

CHAMBRE DES REPRÉSENTANTS
DE BELGIQUE

14 juillet 2023

**ÉTUDE SUR L'ADÉQUATION ET
LA FLEXIBILITÉ EN BELGIQUE
(2024-2034)**

Audition

**Compte-rendu numérique des réunions
de la commission de l'Énergie,
de l'Environnement et du Climat
(art. 32 Rgt. *juncto* art. 178bis Rgt.)**

BELGISCHE KAMER VAN
VOLKSVERTEGENWOORDIGERS

14 juli 2023

**ADEQUACY- EN
FLEXIBILITEITSSTUDIE VOOR
BELGIË (2024-2034)**

Hoorzitting

**Digitaal verslag van de vergaderingen
van de commissie voor Energie,
Leefmilieu en Klimaat
(art. 32 Rgt. *juncto* art. 178bis Rgt.)**

**Composition de la commission à la date de dépôt du rapport/
Samenstelling van de commissie op de datum van indiening van het verslag**
Président/Voorzitter: Christian Leysen

A. — Titulaires / Vaste leden:

N-VA	Wouter Raskin, Yoleen Van Camp, Bert Wollants
Ecolo-Groen PS	Séverine de Laveleye, Kim Buyst, Barbara Creemers Malik Ben Achour, Mélissa Hanus, Daniel Senesael
VB	Kurt Ravyts, Reccino Van Lommel
MR	Mathieu Bihet, Marie-Christine Marghem
cd&v	Nawal Farih
PVDA-PTB	Thierry Warmoes
Open Vld	Christian Leysen
Vooruit	Kris Verduyck

B. — Suppléants / Plaatsvervangers:

Sigrid Goethals, Tomas Roggeman, Anneleen Van Bossuyt, Kristien Van Vaerenbergh
Julie Chanson, Samuel Cogolati, Wouter De Vriendt, Albert Vicaire
Chanelle Bonaventure, Christophe Lacroix, Patrick Prévot, Laurence Zanchetta
Ortwin Depoortere, Nathalie Dewulf, Erik Gilissen
Michel De Maegd, Philippe Goffin, Benoît Piedboeuf
Jan Briers, Leen Dierick
Greet Daems, Raoul Hedeboom
Marianne Verhaert, Kathleen Verhelst
Vicky Reynaert, Joris Vandenbroucke

C. — Membre sans voix délibérative / Niet-stemgerechtigd lid:

Les Engagés	Georges Dallemagne
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N-VA	: Nieuw-Vlaamse Alliantie
Ecolo-Groen	: Ecologistes Confédérés pour l'organisation de luttes originales – Groen
PS	: Parti Socialiste
VB	: Vlaams Belang
MR	: Mouvement Réformateur
cd&v	: Christen-Democratisch en Vlaams
PVDA-PTB	: Partij van de Arbeid van België – Parti du Travail de Belgique
Open Vld	: Open Vlaamse liberalen en democraten
Vooruit	: Vooruit
Les Engagés	: Les Engagés
DéFI	: Démocrate Fédéraliste Indépendant
INDEP-ONAFH	: Indépendant – Onafhankelijk

Abréviations dans la numérotation des publications:

DOC 55 0000/000	Document de la 55 ^e législature, suivi du numéro de base et numéro de suivi
QRVA	Questions et Réponses écrites
CRIV	Version provisoire du Compte Rendu Intégral
CRABV	Compte Rendu Analytique
CRIV	Compte Rendu Intégral, avec, à gauche, le compte rendu intégral et, à droite, le compte rendu analytique traduit des interventions (avec les annexes)
PLEN	Séance plénière
COM	Réunion de commission
MOT	Motions déposées en conclusion d'interpellations (papier beige)

Afkorting bij de nummering van de publicaties:

DOC 55 0000/000	Parlementair document van de 55 ^e zittingsperiode + basisnummer en volgnummer
QRVA	Schriftelijke Vragen en Antwoorden
CRIV	Voorlopige versie van het Integraal Verslag
CRABV	Beknopt Verslag
CRIV	Integraal Verslag, met links het definitieve integraal verslag en rechts het vertaalde beknopt verslag van de toespraken (met de bijlagen)
PLEN	Plenum
COM	Commissievergadering
MOT	Moties tot besluit van interpellaties (beigekleurig papier)

Lors de sa réunion du 12 juillet 2023, la commission de l'Énergie, de l'Environnement et du Climat a tenu une audition sur l'«Étude sur l'adéquation et la flexibilité en Belgique (2024-2034)», avec:

— M. Chris Peeters, CEO Elia;

— M. Frederic Dunon, Deputy CEO, Elia Transmission Belgium.

Les membres suivants de la commission ont pris la parole: M. Bert Wollants (N-VA), Mme Kim Buyst (Ecolo-Groen), M. Kurt Ravyts (VB), M. Mathieu Bihet (MR), M. Thierry Warmoes (PVDA-PTB), M. Christian Leysen (Open Vld), M. Kris Verduyckt (Vooruit), M. Georges Dallemagne (Les Engagés).

Le compte-rendu numérique (art. 32 Rgt. *juncto* art. 178bis Rgt.) de cette audition peut être consulté sur le site web de la Chambre:

<https://www.lachambre.be/media/index.html?language=fr&sid=55U4127>

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Annexe:

Présentation d'Elia.

Tijdens haar vergadering van 12 juli 2023 heeft de commissie voor Energie, Leefmilieu en Klimaat over de "Adequacy- en flexibiliteitsstudie voor België (2024-2034)" een hoorzitting gehouden met:

— de heer Chris Peeters, CEO Elia;

— de heer Frederic Dunon, Deputy CEO, Elia Transmission Belgium.

De volgende commissieleden hebben het woord genomen: de heer Bert Wollants (N-VA), Mevrouw Kim Buyst (Ecolo-Groen), de heer Kurt Ravyts (VB), de heer Mathieu Bihet (MR), de heer Thierry Warmoes (PVDA-PTB), de heer Christian Leysen (Open Vld), de heer Kris Verduyckt (Vooruit) en de heer Georges Dallemagne (Les Engagés).

