



# Call for Expression of Interest (AMI) for the sale of nuclear production allocation contracts (CAPN)

*French version prevails*



# Summary

1. Context
2. Marketed products
3. Auction process



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Context

# 1. Context

EDF is proposing an industrial partnership contract to secure a supply of low-carbon electricity at prices that reflect the costs of the nuclear fleet and are therefore not subject to the volatility of the wholesale markets

Since 2023 and in the wake of the reform of the European electricity market, which encourages the development of **long-term contracts**, EDF has been fully committed to the deployment of a new commercial policy.

In this context, EDF has been offering, for several months, **long-term industrial partnership contracts backed by the historic French nuclear fleet**, known as nuclear production allocation contracts (CAPN). These contracts allow the partners to benefit from a share of the actual production of the historic nuclear fleet in return for a contribution to the associated costs and a sharing of the risks. As a result, the partners have access to a low-carbon electricity supply for 10 or 15 years, at prices that reflect the costs of the nuclear fleet and are therefore **uncorrelated with wholesale market prices** and their volatility.

EDF will propose these nuclear production allocation contracts (CAPN) through **a Europe-wide auction mechanism** for:

- ▶ **Consumers** who have needs greater than 7GWh/year,
- ▶ **Suppliers or producers** with a physical electricity removal capacity in France.

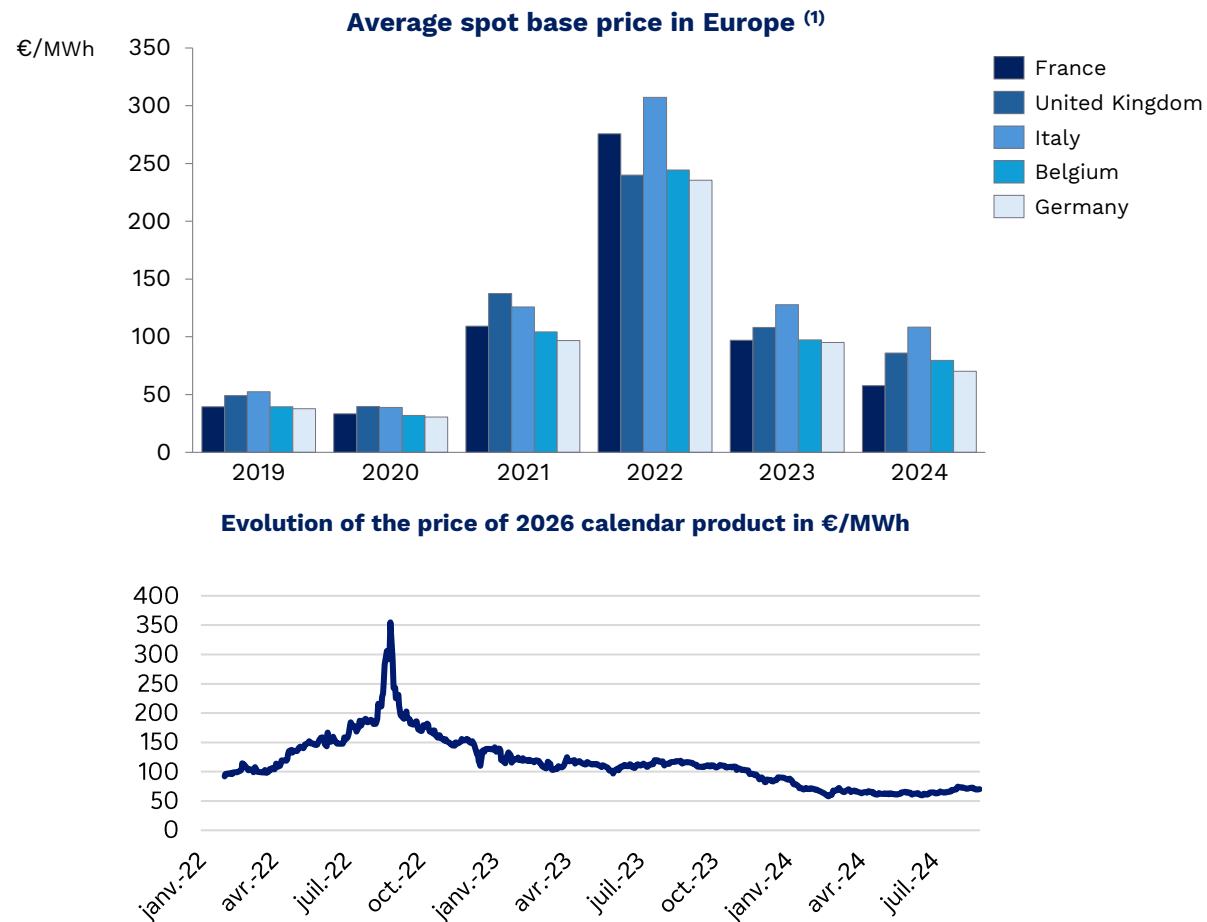
Through this new mechanism, EDF is diversifying its offer and adapting it to meet the requirements of its consumers, enabling access to **competitive low-carbon electricity for either direct consumption or resale on the grid**.

