

Nordic Capacity Calculation Methodology Project (Nordic CCM)

# Nordic CCM

External Parallel Run Market Report Appendix for Week 21 of 2024



## **Appendix**

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## Domain validation

Energy Delivery Day:	Mon. 20.5	Tue. 21.5	Wed. 22.5	Thu. 23.5	Fri. 24.5	Sat. 25.5	Sun. 26.6
Invalid/missing IGMs	О	0	О	24	0	0	0
Substituted IGMs	О	О	1	24	0	0	О
Invalid CGMs	0	О	О	0	0	0	0
FB domain back-up	О	О	О	24	0	0	0
FAV provision (No. of TSOs)	О	О	О	3	1	0	0
Final domain acceptance (1 TSO =25%)	100%	100%	100%	100%	100%	100%	100%









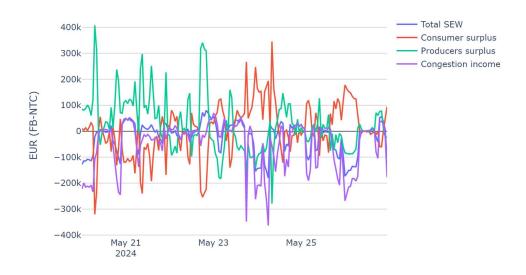


## Socio Economic Welfare

For the socio-economic welfare graphs, the contribution from interconnectors out of the Nordic CCR is not included. Thus, the values for the congestion income are only from the Nordic internal bidding zones, and not from the contributions on the Hansa/Baltic borders. This includes the country specific socio-economic welfare graphs.

