

# Pilot Project # 3 e-GCC

Cross Border Balancing Pilot Project  
(14th May 2014)



## e-GCC is the imbalance netting project

(similar to IGCC module 1)



Cooperation based on a multilateral contract (each participant has the same rights and obligations)



Balancing energy with a fix settlement price for Import



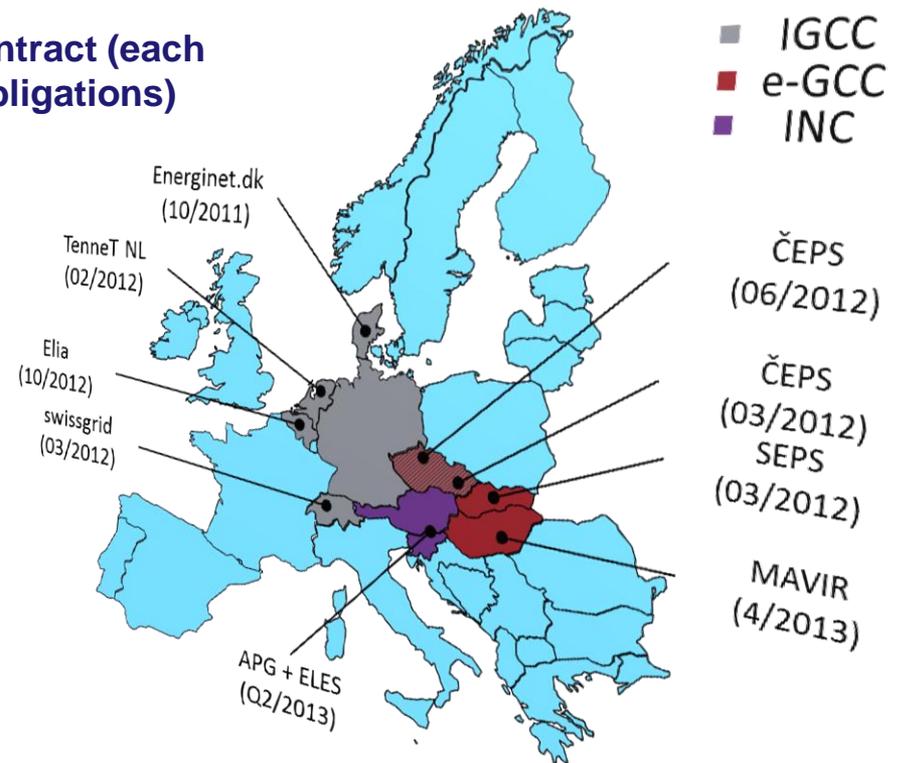
TSO-TSO settlement administrated by a fully automatic IT solution



Operator is ČEPS



With possibility to connect into IGCC, allowing hierarchical merging (ČEPS is participating in IGCC)



