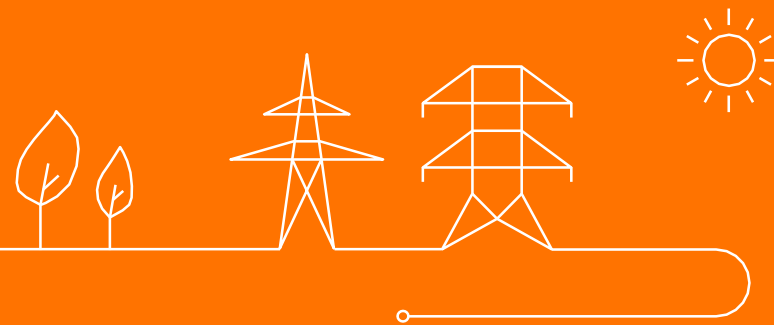


Users' Group

Plenary meeting of the Elia Users' Group

Wednesday, September 13



Agenda

1. Approval of reports 7 March and 5 May

2. Project Grid User flex for congestion management

3. Adequacy & Flexibility study – summary & stakeholder feedback

4. Consumer Centricity

5. Need for flexibility participation in market

5.1. Participation of flexible assets in market: use cases & solutions

5.2. For discussion: proposal for recommendation for Users' Group

6. Feedback Working Groups

6.1. WG Belgian Grid

6.2. WG Balancing

6.3. WG Adequacy

6.4. WG SO&EMD (incl. TF PEZ)

7. Miscellaneous

7.1. Stakeholder survey

7.2. Data 2024

7.3. Next plenary meeting 19 Dec. 16:15h – 18h



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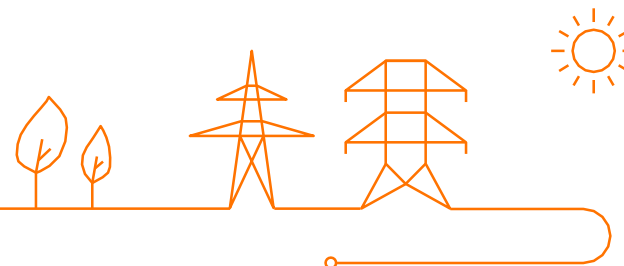
Grid User Flexibility for Congestion Management (GUFlex4CM)

Users Group Introduction – 13/09/2023

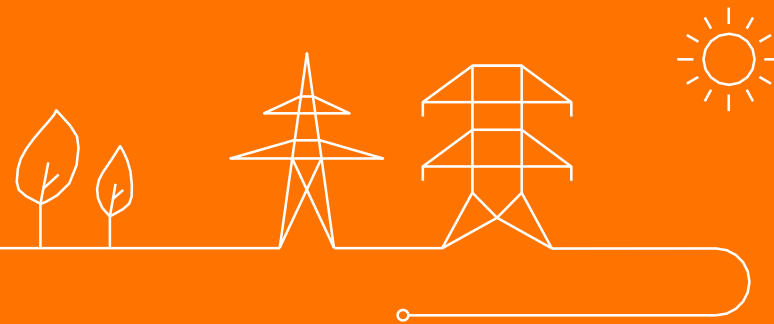
13.09.2023 | A. Weynants, J. Sprooten, S. Stas, K. Sleurs

Agenda

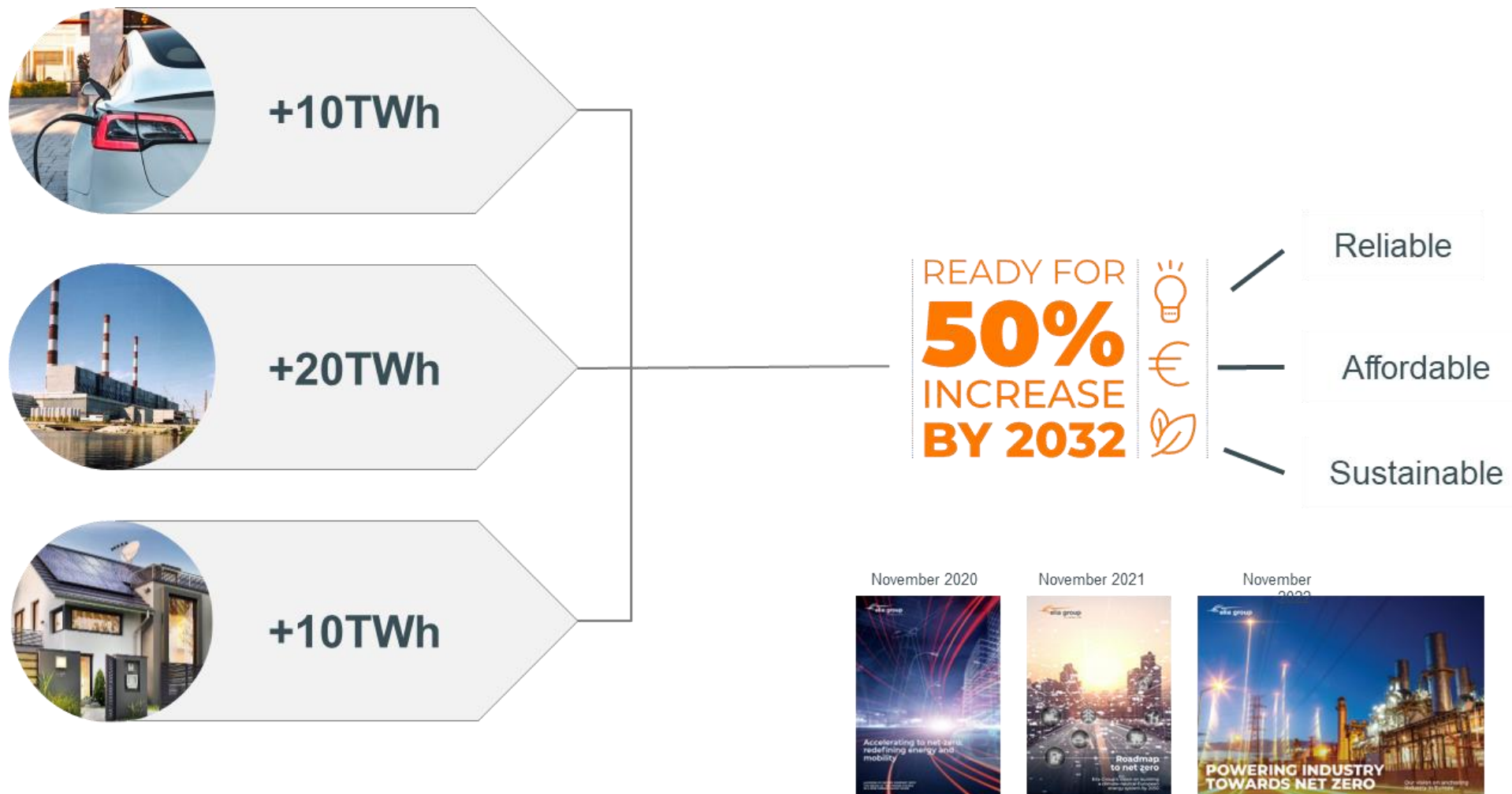
1. Context
2. Project Objectives
3. Overarching Principles
4. Project Roadmap



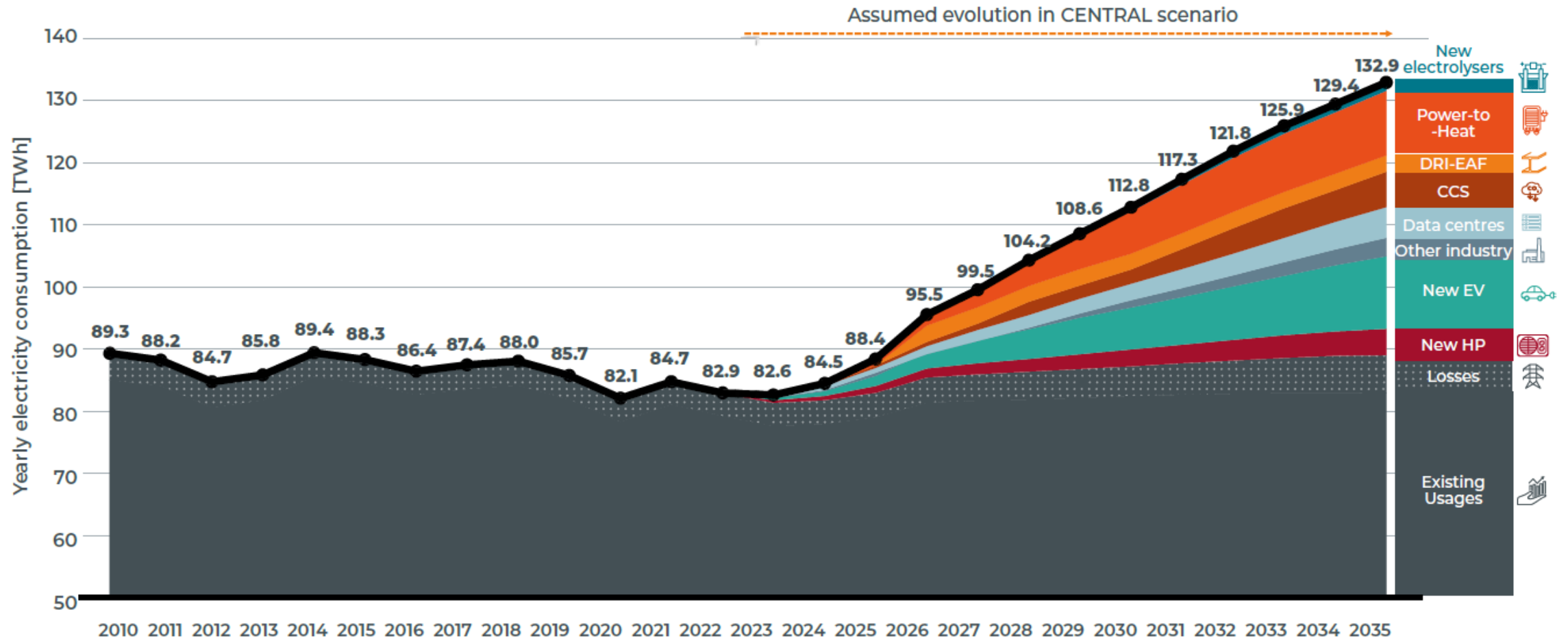
1. Context



The decarbonization of our society implies the electrification of fossil-energized processes and the integration of renewables



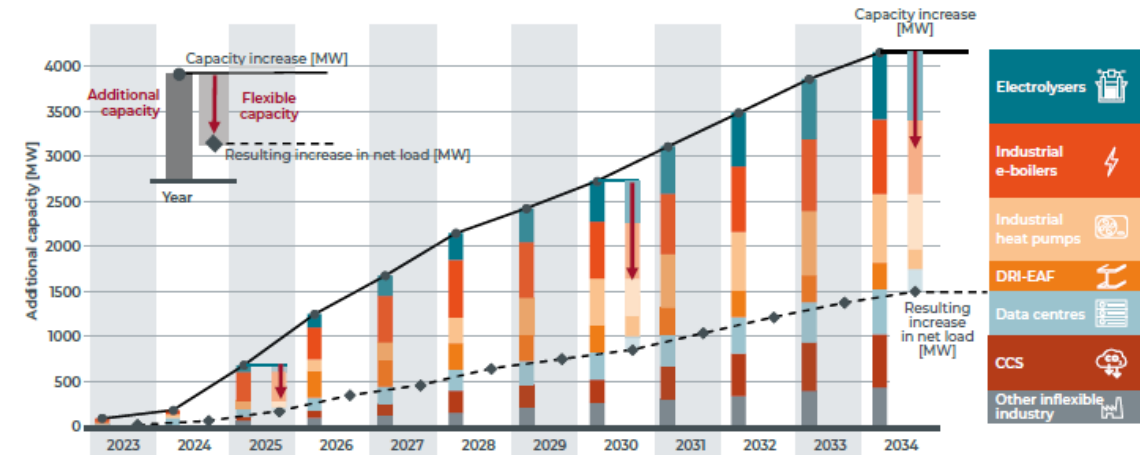
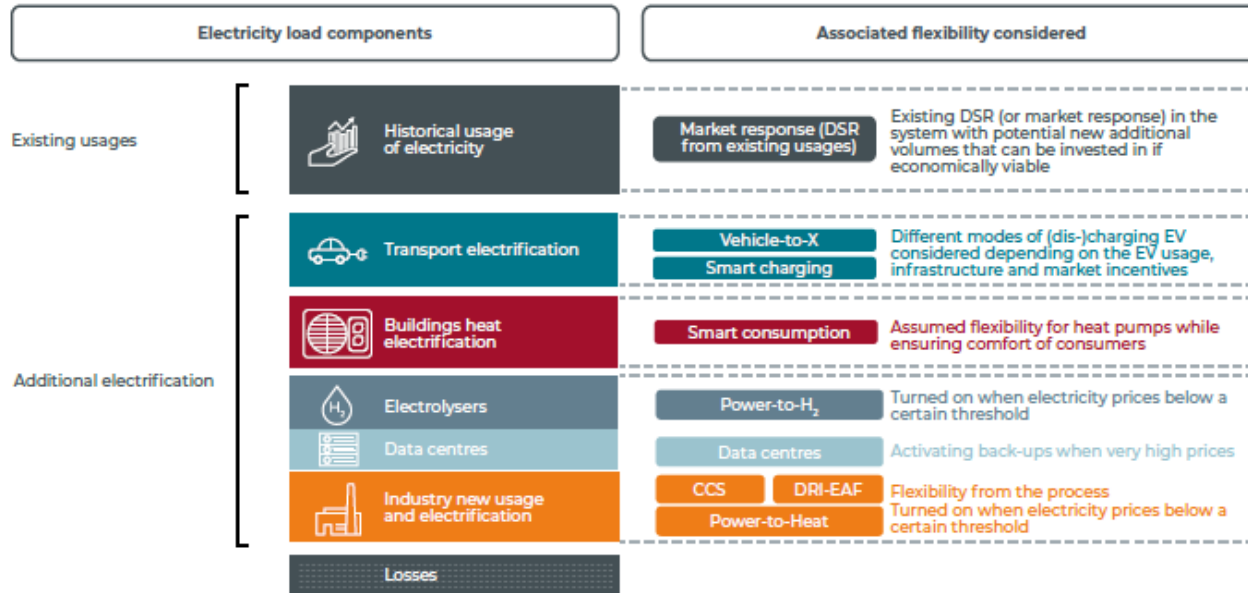
Impact of electrification on electrical demand...



Electrolysers and power-to-heat are an output of the economic dispatch model

...and on supply (vRES, BESS, etc)

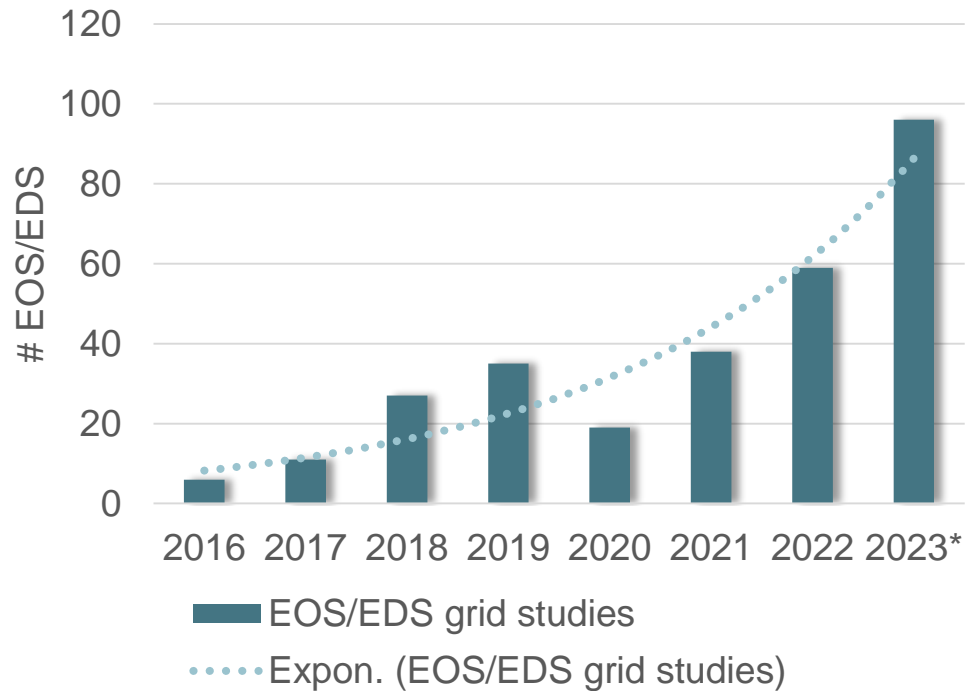
Newly electrified processes could deliver important benefits if operated in a flexible manner



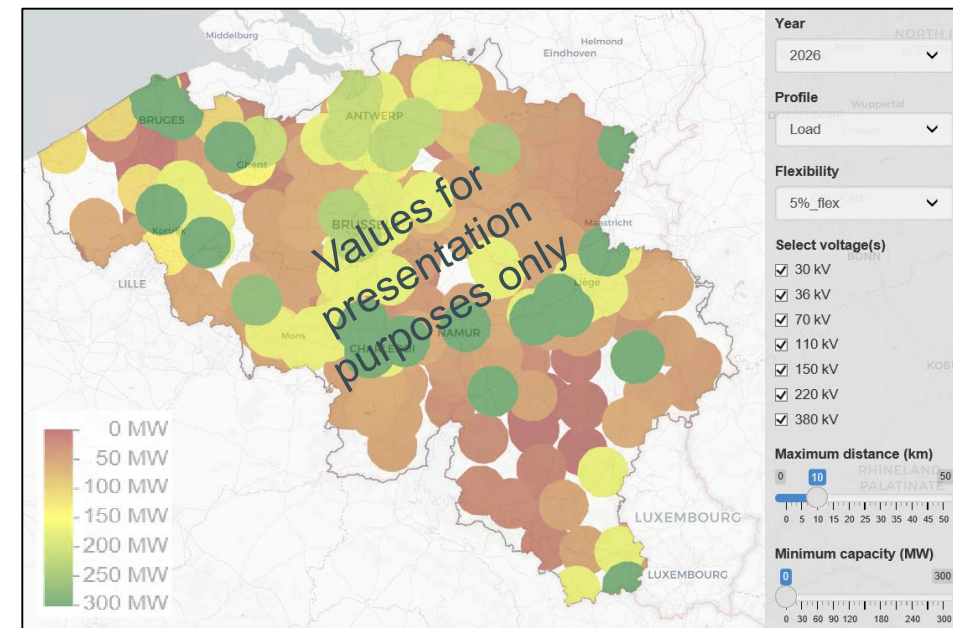
- In our recent Adequacy & Flexibility study, ca. 70% of newly electrified processes were assumed to be **flexible** at times of scarcity
- Resulting in an **important reduction** of the need for installing **costly dispatchable backup capacities**

Flexible grid connections can provide a win-win solution for the grid user and for society

Connection studies realized



Grid hosting capacity



Flexible grid connections can provide a win-win solution for the grid user and for society

Two important trade-offs for infrastructure development:

1 What?

Grid reinforcement: investing in grid infrastructure to offer “permanent” connection capacity to the grid after completion of required grid reinforcements



“**non-wire solutions**”, considering for example the (long-term) use of flexibility solutions to avoid or reduce the “need for copper”.

