

Trading and optimisation with CBAM

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Zonal market design

Principle: commercial exchanges will follow the higher price!

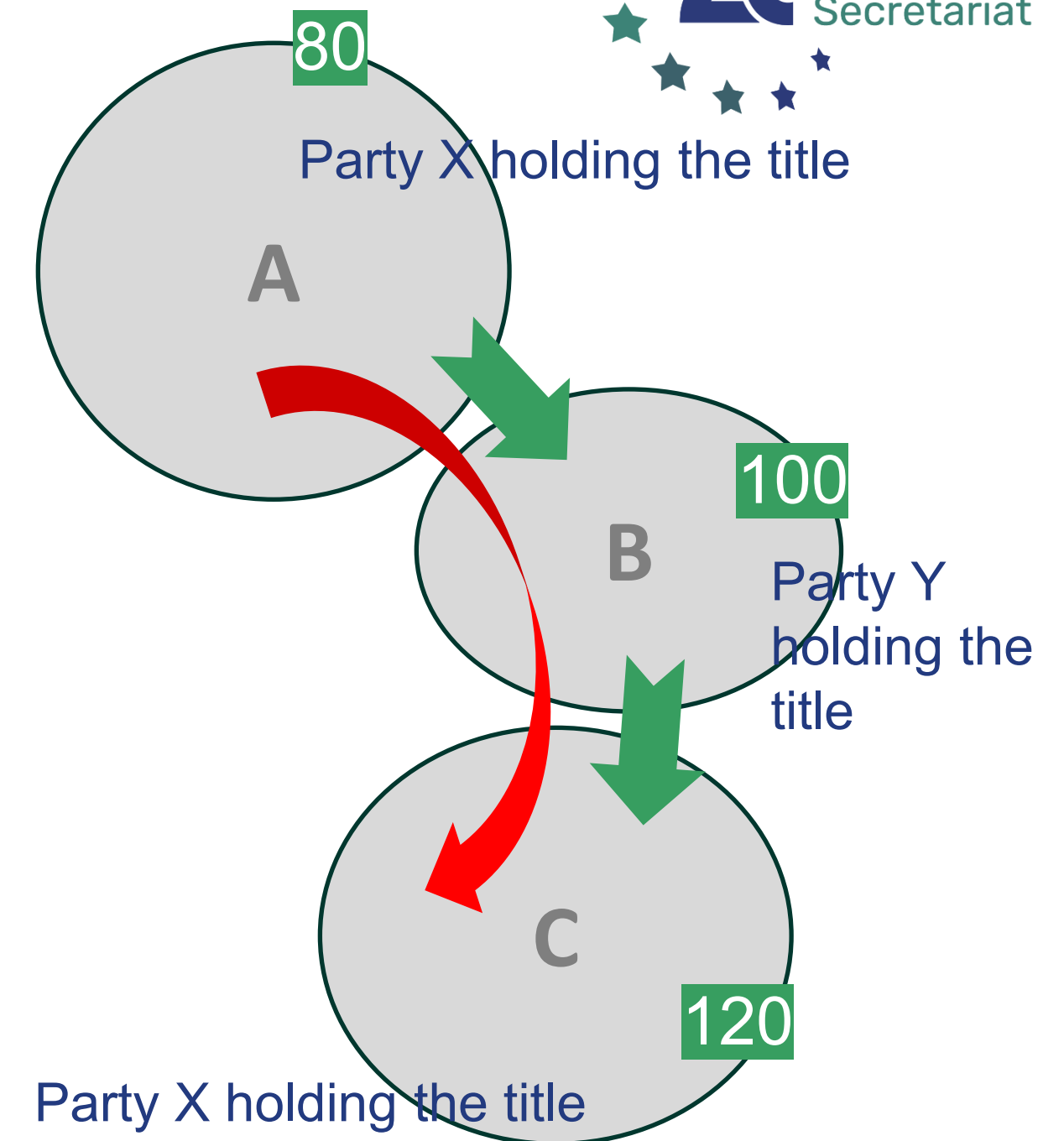
- Price differences show limited cross-border capacity
- Many market participants / many interconnected markets / many market places (PXs)
- Regulatory and tax regime requiring local establishment on some of the market (need for local entities to hold the title in certain markets)
- TSOs balancing exchanges / unintended deviations! / settlement of costs related to ph. flows

Current market practice:

- Electricity traded from market A to B, takes the characteristic of market B
- Once scheduled to flow from A->B it is electricity of market B (if it is further delivered in market C, it goes as a product of market B)
- Electricity delivered in market B 'becomes' a product of market B, regardless of its source market or technology (hence specific regime of certificates or GoO)

Regional portfolio objective:

- Hedging, including proxy hedging (using more liquid markets to hold long-term position)
- Optimise of portfolio across region and market timeframes / utilisation of x-border capacity / avoiding counter-intuitive flows (high-price to low price)
- Minimise welfare loss



Party Y might be:

1. Sister company of X (or X)
2. Third party
3. PX in market B

Trading practice (simple)

Trading 1 MW

Principle: commercial exchanges will follow the higher price!

