



**MINISTÈRE
DE LA TRANSITION
ÉCOLOGIQUE**

*Liberté
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OFFSHORE WIND POWER POLICY IN FRANCE

France's assets for the development of offshore wind energy

- **11 million km²** of maritime zones under France's jurisdiction.
- France has **the second largest wind resource** for offshore wind power in Europe, after the UK.
- A **potential for offshore wind energy by 2050** between **49 and 57 GW** for floating and bottom-fixed.
- **A committed administration** favoring the development of offshore wind power at lower cost, with a strong focus on **floating wind**

Offshore wind is key to reduce greenhouse gas emissions and diversify the French energy mix



The French energy policy: reaching carbon neutrality and increasing the share of renewable energy

Energy transition for Green growth Act (2015)

Energy-climate Law (2019)

- **National Low-carbon Strategy** : Outlines the French roadmap for reducing greenhouse gas emissions by 2050.
- **Multi-Annual Energy Plan (2019-2028)** : Establishes the priorities for government action regarding energy policy in the next decade, shared in two 5-year periods.



Increase the share of renewable energies to 33% of final energy consumption by 2030 and to 40% of electricity production.



Diversify electricity production and reduce the share of nuclear energy to 50% by 2035



40 less greenhouse gas emissions in 2030 compared to 1990
2050 - Carbon neutrality

Multi-Annual Energy Plan – Agenda for offshore wind energy

Multi-Annual Energy Plan (2019-2028) : Agenda of future commercial tenders for offshore wind (attribution date) period

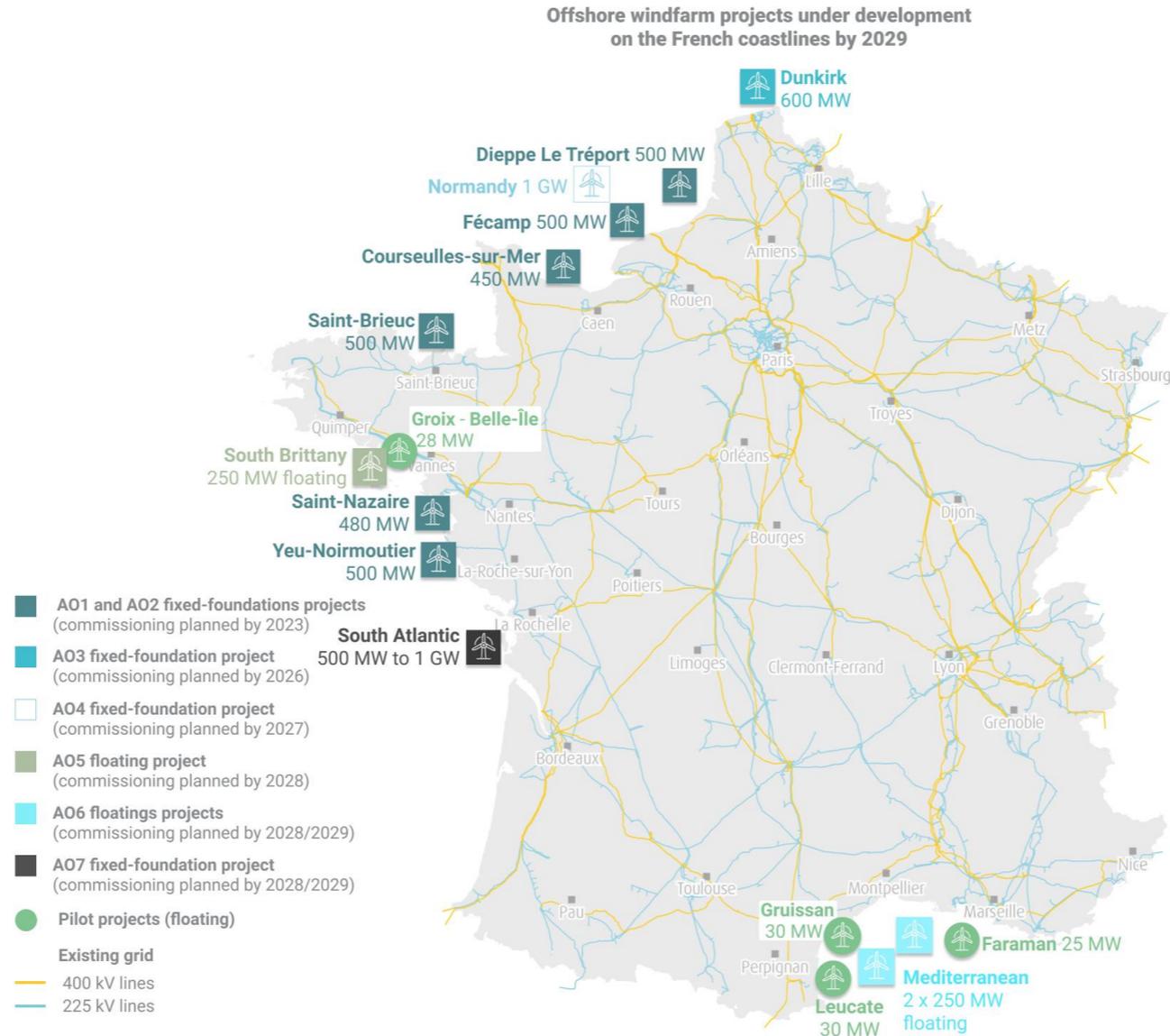
Grant date for the call for tenders	2019	2020	2021	2022	2023	>2024
Floating wind turbine			AO5 250 MW South Bretagne (€120/MWh)	AO6 2 x 250 MW Mediterranean Sea (€110/MWh)		1000 MW per year, fixed or floating, depending on prices and resources, with target prices converging towards the market price for fixed wind
Fixed wind	600 MW Dunkirk (€45/MWh) AO3	AO4 1000 MW Eastern English Channel North Sea (€60/MWh)	AO7 500 – 1000 MW Sud-Atlantique* (€60/MWh)		AO8 1000MW (€50/MWh)	