## Main features:

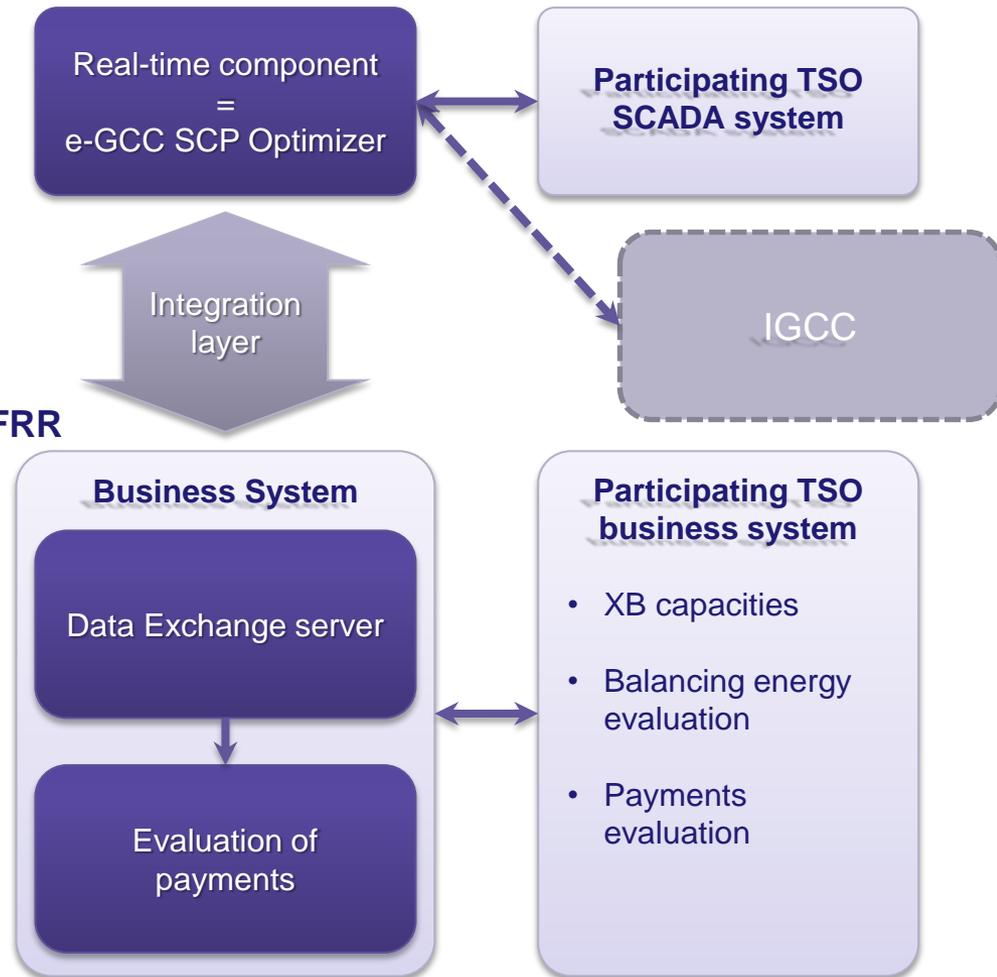
- Centralized IT platforms
- Allowing multiple connections
- Public interface documentation
- Operated by a single entity (TSO) ČEPS

## Real-time component:

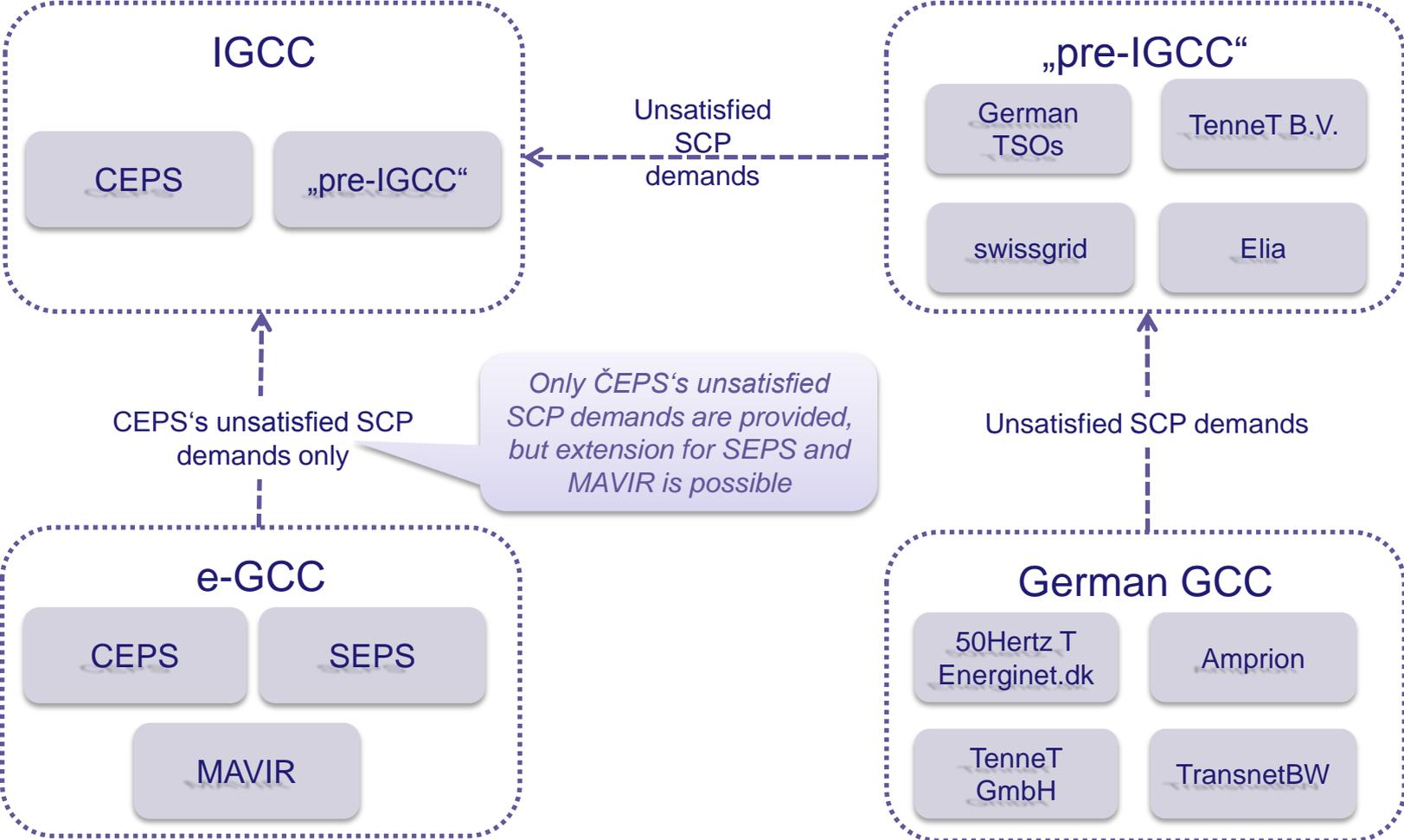
- 4sec loop ensuring efficient activation of aFRR