RS=>HU&MK / GR=>MK / All to HU

*subject to availability capacity

1. EU trader 'X', long in GR / short in HU ↑

- a. Commercial flow GR-MK (sell in MK) – recorded as export of X
- b. Commercial flow RS-HU (buys in RS) – in HU is recorded as import of X

Optimised trades and flows / efficient used of x-border capacity

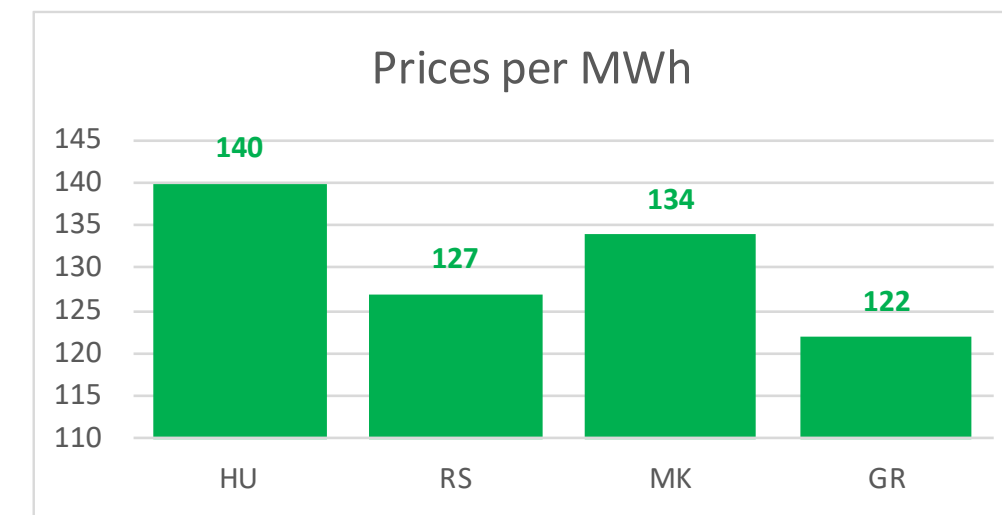
... but, CBAM would apply

2. EU trader 'X', long in GR / short in HU ↑

- a. Commercial flow GR-MK – to be recorded as transit of X
- b. Commercial flow MK-RS – ideally recorded as transit in MK and RS of X
- c. Commercial flow RS-HU (buys in RS) – recorded as transit of X

