

# Strategic reserve volume determination for winter 2018-19

Public consultation on input data



This presentation accompanies the Excel document containing the input data for the base case analysis done in the context of the volume determination of strategic reserve for winter 2018-19, with an indication for winters 2019-20 and 2020-21. The data was elaborated by Elia in cooperation with the FPS Economy, and is subject to a public consultation starting 21/08/2017 and ending 18/09/2017 at 18:00.

The methodology has been subject to a previous public consultation from 24/04/2017 to 22/05/2017. See the link below for the consulted document.

[http://www.elia.be/~media/files/Elia/users-group/Public%20consultations/2017/20170424\\_SR2018-19-Public-consultation-on-methods-and-data-sources.pdf](http://www.elia.be/~media/files/Elia/users-group/Public%20consultations/2017/20170424_SR2018-19-Public-consultation-on-methods-and-data-sources.pdf)

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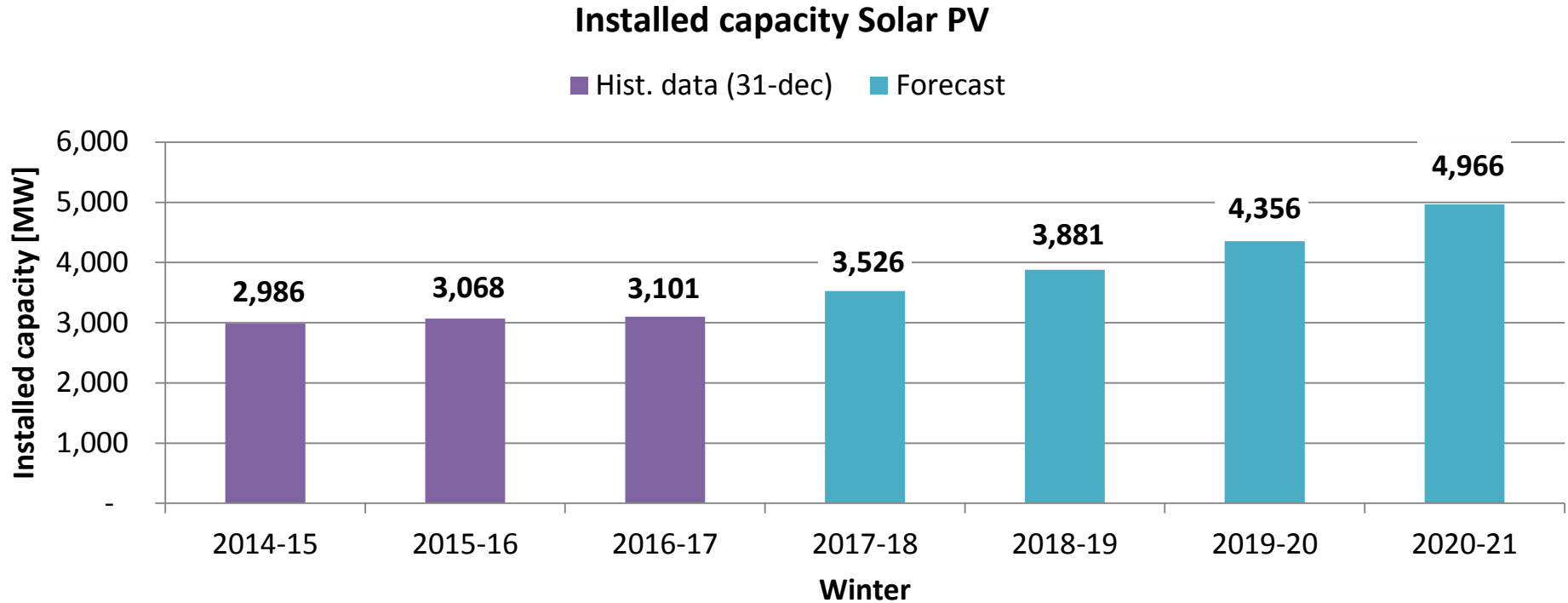


# Belgian Production park

Proposal for hypotheses



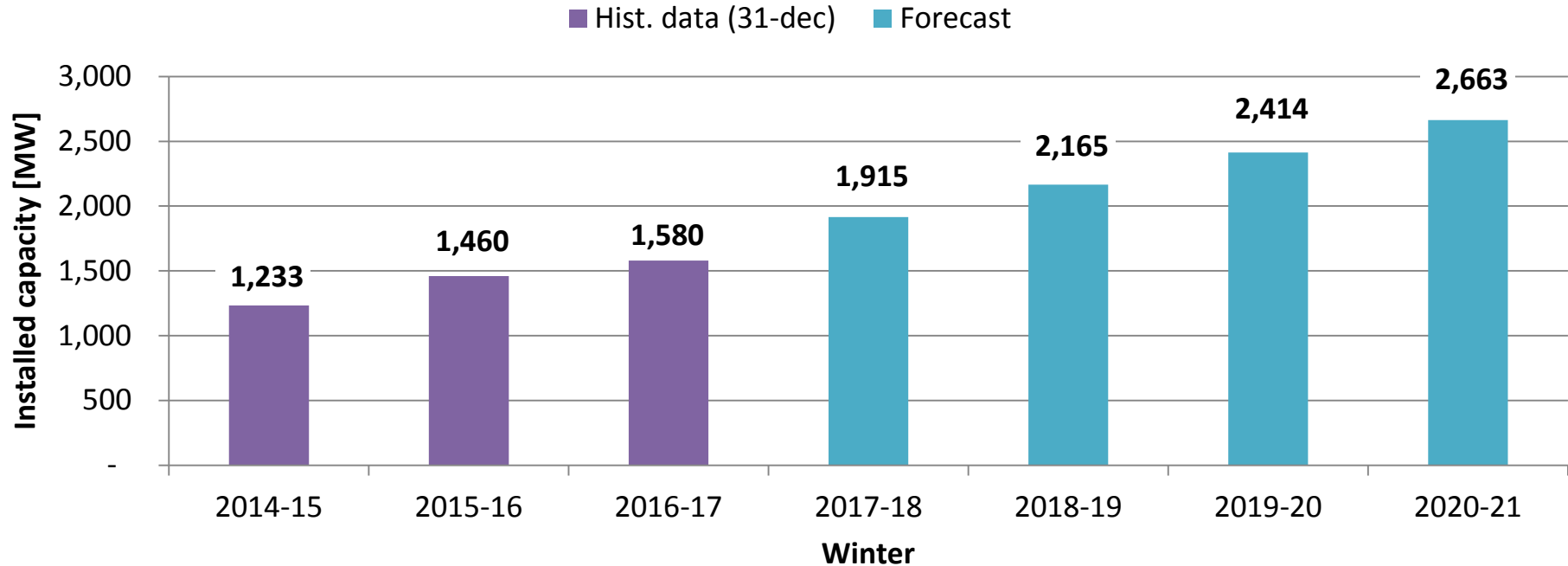
# Solar PV – numbers based on information received from regions





