

Current Nuclear Situation in Belgium

GMF Europe

15-10-2026

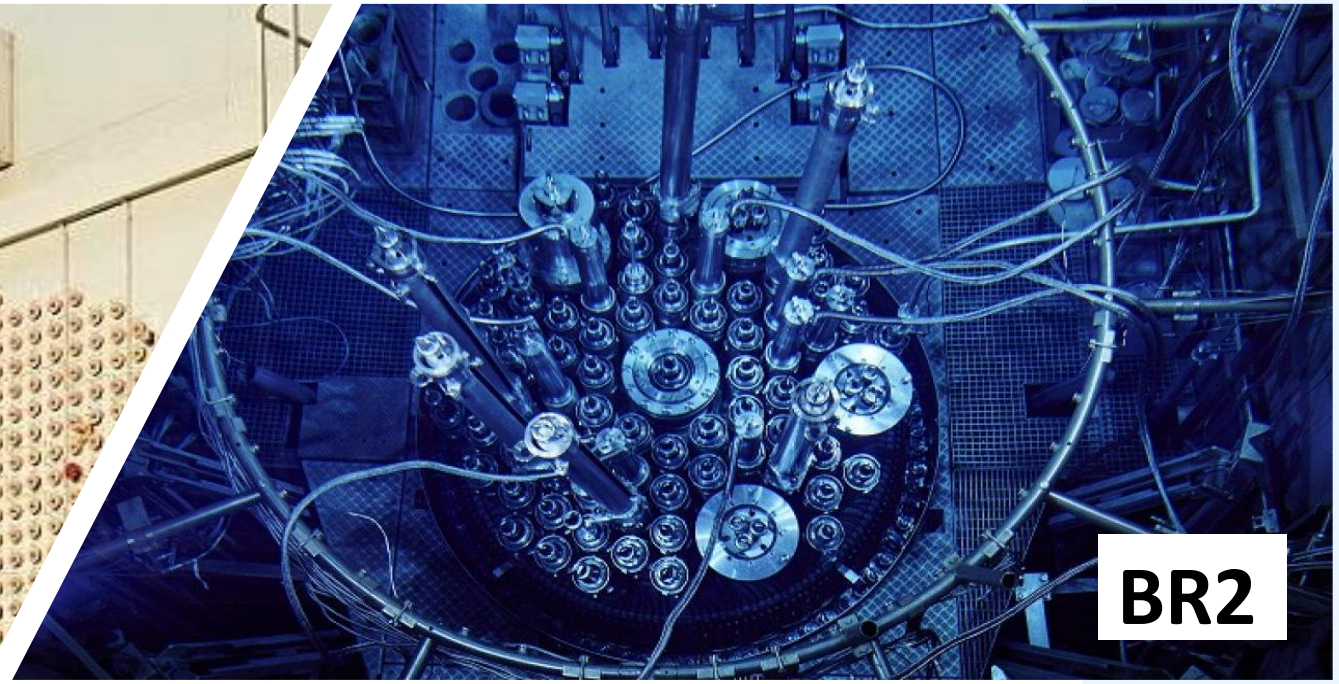
BELGIAN NUCLEAR FORUM

"The Belgian Nuclear Forum unites the majority of companies and institutions active in the various applications of nuclear technology.

*Originally a **sector federation**, the Belgian Nuclear Forum has gradually become a **reference portal for information** on nuclear technology for the press, the political world and the general public."*