Non-optimised trades and flows / non-efficient used of x-border capacity

... possibility to account for CBAM exemption



Reality is more complex

Principle: commercial exchanges will follow the higher price! ↑

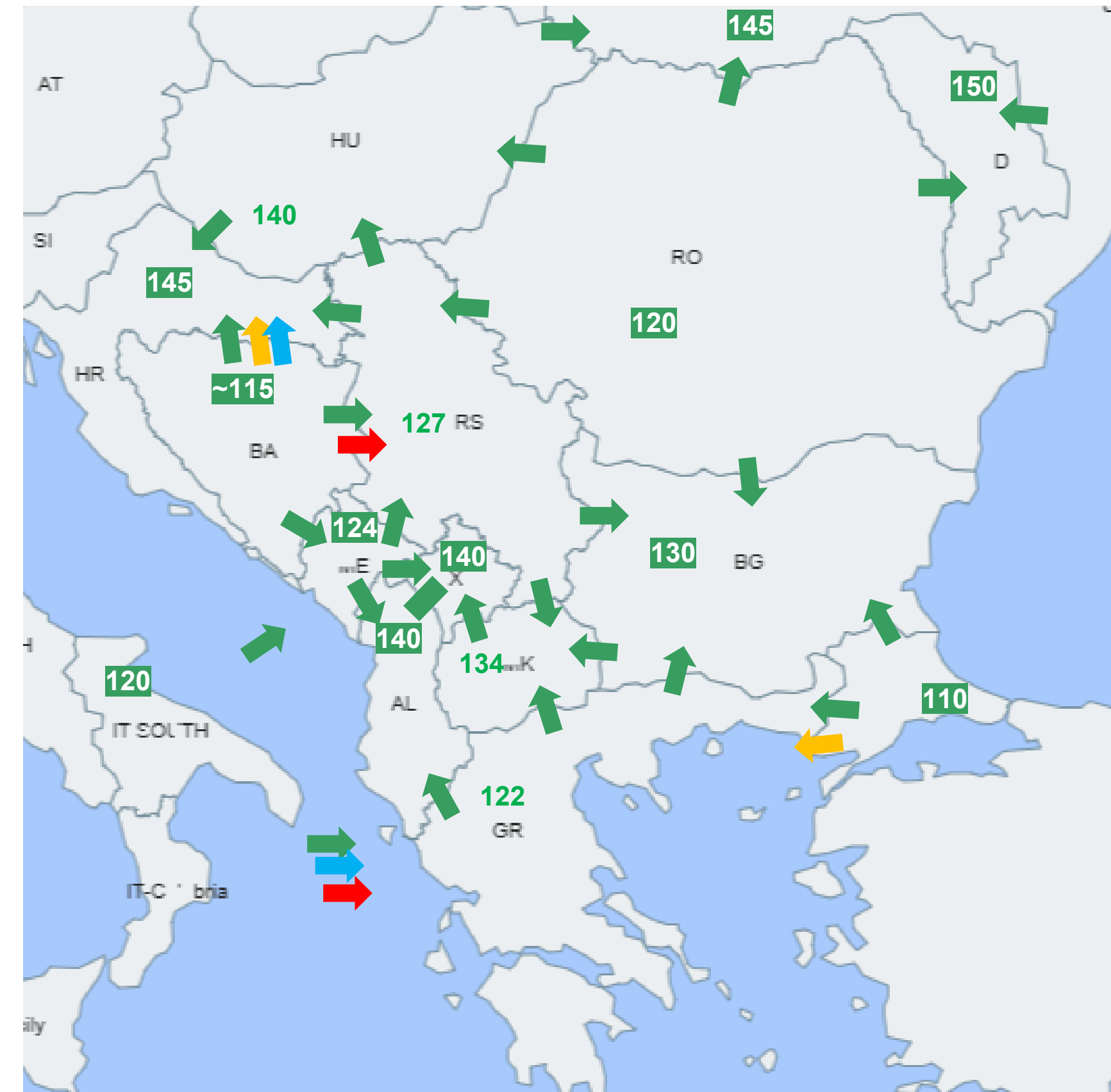
Prices in each market are result of regional market fundamentals and x-border capacity

Optimising the portfolio across region ...

The complex reality – commercial flows: in and out EU / in and out CPs / also impact from Turkish market

Market participants with regional positions: **long in BA, short in GR**

1. Sell in HR / buy in TR sell in GR ↑
 - Two times import in EU, but optimised flows in European grid (efficient)
2. Sell in HR / buy in IT sell in GR ↑
 - One import in EU, less optimised flows, likely to congest northern GR borders (inefficient)
3. Sell in RS / buy in IT sell in GR ↑
 - No import in the EU, non-optimised flows creating higher price differences resulting in welfare loss (fully inefficient)



CBAM and market behavior

Principle: commercial exchanges will follow the higher price, depending on CBAM certificate!

Prices in each market are result of regional market fundamentals and x-border capacity + CBAM certificate price