# Onshore wind – numbers based on information received from regions

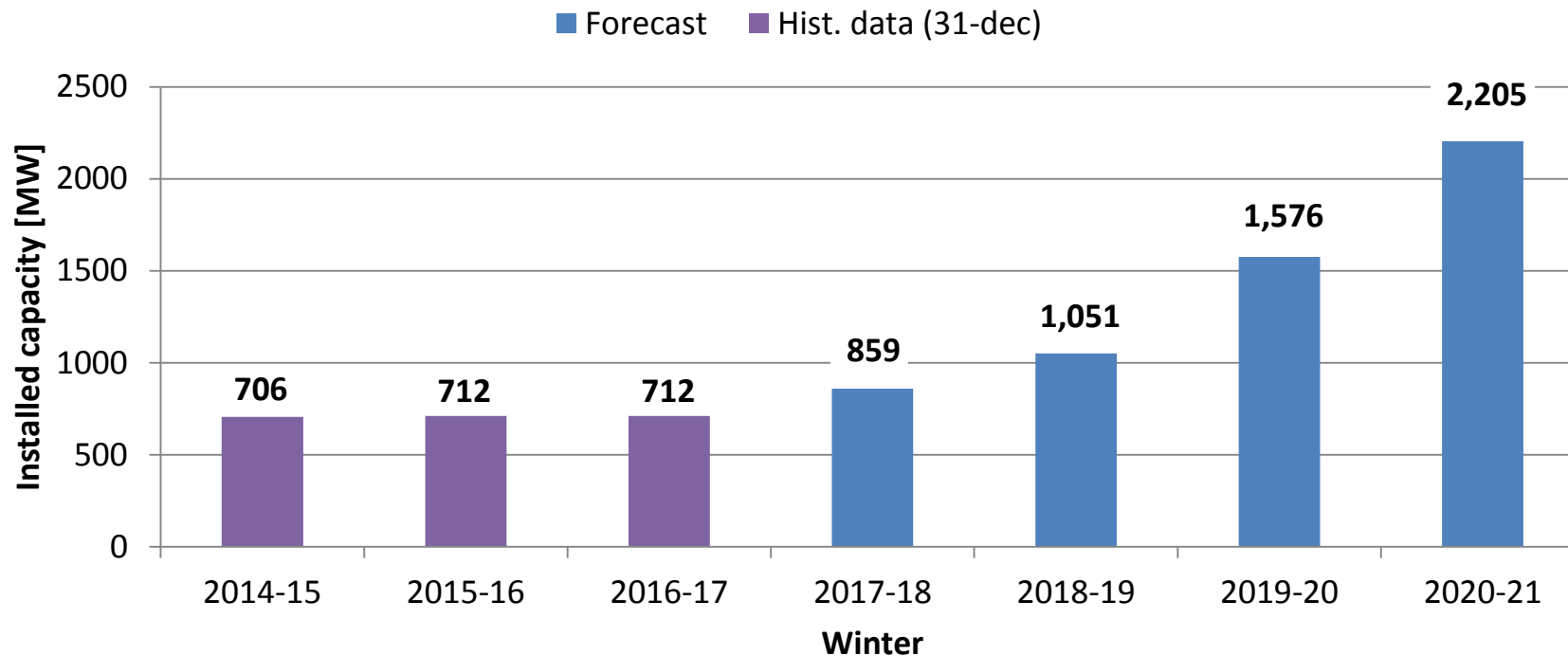
## Installed capacity onshore wind





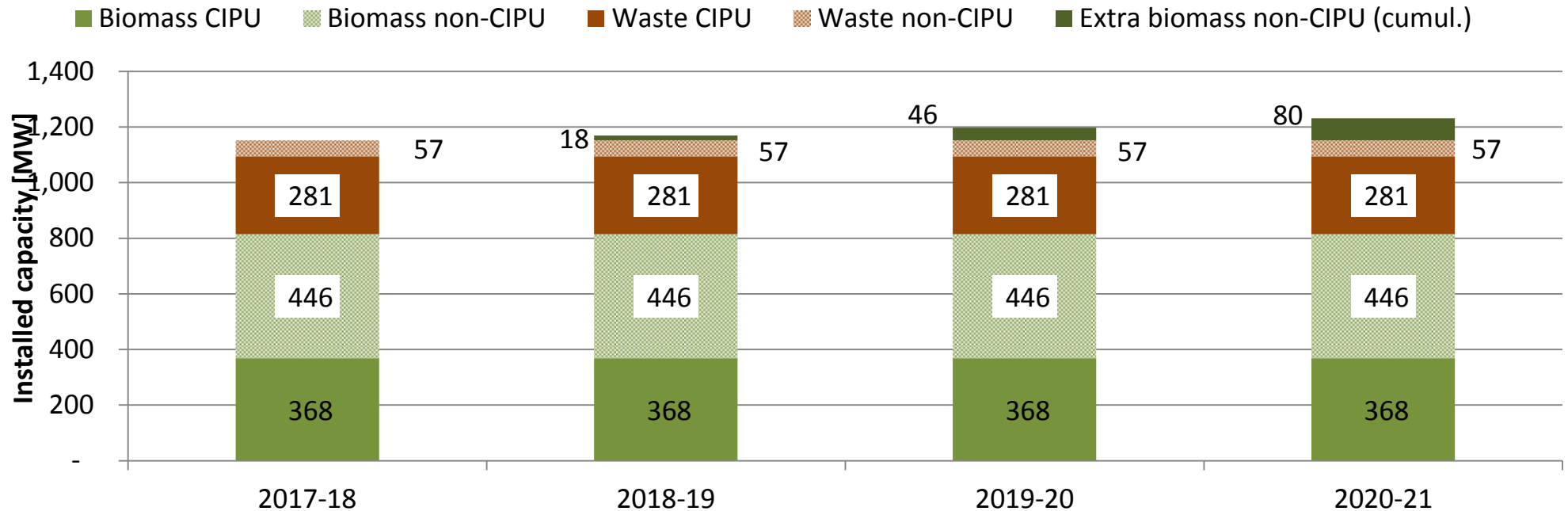
