



20 April 2021

H2IT position

Revision of the Communication on State aid rules for Important Projects of Common European Interest

H2IT

The Italian Hydrogen and Fuel Cells Association ("H2IT") aims at promoting the knowledge and the study of technologies and systems for the production, storage and use of hydrogen in Italy. H2IT overall objective is the development of the hydrogen supply chain and market, ensuring a leadership role for the Italian supply at European and international level.

H2IT brings together large, medium and small companies, research centers and universities active in the hydrogen sector and aims to be a reference point in the field of hydrogen, for the key players in the sector, for the institutions and for the society.

H2IT currently gathers 70 associates, representing the entire hydrogen value chain from production to end uses, aggregating the operators of production, transport, logistics and storage, manufacturers of technologies and components and companies that develop systems for the use of hydrogen in the mobility, residential, power generation and industry sectors.

INTRODUCTION

H2IT welcomes positively the review of the Communication on important projects of common European interest with the aim of updating the definition of IPCEIs and their compability criteria with the internal market State Aid rules.

Since H2IT represents the hydrogen value chain in Italy, this consultation on IPCEI's process and rules is of high importance for italian participation to the development of a Hydrogen IPCEI, which is in progress engaging 22 Member States that signed the "*Manifesto for the development of a European 'Hydrogen technologies and Systems' value chain*" the 17th of December 2020.

We strongly believe a Hydrogen IPCEI will help to achieve European objectives of CO2 reduction in line with the European Green Deal and will bring economic recovery after the covid-19 pandemic and strenghten european hydrogen value chain by supporting the development of large scale project.

H2IT welcomes positively the focus on SMEs since they are fundamental for a strong and coehsive value chain. SMEs and startups are a very important part of the innovation chain which radiates and extends from large companies; therefore any mechanism connecting SMEs initiatives to coordinated plans of large companies is to be promoted.

In the following section we are attracting the Commission attention on some important issues that might hinder the path of building an H2 IPCEI.

TOP PRIORITY ISSUES RELATED TO THE CHANGES INTRODUCED TO THE IPCEI COMMUNICATION

Point 17: Unless a smaller number is justified by the nature of the project¹⁷, the project must involve at least four Member States and its benefits must not be confined to the financing Member States, but extend to a wide part of the EU. The benefits of the project must be clearly defined in a concrete and identifiable manner¹⁸.

¹⁷ - A smaller number of Member States may be justified, for example, if the project concerns interconnected research infrastructures and TEN-T projects that are of fundamentally transnational importance because they are part of a physically connected cross-border network or are essential to enhance cross-border traffic management or interoperability.

¹⁸ - The mere fact that the project is carried out by undertakings in different countries, or that a research infrastructure is subsequently used by undertakings established in different Member States, is not sufficient for a project to qualify as an IPCEI. The Court has upheld the Commission's policy to consider that a project may be described as being of common European interest for the purposes of Article 107(3)(b) when it forms part of a transnational European programme supported jointly by a number of governments of the Member States, or arises from concerted action by a number of Member States to combat a common threat. Joined Cases C-62/87 and 72/87 *Exécutif régional wallon and SA Glaverbel v Commission* [1988] ECLI:EU:C:1988:132, paragraph 22.

Although the cross-border dimension is an intrinsic attribute of IPCEIs, we believe that this requirement might exclude the adoption of (first) H2 IPCEIs, therefore preventing their important contributions in terms of sustainable economic growth, jobs and competitiveness for industry and the economy.. Moreover, it would likely hinder the delivery of the Hydrogen Backbone project, as it would be arguably difficult to prove that the benefits stemming from the first hydrogen clusters would have a cross-border impact, not to mention the requirement associated with benefits applying to a wide part of the EU.

Making reference to Paragraph 26 of the COM, we propose that the requirements of “at least four Member States” does not apply to projects “of great importance for the environmental, climate, energy (including security of energy supply), transport, health or digital strategies of the EU EU or [that] contribute significantly to the internal market, including, but not limited to those specific sectors”.

Point 20 – The project must involve significant co-financing by the beneficiary

Large investments have to be developed and deployed, in order to ensure the transition in the Strategic Value Chain and to implement transformative business models. Nevertheless such important level of investments must come with some certainty of economic conditions for implementing investments. The proposed addition of “significant” to the co-financing provided by the beneficiary brings additional uncertainty on the funding intensity during the preparation of the Project Portfolio thus discouraging, for instance, ambitious capital intensive projects. The European Commission should clarify in the text that the State Aid may cover up to 100% of the funding gap, in presence of a co-financing from the beneficiary.