Table 7: Calls for tender for offshore wind (the dates indicated are the dates on which a winner will be selected, following a pitch procedure; prices indicated are the target prices for the calls for tender on the basis of which the maximum prices will be fixed). The projects assigned starting in 2024 will primarily focus on the expansion of existing floating offshore wind farms using a shared connection.

** In this context, an offshore wind installation off Oléron may be assigned*

Despite some delays, all these volumes will be attributed. These ambitions may be exceeded when this Plan is revised for the 2024-2033 period

7 wind farms and 4 pilot floating projects have already been awarded

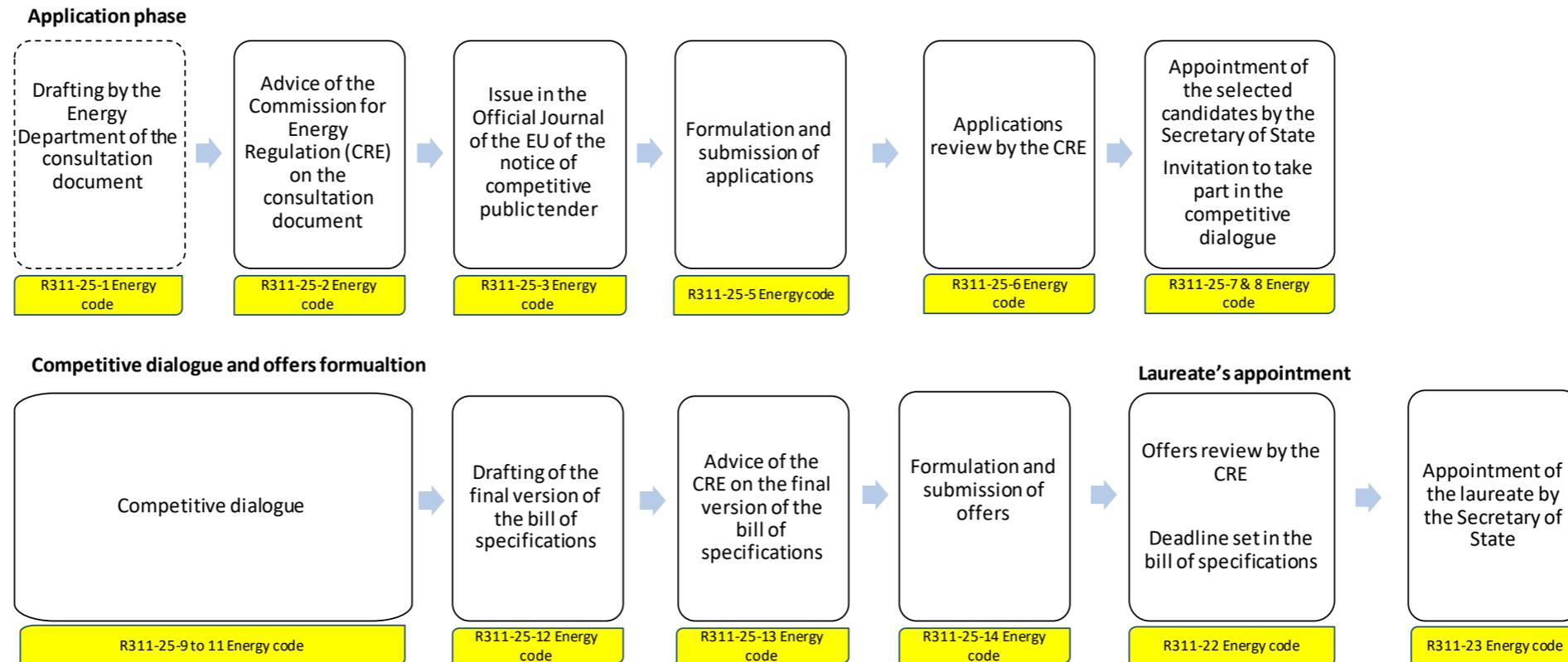


Offshore wind policy framework



A modernized legislative framework for offshore wind (1/3)

- **Energy transition for Green growth Act (2015)** : New procedure called ‘competitive dialogue’ (dialogue concurrentiel)

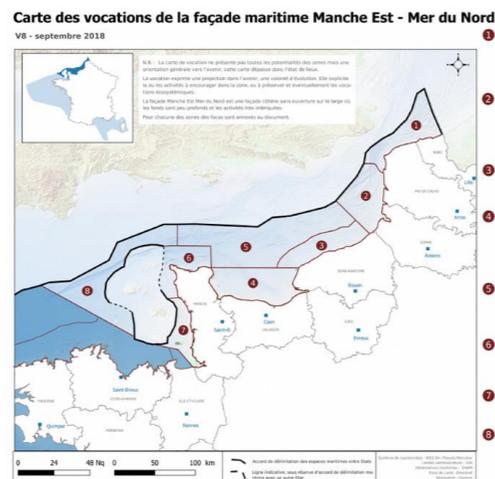


- « **End to hydrocarbon research and exploration** » law (2017) : RTE, as the contractor responsible for connecting up facilities becomes responsible for building and financing offshore farm connection (including offshore substation)

A modernized legislative framework for offshore wind (2/3)

▪ « ESSOC » law (2018) :

- Organisation of a public debate by the government before the call for tender in order to determine the project's geographical area;