## Business component:

- TSO-TSO settlement:
  - ↳ Data matching on a daily base
  - ↳ Data reclamation
  - ↳ Calculation of payments
- Fully automatic solution
- Based on web services



# e-GCC & IGCC cooperation



# What could be the contribution of e-GCC when developing the EU balancing market? #1

## Creation and enlargement of a CoBA

- Multilateral contract gives the same rights and obligations to each participant and already includes entry process for newly joining TSOs (IGCC contract is bilateral)
- Documentation of the IT solution is already in English allowing an easy step-by-step connection of a new TSO

➔ *Knowledge of „how to do it“ thanks to ongoing development*

## Settlement based on a fix price

- An easy and transparent solution in comparison with settlement based on opportunity pricing methodology (IGCC settlement price is based on opportunity price)

➔ *Could be used as a reference to other pricing methodologies when elaborating which pricing methodology reflects the value of avoided activation*

# What could be the contribution of e-GCC when developing the EU balancing market? #2

## Collaboration of two different cooperation („CoBAs“) with the same subject but different basics such as:

- Settlement methodology
- Business and IT solution
- Decision making

➔ *Experience with setting the rules so they allow multiple cooperation for a single TSO*

## Experiences from a real-time operation by dispatchers

- Operation of e-GCC
- Cooperation with IGCC
- Cooperation with PSE (case of highly matched grids)

➔ *Experience gained after more than one year of operation*



## **Finished/ ongoing tasks:**

- ČEPS and SEPS are already granted with a permission for a regular operation by ENTSO-E RGCE SOC
- Regular reporting on ACE quality towards ENTSO-E working groups for MAVIR

## **Step one - Operational experience:**

- Necessary for the third-party co-operation;
- TSOs investigate independently the impact of the cooperation on national markets;
- Examination of the cross border capacity constraints.

