



CWE MC external parallel run report



The CWE FB project has started the FB external parallel run in January 2013. At the request of the regulators, the CWE project proposes to publish the indicators described in this document on a bi-monthly basis.

The proposal of the CWE project is based on a subset of indicators given in the feasibility report as well as on the additional indicators requested by the regulators.

Indicators

The following text will contain the different indicators comparing the following market coupling models:

ATCMC: ATC market coupling;

FBMC: Flow Based market coupling;

FBIMC: Flow Based Intuitive market coupling;

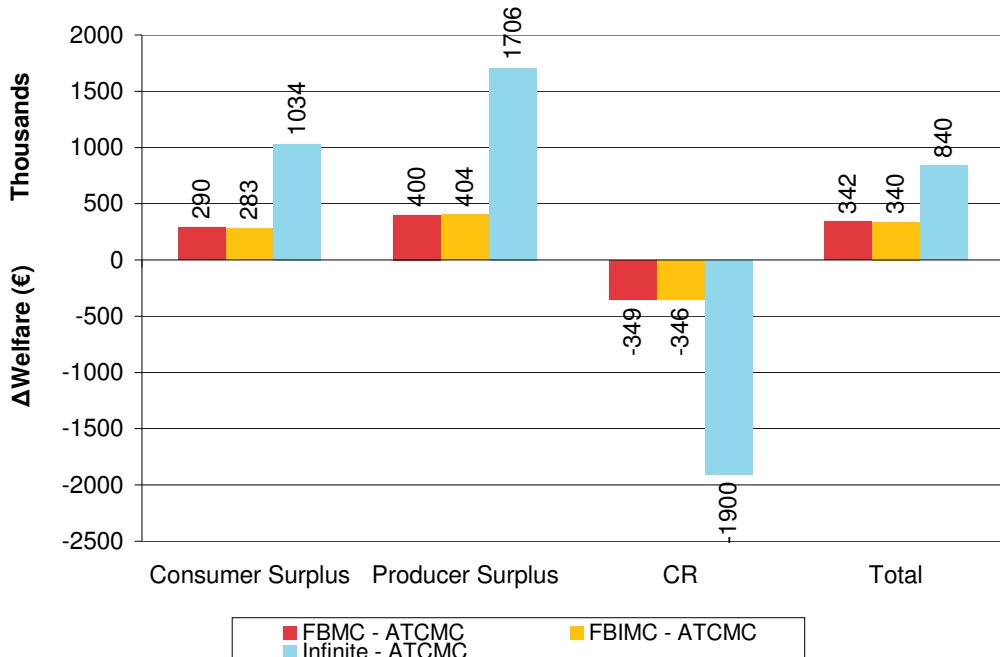
Infinite: Market coupling under infinite ATC;

Dates included in this report

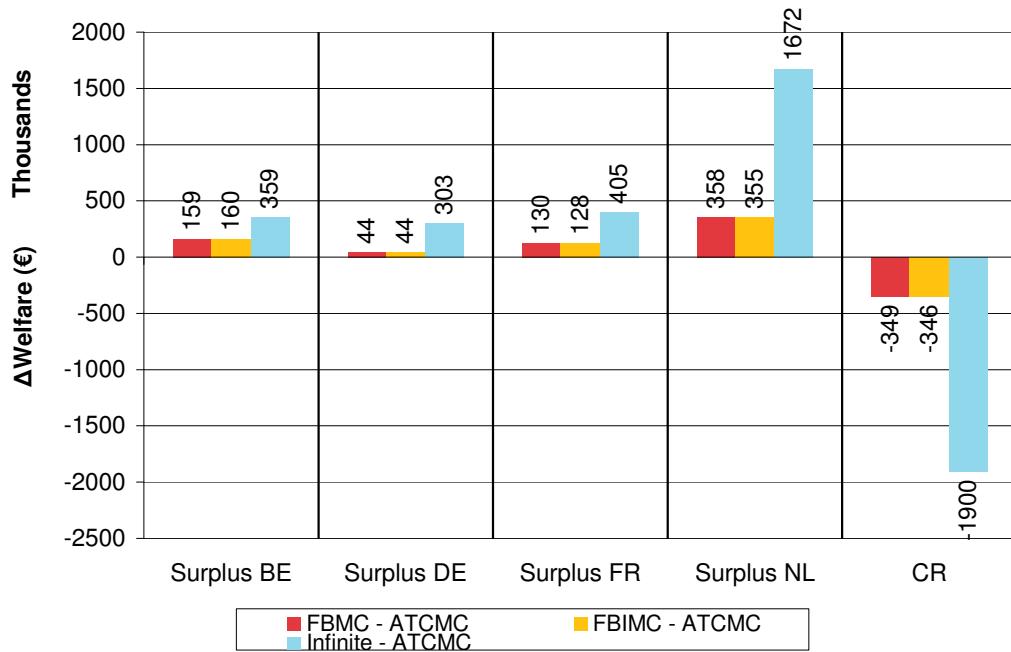
Week	Wed	Thu	Fri	Sat	Sun	Mon	Tue
18	01 May	02 May	03 May	04 May	05 May	06 May	07 May
19	08 May	09 May	10 May	11 May	12 May	13 May	14 May
20	15 May	16 May	17 May	18 May	19 May	20 May	21 May
21	22 May	23 May	24 May	25 May	26 May	27 May	28 May
22	29 May	30 May	31 May	01 Jun	02 Jun	03 Jun	04 Jun
23	05 Jun	06 Jun	07 Jun	08 Jun	09 Jun	10 Jun	11 Jun
24	12 Jun	13 Jun	14 Jun	15 Jun	16 Jun	17 Jun	18 Jun
25	19 Jun	20 Jun	21 Jun	22 Jun	23 Jun	24 Jun	25 Jun
26	26 Jun	27 Jun	28 Jun	29 Jun	30 Jun	01 Jul	02 Jul