## Offshore wind – Elia best estimate

### Installed capacity offshore wind

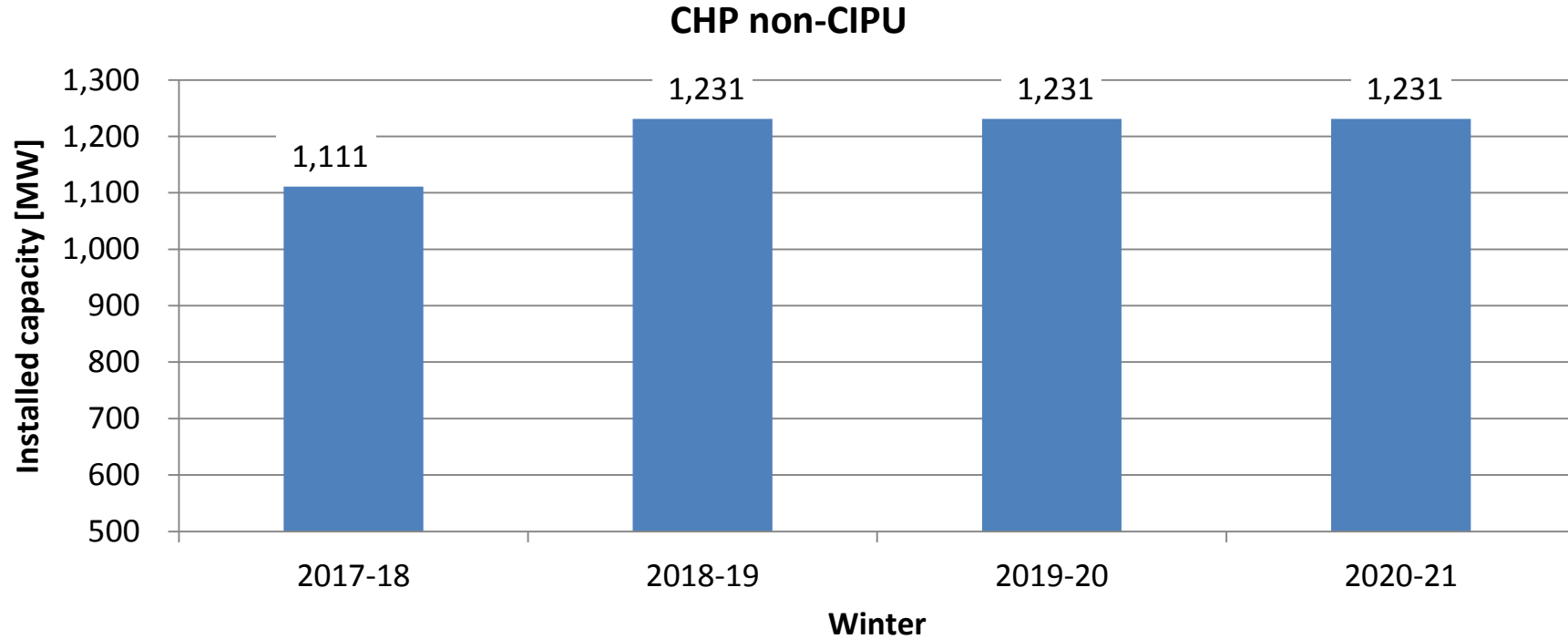


# Biomass – Elia production database, combined with growth forecasts provided by the regions

**Installed capacity