## **Step two – Analysis, studies and designing:**

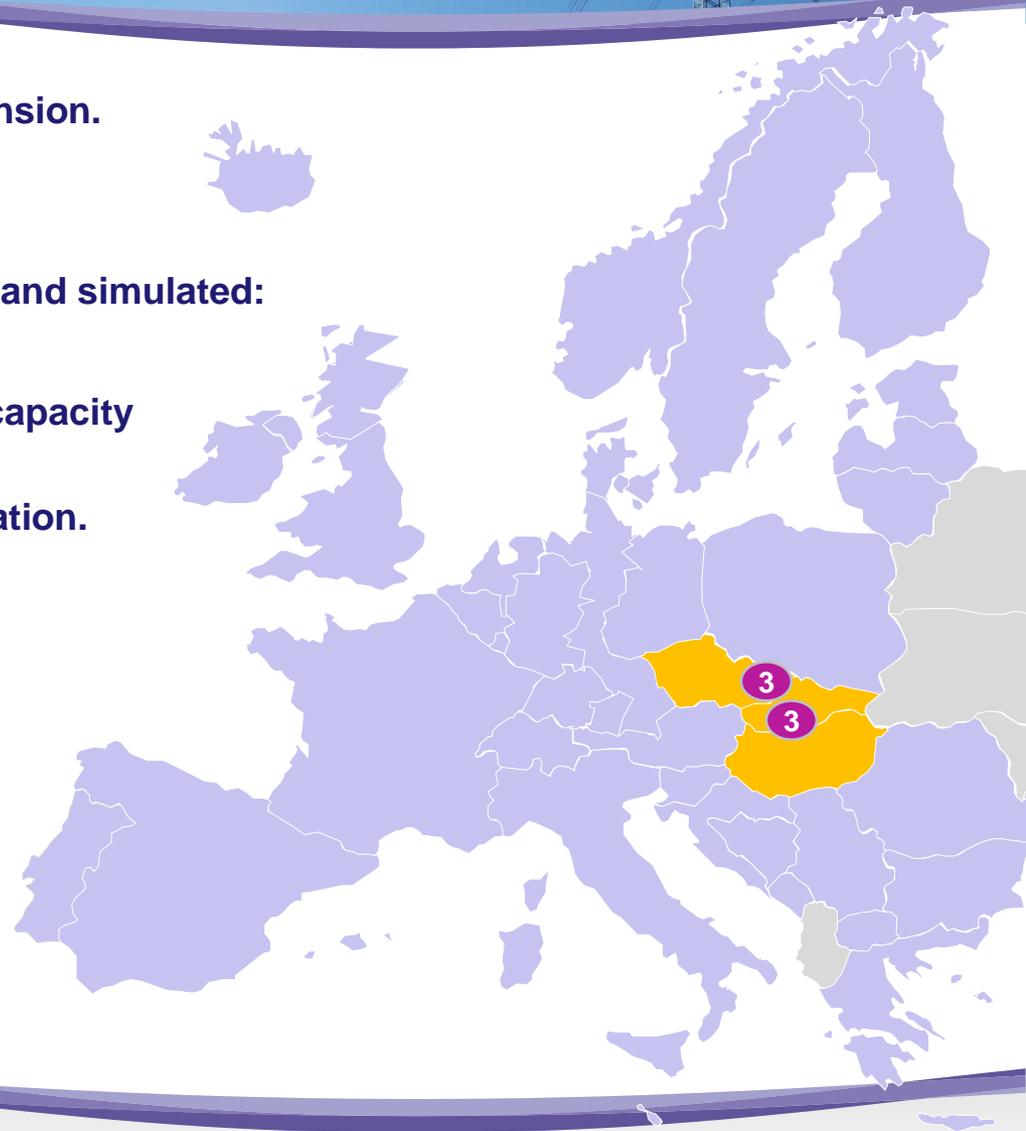
- Discussion about possible modification of settlement price calculation begins. In the second half of 2014 it is planned to make a Cost Benefit Analysis on the current and the possible future pricing methodologies.