# 1. Context

## Evolution of electricity prices over the last 5 years: a very volatile market

Over the past five years, **electricity prices have been extremely volatile**, posing a significant risk to end consumers.

**The CAPN** allows you to benefit from a volume of electricity that is not exposed to market price fluctuations, by **offering a more stable and visible price over the long term**.



1. EDF UDR data 2023



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Marketed products

## 2. Marketed products

### General principles of Nuclear Production Allocation Contracts (CAPN)

The CAPN consists of allowing eligible partners to benefit from **a share of the power of the historic nuclear fleet**.

These contracts, **which last 10 or 15 years**, are **industrial partnership contracts**. They allow:

- ▶ The eligible players to supply part of their needs with low-carbon electricity at relatively stable levels and independent of wholesale market prices, with no resale restrictions on the products purchased
- ▶ EDF to share the costs and risks associated with the operation of the nuclear fleet while ensuring stable revenues over 10 and 15 years

EDF will offer, for deliveries in France, CAPNs via **an ascending auction mechanism (relating only to the initial contribution<sup>(1)</sup>** with an introductory price for each of the 10 and 15-year products).

During the auction, a **total of 1800MW<sup>(2)</sup>** of power will be offered.

A maximum volume per co-contractor may be defined at a later date.

1. Details of the initial contribution are available on slide 14

2. EDF reserves the right to modify this threshold during the process

## 2. Marketed products

### Eligibility criteria to participate in an auction

#### Eligible actors

- 1. Operators with an authorisation to purchase electricity for resale to final consumers** issued by the French administration and/or any other equivalent authorisation in a target country<sup>(1)</sup>, allowing them to be linked to the concept of physical supplier
- 2. Power generators** with generating assets located in one or more target countries
- 3. Final consumers** with an annual electricity requirement of more than 7 GWh/year

Eligible participants will have to **designate a balance perimeter in France by the start of deliveries.**  
**Electricity transported outside France is the responsibility of the co-contractor.**

#### Financial criteria

EDF will require financial guarantees to participate in the auction.

#### Ethics & Compliance Criteria

Qualification will be conditional upon meeting Ethics and Compliance standards.  
A study will be systematically carried out prior to the qualification of the participants.

1. European Union, United Kingdom (including Channel Islands), Switzerland, Norway, Monaco, Andorra



## 2. Marketed products

### Share of Subscribed Power

#### Reference Fleet

The "Reference Fleet" consists, on the date of signature of the Contract, of **all operational units of EDF's historical nuclear fleet that are less than 60 years old** (pressurized water reactors excluding Flamanville 3<sup>(1)</sup>).

Its **net continuous power<sup>(2)</sup>** currently stands at **61,370 MW** ( $PCN_0$ ).

During the Contract, a unit will be removed from the perimeter of the Reference Fleet on its final shutdown date as declared by the operator and, in any case, no later than the first day of the 6th ten-year inspection.