## **Nordics**

Hourly Nordic socio-economic welfare gain, FB-NTC









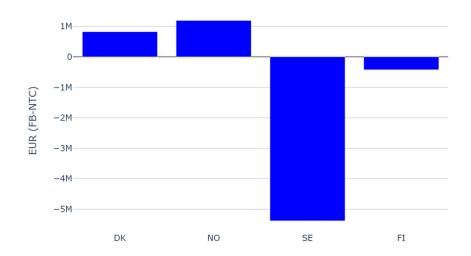




## Nordics socio-economic welfare per stakeholder and day



## Total Nordic socio-economic welfare per country





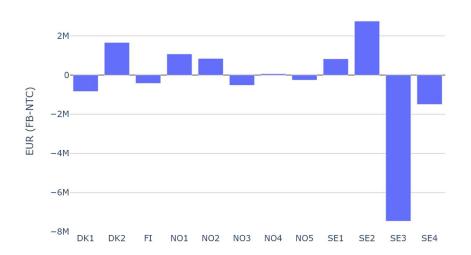






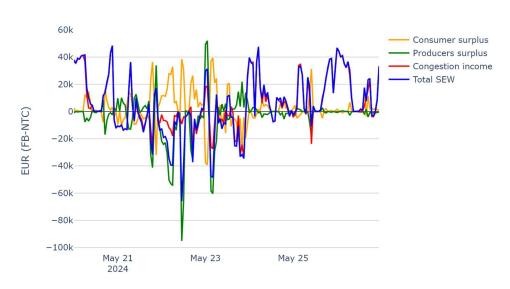


## Socio economic welfaregain FB-NTC per BZ - Total\_sew



## **Denmark**

## DK, socio-economic welfare per stakeholder and country





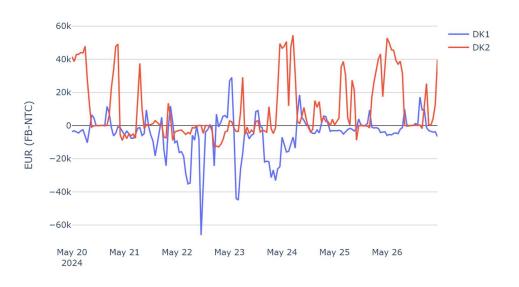




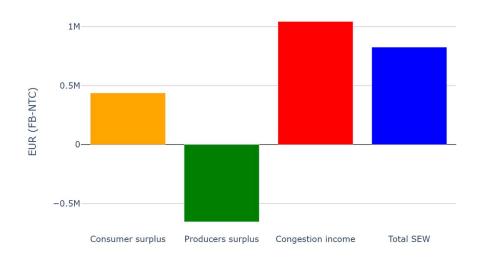




## Total socio economic welfaregain FB-NTC per BZ in DK



## DK, socio-economic welfare per stakeholder and country







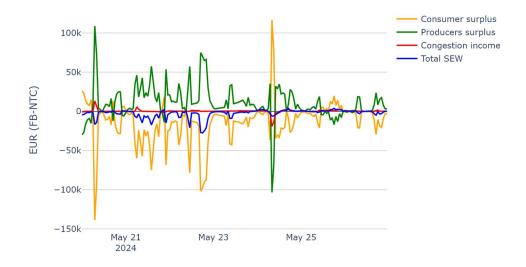




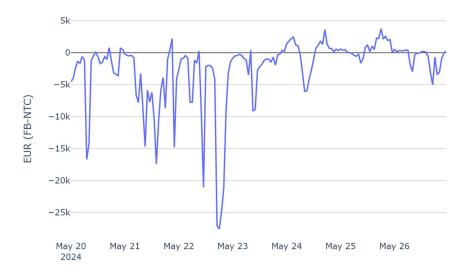


## **Finland**

FI, socio-economic welfare per stakeholder and country



