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WG Energy Solutions of October 2nd 2025

Hybrid meeting

02/10/2025

For a smooth teleconference with 30+ people …
Some rules apply

- Please put yourself on mute at any time that you are not speaking to avoid background noise.
- If you receive a call, please ensure that you do not put this meeting **on hold.**
  - You can quit and reconnect later on.
  - You will be muted or kicked out of the session, if necessary.
- You will be requested to hold your questions for the end of each presentation.
  - Should you have a question, please notify via Teams or speak out if you are only via phone.
  - Share your question (with slide number) in advance so all participants may follow
  - Before you share your question, please announce yourself.
- If you have a poor internet connection, please dial-in.
- Finally, please be courteous and let people finish their sentences.
  - It is practically impossible to follow when 2 people are speaking at the same time in a teleconference.

Agenda

- 10:30 – 10:35: Welcome and approval MoM
- 10:35 – 10:45: Incentive on the economic optimization of the use of FRR – monitoring of the Proof-of-Concept
- 10:45 – 11:05: Incentive BSP Faster Settlement – status & go-live planning
- 11:05 – 11:10: Incentive Knowledge management – new website
- 11:10 – 11:30: Transfer of Energy – Feedback on the public consultation
- 11:30 – 11:40: T&C BRP – public consultation
- 11:40 – 12:10: Flexibility Track & Trace
- 12:10 – 12:20: EV.fleet at scale – conclusions & next steps
- 12:20 – 12:30: AOB

  - *12:30 – 13:30: Lunch*

- 13:30 – 15:00: Interactive info session: **Imbalance price formula evolution 2026**

Minutes of Meeting for approval

Minutes of Meeting of WG Energy Solutions of 19/06/2024

- Comments:
  - CREG: "CREG stresses that this is first a BRP responsibility" is to be clarified by "CREG stresses that BRPs are responsible for accurate and reliable intraday forecasts of PV injections in their perimeter, or to foresee PV flexibility in real time to compensate for uncertainties". The second part "Larger incentives could create business cases" can be maintained.
- Suggestion to approve.

Economic optimization of the use of FRR – Monitoring of the Proof-of-Concept

Tanguy Port

5 Proof-of-concept (PoC) monitoring 23/07/2025 – 22/09/2025

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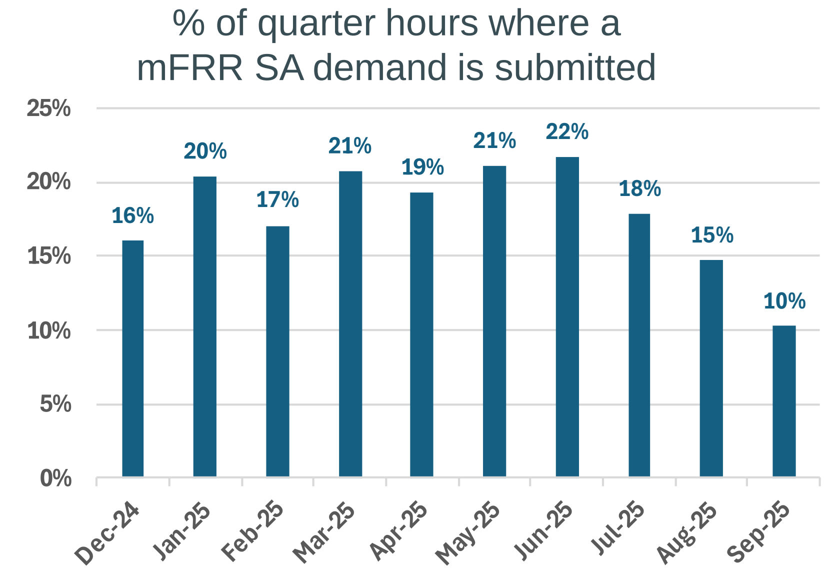
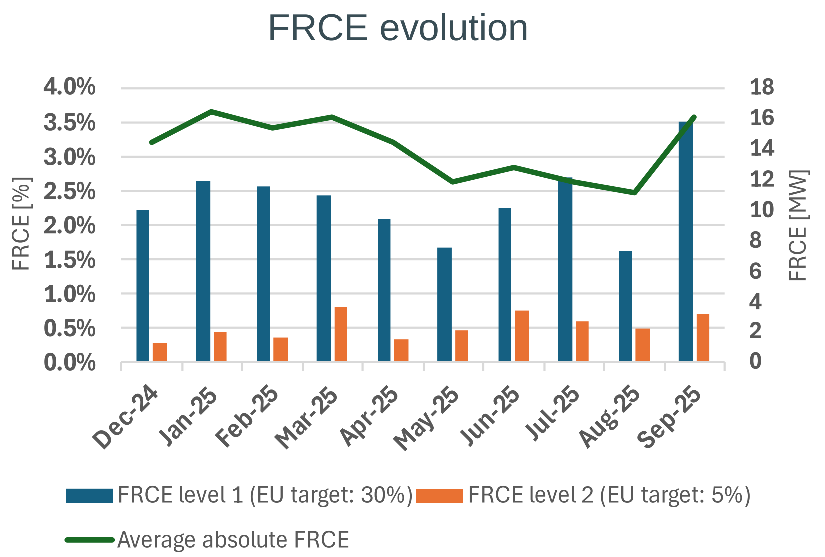
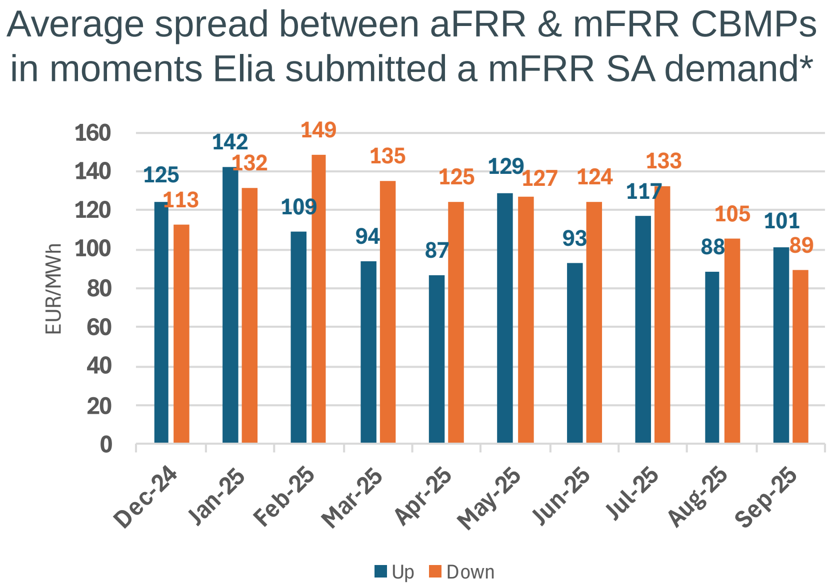
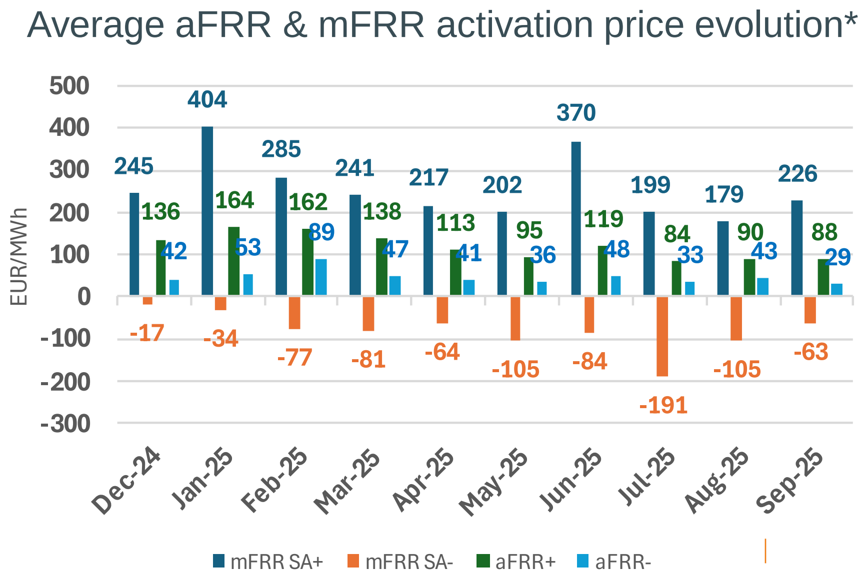
- **mFRR SA activations decreased significantly** thanks to the PoC
- No clear indication on FRCE quality impact – **FRCE remains well below EU threshold**
- It is difficult to differentiate market conditions from financial benefits brought by the PoC
- A methodology to evaluate PoC benefits is presented two slides further





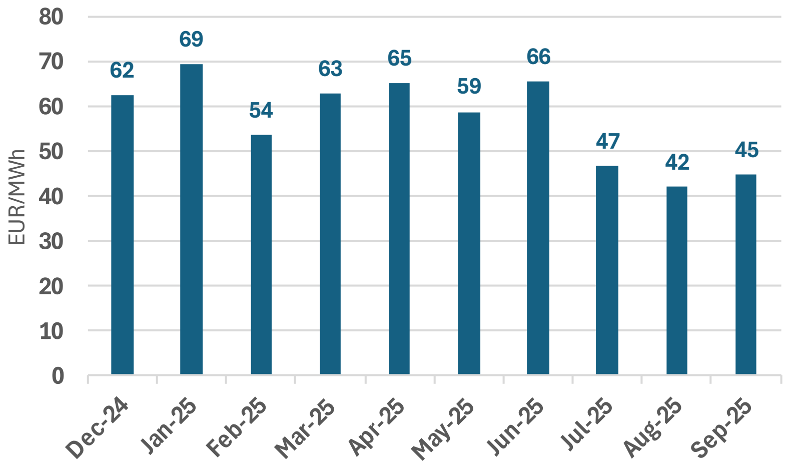




* Disclaimer: calculations made with imbalance price formula components

Proof-of-concept (PoC) monitoring 23/07/2025 – 22/09/2025

Average absolute spread (IP-DA)*



- The attractivity of the imbalance price decreased consequently

ATC leftovers after intraday DE + FR + NL
26/11/2024 – 22/09/2025 (10 months)