2 When?

Leading investment, which can lead to stranded assets, grid oversizing and a suboptimal resource allocation at the expense of other projects



Lagging investment, which may arrive too late and lead to economic losses, missed opportunities and undershooting climate ambitions.

Flexible grid connections can support these trade-offs and may be proposed as a win-win solution for the grid user and for society:

- 1 On the one hand, it enables to maximize usage of grid infrastructure and hence find the optimal trade-off for society, applying the “efficiency-first” principle.
- 2 On the other hand, it enables a faster connection for the client while keeping the stranded-assets risk under control;



Flexibility – crucial for grid operation and system management

- With the increased importance of distributed generation, the electrification of the heat and mobility sectors and the ultimate goal of a net-zero society, consumers will play a key role in the energy sector of tomorrow.
- The energy transition will need to fully unlock their flexibility potential. Such a transformation is also supported by the ‘**Clean Energy for All Europeans**’ package.

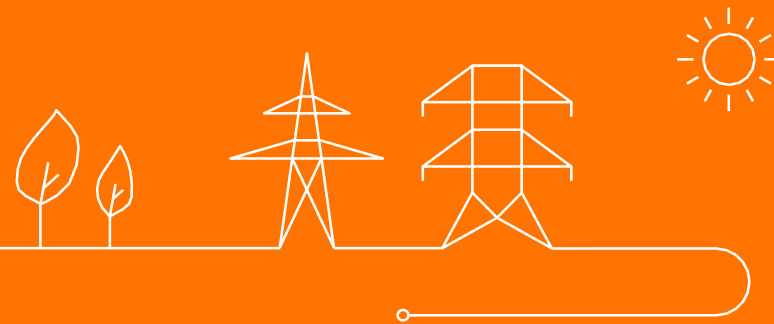
Consumer driven flexibility

- In 2021, Elia published a vision paper (**‘Towards a Consumer-Centric System’**) to encourage and enable end users to fully exploit their technological investments, optimize their electricity bills and contribute to system balance.
- First movers and major contributors are expected to be focused on ‘vehicle-to-grid’ (V2G), demand shifting, small-scale batteries at household level, etc.
- In **2023**, Elia published its most recent **Adequacy & Flexibility** study, highlighting the important role of unlocking flexibility at consumer side for safeguarding Belgian Security of Supply.

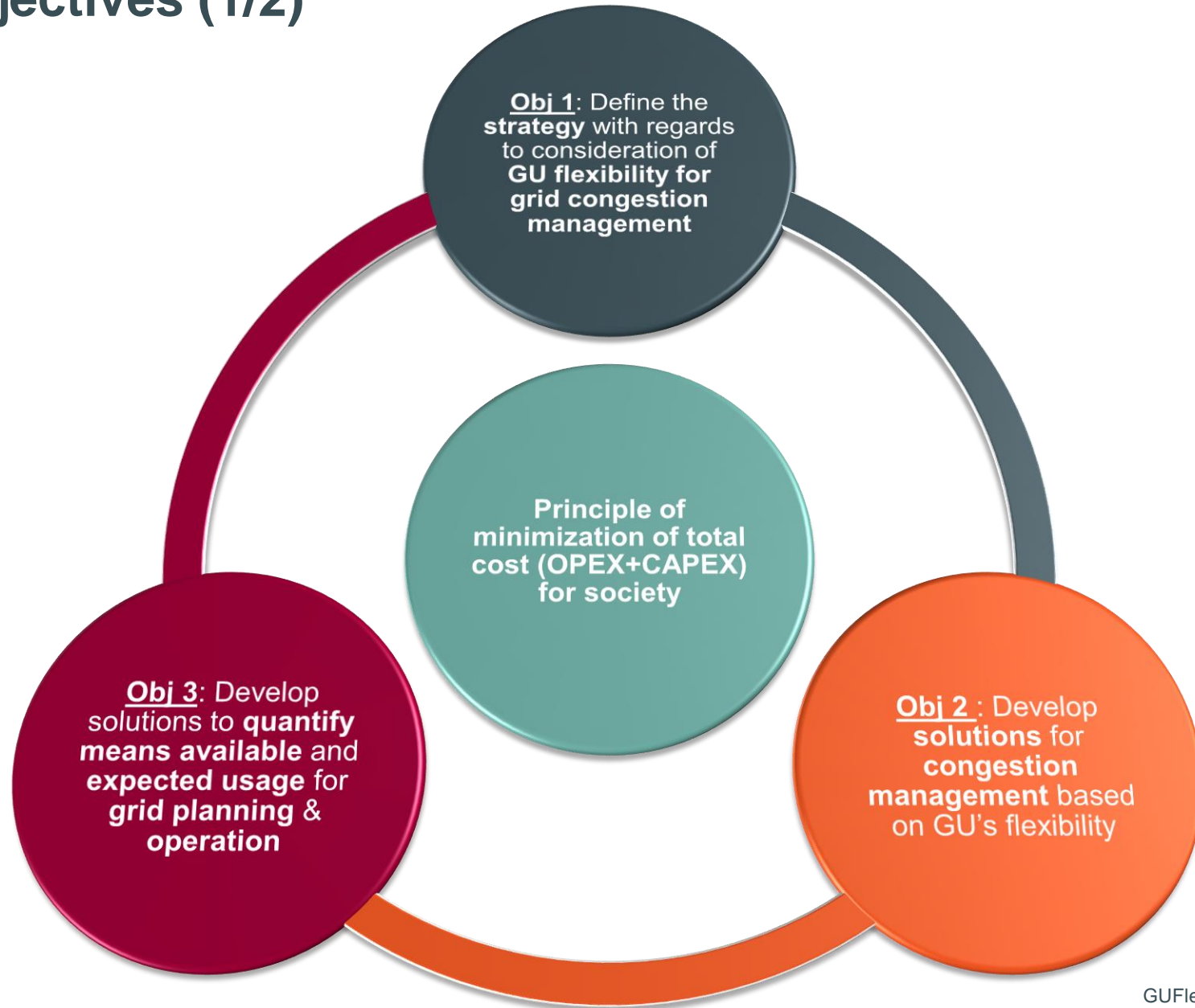
SO driven flexibility

- **Flexible Access concepts** (to be used for congestion management) were introduced in the Federal Grid Code for production units.
- End 2017, the consulted **iCAROS** design included a review of the redispatching product as one of the costly remedial actions used to cope with non-structural congestion detected after the DA market.
 - Redispatching bids are mandatory at cost-based prices for production and storage units taking into account technical constraints
 - Redispatching bids are voluntary for demand

2. Project Objectives



Project objectives (1/2)



Project objectives (2/2)

Objective 1: Define the strategy with regards to the consideration of Grid User flexibility for congestion management

- Clarifying the **approach** in the interest of society concerning the consideration of **flexibility** of Grid Users for congestion management in:
 - Grid Planning
 - Connection Contracting
 - Operational Planning (outage planning of Elia assets) and Grid Operation
- Coherently with current & possible evolutions of the participation of GU flexibility in markets (cf. CCMD developed strategy)

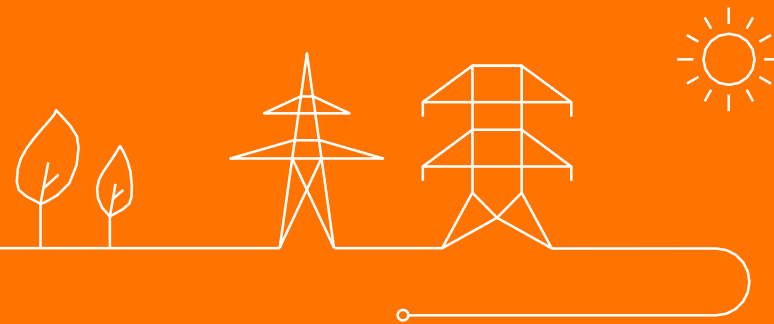
Objective 2: Develop solutions for congestion management based on demand, storage and generation flexibility of existing and new Grid Users

- Establishing **technical** and **contractual solutions** to ensure **implementation of flexibility** in grid **connection**, grid **planning** and grid **operation**:
 - A **short-term pragmatic solution** to unlock flexibility (quick-wins)
 - As well a **long-term well integrated solution**
- Covering the **3 types of grid users** (generation, demand and storage) as well as TSO, DSO and mixed GU (i.e. demand users with storage or generation embedded behind the meter)

Objective 3: Develop solutions to quantify means available and expected usage for grid planning & operation

- Developing decision making processes & criteria fully taking into account GU flexibility (i.e. TOTEX-based decision making). This includes the validation of Grid Operation criteria and Grid Development policies aligned with the legislative context.
- Developing the capability to:
 - **Make projections** of the **flexibility means needed** for congestion management
 - **Perform LT prospective studies** quantifying the **expected benefit of TOTEX-based decision making** in considered future scenario's (Expected policies, FitFor55, ReEU, eProsumers...)

3. Overarching Principles



High Level Goals & Principles

The grid is developed in order to meet BE and EU objectives of market integration, electrification and renewables integration



Other solutions than conventional grid reinforcements (“building grid infrastructure”) are needed for society to successfully realize the energy transition on time



The possibility of remunerated Grid User flexibility for congestion management should be considered in addition to purely relying on grid reinforcements/infrastructure solutions



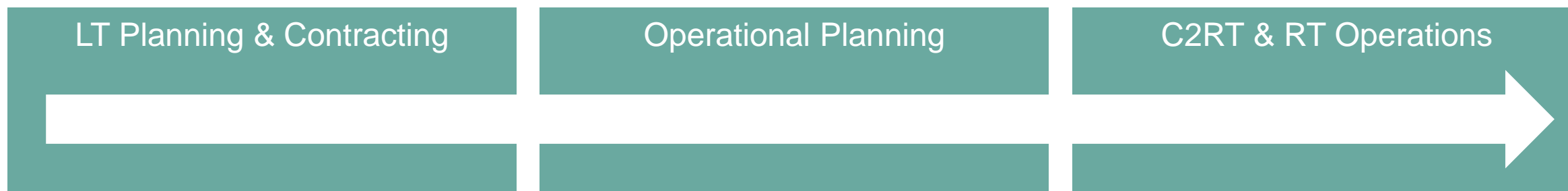
Decisions should be based on TOTEX minimization in the interest of society to have a sustainable long-term solution



Need for solutions & concepts aligned with the evolving context (secure and reliable grid operation, CEP and priority of dispatch, ROSC, DA Market coupling, operational optimization of flexibility activation, evolving legal and regulatory framework...)

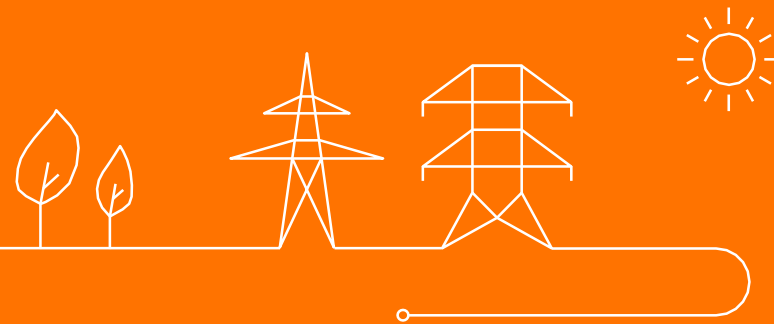
What we would like to achieve

- We want to **build a vision supported by the energy community** and to **develop solutions that integrate Grid User Flexibility for Congestion management from LT System Planning to RT Operations**



- Our **vision** is to be **stress-tested** with practical **Use Cases**

4. Project Roadmap



Balancing incentives 2024

Version CREG consultation (ended 28/08/2023)

L'incitant a trois objectifs principaux:

1. premièrement, assurer la transparence des activations des installations raccordées avec accès flexible en cas de congestions;
2. deuxièmement, développer une vision et une méthodologie pour intégrer la flexibilité dans les analyses coûts-bénéfices supportant les variantes de raccordement proposées aux utilisateurs de réseau dans le cadre des études d'orientation et de détail ;
3. troisièmement, développer une vision et une roadmap intégrant le rôle des raccordements avec accès flexible dans les solutions de développement du réseau.

Q1 – Q2 2024

Organisation d'un ou plusieurs workshops avec les acteurs du marché et d'autres parties prenantes pour présenter et récolter les attentes des utilisateurs de réseau [...]

30 novembre 2024

Proposition vers le régulateur sur les points précédents, prenant en compte les commentaires reçus lors de la consultation publique.

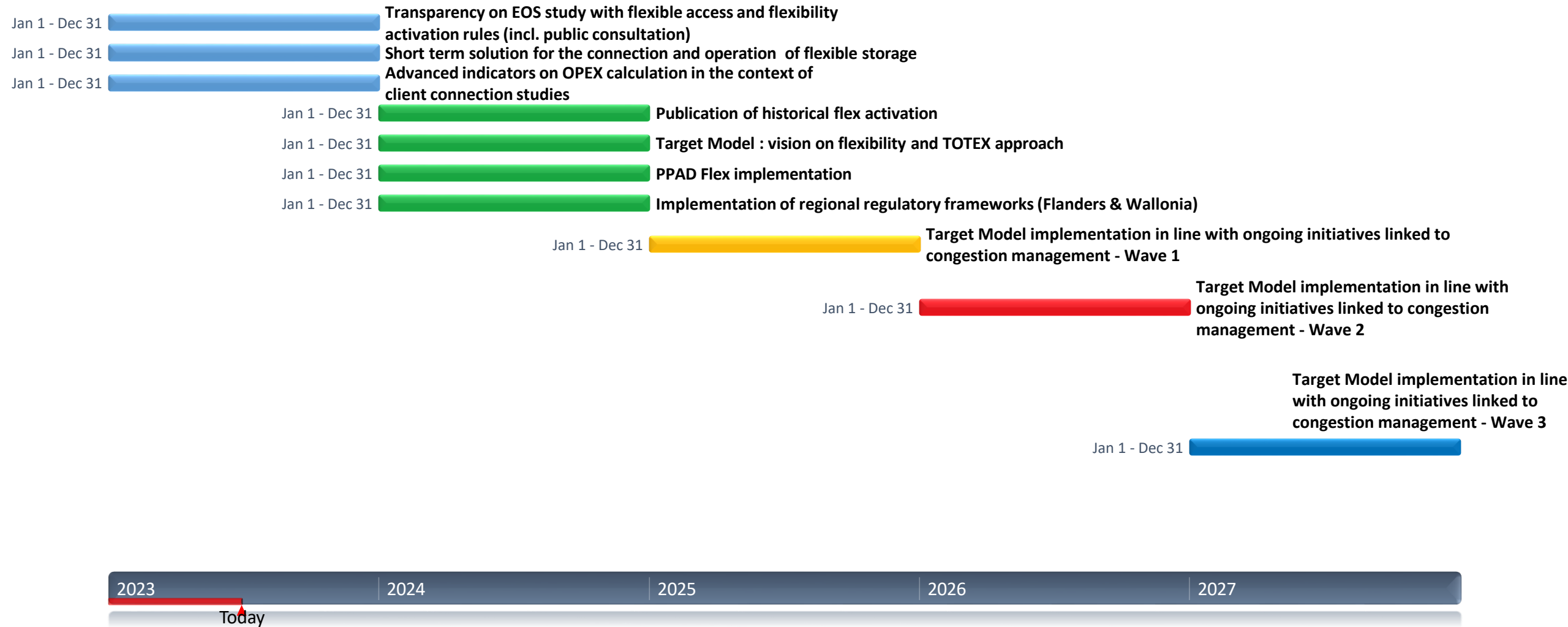
15 septembre 2024

Lancement d'une consultation des utilisateurs du réseau sur les résultats des workshop précités et sur les éléments du cadre réglementaire étant identifiés comme nécessitant une modification afin d'atteindre les objectifs poursuivis.

31 décembre 2024

- la publication de l'activation historique pour les trois premiers trimestres de 2024 de la flexibilité pour la gestion des congestions et l'organisation d'une séance d'information publique;
- la publication du rapport final sur les objectifs 2 et 3.

High-level project roadmap



GUFlex4CM ambitions should be realistic & consistent with the ongoing Congestion Management Transformation Journey



iCAROS phase 2

Availability Planning from Y-n till RT, scheduling and RD bidding for

- TSO-connected units (≥ 1 MW)
- Voluntary for TSO-connected load

Availability planning for DSO-connected units (≥ 1 MW)

iCAROS phase 3

Availability Planning from Y-n till RT, scheduling and RD bidding for

- TSO & DSO-connected units (≥ 1 MW)
- Voluntary for TSO-connected load

DSO collaboration and Synergrid alignment

GUFlex4CM

- Impact of vision on flexibility
- Impact of TOTEX approach to develop the grid



Outage Planning, Scheduling and Redispatching products

ROSC (Regional Operational Security Coordination)

- EU coordination of security analysis for the 220/380kV grid

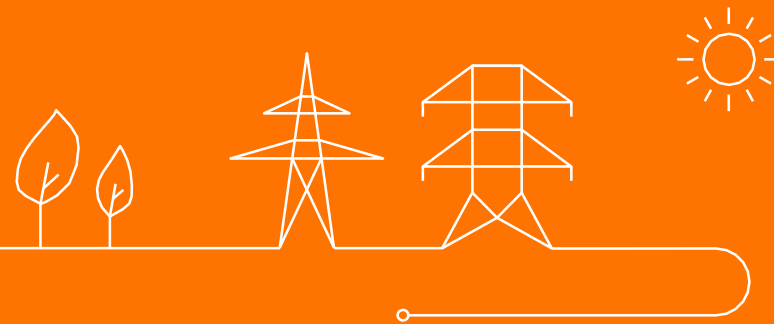


iCAROS phase 1 - Finalization



- Availability Planning from D-7 till RT
- Scheduling and RD bidding for large TSO-connected units (≥ 25 MW) including storage units

Questions ?