BELGIAN NUCLEAR HISTORY







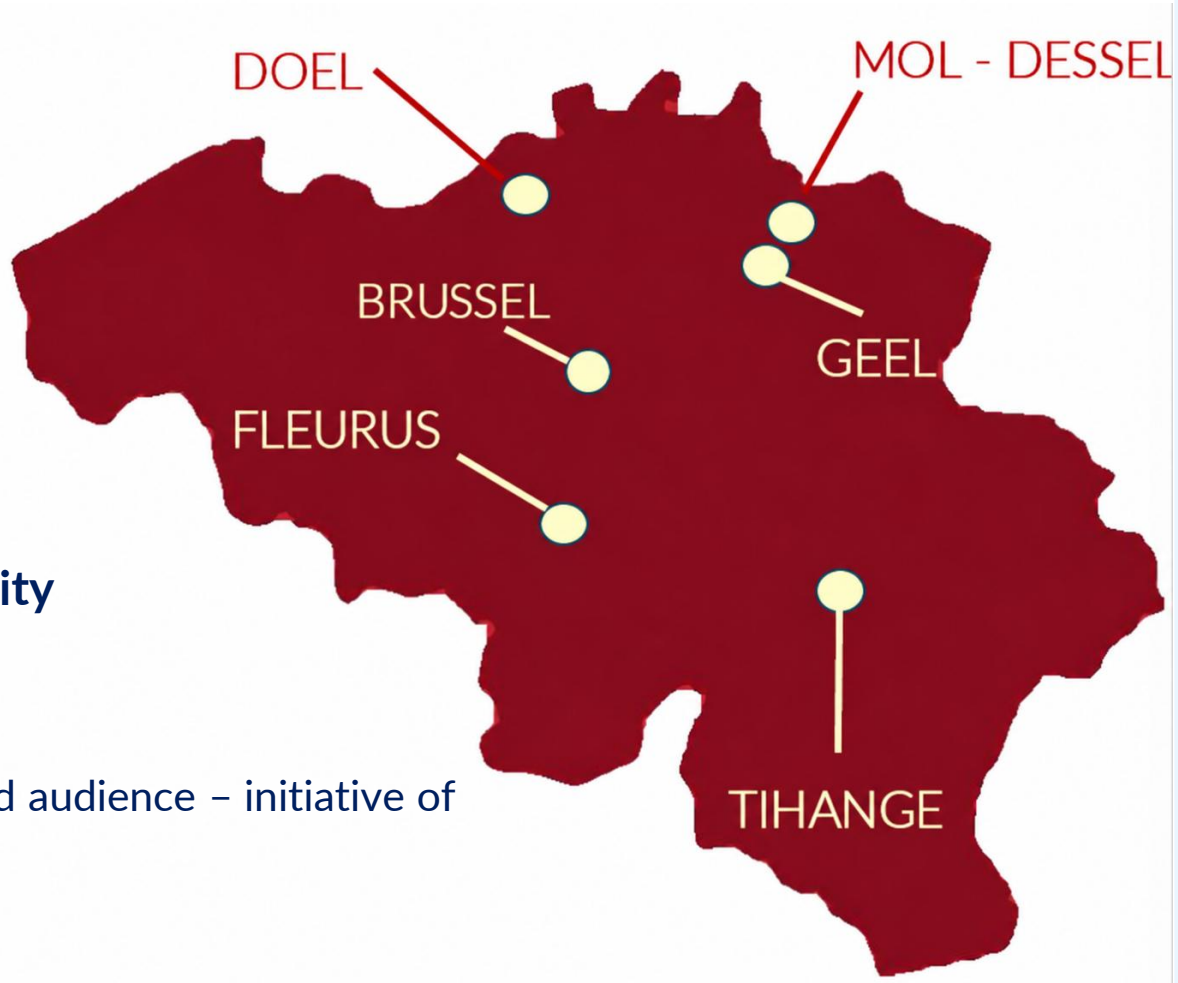
NUCLEAR SITES IN BELGIUM

7 nuclear reactors
4 units in Doel (Beveren-Kruibeke-Zwijndrecht)
3 units in Tihange (Huy)

Research centers
SCK CEN, Mol
JRC, Geel (EC)
VKI, Brussels
Laborelec, Brussels

Radioactive waste treatment and storage facility
NIRAS-ONDRAF, Brussels
Belgoprocess, Dessel
Euridice – HADES, Dessel
TABLOO, Dessel (visitor centre, information to broad audience – initiative of NIRAS-ONDRAF)

Production of medical radio-isotopes
IRE& IRE Elit, Fleurus
SCK CEN, Mol
PanTera, Mol
…



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NUCLEAR FUEL CYCLE: LOST KNOW-HOW IN BELGIUM

Previous actors:

- Belgonucleaire (1973-2005): production of MOX fuel
- Usine Franco-Belge Fabrication de Combustible (FBFC) (1961-2011): production of fuel elements and assemblies



Important domain of know-how (geopolitical independence) in other countries, like France (Orano, Framatome) & The Netherlands (Urenco).

Certain SMR designs will need MOX fuel > will Belgium regain this knowledge…?

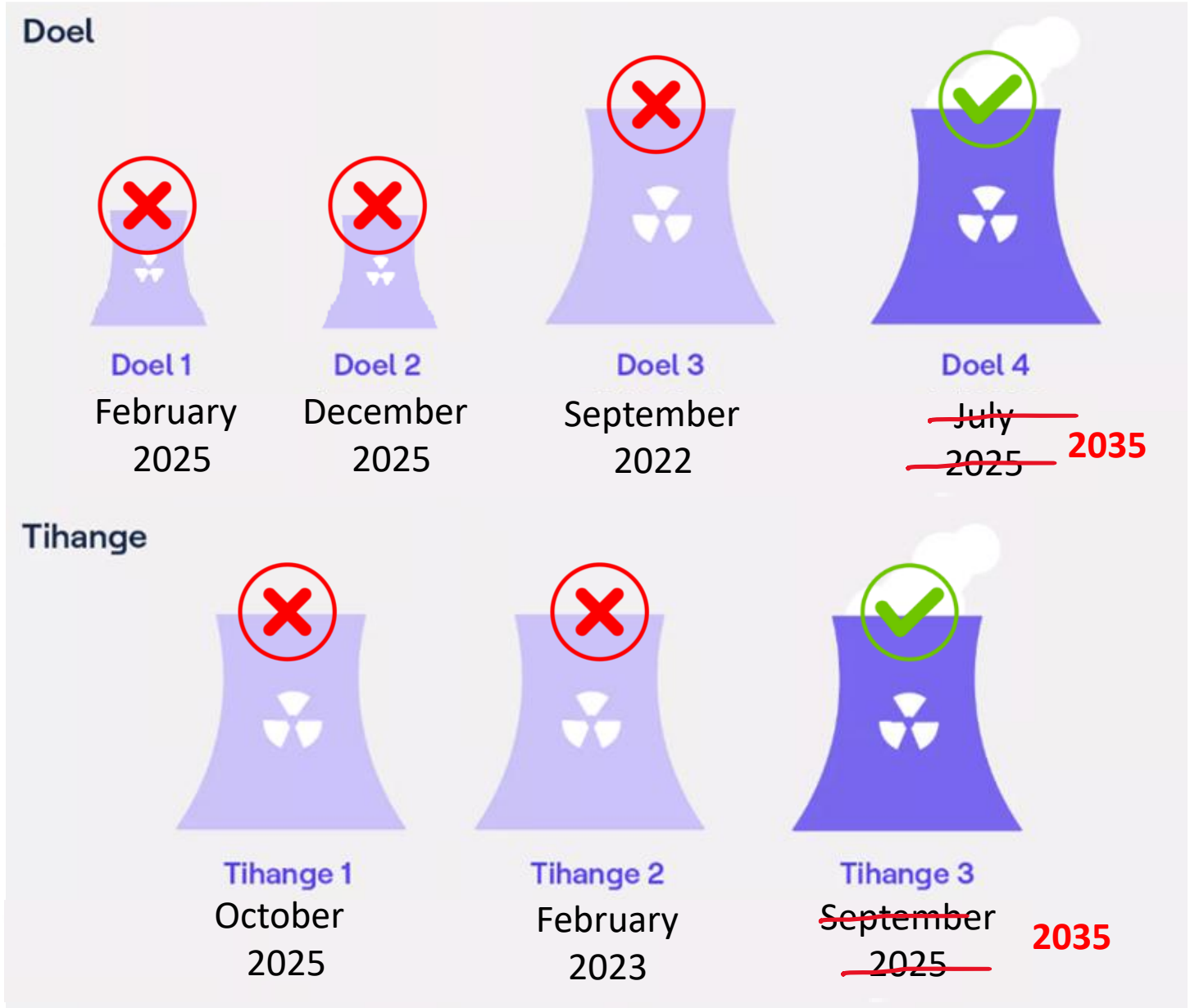
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ACTUAL SITUATION OF THE BELGIAN NPP