Percentile	Export (MW)	Import (MW)
5%	0	0
10%	277	30
15%	613	146
20%	925	262
25%	1185	350
30%	1425	398
35%	1641	483
40%	1863	574
45%	2075	663
50%	2291	753
55%	2514	858
60%	2743	968
65%	2980	1090
70%	3240	1231
75%	3537	1392
80%	3873	1597
85%	4288	1860
90%	4785	2277
95%	5528	3014
99%	6864	5115

500MW
1GW
500MW
1GW

- Residual ATCs for balancing are more frequently limited in import direction

* Disclaimer: calculations made with imbalance price formula components

Proof-of-concept (PoC) monitoring 23/07/2025 – 22/09/2025

Methodology to compute high-level benefits

1. **Assumption on activation occurrences:**

   When forecasted |SI| is low & ATCs are large, mFRR SA would have been activated at a **similar frequency** and **similar volumes** than the **2 months before the PoC**

→

2. **Assumption on activation prices:**

   New activation prices are calculated with the **QH aFRR price kept constant** (price-taker assumption) and **average mFRR price** calculated for **different volume levels** since the PoC *

Results

- Savings of **1 MEUR** over 23/07/25–22/09/25 (2 months) → savings of **~ 6 MEUR** (extrapolated to a full year)
- The PoC contributes to **reducing the gap between implicit and aFRR** → supports **Elia's system balance philosophy**

Next steps

- Continue the regular monitoring of the PoC
- Continue to assess the feasibility of implementing a long-term tool aiming to economically optimize the use of aFRR and mFRR for the next quarter-hour

Disclaimers

- This KPI shall be considered as a proxy with large uncertainty
- Assumptions made to allow the computation of such proxy are strong
- Market conditions affect importantly the KPI. It is not excluded that the current value changes importantly due to changing market conditions in the coming months

* Disclaimer: calculations made with imbalance price formula components. The mFRR CBMP assumption is obviously not accurate over the QH.

Incentive BSP Faster Settlement – Status & go-live planning

Dries De haes

Incentive Recap

Scope of incentive 2025 “BSP faster settlement & invoicing”

final decision CREG October 2024

- **Faster processes for the 4 types of settlement reporting for FCR, aFRR and mFRR**
  - Remuneration of awarded capacity
  - Remuneration of activations (*not applicable for FCR*)
  - Penalties for availability/obligation control
  - Penalties for activations control

- **Proposed improvements**
  - An accelerated calculation and provision of the settlement reportings to the BSP (at the latest end M+1)
  - The publication of the settlement reportings and invoices on a unique communication platform (= EPIC)
  - The switch from traditional billing process to a self-billing process (i.e. self-bills for remuneration and invoices for penalties)

- **Deliverables**
  - **Part 1 :** after discussion with BSPs, the following should be provided to CREG by 30.06.2025 :
    - Reports/MoM from meetings with BSPs
    - Implementation plan of 4 types of settlement reporting for FCR, aFRR and mFRR in the go-live window

  - **Part 2 :** a go-live window between mid 2025 and mid 2026
    - with at least the go-live of the settlement reporting for remunerations of awarded capacity and activations in Q4/2025

Scope of incentive 2025 “BSP faster settlement”

final decision CREG October 2024

	FCR	aFRR	mFRR
Remuneration awarded capacity	< 31/12/2025	< 31/12/2025	< 31/12/2025
Remuneration Activations	n/a	< 31/12/2025	< 31/12/2025
Obligation Control	< 30/06/2026	< 30/06/2026	< 30/06/2026
Activation Control	< 30/06/2026	< 30/06/2026	< 30/06/2026

Status

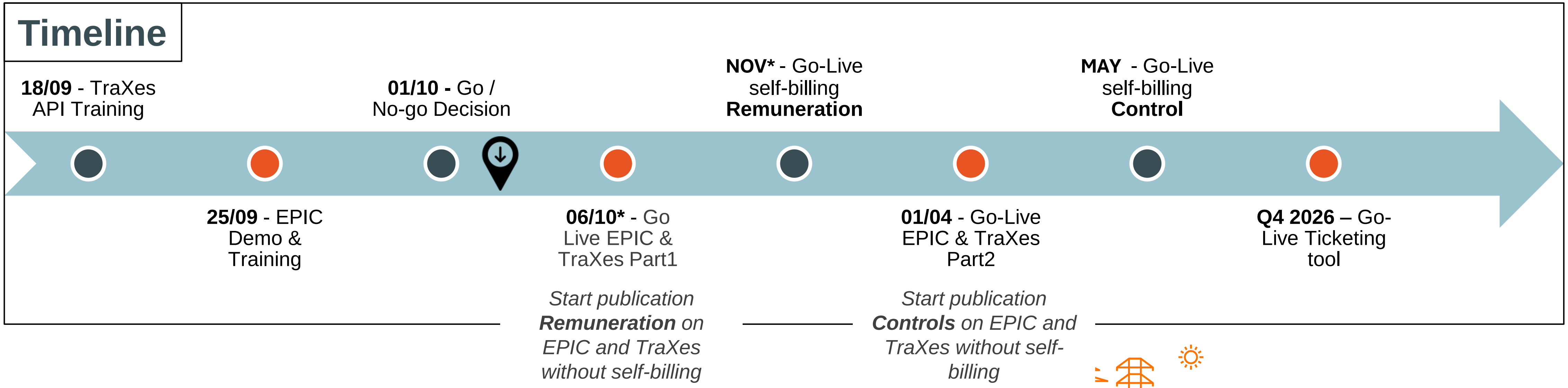
Status & Timeline

<u>Status</u>

TraXes training: Explanation of how to use APIs to retrieve settlement data allowing self-created tools
→ The use of TraXes is entirely optional

EPIC Training: Demonstration of how to use EPIC to validate and reject published settlement data

<u>Any</u> feedback on EPIC and TraXes is welcome via your KAM Energy



*These go-live dates are dependent on the Go/ no-go decision and the approval of the T&Cs by the CREG

Next steps

Next steps & touchpoints

Go lives REMUNERATION

- As of **Monday October 6th, 2025***: Publication of settlement reports via EPIC (&SettlementUI)
- As of **November, 2025***: Start self-billing flow
    - Confirmation will follow with the approval of the T&Cs by the CREG

Touchpoints

- Formal confirmation email after approval by CREG: “Entry into force of new T&Cs BSP”
- ~March 2026: New/refresher training on EPIC / TraXes for Obligation and Activation Control
- Q3 2026: more information on go-live ticketing tool
- Ad hoc: feedback moments on request of BSPs

*These go-live dates are dependent on the Go/ no-go decision and the approval of the T&Cs by the CREG

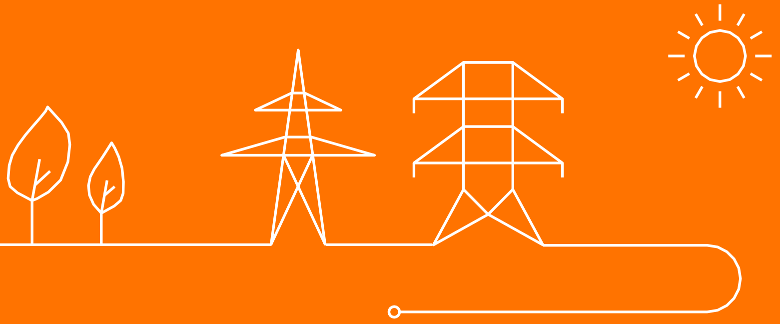
BSP Readiness

1. Know your way around EPIC (you will receive a notification mail, no longer reports via mail) & the approval deadline after 25 days of publication
2. Make sure to be ready for self-billing on your side (you will no longer need to send invoices)
3. Assure the shortened payment deadlines can be met (=15 days following the receival of billing documents)
4. Check compliance via PEPPOL platform to receive and send e-invoices (registration on Peppol Network)
5. Let your KAM know if you want to create your own tooling (using TraXes APIs)

→ TraXes training session & EPIC Demo & training session already took place (recordings available on ELIA website)
→ Your KAMs will contact you to ensure readiness

Incentive Knowledge management – New website

Sander Claeys



Core deliverables of knowledge management are ready to be published, and to receive further feedback

A first version of core deliverables is ready for release. We ask the market to provide their feedback on these, so we can continue to further improve the quality of these documents

What was improved?	Where can you find it?
Update of Elia website on flexibility (Explicit bal. & CRM)	New version of relevant pages is released in week of 29 Sep Explicit bal. : https://www.elia.be/en/electricity-market-and-system/system-services/keeping-the-balance CRM: https://www.elia.be/en/electricity-market-and-system/adequacy/capacity-remuneration-mechanism
Up-to-date design notes for FCR & aFRR	First version is ready, will be made available on respective product pages in week of 6 Oct FCR: https://www.elia.be/en/electricity-market-and-system/system-services/keeping-the-balance/fcr aFRR: https://www.elia.be/en/electricity-market-and-system/system-services/keeping-the-balance/afrr
Further extension of Watts.Happening	Improvements have been released gradually since Q2 2025 https://www.wattshappening.be/