Day ahead market welfare

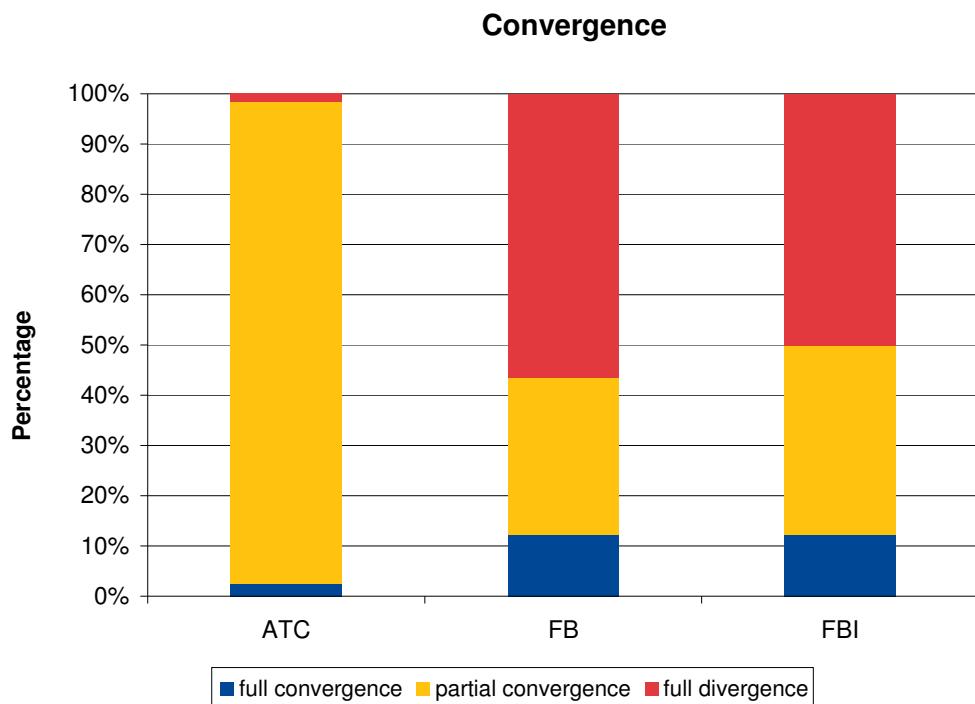
Daily average welfare difference (relative to ATC)



Daily average welfare difference (relative to ATC)



Price convergence



Convergence of price difference between areas in proportion to the number of situations (tolerance: 0.02 €/MWh)

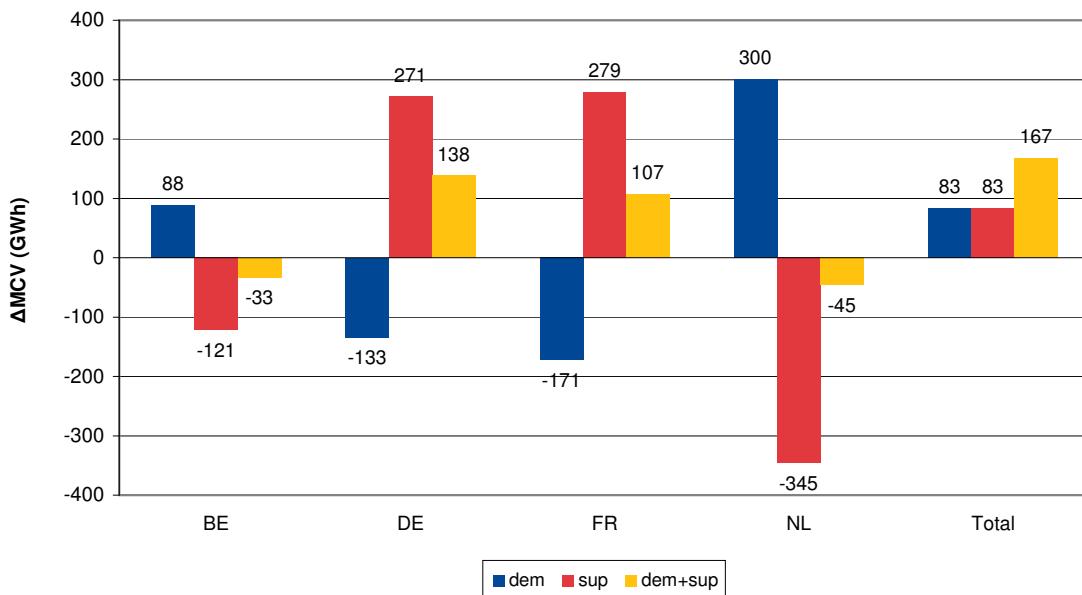
Note we distinguish three market clearing volume indicators:

dem: total accepted demand in an area

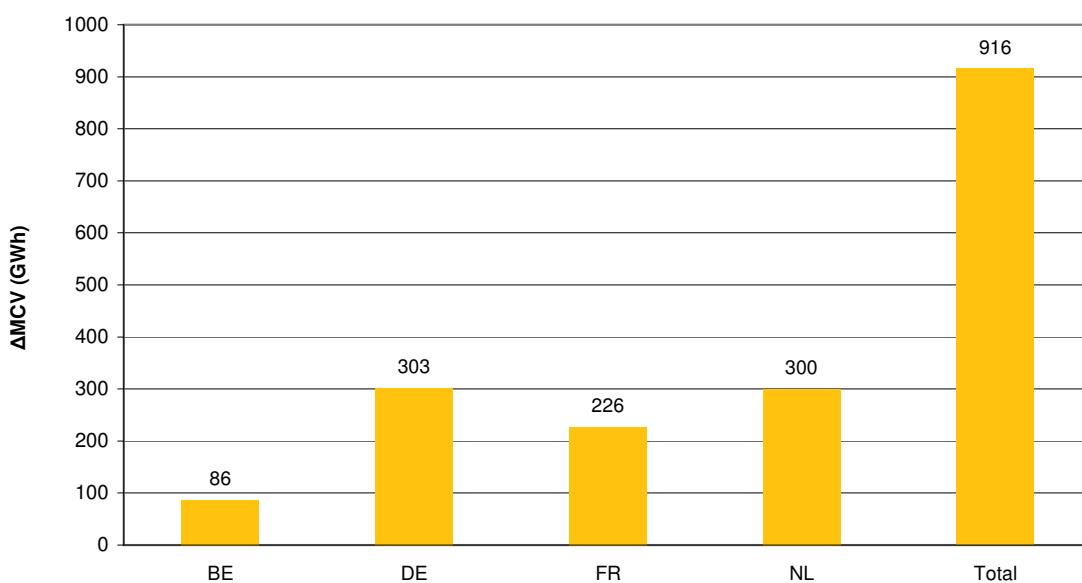
sup: total accepted supply in an area

mcv: the larger of total demand and supply in an area. The rationale is that the difference is the net position, i.e. additional supply from adjacent areas (import), or additional demand from adjacent areas (export).