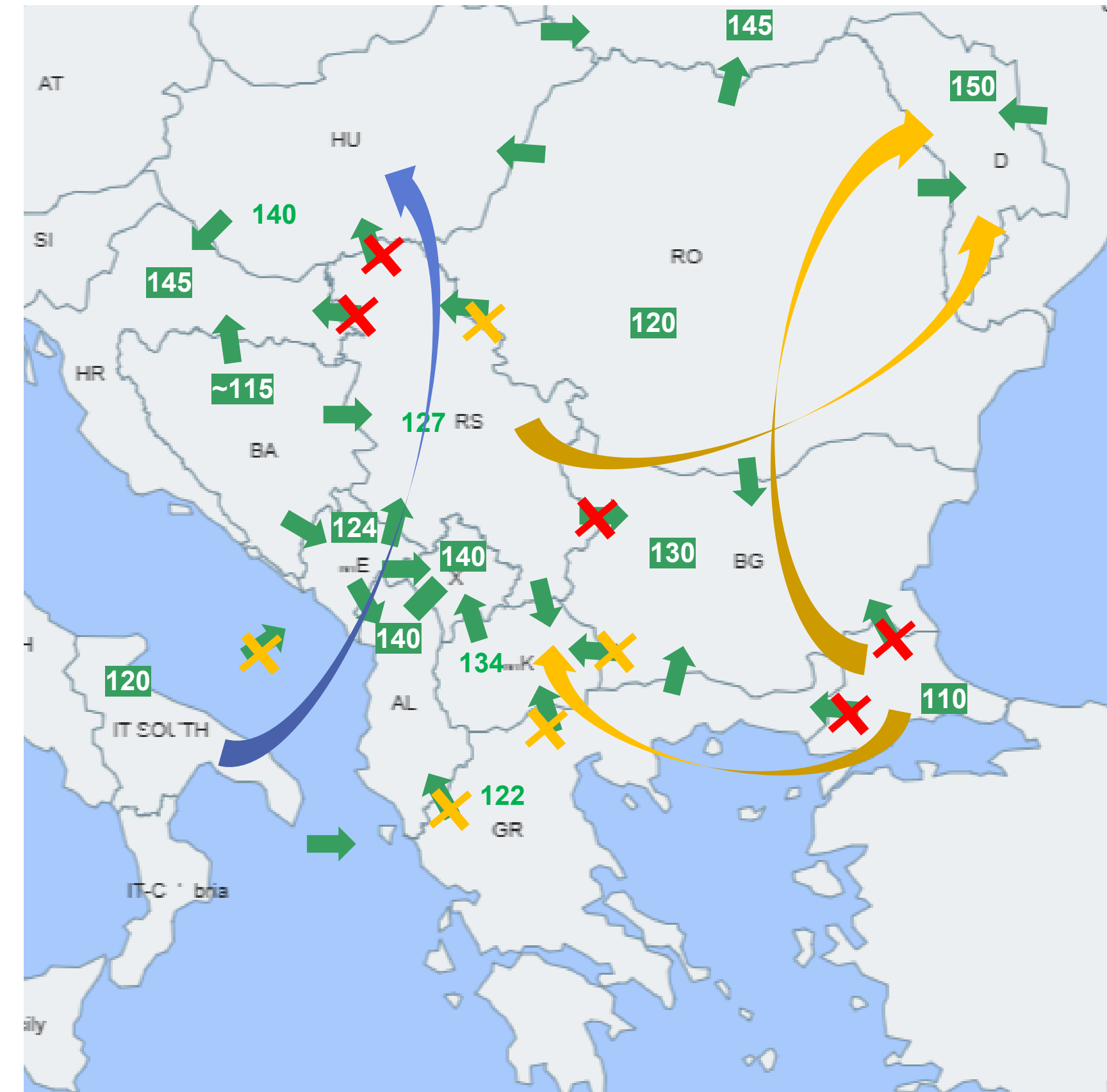
The complex reality – commercial flows: in and out EU / in and out CPs / also Turkish market

Example: Assume an impact of 30 EUR of CBAM certificate:

- Many trades would not be realised 
- Even some EU->CPs (highly likely due to change in price dynamic) 
- Behaviour change – tools to look for suboptimal optimisation 
- Assuming transit can be recorded within CPs and within EU

What happens when CBAM cost are still in the money (BA->HR): 

- Currently: x-border value BA->HR = 30 EUR, congestion fee paid to TSOs
- With CBAM: x-border value will be undermined for the value of CBAM certificate, in this case to zero!
- Impacting TSOs sources to invest in cross-zonal capacity to increase welfare



Current trading practice

1. **Welfare gain through optimal use of resources** across a wider European market (production, interconnection, reserves, etc.) & different market timeframes
2. Prices tend to converge – **price difference reflects the value of x-zonal capacity** (congestion income for TSOs – with obligation to maintain/increase such capacity)
3. **Electricity is traded zone-to-zone**, with no need to track commercial transit
 - EU->CPs->EU and CP->EU->CP would be considered as ‘commercial transit’ but not accounted as such

With CBAM

1. Flow CPs->EU will only happen **if CBAM certificate price is lower than price difference**
 - Undermining value of transmission rights, **impacting congestion revenues of TSOs**
2. EU->CPs->EU and CP->EU->CP, may be accounted as ‘**commercial transit**’ if:
 - CPs and MSs need to establish measure for accounting/recording transit, and
 - Flow zone-to-zone is recorded by single market participant in all zones (title doesn’t change hands)
3. Significant flows, linked to regional optimisation, from EU->CPs are **unlikely to be realised** (including increased no of curtailments)



THANK YOU!



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