Transfer of Energy –
Feedback on the public consultation

Simon Serrarens

Topics

- Public consultation ToE Rules – feedback received & draft response Elia
- Corrected model – VAT
- Next steps

Public consultation ToE Rules

- Elia organized a public consultation on the proposal for amendments to the ToE Rules, in context of the Synergrid ToE Game Plan (18/06 – 01/08, ext. 15/08). The topics in scope were:
  - Introduction of the Corrected model for the Elia Grid
  - Extension of ToE to the public distribution grid
  - Extension of ToE to aFRR
  - Updates to the go-lives
  - Simplification of references to T&C BSP and T&C BRP
  - Additional changes (removal SDR, removal of net annual offtake obligation for DP, data provision in Opt-Out)
- Elia received 6 non-confidential responses, and 1 confidential response
  - Non-confidential: FEBEG, Febeliec, Centrica, Bnewable, EU commodities, Abousco

Overview of the general theme of the responses to public consultation ToE Rules, with a deep-dive in specific comments on the following slides

The various responses center around the following themes, with certain messages occurring frequently with different market parties. The following themes have been addressed in the consultation report:

- General feedback to the amendments of the ToE Rules
- Comments on the timing of entry into force
- Comments on the ToE models
- Comments on the text
- Data sharing
- Remaining considerations

General feedback to the amendments of the ToE Rules

Market party	Comment	Elia response
All market parties	Market parties welcome the public consultation	Elia thanks the market parties for taking the time to provide feedback
	React positively to the extension of ToE to aFRR	
	React positively to the introduction of the Corrected Model	

Timing of entry into force

Market party	Comment	Elia response
Febeliec, FEBEG, Bnewable	Indicate they find the timing lacks ambition.	Elia is committed to extending the ToE framework across voltage levels and balancing products. The ToE Rules are in function of ToE Game Plan, taking into account impact on different stakeholders and IT developments.
Febeliec	Finds certain items indicated 'TBD' as unacceptable	Certain topics were out of scope (DA/ID) *(see next steps)*; others are under evaluation (CM)
Bnewable	[Out of scope] Faster timing Supply Split	In collaboration with Synergrid, a timing towards 2027 is set.
FEBEG	[Out of scope] Calls for faster entry into force multiple BRP	Elia and CREG are working on this introduction.

Comments on ToE models

Market party	Comment	Elia response
All parties	Welcome Corrected Model	N/A
FEBEG	CM should be only model	Not appropriate at this time, CSM is required for confidentiality if GU desires
Centrica	Believes there should be no default model	This would not be coherent with the requirement to explicitly make a GU opt-in if they want the CM
FEBEG & Bnewable	Request for changes to baselines ToE DA/ID	Elia proposes to address this as of fall ’25 *(see next steps)*
FEBEG	Asks CREG (and Elia) to revise regulated price	Elia has conferred this message to CREG, who is in charge of determining the regulated price formula
Abousco	Asks for requirements for CM, impact for DSO connected GU, technical and admin implications	*Explanation in more detail in PC report.*
Centrica	Asks for perimeter correction in pass-through	Elia does not think this is a beneficial improvement. This was discussed further with Centrica, a further analysis will be made
Bnewable & Centrica	Ask for clarification on risks of the CM	Elia explains in PC report: - Financial risk - Confidentiality risk

Comments on the text

Market party	Comment	Elia response
Febeliec, FEBEG, Centrica	Request to clarify with an example the order of allocation of volumes under multiple FSP, multiple BRP	Elia has provided an additional example in the ToE Rules
FEBEG	[Out of scope] asks for notification for aFRR activations	*Out of scope*
Centrica	Suppliers need to provide list of imbalance exposed Delivery Points, but sometimes don’t keep this up to date	This was discussed with Centrica and CREG, a common ground solution was found in allowing Pass-Through contracts to *not* have a fixed end date if all parties agree.
Bnewable & Centrica	Ask for possibility to combine DA/ID and aFRR during same Qh	Elia proposes to investigate this as of fall ’25 *(see next steps)*
FEBEG	Asks CREG (and Elia) to revise regulated price	Elia has conferred this message to CREG, who is in charge of determining the regulated price formula

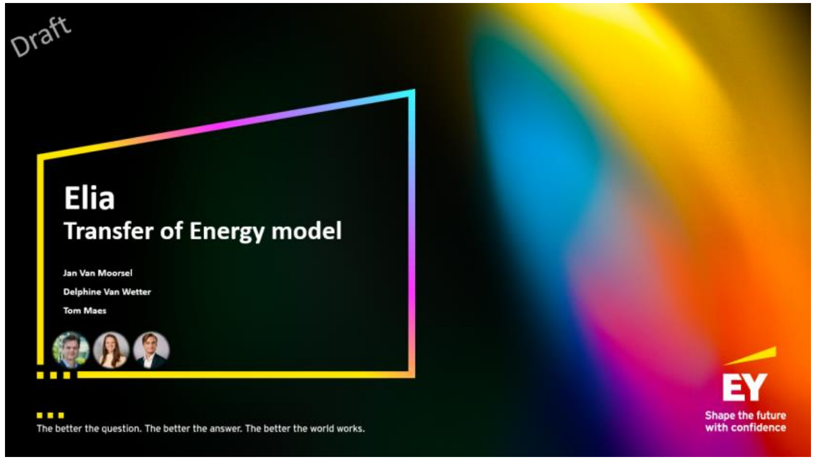
Comments on data sharing

Market party	Comment	Elia response
FEBEG	FEBEG supports the data sharing between Supplier and FSP in Opt-Out as foreseen	N/A
FEBEG	Requests to have the data available in D + 2	Currently, data sharing is foreseen in M + 2. Elia understands that for many market parties this is late, and aims to work on improving this.
European Commodities	Wants additional data sharing towards BRP under Opt-Out (see next slide)	While Elia understands the request of European Commodities, this can not be introduced at this time, since it might lead to confidentiality issues. Elia is in further discussion with the regulator regarding this issue.
Centrica	Wants, under Opt-Out, detailed data sharing per DP, per Supplier and FSP	This does not seem possible at this time since this would involve sharing of individual data, for which the Opt-Out is not designed.
Bnewable	Wants, under CSM, detailed data sharing per DP, per Supplier and FSP, with a GU opt-in	The CSM is specifically designed for GU confidentiality; and an Opt-In would further complicate matters. Elia does not believe this beneficial at this time.

Remaining considerations

Market party	Comment	Elia response
FEBEG	Calls for the implementation of multiple BRP	Elia and the regulator are working on making this possible through finalizing the necessary articles in the CoC and Access Contract.
Abousco	[Out of scope] Asks what the economic impact of these changes is	An in-depth answer was provided in the PC Report.
Abousco	Would like to see improved communication on the consultation of doc release 3	The connection to the consultation of doc release 3 was detailed in the ToE design note, in info sessions by Synergrid, in the WG ES, in the consultation of doc release 3 and in the consultation of the ToE Rules

Corrected Model – VAT



- The matter of invoicing baselined energy under the CM (rather than consumed energy) has implications for VAT:
  - In which cases is VAT applied, and on which volume?
  - Who charges the VAT and to whom?
- Elia has taken this up with EY tax consultants, who are working on an analysis
  - For HV and MV (B2B context), VAT will most likely not be a problem, though the analysis is pending
  - This will be finalized by EY and presented to the market on Nov 13th.