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ACTUAL SITUATION OF THE BELGIAN NPP



BELGIAN COALITION AGREEMENT

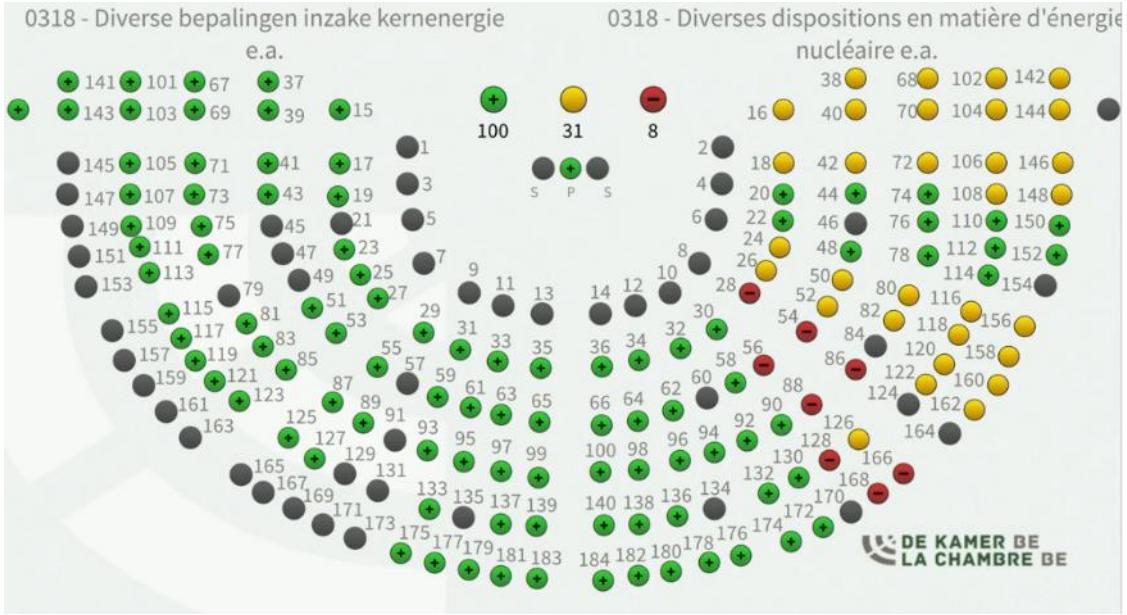


- Nuclear power = a key component of the future energy mix
- 4 GW of nuclear power in the mix
- Amend the nuclear phase-out law
- Extend D4/T3 by at least a further 10 years (until 2045) + investigate extension of other reactors
- Remove obstacles to facilitate and accelerate the construction of new nuclear reactors without compromising nuclear safety requirements
- Closing the nuclear fuel cycle
- European Collaboration (EU Nuclear Alliance)

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AMENDMENTS TO THE NUCLEAR PHASE-OUT LAW

- 15 May 2025
- The “Bihet Law” approved in Parliament
- A convincing majority





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DUE DILIGENCE PROCESS (4 NOVEMBER 2026)

DE TIJD

Regering-De Wever sluit deal met Engie om alle Belgische kerncentrales te nationaliseren