biomass & waste Elia database**

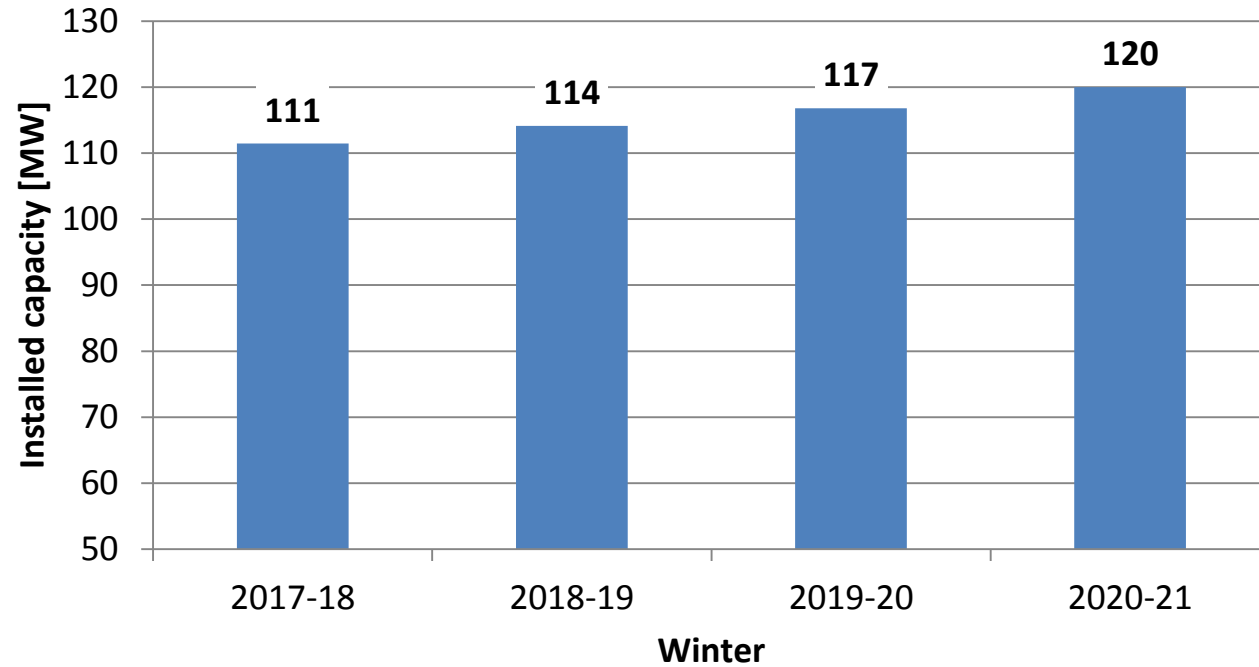


# CHP non-CIPU – Elia production database

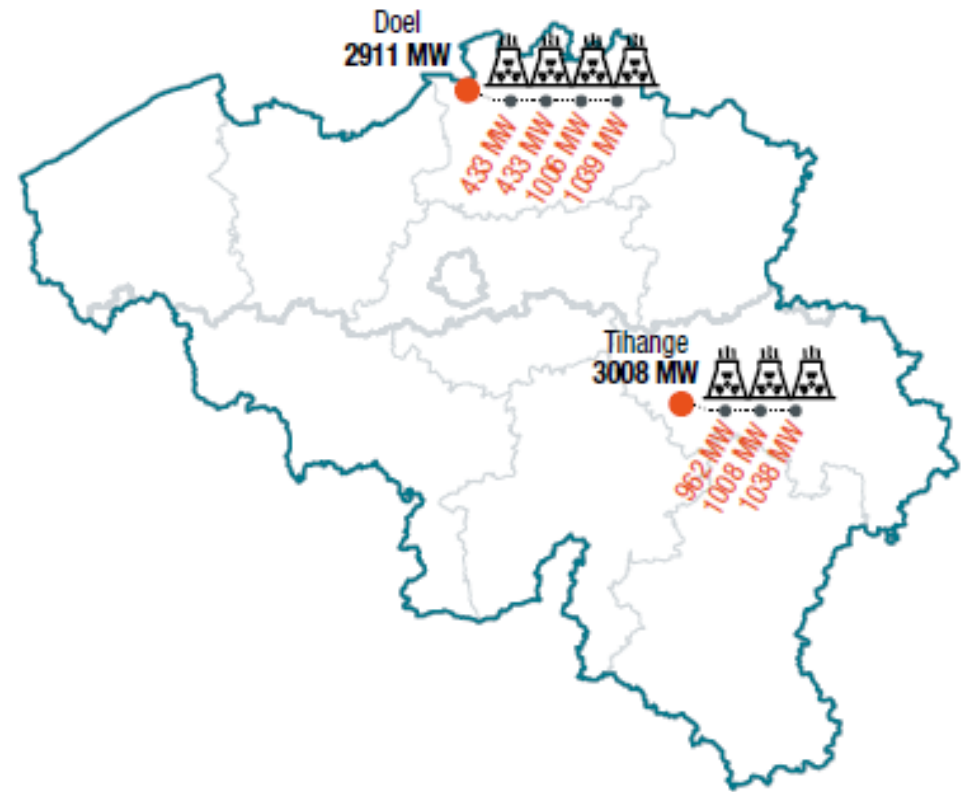




## Hydro RoR – information provided by the regions