Thank you.



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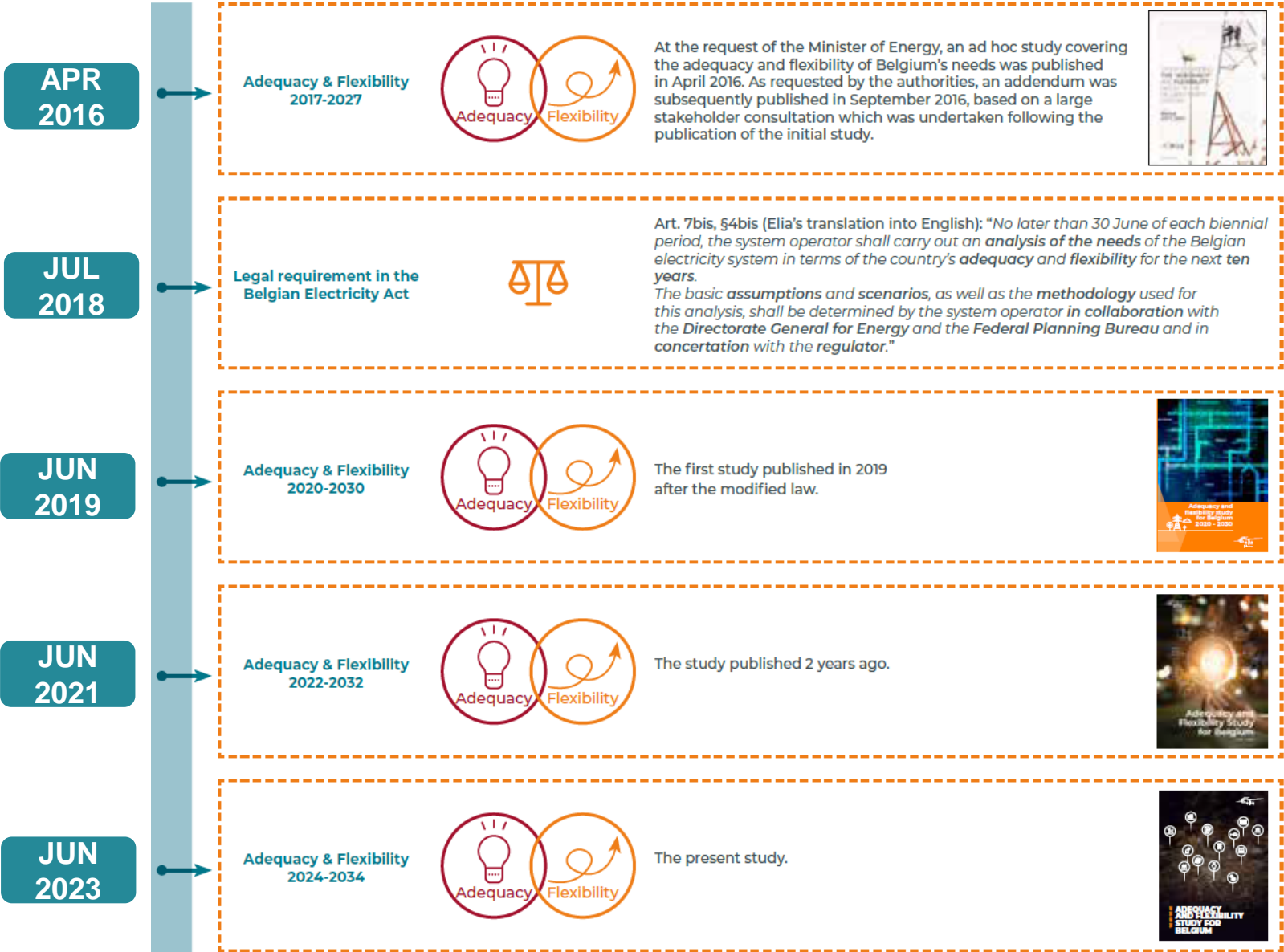


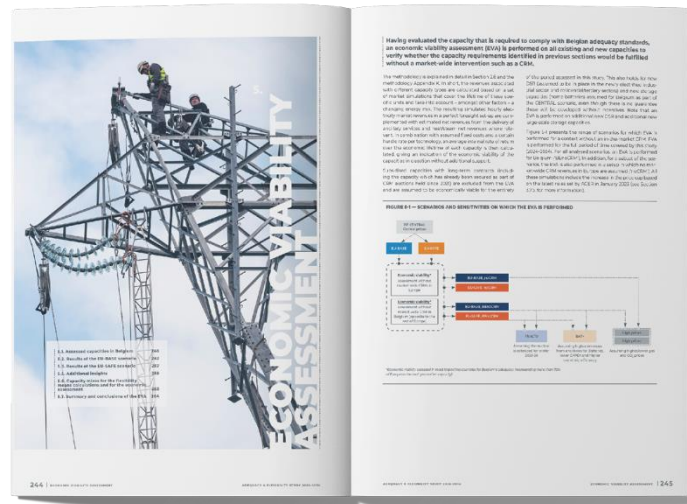
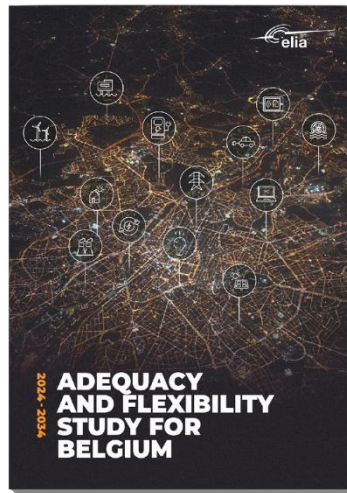


2024 - 2034

ADEQUACY AND FLEXIBILITY STUDY FOR BELGIUM

This study is based on the requirements set in the electricity law and uses the expertise that Elia has developed in its past Adequacy and Flexibility studies





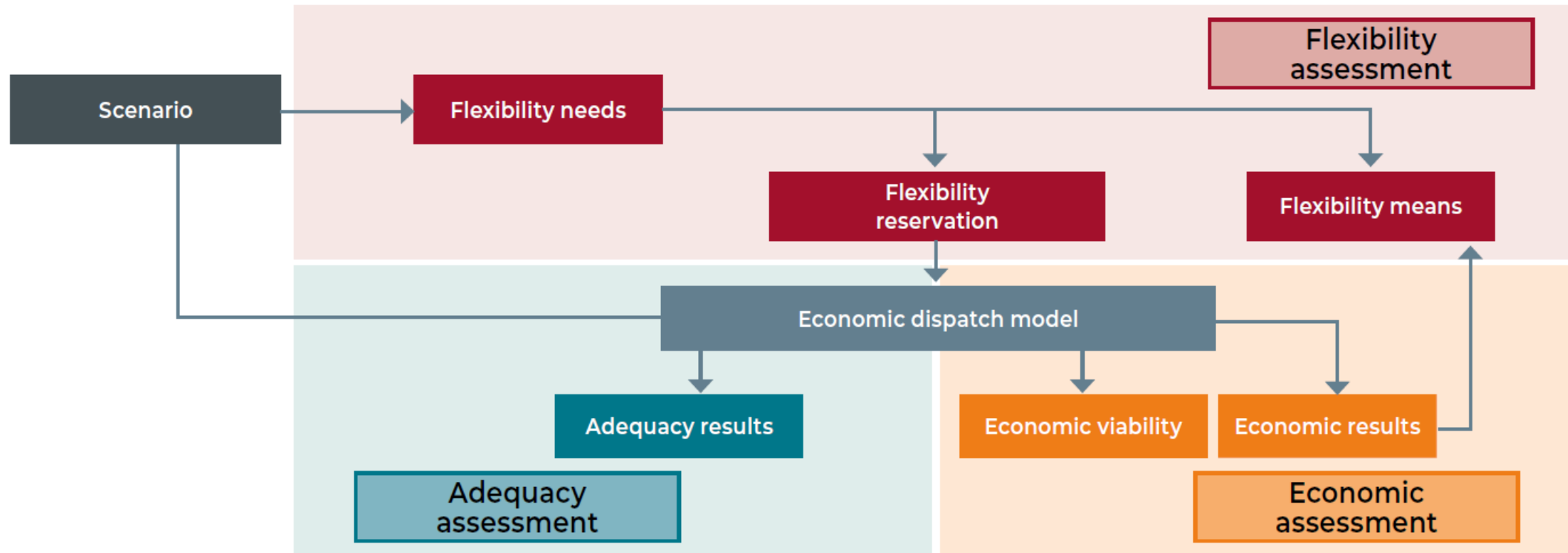
The study is available online and was presented end of June 2023 to stakeholders

Report content (470 pages)

- Executive summary
- Introduction
- Methodology
- Scenarios and data
- Adequacy needs assessment
- Economic viability assessment
- Short term flexibility assessment
- Economic and dispatch assessment
- Appendix on the methodology
- Appendix on the scenarios & data

<https://elia.group/ADEQFLEX-EN>

This study covers **3** main topics related to **adequacy**, **flexibility** and **economics**



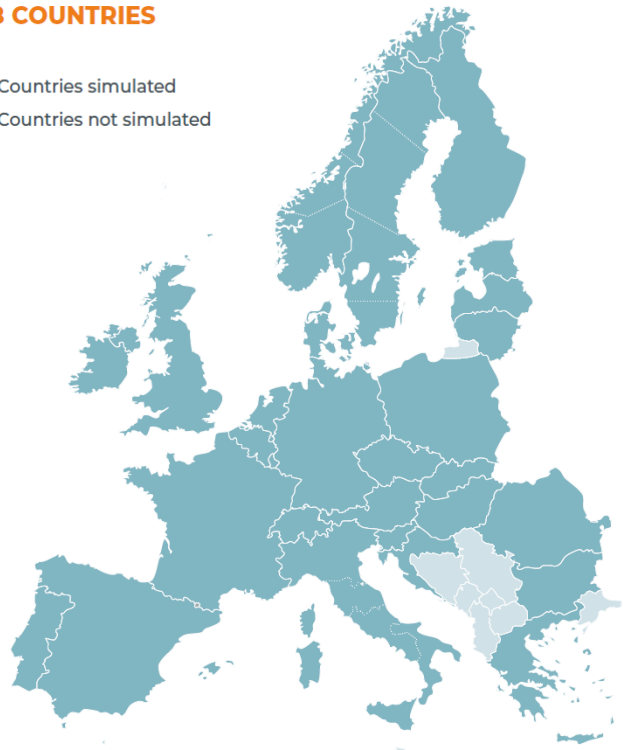
The **scenarios** used in this study are aligned with the **most recent figures** and **ambitions of Belgium** and **other countries**.

In addition, a **large amount of sensitivities** were investigated on European assumptions, Belgian assumptions, the grid and economics.

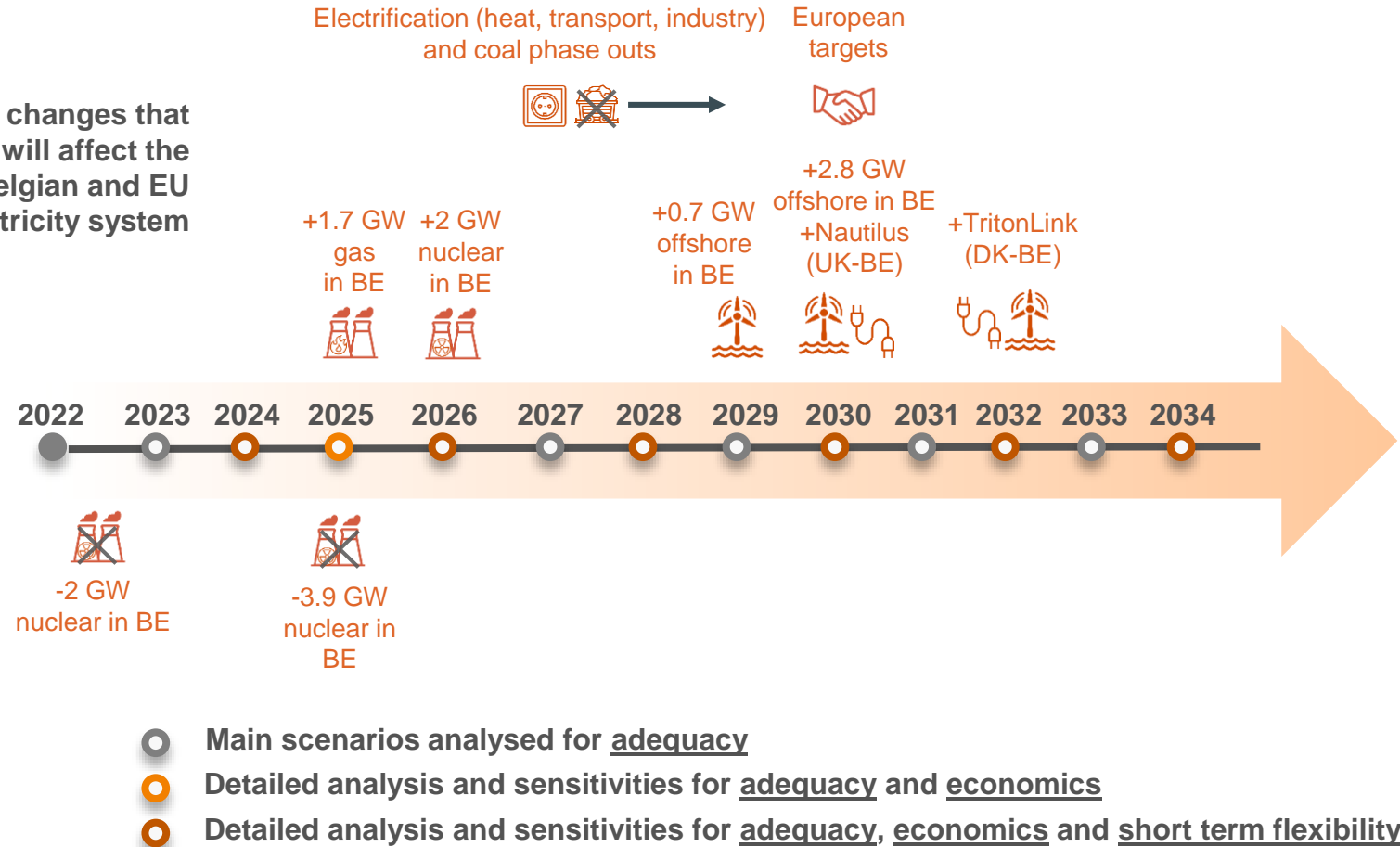
We looked **10 years ahead**, covering the most important events that will affect the electricity system in the future, simulating **28 countries**

28 COUNTRIES

- Countries simulated
- Countries not simulated



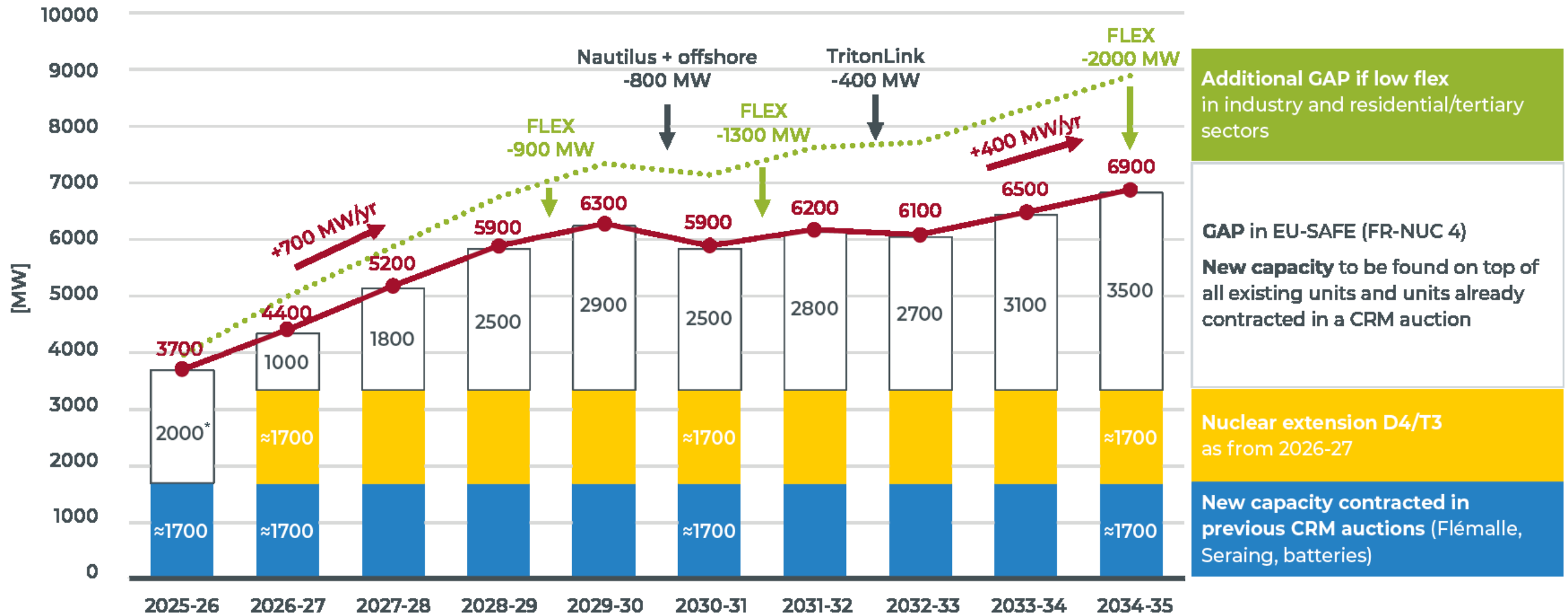
Main changes that will affect the Belgian and EU electricity system



Years are simulated from 1 September Y to 31 August Y+1, hence 2025 corresponds to 1 September 2025 until 31 August 2026.

