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
1	01 Jan	02 Jan	03 Jan	04 Jan	05 Jan	06 Jan	07 Jan
2	08 Jan	09 Jan	10 Jan	11 Jan	12 Jan	13 Jan	14 Jan
3	15 Jan	16 Jan	17 Jan	18 Jan	19 Jan	20 Jan	21 Jan
4	22 Jan	23 Jan	24 Jan	25 Jan	26 Jan	27 Jan	28 Jan
5	29 Jan	30 Jan	31 Jan	01 Feb	02 Feb	03 Feb	04 Feb

Day ahead market welfare

Daily average welfare difference (relative to ATC)
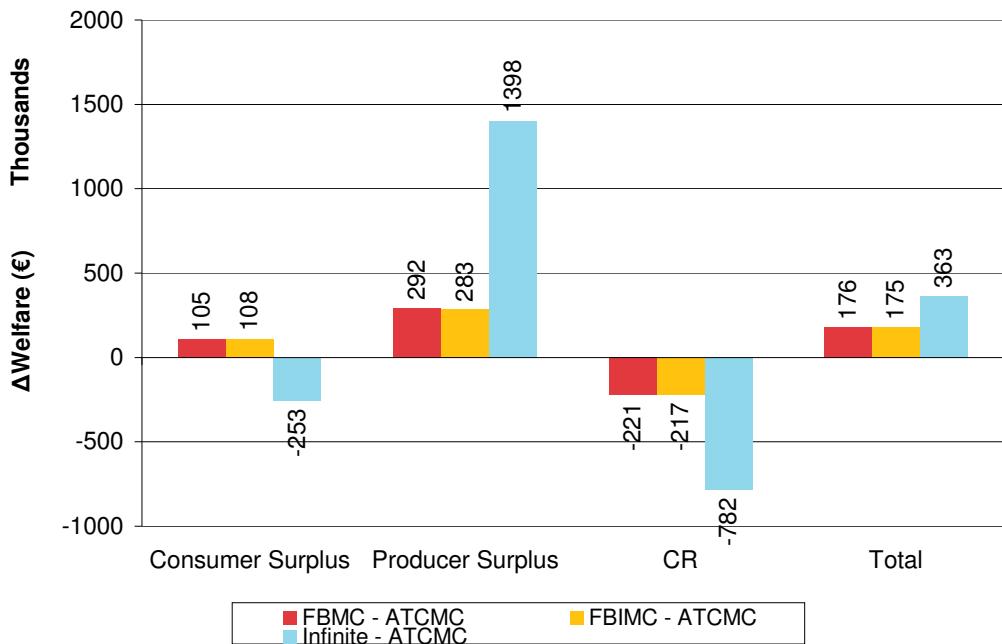

Daily average welfare difference (relative to ATC)
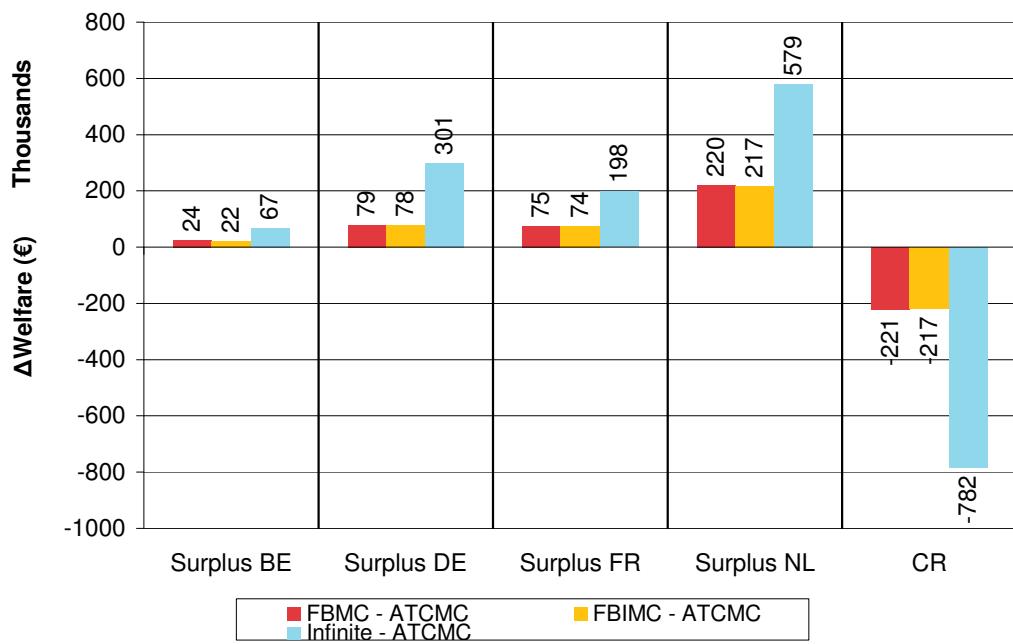
Price convergence
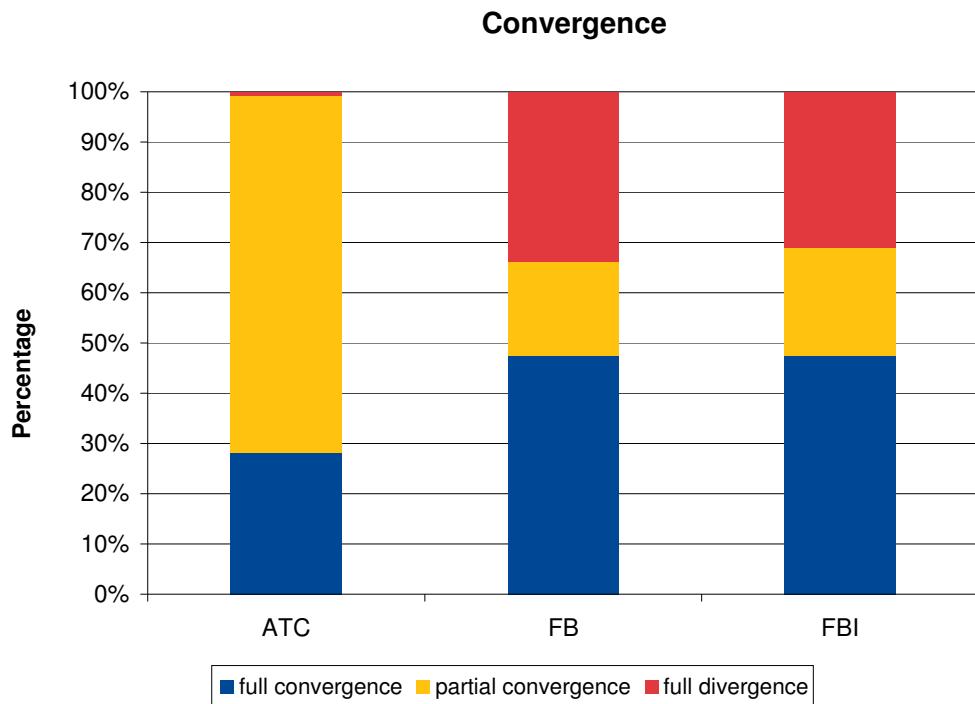
Convergence