#### Total socio economic welfaregain FB-NTC per BZ in FI





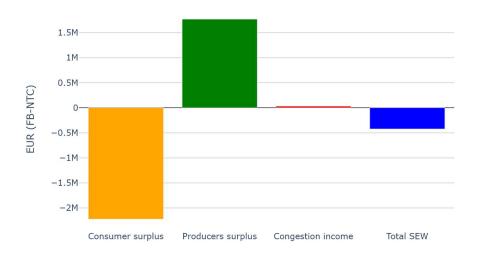






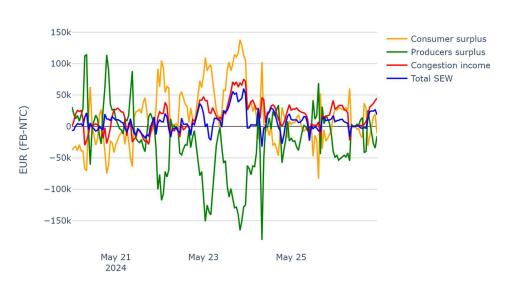


FI, socio-economic welfare per stakeholder and country



## **Norway**

## NO, socio-economic welfare per stakeholder and country





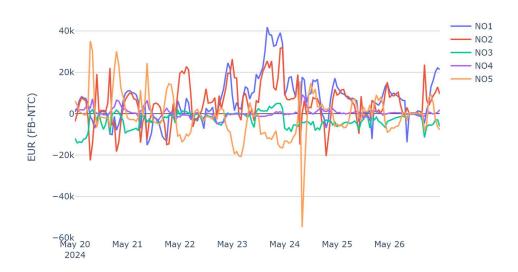




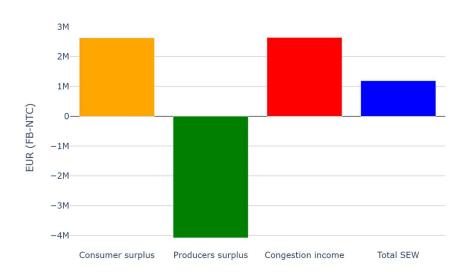




## Total socio economic welfaregain FB-NTC per BZ in NO



## NO, socio-economic welfare per stakeholder and country







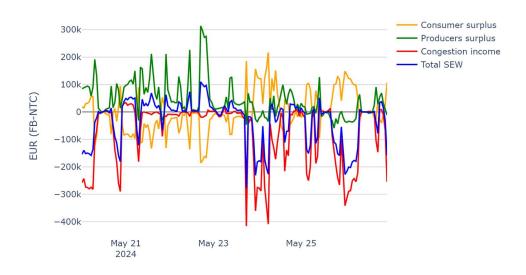




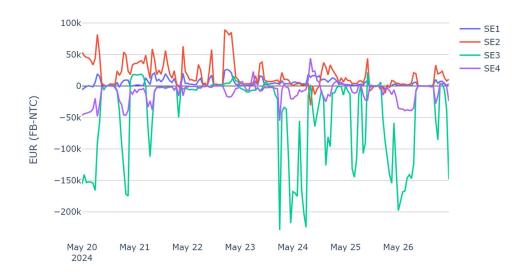


## **Sweden**

SE, socio-economic welfare per stakeholder and country



#### Total socio economic welfaregain FB-NTC per BZ in SE





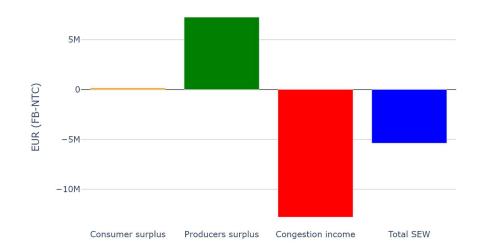








## SE, socio-economic welfare per stakeholder and country







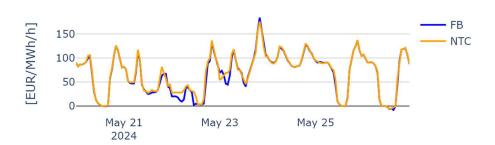