Summary of adequacy results in the EU-SAFE scenario

SUMMARY OF THE GAP IN THE EU-SAFE/CENTRAL SCENARIO



* FLEX LTO already agreed upon between the Belgian State and Engie in 2025-26, decreases the need by 1700 MW in 2025-26

Equal attention must be paid to short-, medium- and long-term measures

2025-2026

Short-Term measures

- Flex-LTO of 2 Belgian nuclear units*

2027-2029

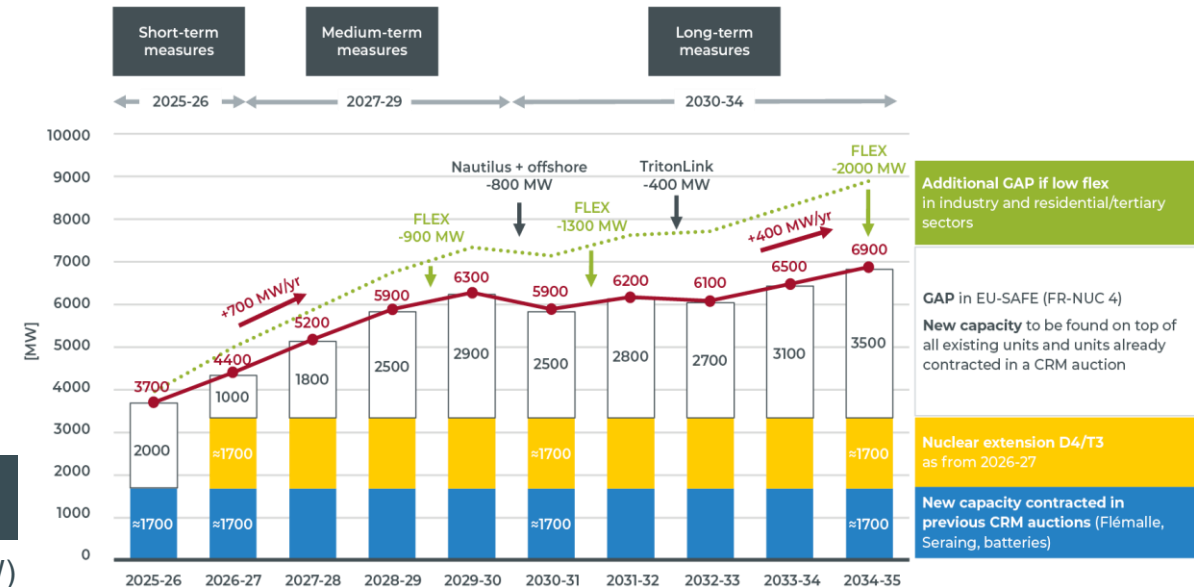
Medium-Term measures

- Unlocking new flexibility
- Prompt realisation of grid infrastructure
- Refinement of the CRM mechanism
- Managing periods of excess energy

2030-2032

Long-Term measures

- Additional offshore wind ambition in BE North Sea (8GW)
- Investigate additional interconnectors with countries with de-correlated generation surplus



* already agreed upon between the Belgian State and Engie

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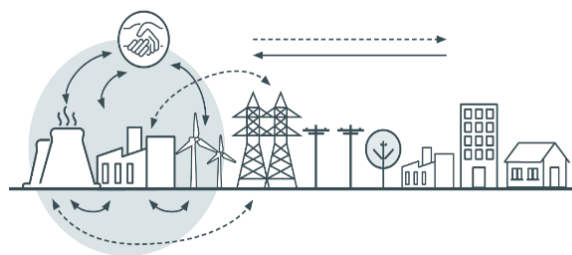


State of Play

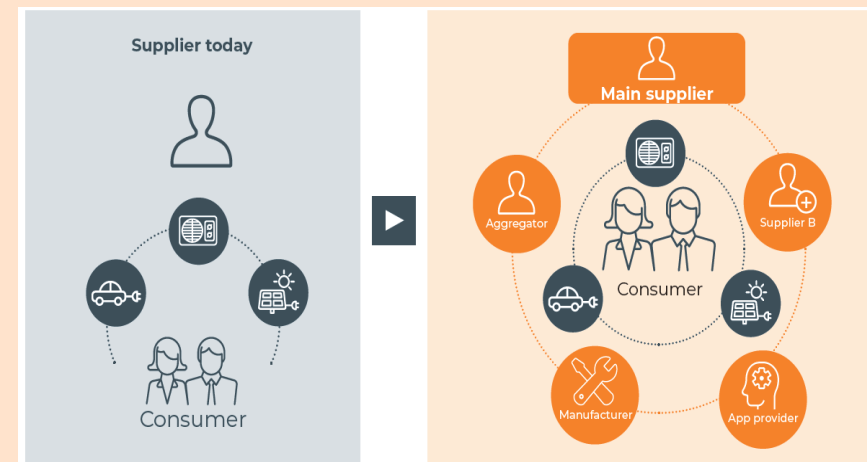
Consumer Centric Market Design

On-boarding the consumer in our roadmap to net zero is the key to unleash the energy transition

From competition for the meter...
Generation follows consumption



...to competition behind the meter
Demand will follow generation

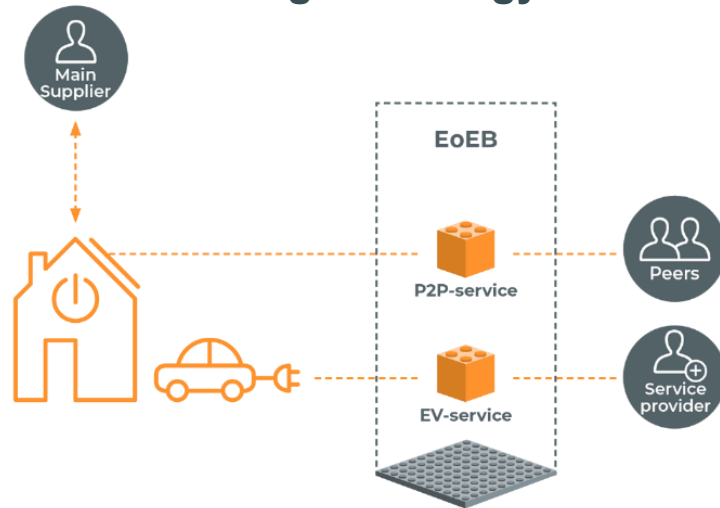


- ✓ Empowered end-prosumers
- ✓ Generic service model
- ✓ Robust and simple market model

Consumer Centric Market Design to make flexibility seamless

Two key features delivering major benefits

A decentralized exchange of between consumers and many other parties, **on & behind the meter**
“Exchange of energy blocks”



From competition for the meter... to competition behind the meter

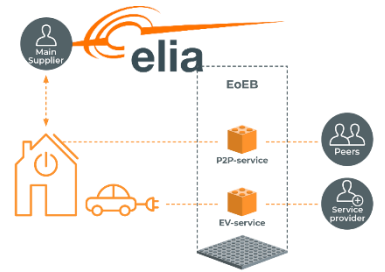
A **real-time market price** to reveal the true **value of flexibility** to consumers



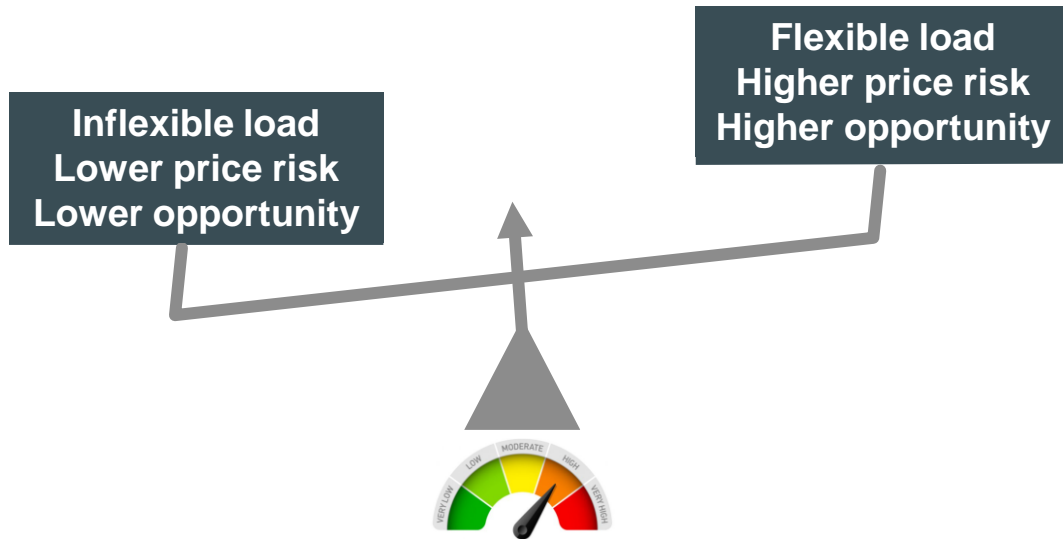
Lowering barriers to valorize flexibility



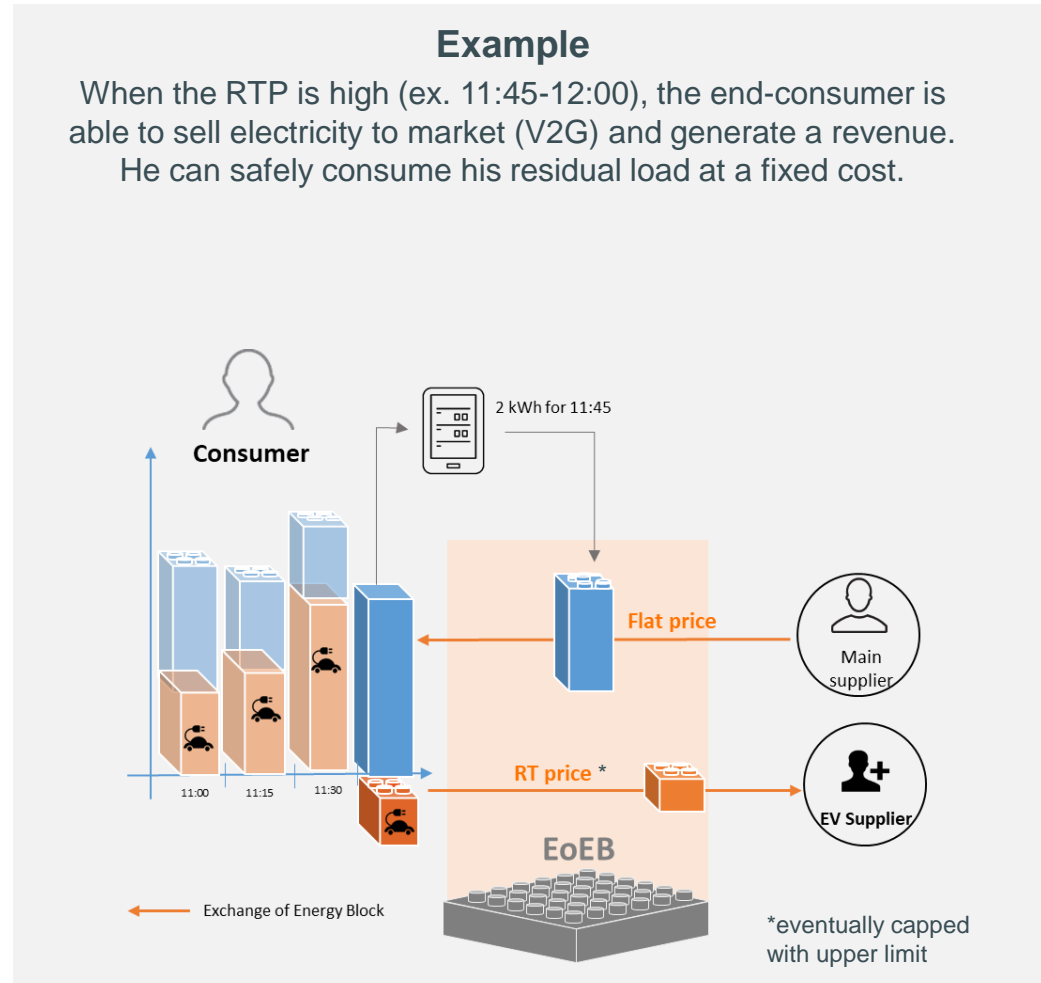
Opportunities for grid users



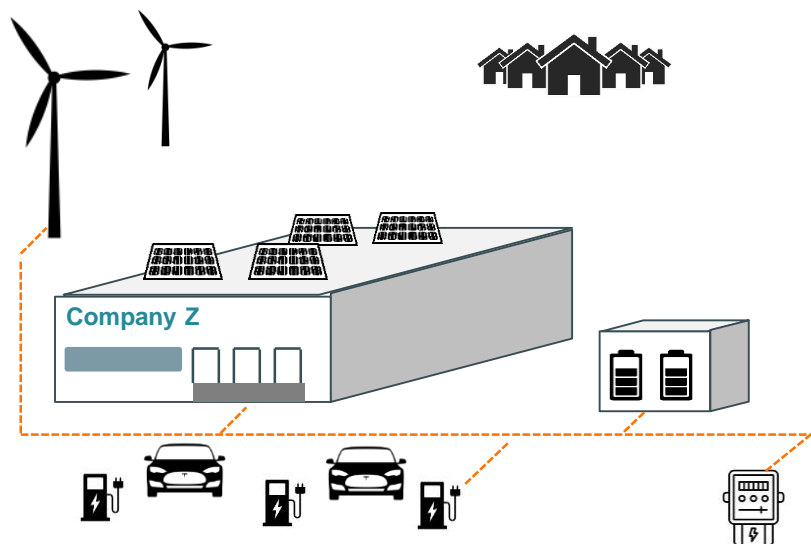
A tool to split the flexible from the inflexible load, striking a balance between price opportunities and risks



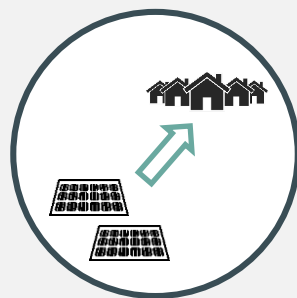
Consumer preference and risk profile



How can a consumer benefit from this upgraded market features?



- ✓ **optimize** his energy profile
- ✓ **valorize** his flexibility
- ✓ define his **tailor-made solution**

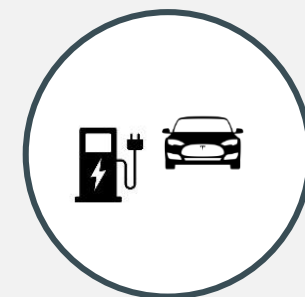


Valorization of your own renewable production

Sharing your solar energy between different access points or with other grid users (eg. residential area) through an energy community

Valorization of your employee's EV flexibility in balancing services

Steer your employee's EV to help Elia balance the grid without impacting your supplier or your employees' comfort

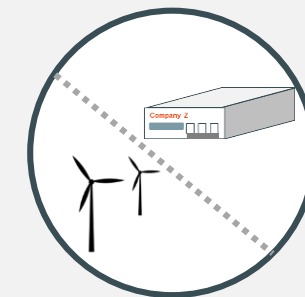


Contract a dedicated supplier for your battery

Keep your current supply contract for your baseload and optimize your flexible assets through a new supply contract sensitive to market prices

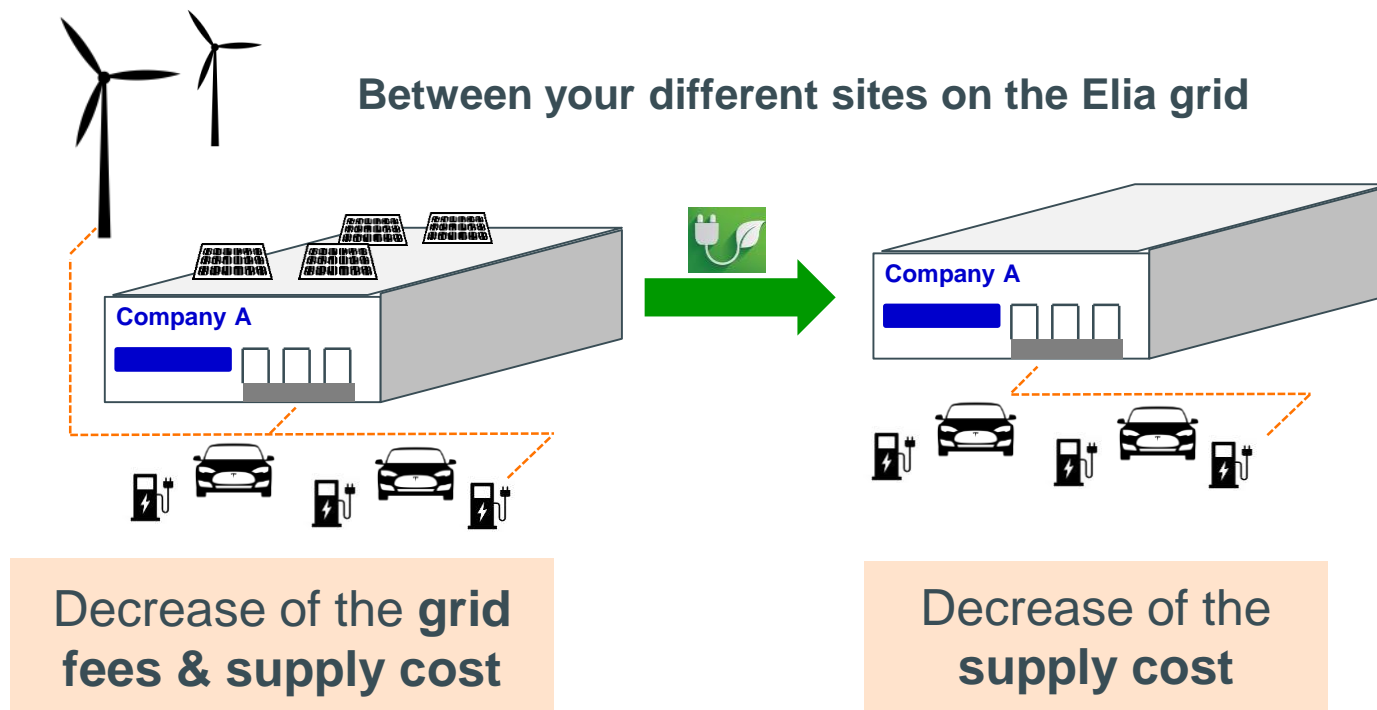
Let investors build a wind park on your site without affecting your supply contract

Investors can appoint their own supplier and avoid financial risk on your own supply contract by splitting responsibilities



New Services available for you by the end of the year...

1 Share your energy **New**



Invest only once to supply several sites!

- ✓ Dimension your own production units on one site to supply several sites
- ✓ Optimize the available capacity of your connection point

New Services available for you by the end of the year...

