

The European Power Exchange in the Energy Market Transition

Serbian Energy Law Association
Belgrade, 4.12.2018

A truly European Power Exchange

16 nationalities in staff

7 local offices across Europe

14 EEX Group in total

7 European shareholders

51% private, 49% TSOs

8 European markets operated

8 new planned

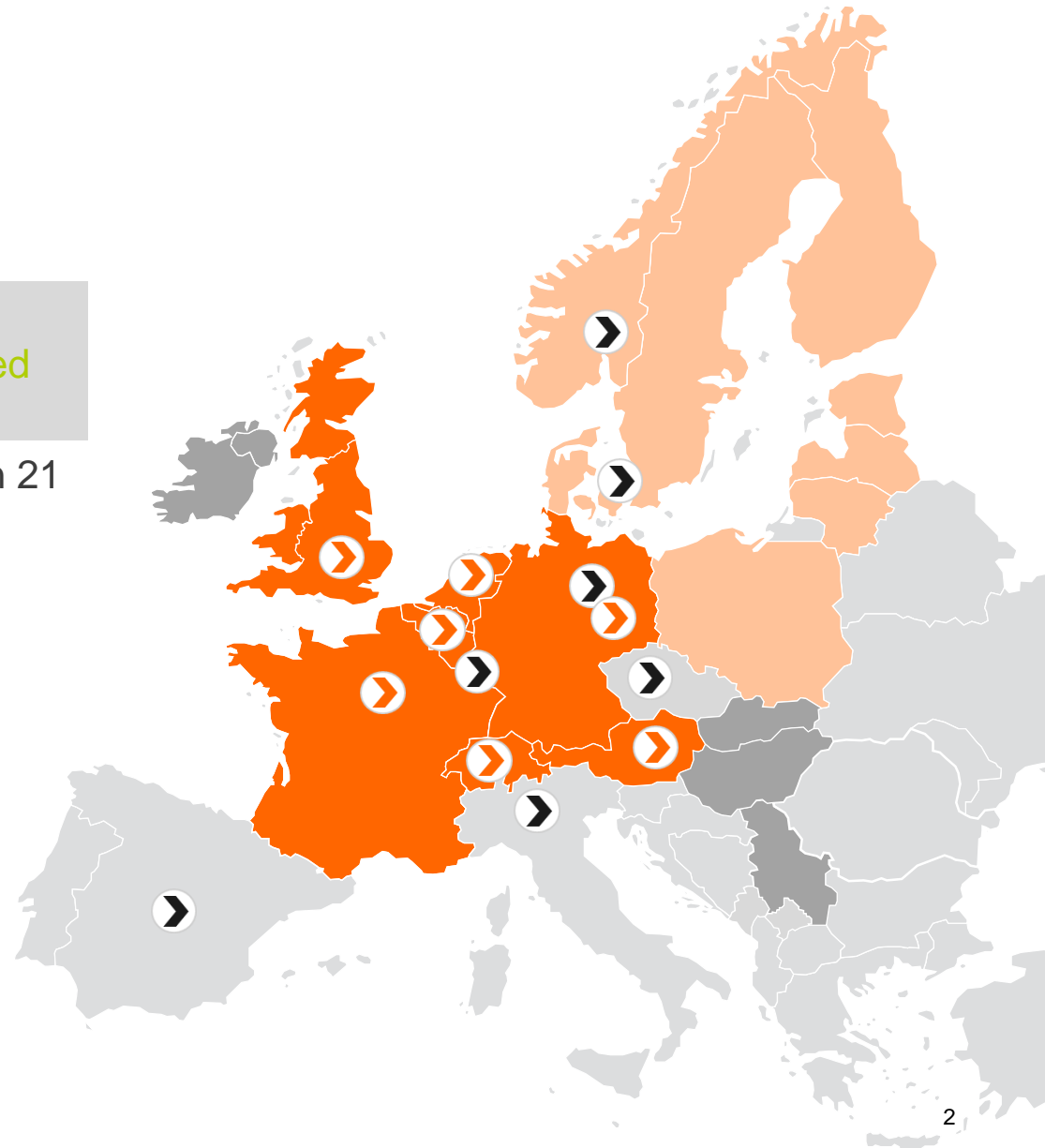
21 borders market-coupled

285 members in 21 EU countries

Markets cleared by **ecc**

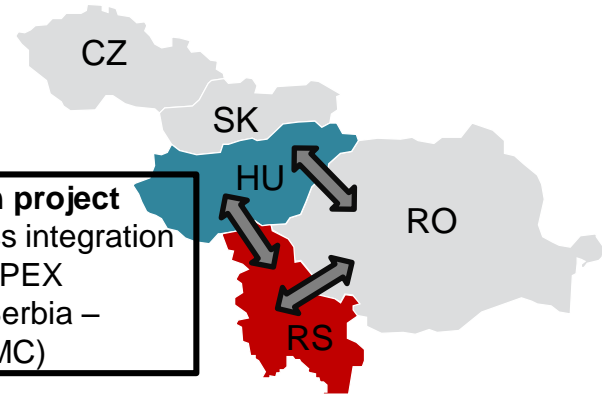
- Current EPEX markets
- Coming soon
- Serviced Power Exchanges

 Local EPEX / EEX Group offices



A new regional Power Exchange for the Central and South Eastern European region in 2019

- 5 February 2018 – Penta-lateral MoU signed by EMS, MAVIR, EPEX SPOT, HUPX and SEEPEX
- **Main goals of the cooperation**
 - Merge HUPX and SEEPEX spot power businesses in order to create a **robust and strong spot Power Exchange in the CSEE region**, with DA and market coupling operations provided by EPEX
 - Enhance cooperation between TSOs and the NEMOs in the CWE/CEE common region and SEE region and contribute to the successful achievement of both political and economic common goals
 - Implement Market coupling (DA and ID) between Serbia and Hungary (and 4MMC)
- **Shareholders structure:** TSO cluster (EMS and MAVIR in initial stage) and EPEX SPOT
- Business and regulatory status to be:
 - Power spot focused
 - For profit, customer driven
 - No monopoly status