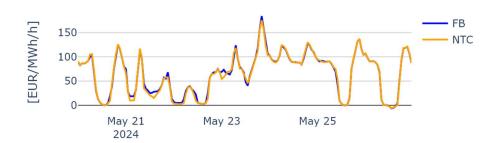


## **Prices**

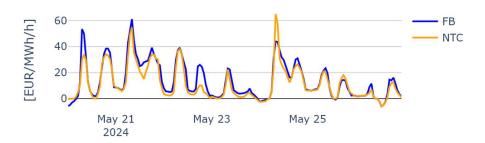
DK1 price



DK2 price



FI price





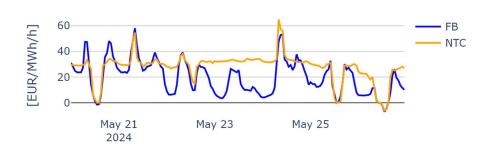




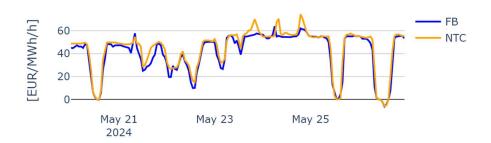




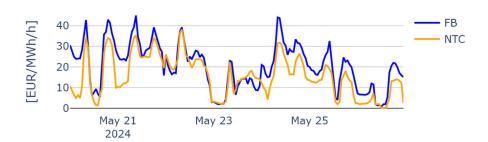




## NO<sub>2</sub> price



## NO3 price





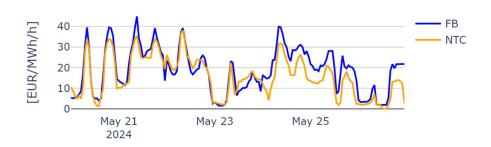




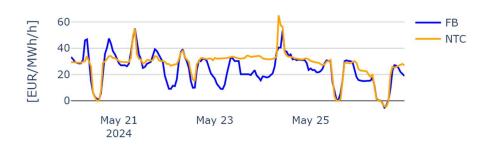




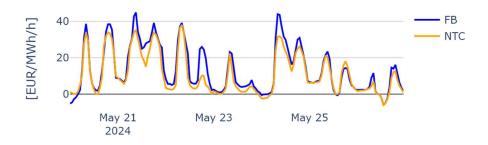




## NO5 price



## SE1 price





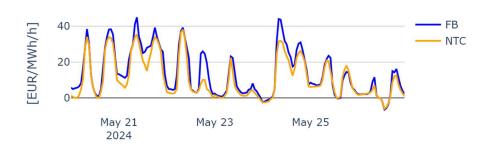




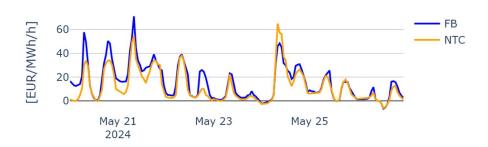




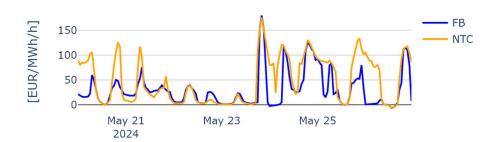




## SE3 price



## SE4 price











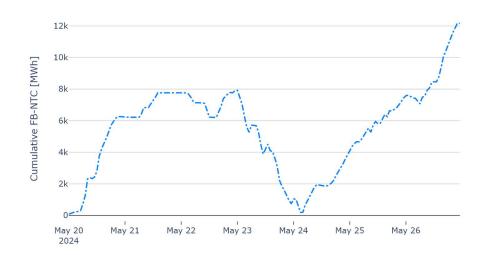


## **Net positions**

## **Nordics**

Total Net Position Nordics











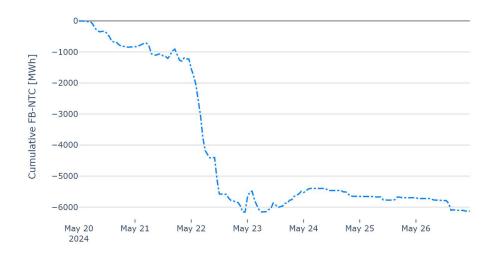




## **Denmark**

Total Net Position DK