Premier Bart De Wever (N-VA) en minister van Energie Mathieu Bihet (MR). ©BELGA

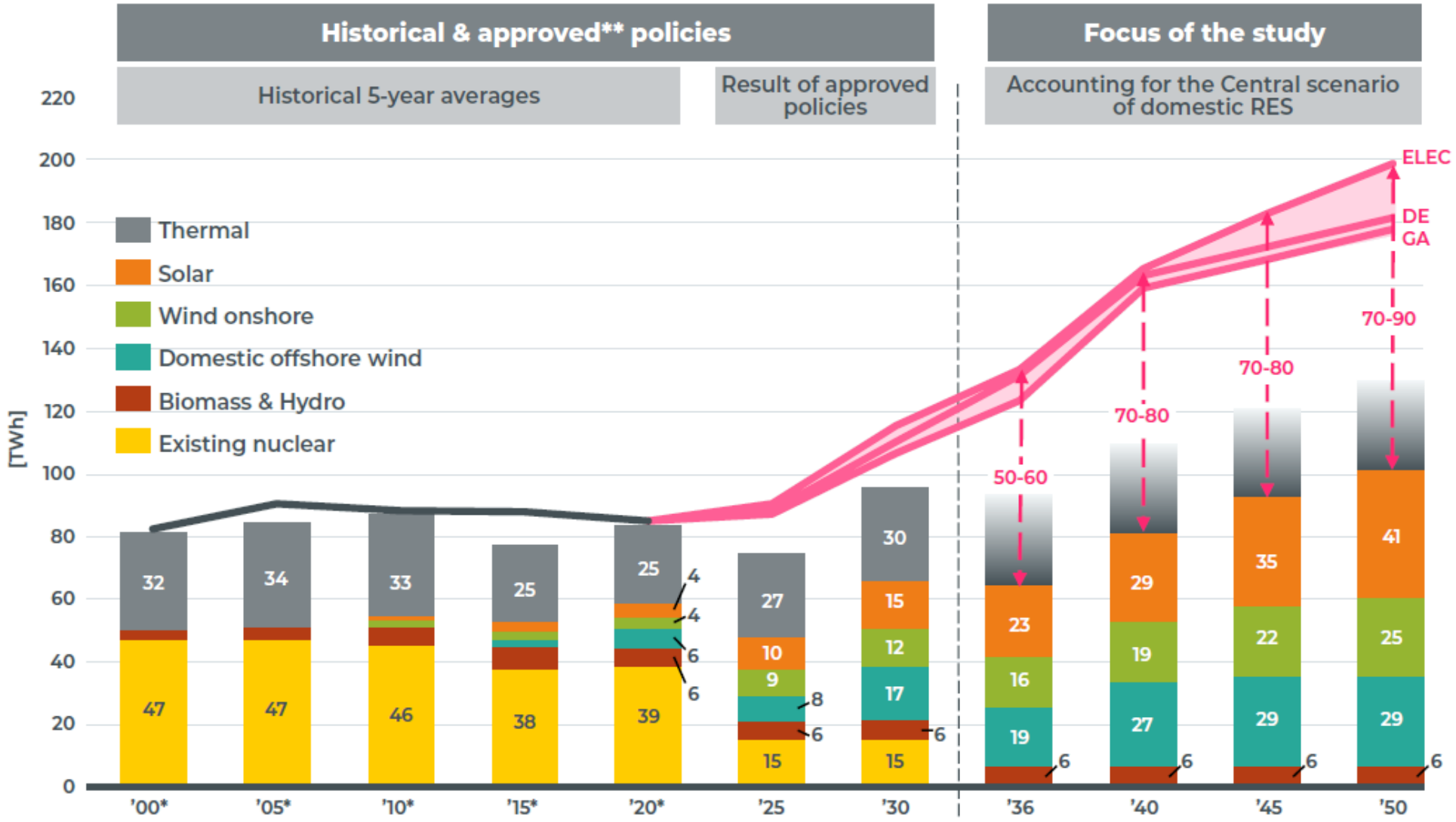
ENGI
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WIM VAN DE VELDEN, DAVID ADRIAEN, CHRISTINE SCHARFF

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INCREASING ELECTRIFICATION



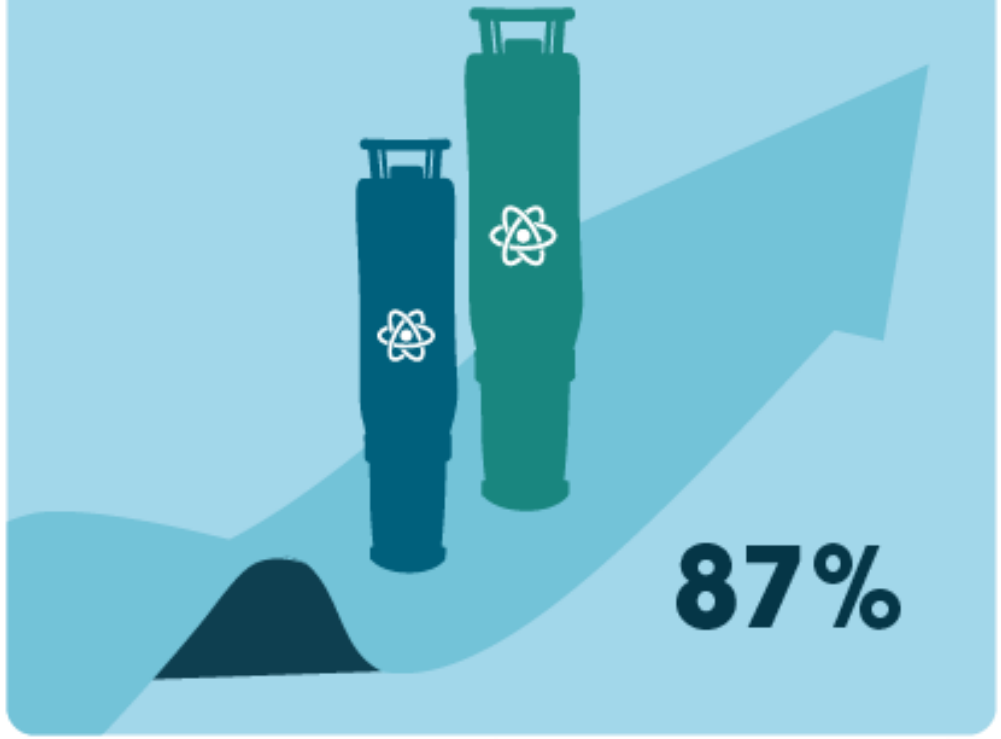
* For year X, the 5-year average in the range [X-2,X+2] is shown instead

