



CWE MC external parallel run report



Introduction

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;

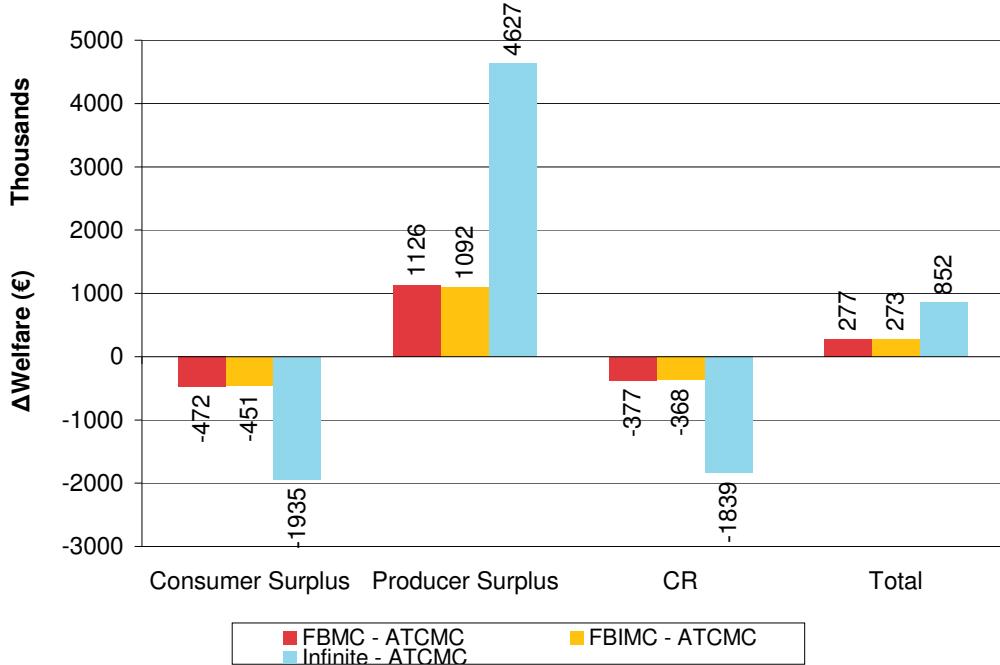
Infinite: Market coupling under infinite ATC;

Dates included in this report

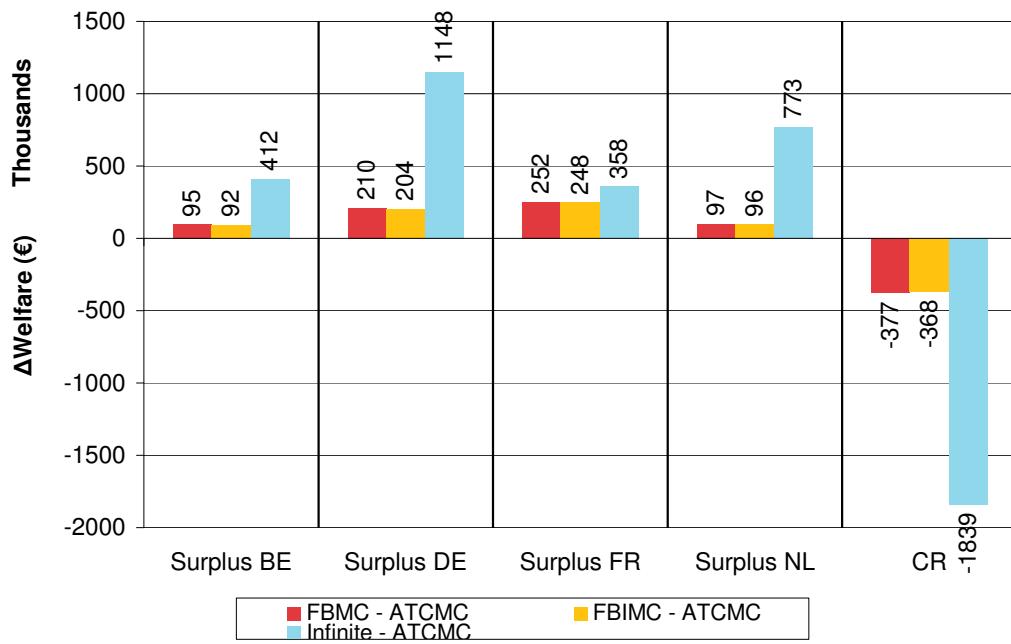
Week	Wed	Thu	Fri	Sat	Sun	Mon	Tue
10	06 Mar	07 Mar	08 Mar	09 Mar	10 Mar	11 Mar	12 Mar
11	13 Mar	14 Mar	15 Mar	16 Mar	17 Mar	18 Mar	19 Mar
12	20 Mar	21 Mar	22 Mar	23 Mar	24 Mar	25 Mar	26 Mar
13	27 Mar	28 Mar	29 Mar	30 Mar	31 Mar	01 Apr	02 Apr
14	03 Apr	04 Apr	05 Apr	06 Apr	07 Apr	08 Apr	09 Apr
15	10 Apr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

