

The key role of nuclear power to energize Europe: EDF vision and industrial solutions

### CET 2024

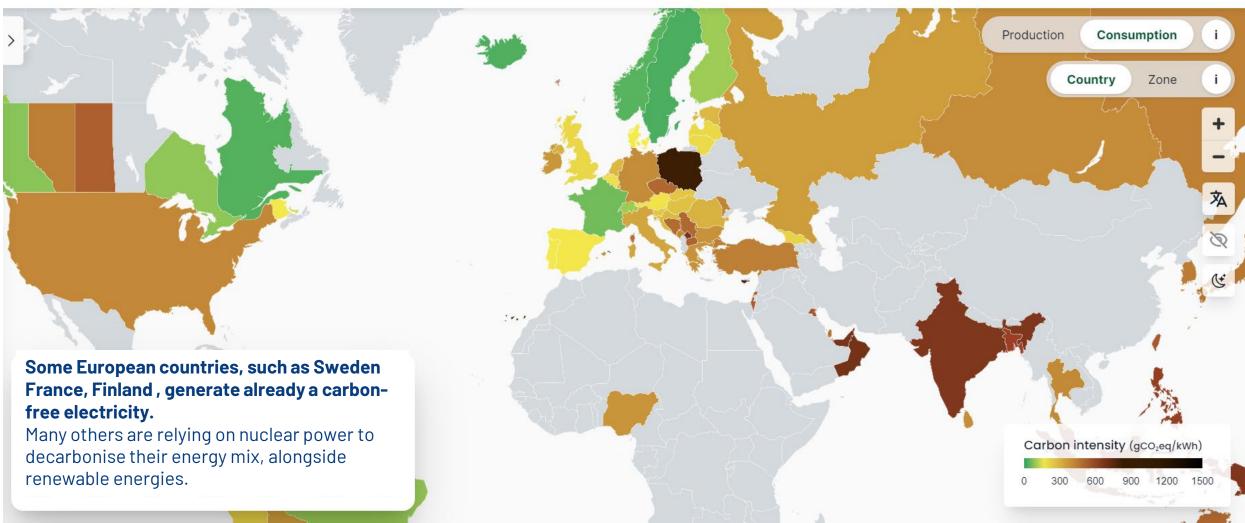
Olivier GODON EDF Head of Business Development Nordic Countries International New Nuclear Development

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## A SNAPSHOT OF GLOBAL ELECTRICITY PRODUCTION: A LONG PATH TO ENSURE NET ZERO BY 2050

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## **ZOOM EUROPE :** A GROWING NUMBER OF PROJECTS GAINING IN MATURITY AND CREDIBILITY



**Significant progress on existing projects,** including the reaffirmation of eight additional reactors in France, TFS in the Netherlands, major decisions in Bulgaria and the extension of the tender in the Czech Republic to four units.

Increase in the volume of large-scale projects with **the integration of new programmes** (Sweden, Slovakia, second unit in Slovenia): **a potential increase from 27 to 57 projects**.

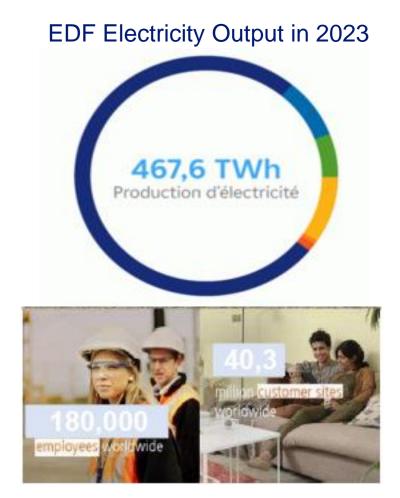
## Achieving the European target of 150 GW by 2050 announced by the European Nuclear Alliance(15 countries) requires :

- **Completion of all announced programs** (60 GW of new nuclear capacity by 2050)
- The emergence of 60 GW of additional projects or the life time extension of part of the fleet beyond 60 years

## A LEADING ELECTRICITY GENERATION AND DISTRIBUTION COMPANY IN FRANCE AND EUROPE

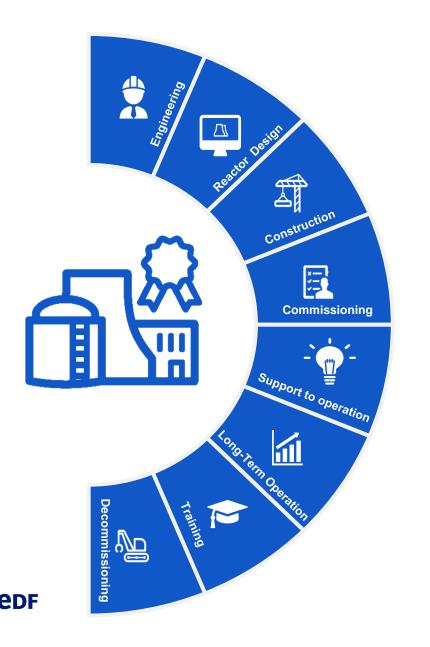


- Covers all electricity related activites: from electricity generation to transmission distribution and trading
- Producing 97% of CO<sub>2</sub>-free<sup>(1)</sup> electricity in France
- Owning the largest nuclear fleet worldwide: 56 operating reactors in France
- Active across the whole electricity value chain