** Approved policies: Extension of offshore wind in Belgium to 5,8 GW, extension of D4/T3 for 10 years, National/Regional energy climate plans (domestic RES, electrification, energy efficiency...), CRM

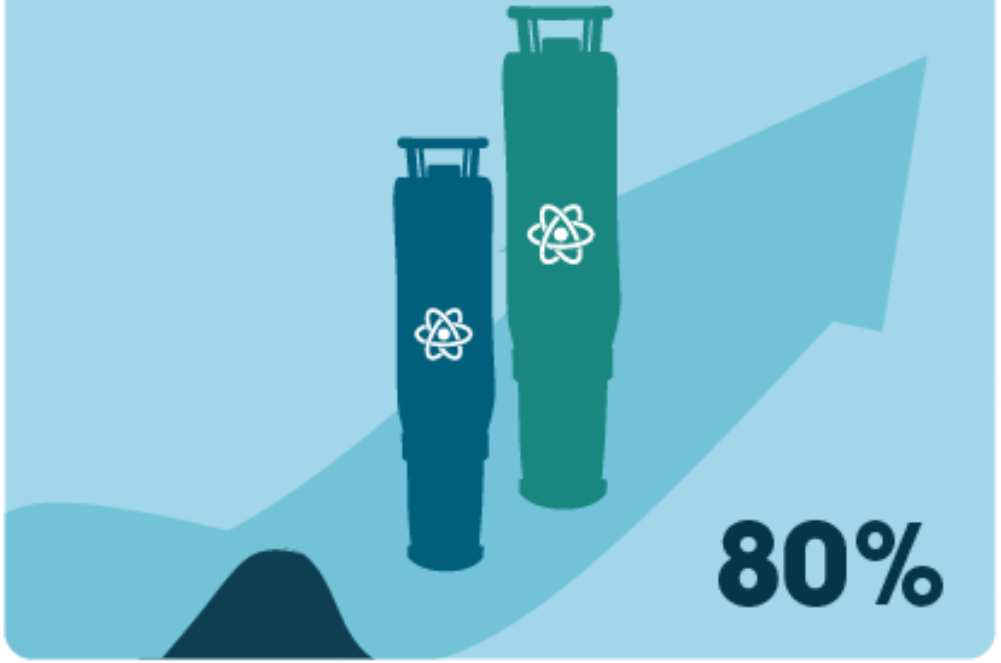
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PUBLIC ACCEPTANCE (SURVEY)

87% of Belgians want Belgium to invest in SMRs (Small Modular Reactors)



80% of Belgians want Belgium to invest in the construction of Gen III SMRs (water-cooled), whilst awaiting these innovative Gen IV SMRs (lead-cooled)