#### Net Position DK2









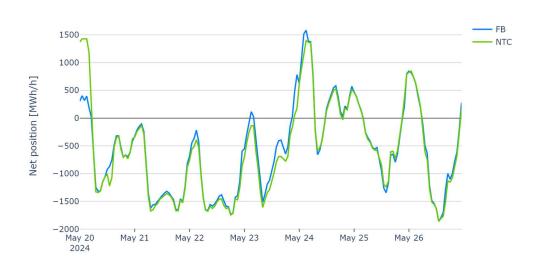


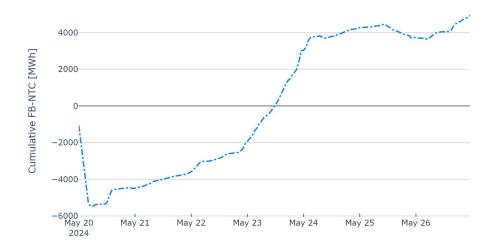




## **Finland**

Total Net Position FI









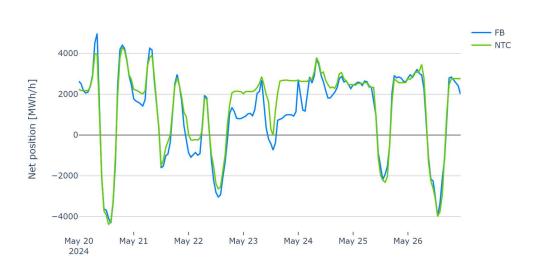






## Norway

Total Net Position NO







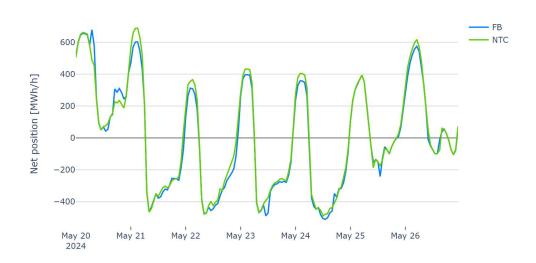
















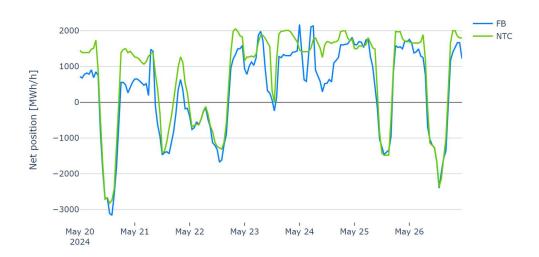
















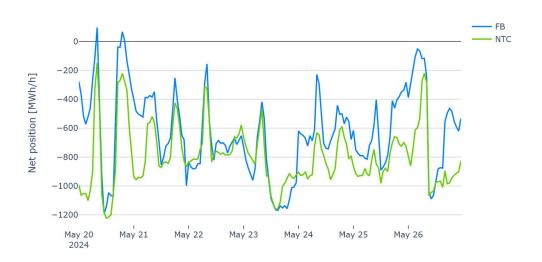








Net Position NO3







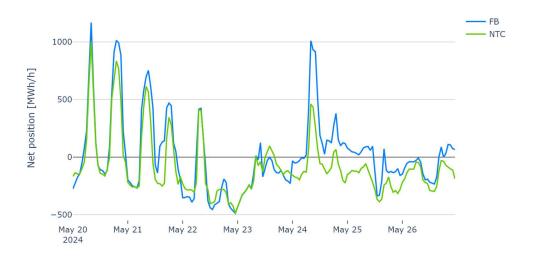
















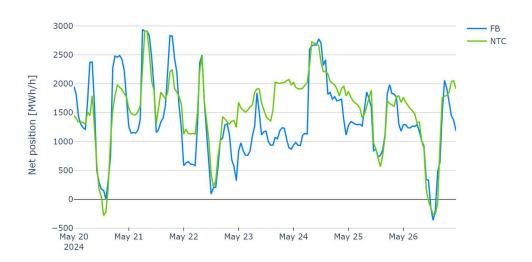


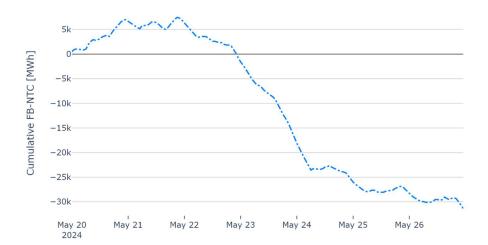






















## Sweden

Total Net Position SE









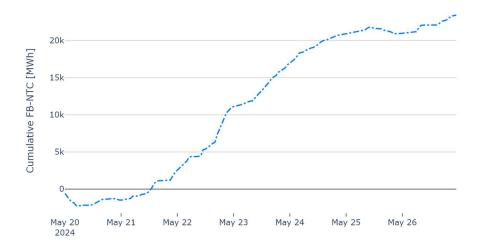
















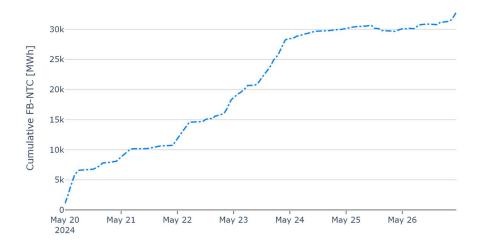






Net Position SE2







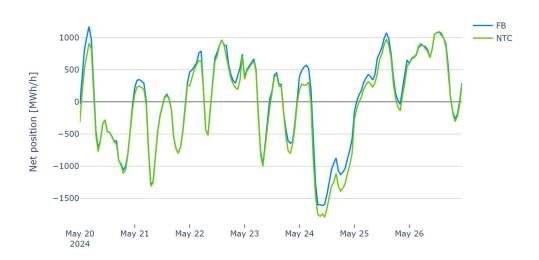


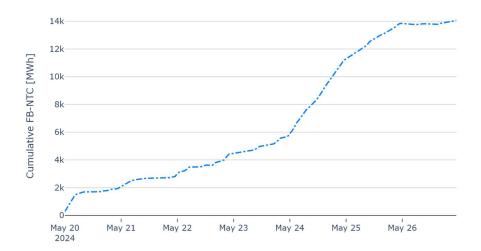


