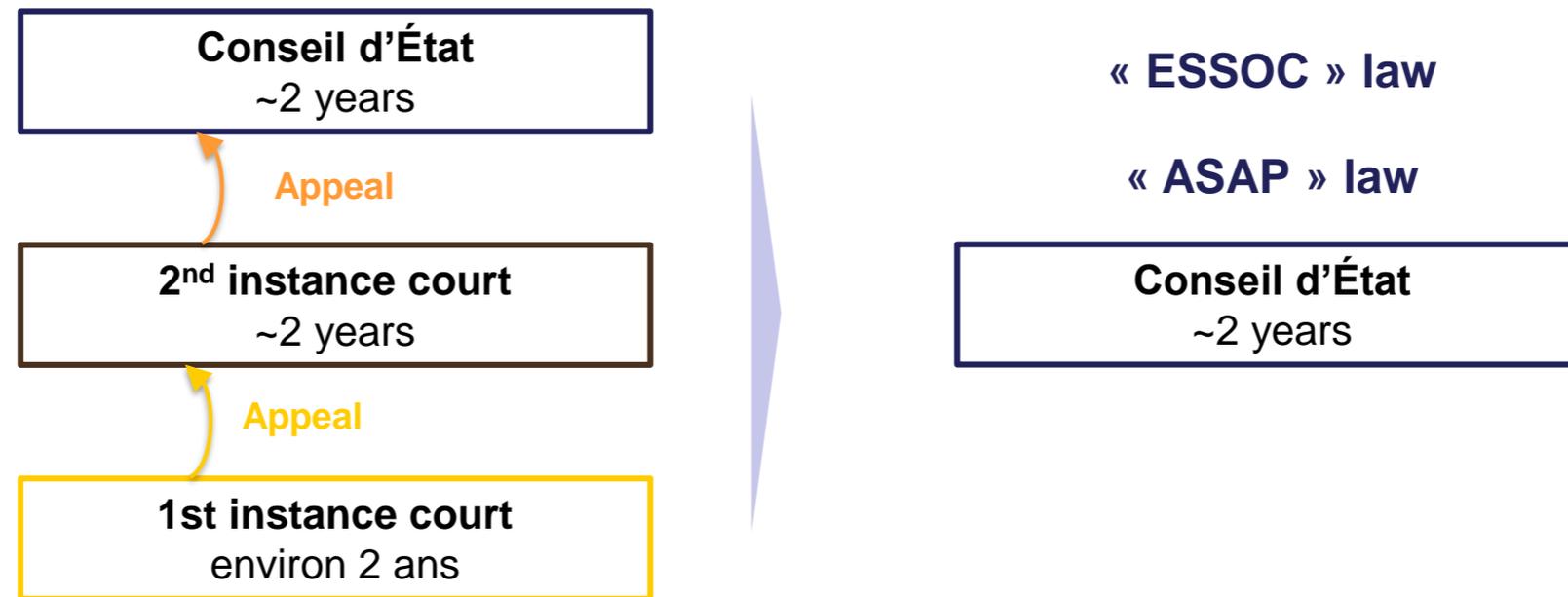


- Reform of the permitting regime so that the permits remain valid if some modifications to the projects occur because of technological progress, e.g. use of a larger wind turbine;
- Preliminary studies, including environmental site assessment and geotechnical studies, undertaken by the