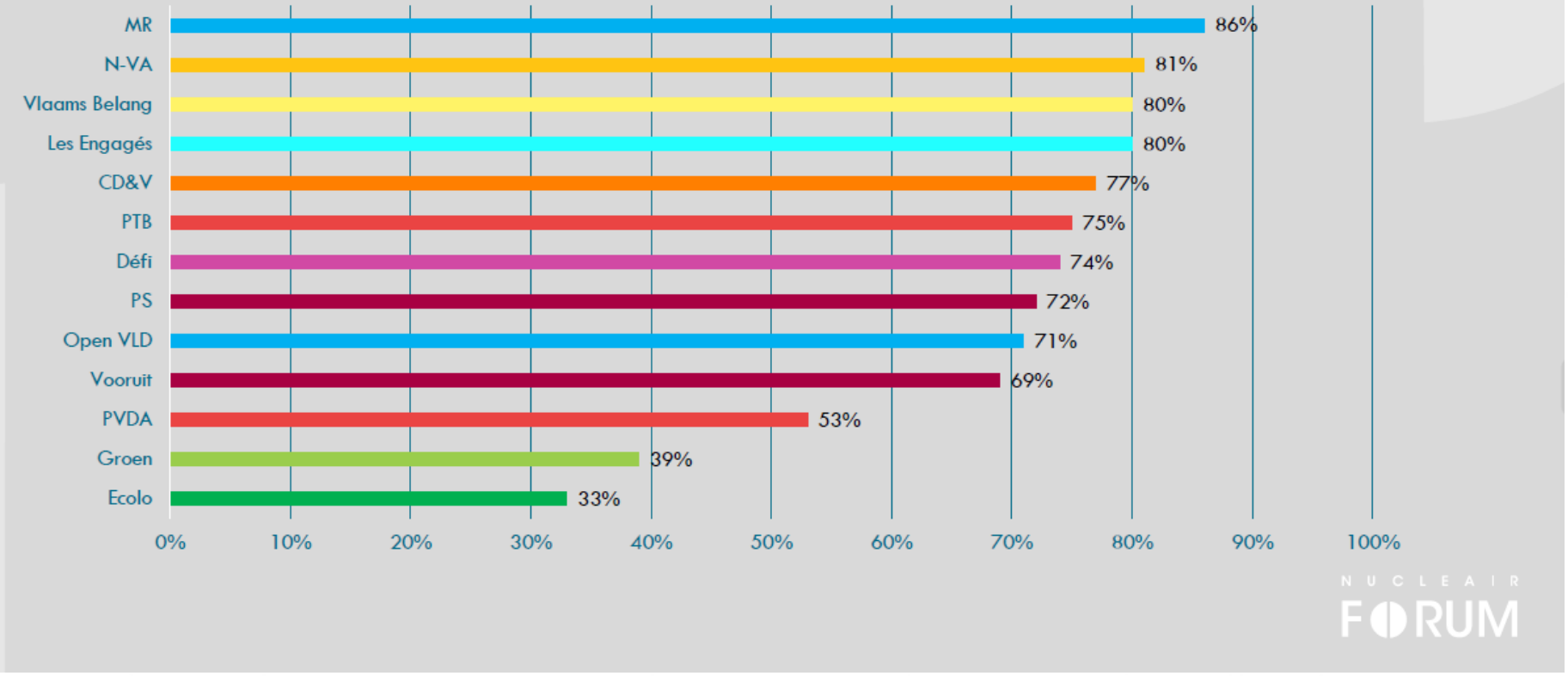


AQ Rate Poll March 2024

BELGIAN NUCLEAR FORUM

PUBLIC ACCEPTANCE (SURVEY)

EXTEND D4/T3 with another 10 years (until 2045)



AQ Rate Poll March 2024

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BELGIUM'S NUCLEAR STRATEGY



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SMR (GEN 3) – TIMELINE IN BELGIUM (TRACTEBEL)

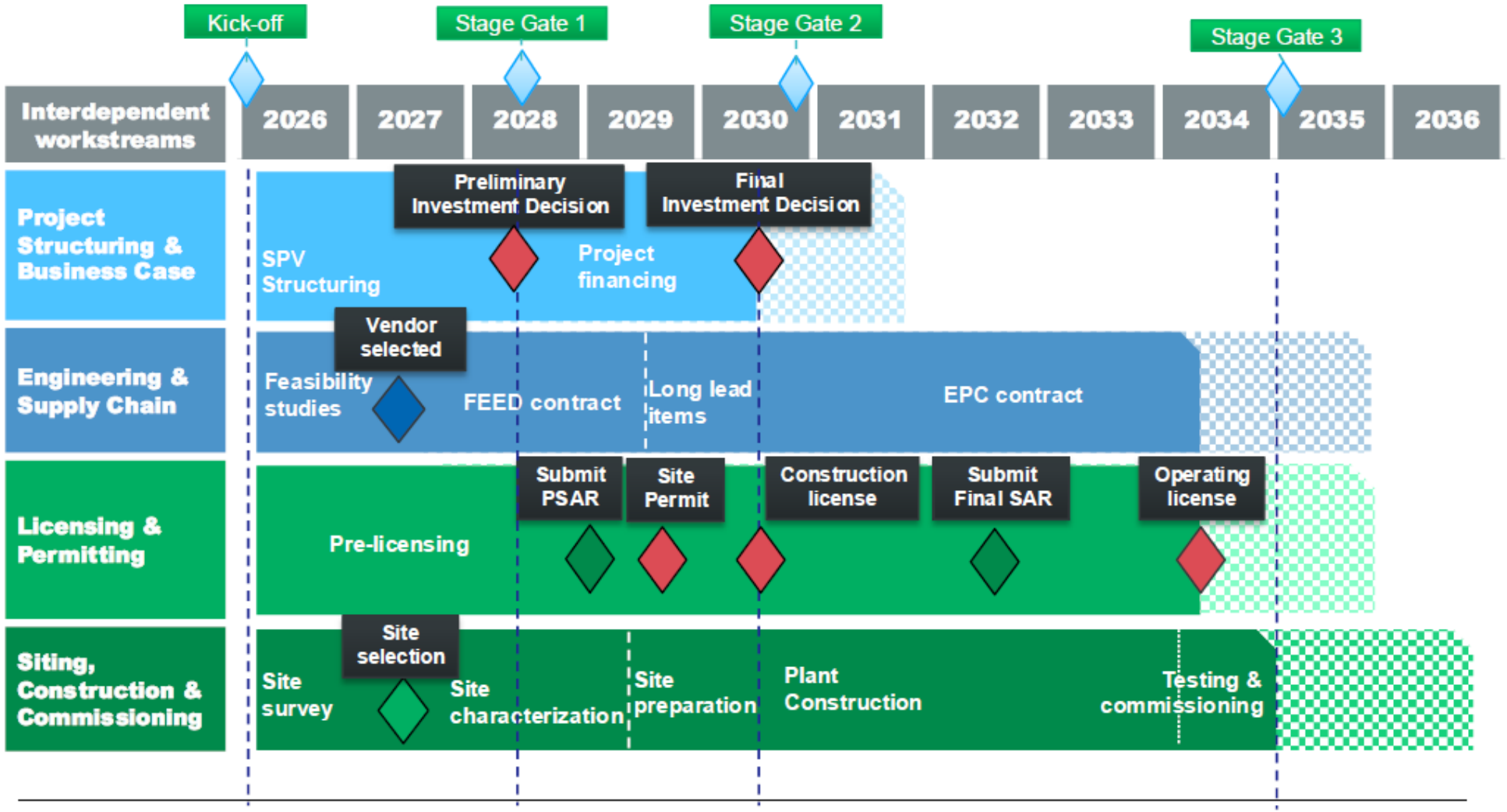


Figure 3: A perspective into SMRs deployment: ~9-11 years in the critical path scenario, ~11-13 years considering industry track record - Source: Tractebel