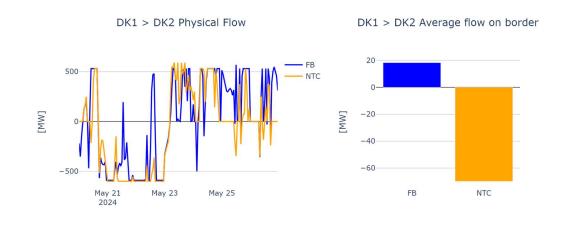




## **Border flow**

The flows present here, both in FB and NTC, represent the physical flow on the lines and are calculated as the product of the NP and the PTDF matrix. When comparing the NTC-results in this report with those present in the DA market there will be a difference as the DA flows are calculated without the use of PTDF matrixes and therefore the flow from DA will not yield the same result.

DK1 > DE/LU Physical Flow DK1 > DE/LU Average flow on border 1500 2000 1000 1000 [MM] [MM] -1000 500 -2000 NTC May 21 May 23 May 25













DK1 > NL Physical Flow 500 [MM] -500

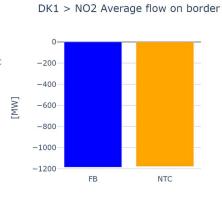
May 23

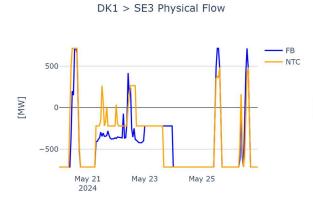
May 21 2024

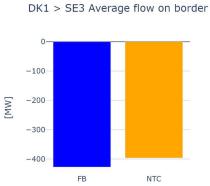
DK1 > NL Average flow on border -20 -40 -60 -80 -100 -120