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).
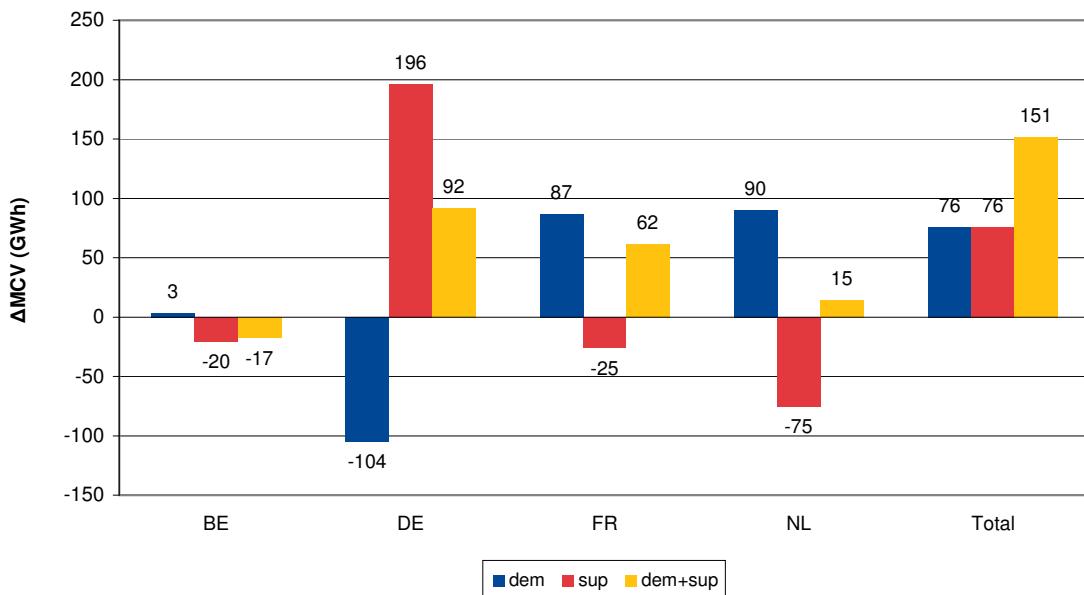
### ΔMCV (FBMC - ATCMC)

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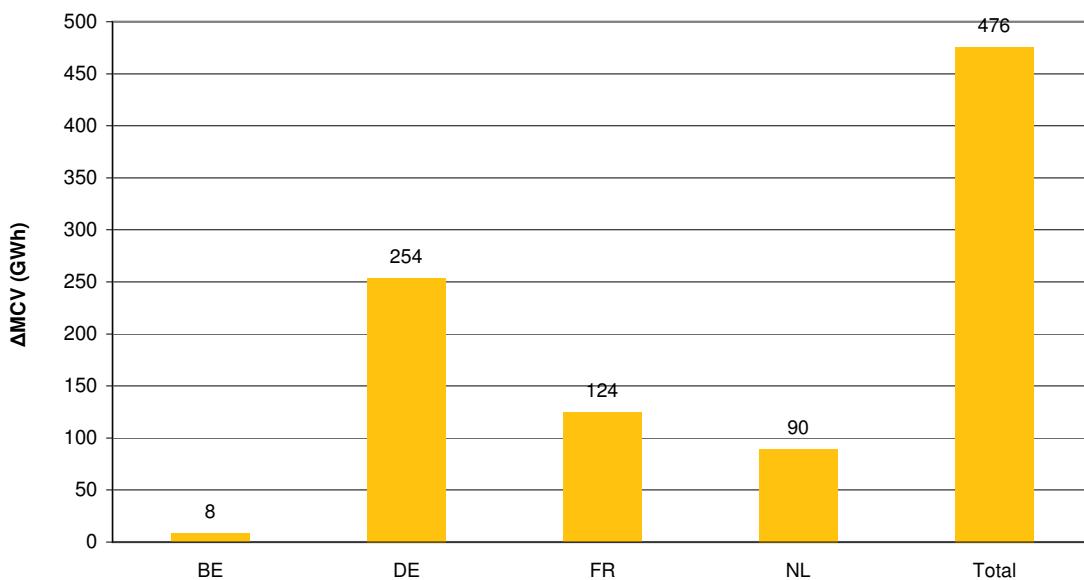
MCV - BE
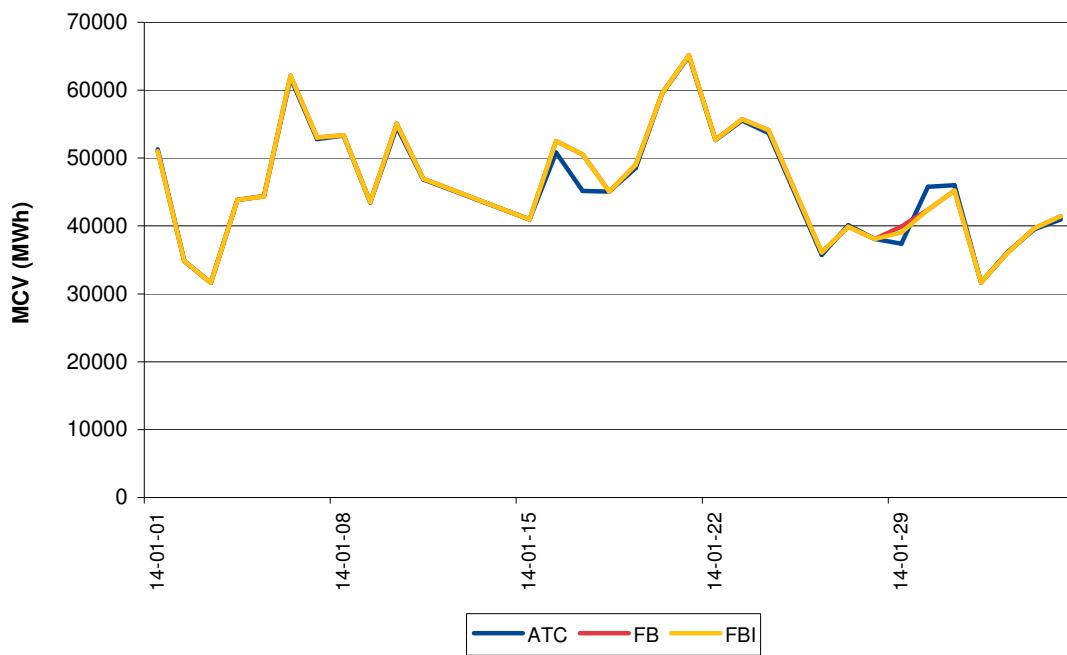
MCV - DE
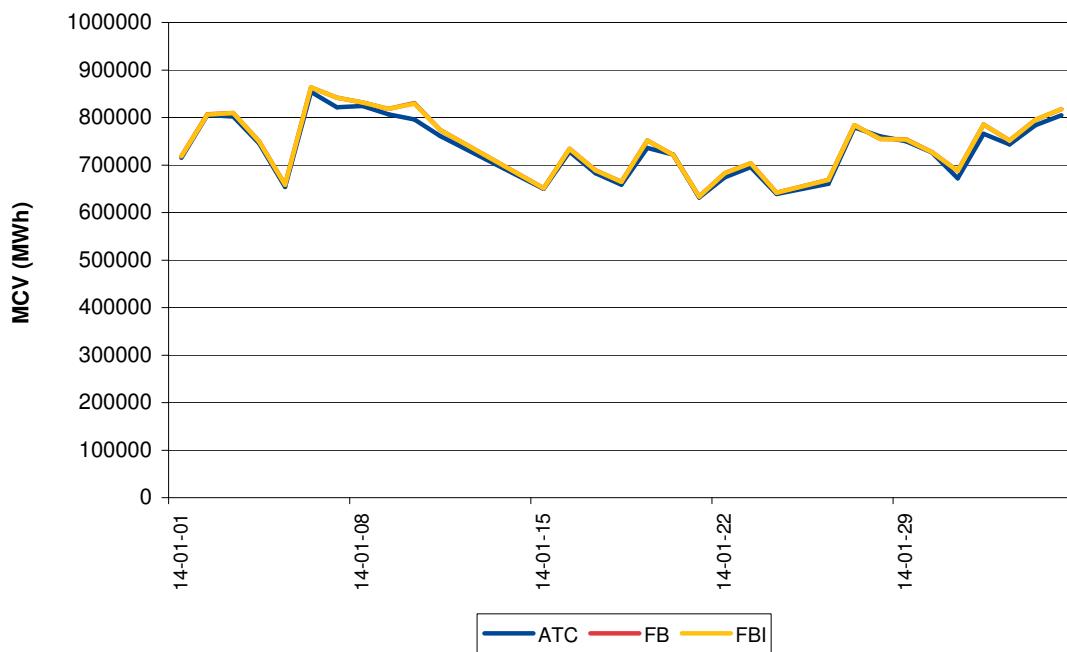
MCV - FR