#### Allocation of subscribed power

The power subscribed  $Pc_0$  at the beginning of the contract allows to determine the share of the Reference Fleet allocated by the co-contractor  $Q_0$ .

$$Q_0 = \frac{Pc_0}{PCN_0}$$

During the execution of the Contract, the Subscribed Power ( $Pci$ ) will evolve according to the PCN of the fleet:

$$Pci = Q_0 \cdot PCNi$$

With:

$PCNi$ : Total Net Continuous Power of the Reference Fleet at date  $i$ , considering the evolution of the scope of the Reference Fleet (MW).

Cumulative PCN for units of less than 60 years of operating life (MW)



1. Flamanville 3, which was commissioned at the end of 2024, does not offer sufficient feedback to be included in the reference fleet.

2. The PCN of a unit is determined when it is put into service. It remains fixed throughout the operating life of the unit

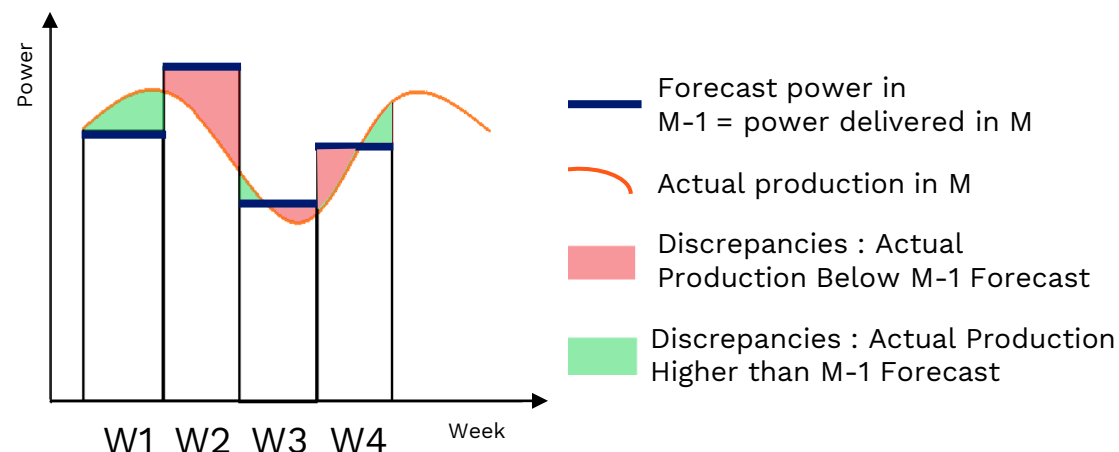
## 2. Marketed products

### Energy Allocated

In month M-1, EDF establishes **a forecast value of the production coefficient  $Kp_s$**  of the reference fleet for **each week** of month M. This forecast determines the weekly power that will be delivered to the co-contractor within its balance perimeter, regardless of the actual production.

**The discrepancies between** the forecasts made in month M-1 and the actual production in month M are **subject to an annual financial adjustment**, based on spot prices, to the benefit of one or other of the Parties.

EDF communicates at the same frequency the forecasts of the Reference Fleet's weekly Production Coefficient over the next 24 months (these data are provided for information purposes only and are not binding).



### Annual production thresholds of the reference fleet

A contractual floor will limit the financial exposure of the co-contractor in the event of a drop in production below an annual  **$Kp_{min}$**  of **57.7%** (equivalent to 310 TWh to date). Symmetrically, an annual  **$Kp_{max}$**  of more than **76.3%** (equivalent to 410 TWh to date) will financially benefit EDF.

The calculation of  **$Kp_{min}$**  and  **$Kp_{max}$**  does not include production losses resulting from events not attributable to EDF.