## **Step three – Enhance the cooperation and harmonization:**

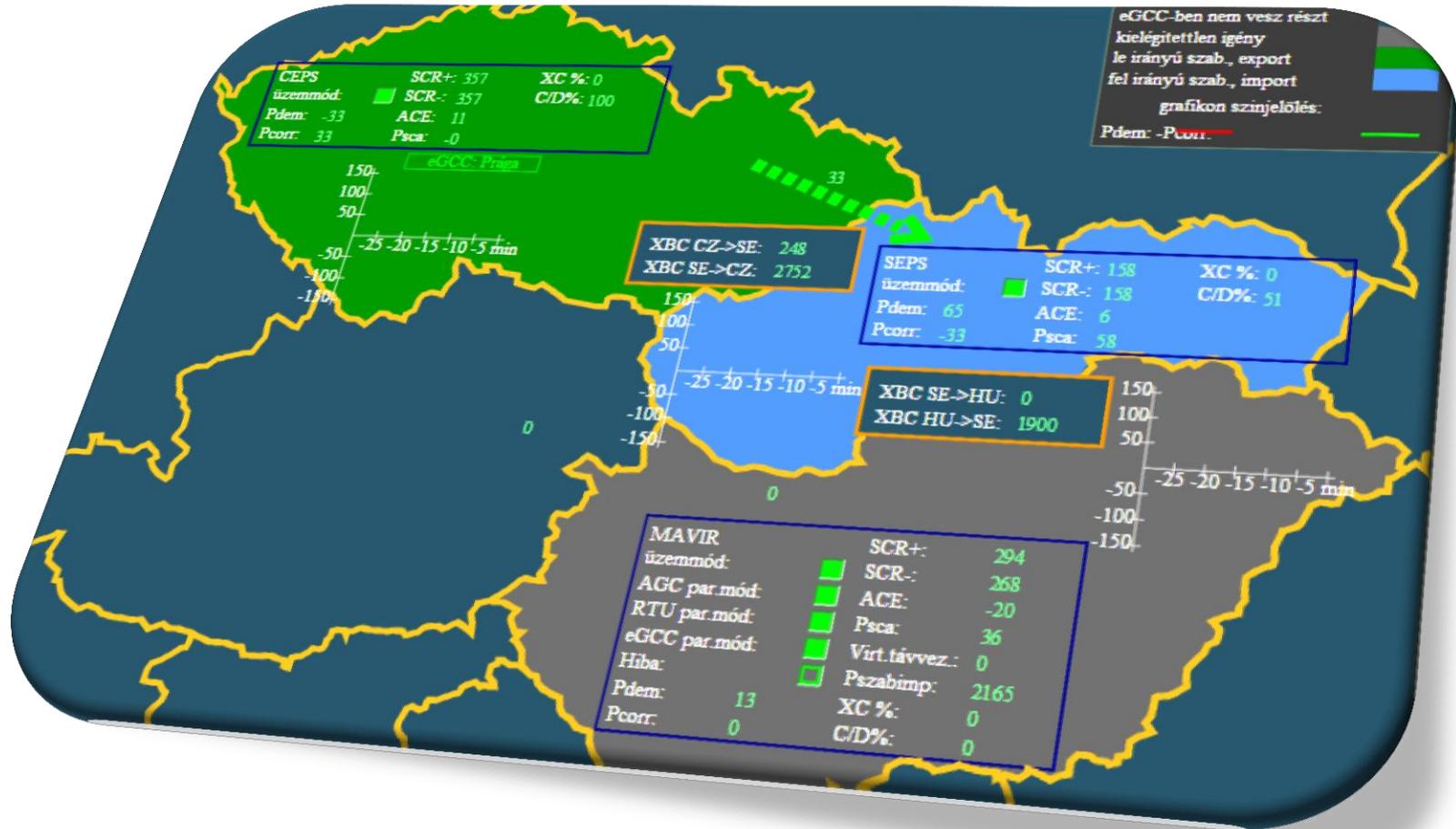
- Close cooperation with the other pilot projects for examining and collecting the conclusions deriving from the their test periods,
- Evaluation of possible advantages resulting from merging with other imbalance netting projects (future inter-CoBAs cooperation or merging).

# Co-operation with other Projects

- There are options for both merging and extension.
- CEPS is already inside IGCC;
  - Needs to be agreed bilaterally.
- The extension or merging needs to be tested and simulated:
  - Geographical extension,
  - Technical limits, such as cross-border capacity limit calculation and consideration,
  - Methodology of Settlement price calculation.
- Operator of the co-operation;
- Levels of co-optimisation need to be defined.