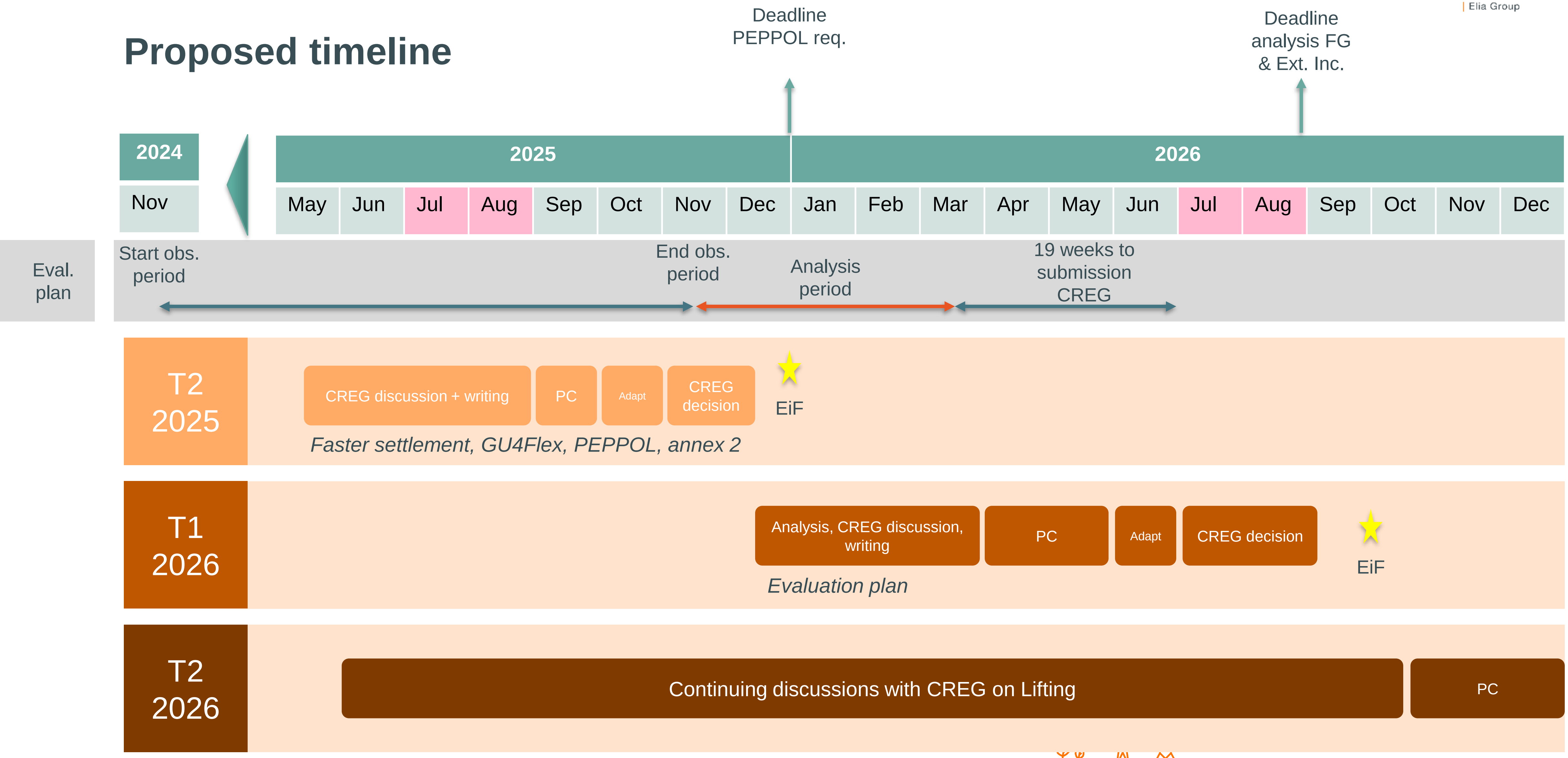
Next steps

- Elia has finalized the ToE Rules based on the feedback received and discussions with CREG.
- The Consultation Report is finalized as well and will be published on the Elia website.
- The market indicated a need for improvements to ToE DA/ID, among others by revising the baseline in light of renewables and BESS; as well as the possibility to allow for activations of DA/ID and a/mFRR during the same Qh. Elia will start analyzing these potential ways for improvement as of now, in close dialogue with CREG. Elia wishes to thank the market parties for providing ideas and examples of how ToE DA/ID can be improved.

T&C BRP – Public consultation

Simon Serrarens

Proposed timeline



** Only Faster settlement based on provisional allocations*

Content of the public consultation

- Public consultation is ongoing, will run from 03/09/2025 till 03/10/2025
- T&C BRP – version 2 2025 includes amendments concerning:
    1. Incentive faster settlement
    2. GUflex
    3. Peppol
    4. Contact details
    5. Remaining changes

1. Incentive Faster Settlement

As discussed with CREG, the design as proposed in the Incentive Faster Settlement (IFS) is written into the T&C BRP. There are, however, 3 proposed changes compared to the initial design, to further streamline the process:

1. No minimum financial guarantee was defined explicitly within the IFS. Keeping the existing assumptions (i.e. minimum position of 50MW, minimum imbalance price 50 EUR/MWh), the new formula leads to a minimum financial guarantee of 30.000 EUR (prev. 93.000 EUR).
2. To ensure enough time to draft the provisional invoice, it will be sent either on M + 11 WD or on M + 16 WD. The IFS originally fixed this at M + 11 WD; leading to relatively little margin for data quality checks and creating all invoices.
3. In the exceptional case no provisional invoice can be sent out (specified in IFS), it is not possible to calculate the invoice-based financial guarantee. To alleviate this, Elia would then look back to the past 3 base invoices (M-2; M-3; M-4) to calculate the financial guarantee amount.

2. GUflex – perimeter correction

This revision of the T&C BRP is amended to ensure it is ready for go-live of a BRP perimeter correction in context of flexible connection agreements. This is done as follows:

- Art. 20.9, defining when the perimeter will be corrected in context of flexible connection agreements, by subtracting the Modulated Volume, provided that there is a Grid User Contribution specified in said Grid User's connection contract.
- Art. 1 (Glossary), definition of Modulated Volume and Grid User Contribution, with reference to the Connection Contract, where both will be defined in context of GUflex, and amended later this year/early next year;
- Implementation plan: stipulates that the changes regarding perimeter correction for flexible connection contracts and related definitions will go live as of the entry into force of the amended Connection Contract

3. Peppol

Pursuant to Royal Decree of 8 July 2025, structured electronic invoices must be issued via the Peppol network as from 01/01/2025.

Changes are made in Article 5.1 to precise that, for BRPs that are VAT taxpayers in Belgium:

- All structured electronic invoices will be sent and received via the Peppol network;
- The BRP must have an access point to an exchange platform meeting the Peppol standard;
- For a structured electronic invoice, the date of uploading on the platform shall be considered as the date of sending.

For BRPs that are not VAT taxpayers in Belgium, such structured electronic invoices can be used, based on a common agreement, otherwise sending of PDF invoices via e-mail or platform is accepted.

4. Contact details

Currently, the contact details must be provided by the BRP by completing Annex 2, and any update leads to export of the document and e-mail exchanges. With the development of EPIC, BRPs can complete and update their contact details list directly on the digital platform.

Amendments are made, similarly to the BSP Contracts:

- Definition of the Digital Platform (EPIC) is introduced
- Appendix 2:
  - Contains the list of roles for which contact details must be provided
  - Precises that the contact details must be provided on the Digital Platform, and kept up to date
- References to appendix 2 in the contracts, now refer to the Digital Platform

5. Remaining changes

The changes included in this revision of the T&C BRP consist a.o. of changes to the invoicing modalities, via the IFS and changes for Peppol.

Given this context, Elia identified two additional ways to streamline the settlement process:

1. Currently, a 3-day period is assumed between sending an invoice and receipt of said invoice by the BRP. Given the digitization via Peppol; the fact that all BRPs receive their invoices electronically already and the fact that this 3-day delay was already removed for the self-bill, Elia would propose to remove this altogether. Consequently, the invoice is assumed to be received the day it was sent.

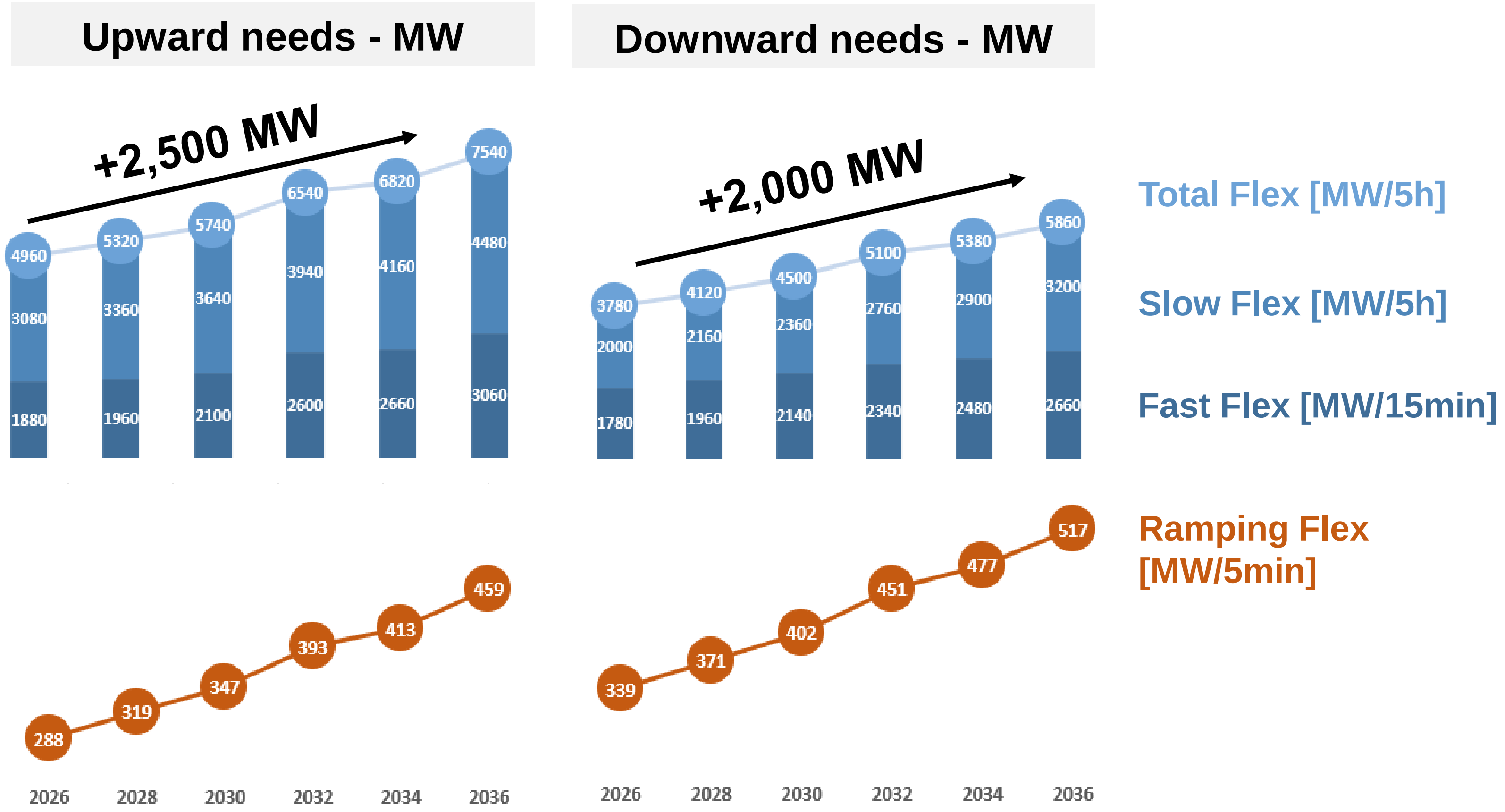
2. Today, regularization occurs on an annual basis. When all data is final and rerun if necessary, at one point in the year, regularization invoices are sent out as necessary for the past year, meaning there can be quite a delay between delivery and regularization (e.g. Jan ’24 regularized in Jul ’25). Elia proposes to change this to a 6-month rolling window, where an invoice is regularized (if necessary), in M + 7. The Jan ’26 invoice would then be regularized in Jul ’26.