## 2. Marketed products

### Example: Subscription of 100 MW of CAPN over a period of 15 years

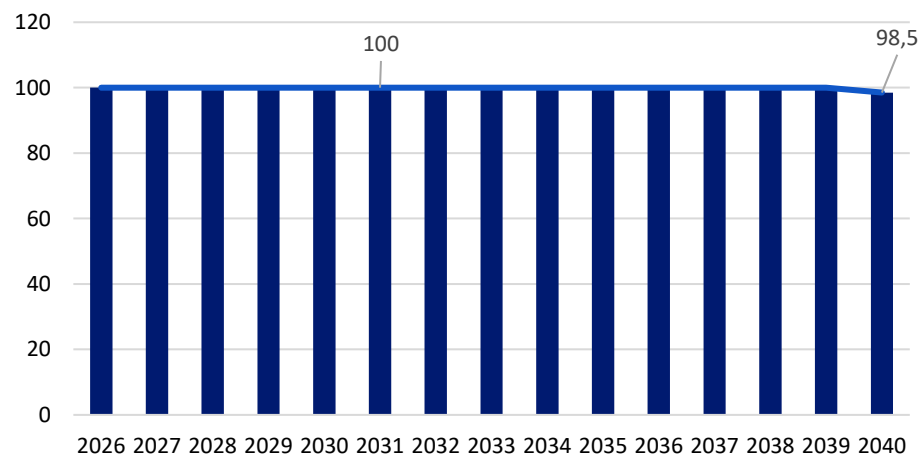
#### Contracted power

By subscribing to 100 MW of CAPN, the  $Q_0$  share held by the co-contractor amounts to

$$Q_0 = \frac{100}{61370}$$

The power allocated over the duration of the contract evolves in line with the PCN of the reference nuclear fleet.

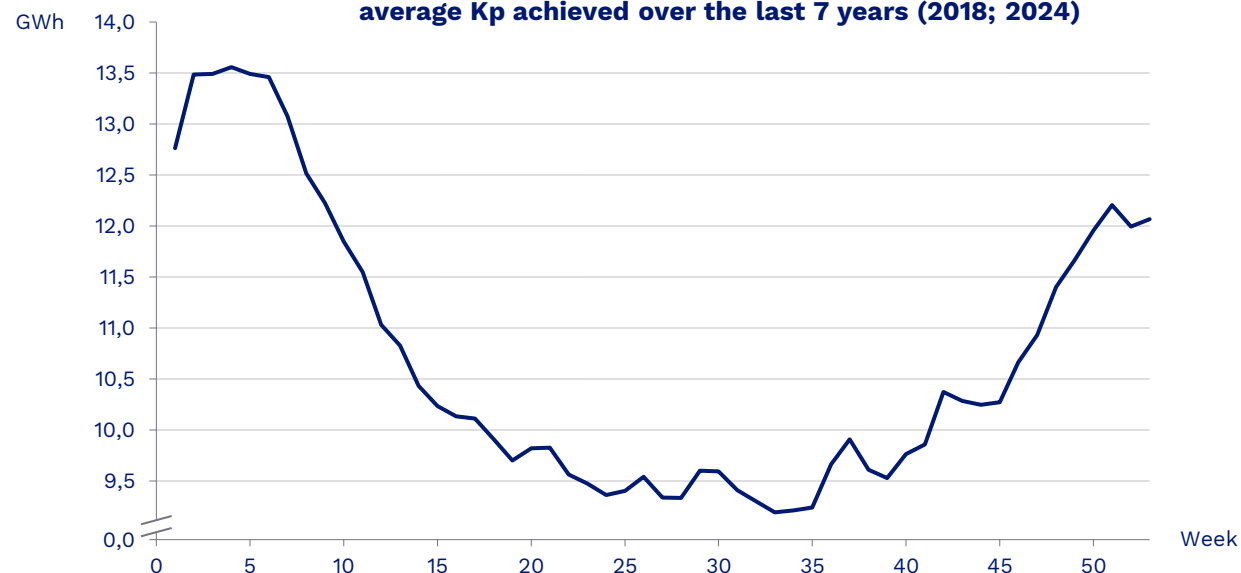
#### Projected allocated power (in MW)



#### Allocated Energy

The volume delivered will depend on the projected production of the reference nuclear fleet, with a financial adjustment made according to the actual production.