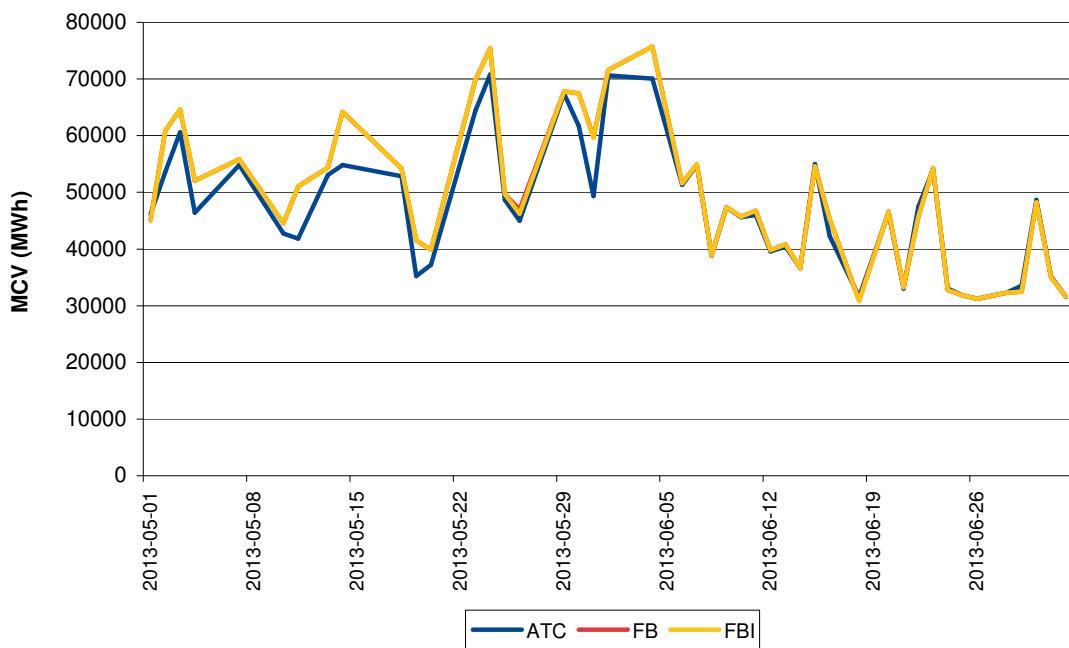
ΔMCV (FBMC - ATCMC)



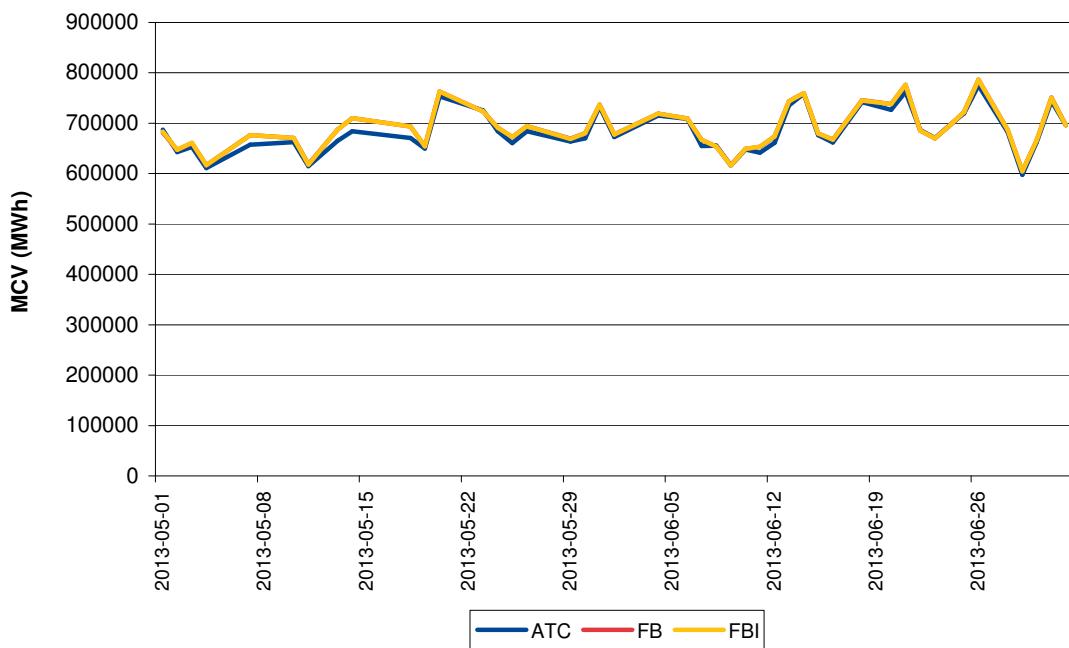
ΔMCV (FBMC - ATCMC)