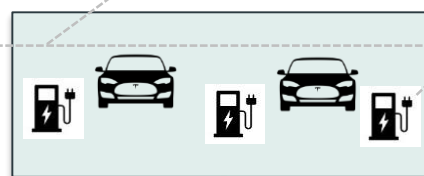
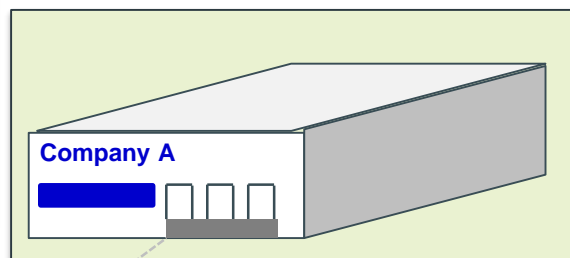
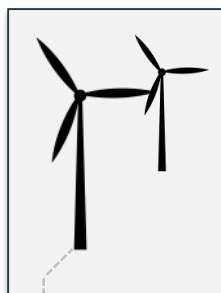
2 Contract different BRPs

New

Valorization of (remaining) production



BRP 3
Responsible for the valorization of the production



Baseload with limited risk



BRP 1
Responsible for the (non-flexible) baseload

Valorization on the balancing market



BRP 2
Provides an optimization on market prices (day-ahead, intraday, balancing) for your flexible assets



Evolution of the imbalance price

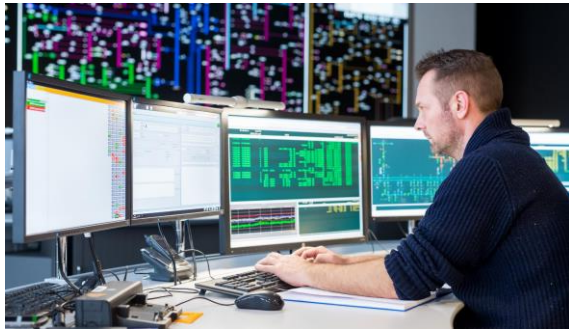
Supporting the paradigm shift with a real-time price...

Flexible assets need a **clear signal** to determine the right moment to engage flexibility :



- ✓ **Explicit activation** by System Operator

“Volume based” Flexibility



Explicit participation in the system comes with **technical and administrative constraints** that not all assets can afford → while working on the **reduction of these barriers**, it is important to also **allow another more accessible way to participate** in the system in order to capture the whole flexibility available

- ✓ **Implicit financial incentive, or Real-Time Price**

“Price based” Flexibility

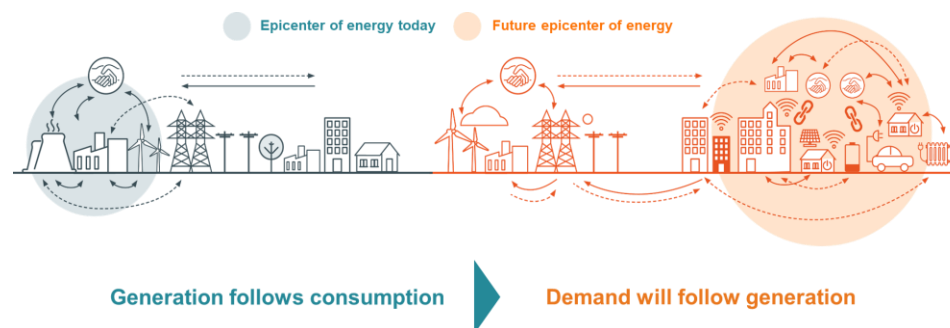


Elia is therefore engaged in an **evolution of the imbalance price** in order to trigger safe and efficient reactions from the remaining flexibility to help **balance the system**.



... an imbalance price evolving from a penalty to a clear incentive for all BRPs

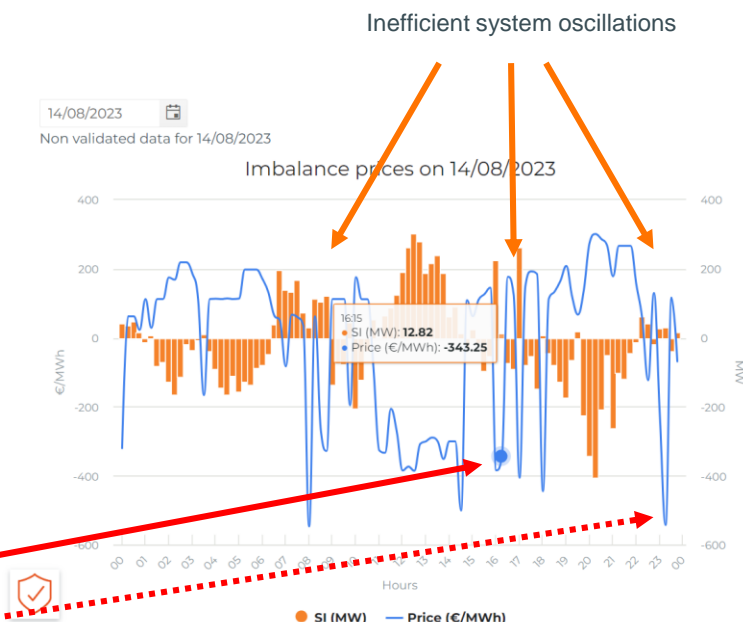
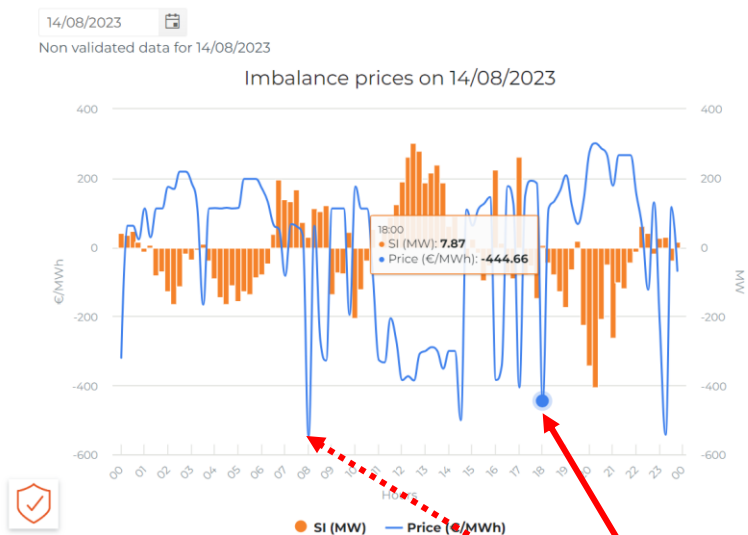
The current imbalance tariff is a **penalty** for the **imbalances** (in the wrong direction) of BRPs who have **the legal and physical obligation to be balanced** (or, in some conditions**, help the system) in real-time



The future imbalance tariff should provide a clear **incentive** to **all BRPs** to help balance the system in real-time.

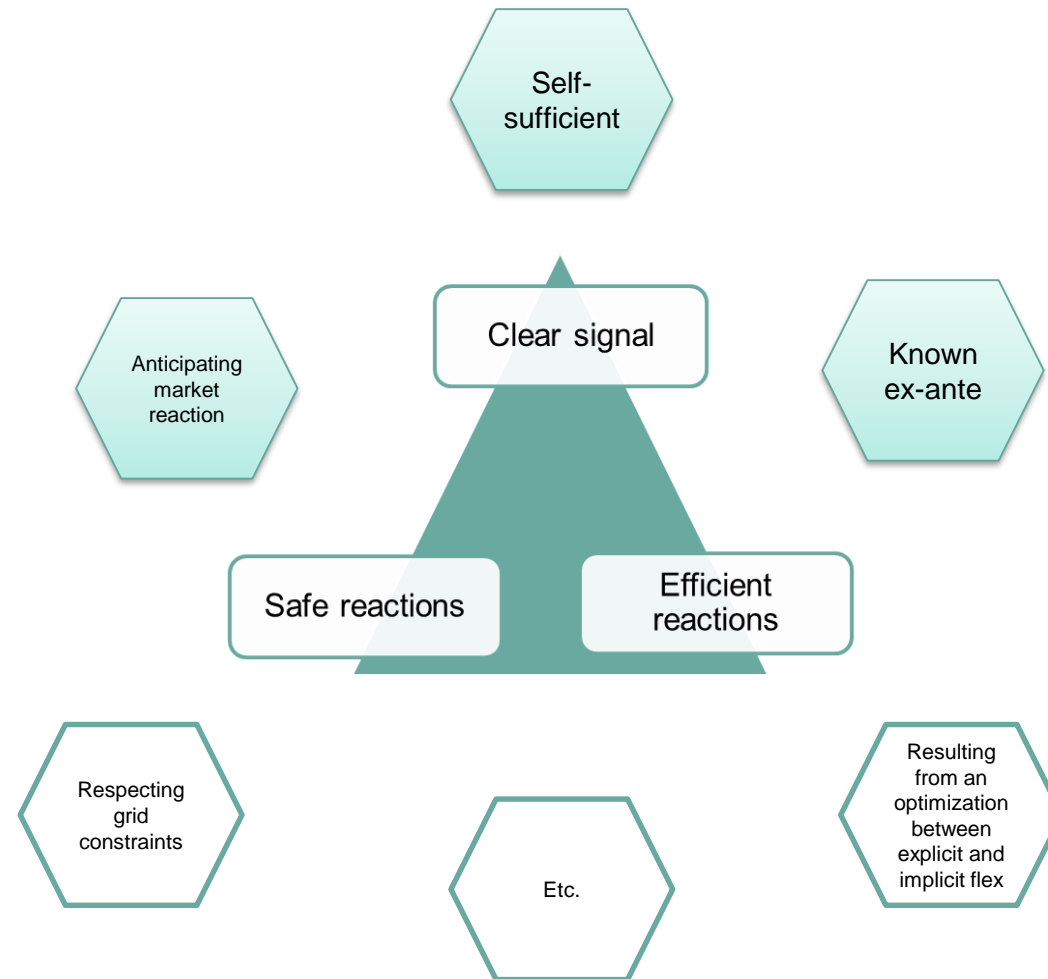
To do so, the future imbalance tariff should evolve towards a **self-sufficient** signal, it should be **known as soon as possible** and it should aim at **using the flexibility available in the system in the best possible way***.

Inefficient system signals – 14 August 2023



Very negative IP while BE zone is almost balanced → very punitive IP (to which BRPs with RES are the most exposed)

A good Real Time Price is a *clear* signal incentivizing *safe* and *efficient* market reactions



More during the WG CCMD – 27 September 2023



How to operate...

Individuals who wish to access services from Elia Group...



I'm looking for an Elia Group service



Interconnected entry channels for Elia Group services

End-user service



Building blocks & higher SLA



Public & free API



Public & free end-service



Services

Peer to Peer

Excess Energy to Offtake

The service "Excess Energy to Offtake" offers the possibility for a Consumer to share his excess energy with a peer who can consume during the same quarter hour.

[For business](#)
[For Developers](#)

[Go to Introduction](#)
[Go to Technical documentation](#)
[Go to API documentation](#)

Supply Split

Supply Split

The service "supply split" offers the possibility for a Consumer to appoint a separate Supplier for a specific asset (or series of assets) behind the same Access Point (i.e. main meter).

[For business](#)
[For Developers](#)

[Go to Introduction](#)
[Go to Technical documentation](#)
[Go to API documentation](#)

ENERGY TRACK & TRACE

Energy Track and Trace

Energy Track and Trace service allows Energy service providers (ESP)/Grid users to track the origin of renewable energy from source to consumption - in near real-time and across borders

[For business](#)
[For Developers](#)

[Go to Introduction](#)
[Go to Technical documentation](#)
[Go to API documentation](#)

Coming soon

Consumer Data Access

Consumer Data Access

Get access to Consumer Data at the head-meter or behind the meter, at different voltage levels, historical or real-time

[For business](#)
[For Developers](#)

[Go to Introduction](#)
[Go to Technical documentation](#)
[Go to API documentation](#)

CO2 Intensity

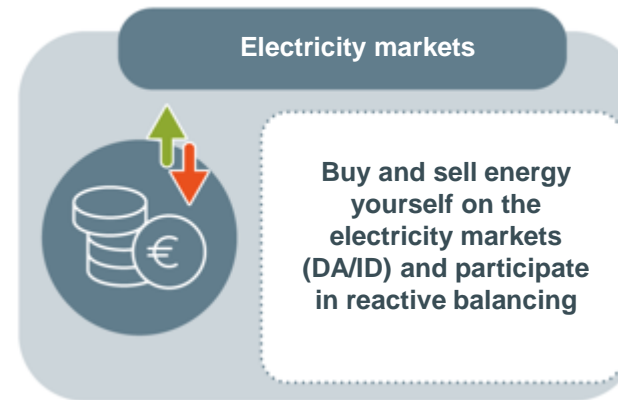
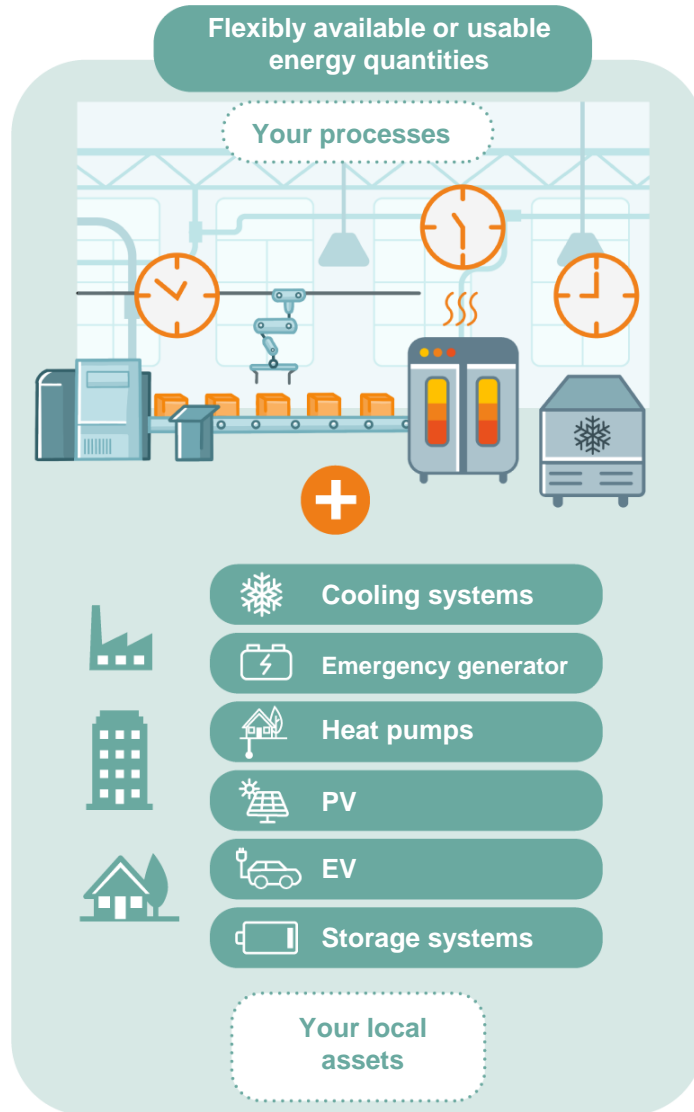
CO2 Intensity

Provision of live data about the share of renewables and the CO2 intensity via APIs

[For business](#)
[For Developers](#)

[Go to Introduction](#)
[Go to Technical documentation](#)
[Go to API documentation](#)

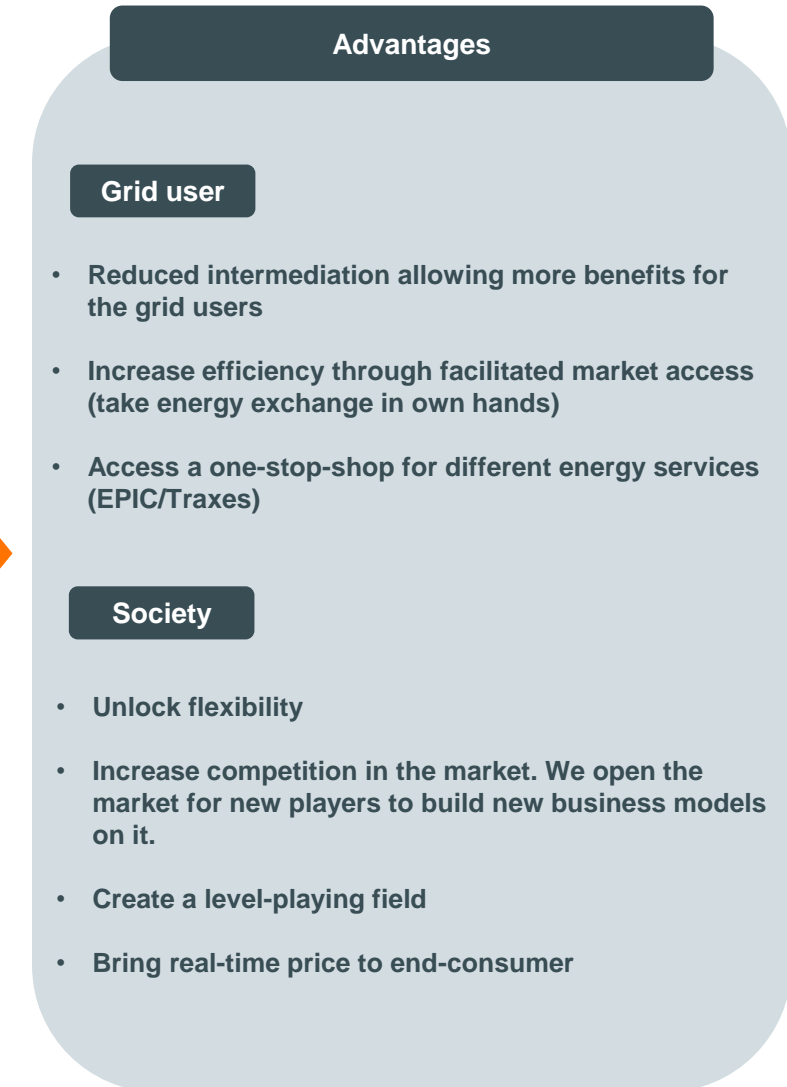
MPx... a way to expose your flexible assets directly on electricity markets