#### Weekly energy for a power of 100MW according to the average $K_p$ achieved over the last 7 years (2018; 2024)



## 2. Marketed products

### Accessory Energy Products

#### Capacity guarantees:

EDF **participates in the French capacity mechanism and manages the value of the capacity guarantees** for the energy produced by the Reference Fleet.

As such, EDF **will pass on to the co-contractor up to the share of the contracted power :**

- ▶ The revenues from the sale of these capacity guarantees
- ▶ Costs related to the management, certification and declaration of certified parameters supported by EDF

#### Guarantee of origin (GOs):

EDF transfers to the Co-contractor **the GOs from EDF's nuclear fleet**. The GOs are sold against the payment of a sum equivalent to the management costs to which EDF will be exposed.

#### System Services:

EDF **may freely participate in reserve mechanisms**, including frequency control system services offered or imposed by RTE, to contribute to the stability of the French or European electricity system.

EDF will deduct the volumes not produced as a result and **will pass on to the co-contractor up to the share of the contracted power :**

- ▶ revenues from setting aside a volume of power to provide frequency control services for the reference fleet
- ▶ revenues from the activation of secondary frequency control on the reference fleet

Penalties and other costs charged by RTE for these services will be deducted from these revenues.

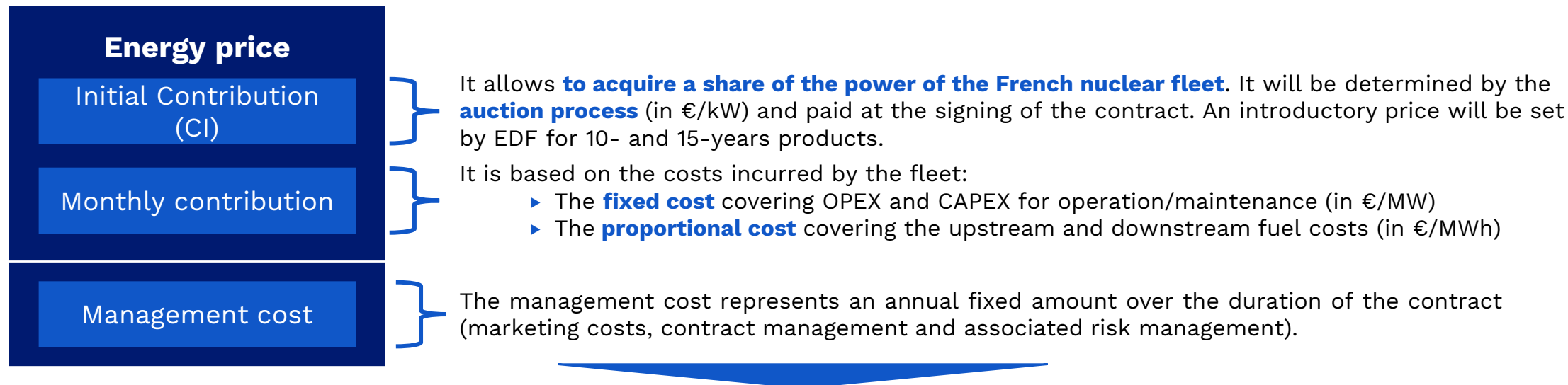
## 2. Marketed products

### Delivery and billing principles

	Physical Flows	Financial flows
1 At the signing of the CAPN	The co-contractor benefits from a <b>fixed power</b> corresponding to a share of the production of the nuclear fleet	The co-contractor pays <b>the full Initial Contribution</b> upon signature of the contract
2 At month M-1	The co-contractor is <b>informed of its weekly deliveries in month M</b> (based on fleet availability forecasts)	
3 At month M	The co-contractor <b>receives the volume of electricity announced</b> in M-1	The co-contractor pays the <b>monthly cost of its electricity</b> (fixed and variable costs) <b>no later than 15 days from the date of issue of the invoice</b> (under penalty of late penalties)
4 At the end of the delivery year		<p>The co-contractor may <b>pay (or receive) a financial adjustment</b> corresponding to the difference between the projected energy delivered and the energy due under the contract, and the difference between the estimated costs invoiced and the actual costs</p> <p>The co-contractor may <b>pay (or receive) a financial adjustment</b> under the availability tunnel.</p> <p>The co-contractor is remunerated for the share of the revenues under <b>the Capacity Guarantees</b>, sales of <b>Guarantees of Origin</b> and <b>the System Services</b></p>

## 2. Marketed products

### Price structure and rights of the CAPN co-contractor



- ▶ **EDF remains the sole operator of the power plants** and solely responsible for their management. As such, he is solely responsible for maintenance planning and production optimization and scheduling.
- ▶ The interests of the co-contractor are guaranteed by the alignment of the economic interests of the two parties:
  - Shared interest **in optimizing production on price signals** while considering industrial constraints
  - Shared interest in **ensuring the operational efficiency of industrial activities** (cost control, downtime,...)