Day ahead market welfare

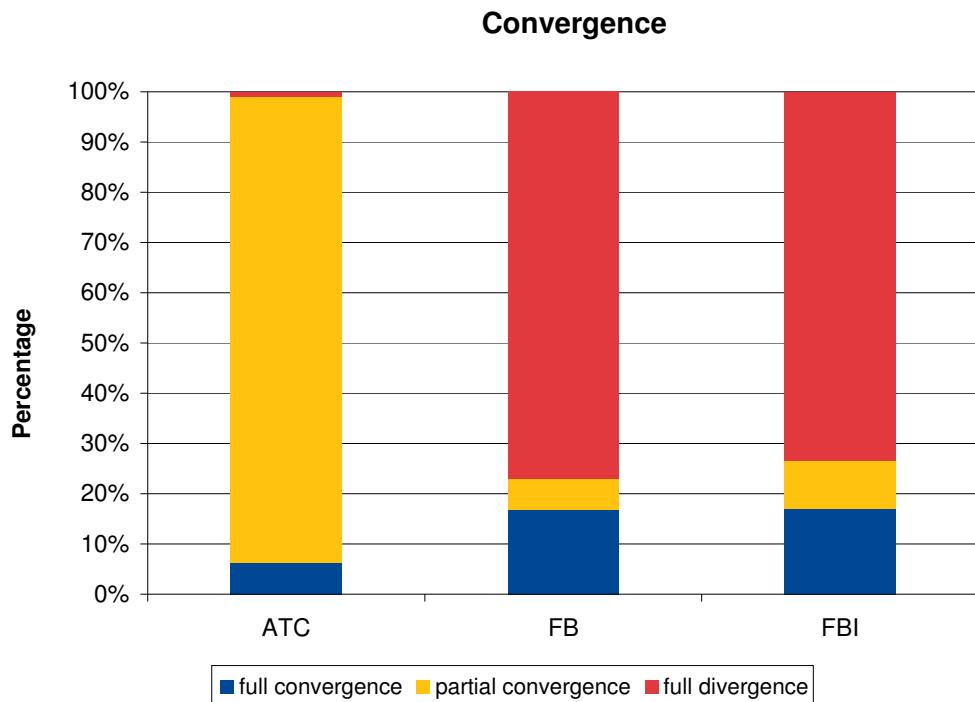
Daily average welfare difference (relative to ATC)



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)

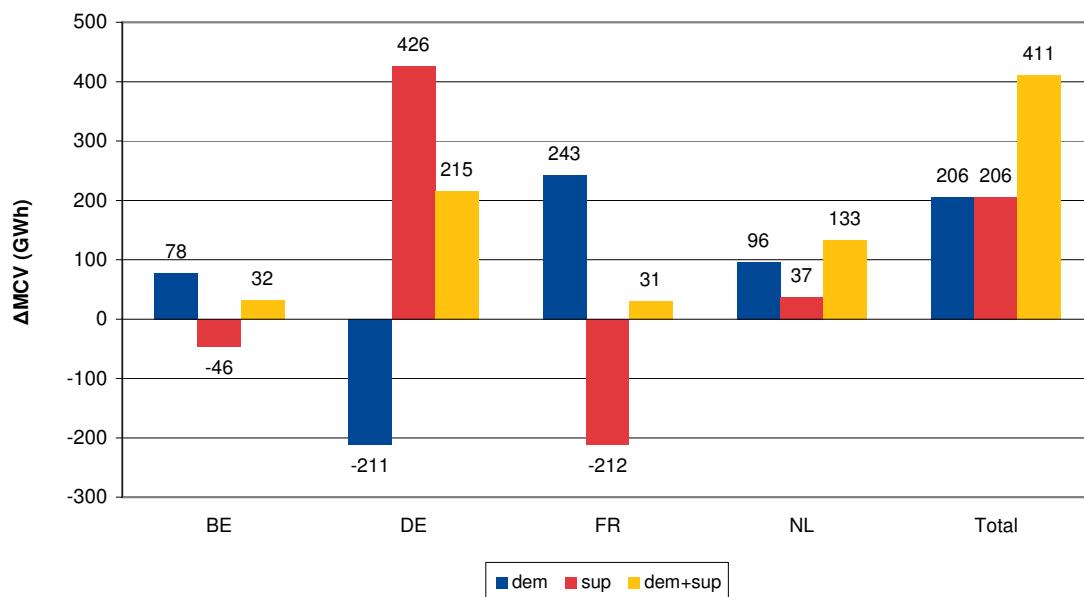
Note we distinguish three market clearing volume indicators:

dem: total accepted demand in an area

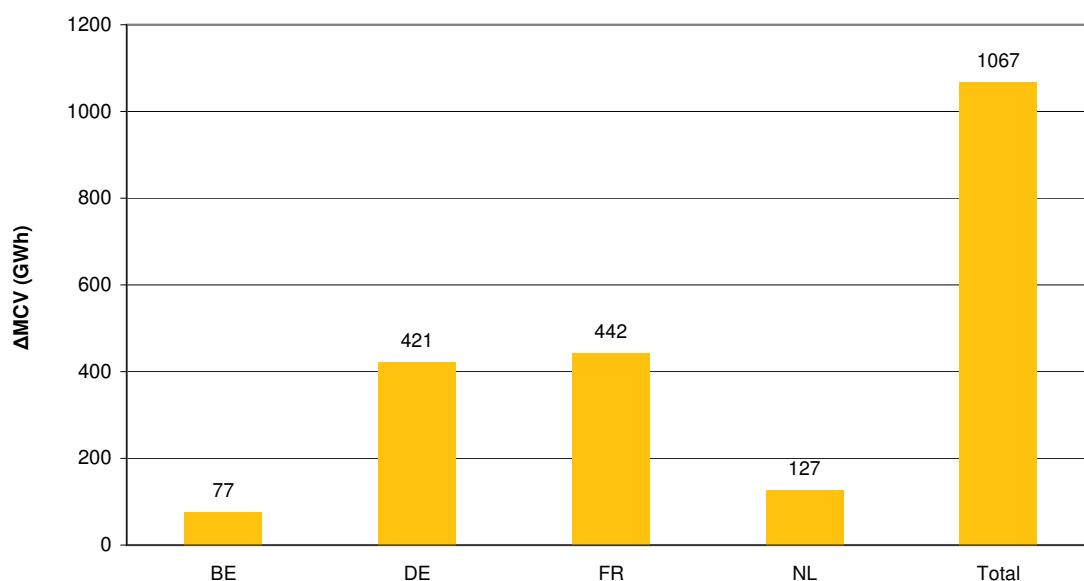
sup: total accepted supply in an area

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).