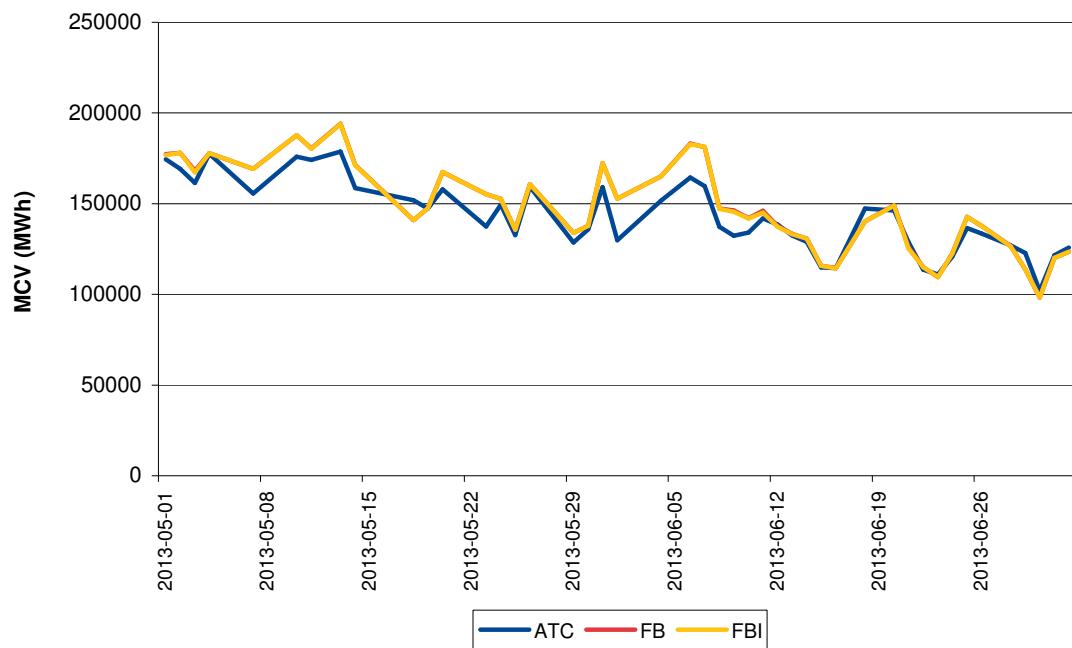
MCV - BE



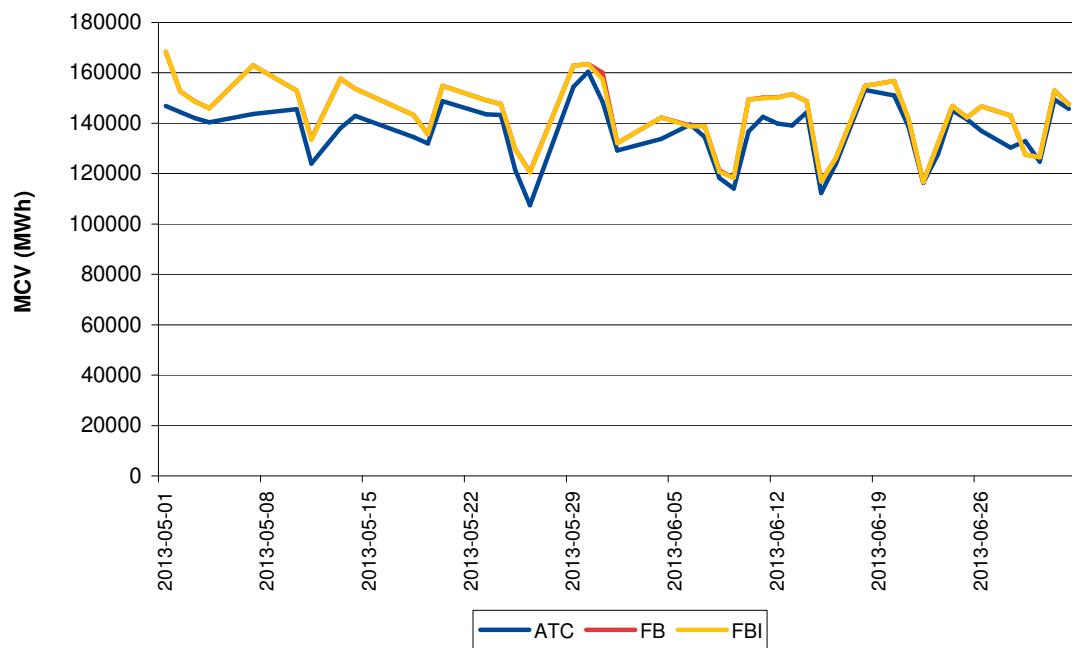
MCV - DE



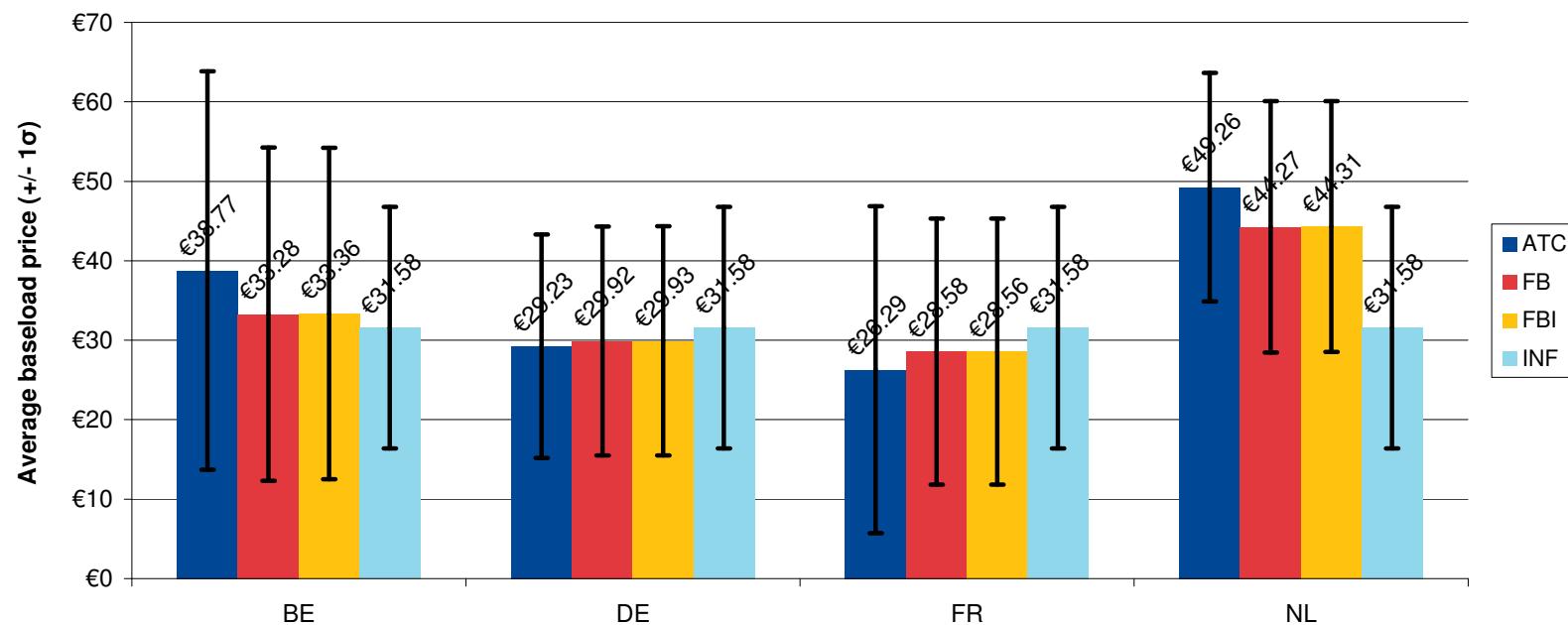
MCV - FR

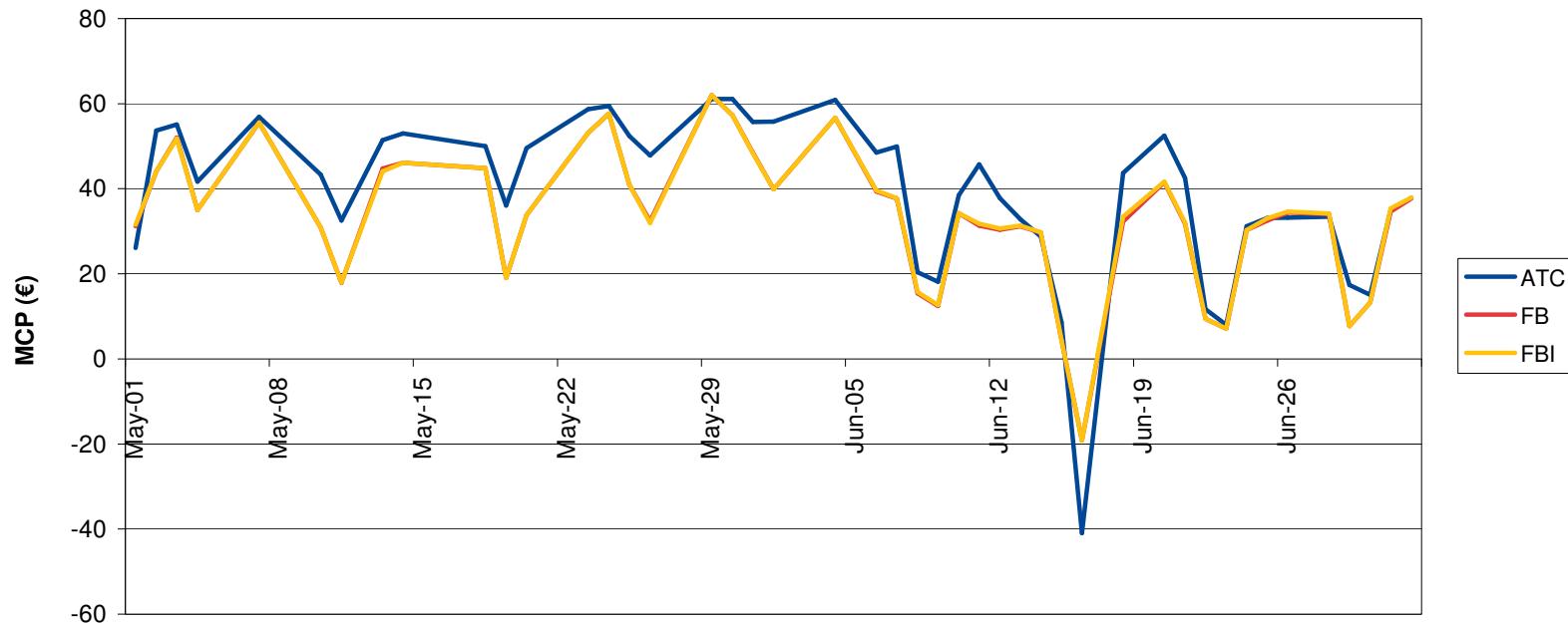


MCV - NL



Average baseload price