- ▶ The co-contractor has the right to audit the costs for a given annual period, to modify the balance perimeter, to freely resell the energy purchased and a right to information through a liaison committee
- ▶ The co-contractor **undertakes not to adopt an attitude likely to damage the image of nuclear energy**.

## 2. Marketed products

### Guarantees requested on the Initial Contribution (CI) for participation in the auction

To participate in the auction, players will have to provide guarantees according to their Rating<sup>(1)</sup>:

- ▶ **If Rating <sup>(1)</sup> ≥ BBB+ <sup>(2)</sup>**: players can provide either a first demand bank guarantee, a first demand parent company guarantee or a cash deposit. If the interested party is the parent company, then no guarantee is required.
- ▶ **If Rating <sup>(1)</sup> < BBB+ <sup>(2)</sup> or no Rating**: players must provide a first demand bank guarantee from a banking institution with a minimum rating of BBB+ or a cash deposit.

This Financial Guarantee must cover at least the entire amount committed by the player during the first round of the auction for the Initial Contribution. The amount of this Guarantee determines the maximum volume that the player will be able to bid on the first round. Its duration **will cover at least 90 days** after the auction day.

EDF will be able to invoke this guarantee in the event of non-payment of the CI within the 60-day of the end of the auction or failure to sign the CAPN contract within the 30-day period granted to the auction winners.

EDF will release the guarantees of the unselected players immediately at the end of the auction.

### Guarantees requested during the term of the contract

The Co-contractor undertakes to provide EDF, no later than 20 days before the start of each calendar year of delivery, **with a first demand bank guarantee valid for 13 months, in an amount covering the equivalent of 2 months' monthly contribution.**

The guarantee may be invoked by EDF in **the event of total or partial non-payment**, of an invoice for energy deliveries or any other amount due under the contract, **after a period of 10 days following the payment due date of the amount concerned.**

1. Credit ratings issued by one or more of the three agencies Moody's, Standard & Poors and Fitch

2. Equivalent Baa1 for Moody's

A blue square containing a white dot and the number 3, indicating the third step in a process.

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## Auction process



# 3. Auction process

## Qualification process

To participate in the auction, there are two main steps to follow for the players:

### Pre-qualification phase

1. Via the dedicated website, **download and complete the Identity Sheet**
2. **Send your identity sheet** to the following address: AMI-CAPN@edf.fr
3. If the player meets the eligibility criteria, EDF returns by email **a confidentiality agreement to be signed** to access the contractual documents on the Ivalua platform

### Qualification phase

1. **Download the qualification file**
2. **Complete the mandatory documents of the qualification file** and submit them on the platform
3. **If the actor meets all the requirements, he becomes a qualified actor who will be able to participate in the auction**

**The player may contact EDF at any time** via the messaging system of the Ivalua Platform.



If the player is pre-qualified, he will have to **register on the platform** following the operating procedure provided by email by EDF