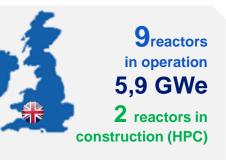




## EDF EXPERIENCE : BUILDING AND OPERATING ITS OWN FLEET







2 Reactors in operation\* \* EDF minority shareholder

- 65 reactors\* operated by EDF (alone) in Europe
- Nuclear is the third industrial sector in France
- +220,000 jobs in France
- +3,000 SMEs involved

\* The EPRs reactors in Taishan (China) are operated by operated by TNPJVC, a joint venture established between CGN (51%), EDF (30%) and the provincial Chinese electricity company Yuedian (19%).

# CAPACITIES: EDF ENGINEERING AND INDUSTRIAL CAPABILITIES SUPPORTED BY AN EUROPEAN SUPPLY CHAIN

Integrated engineering & industrial solutions...



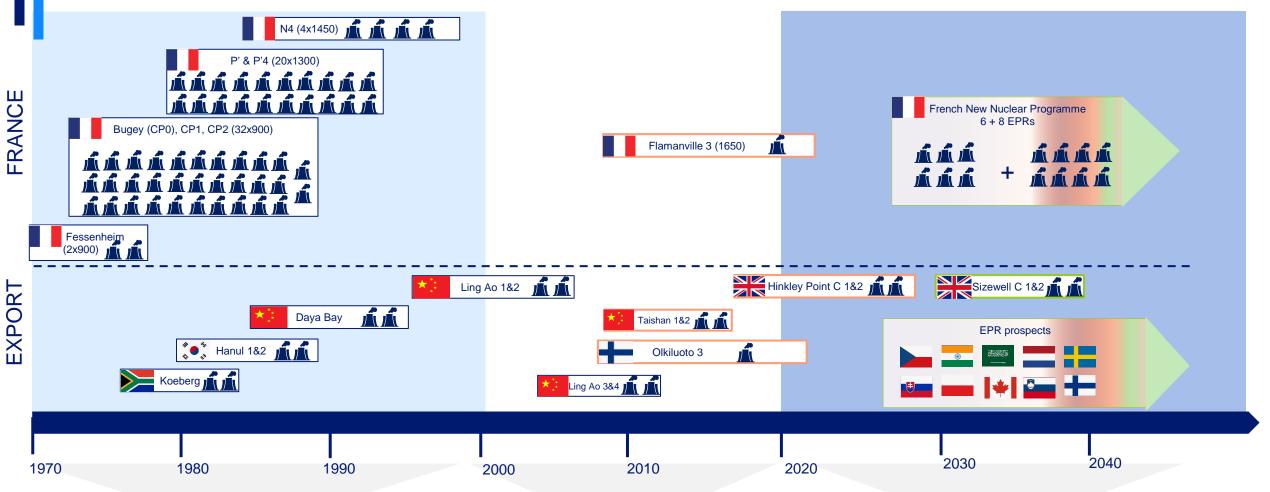
Sanand, India

And supporting the nuclear supply chain in Europe, with 95% of European suppliers for HPC ready for the next EPR projects



Tier type: 🔵 1 🛑 2

## A UNIQUE NEW BUILD AND OPERATING EXPERIENCE



Phase 1: 66 reactors constructed in less than 30 years

Construction of a significant number of reactors, **in France and abroad**, in less than 30 years, demonstrating the benefit of **fleet construction** in terms of competitiveness and industry readiness.

#### Phase 2: 5 reactors constructed in 20 years

With the securement of energy through its extensive nuclear programme, France has reached a moment of stability, triggering **a** slowdown in new nuclear projects but also a progressive loss of capacity and industry readiness. EDF Nuclear

#### Phase 3: 20+ reactors to be constructed

France is reigniting its nuclear ambition, both domestically and internationally. Leveraging lessons from past projects and the advancements in EPR technology, EDF is embarking on a new wave of nuclear projects, benefitting from the fleet effect.

GEN III+ (EPR)

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## **Conclusion : the condition of success for nuclear in Europe**

### Products

A portfolio of reactors developed for the European Market integrating our operator's experience

## Capacities

EDF has unique in-house engineering and industrial capacities, and a robust European supply chain



EDF, its supply chain and the French Government, are committed to enter into a long term **partnership for the** 

entire of nuclear power plants

### Projects

A tangible pipeline of projects in Europe, including **6 in France** 

## Delivery

Unique and exclusive experience in delivering recent new build projects in EU



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## Contact: nucleardevelopment@edf.fr

# Tack så mycket