Baseload price - BE



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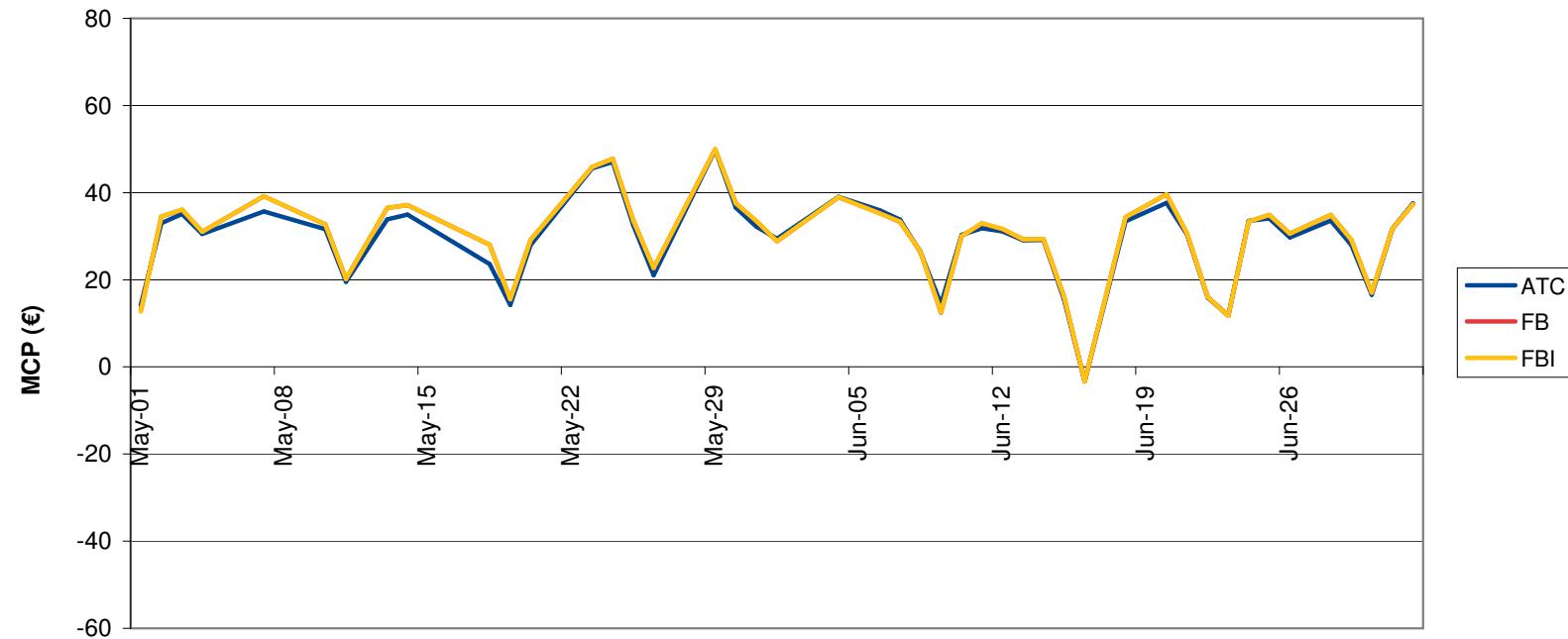
EPEX SPOT
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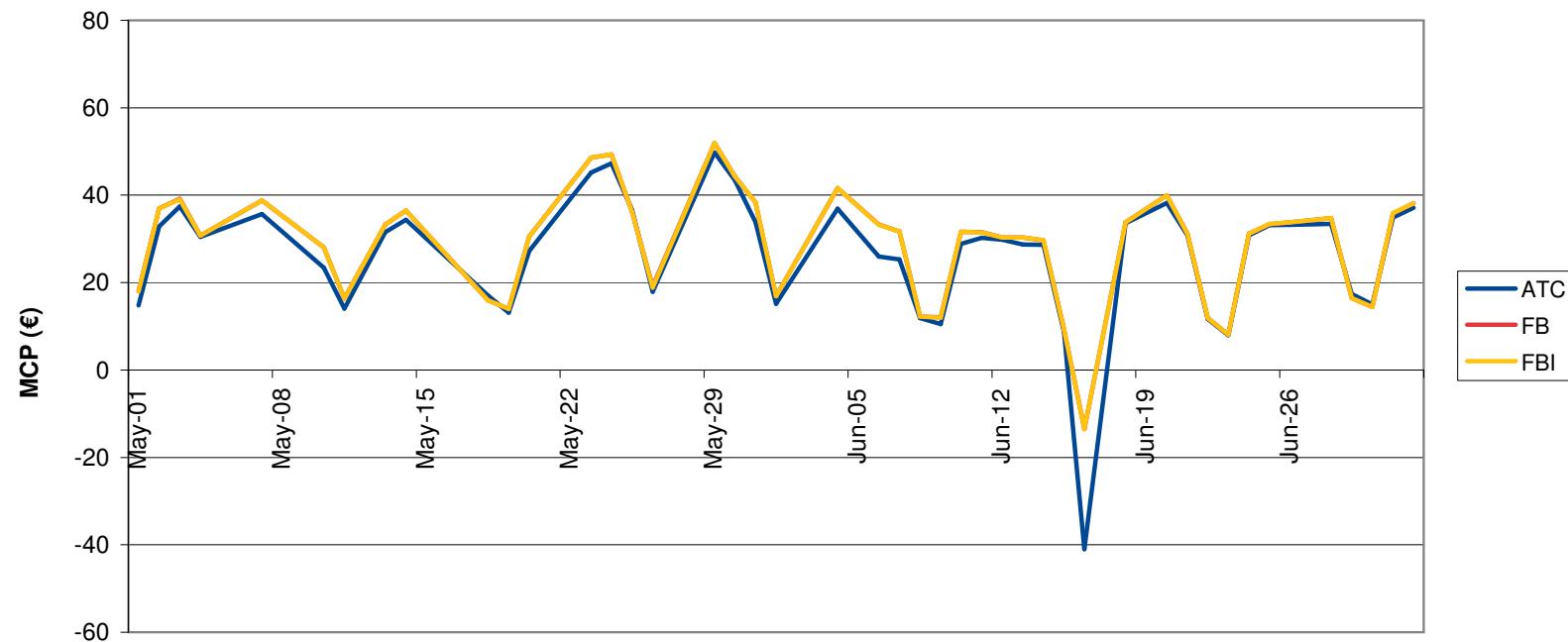
Tennet
Taking power further