SAXO
BE INVESTED



Bolero

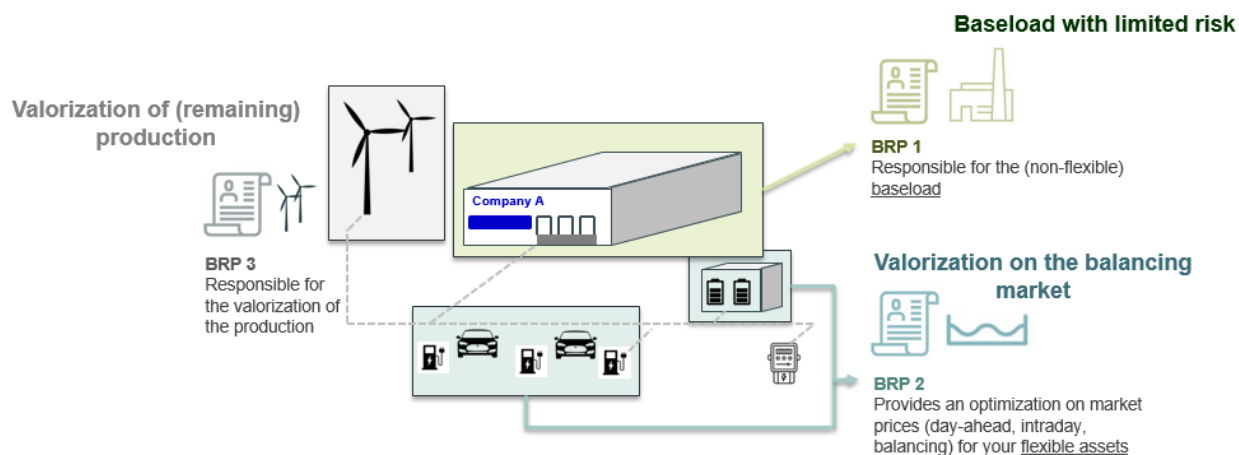


Letting you handle any power transaction by facilitating BRP, financial and trading services

MPX is building on the possibilities enabled by the Consumer Centric Market Design

Contracting different BRPs by making use of “Exchange of energy blocks”

Give the right incentive and **benefit from reactive balancing** (real-time price)

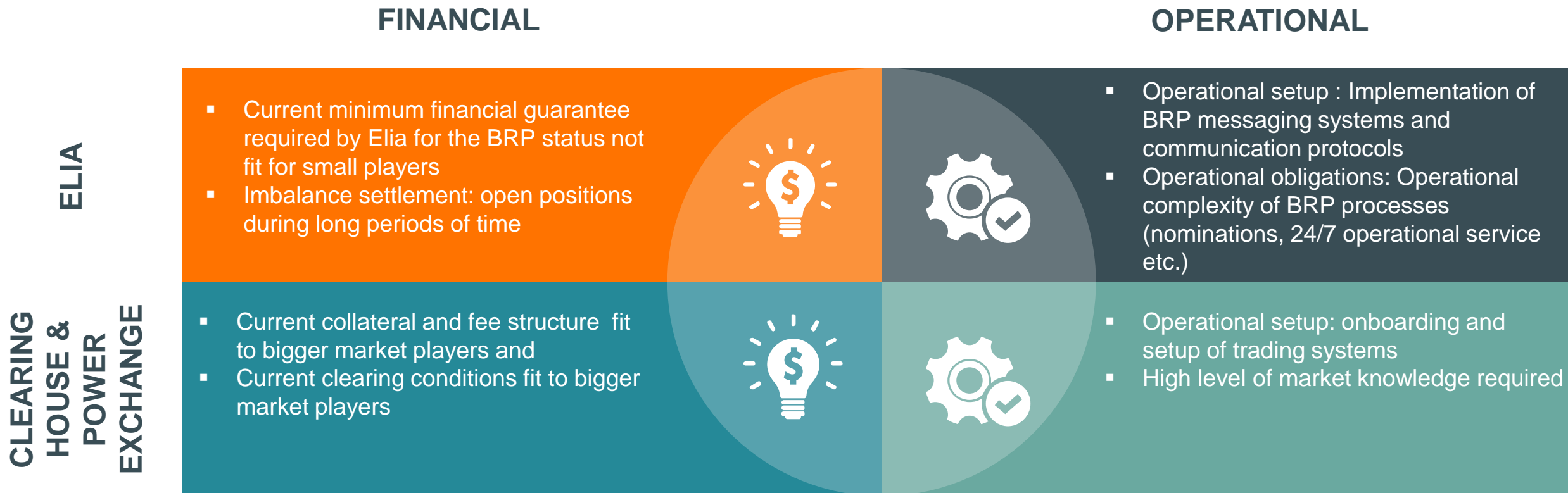


&



MPx allows to expose flexible assets (via the “multiple BRP” service) on the electricity markets and to make a full optimization for these assets making use of the real-time price

Key hurdles* for participation to the power exchanges today



*Based on interview feedback with market parties

A dramatic photograph of a surfer in a black wetsuit riding a massive, curling wave. The water is a vibrant turquoise color, and the wave's crest is breaking into white foam. The surfer is positioned at the base of the wave's face, looking up towards the crest. The overall scene conveys a sense of power and excitement.

EXCITING TIMES

Agenda

- 1. Approval of reports 7 March and 5 May**
- 2. Project Grid User flex for congestion management**
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- 4. Consumer Centricity**

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5.2. For discussion: proposal for recommendation for Users' Group

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6.4. WG SO&EMD (incl. TF PEZ)

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**Need for flexibility
participation in market**

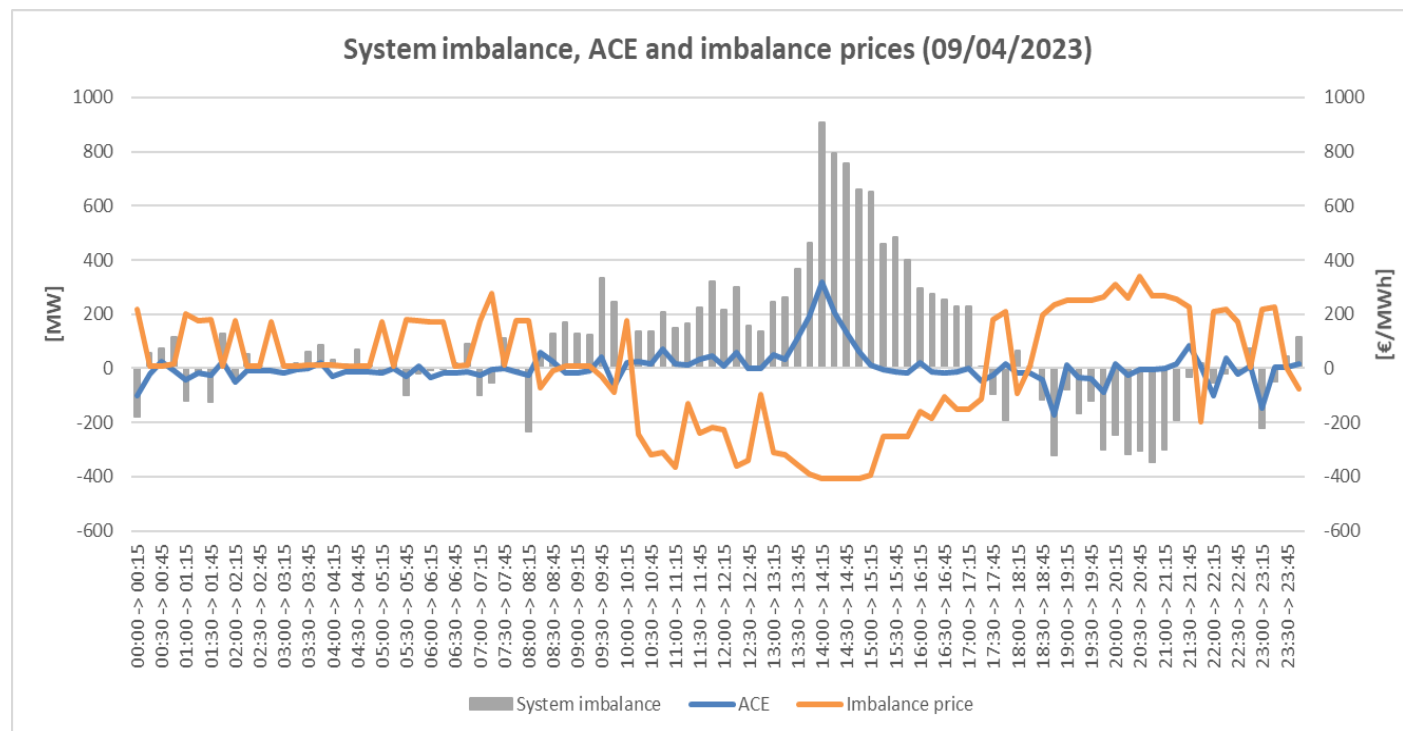


Agenda

- **Participation of flexible assets in market: use cases & solutions**
- For discussion: proposal for recommendation from Users Group



WG BAL 16/5: system indicators showing significant incompressibility on 9/4

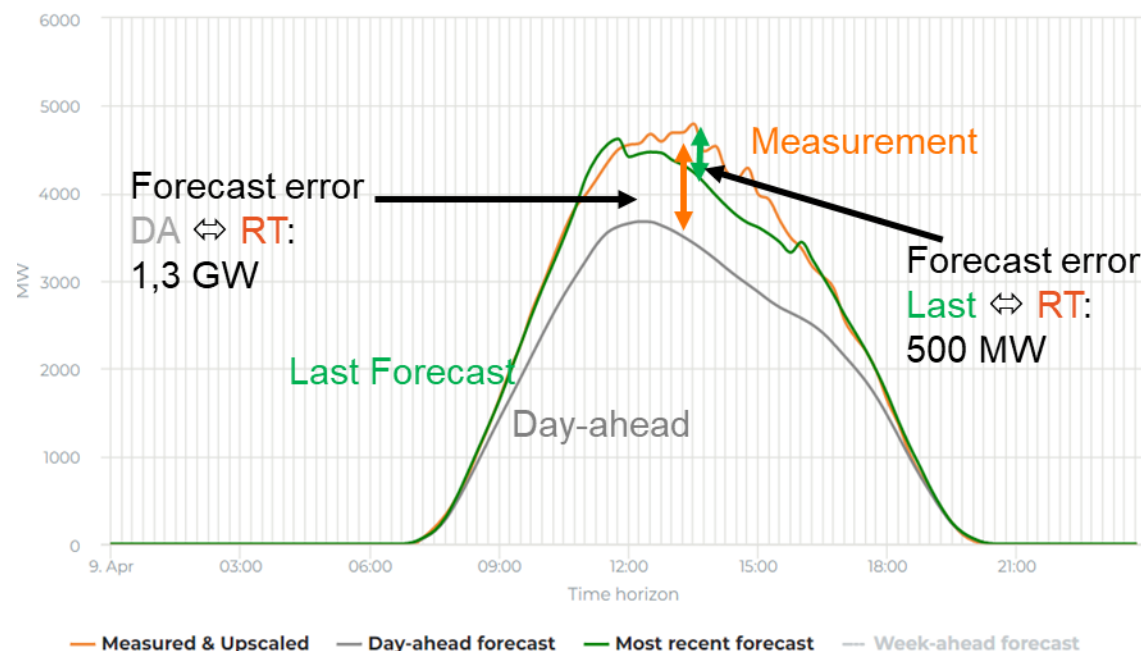


- **System imbalance (SI)** was long most of daylight hours (08:00 → 17.00)
- Peak at almost 1GW in the afternoon.
- Moreover, **ACE** peaks at 350MW in the afternoon during some QHs
- **Imbalance price** down to -400€/MWh during several QHs

9/4 exhibits a significant case of incompressibility

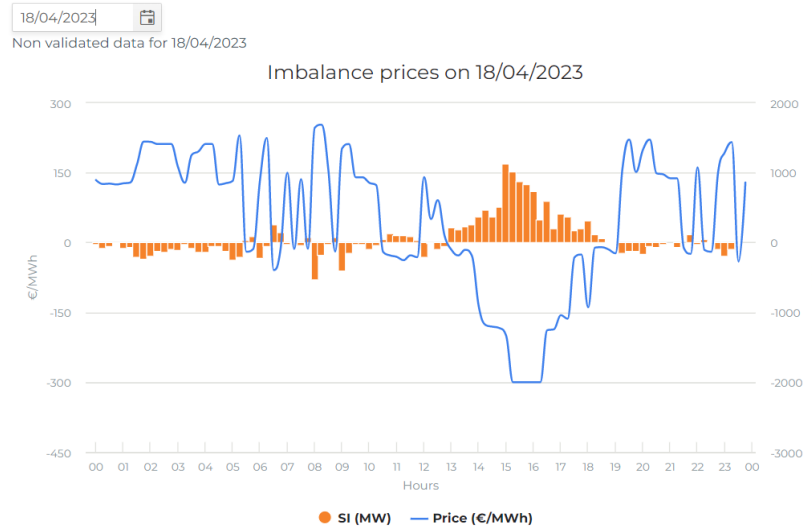
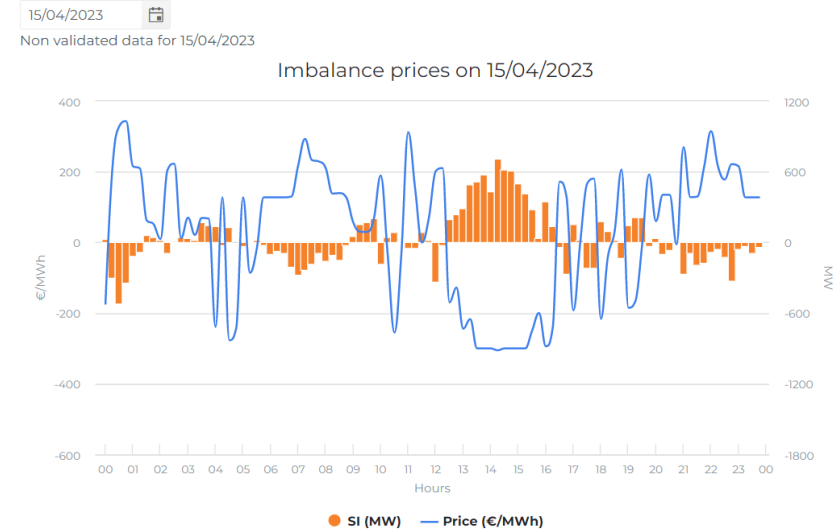
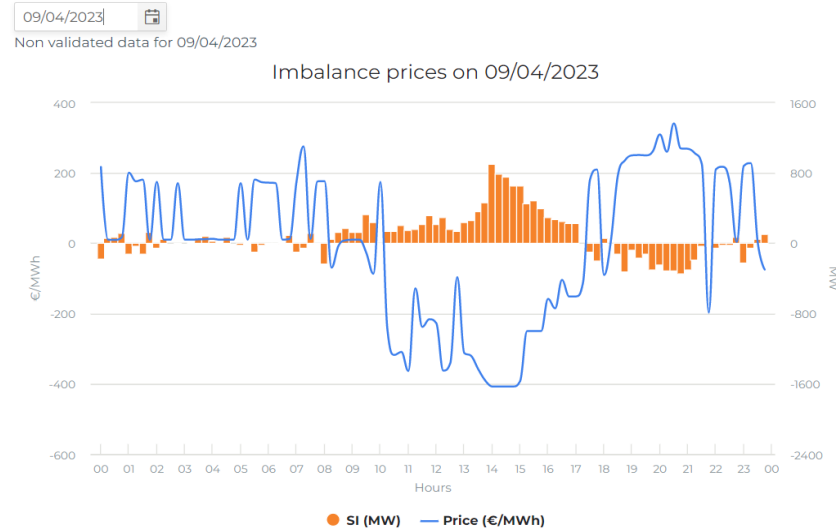
WG BAL 16/5: Day-Ahead solar forecast error as key driver on 9/4

Solar forecast : From DA → real-time



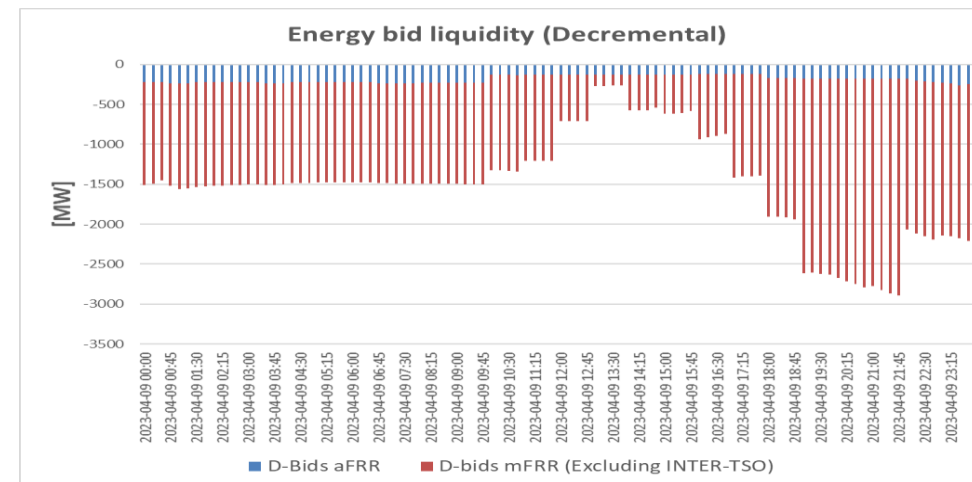
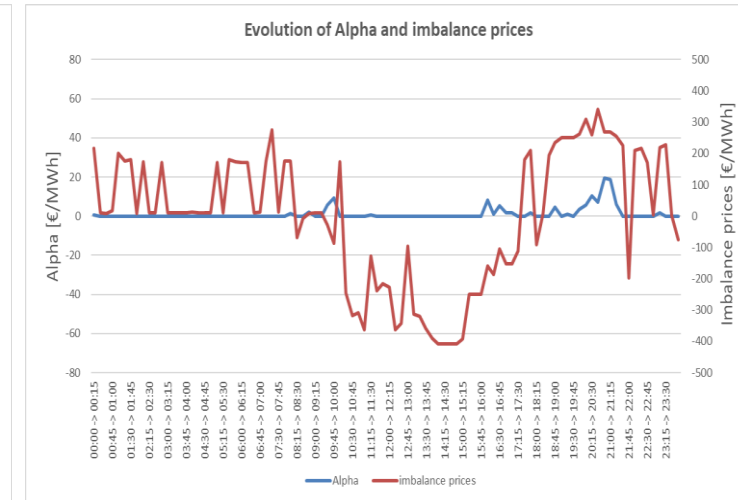
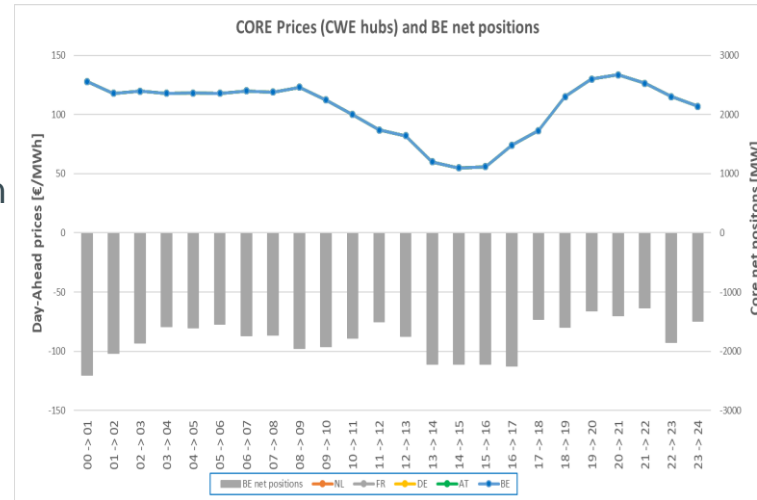
- DA Solar forecast has been the **key driver** of the system imbalance
- Forecast error of more than 1,3GW in DA compared to the measurement.
- Even the most recent forecast (=RT-1h) shows an underestimation of 500MW.
- **Wind forecast is not** a root cause of the system imbalance on this day. Hardly any wind and limited error (also limiting downwards regulation potential from wind)
- Hardly any **large gas units** were running in the afternoon. **Nuclear** infeed at about 3,5 GW.