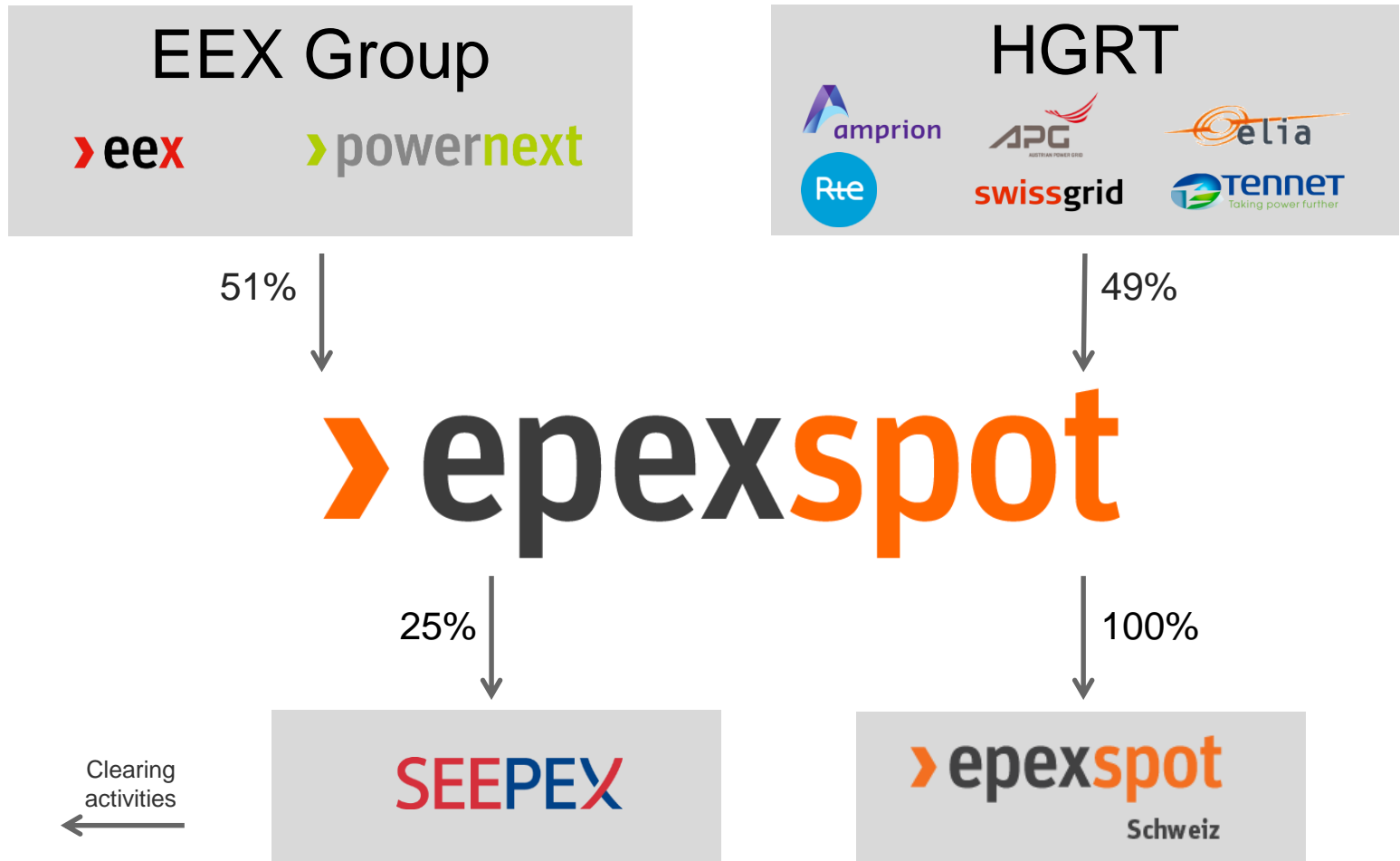


Regional integration project

- Corporate/business integration of HUPX and SEEPEX
- Market Coupling Serbia – Hungary (and 4MMC)



Shareholder structure



Part of
EEX Group

One gateway to value the whole chain of power trading

> **eex**

> **epexspot**

**FUTURES
MARKET**



**CAPACITY
MARKET**



**DAY-AHEAD
AUCTION**



**INTRADAY
CONTINUOUS**

Year/Month/Week
before delivery

Year(s) before/
after delivery

One day
before delivery

Until 5 min before
delivery

HEDGE
fluctuations

Value
CAPACITY
DEMAND-RESPONSE

Value
PRODUCTION
CONSUMPTION

Value
FLEXIBILITY

> **ecc**

Integrated & Secure Clearing Solution

Who are sellers and buyers on EPEX SPOT?