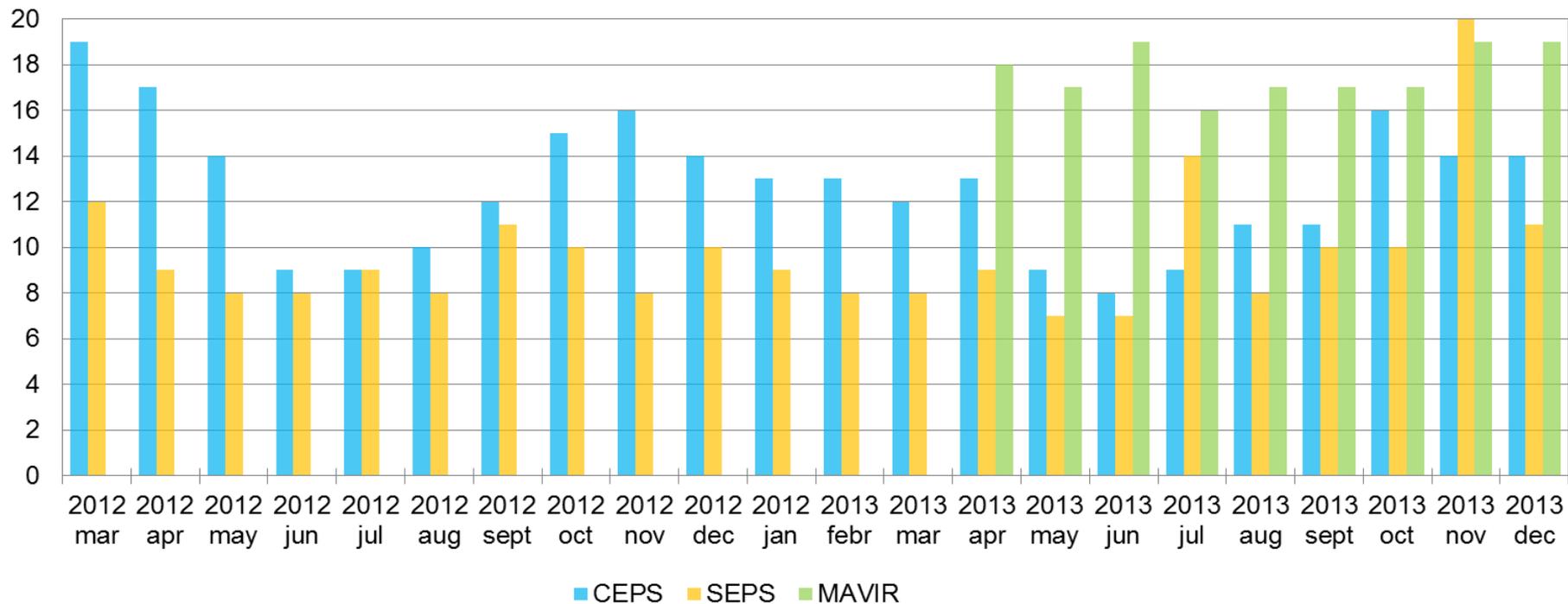
# Results of e-GCC Operation



# Results: ACE Quality



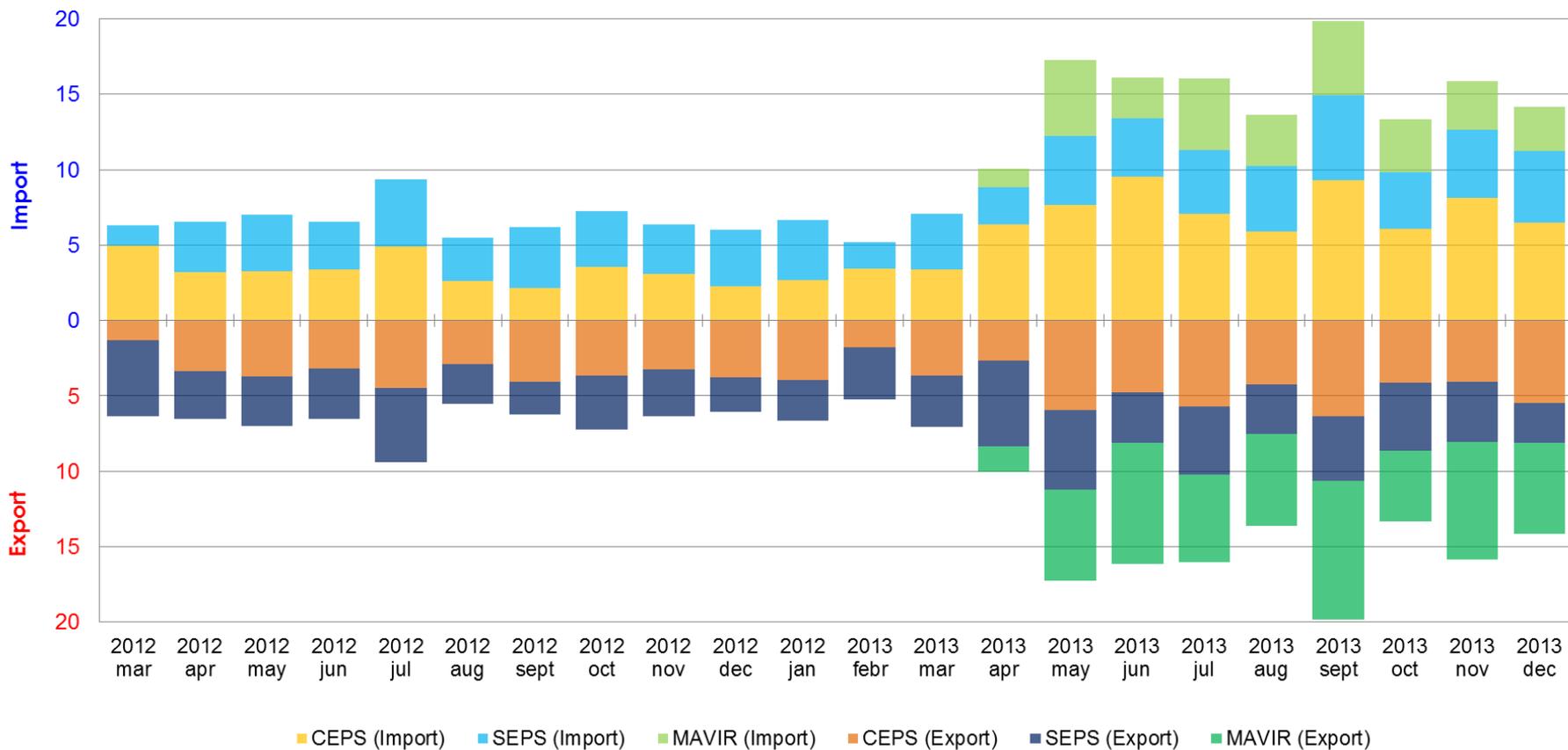