MCV - NL

Average baseload price

Average baseload price (+/- 1σ)

|	ATC	FB	FBI	INF
BE	€39.89	€39.69	€39.68	€38.17
DE	€35.95	€36.53	€36.52	€38.17
FR	€39.40	€38.82	€38.82	€38.17
NL	€45.22	€42.22	€42.23	€38.17
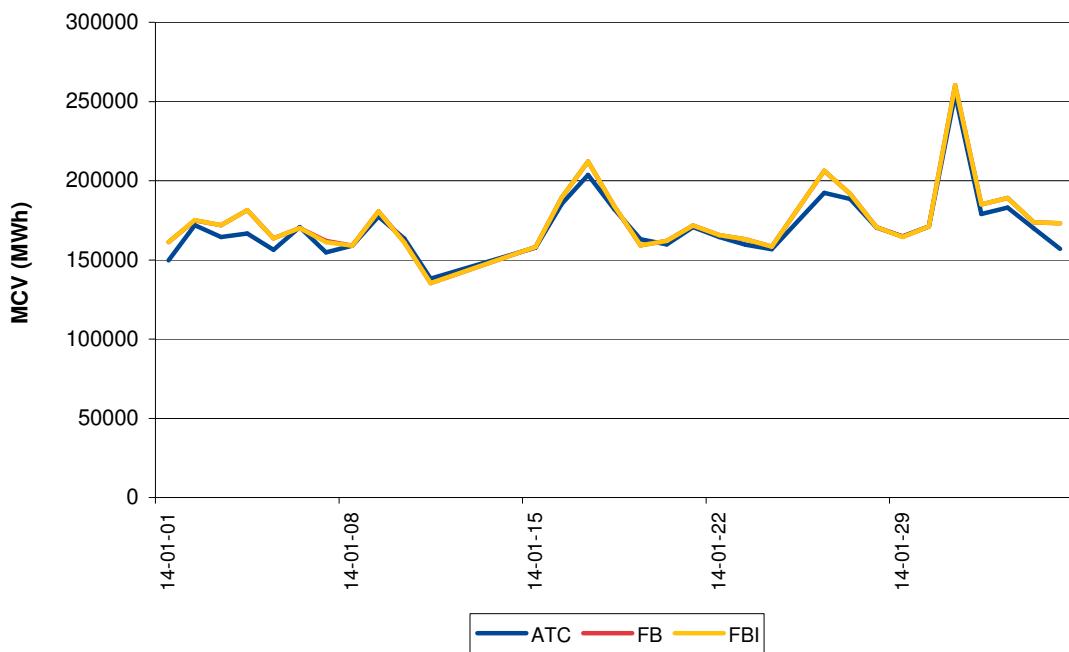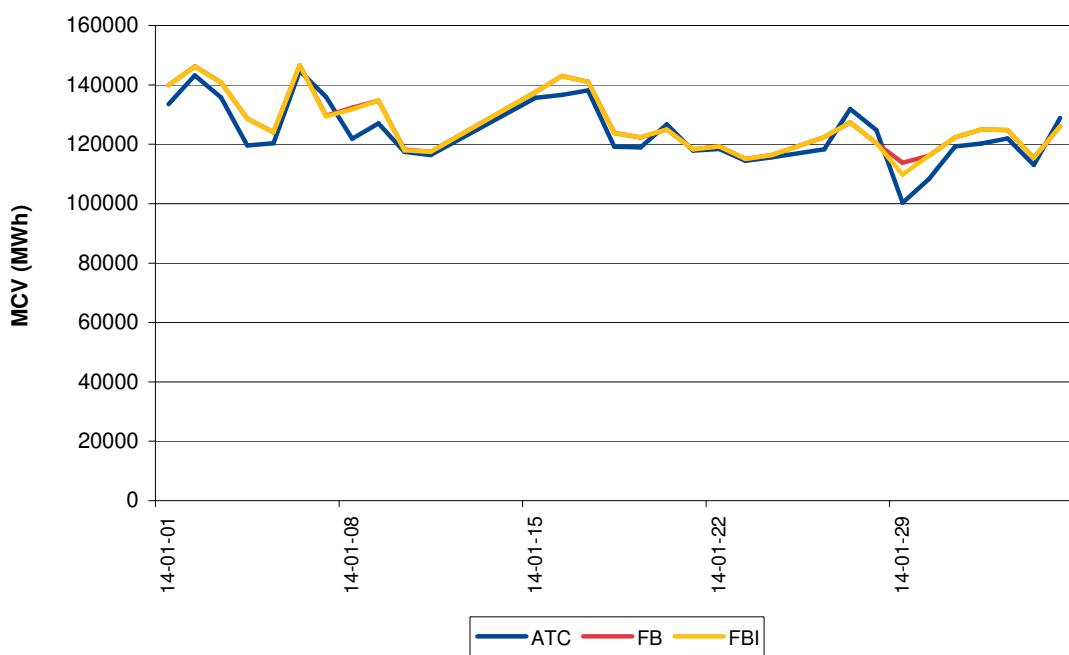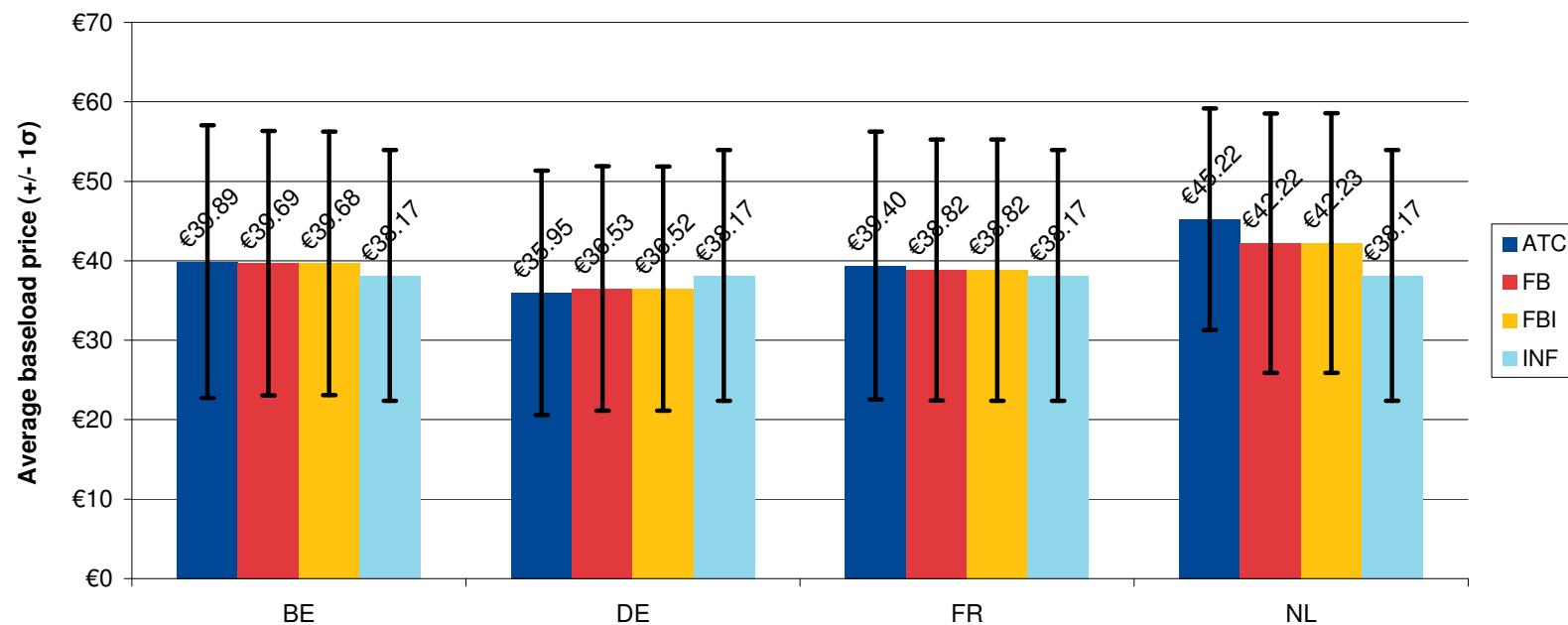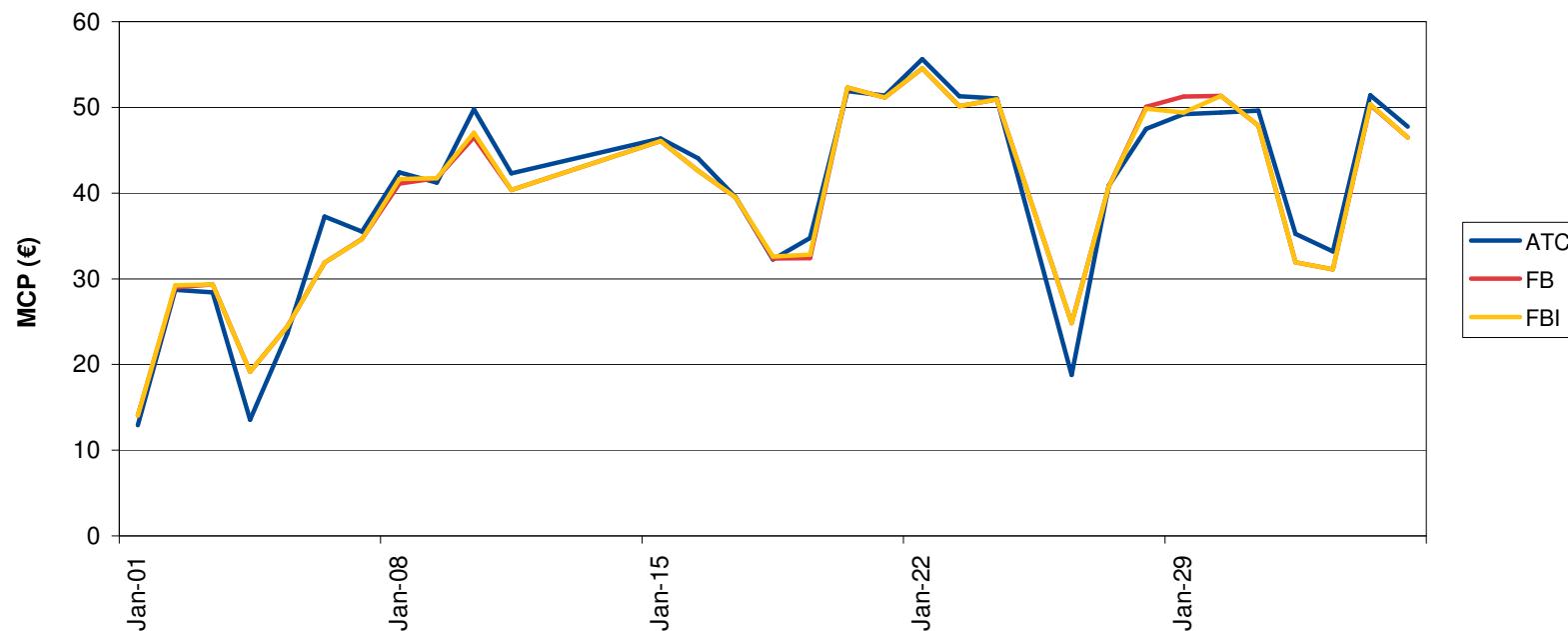
Baseload price - BE

