market levels
- Study new local market enabled business models



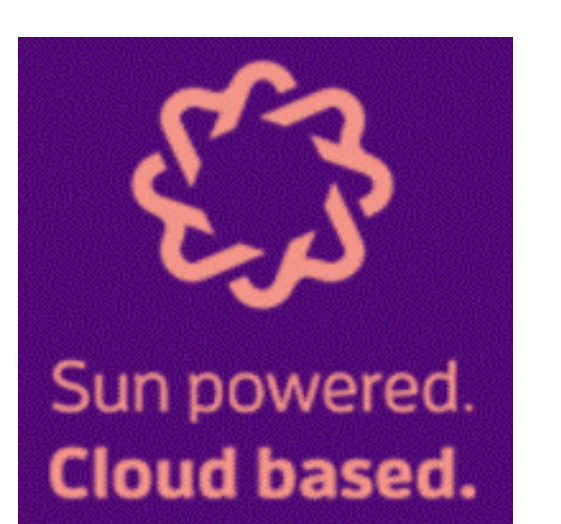
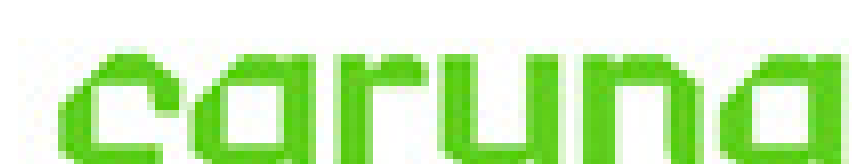
The basis of a fair market implementation is the **balance management and settlement**.

- Balancing model for estimation of balance flows
- The concept of each end-user as a balance responsible party: balancing issues are much easier to manage and keep as fair for all parties



IA=independent aggregator

## Pilot partners



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