Het digitaal verslag (art. 32 Rgt. *juncto* art. 178bis Rgt.) van deze hoorzitting kan worden geraadpleegd op de website van de Kamer:

<https://www.dekamer.be/media/index.html?language=nl&sid=55U4127>

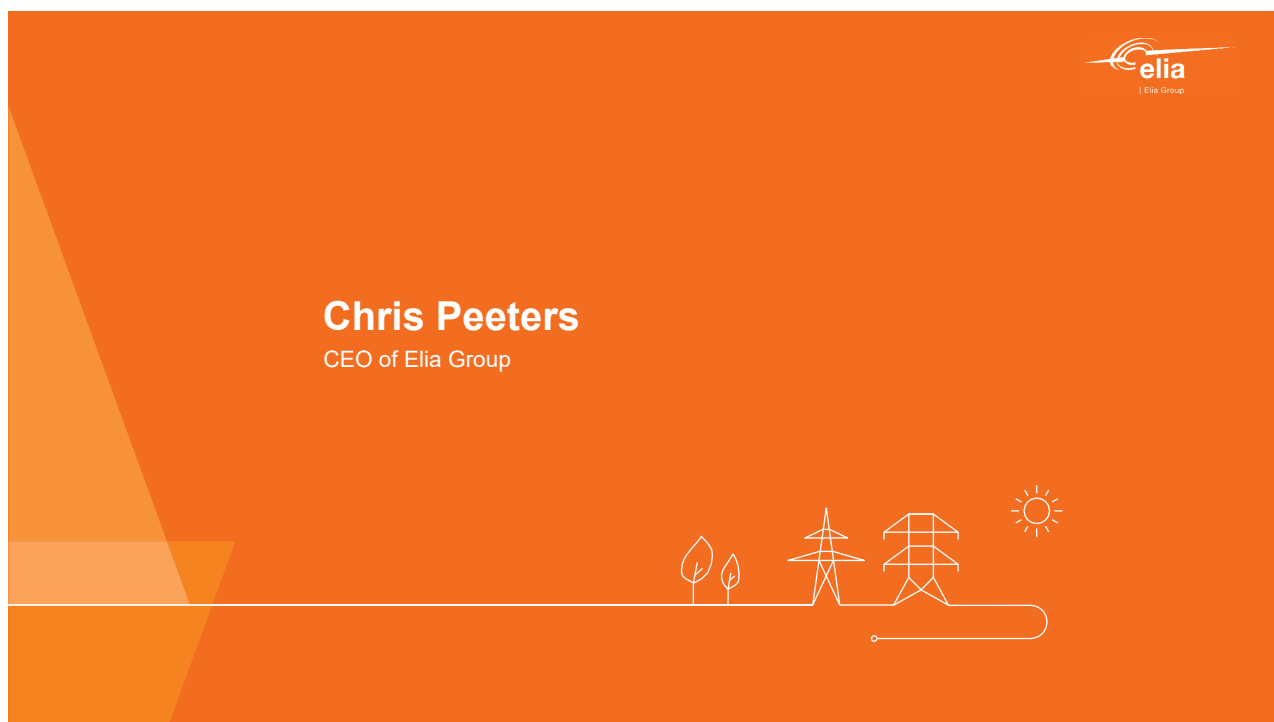
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Bijlage:

Presentatie van Elia.