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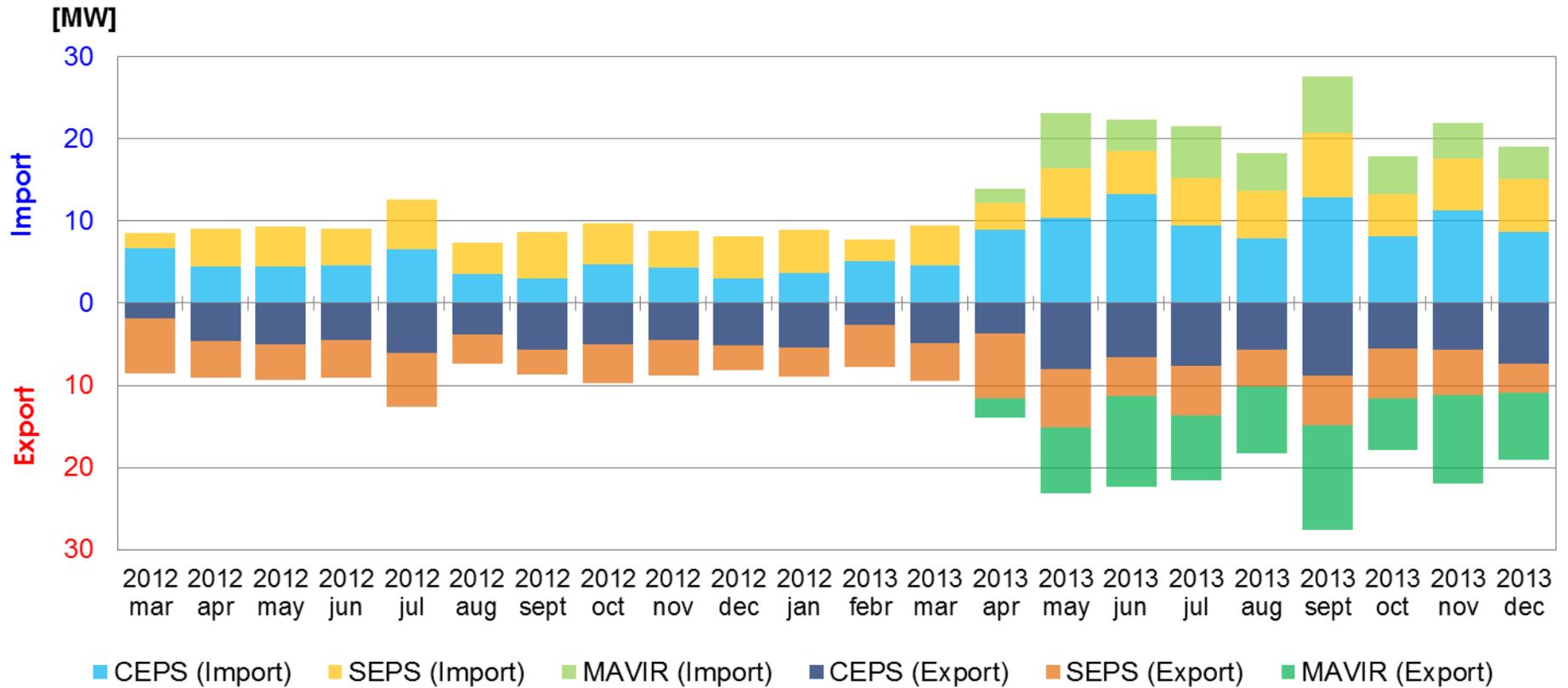
# Results: Exchanged energy (Import and Export)