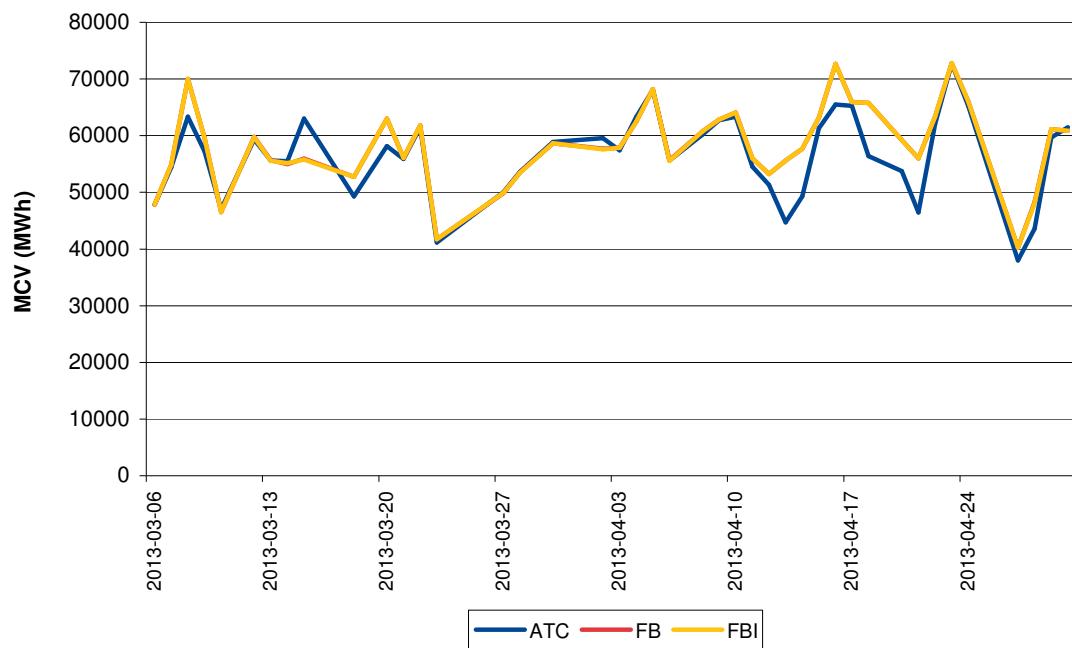
ΔMCV (FBMC - ATCMC)



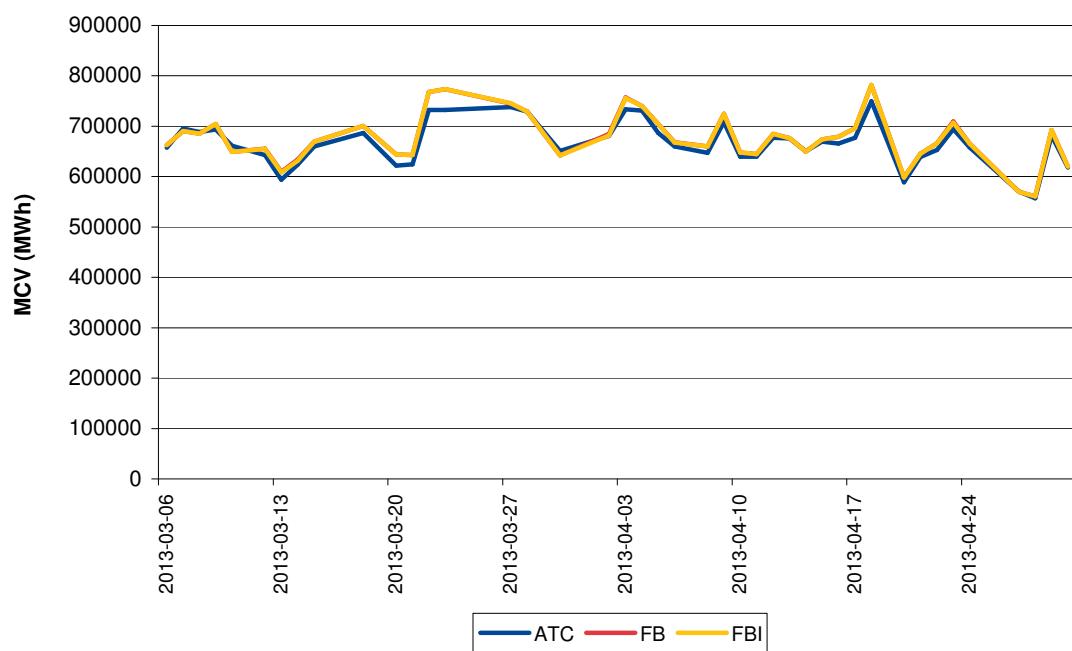
ΔMCV (FBMC - ATCMC)