ANNEXE

BIJLAGE





Frédéric Dunon

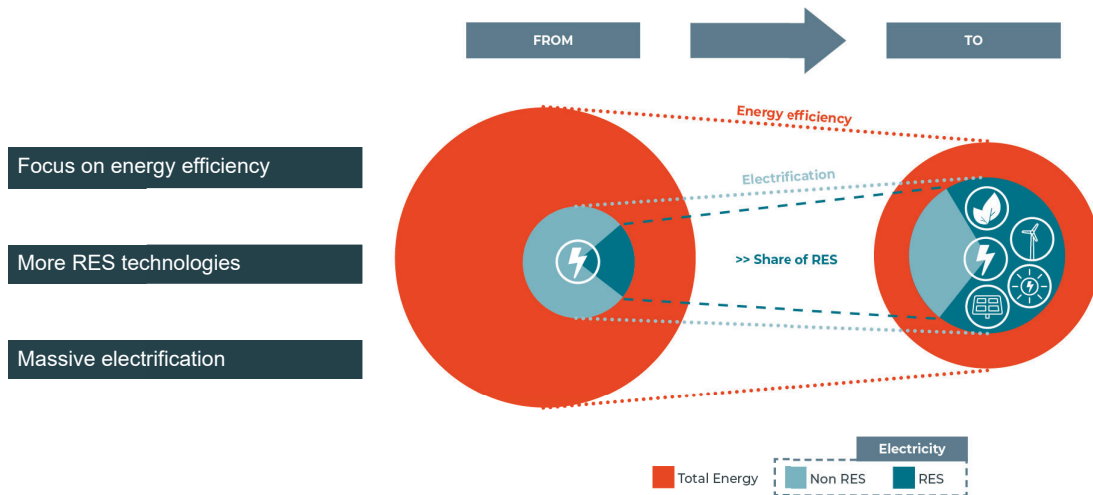
Deputy CEO of Elia Transmission Belgium



**What has changed since the last
adequacy and flexibility study, published
in 2021?**

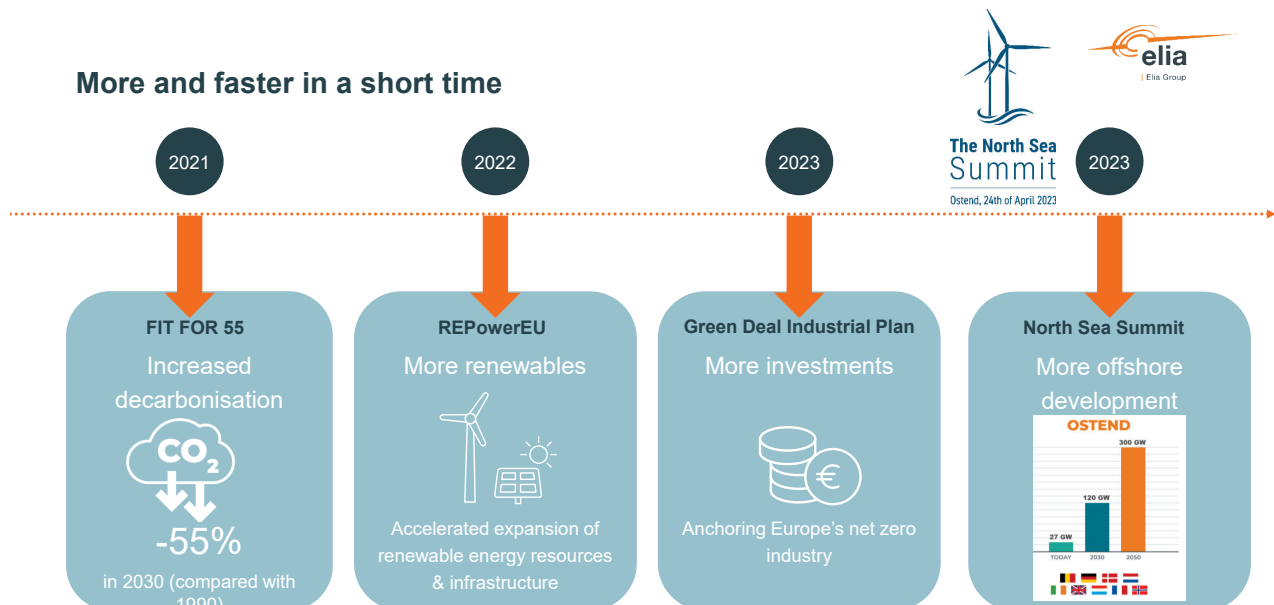


Key trends in the energy sector



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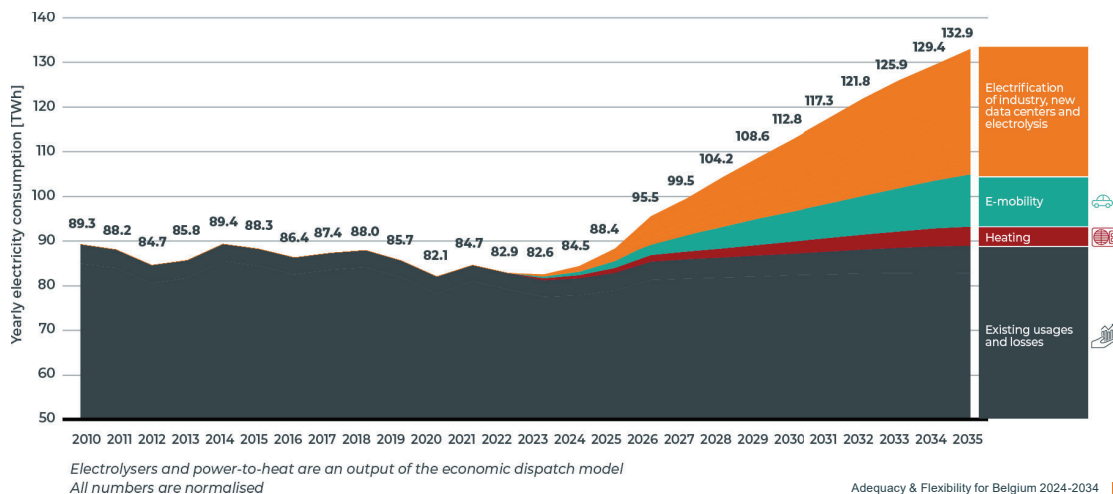
More and faster in a short time



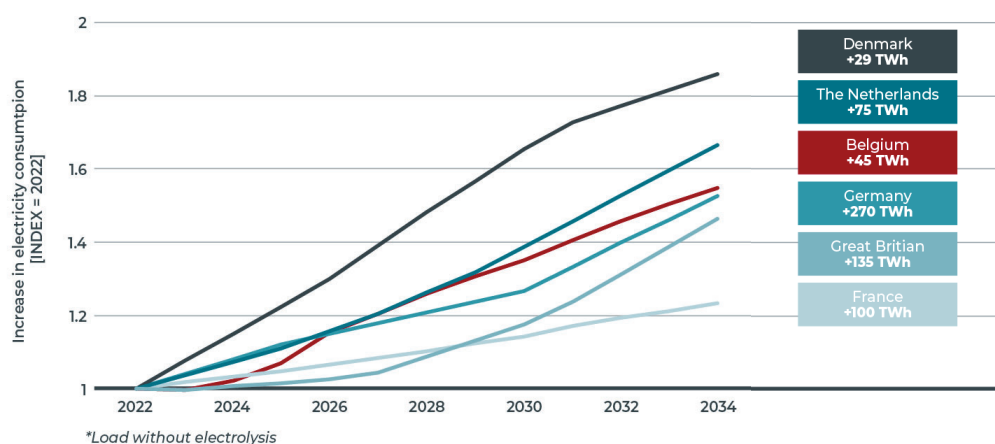
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Yearly electricity consumption for Belgium