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LARGE SCALE – TIMELINE IN BELGIUM (TRACTEBEL)

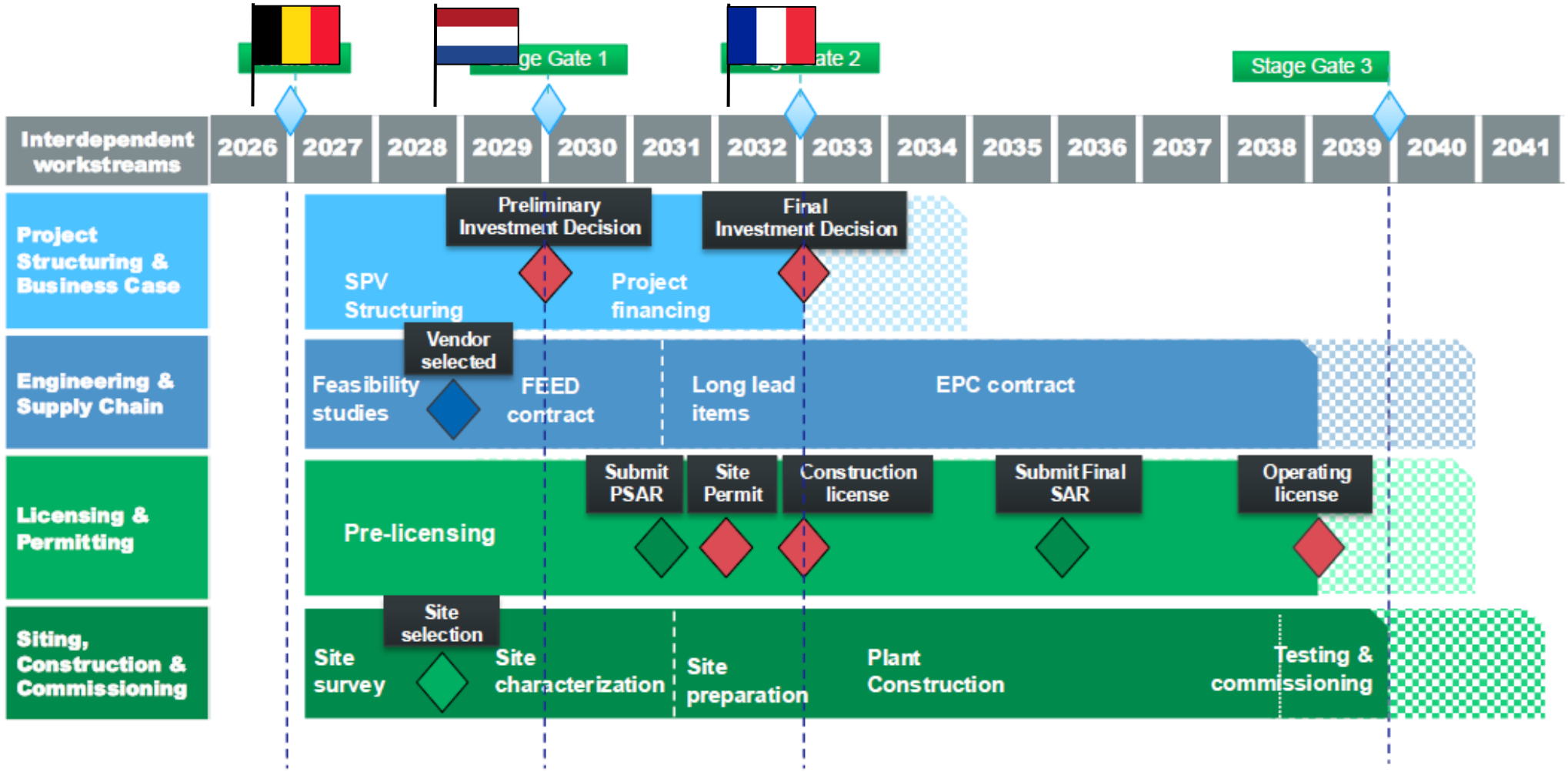


Figure 2: A perspective into Large NPPs deployment: ~13-15 in the critical path scenario, to ~15-17 years considering industry track record - Source: Tractebel

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LFR-SMR "EAGLES-300" (GEN IV)

- Consortium Ansaldo Nucleare (It) ENEA (It), Raten (Ro) & SCK CEN (Be)
- 2034: demonstrator in Mol
- 2039: commercially available



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TIMELINE IN BELGIUM – POTENTIAL ROADMAP

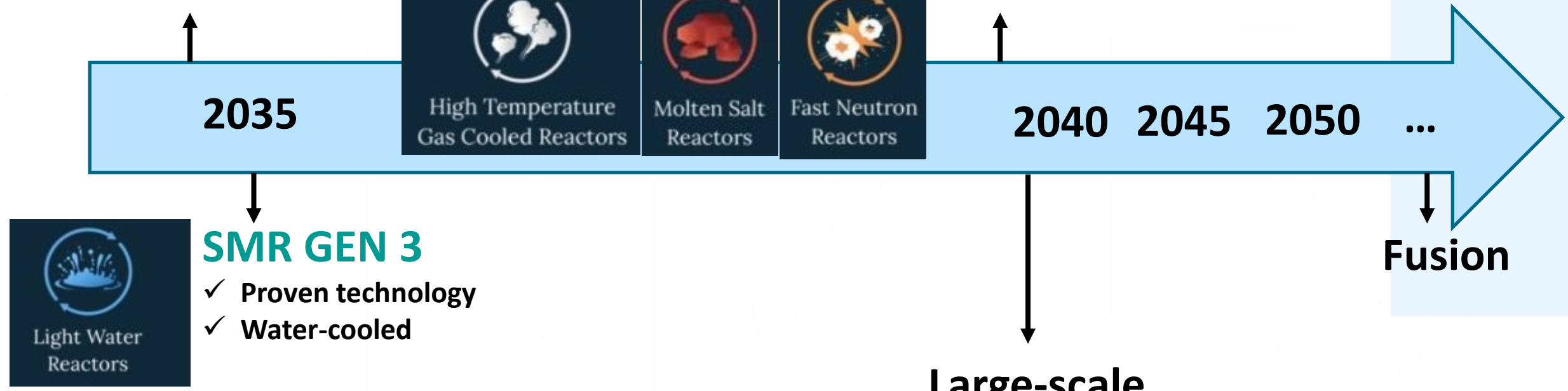
LEANDREA
(SCK CEN)