State before the call for tender, are delivered to candidates in order to reduce risks and thus the cost of production of electricity (LCOE).
- Reduction of timeframe for dealing with objections (suppression of 1st instance court)

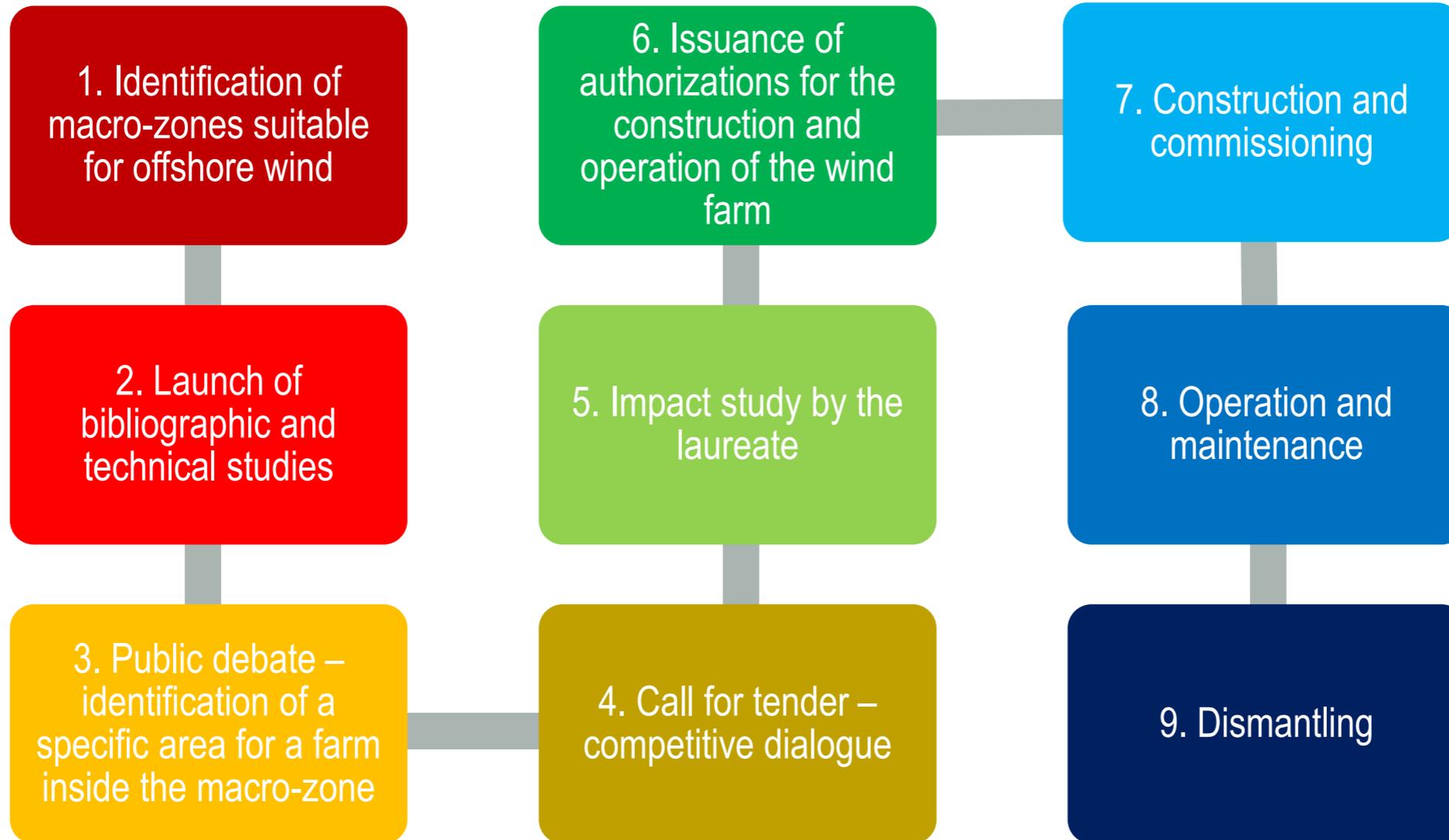
A modernized legislative framework for offshore wind (3/3)