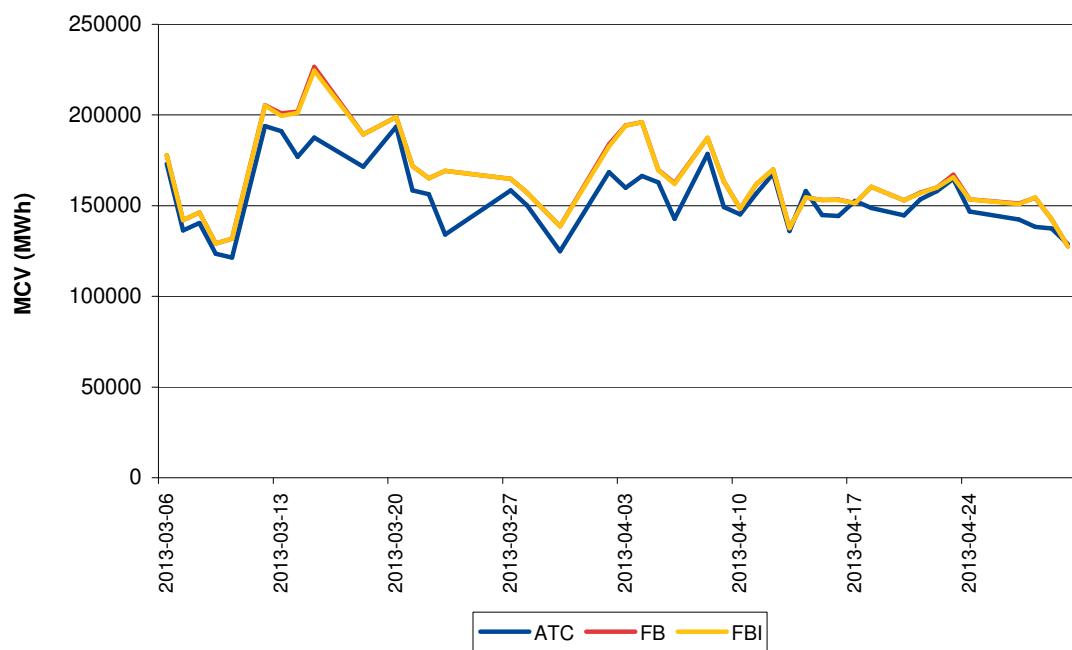
MCV - BE



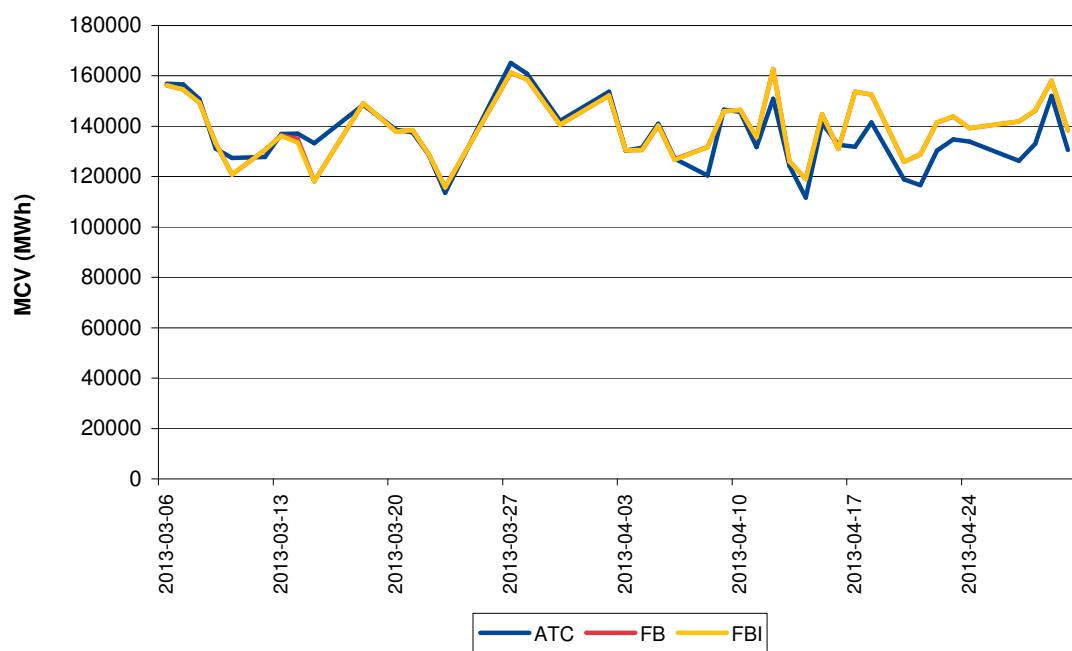
MCV - DE



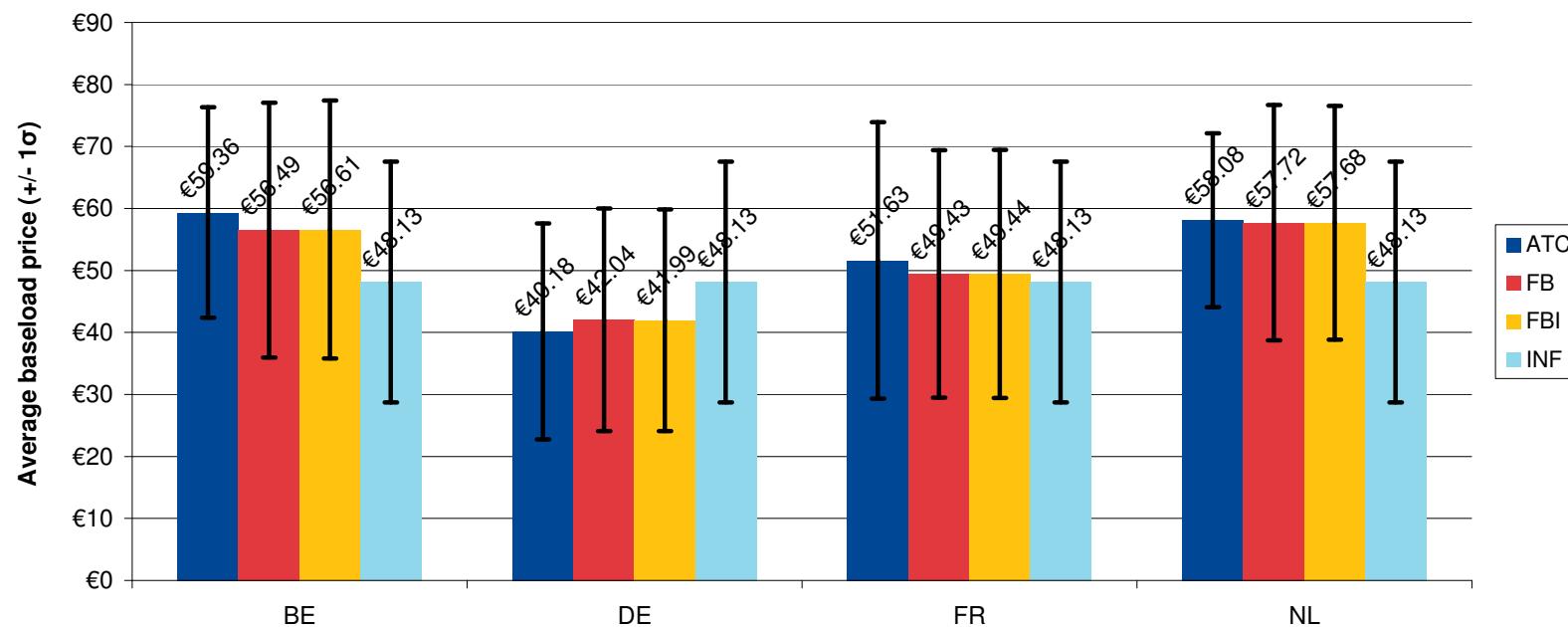
MCV - FR



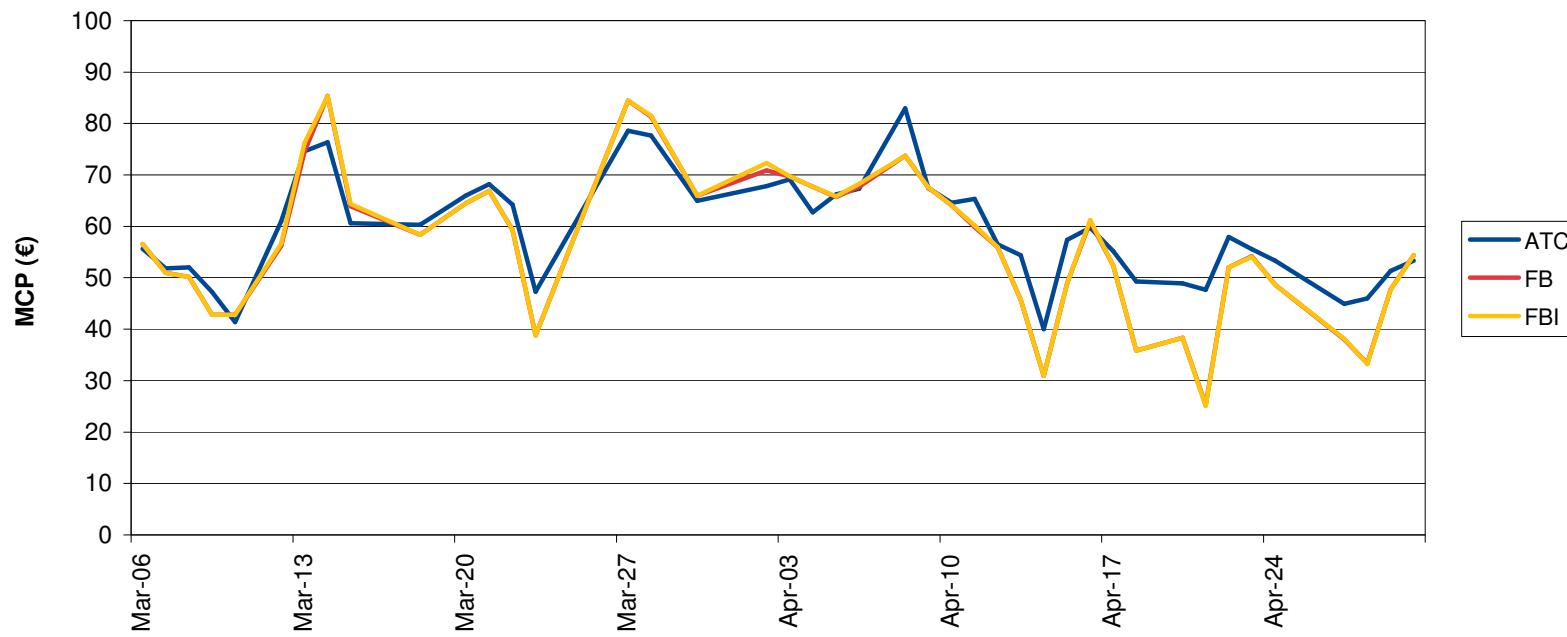
MCV - NL