NTC

DK1 > NO2 Physical Flow FB 1000 NTC 500 [MM] -500 -1000 -1500 May 21 2024 May 25













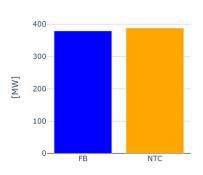




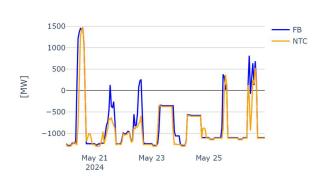
DK2 > DE/LU Physical Flow

1000 500 [MM] -500 -1000 May 21 2024 May 23 May 25

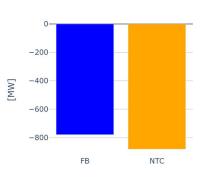
DK2 > DE/LU Average flow on border



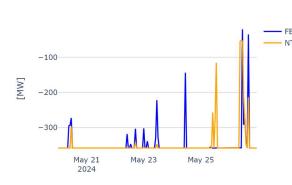
DK2 > SE4 Physical Flow



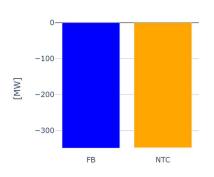
DK2 > SE4 Average flow on border



EE > FI Physical Flow



EE > FI Average flow on border













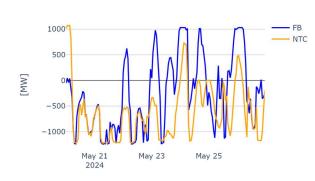
FI > NO4 Physical Flow

0.2 -0.4 -0.6 May 21 2024 May 23 May 25

FI > NO4 Average flow on border



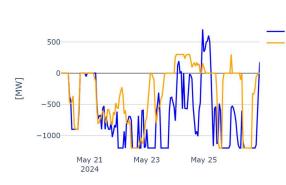
FI > SE1 Physical Flow



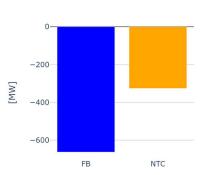
FI > SE1 Average flow on border



FI > SE3 Physical Flow



FI > SE3 Average flow on border







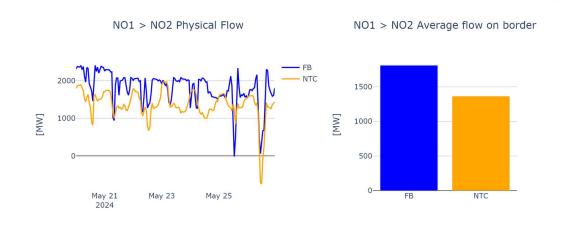






LT > SE4 Physical Flow LT > SE4 Average flow on border -100 -300 -200 [MM] -400 -300 -500 -400 -600 -500 -600 -700 May 21 2024 NTC May 23

NL > NO2 Physical Flow NL > NO2 Average flow on border 0-500 -100 -200 [MM] -300 -500 -400 May 21 2024 May 23 FB NTC













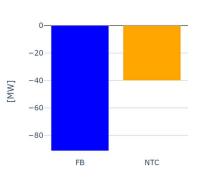
NO1 > NO3 Physical Flow 200 100 [MM] -100 -200 -300

May 23

May 25

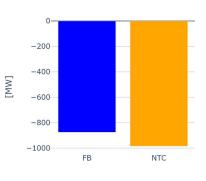
May 21 2024

NO1 > NO3 Average flow on border



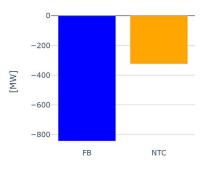
NO1 > NO5 Physical Flow 500 -500 [MM] -1000 -2000 May 21 2024 May 23 May 25

NO1 > NO5 Average flow on border



NO1 > SE3 Physical Flow 500 [MM] -500 -1000 -1500 -2000 May 21 2024 May 23 May 25

NO1 > SE3 Average flow on border







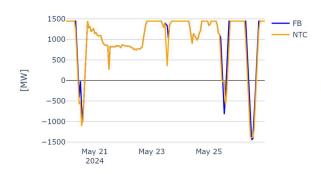


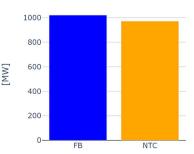




NO2 > DE/LU Physical Flow

NO2 > DE/LU Average flow on border

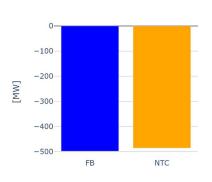




NO2 > NO5 Physical Flow

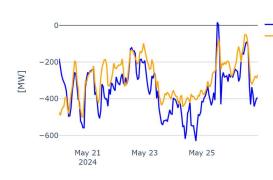
NO2 > NO5 Average flow on border

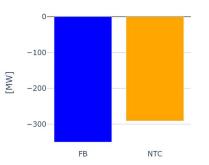




NO3 > NO4 Physical Flow

NO3 > NO4 Average flow on border











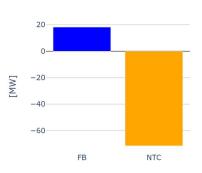




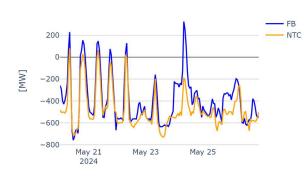
NO3 > NO5 Physical Flow

200 100 [MM] -200 -300May 21 2024 May 23 May 25

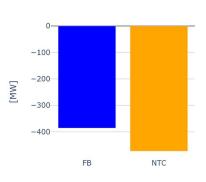
NO3 > NO5 Average flow on border



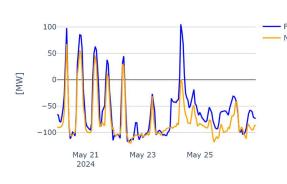
NO3 > SE2 Physical Flow



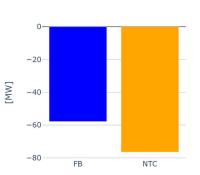
NO3 > SE2 Average flow on border



NO4 > SE2 Physical Flow



NO4 > SE2 Average flow on border













PL > SE4 Physical Flow PL > SE4 Average flow on border 500--100 -200 [MM] -300 -400 -500 -500 May 21 2024 NTC May 25