(Technology demonstrator
Lead-cooled Fast Reactor)

SMR GEN 4

- ✓ Innovative technologies
- ✓ Cooled with something else than water

EAGLES-300
(SCK CEN)



SMR GEN 3

- ✓ Proven technology
- ✓ Water-cooled

Large-scale reactor

Fusion

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POTENTIAL LOCATIONS: NOT YET DECIDED



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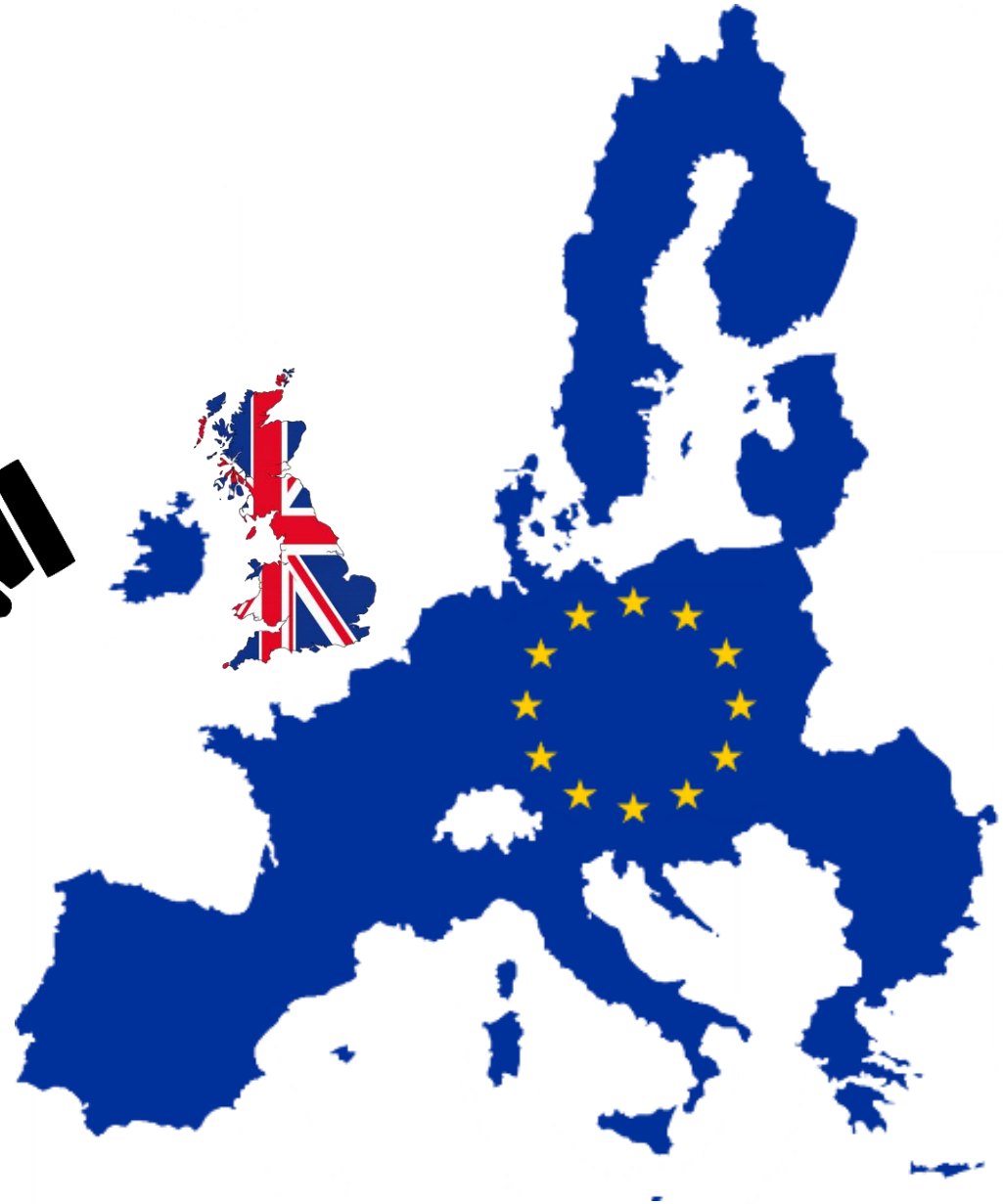
BIGGEST CHALLENGE: REINFORCING THE SUPPLY CHAIN



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Signing of MoU
Nuclear cooperation


Gifen
SUIVEZ-NOUS !


CANADA


Nuclear Energy Sector
in Belgium

THANK YOU

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