Baseload price - DE
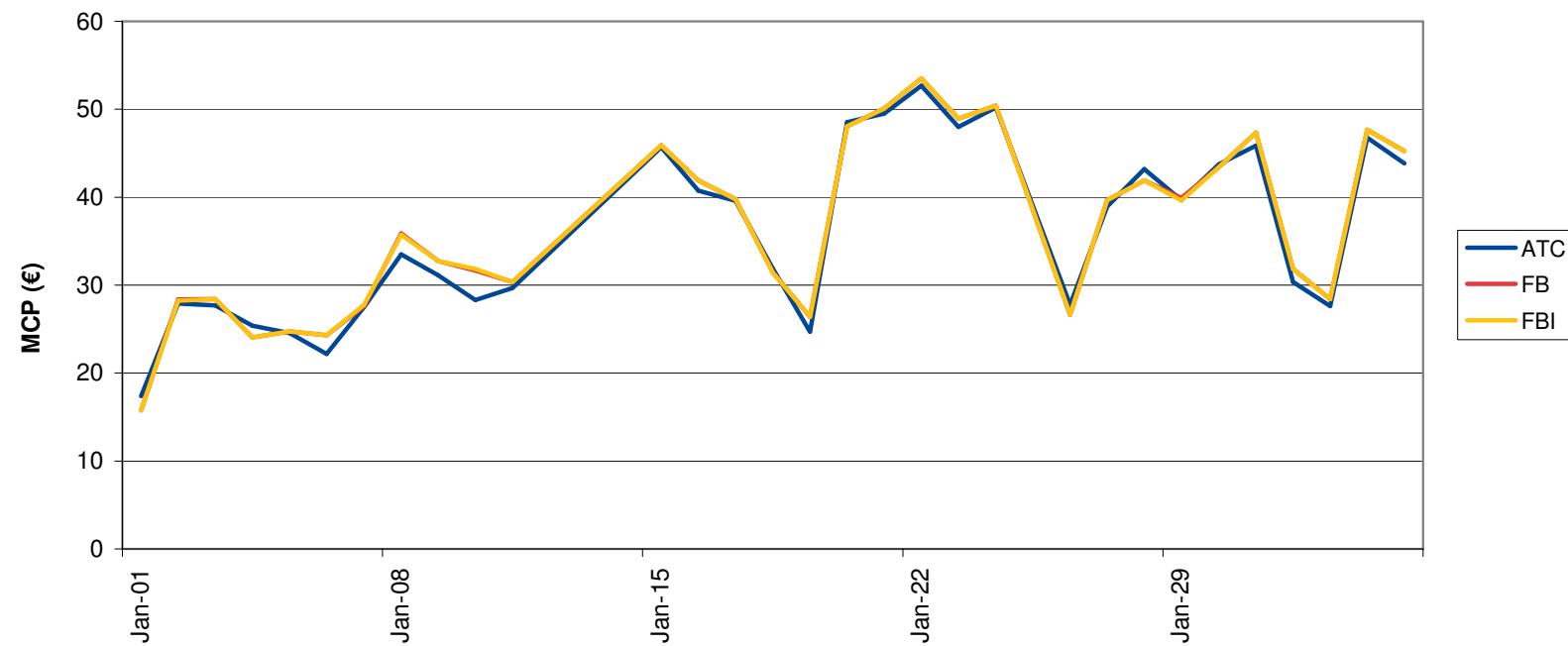
Baseload price - FR
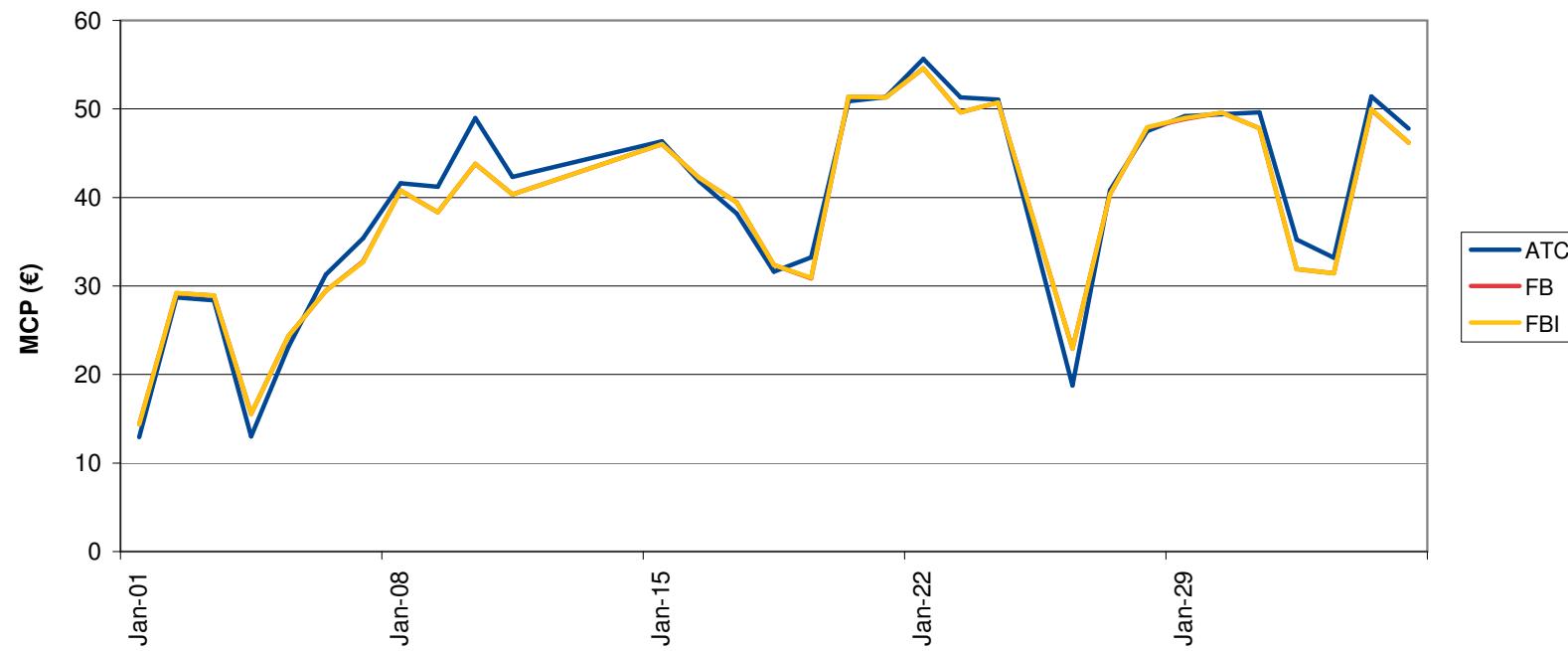
Baseload price - NL

