

CONSULTATION RESPONSE

March 2023

List of candidate Projects
of Common Interest in the
thematic area of cross-border
CO₂ transport and storage
networks



RESPONSE TO THE LIST OF CANDIDATE PROJECTS OF COMMON INTEREST IN THE THEMATIC AREA OF CROSS-BORDER CO₂ TRANSPORT AND STORAGE NETWORKS

A total of [18 cross-border CO₂ transport and storage infrastructure projects applied](#) for the status as a “Project of Common Interest” (PCI) or “Project of Mutual Interest” (PMI, in cases of projects involving non-EU countries), covering 17 EU Member States and 4 non-EU countries. These projects collectively show tremendous potential for making a European CO₂ transport and storage network a reality, enabling large-scale European industrial decarbonisation. Putting into place the necessary infrastructure to transport and permanently store industrial CO₂ emissions is an important step in ensuring European industrial competitiveness in light of asymmetric international climate ambition, and in particular following the recent U.S. Inflation Reduction Act. However, more efforts are still needed to fully decarbonise European industries in line with the EU’s 2050 net-zero target.

Overall, 17 of the 18 PCI/PMI candidate projects contribute towards significant emission reductions in European industries, in Bellona Europa’s view. Awarding the projects highlighted in green with PCI/PMI status would help embed CCS in European decarbonisation discussions as well as help industries gain considerable technological know-how related to CCS. These projects have the potential to lower the cost of the technology paving the way towards economies of scale necessary for the large-scale deployment of the technology currently hindered by persistent market failures.

We especially find it important that CCS projects in the Central and Eastern European region are given support in order to avoid creating a gap in development towards industrial decarbonisation. Such a gap would disadvantage industries of the CEE region in the mid- to long-term and potentially shift industrial production towards North-Western Europe, leaving Central-Eastern European harder-to-abate industries with high prices of ETS allowances and no alternatives for decarbonisation.

Projects highlighted in orange also have the potential to contribute to European industrial decarbonisation but can do so only under certain conditions. Projects that foresee the utilisation of CO₂ to make products as a way to reduce emissions must include a full lifecycle analysis of those products to determine the process’ net contribution to emission reductions. Furthermore, in the case of projects involving the production/utilisation/transport of hydrogen, the sustainability of the entire hydrogen lifecycle (e.g., GHG emissions of electricity used and indirect emissions from energy use), as well as their impact on the rest of the power sector, must be assessed to determine the overall climate impact of each project.

The project highlighted in red, however, is likely to be characterised by considerable energy efficiency losses stemming from the use of scarce renewable resources to produce hydrogen, the indirect use of renewable energy (through the H₂ energy vector) to provide electricity, the transport of green hydrogen across seas, as well as the overall low (if any) contribution of the project to emission reductions. For the reasons detailed in the table below, Bellona Europa does not support the awarding of the project with the status of Project of Mutual Interest

NR.	TITLE OF THE PROJECT	SUPPORT/OPOSITION
1	CO₂TransPorts	Bellona Europa supports the awarding of the present project with PCI status and wishes to highlight the importance of putting into place cross-border, open-access transport and storage infrastructure. The development of CO ₂ infrastructure facilitates the flow of private investments into capture installations for industries in the region.
2	N-LITES	Bellona Europa supports the awarding of the present project with PMI status.
3	ARAMIS	Bellona Europa supports the awarding of the present project with PCI status.
4	NAUTILUS	Bellona Europa supports the awarding of the present project with PMI status.
5	EU2NSEA	Bellona Europa supports the awarding of the present project with PCI status.
6	NORNE	Bellona Europa supports the awarding of the present project with PMI status.
7	DELTA RHYNE CORRIDOR	The project includes a parallel pipeline to transport hydrogen from the ports towards the industrial cluster, where it can be used to decarbonise sectors with no alternative decarbonisation pathways. Despite the hydrogen pipeline element not being under the present thematic area, Bellona stresses that the sustainability of the production of such hydrogen remains to be assessed to determine the final climate impact of the project.
8	GERMAN CARBON TRANSPORT GRID	Bellona Europa supports the awarding of the present project with PMI status.
9	WH2V	<p>We do not support the awarding of the present project with PMI status as the project has several problematic elements:</p> <ol style="list-style-type: none"> 1. Without the existence of abundant additional renewable energy generation in Europe the production of electrolytic hydrogen threatens to cannibalise scarce renewable energy resources that could be used directly to power European businesses, which is what the project intends to achieve. 2. Generating electricity from green hydrogen to power European businesses is a highly inefficient use of the molecule: the electricity used to produce the hydrogen should instead be used directly. 3. The project likely comes with considerable inefficiencies and energy losses stemming from transporting green hydrogen (with captured carbon molecules acting as a carrier) from the USA (or UAE) to Europe as well as cross-border transportation within Europe. 4. In addition to the clearly inefficient uses of energy suggested by the project description seem problematic: when used synthetic methane based on carbon captured from industrial emissions produces delayed emissions which must be accounted for. The same applies for electricity produced from combusting this synthetic methane. And finally, converting hydrogen to methane and then converting it back to hydrogen is likely to also generate substantial (direct and indirect) emissions.

10	NOORDKAAP	The present project as it includes emissions from a biomass/coal power plant and should be treated with caution, in light of potential removal claims that need to be correctly assessed. Bellona is actively working to ensure the certification of removals is done in a manner that reflects the correct carbon accounting.
11	BIFROST	Bellona Europa advises to approach the present project with caution as the project leaves the door open for CO ₂ utilisation for part of the captured CO ₂ . We oppose the public support of, and the channelling of public funds intended for climate mitigation towards CCU projects unless it proves to significantly contribute to emission reductions according to GHG methodologies which consider the entire lifecycle of a CCU product.
12	ECO2CEE	Bellona Europa supports the awarding of the present project with PCI status. We find it important that CCS projects in the Central and Eastern European region are given support in order to avoid creating a gap in development towards industrial decarbonisation.
13	CCS BALTIC CONSTITUTION	Bellona Europa supports the awarding of the present project with PCI status. We find it important that CCS projects in the Central and Eastern European region are granted support.
14	GEOTHERMAN CCS CROATIA	Bellona Europa supports the awarding of the present project with PCI status. The project also includes the use and development of additional renewable energy sources and the use of residual heat in local communities, which is commendable.
15	PYCASSO	Bellona Europa supports the awarding of the present project with PCI status.
16	CALLISTO	Bellona Europa supports the awarding of the present project with PCI status.
17	AUGUSTA C2	Bellona Europa advises to approach the present project with caution as the project leaves the door open for CO ₂ utilisation for part of the captured CO ₂ . We oppose the public support of, and the channelling of public funds intended for climate mitigation towards CCU projects unless it proves to significantly contribute to emission reductions according to GHG methodologies which consider the entire lifecycle of a CCU product.
18	PRINOS CO₂ STORAGE	Bellona Europa supports the awarding of the present project with PCI status.



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Bellona Europa is an independent, non-profit organisation that meets environmental and climate challenges head-on. We are result-oriented and have a comprehensive and cross-sectoral approach to assess the economics, climate impacts and technical feasibility of necessary climate solutions. To do this, we work with civil society, academia, governments and polluting industries.