Average baseload price



Baseload price - BE





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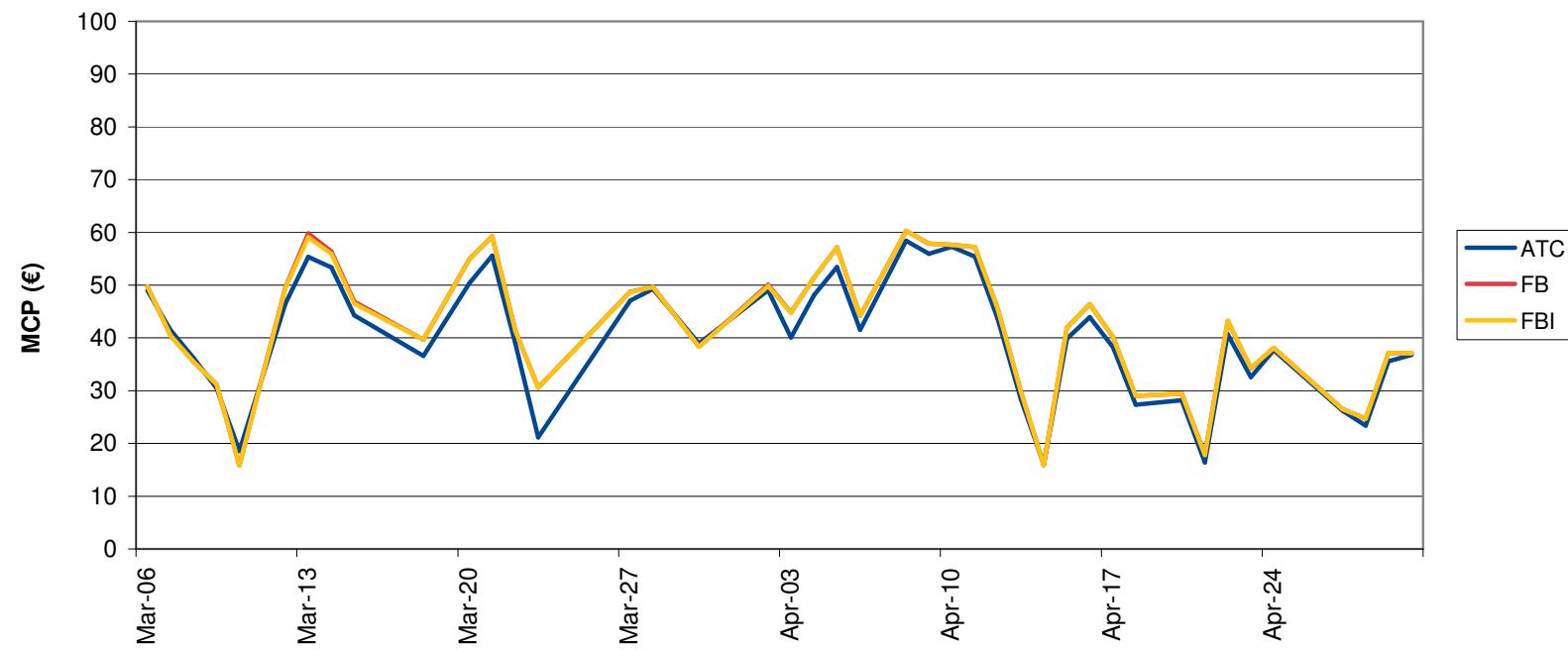
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Baseload price - DE