▪ « ASAP » law (2020) :

- Launch of competitive dialogue before the public debate's end ;
- Public debates can cover several offshore wind farms at the same time;
- Reduction of timeframe for dealing with objections (directly at Conseil d'Etat, suppression of a 2nd instance court),



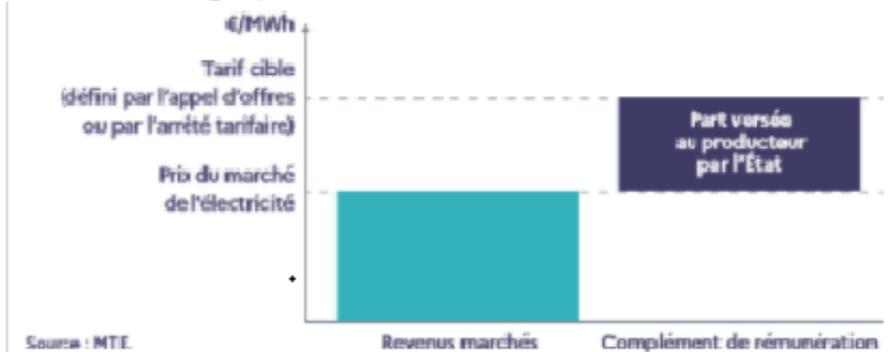
Offshore wind farm lifespan today



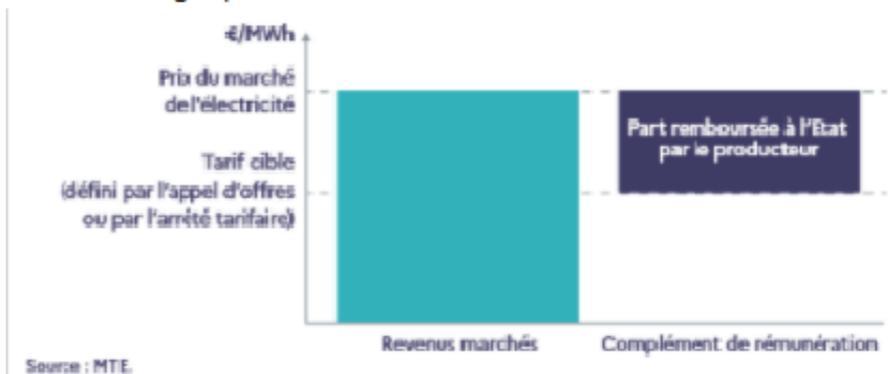
Support scheme for offshore wind

- The cost of fixed wind has dropped significantly in recent years but prices for floating wind are still high.
- To be sure that the revenues from the sale of electricity will offset the costs of construction and operation, **French government has decided to support wind energy by implementing a remuneration scheme ensuring a fixed remuneration per MWh: a double-sided Contract for Difference.**
- The last tender, for a farm at Dunkerque (600 MW), was awarded at 44€/MWh (without grid connection).
- This support scheme has to be accepted by the EU, as it is considered a State aid

“Complément de rémunération” scheme when market prices are below the target price



“Complément de rémunération” scheme when market prices are higher than the target price.



Biodiversity conservation and cohabitation of activities

Conservation of the environment ...

- According to the biodiversity protection policy and the UE policy, the **French government works to protect and to reduce risks for the biodiversity.**
- France has **9 marine natural parks**. In a logic of cohabitation of activities, the development of offshore renewable energies is possible.
- EU **Natura 2000** legislation allows to implant offshore wind farms if an environmental evaluation is undertaken. Offshore wind farms have to respect the local biodiversity.
- Offshore wind farms are submitted to the « **Avoid, reduce and offset** » **sequence.**

...and cohabitation of activities are key components of the offshore wind program

- France strongly supports the cohabitation of all activities at sea with offshore wind
- Whenever it is possible and secure, fishing is allowed inside windfarms



Photo 2 : Grands dauphins (Virginie Wyss - Cohabys)

Thank you for your attention