WG BAL 16/5: a few examples indicating incompressibility



WG BAL 16/5: also neighboring countries were confronted with a similar situation on 9/4

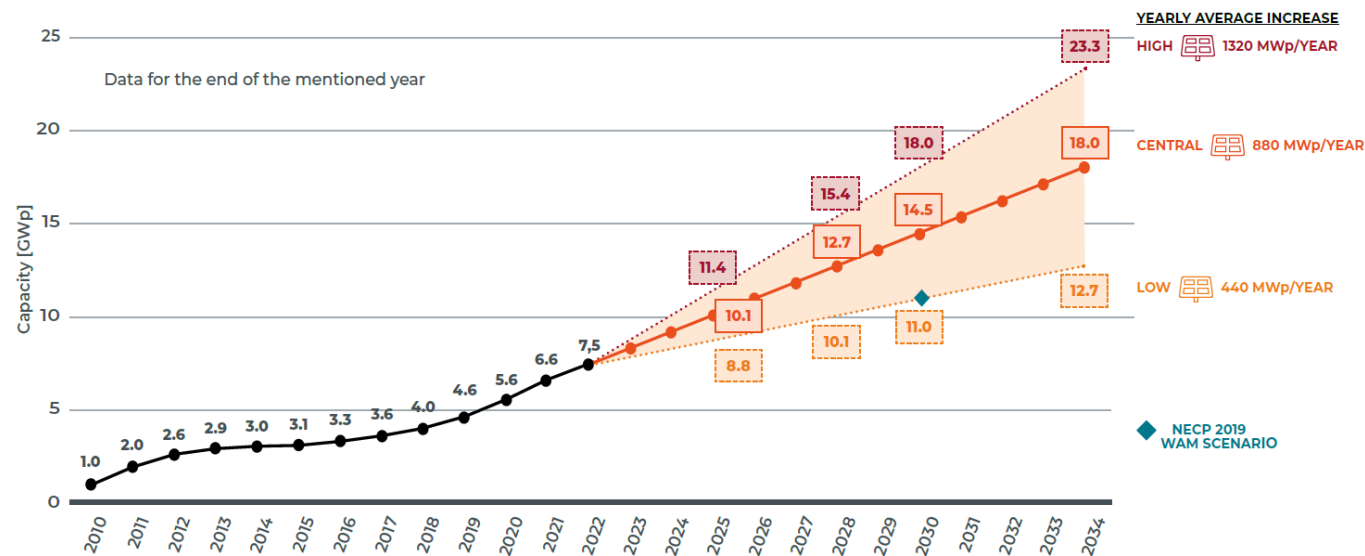
- **Day-Ahead Market Coupling** resulted in Belgium being in import while neighbouring countries were in export.
- In real-time the case was nevertheless further exacerbated by the fact that also in neighbouring countries a similar situation occurred.
- On the **intraday market and in real-time** it appeared difficult to evacuate the surplus volumes.
- In line with how it has been designed now, the alpha component was about zero during the situation, hence not providing increased incentives via real-time price signals.



Incompressibility: future outlook and solution

- Estimated increase of 880 MWp of PV p.a. until 2034
- Large share of residential PV which –today- does not react to price signals and hence continues to feed in even in case of excess energy in the system
- Cumulative capacity of 14 GW of PV expected by 2030 (exceeding typical summer load of Belgium)
- Similar evolutions abroad limit the possibility to export excess energy

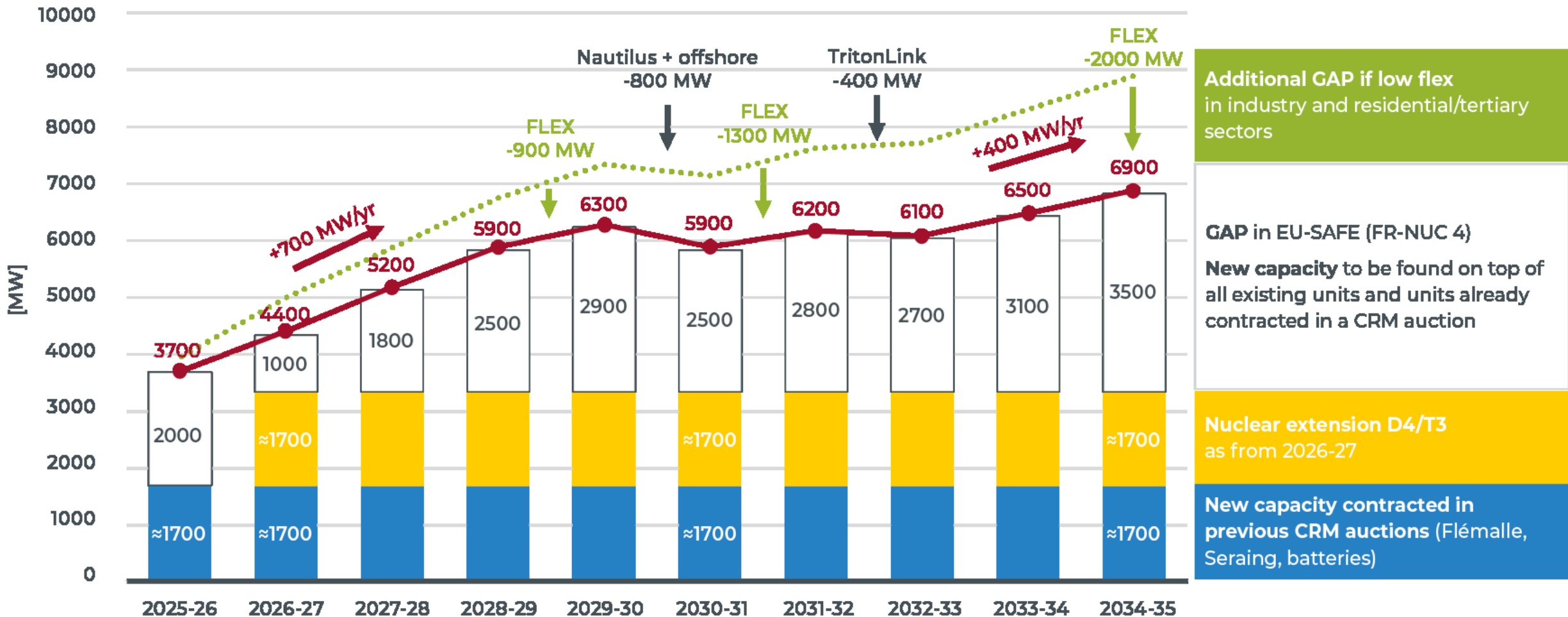
FIGURE 3-54 — ASSUMED EVOLUTION OF THE INSTALLED PHOTOVOLTAICS CAPACITY IN THE CENTRAL SCENARIO AND SENSITIVITIES FOR BELGIUM



Further integration of PV will require flexible demand to consume more during periods of high PV infeed and PV to react in a flexible way in case of remaining excess energy in the system.

Active participation of flexible assets in the market is important for SoS and balancing the system

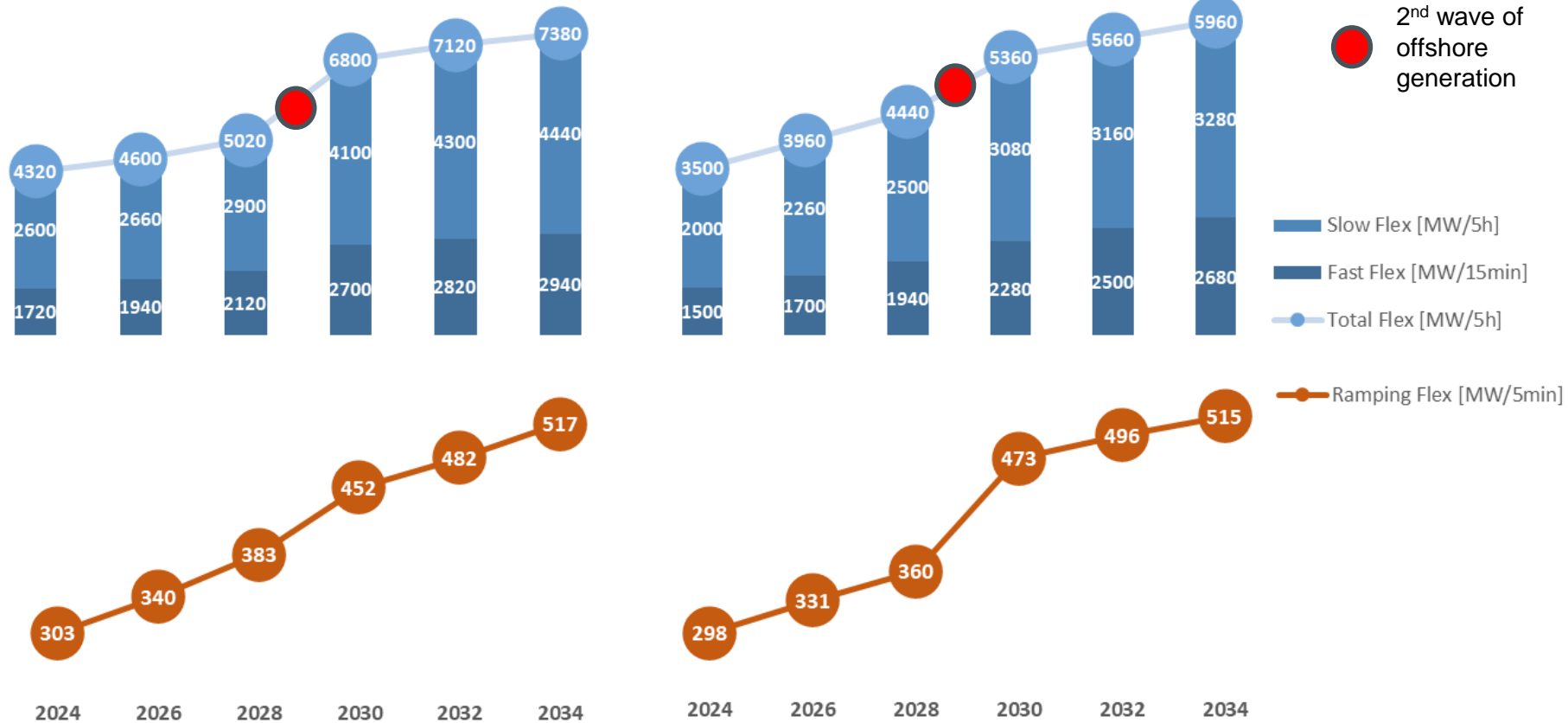
SUMMARY OF THE GAP IN THE EU-SAFE/CENTRAL SCENARIO



Active participation of flexible assets in the market is important for SoS and balancing the system

Upward Flex Needs

Downward Flex Needs



● 2nd wave of offshore generation

- Slow Flex [MW/5h]
- Fast Flex [MW/15min]
- Total Flex [MW/5h]
- Ramping Flex [MW/5min]



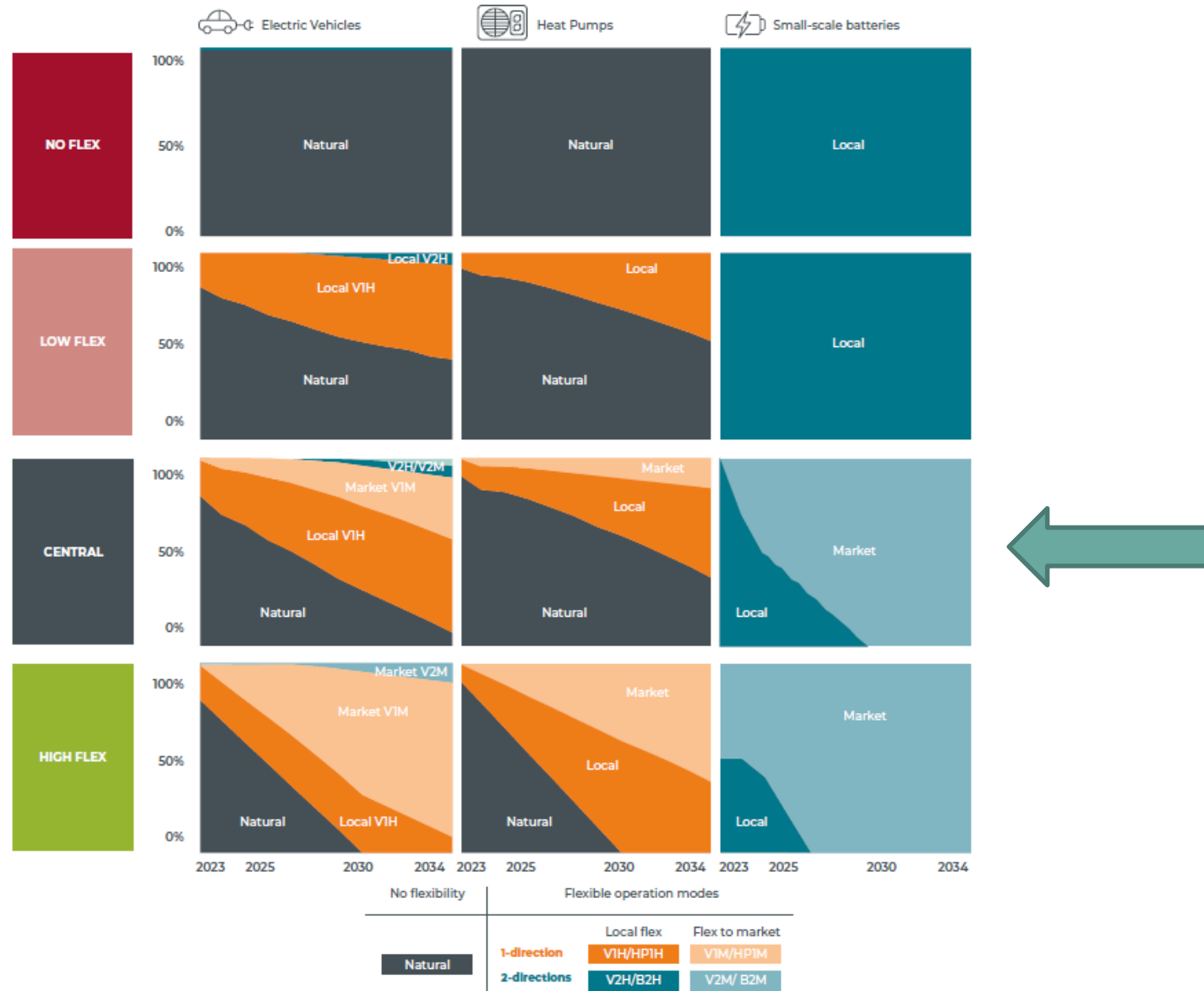
By 2034, the Belgian system will require

- 6 - 7 GW of flexibility in the last hours before real time,
- of which almost 3 GW needs to be able to react in the last quarter hours,
- and up to 0.5 GW needs to react within 5 minutes.

Flexibility needs should be covered as much as possible by the market and only the residual imbalances are to be covered by Elia.

