

Public

Environmental and Social Data Sheet¹

Overview			
Project Name:	JUST TRANSITION	BIOMASS EMETHANOL PLANT	
Project Number:	2023-0501		
Country:	Spain		
Project Description:	The project consists in the design, construction and operation of an integrated facility consisting of a 50 MW biomass cogeneration plant, carbon capture, green hydrogen production and green e-methanol plant in La Robla, Castilla y Leon (Spain).		
EIA required:		yes	
Invest EU sustainability proofing required		yes	
Project included in Carbon Footprint Exercise ² :		yes	

(details for projects included are provided in section: "EIB Carbon Footprint Exercise")

Environmental and Social Assessment

The Project involves the development of an innovative and fully integrated renewable energy production facility consisting of three components that will be implemented in two phases.

- Phase 1 focuses on constructing a biomass cogeneration plant with CO2 capture technology (CCU)³ Component I. The biomass plant is designed to produce 399,200 MWh/year of electricity and capture up to 400,000 tons of CO2 annually, significantly contributing to reducing greenhouse gas emissions.
- Phase 2 focuses on constructing two additional components: Component II a green hydrogen (H2) plant and Component III an e-methanol plant. The H2 will be produced through a 200 MWe electrolyser using renewable electricity supplied from the Spanish grid. The H2 will be used together with half of the captured CO2 to produce up to 140,000 tons of e-methanol per year.

The Project will also include essential enabling infrastructure, such as electricity grid connections, railway connections and water usage and discharge systems. All components will be located on the same industrial site.

The Project will be developed in the municipality of La Robla, a designated just transition area in Castilla y León, Spain. This region is part of the Just Transition Agreement (*Convenio de Transición Justa - CTJ*) for Montaña Central Leonesa-La Robla, which aims to mitigate the impacts of coal mine and thermal power plant closures.

The project has been declared a Public Utility Project (DUP), ensuring a focus on just transition in the region. The permitting process involves several key steps and milestones. Following the acquiring of DUP status, a Regional Project request was submitted and published on June 3, 2024, with the public consultation phase closing one month later. The promoter has addressed

¹ The information contained in the document reflects the requirement related to the environmental, social and climate information to be provided to Investment Committee as required by the Invest EU Regulation and it represents the equivalent of the information required in the template of the InvestEU sustainability proofing summary

² Only projects that meet the scope of the Carbon Footprint Exercise, as defined in the EIB Carbon Footprint Methodologies, are included, provided estimated emissions exceed the methodology thresholds: 20,000 tonnes CO2e/year absolute (gross) or 20,000 tonnes CO2e/year relative (net) – both increases and savings.

³ CCU – Carbon Capture Unit



all sectoral reports and the final report, leading to the approval of the Regional Project request by authorities on October 28, 2024. The Regional Project includes comprehensive urban planning, both general and detailed, management conditions, basic determinations for land redistribution and urbanization, as well as the basic projects for the industrial plants to be established. The Project will be implemented in the *"El Crispin"* industrial area of La Robla, which has been designated as industrial development land in 2023⁴. A collaboration agreement with the city council, established on June 6, 2024, ensures the purchase of the terrain and water availability for the industrial area. The Urban Compatibility Report, necessary for the EIA was received positively on August 9, 2024.

Environmental Assessment

The project follows the ordinary EIA permitting process of a public utility project.

<u>Component I</u> - The biomass plant and CCU were subject to Environmental Impact Assessment (EIA) and Integrated Environmental Authorization (in Spanish, Autorización Ambiental Integrada – AAI) permitting process. This process was initiated on April 24, 2024, with information published on June 11, 2024⁵. The Environmental Impact Declaration (in Spanish, Declaración de Impacto Ambiental – DIA) was approved and issued on January 21, 2025. The AAI authorization, the Prior Administrative Authorization (in Spanish, Autorización Administrativa Previa – AAP) and the Administrative Authorization for Construction (in Spanish, Autorización Administrativa de Construcción – AAC) are expected to be issued in Q1 2025. The biomass plant will comply with Best Available Technology (BAT) as per the EC Decision 2021/2326, establishing BAT conclusions in accordance with Directive 2010/75/EU for large combustion plants.

<u>Components II and III</u> - The H2 and e-methanol plants also undergone the EIA and AAI permitting process. This process was initiated on December 18, 2023, with information published on April 10, 2024, for H2 production and March 19, 2024, for e-methanol production. Favourable DIA authorizations for both projects were issued on September 10, 2024⁶. The AAIs were issued on October 10, 2024, for the H2 plant⁷, and October 18, 2024, for the e-methanol plant⁸ and they have been made available to the public.