Point 25: For the purpose of this Communication, first industrial deployment means the upscaling of pilot facilities, demonstration plants or of the first-in-kind equipment and facilities covering the steps subsequent to the pilot line including the testing phase, but neither mass production nor commercial activities²². First industrial deployment activities can be financed with State aid as long as the first industrial deployment follows on from an R&D&I activity and itself contains a very important R&D&I component which constitutes an integral and necessary element for the successful implementation of the project. The first industrial deployment does not need to be carried out by the same entity that carried out the R&D&I activity, as long as the former acquires the rights to use the results from the previous R&D&I activity, and the R&D&I activity and the first industrial deployment are both covered by the project.

22 Limited atypical sales related to the testing phase, including sample or feedback or certification sales, are excluded from the notion of “commercial activities”.

This definition does not take into consideration the specificities of some sectors in the H2 value chain where the costs of a first innovative large-scale prototype cannot be absorbed by a large serial production or subsequent mass production. There are cases where disruptive innovations can only be tested at small scale in laboratories first, and applied on the first industrial prototype, which is inevitably sold to the client later, thus implying commercial activities. This is for example the case of the large shipbuilding sector where high-complex vessels require high time and costs of construction, and where there is a strong level of customization depending on the customer, on the operational profile or on market segment.

When it is not possible to decouple the FID from implementation, H2IT supports the alignment of the FID definition with that of “experimental development” included in the Commission Communication 2014/C 198/01 ‘Framework for State aid for research and development and innovation’: “*the development of a commercially usable prototype or pilot which is necessarily the final commercial product and which is too expensive to produce for it to be used only for demonstration and validation purposes.*” Similarly, for FIDs with a certain installation, the use of that certain installation should not be excluded for subsequent mass production if significant process improvements or process modifications were taken out during FID phase.

In relation to hydrogen and power to gas (PTG) facilities, there is great scope to learn from the potential of allowing PTG participation into the electricity ancillary markets in terms of sector coupling. Restricting the scope of the allowed commercial activities to “*limited atypical sales related to the testing phase, including sample or feedback or certification sales*” carries the risk of pre-empting the opportunity to make the most of sector coupling.

Eligible costs Annex and related provisions of Art. 34 of the COM- Funding for large infrastructure projects Referring to Point 26

Considering the specific nature of H2 projects, large infrastructures projects could be considered as complementary to the solutions mentioned in H2IT comment to point 25 (here above) and referred to exemplar First of its kind technology – FOIK, not intended to be a mere commercial prototype generating profits, but involving an innovative solution implemented in the market as a FOIK. technology introducing innovative concepts, to be validated before a full and wide market uptake, and after the introduction of additional support schemes and incentives to the specific sector, as foreseen by the upcoming new RED2 and GAS EC Directives.

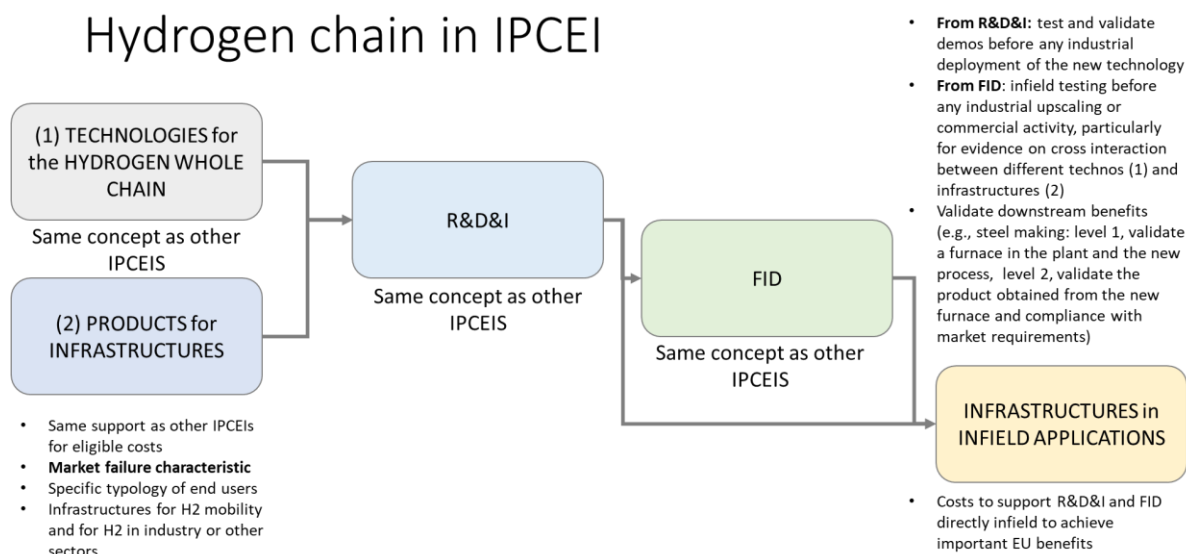
If these large infrastructures could pave the way for additional benefits related to the internal EC market, or environmental or other benefits included in the EC policies (e.g., outreach of the climate goals 2030 and 2050), there should be a specific mechanism allowing for both CAPEX and OPEX support limited to the reach of a plant or infrastructure profitability, so aligning it with a similar scheme of the funding gap utilized for R&D&I and FID activities.