Assumptions on flexible assets in the ADFLEX study

FIGURE 3-49 — FLEXIBILITY ASSUMED FOR EV, HP AND SMALL-SCALE BATTERIES IN THE CENTRAL SCENARIO AND SENSITIVITIES



Need for flexible assets to participate in market

- **The further integration of PV and wind (*intermittent renewables*) in the system will require:**
 - Flexible demand to consume ‘more’ during periods of high solar (*intermittent renewable*) infeed (and vice versa, to consume less in case of low renewables infeed) by reacting on market (price) signals
 - PV and wind (*intermittent renewables*) to react in a flexible way on market price signals (e.g. have incentive to reduce output in case of negative market prices)
- **Participation of flexible assets (EV, HP, PV, batteries,...) in the market requires (a.o.):**
 - Digital meter, data exchange/communication and standardization
 - Improved market mechanisms (CCMD) and price signals to incentivize flexible assets to react
 - Flexible assets need to have technical capabilities to react on the basis of market-based signals
- **There is a need for having new flexible assets ‘flex ready’ from start**
 - Given rapid uptake and long lifetime (avoiding expensive ex-post retrofits)
 - Benefit for society, system and asset owners
 - E.g. PV owners that react on negative market prices could receive higher remuneration for injected energy



Agenda

- Participation of flexible assets in market: use cases & solutions
- **For discussion: proposal for recommendation from Users Group**



For discussion: opportunity for recommendation endorsed by Users Group

Goal of such recommendation would be to accelerate the development of flexibility to support the next steps in the energy transition by removing important barriers

Such recommendation could a.o. take following points into consideration:

1. Importance to foster participation of flexible assets, like electric vehicles, heat pumps, batteries, solar panels,... in the market to facilitate the further integration of renewable energy (and e.g. cope with issues of incompressibility)
2. Need for newly installed flexible assets to be 'flex ready' (as of a certain date), i.e. technically capable to react on market-based signals (e.g. enable reaction of PV installations to negative market prices).
3. Need implement the CCMD market design that enable flexible assets to participate in the markets and to valorize their flexibility in an easy way
4. ***Other relevant points?***



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- 7.3.** Next plenary meeting 19 Dec. 16:15h – 18h



Highlights WG Belgian Grid

Since last plenary meeting: **two meetings: 17/05 & 05/09**

Main topics

1. **Tariff proposal 2024-2027:** results of public consultation
2. **Energy View Point**
3. **Public consultation** on concept note on **connections with flexible access** to the federal transmission grid
4. **Access contract:** main modifications
5. **Connection contract:** main modifications
6. **Incentives:**
 - Hosting capacity maps
 - MVAR
 - Cost benefit analysis requirements for generators applicable on existing and new generating units

Next (ad hoc) meetings:

- **Date TBD – call for feedback** regulations
- **Date TBD – Tariffs 2024-2027**
- **Last WG Belgian Grid Thu. 7/12** 2pm-5pm

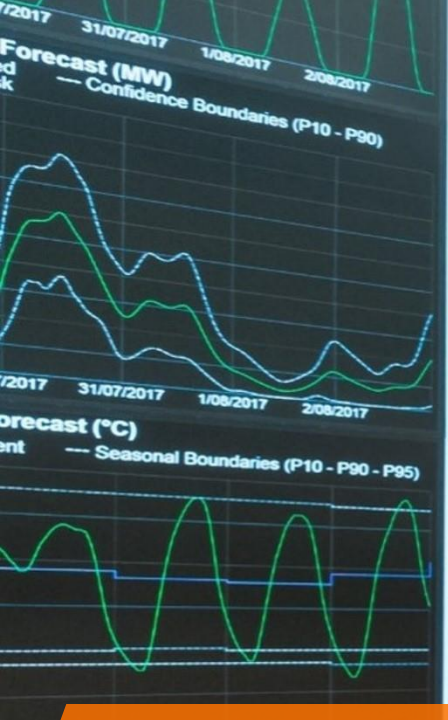


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Feedback WG Balancing



Feedback WG Balancing 29/06 (1)

– EU & BE Balancing Program Update

- Elia reminded the timing of the different Public Consultations (T&C mFRR, T&C BRP, Balancing Rules)
- Elia explains how it will need to adapt its FRR activation strategy after connection to the EU MARI platform, in line with the timings of the EU platform, its activation optimization function and availability of ATCs.
 - Elia will mainly use Scheduled Activation for mFRR, determining its mFRR demand on the basis of best estimate of SI for the next QH to bring ACE close to zero and/or relieve aFRR

– T&C BRP / Imbalance Price

- Elia reminded the general timing of the amendment of the T&C BRP in the context of connection to MARI and PICASSO, and presented the proposed imbalance price formula compatible with MARI/PICASSO

– aFRR Evolutions & Connection to PICASSO

- Elia reminded that the objective is to connect to PICASSO in 06/2024 before the legal deadline (07/2024)
 - A workshop on mitigation measures for the connection to Picasso will be organized.
- Elia reminded the various design evolutions and timings foreseen for aFRR and will organize a workshop to discuss them



– Winter Plan Balancing

- Elia proposed to introduce a more robust, general framework to ensure the availability of sufficient mFRR in case of tight market conditions or unavailability (risk) of sharing agreements by neighboring TSOs. The measures are based on technical triggers (Critical Grid Situation communicated by RCC).
- Follow-up: PC from 18/08 to 15/09 & submission to CREG on 29/09, entry into force foreseen on 01/11

– Incentive on DfD

- Elia presented the DfD analysis and mitigation measures to prevent them, based on a decision tree
- Follow-up: feedback expected from MPs by September & consultation of a draft report by 01/09. Window for POC tests from October to December, and final report to be submitted to CREG by 22/12

– CRI filtering for aFRR

- Elia explained the filtering process for aFRR which aims to limit the filtered volumes of aFRR

– AOB – Incompressibility Issues

- Elia explained the procedure, based on the existing legal framework, to manage situations of incompressibility
- Follow-up: a mail towards WG BAL members was sent on 05/07 with a document explaining the high incompressibility risk procedure, taking place from 06/07 to 21/09



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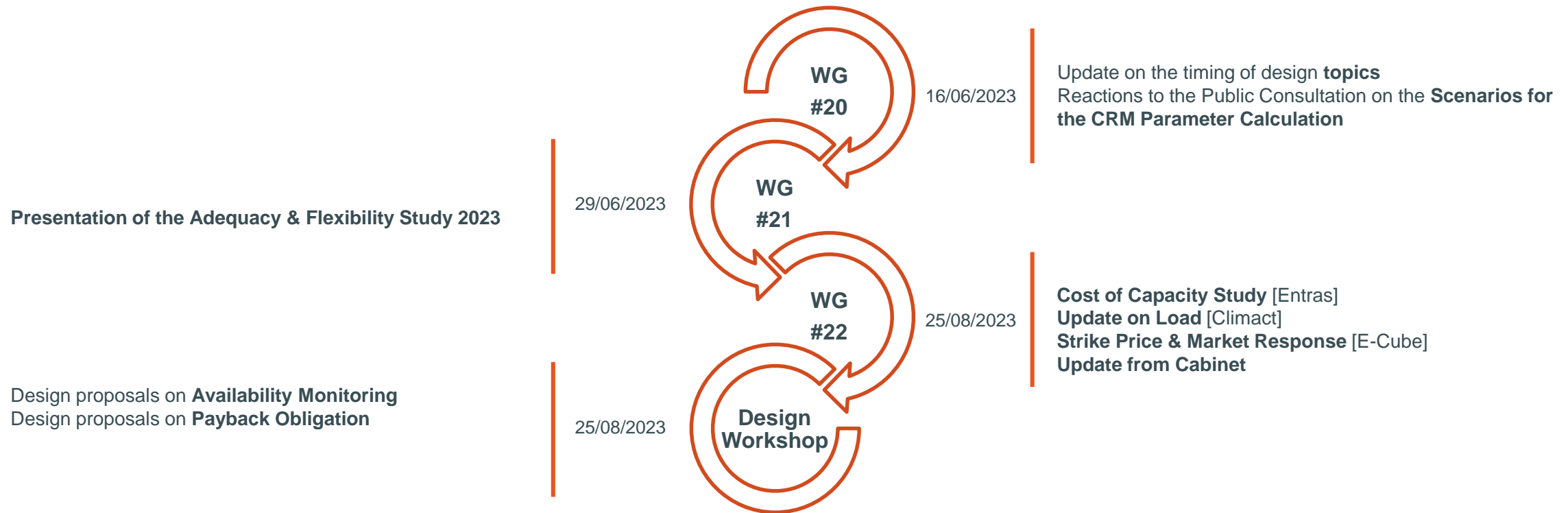
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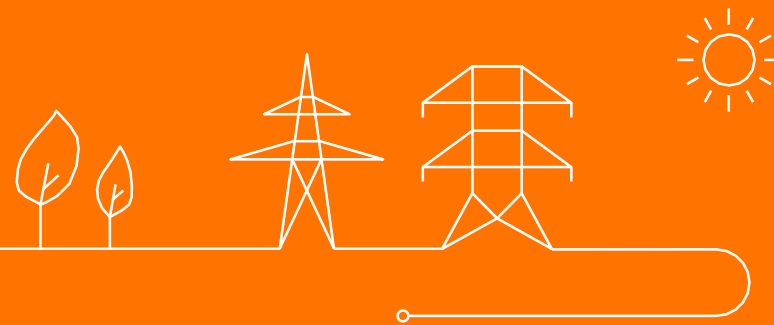


Feedback WG Adequacy

WG Adequacy – Overview of last Meetings



Main Topics from the Last Meetings



Main Topics



Public consultation on the scenarios and data to be used for the Y-4 2028-2029 and Y-1 2025-2026 CRM auctions

Elia presented and answered the feedback received from external parties



Presentations of several studies regarding the parameters of the CRM auctions

A study by Climact on the **Total Electricity Demand Projection**
 A study by E-cube on the **strike price and market response** for the upcoming CRM auctions
 Two other studies are ongoing:

- The **Cost of Capacity Study** by Entras is underway
- Elia has launched a study about the **assessment of net balancing revenues**



The Cabinet of the Minister of Energy introduced additional changes to the CRM / SoS framework:

The introduction of a **Y-2 auction** in combination and further **improvements of the 200h rule**
 A change to **Art 4bis** of the Electricity Law which governs the process of capacities leaving the market



Renotification of the CRM

Renotification is ongoing; the renotification **amends the initial approval of the CRM by the EC** to include, amongst others, the nuclear prolongation and the design evolutions discussed in the WG.
 Approval of **DSR payback exemption is highly unlikely.**

Main Topics

- Following the publication of the CRM Functioning Rules, **a number of design improvements** will be discussed in the Working Group Adequacy
 - Elia presented a timeline for the discussion
 - A first design workshop took place with interested parties to deep-dive on a number of evolutions Elia is proposing to the Availability Monitoring and the Payback Obligation

Current scope of design discussions per topic

Availability Monitoring:

- Clarification on current design
- Determination of SLA hours
- Proven/Unproven Availability for Daily Schedule CMUs
- Number of activations per day

Payback obligation:

- Clarification on application of DSM exemption per DP
- Potential improvements to the indexation mechanism and the calibrated strike price

Prequalification:

- Timing for Additional to Existing capacity

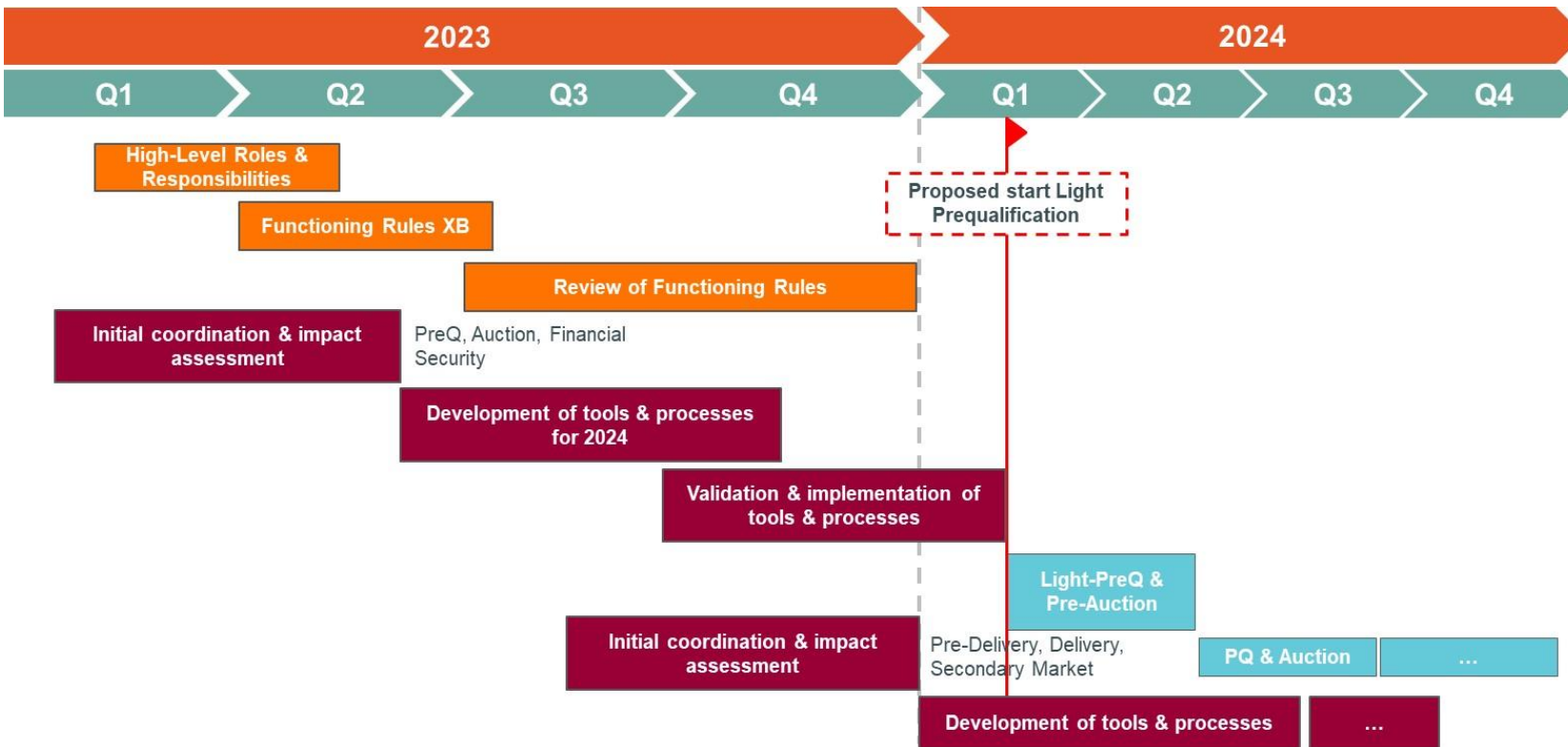
Cross-border CRM:

- Process for participation of foreign CMU
- Cross border CRM design (pre-auction, light prequalification, etc.)

This list represent the current scope of the proposed discussions, Elia does not exclude that additional topics are brought to the Working Group



Main Topics

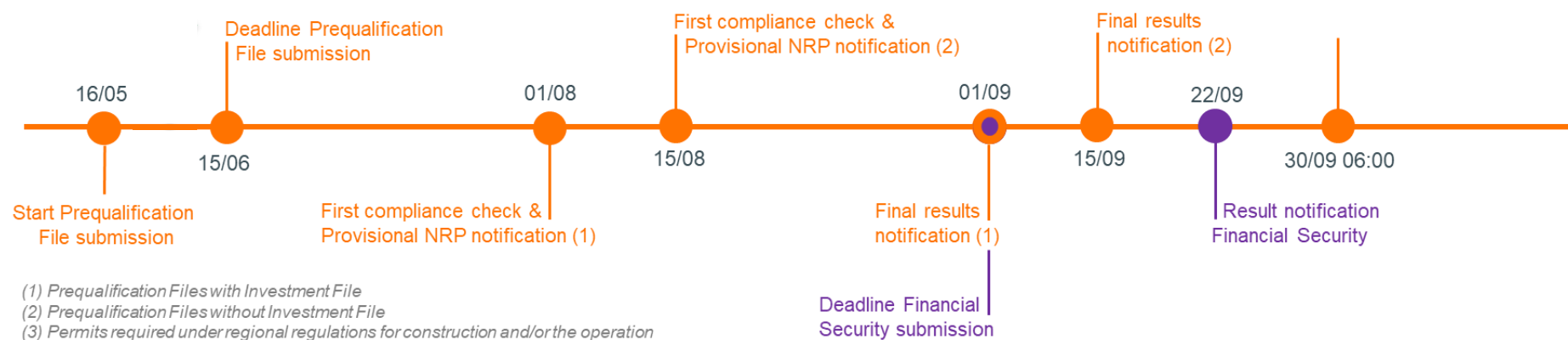


- Based on a EU decree, every CRM should allow for **Cross-Border participation**
 - Elia is working on the Cross-Border CRM with neighbouring countries – France, Germany & the Netherlands
 - First Cross-Border participation in the Belgian CRM in Delivery Period 2025-26
 - The proposed timeline is as displayed



Main Topics

- **Launch of 2023 CRM Auction Operations**
 - The prequalification process for the 2023 CRM auction is running its course
 - More information, documents & template are on the CRM page Elia's website



- In June, the CRM secondary market launched
 - Going forward, market parties are able to notify trades to Elia using the new platform.

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Highlights WG EMD-SO (Q3 2023)

European Market Design

Core Intraday Capacity Calculation

- 17th of July dedicated workshop organized about summer consultation of ACER on the 2nd IDCCM amendment (escalation by Core NRAs to ACER)
- Shared insights of Elia and discussion held with CREG and Belgian market parties on relevant point of attention from a Belgian perspective

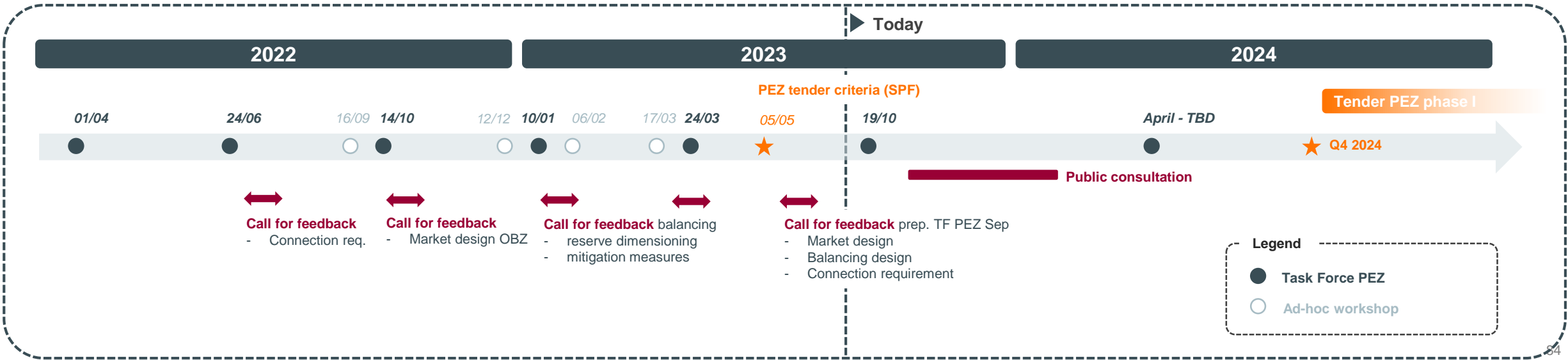
Calendar

- Next WG EMD-SO meeting at 17th of October
- Agenda topics (tentative)
 - Winter outlook, summer review
 - Emergency & Restoration
 - Post Brexit Market Coupling with UK
 - Core Intraday Capacity Calculation

Task Force Princess Elisabeth Zone (PEZ)



Overview of Task Force PEZ and workshop



Agenda Task Force 19th of October (tentative)

- Results call for feedback and scope public consultation
- Dynamic & Harmonic: conformity process foreseen for PEZ tender
- Balancing: feedback on open points and final conclusion



Public consultation

A public consultation will be organized from 20th of November until 20th of January on topics presented in the framework of the Task Force PEZ:

- **Balancing design:** impact on balancing, recommended mitigation measures and OBZ balancing market implications
- **Market design:** OBZ market implication and process
- **Dynamic & harmonic:** Clarification of amendments foreseen for the technical specifications for PEZ
- **Summary of technical aspects** presented during TF/workshops

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Plenary meetings 2024

Friday, **1 March** – PM

Monday, **10 June** – PM

Monday, **23 September** – PM

Monday, **25 November** – PM