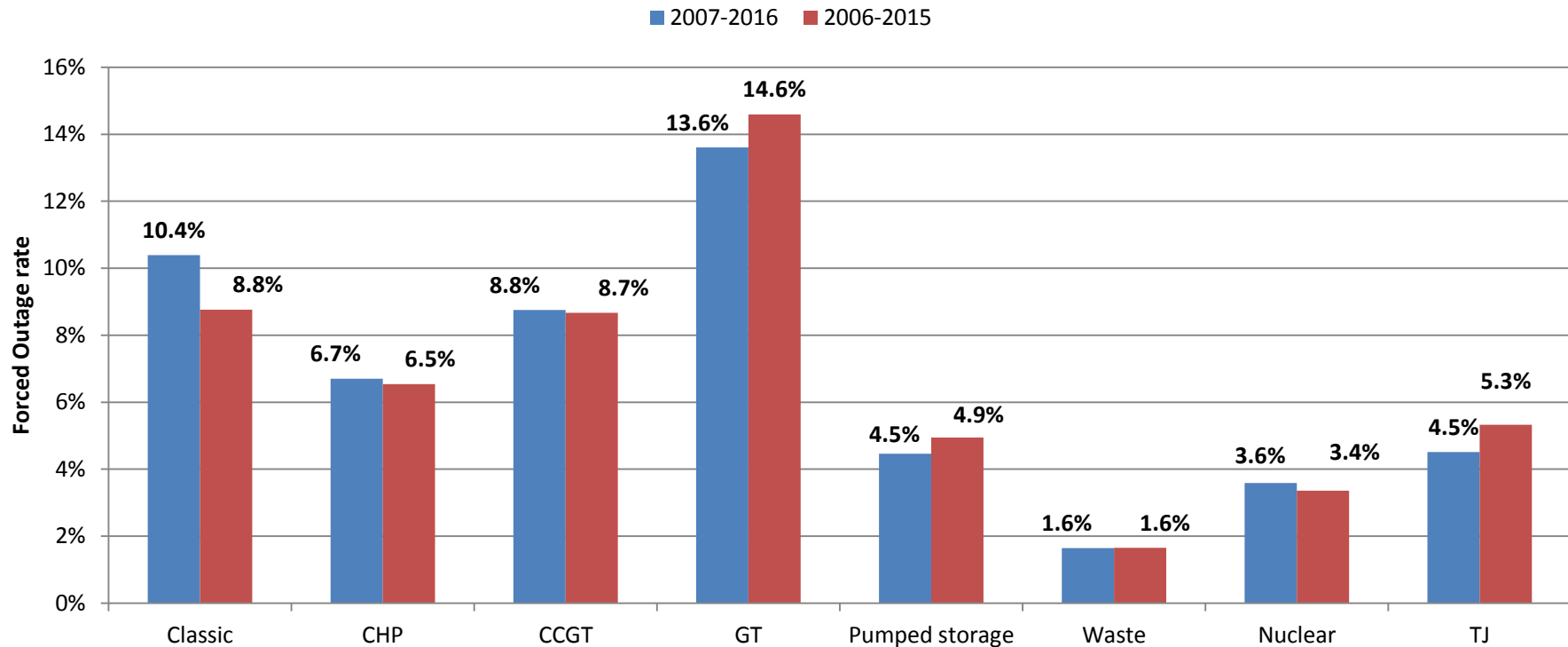


Nuclear availability:  
Full availability is assumed  
in the base case



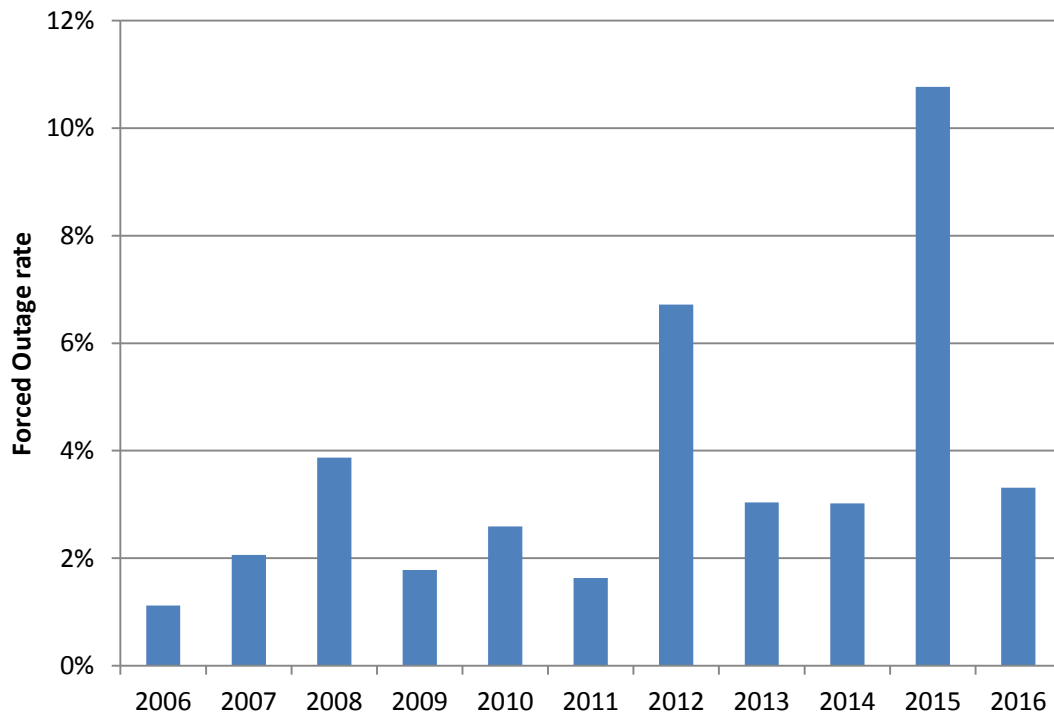
# Forced outage rates – update for period 2007-2016