Flexibility Track & Trace

Kristof De Vos

Elia's latest Adequacy and Flexibility study re-confirms the increasing flexibility needs towards 2036 driven by increasing renewable capacity

- *The results represent the required capacity to manage prediction errors of renewable capacity in intra-day and real-time*
- *Without action, the share to be covered by the TSO through reserve capacity will increase proportionally*



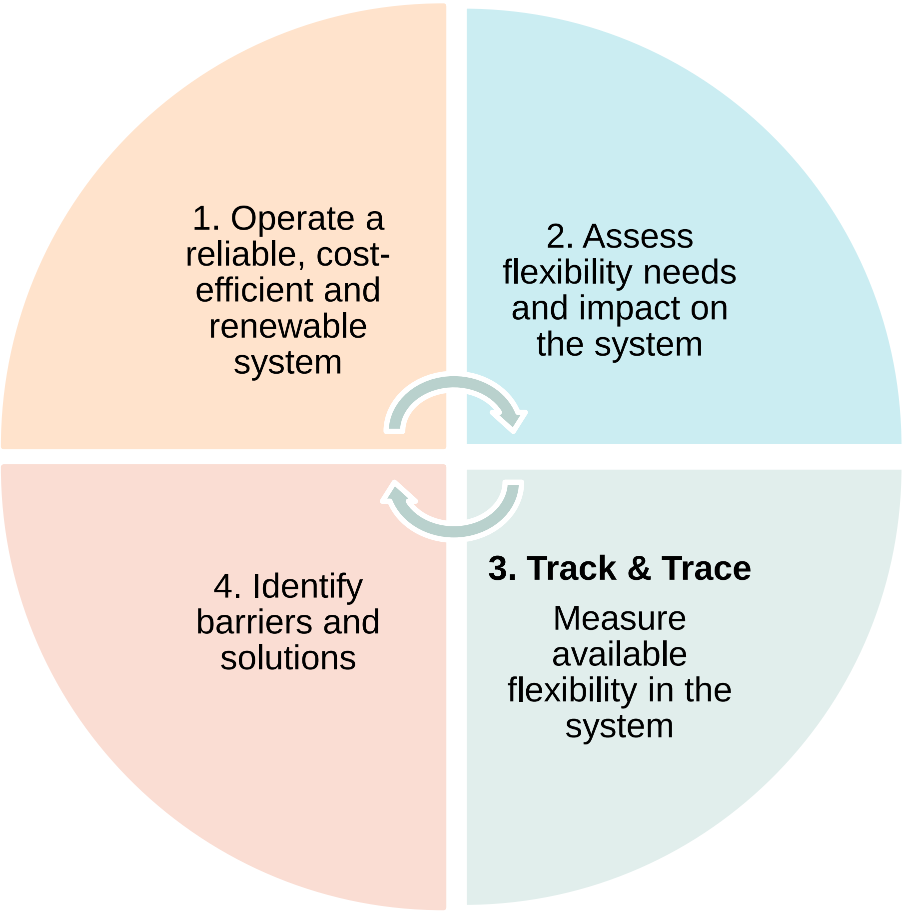
By 2036, the Belgian system will require

- **6 - 7 GW of flexibility** in the last hours before real time,
- of which **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**.

**Ramping flexibility is a subset of the fast flexibility needs*

Elia's Flexibility 'Track and Trace' initiative intended to enhance Elia's ability to assess and steer the trajectories towards the development of flexibility

Elia requires flexibility to operate a reliable, cost-efficient and renewable power system in view of the energy transition



Elia conducts projections of the long-term adequacy and flexibility needs of the system to timely anticipate potential problems and take the adequate measures

Elia follows the actual evolutions on the development of flexibility to continuously assess the feasibility of its projections

Determine '**installed' flexibility :** e.g. how many electric cars are installed and connected and how many MW can be shifted during a day**?**

Determine **'unlocked' flexibility** : e.g. which shares of this capacity can effectively react on market signal (given price or activation signal) ?

Determine operationally '**available' flexibility** : e.g. what capacity can react at a given time in a given product to adequacy or balancing events ?

Elia identifies potential barriers for the development of flexibility in the system and recommends solutions (cf. Power of Flex, Flex@scale)

The initiative covers the full scope of flexibility assessing available flexibility in the system and measure flexibility delivered per technology, voltage level and product type

Assess ‘**installed**’ flexibility

How many flexible assets (cars, heat pumps,…) are installed in the system today ?

What is the maximum flexibility which can technically be delivered ?

Low voltage

Medium voltage

High voltage

Assess ‘**unlocked**’ flexibility

Which share of this flexibility wants to effectively react to incentives to shift its demand?

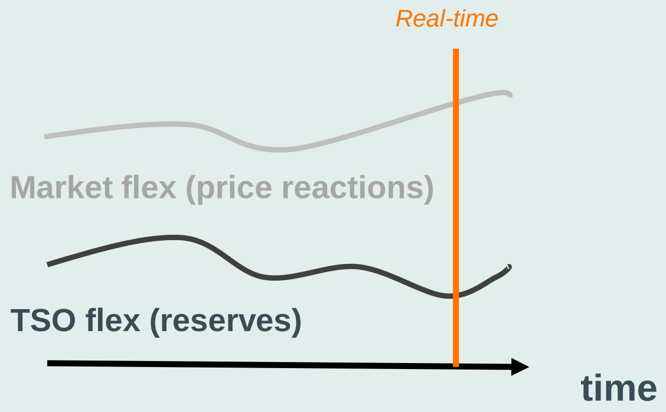
Elia balancing services (FCR, FRR, CRM).

Reaction to energy market prices (e.g. dynamic price contracts)

Local optimization (e.g. capacity tariffs, self-consumption)

Assess ‘**available**’ flexibility

Which capacity / energy is effectively available for activation at a certain point in time?



The Flex Track & Trace initiative is measuring evolution flexibility in the system through different existing and new projects

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	Large industry Consumer's flexibility	Medium voltage Consumer's flexibility	Low voltage aggregated consumer flexibility
1. Assessment of installed and unlocked end-users' flexibility	Load management study	EnergieGrip/Plan de puissance	Tracking installed / unlocked flexibility with desktop statistics
2. Assessment of assets' availability for Elia activation (FCR; FRR Balancing capacity; FRR Balancing energy)	Technology shares in Elia's balancing products, up to the low voltage level		
3. Assessment of energy price reactions (Day-ahead; Intra-day; Real-time)	Market response study Bottom-up load / injection reduction / increase in metering (TSO level) Top-down market reaction after day-ahead (balancing and intra-day)		MV/LV implicit flex (under discussions with Synergrid and DSOs)
4. Assessment of assets' flexibility for local optimization			Individual consumption profiles (with Fluvius) and EV charging behaviour (with CPOs)

The results of this initiative assesses the current state of installed, unlocked and available flexibility to support

Improve Elia's **long-term projections** on adequacy, flexibility and balancing needs

Improve Elia's **short-term operations** in view of flexibility shortages and identify mitigation measures

Strategy recommendations on the development of flexibility

Illustrations of recent outputs and valorizations

The results on next slides intend to demonstrate methods and outcomes and are not intended to be used as final outcomes or results as such

1 A better view on unlocked end-user flexibility allowed a calibration of Elia’s Adeqflex’25 scenarios

Installed e-assets

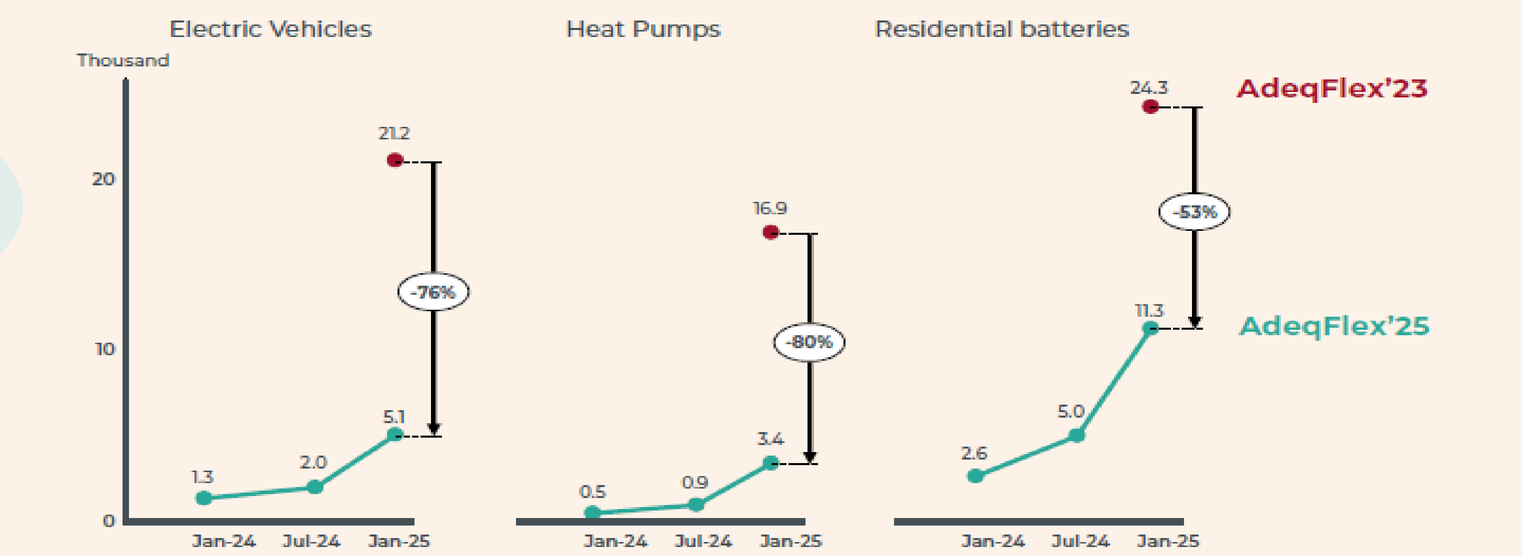
Based on information on dynamic contracts and smart meters per region, an estimation is made on units able to participate in energy markets or react on local tariff signals

Further finetuning is conducted by means of assuming asset controllability and consumer behaviour

Market incentives
(reacting on prices)

Local incentives
(reacting on tariffs or self-consumption)

The measured shares of unlocked flexibility for the provision of market flexibility have fallen below expectations compared with those assumed for AdeqFlex’23 study. The slower-than-expected growth of dynamic contracts impact the ability to fully unlock e-assets.