Historical and assumed future

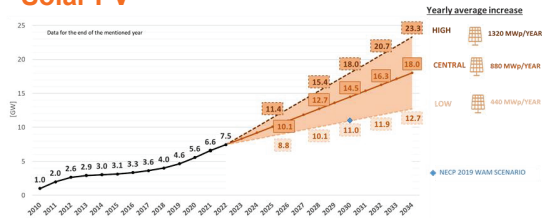


Evolution of electricity demand in other EU Countries

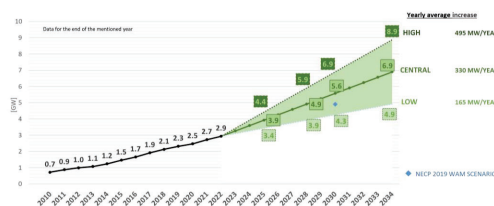


Accelerated integration of renewable energy sources in Belgium

Solar PV

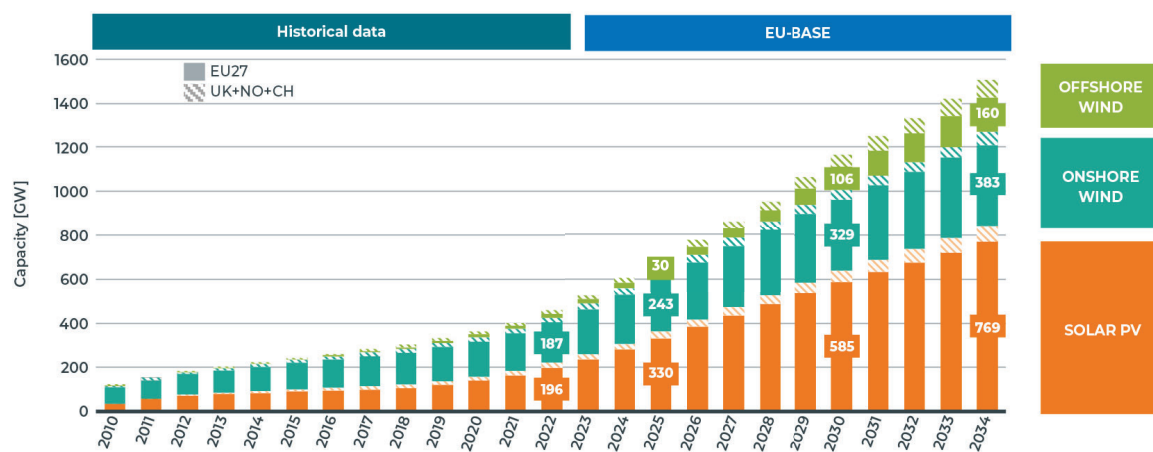


Wind onshore & offshore



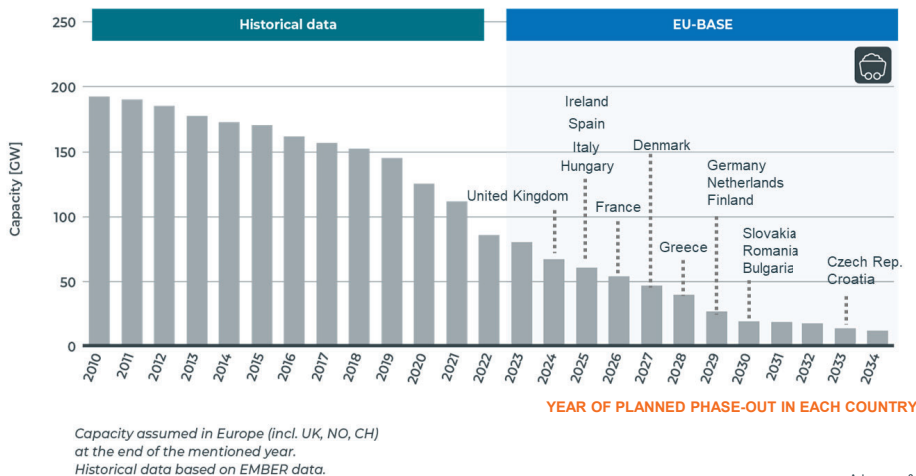
Adequacy & Flexibility for Belgium 2024-2034 | 9

Accelerated integration of renewable energy sources in Europe



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Evolution of coal-fired capacity in EU



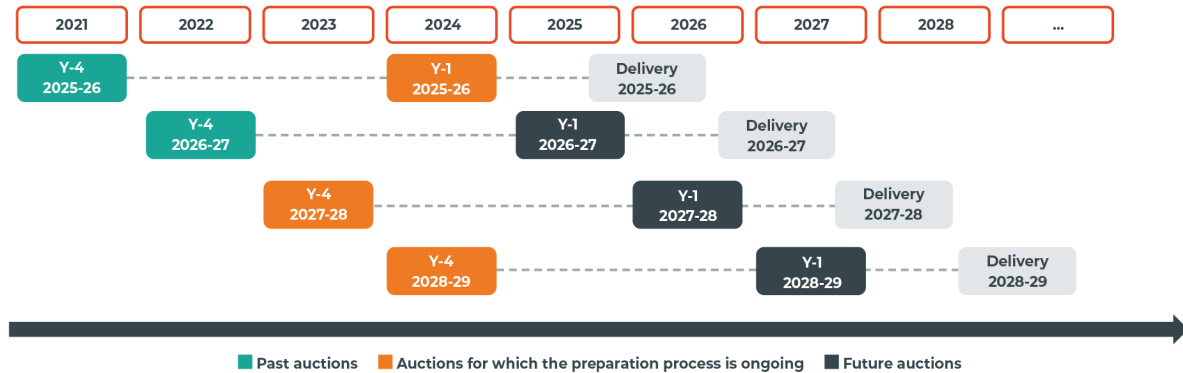
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Approval of the Federal Development Plan 2024-2034 (incl. Nautilus & TritonLink)



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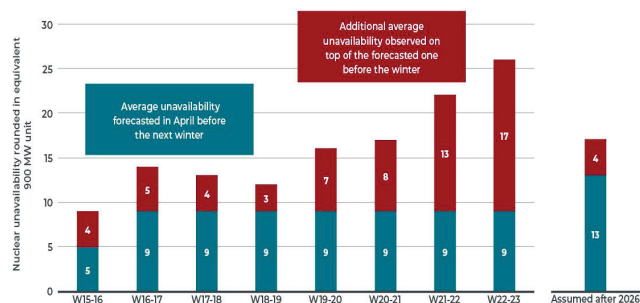
First CRM Auctions in 2021 and 2022