Tennet
Taking power further

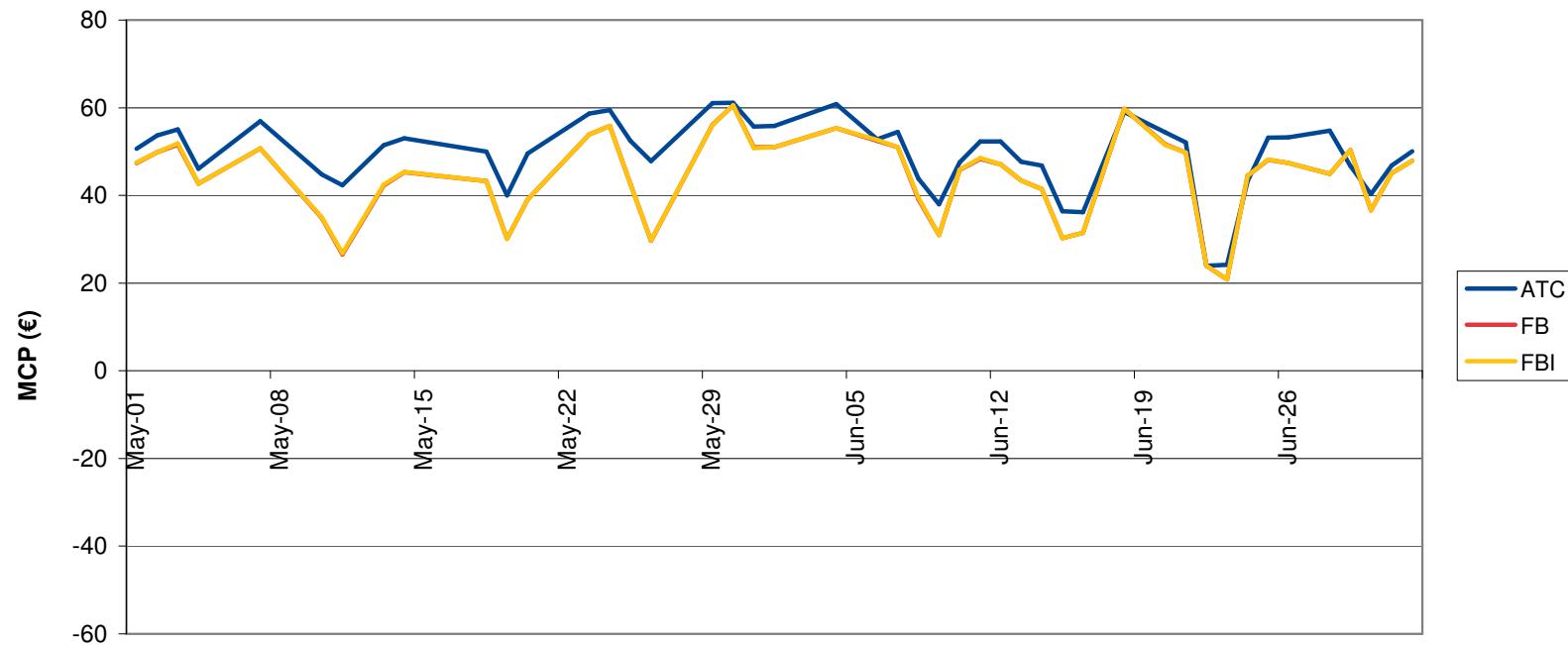
Baseload price - DE



Baseload price - FR



Baseload price - NL





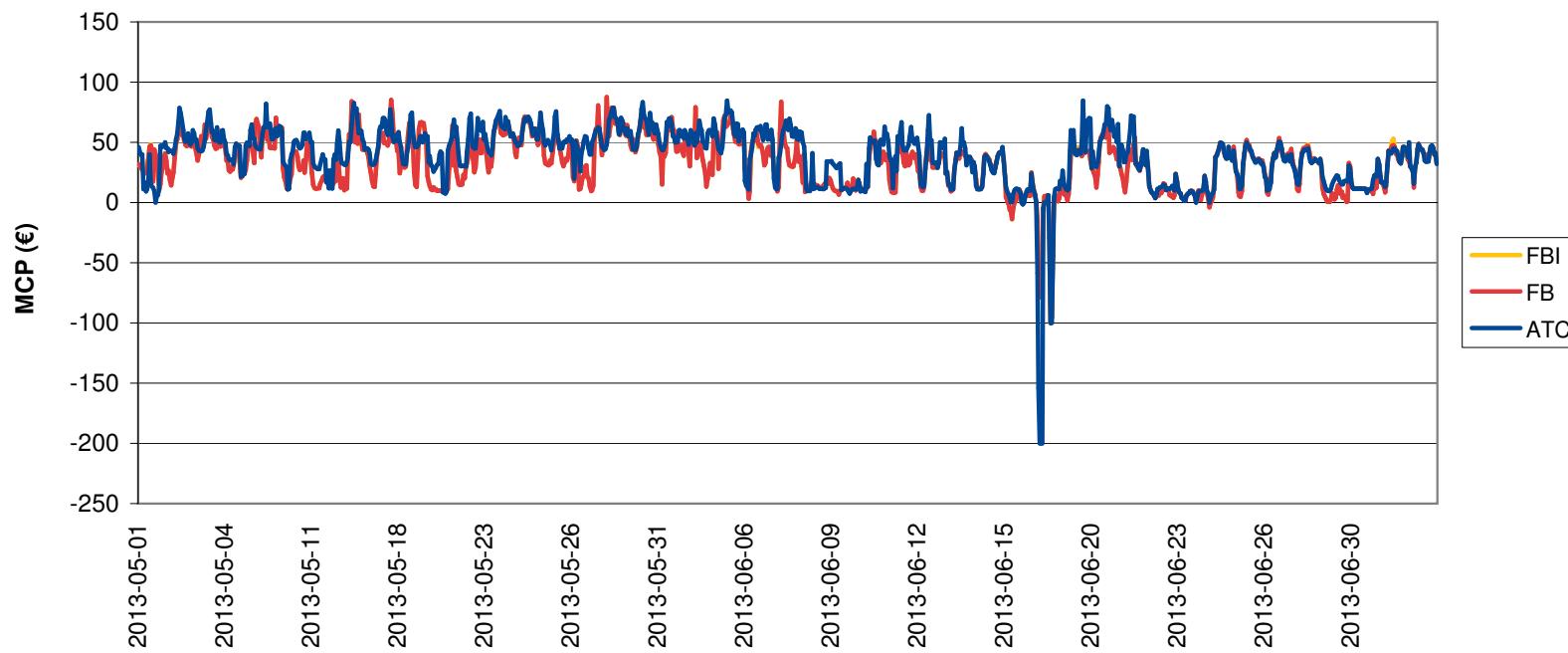
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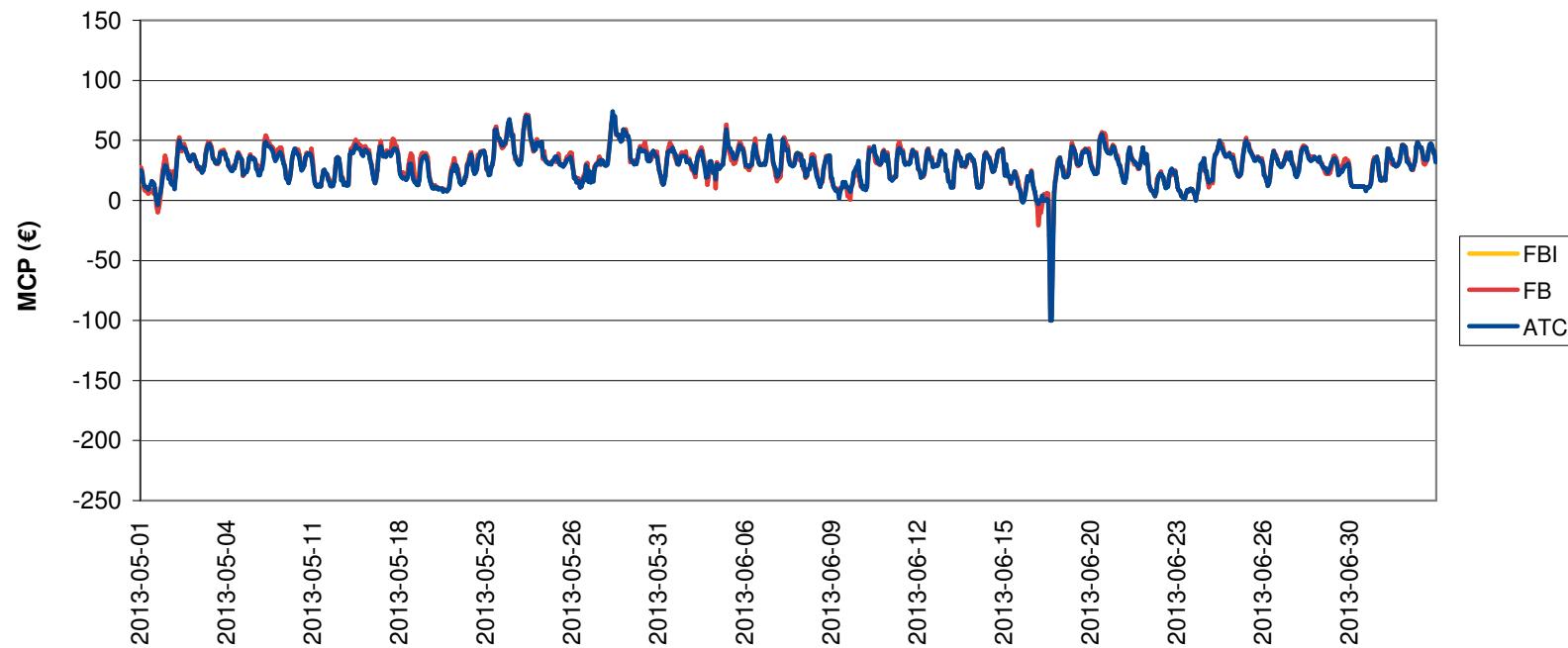