<u>Electricity grid connection</u> - The project requires two electricity connection lines: a 132 kV line for the biomass cogeneration plant and a 400 kV line for the hydrogen, methanol, and carbon capture plants. The Promoter has received and accepted proposals from the national grid manager (REE)⁹ for (i) access and connection for the biomass plant on October 10, 2024, and (ii) access and connection for the 400 kV line for the H2, e-methanol and CCU plants on October 17, 2024. The use of high-voltage underground lines minimizes the visual and environmental impact on the landscape.

<u>Railway connection</u> - The railway connection authorization was submitted on May 15, 2024, and accepted by ADIF¹⁰ on August 5, 2024. The connection is designed to facilitate loading operations in the e-methanol zone and unloading in the biomass zone, linking the project site with the railway Centa de Baños – Gijón. The connection does not require an EIA or other environmental authorization. Railway connection authorization has been received on December 10, 2024.

<u>Water usage and discharge systems</u> - Water demands for the project will be supplied from the Bernesga river, requiring authorization from the Confederación Hidrográfica del Duero (CHD)¹¹.

⁴ BOCyL n.º 32, 16 de febrero de 2023 - Disp. 016; BOCyL n.º 228, 28 de noviembre de 2023 - Disp. 016

⁵ BOCyL n.º 112, 11 de junio de 2024 - Disp. 034

⁶ BOCyL n.º 182, 18 de septiembre de 2024 - Disp. 011; BOCyL n.º 182, 18 de septiembre de 2024 - Disp. 012

⁷ BOCyL n.º 203, 17 de octubre de 2024 - Disp. 015

⁸ BOCyL n.º 209, 25 de octubre de 2024 - Disp. 032; AAI permit for capacity of 100,000 tons e-methanol per year

⁹ REE - *Red Eléctrica de España*, which is the Spanish electricity grid operator responsible for the transmission and operation of the national electricity system

¹⁰ ADIF - Administrador de Infraestructuras Ferroviarias, which is the Spanish state-owned company responsible for the management and maintenance of railway infrastructure in Spain

¹¹ Confederación Hidrográfica del Duero (CHD) or the Duero River Basin Authority is an inter-community basin organization in Spain responsible for managing the water resources and hydrological planning of the Duero river basin



The permitting request was submitted in June 2023. The project development is considered compatible with the regional Hydrological Plan, with specific conditions provided by the CHD. Historical observed information from the Bernesga river suggests that the requested water usage is within sustainable limits, minimizing the risk of water scarcity in the region. The water concession proposal issued by the authorities has been accepted by the Promoter on January 21, 2025. The wastewater treatment plant (WWTP) will treat rainwater, refrigeration water, and sanitary use water. The WWTP will be owned and executed by the municipality, which will jointly manage the WWTP together with *Sociedad de Medioambiente de la Junta de Castilla y León* (SOMACYL), as part of the *"El Crispin"* industrial area infrastructure, with the permitting process initiated on July 22, 2024, including water discharge to Bernesga river requested to CHD. The wastewater treatment and discharge authorizations are expected by the end of Q1 2025.

<u>Natura 2000</u> – The Project is situated near the Natura 2000 site ZEC ES4130079 "*Riberas del Río Esla y afluentes*"¹². Environmental Impact Assessments (EIAs) have evaluated potential impacts on this protected area. While the Project will not compromise the site's integrity, there are direct and indirect effects on habitat loss, noise, and water quality. These impacts will be mitigated through preventive and corrective measures during construction and operation phases, as well as compensatory measures. Additionally, habitat restoration and maintenance will enhance the site's connectivity and functionality.

<u>SEVESO</u> - The Project falls under the SEVESO Directive 2012/18/EU, as it involves industrial risks due to the use and storage of hazardous substances like hydrogen and e-methanol. The Project includes both lower and upper-tier SEVESO establishments, ensuring comprehensive risk management and adherence to safety regulations.

Climate Assessment

Paris Alignment:

The project has been assessed for Paris alignment. The Project aims to decarbonise the electricity and transport sectors, decreasing the use of fossil feedstock in these domains and, therefore, is considered to be aligned both against low carbon and resilience goals against the policies set out in the Climate Bank Roadmap and Energy Lending Policy.

EIB Carbon Footprint Exercise

The total emissions of the Project in a standard year of operation are estimated at 346.9 kt of CO2-equivalent per year. In the baseline scenario (without the project), it is assumed that the renewable energy that would be otherwise produced by the project is generated by fossil-based fuels, with annual emissions levels of 2,261.4 kt CO2-equivalent. Therefore, the net emission savings due to the Project are estimated at 1,914.4 kt CO2-equivalent per year. For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount signed in that year, as a proportion of project cost.