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From EU-Base to EU-SAFE

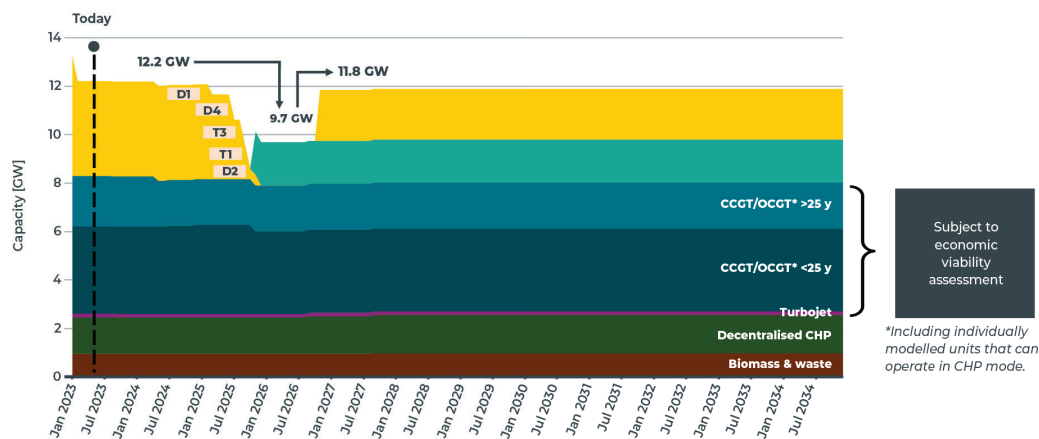
Difference between forecasted and actual unavailability of France's nuclear capacity
Expressed in number of units



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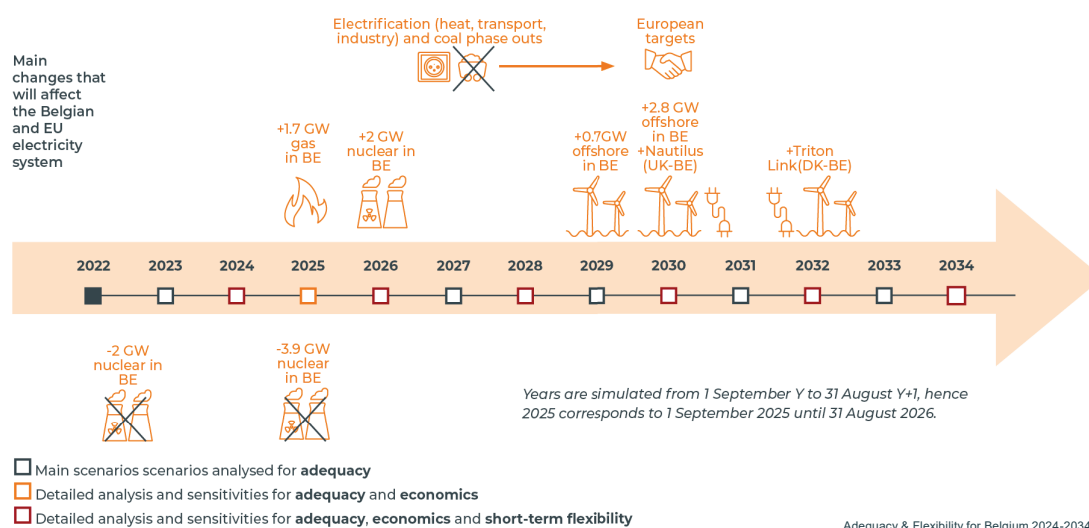
Nuclear extension of D4 and T3

Installed thermal capacity assumed in BE



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Time horizon covered in the present study

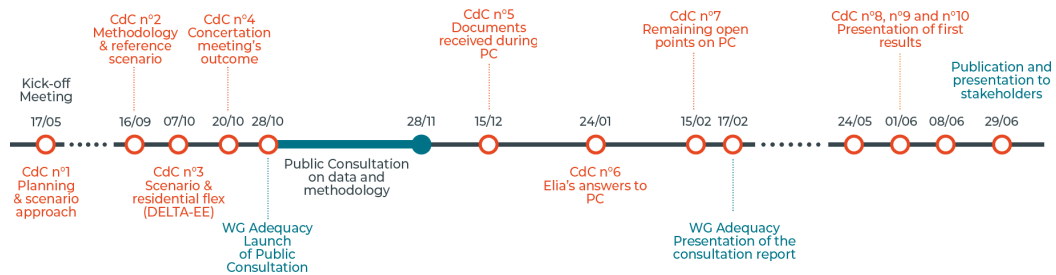


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Stakeholder involvement process: May 2022 until June 2023

Comité de Collaboration (CdC) = Elia, FPS Economy, Federal Planning Bureau + CREG cooperation



* **Comité de Collaboration (CdC)** - meeting with Elia, the FPS Economy and the Federal Planning Bureau and with CREG as observer.

* **Public Consultation (PC)** report - report containing answers to each comment received from stakeholders during the public consultation.

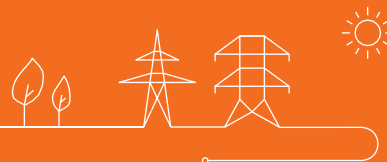
* **Adequacy Working Group (WG)** - meeting during which Elia and market parties can discuss the development and evolution of the different mechanisms related to the topic of adequacy.

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Chris Peeters

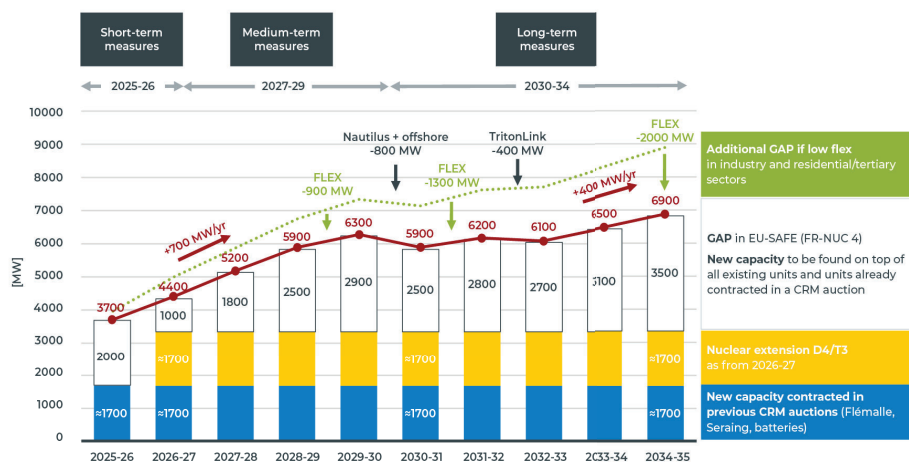
CEO of Elia Group



4 key messages



Required new capacity* to ensure Belgium's security of supply during winter periods after 2025