MCP - BE

MCP - DE

MCP - FR

Legend: FBI, FB, ATC
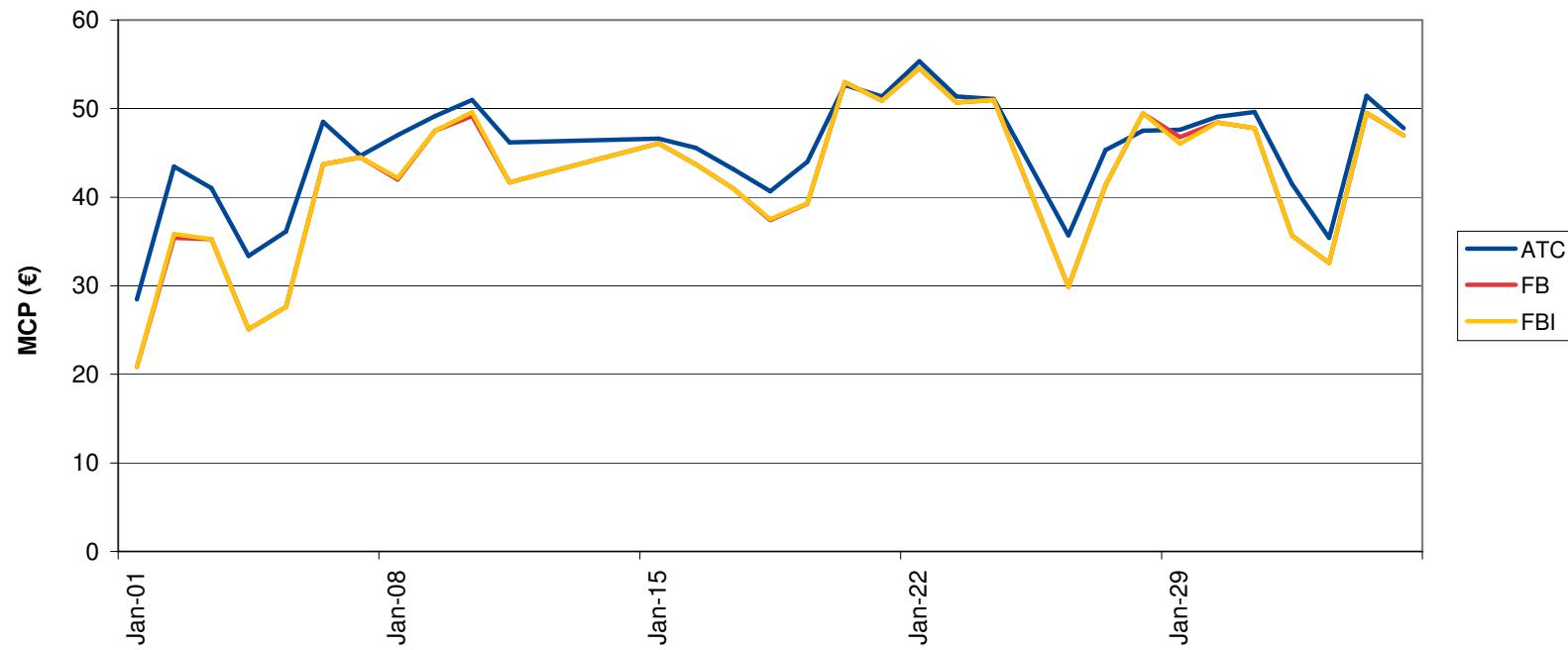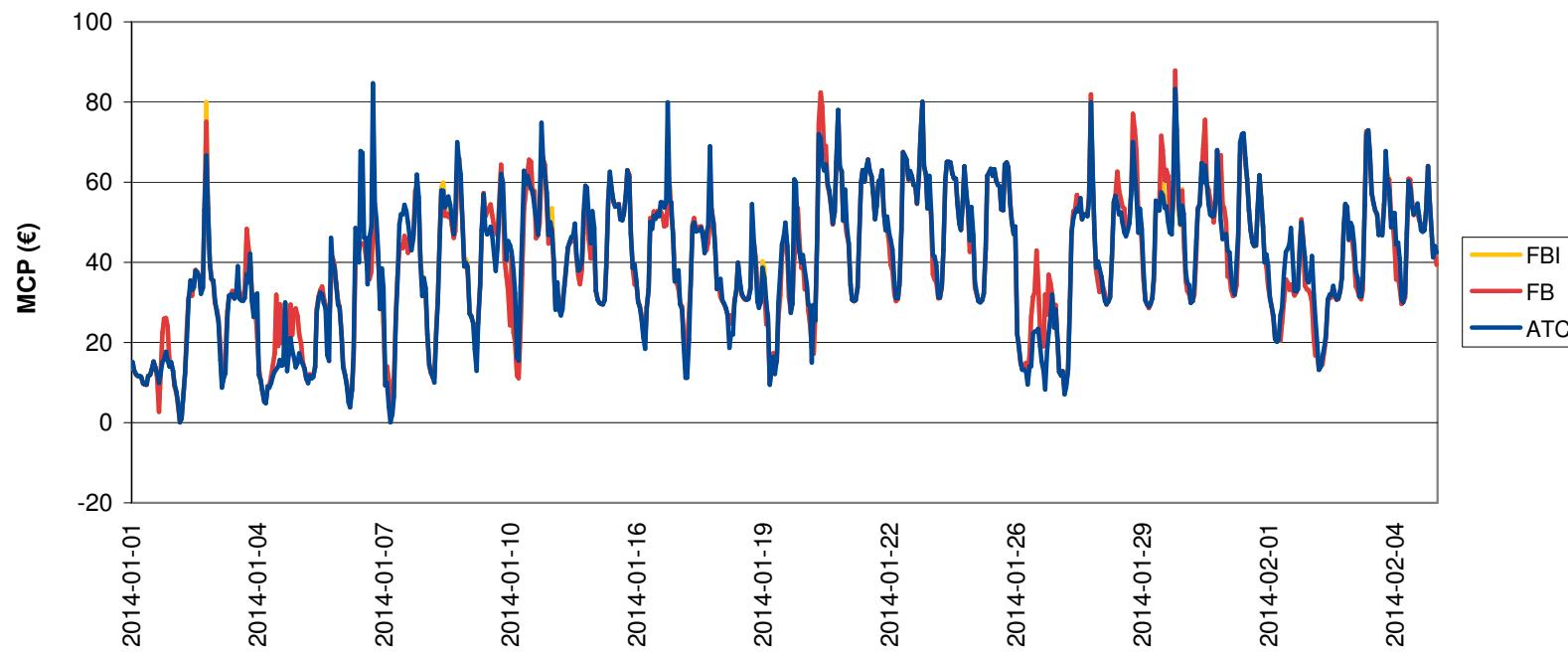