EPEX SPOT at a glance

535 TWh

traded in 2017 on all spot markets

+6% Y2Y for 2018

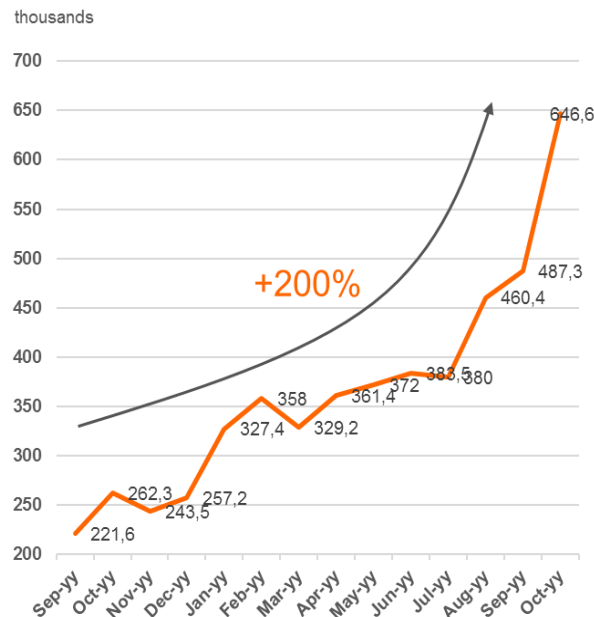


1st

operator of a European market-based **local flexibility** demonstrator in 2019

Proven technical **performance** adapted to new market behavior

Number of orders on EPEX continuous markets

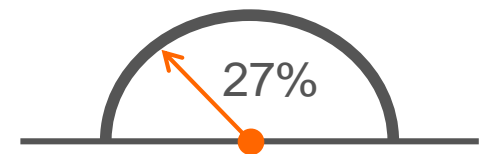


Largest Intraday market in Europe with **71 TWh** traded in 2017

+15% CAGR since 2015

Success of 15min products

27% of German intraday volumes traded on 15-min contracts

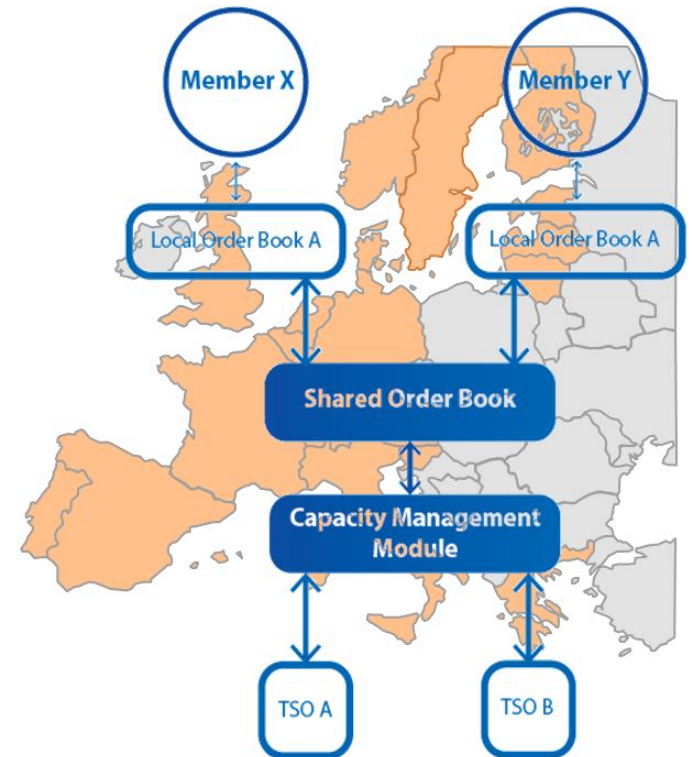


Two « Target Models » for market integration, now set in the EU Law

Day-Ahead Market Coupling

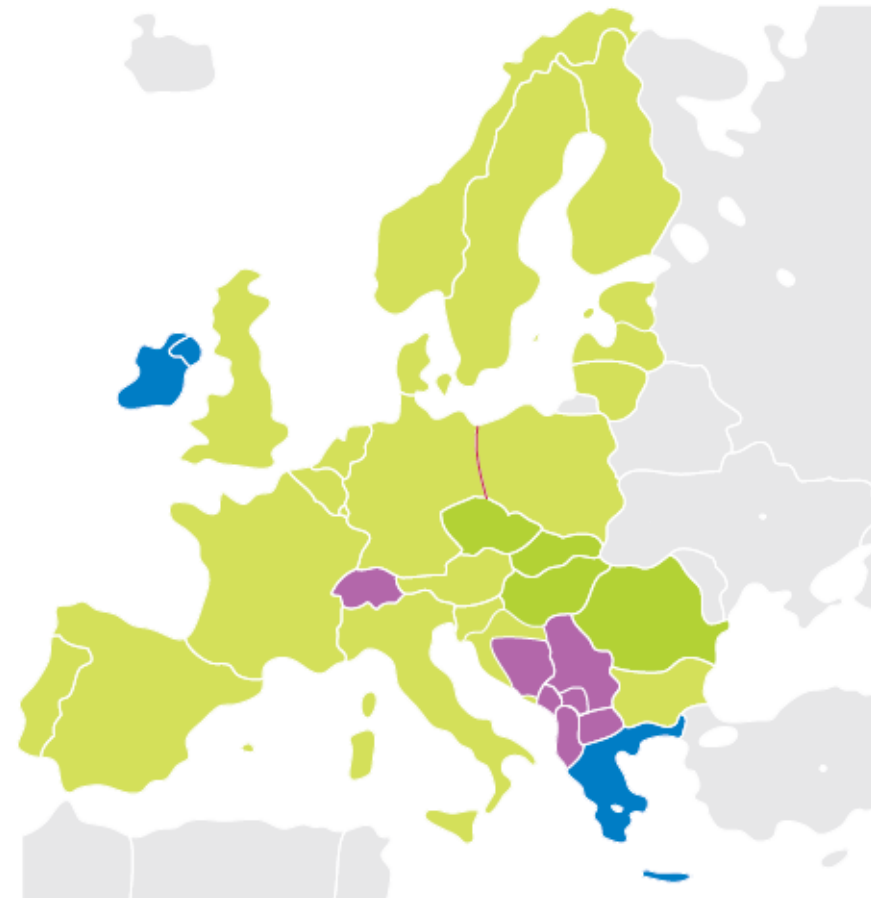


Intraday Market Coupling



Clean Energy Package fosters competitive, liquid & European-wide interconnected wholesale markets

- **Market coupling** is a major step towards market integration. Remaining barriers to cross-border trade must be further abolished
- Allow unrestricted, **market-based price formation** & scarcity pricing – no regulatory price caps
- **Large and liquid bidding zones** are essential. Involve all key stakeholders in the decision-making process to redraw them if need be
- Ensure **consistency with the processes currently in place for the network codes and guidelines**
- Future market design should also allow customers to **offer their flexibility in a market-based manner**



■ SDAC markets (MRC) ■ SDAC markets (4MMC)
■ SDAC market extensions (MRC) ■ SDAC potential markets

Source: ENTSO-E, First Joint Report on the Progress with the Implementation of Intraday and Day-Ahead Coupling, August 2018