* 100% available

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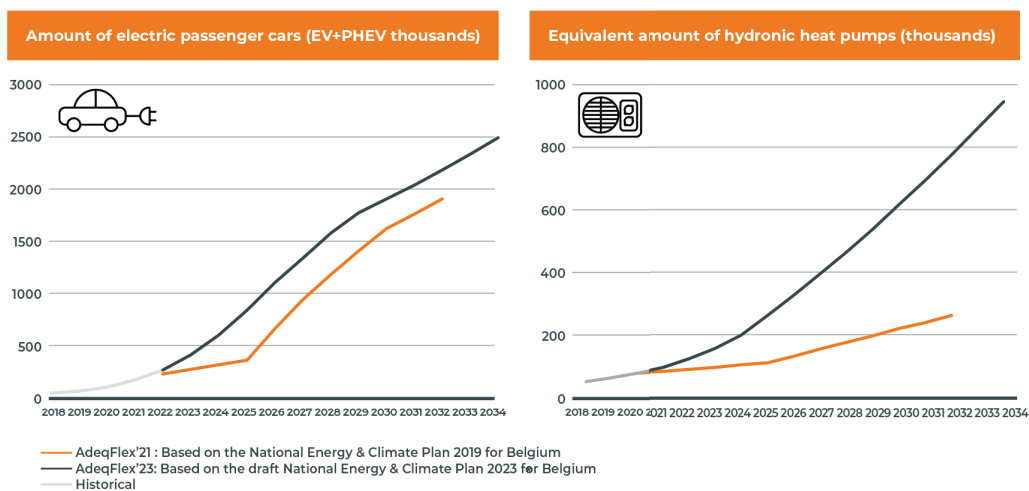
Key message

1

Electrification is spreading across society both earlier and at a faster speed. The war in Ukraine and rising gas prices have resulted in new targets and action plans linked to ensuring an independent, resilient and climate-neutral energy system. This is creating additional capacity needs, which can be addressed by the CRM.

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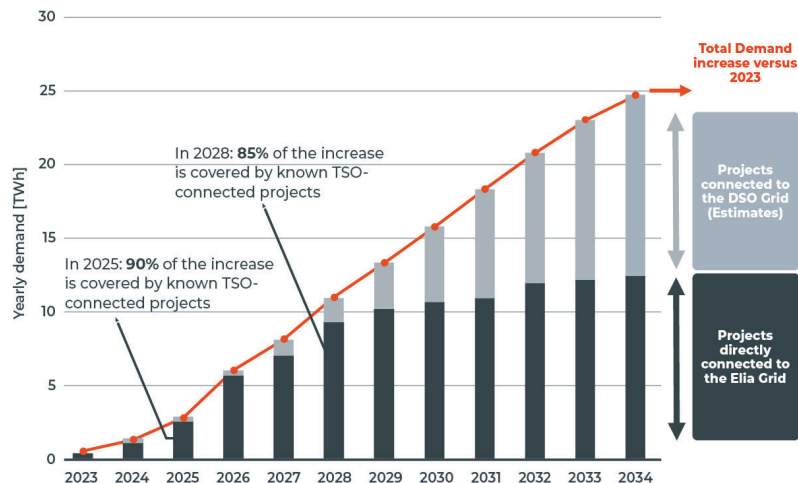
The uptake of EVs & heat pumps is happening earlier and faster



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Yearly demand increase due to industrial electrification versus 2023

Information from Elia's grid users



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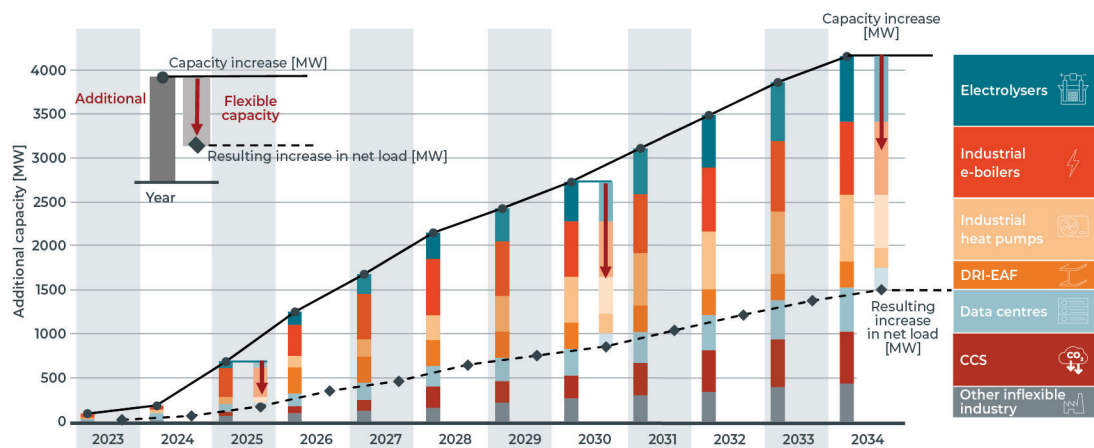
Key message

2

Flexible consumption has the potential to flatten consumption peaks and manage RES variability, so directly contributing to security of supply. It is an important lever for reducing capacity needs linked to Belgium's rising electricity demand.