Numbers include outage of Tihange 1 starting in September 2016

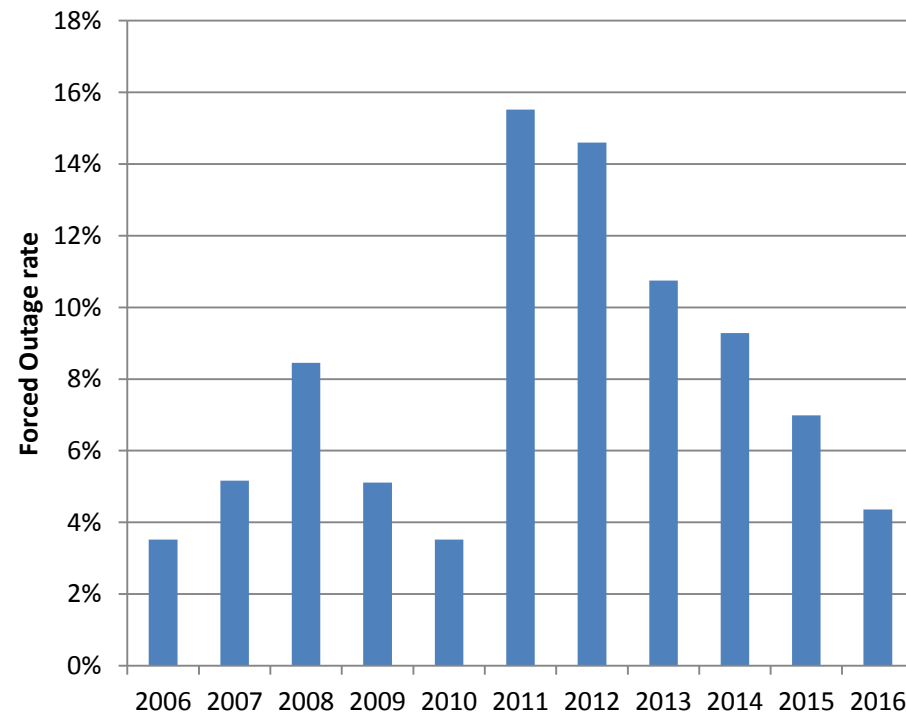


# Forced outage rate evolution

### Nuclear forced outage rate



### CCGT forced outage rate



## CIPU conventional units

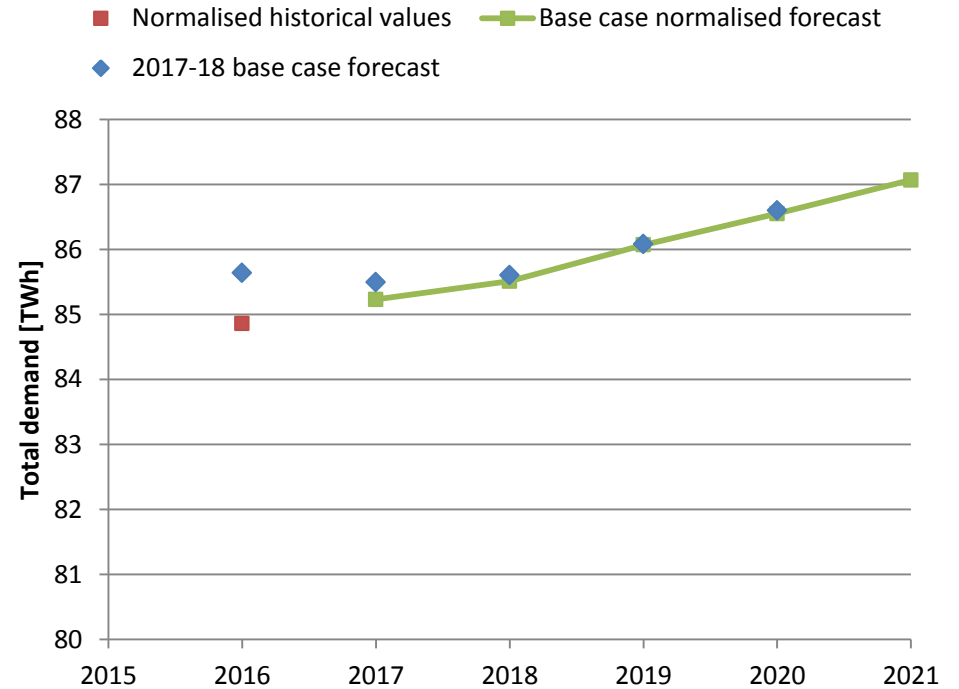
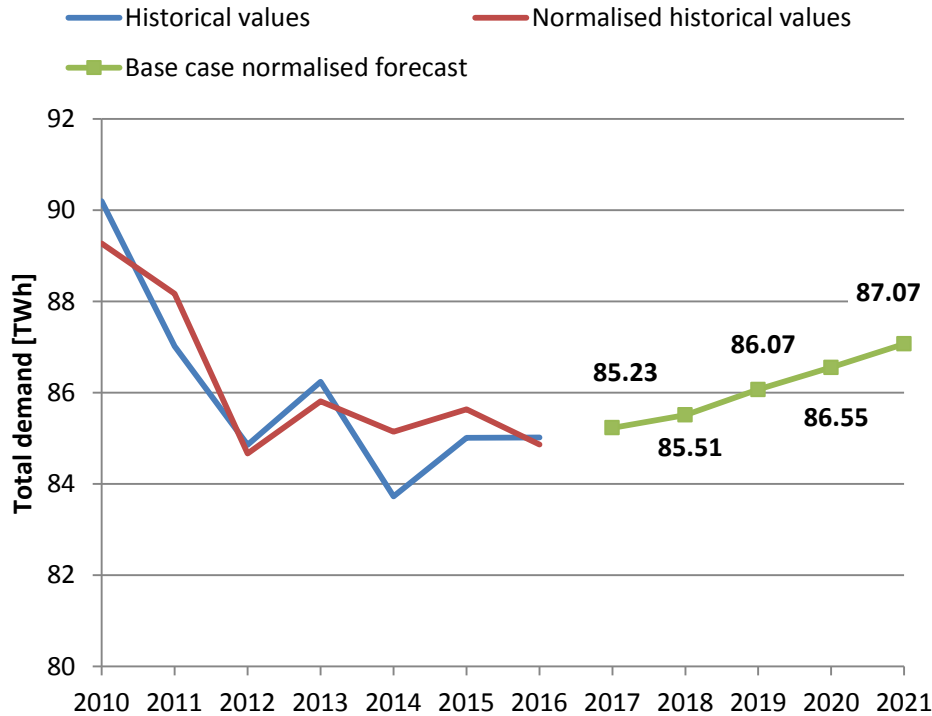
See detailed list in Excel file for assumptions.