Adeqflex 2025 – Figure 3-9

Enablers*

	Smart meters			Smart meters with SMR3*			Dynamic Electricity Contracts		
	Dec-23	Jul-24	Dec-24	Dec-23	Jul-24	Dec-24	Dec-23	Jul-24	Dec-24
# [Thousands]	2100	2600	**3000**	36	57	**71**	3	5	**11**
% of households	41.1%	50.4%	**57.1%**	0.7%	1.1%	**1.4%**	0.1%	0.1%	**0.2%**

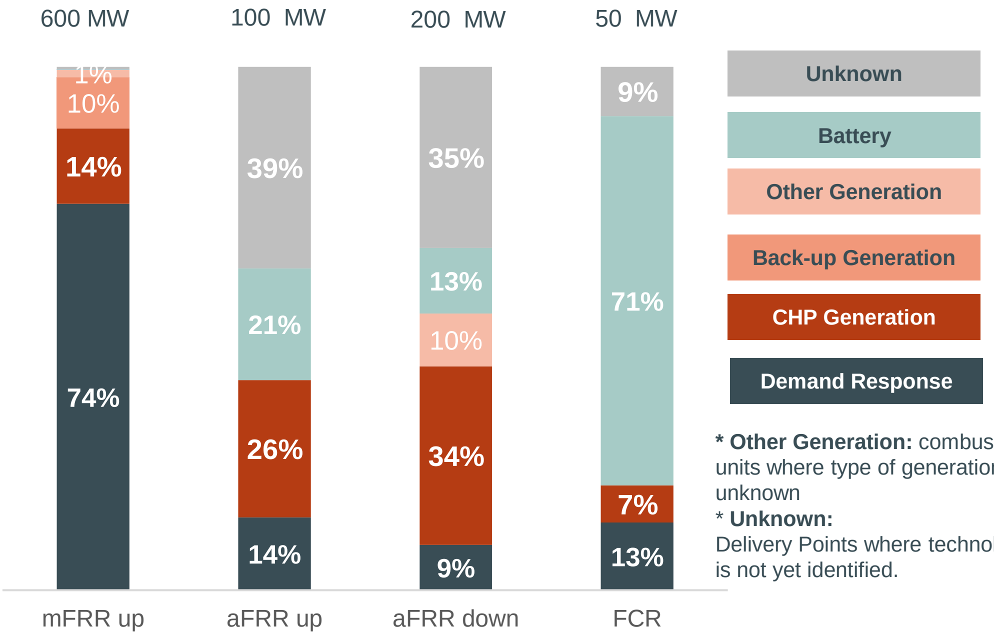
**Figures are representing residential assets, including passenger cars and vans (based on information available in Q1 2025)*

2

Tracking evolutions of technologies and processes delivered by decentral assets in Elia's balancing services allows to improve products and prioritize developments

- Elia was already tracking the evolution of decentral flexibility in its market response study for its Adequacy studies (which remains relatively stable)
- Information received from BSPs allows to further refine view on technologies and processes behind decentral capacity
- Results allow to account the uptake of new technologies in studies and better target product developments

Technology segmentation of prequalified DPPG volumes per balancing capacity product (rounded)



* **Other Generation:** combustion units where type of generation is unknown
* **Unknown:**
Delivery Points where technology is not yet identified.

Elia, Based on information available in Q1 2025

3

Elia is testing methodologies to assess price reactions of its grid users to estimate expected reactions during exceptional system conditions

elia | Elia Group

The aim of price sensitivity analysis is to identify if industrial consumers consume less during periods with elevated prices, or more during periods with very low prices,

- This is done by comparing the metered consumption during moments of extreme prices to a reference consumption

To do so, several definitions must be made:

1. The reference consumption, i.e., the consumption under "normal" circumstances

2. The quarter-hours periods with potential upward activation: moments with prices above a threshold value

The results of this analysis are:

- the frequency with which a consumer reacts above certain price
- the volume associated with the reactions above this price

Volume in MW with activation frequency > 75% at high price levels

	€150	€200	€250	€300	€350	€400	€450	€500	€550
2021	50	52	80	126	254	343	383	388	448
2024	121	192	247	329	373	408	414	406	406

Elia analysis, preliminary results

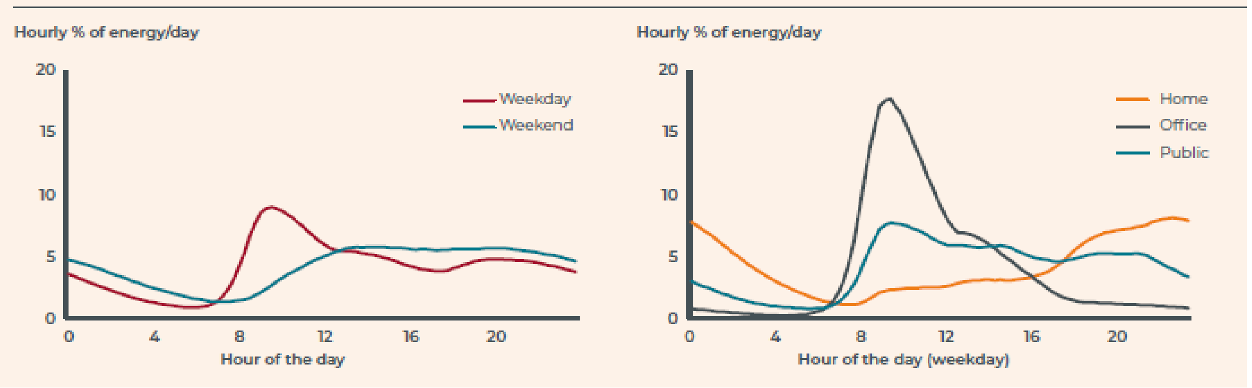
- First results indicate 37 industrial access points react with 400 MW reaction when prices are ≥ €550
- Elia is still evaluating the results and comparing this with inputs from other sources (load surveys, market response studies)
- The method seems to allow extension to downward flexibility, as well to assess reaction of renewable generation sources to negative prices

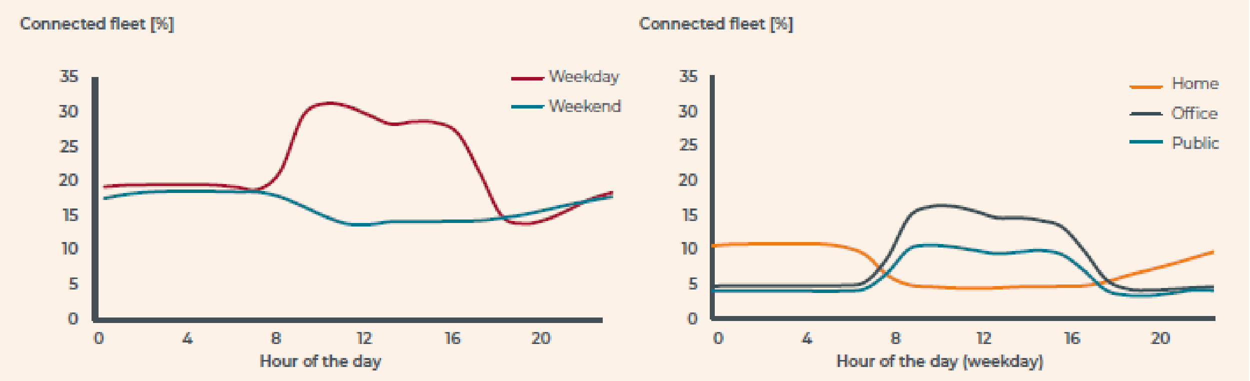
4 Insights from historical EV profiles are used to improve Elia's Adeqfllex'25 assumptions on EV charging while providing input for where and when to access flexibility

In Belgium, three relevant charge point operators (CPO) shared output of their charging transactions data with Elia

Together, these CPOs manage a substantial portfolio of 25,000 – 30,000 charging points in Flanders, Wallonia and Brussels

- **Daytime charging is observed to have more impact as initially expected** following pre-dominance of company EV cars (and their charging policies)
- **Home charging occurs later in the evening as initially expected** indicating reaction on local incentives (automatic load balancing combined with capacity tariff)
- **Aggregated EV load behaves in a regular, predictable way** providing potential for EV load forecasts
- Strong **impact of holidays, and correlation with temperature** (daily energy), while observing already a slight correlation with solar generation (hourly profile)
- Profiles based on amount of cars connected show that **minority of the EV fleet is connected** (between 13 – 35 % depending on time of day)
- Profiles based on amount of cars charging show that **only half of the connected EVs are charging** (47% on average)





Elia, Adequacy and flexibility study 2025 – Box 3-6

In an iterative way, these methods allow and will further improve Elia's capability to calibrate its study scenarios and improve its strategies

Unlocked

Increasing uptake of electric vehicles, heat pumps and home batteries remains on track but unlocking these e-assets is lagging behind:

- **Smart meters** (flex enabler #1) on track, especially in Flanders (with **71%** of households). **Wallonia (20%) and Brussels (10%) are expected to catch up in 2025/2026.**
- **Dynamic contracts** (flex enabler #2) shows a rapid increase, but absolute number of dynamic contracts is remains too low to show substantial impact. It considered the main indicator for further unlocking E-assets.