SE1 > NO4 Physical Flow SE1 > NO4 Average flow on border 300 250 200 150-100 -500 0-May 21 2024 May 23 May 25 FB NTC







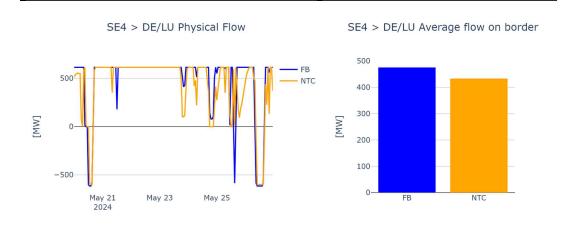






SE2 > SE3 Physical Flow SE2 > SE3 Average flow on border 8000 5000 4000 [MM] 3000 2000 2000 1000 0-May 21 2024 May 23 May 25 NTC

SE3 > SE4 Physical Flow SE3 > SE4 Average flow on border 4000 3000 3000 [MM] [MM] 2000 2000 1000 1000 -1000 0-May 21 2024 May 23 FB NTC













## Flows per border (FB)

Values are rounded to the nearest integer.

Border	Congestion Income (total)	Avg. Price Spread	
DK1 > DE/LU	3908912	12	
DK1 > DK2	316377	3	
DK1 > NL	1237908	11	
DK1 > NO2	7027828	27	
DK1 > SE3	5069866	53	
DK2 > DE/LU	1656831	14	
DK2 > SE4	5957966	35	
EE > FI	3236871	54	
FI > NO4	61	2	
FI > SE1	126556	1	
FI > SE3	-20615	0	
LT > SE4	3823669	37	
NL > NO2	3441274	35	
NO1 > NO2	6498008	21	
NO1 > NO3	1965	0	
NO1 > NO5	-538470	-4	
NO1 > SE3	707639	5	
NO2 > DE/LU	7641280	39	
NO2 > NO5	1427887	17	
NO3 > NO4	84141	2	
NO3 > NO5	22813	0	
NO3 > SE2	506376	6	
NO4 > SE2	68295	5	
PL > SE4	6062354	61	
SE1 > NO4	339438	6	
SE1 > SE2	41834	1	
SE2 > SE3	1507006	2	
SE3 > SE4	10255498	15	
SE4 > DE/LU	4943297	50	











## Non-Intuitive flows (FB)

Values are rounded to the nearest integer.

Border	Pct. of non-intuitive flows	Negative congestion	Avg. price spread for nor	
border	Pct. of fion-intuitive flows	income	intuitive flows	
DK1 > DE/LU	0	0	0	
DK1 > DK2	7	-30069	-8	
DK1 > NL	4	-13995	-10	
DK1 > NO2	15	-122171	-8	
DK1 > SE3	8	-3578	-2	
DK2 > DE/LU	4	-2157	-3	
DK2 > SE4	3	-90	0	
EE > FI	0	0	0	
FI > NO4	31	-13	-7	
FI > SE1	17	-1798	0	
FI > SE3	25	-61117	-2	
LT > SE4	2	-288	0	
NL > NO2	4	-1945	-5	
NO1 > NO2	6	-3075	0	
NO1 > NO3	24	-20940	-3	
NO1 > NO5	82	-615995	-5	
NO1 > SE3	5	-9795	-1	
NO2 > DE/LU	4	-17929	-8	
NO2 > NO5	8	-3127	-1	
NO3 > NO4	27	-42702	-2	
NO3 > NO5	43	-8469	-7	
NO3 > SE2	5	-3285	-4	
NO4 > SE2	7	-548	-1	
PL > SE4	5	-165240	-49	
SE1 > NO4	6	-2098	-1	
SE1 > SE2	32	-47264	-1	
SE2 > SE3	19	-48412	0	
SE3 > SE4	22	-21570	0	
SE4 > DE/LU	1	-341	-11	