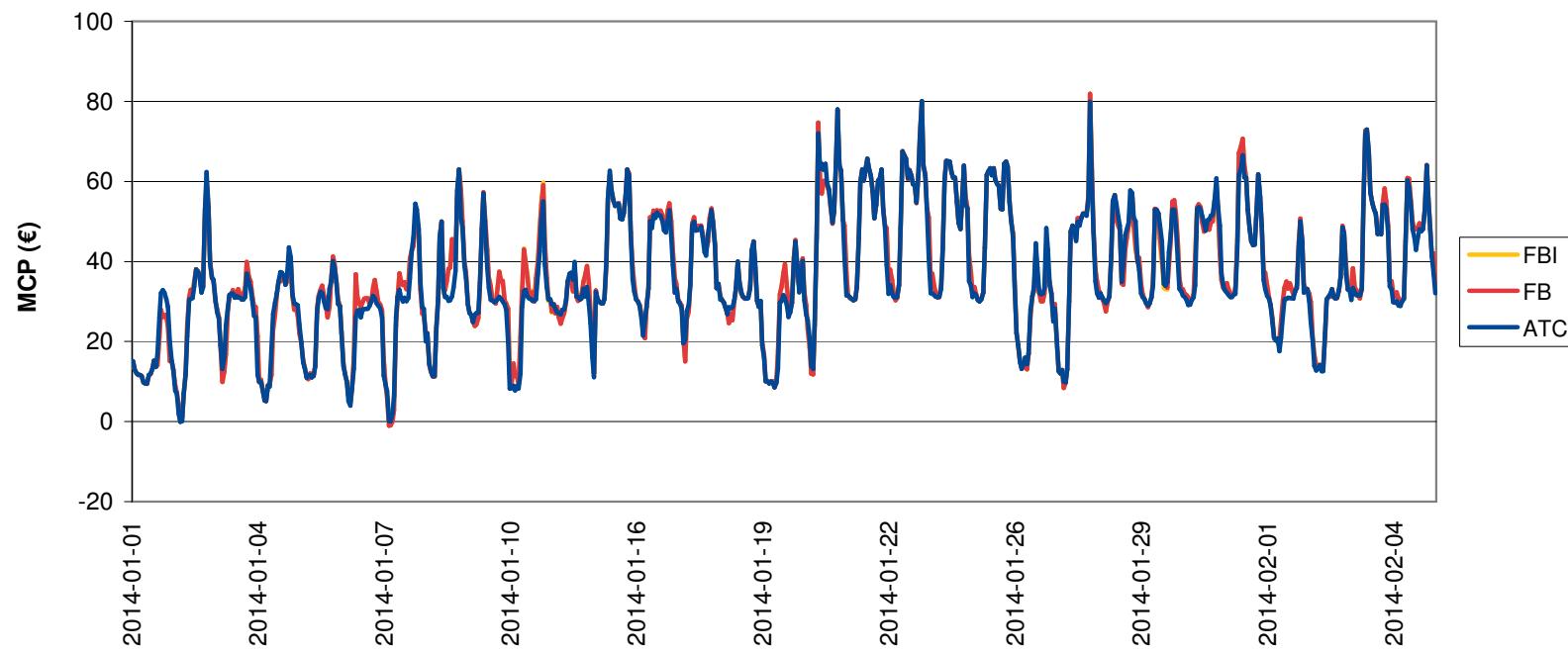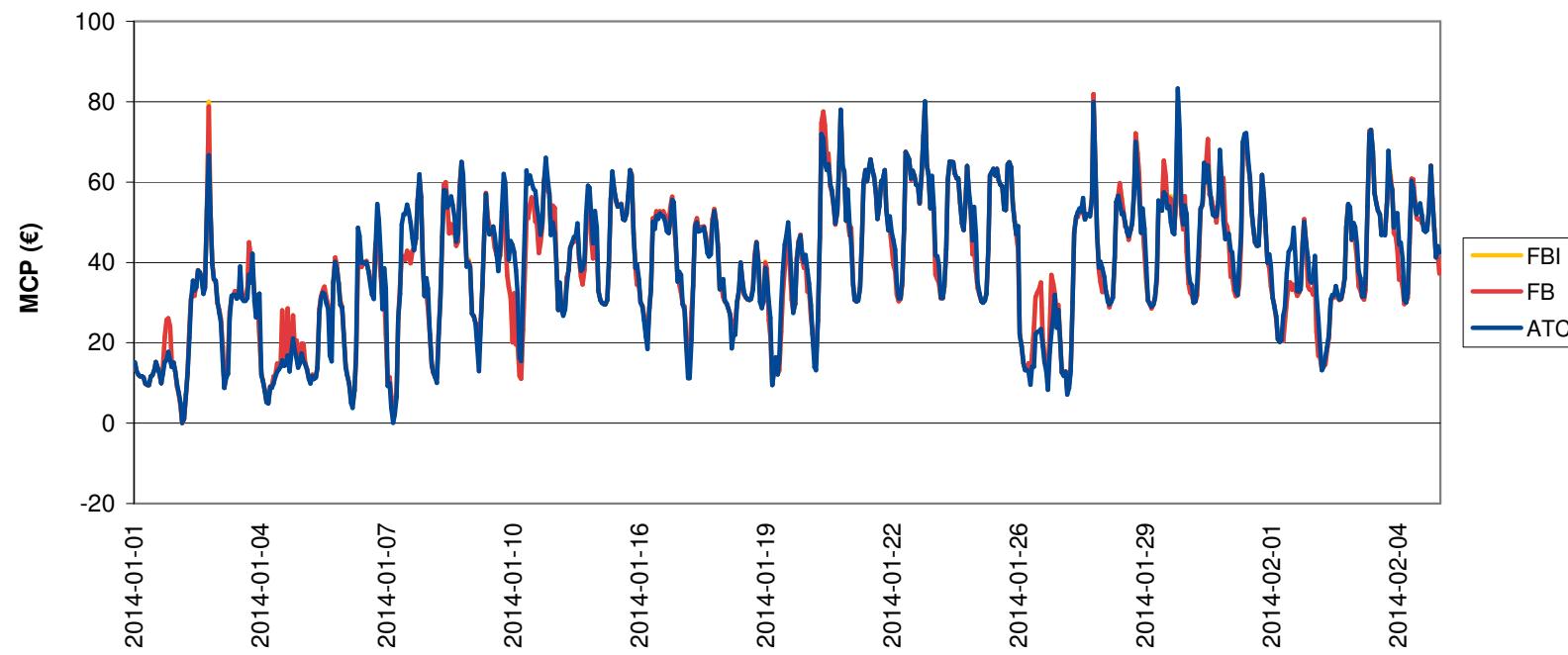
MCP - NL
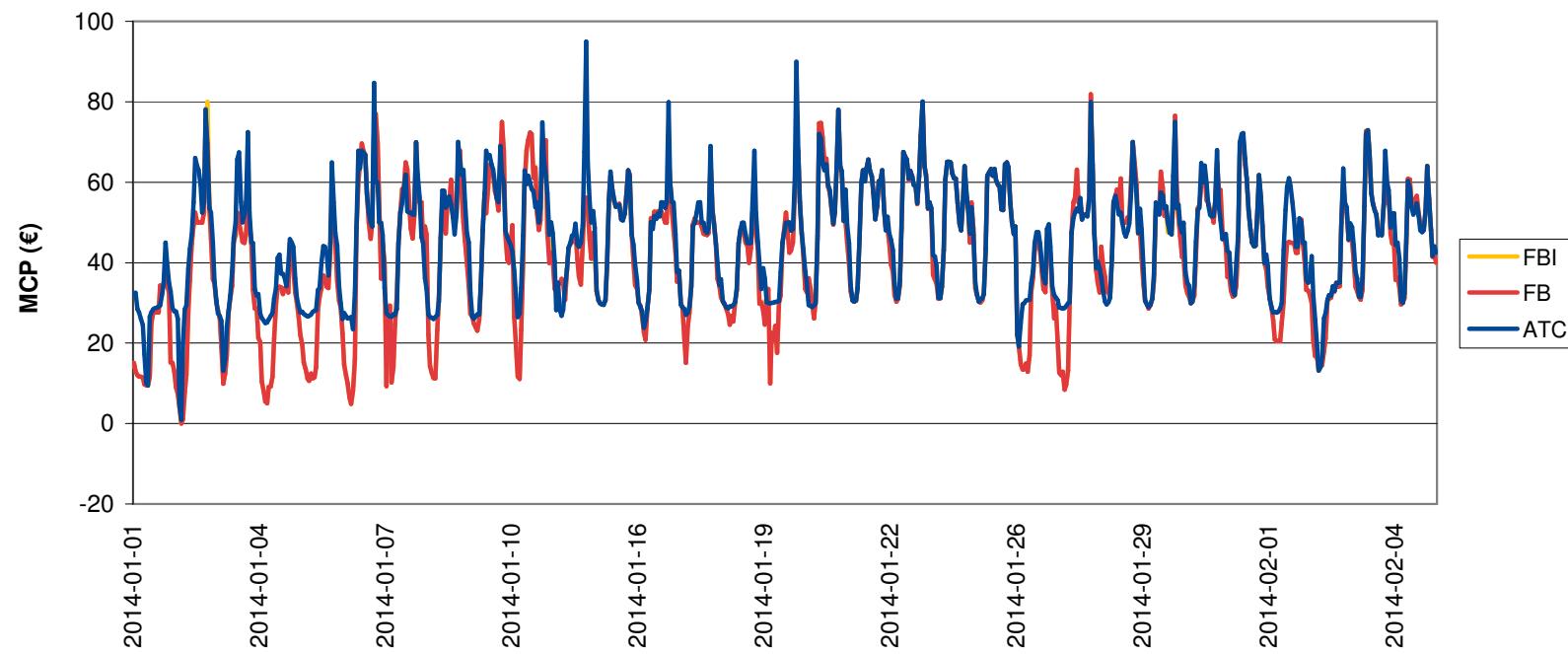
Intuitiveness