Explicit

Slowly increasing share of **DPPG** in reserve capacity products

- Demand Response technology is especially well represented in mFRR up
- Demand Response technology is available mainly on High Voltages (around 400 MW) and on Medium Voltage level (around 100 MW)
- Demand Response technology in downward direction remains limited (around 20 - 30 MW) on medium voltage level.

Implicit

Implicit flexibility reactions appear relatively stable over the years

- Market coverage in **excess** periods stays stable and even slightly increases during incompressibility risk periods, despite increasing share of variable renewable generation. Market coverage in **shortage** seems to decrease, in line with observations on increasing system imbalance in that direction.
- **Bottom-up assessments** seem to confirm the effective reaction of large TSO-connected industry processes during very high prices.

Local

Daytime charging is observed to have more impact as initially expected following pre-dominance of company EV cars (and their charging policies) indicating flexibility potential during day-time in office locations.

Home charging occurs **later in the evening** as initially expected indicating reaction on local incentives (automatic load balancing combined with capacity tariff)

EV.fleet at scale – Conclusions & next steps

Michaël Piron

EV.fleet at scale

Context & recap of the scope

The bigger picture of flex unlocking, and scaling ambitions

Outcome of coalition-building efforts

What have we captured from the stakeholder exchanges with fleet owners, mobility service providers and energy suppliers.

Next steps towards flexibility at scale

Further approach towards unlocking flexibility at scale.

Context

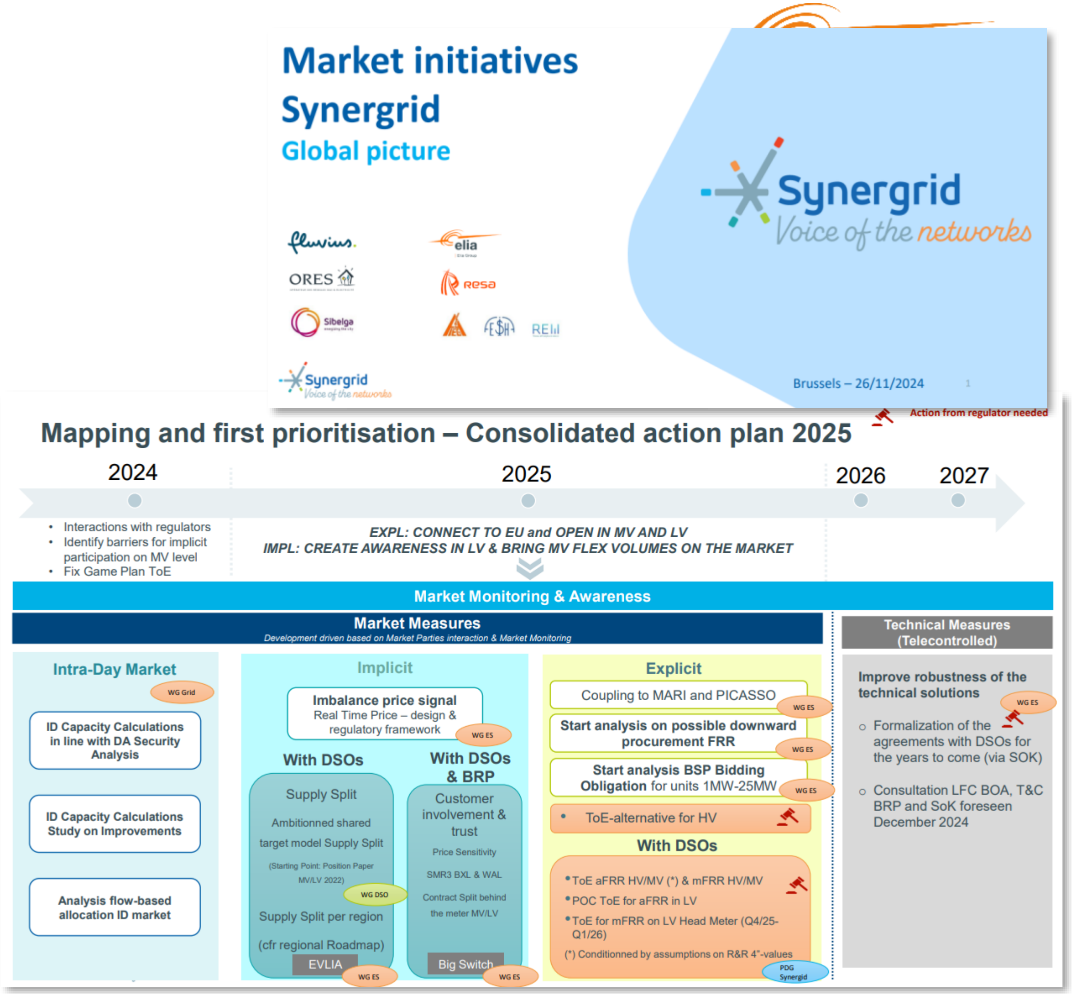
Elia launched the initiative “EVLIA” (Nov 2024), as a strategic initiative to showcase the **unlocking of flexibility from EV’s in Belgium at scale**.
This also supports the joint Synergrid action plan, with a focus in 2025 on creating awareness for implicit flexibility on LV.

Focus is on **implicit flexibility**, and the largest segment of EV’s in Belgium: **company cars**.

To kickstart the initiative, Elia opened their EV fleet, but the aim has always been to **extend to other company fleets, to demonstrate the scalability throughout Belgian fleets**.

Along the route, we changed the initiative’s name to better reflect the scaling ambition to not stop at Elia’s fleet:

EV.fleet at scale



Working towards **supply split** on the longer term

Scope recap

“Volume split” as enabler to unlock flexibility behind the meter

One supplier, separate billing

Existing tariff (fixed/variable)

Dynamic pricing

No risk for end-consumer

Access to flexibility benefits

… while solving the home charging reimbursements issue

To:
home owner
Lindestraat 2,
Mechelen

Energy Supplier

HOME ENERGY BILL
Fixed or Variable price contract

ELECTRICITY – EAN 541448820012345678

Energy offtake (529 kWh)	€ xxx
Energy injection (63 kWh)	- € xxx
Grid costs	€ xxx
Taxes & levies	€ xxx
SUBTOTAL	**€ xxx**

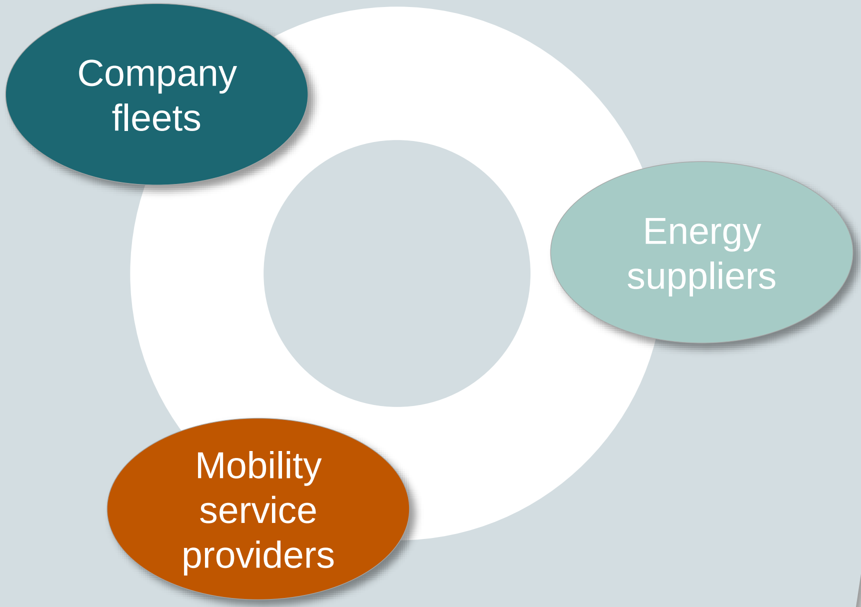
HOME CHARGING SESSIONS

Employer payment of home charging sessions (350 kWh)	- € xxx
Smart charging incentive	- € xxx

TOTAL TO BE PAID (incl VAT) **€ xxx**

Participates in smart charging, by using a mobile application, and gets a **smart charging discount**

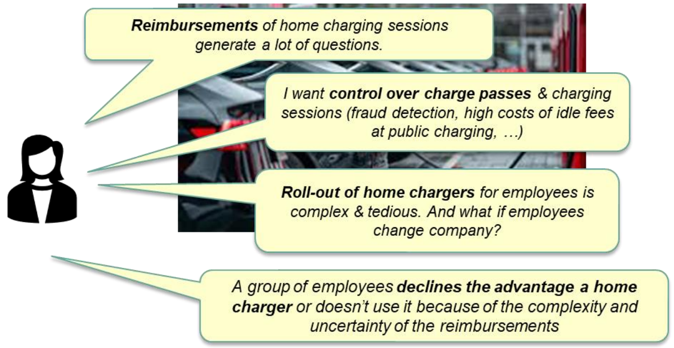
Outcome of coalition-building efforts



Strong demand from corporate fleets

We successfully validated demand from large fleets, with **over 10.000 EVs from 10 companies represented** in our coalition of the willing.