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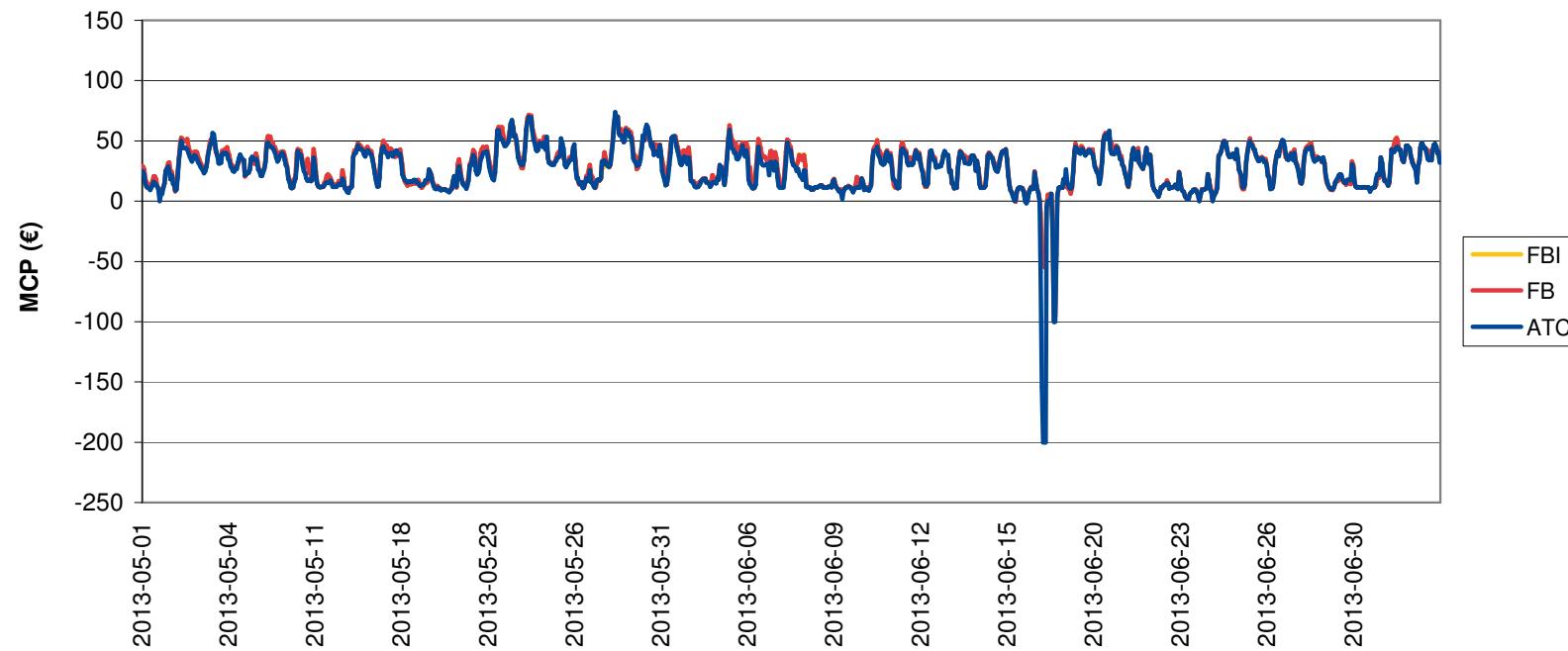
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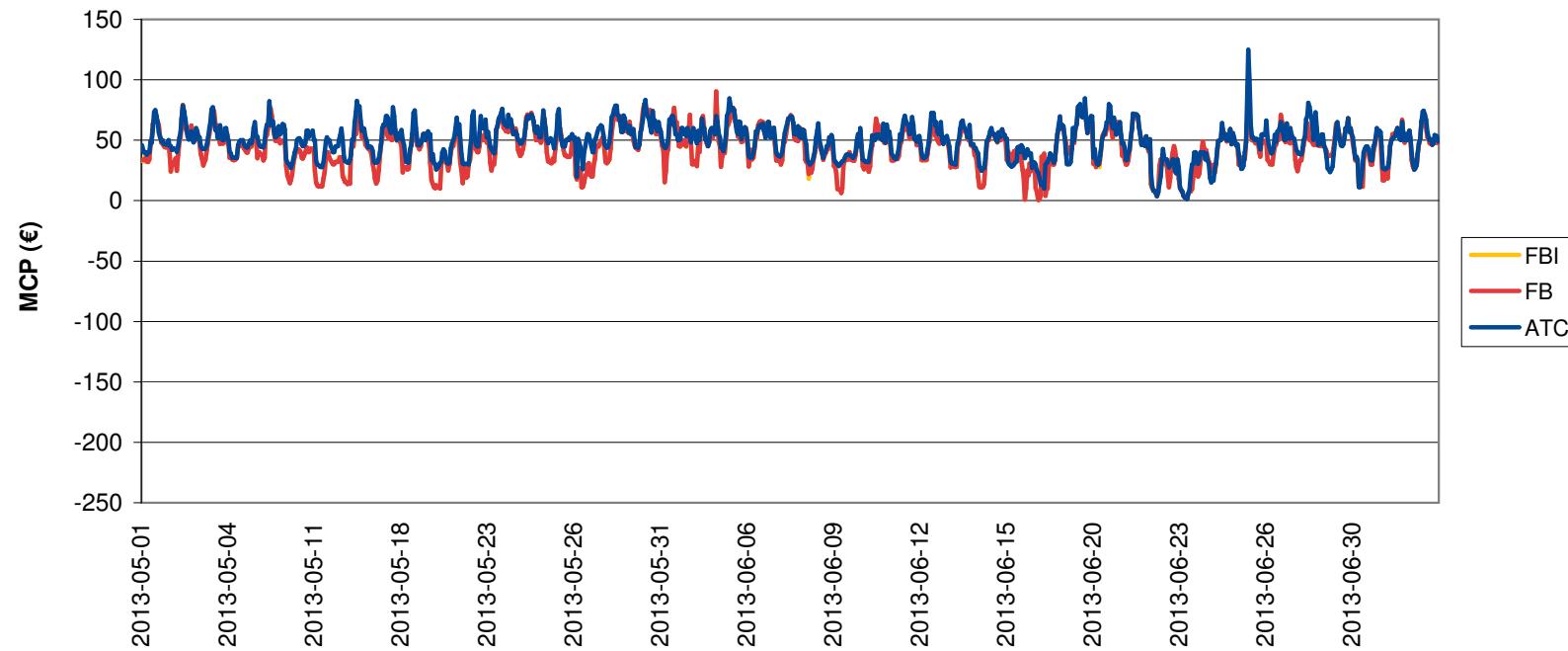
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MCP - NL