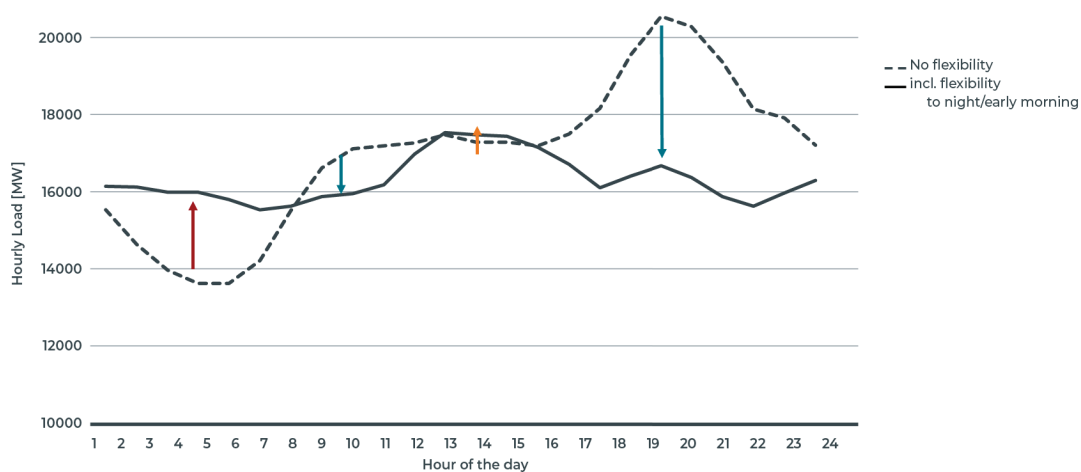
Adequacy & Flexibility for Belgium 2024-2034 | 24

Industrial flexibility can strongly reduce additional capacity needs



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Average winter's day load profile (year 2034)



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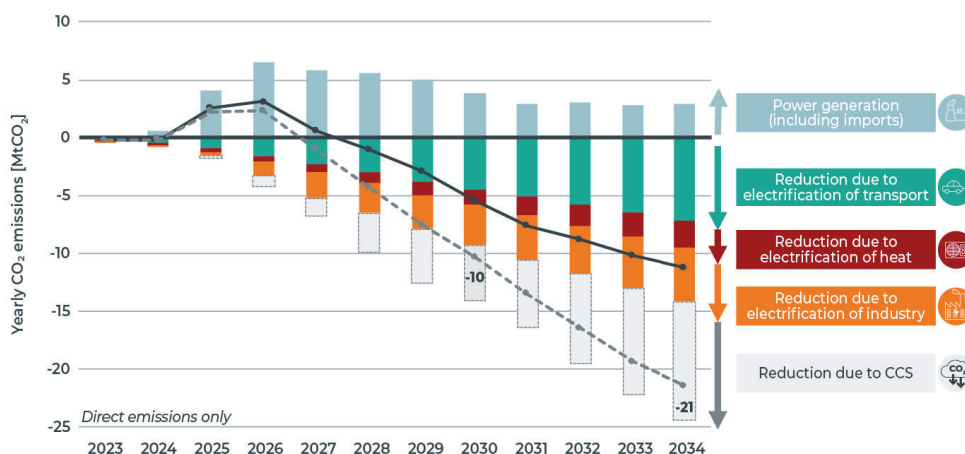
Key message

3

Electrification reduces primary energy consumption levels whilst maintaining consumer comfort. This significant efficiency improvement therefore delivers large benefits in terms of CO₂ reduction - an effect that will become even more prominent as the share of renewable energy in the energy mix grows. In addition to important climate benefits, electrification also provides solutions to our country's economic and geopolitical challenges.

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Additional electrification delivers large benefits in terms of CO₂ emission reduction (Compared with 2022)



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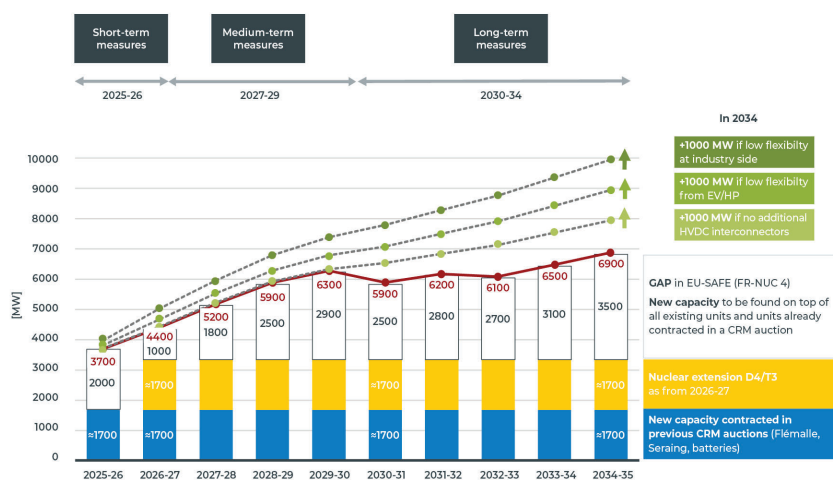
Key message

4

Any delay in unlocking flexibility or realising grid infrastructure will result in additional capacity needs. If Belgium's security of supply is to be achieved in the most (cost-)efficient way possible, investing in accelerated digitalisation is as important as investments in the timely build-out of grid infrastructure.

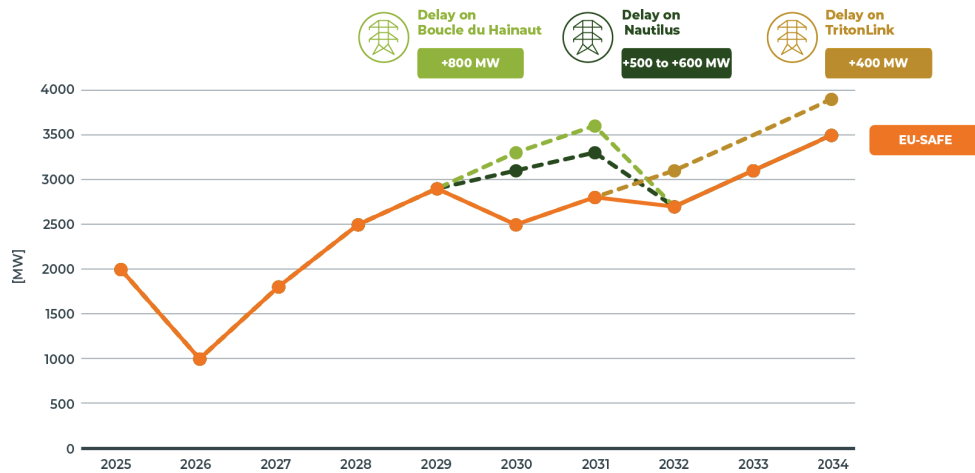
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Impact of unlocking flexibility & the timely build-out of additional HVDC interconnectors on the capacity GAP