The whole hydrogen chain has a bivalent picture: specific technologies in the chain and specific applications and uses. Both segments must be developed together to reach the impact in the market. Only a double sided approach can solve the egg and chicken dilemma and help a whole chain market development.

Within the scheme of the IPCEI there could be technologies following the same process of the IPCEI (on the left of the below image) and infield applications that will embed the results from R&D&I and FID respectively and design a full application framework, including the related infrastructures. R&D&I and FID must be coherently connected to the infield applications and vice versa.

The two levels, technologies and applications, can have two different funding gaps. One is referred to the manufacturing of a new product for the market, the second is related to the application into the hydrogen whole chain and, more in general, into the energy sector.

Hydrogen chain in IPCEI



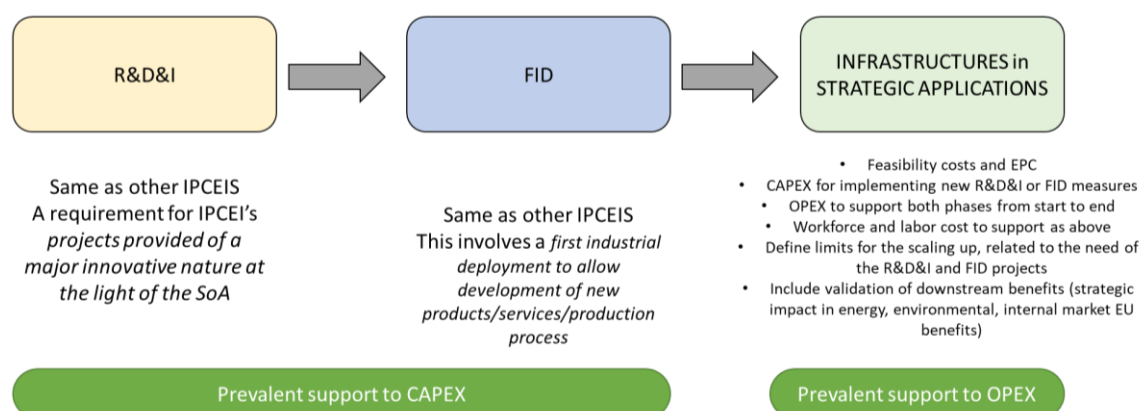
The funding gap of a new technology is related to the difference between all the investments versus all the revenues coming from a new product. The funding gap of an infrastructure projects is related to the difference between all necessary investments in realizing the specific infrastructure (in industrial use, in mobility, in other sectors) versus the revenues that can be obtained from commercial product(s) at the present market price, for the whole lifetime of the plant. In other terms, it's the gap to access the market with the specific product or service.

Without incurring in double funding, two parallel approaches could be followed:

- supporting the R&D&I and FID in technology development
- consider a second specific criteria to support strategic energy applications with the criteria of the funding gap applied to the lifetime of the specific infrastructure, plant or end use.

R&D&I and FID will be mostly (but not exclusively) supported on CAPEX, while strategic applications could be supported in OPEX under the funding gap mechanism for the FOIK projects following the scheme of credits for difference.

Eligible costs within the Specific Criteria



There should be inside the IPCEI scheme two different funding gap questionnaires: one for manufacturing companies, one for end users responsible to realize the application or the infield plant.

The eligibility of additional Opex in the FID as well as in the projects of great importance (Annex), to compensate the higher cost of renewable and low carbon hydrogen production, as well as end-users' higher costs due to the change to renewable hydrogen and to transforming industrial technologies and processes to hydrogen.

Point 56: The Commission will apply this Communication to all notified aid projects, even where the projects were notified prior to its application date

We recommend the Commission to take into consideration any possible negative effect on IPCEIs under preparation, coming from a retroactive application of the legal framework of the new communication.