Intuitiveness

Frequency

The period under consideration contains 1080 hours.

Non-intuitiveness

	Number of hours where the situation is bilateral non-intuitive	Proportion of hours where the situation is bilateral non-intuitive	Proportion of congested hours where the situation is bilateral non-intuitive
ATC	0	0.0%	0.0%
FB	82	7.6%	8.7%
FBI	0	0.0%	0.0%
INF	0	0.0%	0.0%

Involvement

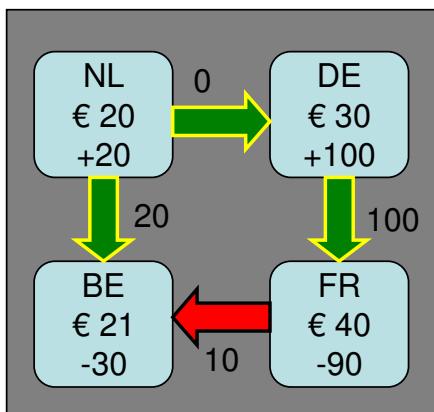
In most non-intuitive situations, the areas are said to be involved in the non-intuitive situation if they belong to one of these sets:

- The largest set of areas with the highest prices such that all areas of the set are exporting;
- The largest set of areas with the lowest prices such that all areas of the set are importing;

Note

With this definition of involvement it could happen that a situation is considered non-intuitive, yet none of the areas is considered to be involved.

Example



BE+NL are together importing, yet are the cheapest markets. This means no bilateral exchanges can be found that do not include at least one counter intuitive flow (FR-BE in our example). Yet none of the markets are involved: NL is the cheapest market and is exporting. Even though the set {BE, NL} is exporting in aggregate, they are not all exporting individually as stated in our definition. Hence no markets are involved.

Number of Involvements	BE	DE	FR	NL
FB "plain" MC	41	16	0	0

Paradoxically rejected block orders

	Number of PRBs	PRB Utility value
ATCMC	295	€360,778
FBMC	312	€327,459
FBIMC	299	€308,553
Infinite Capacity	82	€29,565
Isolated	589	€4,027,540

Block Bids

Proportion of accepted block orders in the Total	BE	DE	FR	NL
ATCMC	7.0%	3.7%	5.3%	7.4%
FBMC	6.8%	3.8%	5.5%	7.0%
FBIMC	6.8%	3.8%	5.5%	6.9%
Infinite Capacity	7.8%	4.3%	5.7%	9.5%
Isolated	21.1%	3.4%	5.4%	16.8%