

France's new green hydrogen support mechanism: an opportunity for European players?



Anouk DARCET-FELGEN

Partner, Avocat aux Barreaux de Paris et de Luxembourg



Charlotte HACOT

Lawyer

Wind, photovoltaic and biomethane industries have benefited from support mechanisms which have helped the sector to develop. The hydrogen industry is now to receive government support to speed up its development. In France, the government has announced a €4 billion plan to develop 1GW of electrolyzers to produce green hydrogen.

Main provisions of the draft specification document

The French energy regulatory authority (commission de régulation de l'énergie - CRE) has issued an opinion on the draft specification document for a new project funding mechanism benefiting both low-carbon and renewable hydrogen production. It provides for the division of the targeted installed capacity into three tender tranches (150 MW, 250 MW and 600 MW), and the organisation of a competitive procedure for the first tranche of the procedure in order to set out the specifications that will also apply to the next tranches.

The public support may consist of an operating aid (aide au fonctionnement), which would take the form of a contract for difference (CfD) that would cover the difference between the cost of producing renewable or low-carbon hydrogen and the price of producing a carbonised counterfactual; or a combination of an operating aid and an investment support (aide à l'investissement) to finance the electrolyser.

Organisation of the competitive tendering procedure

The competitive tendering procedure aims at the award of public support for a period of 15 years for the construction and operation of renewable or low-carbon hydrogen production units based on water electrolysis, a technique using an electric current to split hydrogen and oxygen atoms that does not release carbon in the chemical process of extracting hydrogen.

Article L811-1 of the French Energy Code defines the different types of hydrogen to be produced:

- Renewable hydrogen is produced either by electrolysis using electricity from renewable energy sources, or by any other technology using exclusively one or more of these same renewable energy sources and not conflicting with other uses allowing their direct recovery. The production process shall emit a quantity of carbon dioxide equivalent per kilogram of hydrogen produced that is less than or equal to a threshold.
- Low-carbon hydrogen generates emissions during its production process that are less than or equal to the threshold used to qualify it as renewable hydrogen, but which does not qualify as renewable hydrogen because it does not meet the other criteria.

The qualification of hydrogen is mainly based on the quantity of carbon dioxide released during production. These thresholds are to be specified by order of the Minister for Energy.

Candidates may only receive support for periods during which the production process emits a quantity of carbon dioxide equivalents less than or equal to 3.38 kg of CO₂ emitted per kilogram of hydrogen produced. In the event that this threshold is not met for the entire production of the installation, the support actually paid will have to be prorated to ensure that the tender-winning installation only receives support for the quantities of energy produced that meet the eligibility conditions. **The production of hydrogen from nuclear electricity** falls within the scope of the draft specifications.

The procedure is open to all applicants who are established on the territory of a Member State of the European Union or of the European Economic Area, wishing to build and operate a unit to produce renewable or low-carbon hydrogen by electrolysis of water on French territory.

Projects with a capacity **greater than 30 MW** identified for fuel refining, synthetic fuel production and direct industrial use without blending in France are eligible for the competitive tendering procedure, (except for use for heating and blending with methane gas).

The candidates' selection procedure

The competitive dialogue procedure consists of three phases: the phase for selecting candidates to participate in the competitive dialogue, the competitive dialogue phase, and the last phase for selecting the winning tenders.

The selection phase for applications to take part in the competitive dialogue

Early in the procedure, many documents must already be provided by the applicants, including information on the applicant's economic capacity (average annual turnover of more than €100 million over the last three years, excluding tax), financial capacity and references providing for the applicant's ability to finance projects with an investment cost of more than €30 million.

Applicants must also demonstrate their technical capacity by providing references for industrial projects "involving technological risks" that they or their controlling shareholders have carried out in the last ten years with an investment cost exceeding €30 million. The total investment cost for the references submitted must be at least €100 million.

It shall be noted that candidates may take part in the procedure alone or as part of a consortium. In the case of an application in the form of a consortium, the turnover of all the members of the consortium (and, where applicable, of the shareholder(s) controlling them) will be added together for the purposes of the economic capacity requirement. Regarding the references, the candidate consortium may take advantage of the respective references of the members of the consortium, giving priority to the references of the delegated representative.

Only a maximum of 5 candidates will be admitted to the competitive dialogue. They will be ranked based on their ability to meet the minimum requirements for application, or on criteria such as the maturity of their project, the relevance of the references justifying their technical capabilities, etc.

The competitive dialogue phase

The competitive dialogue phase is expected to last approximately four months and will be based on draft specifications provided by the Minister for Energy. The discussions must lead to the drafting of final specifications.

The final tendering and selection phase

The candidates who took part in the competitive dialogue will be invited to submit a tender according to the final specifications. The candidates' tender will be evaluated based on the following criteria:

- for at least 70% of the total score, a **price criterion** based on the amount of funding offered per tonne of CO2 avoided;
- for a maximum of 30% of the total score, **non-price criteria** including, including the facility's carbon footprint and its contribution to the objectives set out in article L. 100-4 of the Energy Code.

The tendering procedure targets major economic players

The minimum requirements regarding the **financial capacity** of candidates at the first phase of the procedure will tend to reduce the number of potential candidates. To mitigate this problem, the CRE proposed that candidates provide evidence of their financial capacity by combining a financial execution guarantee at the competitive dialogue application phase (a) with a

justification of the financial capacity required to finance the candidate project, including minimum criteria relating to the amount of equity in the candidate's balance sheet (b).

With regard to **technical capacity**, the CRE recommends limiting the maximum number of references that can be submitted to 5, in order to avoid excessive dilution of the references that are genuinely relevant to the candidates' project, and establishing as a minimum requirement that the candidate must have, at least 3 references that are considered relevant, with an investment cost above a minimum threshold set in the consultation document. Finally, the CRE considers that it would be appropriate to lower the minimum threshold of the technical references (i.e. €30 million in investment costs per reference) to limit the barriers at the early phase of the procedure.

Regarding the **selection of candidates**, the CRE suggests increasing the maximum number of candidates that can take part in the competitive dialogue to 8 in order to guarantee a diversity of operators and project types and to limit the risk that the volume of bids finally selected will be lower than the volume targeted for the 1st period.

Finally, the CRE supports a compensation system based on the quantity of hydrogen genuinely produced, rather than an investment aid. It also considers that delays in the provision of connection facilities should be grounds for postponing the deadline only when they cannot be anticipated and are attributable to the applicant.

The draft specifications have yet to be approved by the Minister for Energy. It is difficult to know whether the changes requested by the CRE and called for by the industry will be implemented.

While the draft specifications target large industrial companies or major consortiums, it is noteworthy that the public will to support major projects is part of a vision for the large-scale development of low-carbon and renewable hydrogen in France, enabling European players to position themselves on the French market. Nevertheless, small and medium-sized companies won't be excluded from the strategy on hydrogen development since they will still be able to apply to the call for tenders as part of a consortium, while projects with an installed capacity of less than 30 MW are eligible for the auction launched by the European Hydrogen Bank (minimum installed capacity of 5 MW).