From global to local: flexibility offered at each grid level

Wholesale



global flexibility
to balance the grid

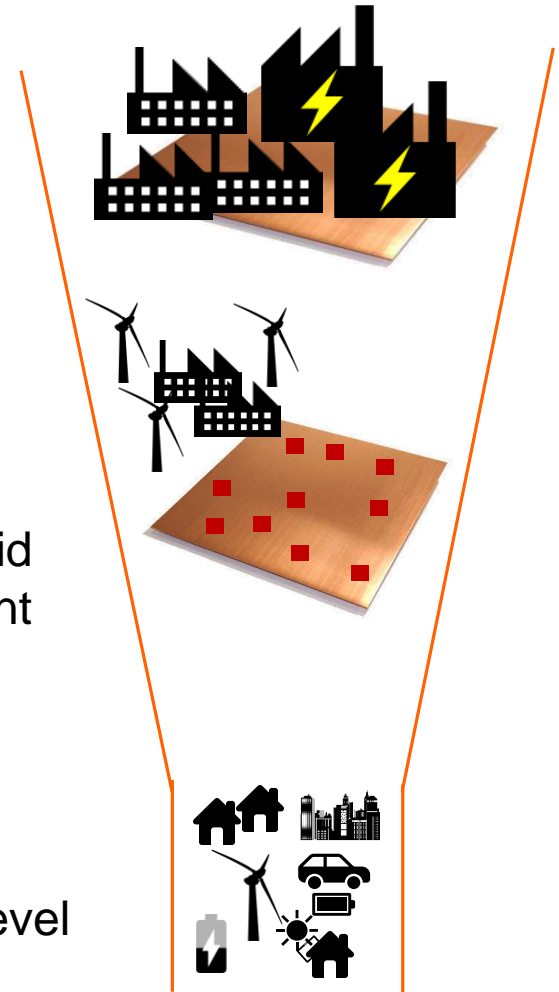
Local



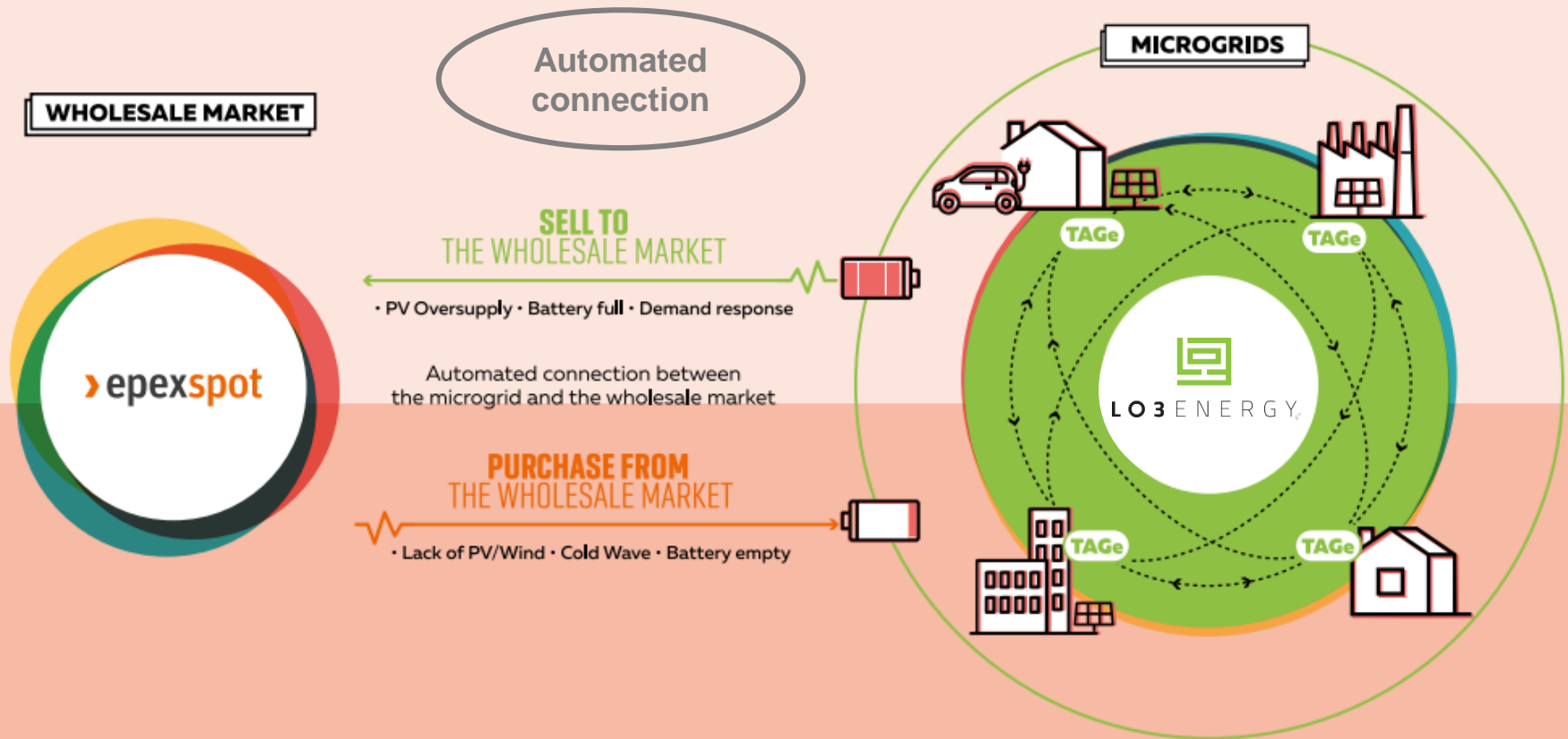
local flexibility
to alleviate local congestion at grid node level, when & where relevant

Microlocal

microlocal flexibility
at the household / building / block level



The next level : the micro-local will support flexibility needs at all grid levels



- ✓ Wholesale market
- ✓ Local flexibility markets, when and where relevant

- ✓ Microgrids
- ✓ Smart devices
- ✓ Electric vehicles
- ✓ Storage
- ✓ Any type of flexibility (IoT)

Thank you for your attention!

> epexspot



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