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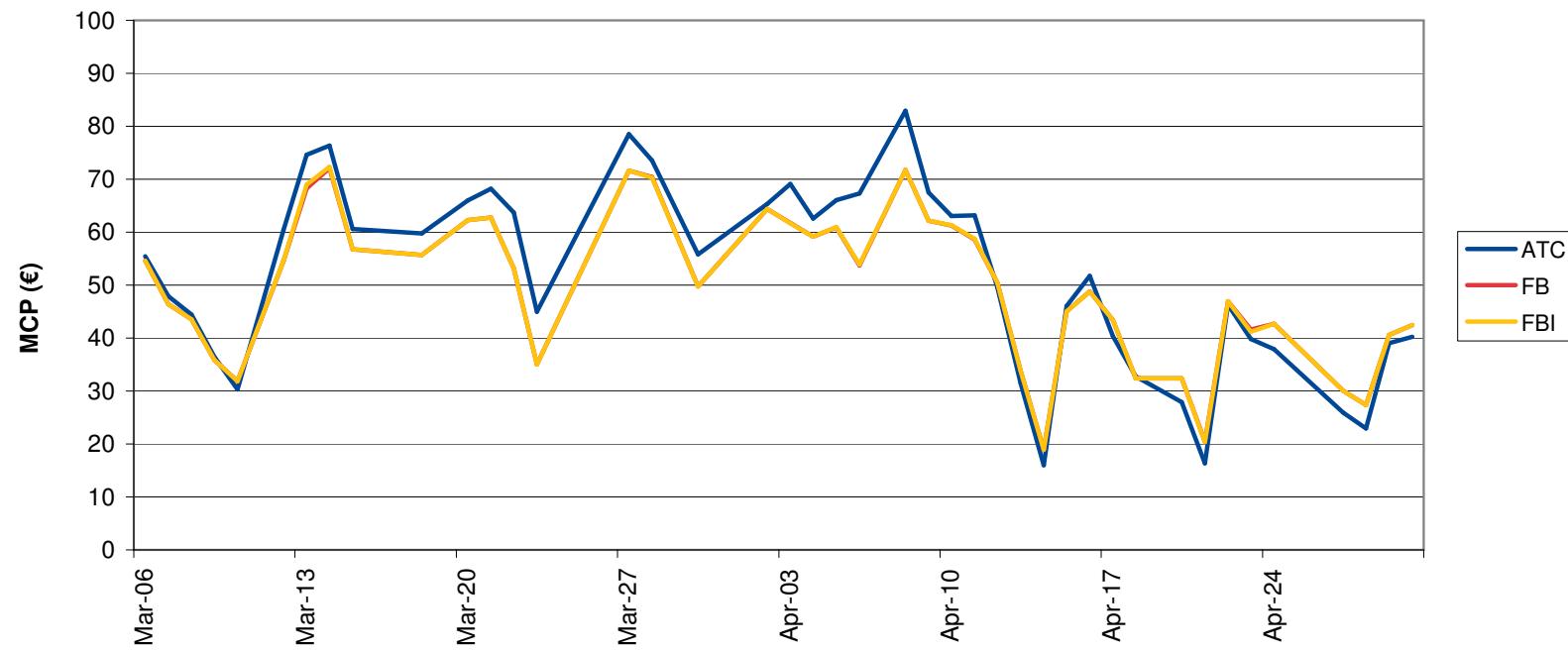
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Baseload price - FR