# BE Demand, Market Response & Balancing Reserves

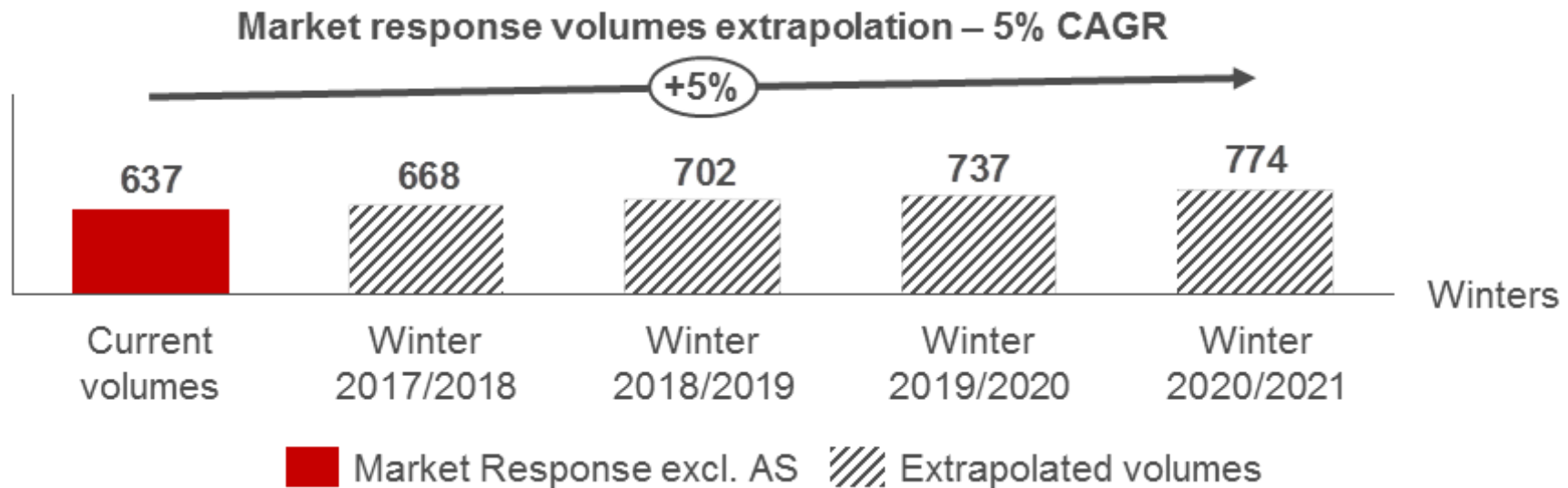
# Demand evolution

The latest forecasts (July 2017) from IHS Markit have been used, incorporating all market insights up until June 2017.



## Market response

Results from the “Market Response” subgroup of the TF iSR will be used.