The concept of EV.fleet at scale that would resolve the relevant issue of home charging reimbursements and at the same time bring an easy entry into flexibility smart charging, **appealed** to practically every company fleet manager we engaged with.



De Tijd
147,577 followers
5d •

Wie zijn elektrische bedrijfswagen thuis laadt, mag terugbetaald blijven worden op basis van een forfaitair elektriciteitstarief. Tot nog toe zouden bedrijven vanaf volgend jaar voor elke werknemer verplicht de reële stroomkosten moeten vergoeden. Maar minister van Financiën Jan Jambon (N-VA) geeft ze voortaan de vrije keuze. Wat vindt u daarvan?

👉 https://lnkd.in/g6V8mGXG

Show translation

Zou u voor het thuis opladen van uw bedrijfswagen terugbetaald willen worden volgens de reële kosten of via een forfait?

The author can see how you vote. Learn more

Reële kosten	53%
Forfaitaire tarief	47%

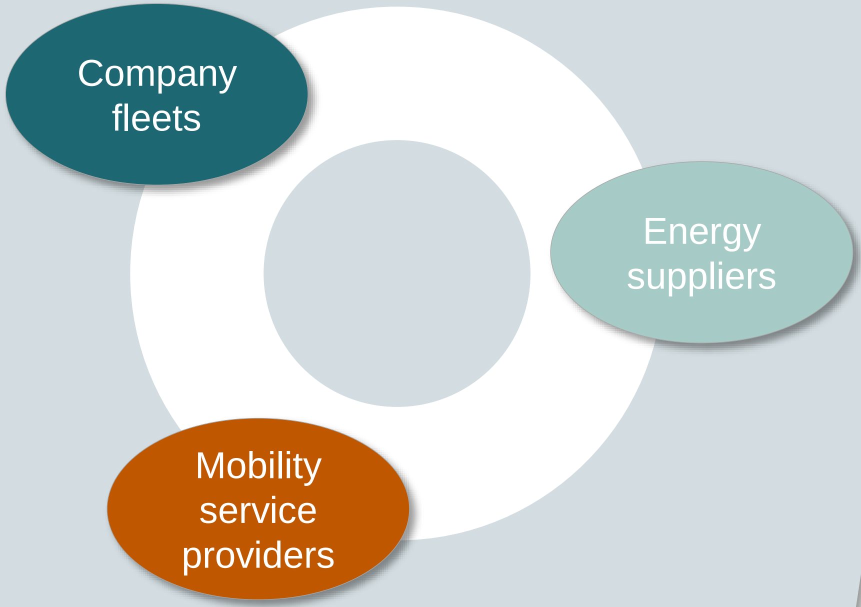
808 votes • 1d left • Undo

DE TIJD

Nieuws Beleggen Mijn Geld Sabato

25% of employees with company cars hardly ever charge at home

Outcome of coalition-building efforts



Supply side

The majority of the supply market chooses not to engage in the EV.fleet at scale initiative, driven by following motivations:

- 'From the employee EV driver's perspective, the **current forfait reimbursement offers more incentive**, by switching to dynamic, time-of-use or smart supply contracts.'
- 'We are already **rolling out flexibility offerings** to the market. EV.fleet at scale does not fit the strategy around flexibility.'
- For some suppliers, bringing the volume split solution to the market requires **significant IT time & cost investments.** This does not make sense, **in view of supply split** coming to the market in 2 years.

These messages were also voiced by FEBEG, after consultation with their members.

The predominant voice from the supply market asks Elia **to put trust to the market, that is working hard to bringing solutions for unlocking flexibility**.

Next steps towards flexibility at scale

As facilitator of this market-inclusive initiative, Elia regrets that **no scalable coalition has emerged** to solve this dual challenge of EV fleets: resolving reimbursement issues & tapping into a large flexibility potential.

As stated before, this initiative cannot continue nor grow without a coalition, therefore **further efforts will be stopped**.

Elia hears the voice of the market parties and welcomes the market's initiatives that will lead to increasingly unlocking demand-side management and end-user flexibility, making it possible to fulfill the **balancing obligations.** Elia is very interested in observing the outcome.

To safeguard a balanced system in the future, Elia (in collaboration with the DSOs) will continue to:

- further **push the enablers of flexibility** and work on **removing remaining barriers** towards flexibility, together with the DSOs.
- **Continue to engage** with the market to follow-up the progress & monitor obstructions towards more flexibility in the market.
- Investigate **technical measures** which can be activated as a last-resort system in case the market brought insufficient flexibility.

Flex at scale

Contact:
Michaël Piron – Michael.Piron@elia.be
Alexandra Verbrugge – Alexandra.Verbrugge@elia.be

AOB

Alexandre Torreele

AOB – OpenData

OpenData authentification

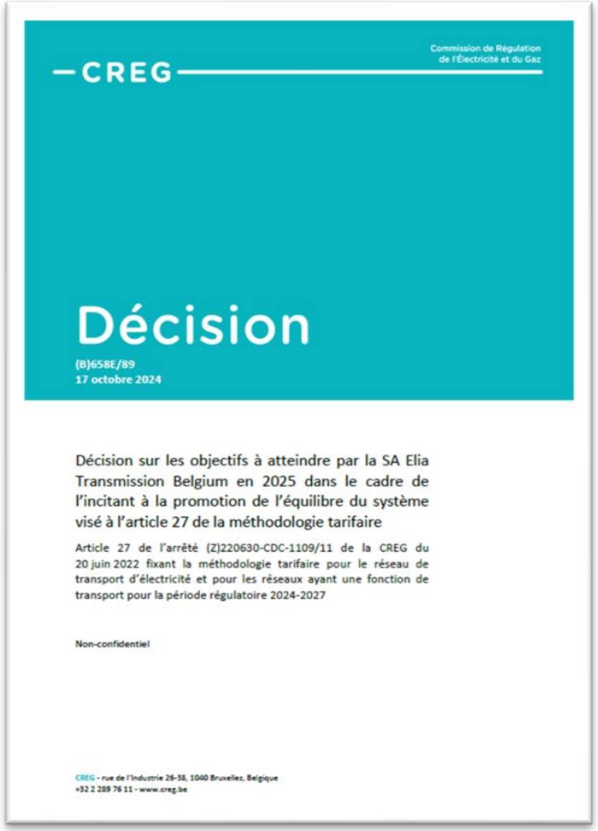
- Elia will offer an authentication mechanism in its OpenData portal for Belgian BRPs and BSPs, this will enable different services, of which a higher daily limit of API calls.
- The same credentials as your EPIC account will have to be used, please contact opendata@elia.be to register.
- The authentication mechanism will be live on 15/10/2025.

Incentive LV barriers and prequalification
-
EU commission evaluation of MID

Arnaud Debray

Incentive study on LV barriers and prequalification

The public consultation will be launched soon


Commission de Régulation de l'Électricité et du Gaz

CREG

Décision

(B)658E/89
17 octobre 2024

Décision sur les objectifs à atteindre par la SA Elia Transmission Belgium en 2025 dans le cadre de l'incitant à la promotion de l'équilibre du système visé à l'article 27 de la méthodologie tarifaire

Article 27 de l'arrêté (Z)220630-CDC-1109/11 de la CREG du 20 juin 2022 fixant la méthodologie tarifaire pour le réseau de transport d'électricité et pour les réseaux ayant une fonction de transport pour la période régulatoire 2024-2027

Non-confidentiel

CREG - rue de l'Industrie 26-38, 1040 Bruxelles, Belgique
+32 2 289 76 11 - www.creg.be

Content:

a) Analysis of **the possibilities to simplify the PQ for LV assets**, in particular
   - Possible approaches to prequalify a type of units
   - The interaction with the wider prequalification process
   - Assess via a POC what info should be requested; and ensure it's realistic. (collab with OEMs)

b) Analysis of the **possibilities to reduce the metering and communication participation threshold** (FCR and aFFR)
   - Overview of the current threshold
   - Analysis of the impact and challenges generated for LV assets participation
   - Propositions to reduce or remove those thresholds

c) Elia's **recommendations** based on the analyses performed

- Expected launch of the PC: 24/10/2025
- Open discussion: WG ES 13/11/2025 PM
- End of the PC: 21/11/2025

EU Commission Evaluation of Measurement Instrument Directive (MID)

– For information, the EC has launched a Call for Evidence on the Evaluation of Measurement Instrument Directive (MID), open **until 09th of October.**
– The purpose of this evaluation is to assess whether the Measuring Instruments Directive is still working as intended.
– On the basis of the conclusions, the Commission will decide whether steps may be necessary to improve the performance of the Directive.
– In case you have insights or opinions to share, feel free to answer

WG next dates

2026 WG Energy Solutions

- **Dates for 2026:**
  - Thursday 12/02/2026 09:00 – 17:00
  - Thursday 02/04/2026 09:00 – 17:00
  - Thursday 11/06/2026 09:00 – 17:00
  - Thursday 17/09/2026 09:00 – 17:00
  - Tuesday 10/11/2026 09:00 – 17:00
  - Thursday 17/12/2026 09:00 – 17:00
- Feedback welcome by e-mail to usersgroup@elia.be

2025 WG Energy Solutions

- Thursday 06/02/2025 09:00 – 17:00
- Friday 04/04/2025 09:00 – 17:00
- Thursday 19/06/2025 09:00 – 17:00
- Thursday 02/10/2025 09:00 – 17:00
- Thursday 13/11/2025 09:00 – 17:00
- Thursday 18/12/2025 09:00 – 17:00