Baseload price - NL





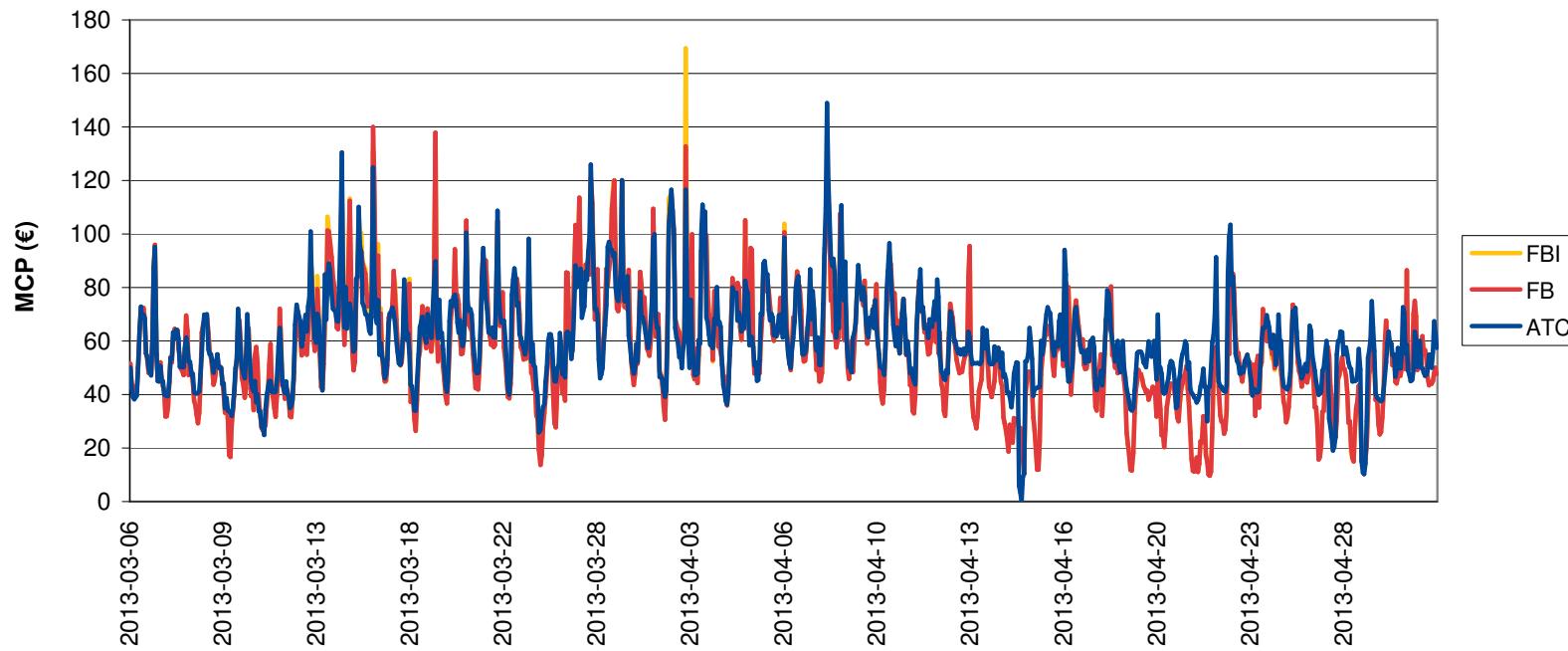
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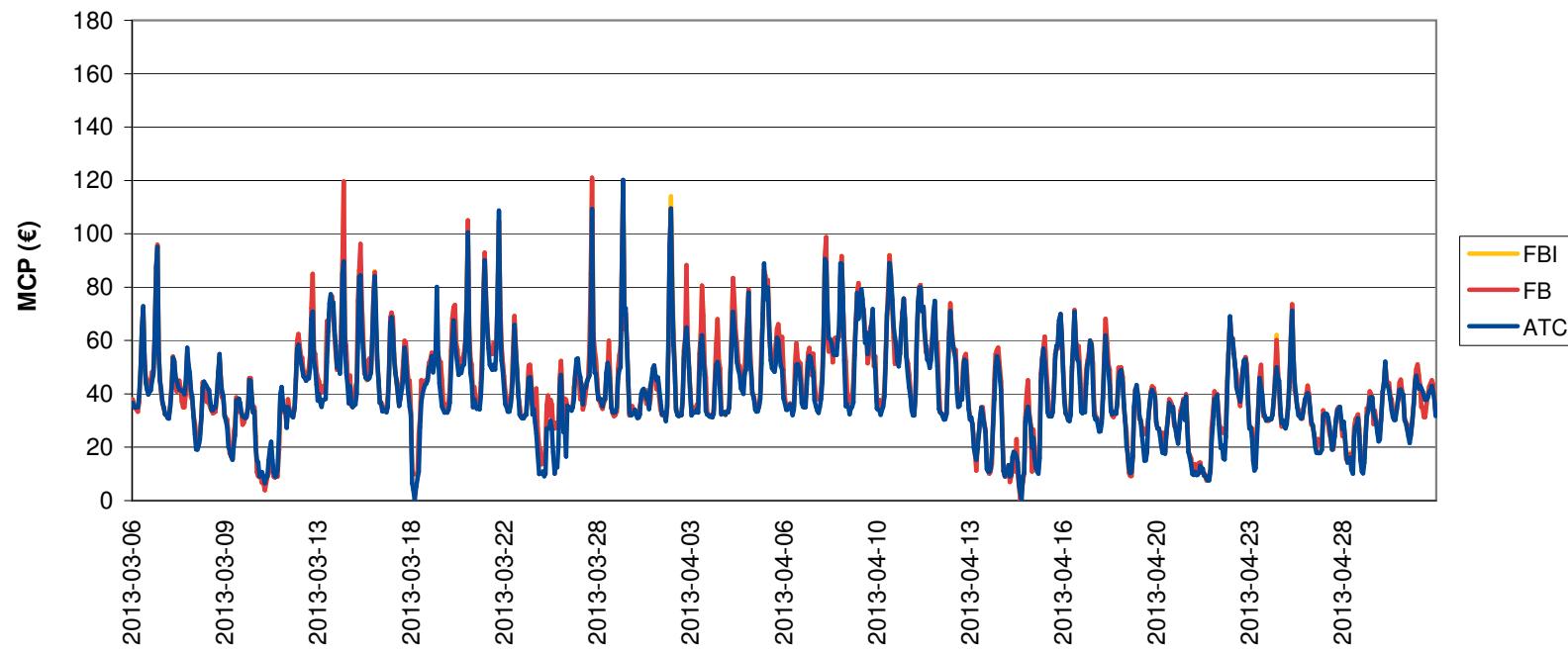
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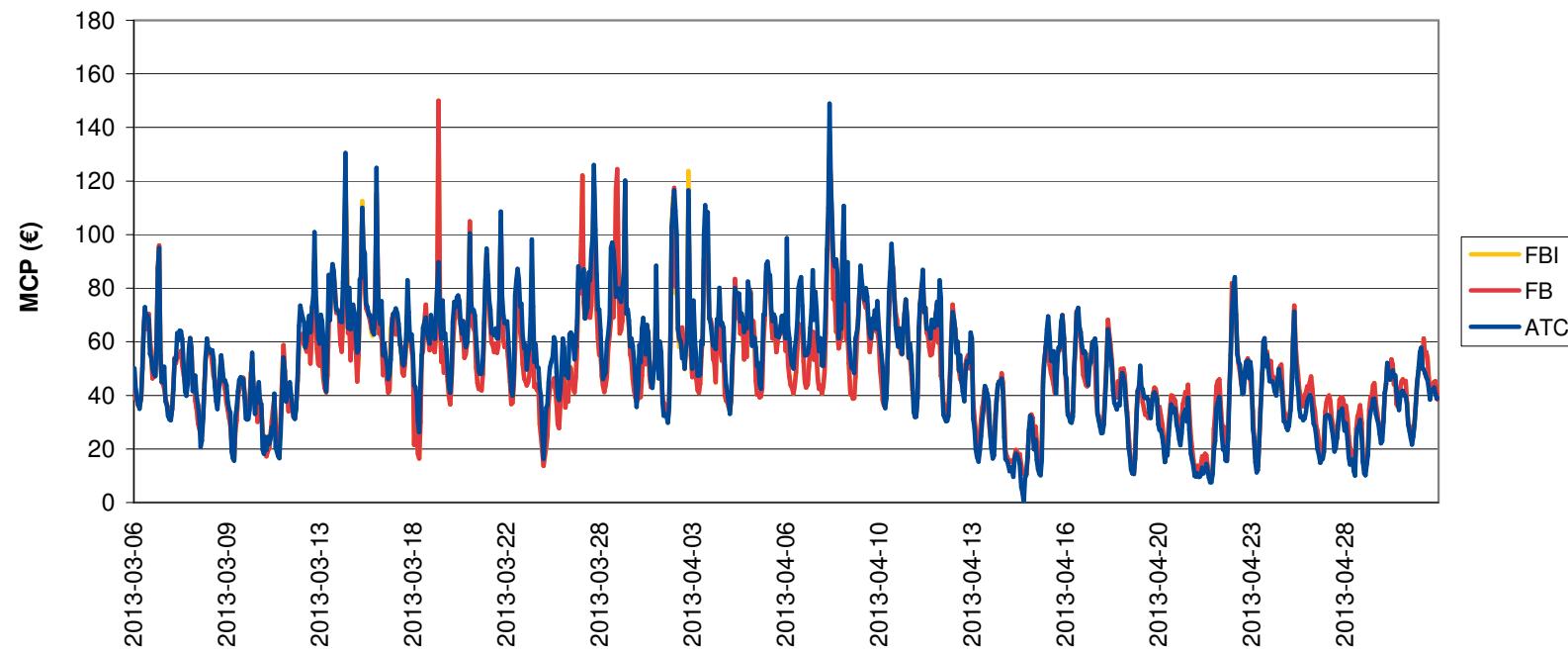
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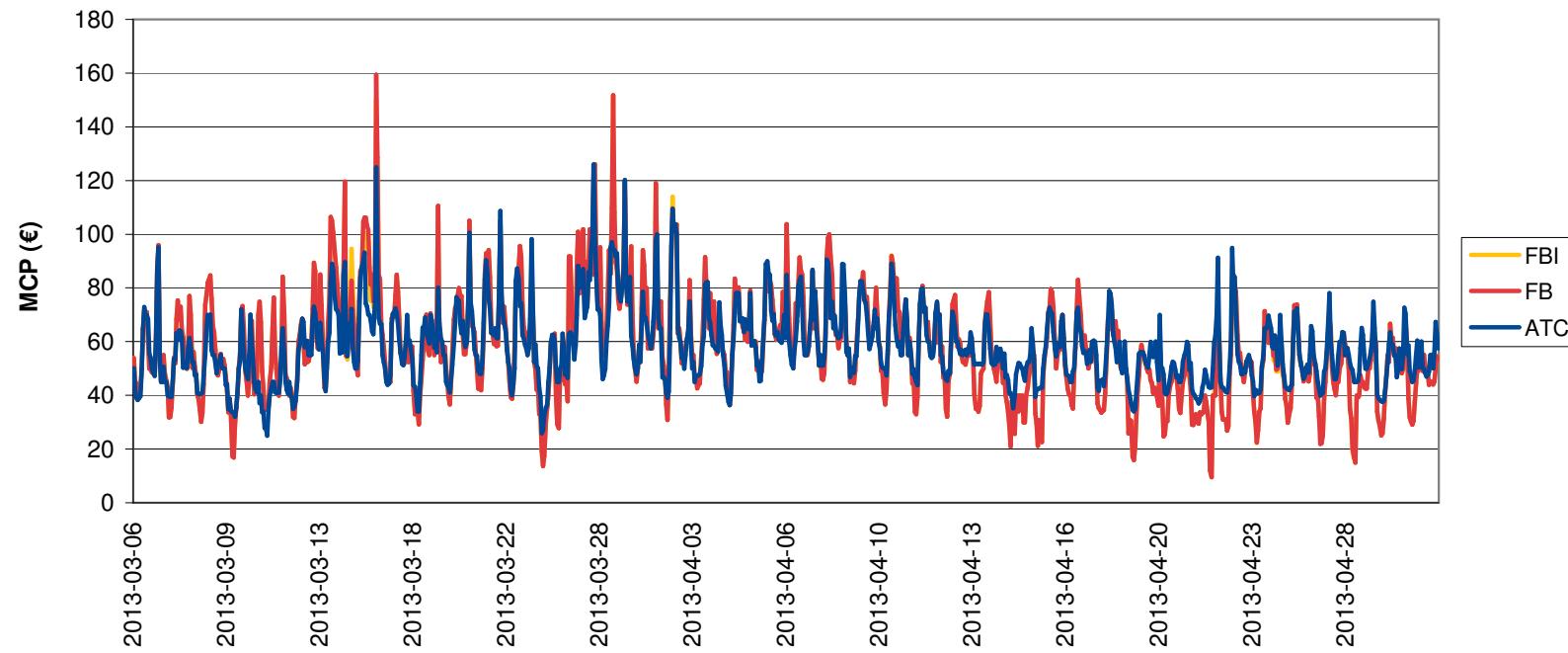
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MCP - NL