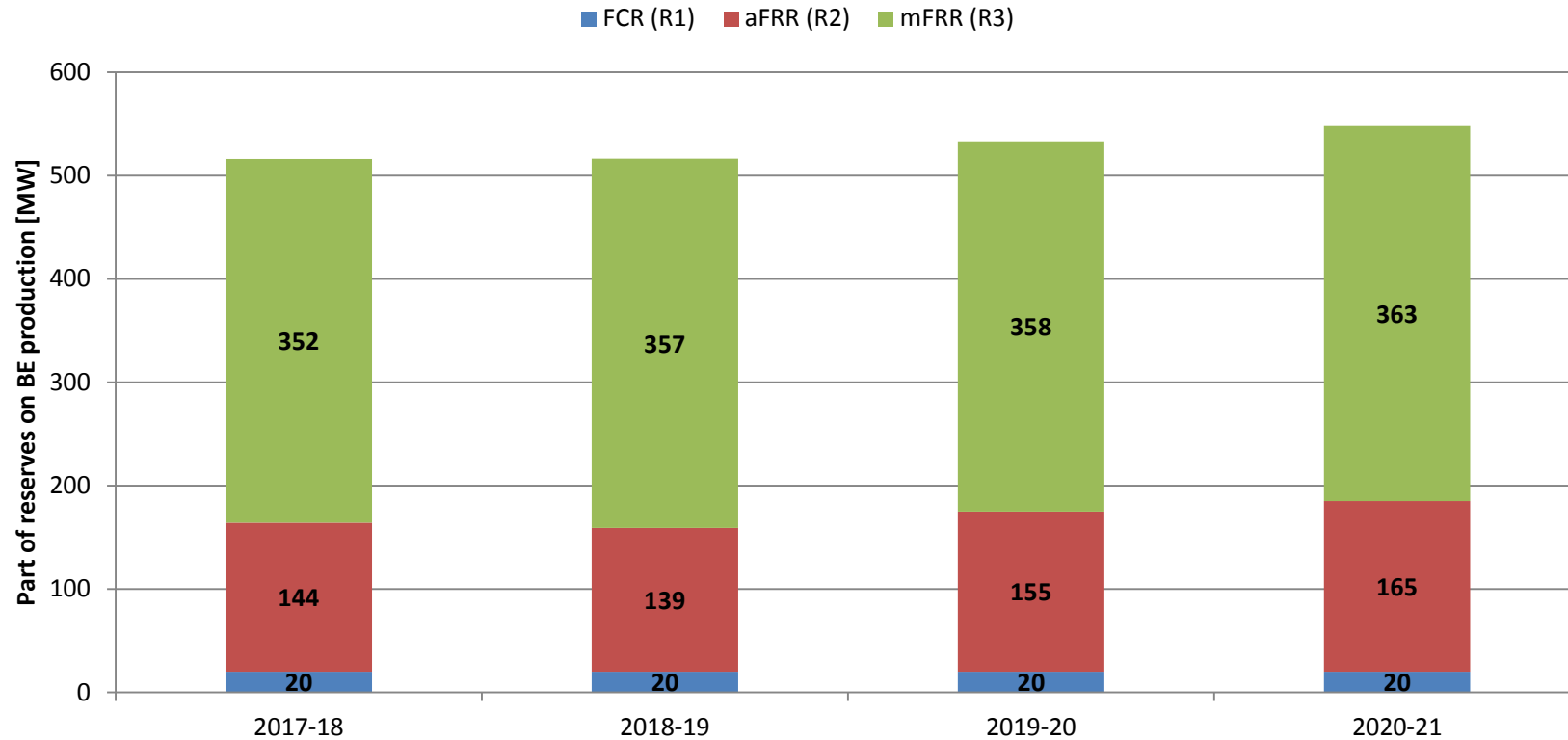


## Market response – activation constraints

Results from the “Market Response” subgroup of the TF iSR will be used.

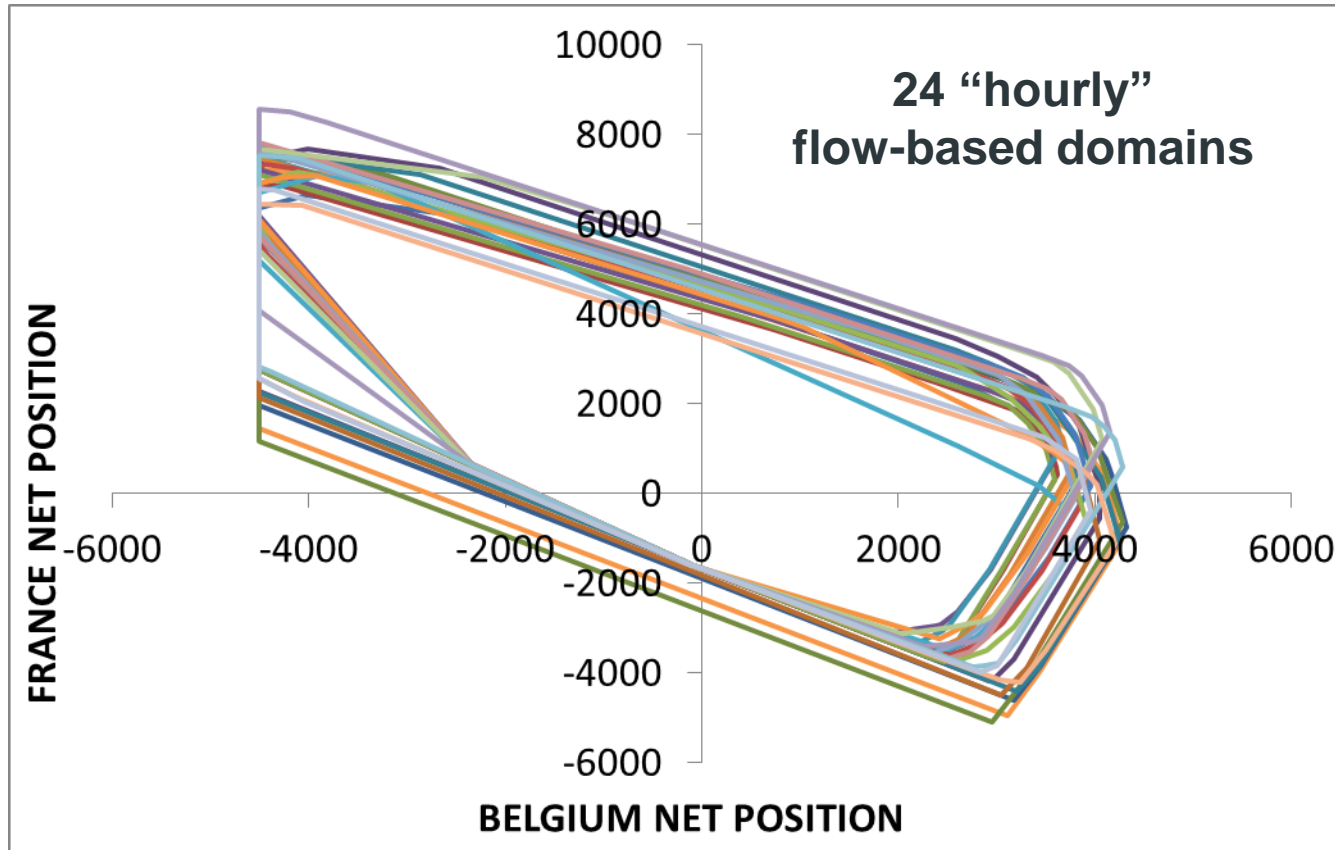
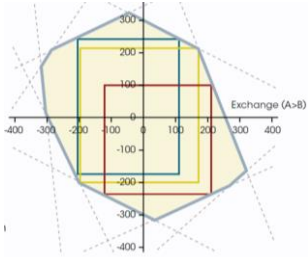
<b>Number of activations per week</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>14</b>	<b>14</b>	<b>28</b>	No limits
<b>Activation duration (hours)</b>	<b>1</b>	<b>4</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>4</b>	No limits
<b>% of MR volumes</b>	~10%	~10%	~25%	~10%	~30%	~10%	~5%

# Balancing reserves on Belgian production





# Example: Flow based typical day 1 (10-12-2015 - Weekday)



Domains for typical day 1 shown here by example.

See Excel document containing the input data for all typical days hourly domains.