Social Assessment

The closure of the coal mine in 2018 and the thermal power plant in 2020 has resulted in significant job losses and economic challenges in La Robla region. The project supports a just transition, ensuring that the shift away from traditional energy sources towards sustainable and renewable energy benefits the entire community. The project will foster sustainable economic growth and employment, by bringing back industrial activity to the area. It will not only create direct and indirect employment opportunities, but it will also revitalize the local economy by stimulating related businesses and improving infrastructure. The Project will generate about 1,000 temporary jobs during construction and will create about 180 new permanent jobs during the operational phase, with spillover effects on local, rural economies, in the upstream and downstream value chains.

Public Consultation and Stakeholder Engagement

¹² N2K ES4130079 dataforms



Public Consultation has been carried out as part of the EIA and AAI processes, as presented in the Environmental Assessment section above. In brief, the following public consultation phases for various project components:

- <u>Regional Project authorization</u>: public consultation lasted one month starting June 4, 2024, and the Promoter addressed all public comments.
- <u>Biomass plant and CCU</u>: public consultation period: June 11, 2024, to July 23, 2024. The Promoter addressed all public comments on the project.
- <u>H2 and e-methanol plants</u>: public consultation lasted one month, starting on April 10, 2024, for H2 production and March 19, 2024, for e-methanol production. The public consultation period has ended, and the Promoter has addressed all comments.
- <u>Water concession</u>: Public consultation was initiated in February 2024 and lasted for one month. No significant comments have been received from the public.

Other Environmental and Social Aspects

The Project's biomass feedstock will primarily consist of agricultural residues, especially corn straw, but also rye and rapeseed straw, woody biomass from vines and fruit tree pruning. Forest biomass is not expected to be used in the project. The biomass will be sourced within 200 km of the plant, in compliance with the Renewable Energy Directive (RED II and RED III) requirements, including the cascading use of woody biomass, and sustainability certifications like ISCC¹³ EU or SURE¹⁴.

Through its Environmental and Social Policy (ESP), the Promoter will ensure that the project will be built and operated complying with environmental and social requirements, as per the relevant legislation.

Regular monitoring and compliance with emission levels to air, water and noise, as well as other environmental and social performance indicators will be performed by the relevant authorities, as specified in the environmental permits and authorizations.

Conclusions and Recommendations

Overall, the Project has well advanced through the various permitting processes, with most of the permits and authorizations expected to be completed in Q1 2025. The declaration of the project as a Public Utility Project and Regional Project has provided a comprehensive approach to environmental permitting and impact assessment, demonstrating a commitment to sustainable industrial development and environmental protection.

Sustainability proofing conclusion: the Project is carried out in compliance with applicable EU and national environmental and social legislation. Based on the environment, climate and social (ECS) information, and based on the review of the potential ECS risks and impacts, as well as the mitigation measures and management systems in place, the Project is deemed to have low residual ECS risks and impacts. No further sustainability proofing is required.

Project conditions:

- Any biomass supplied to the plant must be subject to a transparent, credible chain of custody, in line with Renewable Energy Directive (RED II and RED III) requirements, including biomass sustainability certification (e.g. ISCC EU, SURE, FSC¹⁵, PEFC¹⁶).
- Comply with the sustainability principles and requirements of the EU regulatory framework, as applicable i.e. EU Forest Strategy for 2030, LULUCF Regulation

¹³ ISCC – Trans Certification & Inspection Turkey

¹⁴ <u>SURE – Sustainable Resources Verification Scheme</u>

¹⁵ Home | Forest Stewardship Council

¹⁶ <u>PEFC - Programme for the Endorsement of Forest Certification</u>



(841/2018), Regulation (EU) 2023/1115 on deforestation-free products and commodities.

- Submit to the Bank the updated AAI permit for the e-methanol plant (i.e. capacity 140,000 tons of e-methanol per year)
- Submit to the Bank the relevant IED, WWTP and operating permits of the project before starting to operate the new facilities.
- Ensure that all Engineering, Procurement and Construction (EPC) and Operation and Maintenance (O&M) contractors and subcontractors will be ISO certified (e.g. ISO 9001, ISO 14000, OHSAS 18001, ISO 45001). Ensure that EPC and O&M contractors will comply with all required environmental and social standards.
- Annually provide evidence to the Bank to what extent the electricity supplied to the hydrogen production plant has met the technical screening criteria set under the Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 for determining if the economic activity¹⁷ qualifies as contributing substantially to the climate change mitigation objective.

Subject to the above E&S conditions on the project and taking into account Promoter's capability and the systems in place to manage environmental and social impacts and issues, the project is considered to be acceptable for EIB financing in environmental and social terms.

¹⁷ Notably the economic activities 3.10, 4.12 which refer to Commission Delegated Regulation (EU) 2023/1184 (for RFNBO in transport) and Commission Delegated Regulation (EU) 2023/1185 (GHG savings threshold), both under Directive (EU) 2018/2001.