Frequency

The period under consideration contains 744 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	23	3.1%	5.9%
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
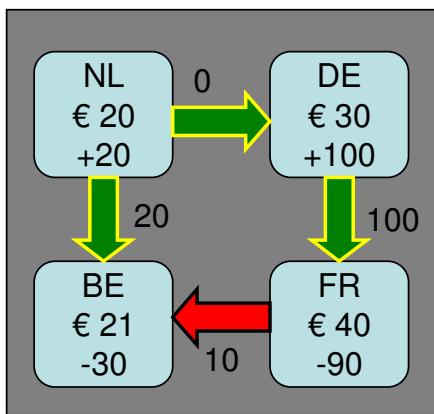
BE+NL are together importing, yet are the cheapest markets. This means no bilateral exchanges can be found that do not include at least one counter intuitive flow (FR-BE in our example). Yet none of the markets are involved: NL is the cheapest market and is exporting. Even though the set {BE, NL} is 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	11	1	11	1

Paradoxically rejected block orders

	Number of PRBs	PRB Utility value
ATCMC	170	€187,036
FBMC	168	€177,966
FBIMC	180	€189,396
Infinite Capacity	109	€26,552
Isolated	680	€5,145,126

Block Bids

Proportion of accepted block orders in the Total	BE	DE	FR	NL
ATCMC	8.6%	3.9%	8.9%	8.9%
FBMC	8.0%	4.0%	9.3%	9.2%
FBIMC	8.0%	4.0%	9.3%	9.1%
Infinite Capacity	8.1%	4.5%	10.2%	10.9%
Isolated	22.6%	4.0%	10.1%	16.1%