Intuitiveness

Frequency

The period under consideration contains 1008 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	53	5.3%	6.3%
FBI	0	0.0%	0.0%
INF	0	0.0%	0.0%

Involvement

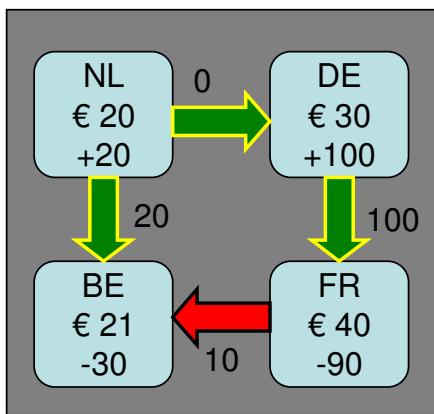
In most non-intuitive situations, the areas are said to be involved in the non-intuitive situation if they belong to one of these sets:

- 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	0	3	2	42

Paradoxically rejected block orders

	Number of PRBs	PRB Utility value
ATCMC	399	€404,118
FBMC	385	€436,925
FBIMC	394	€466,830
Infinite Capacity	130	€49,855
Isolated	776	€4,045,302

Block Bids

Proportion of accepted block orders in the Total	BE	DE	FR	NL
ATCMC	12.8%	3.6%	7.2%	9.9%
FBMC	13.5%	4.0%	7.2%	11.3%
FBIMC	13.6%	3.9%	7.2%	11.3%
Infinite Capacity	13.8%	4.4%	8.0%	10.0%
Isolated	29.4%	4.3%	10.6%	16.8%