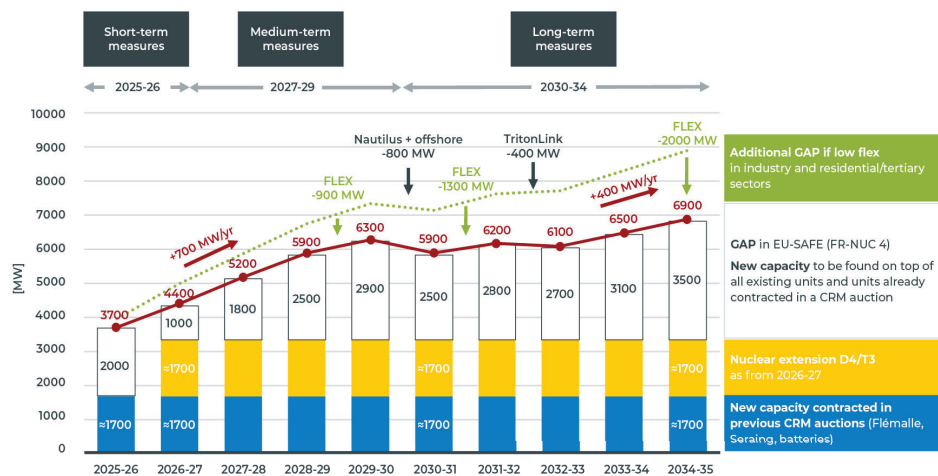
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Impact of grid infrastructure delays on the volume gap



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Required new capacity* to ensure Belgium's security of supply during winter periods after 2025

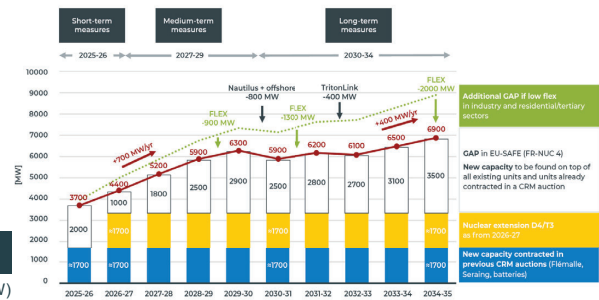


* 100% available

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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



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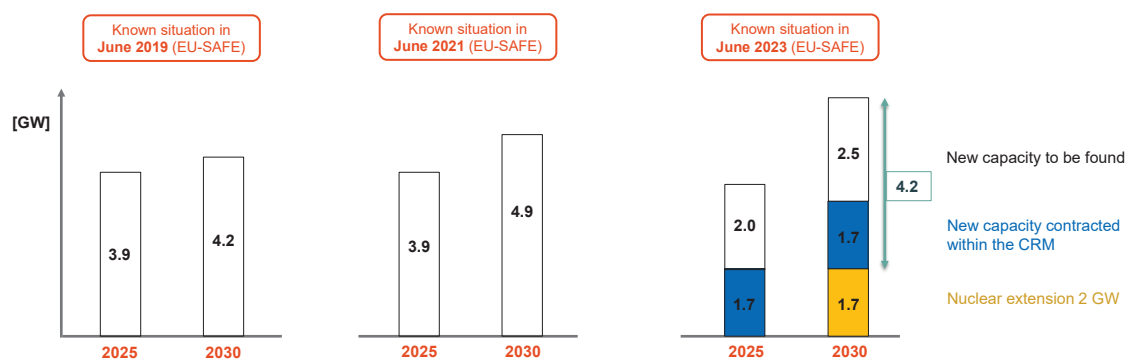
Q&A



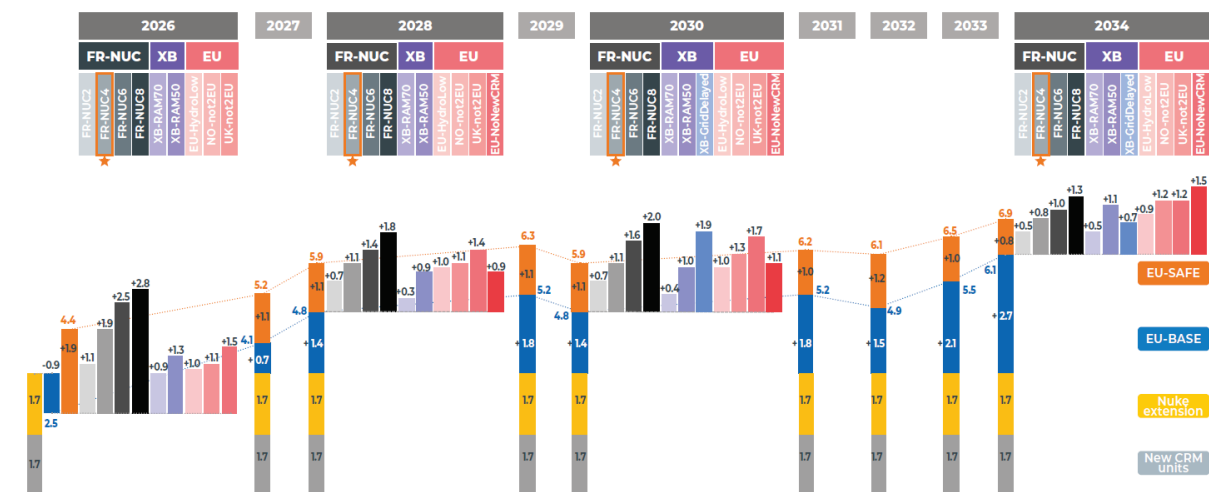
EXTRA INFORMATION



Recap of adeq-flex studies (2019, 2021, 2023)



A need for new capacity is foreseen in all simulated scenarios/sensitivities, except in EU-BASE for 2026. This need is calculated on top of the nuclear extension and new units contracted in CRM auctions. The chosen representative sensitivity for the EU-SAFE is the FR-NUC4.



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Adequacy & Flexibility study 2024-34