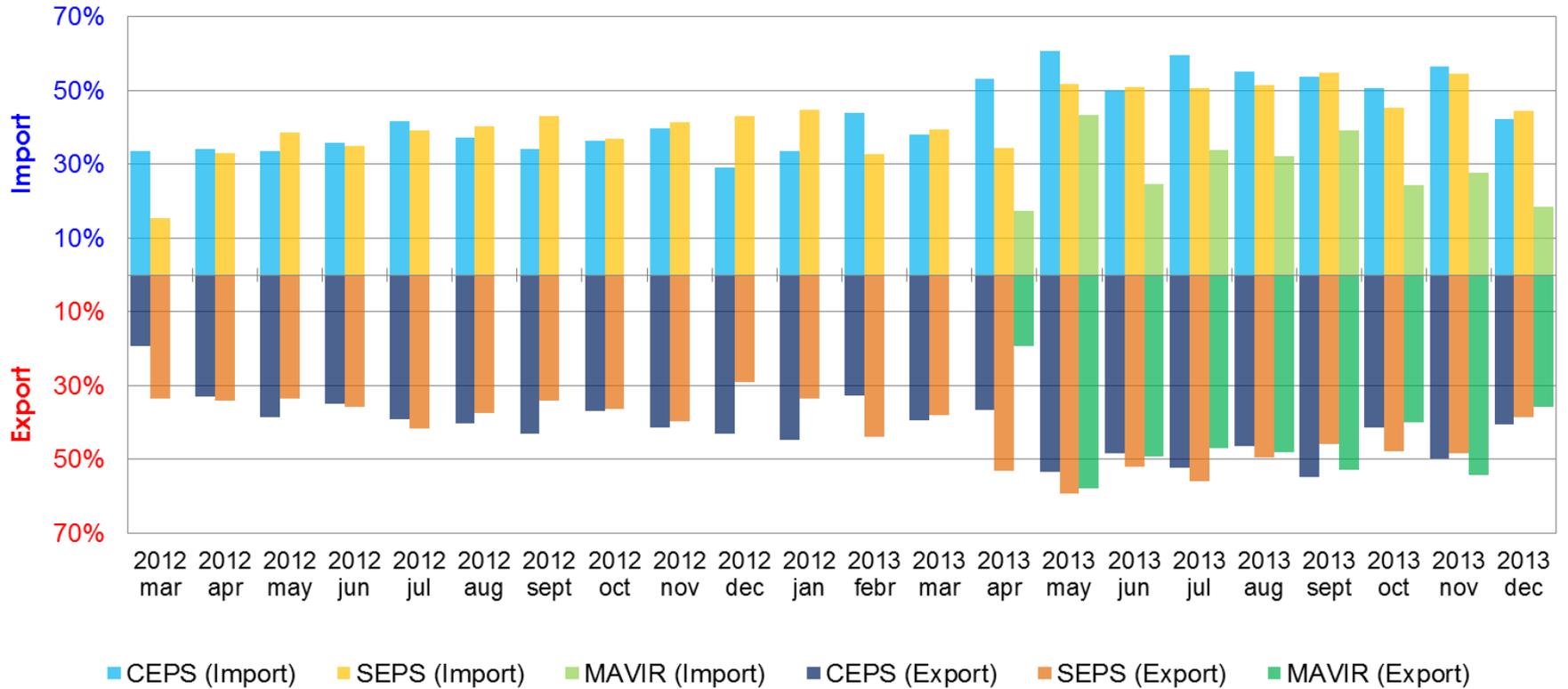
[GWh]



# Results: Hourly average of netted imbalance



# Results: Ratio of hours for successful exchange



Thank you for your attention.

Evelin Kiss (kisse@mavir.hu)  
MAVIR

