



European  
Commission

## Innovation Fund Programme



### Overview of ongoing projects in Germany

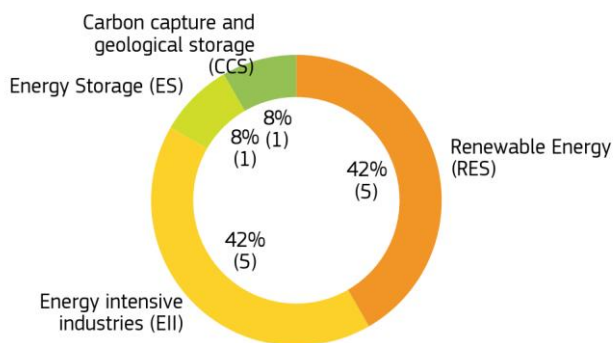
Funded by the revenue of the EU Emissions Trading System, the Innovation Fund's goal is to help businesses investing in innovative low-carbon technologies with significant GHG emissions reduction potential.

The Innovation Fund currently supports **12 projects** located in Germany, which will contribute to the decarbonisation of European industries with a total expected GHG emission reduction of **81.3 Mt CO<sub>2</sub> equivalent in the first 10 years of operation**.

The total **Innovation Fund grant in Germany is of EUR 1.1 billion**, out of the **total relevant costs of EUR 2.3 billion**, as defined in Art 5 of the Delegated Regulation 2019/856 on the Innovation Fund<sup>1</sup>.

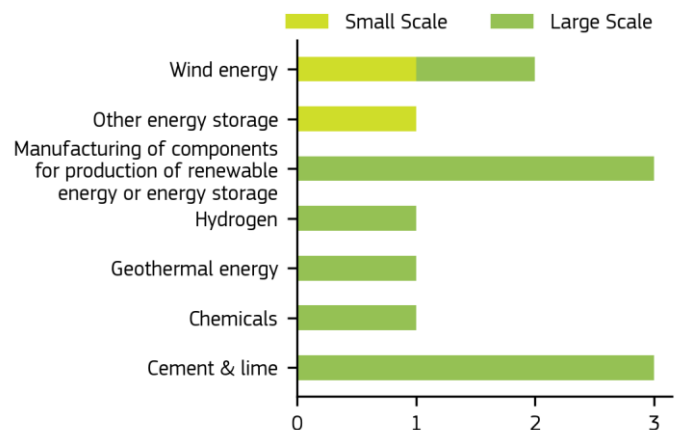
#### Projects per category

Number of projects and percentage of the total



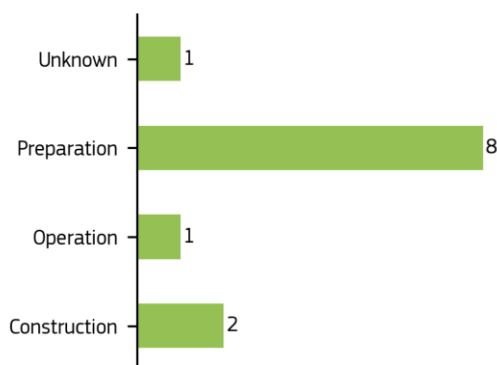
#### Projects per sector

Number of Small and Large-Scale projects



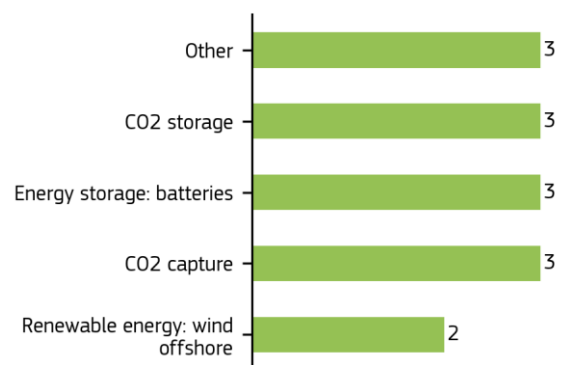
#### Projects per phase<sup>2</sup>

Number of projects



#### Top 5 technology pathways<sup>3</sup>

Number of projects



<sup>1</sup> OJ L 140, 28.5.2019, p. 9.

<sup>2</sup> Preparation means the period before financial close is reached; construction means the period between financial close and entry into operation; operation means that the construction is finished and the project has already started production.

<sup>3</sup> Projects may employ several technological pathways, only the top 5 per country are kept in the graph.

## List of ongoing Innovation Fund projects in Germany

Acronym	Title	Sector	Start date	Project phase	Beneficiaries	Innovation Fund grant (EUR million)	Expected GHG emission avoidance (t CO2eq)
<b>Large Scale</b>						<b>1,063.3</b>	<b>79,908,381</b>
C2B	Carbon2Business	Cement & lime	01/01/2023	Preparation	HOL SER   HOL TECH   HOL	109.8	13,136,686
EAVORLOOP	The Eavor-Loop first of its kind commercial scale implementation of an innovative closed-loop geothermal technology	Geothermal energy	01/10/2022	Construction	EavorGeretsried	91.6	439,735
ELYAS	Smart ELeCtroLYsis Module manufacturing – upscaling with Automotive production technology with a Sustainability focus	Manufacturing of components for production of renewable energy or energy storage	01/01/2024	Preparation	BOSCH	51.9	23,441,943
EVEREST	Improved calcination and carbon capture for the largest lime plant in Europe	Cement & lime	01/01/2024	Preparation	AL E&C France   ALD   LHOIST   AL E&C Germany	228.7	9,309,295
GeZero	First German inland cement plant Geseke becomes net carbon negative by implementing a full CCS chain	Cement & lime	01/01/2024	Preparation	HM	190.9	7,265,868
HOPE	High-efficient Onshore PV module production in Europe	Manufacturing of components for production of renewable energy or energy storage	01/01/2024	Preparation	MBI	200.0	17,080,051
HyNCREASE	Hydrogen-related Novel Components, Robotic Elements, and manufActuring Solutions for Electrolyzers and fuel cells	Manufacturing of components for production of renewable energy or energy storage	01/04/2023	Preparation	Capannoni S.r.l   DND	5.2	3,922,533
HydrOxy	HydrOxy Hub Walsum	Hydrogen	01/01/2024	Preparation	IQONY GmbH   IQS	49.2	1,292,898
MoReTec-1	Fully electrified chemical recycling of plastic waste for deep decarbonisation of the polymer industry	Chemicals	01/01/2024	Preparation	LYB INDUSTRIES	40.0	823,484
N2OWF	Nordsee Two Offshore Windfarm Innovation Project	Wind energy	01/04/2022	Construction	Nordsee2	95.9	3,195,888
<b>Small Scale</b>						<b>6.5</b>	<b>1,393,167</b>
Aquilon	Airborne wind hybrid renewable microgrid with RedOX Flow battery to provide flat renewable energy to an industrial site	Wind energy	01/01/2022	Unknown	LABORELEC   StoreD   Storengy DB   ENGIE	2.0	1,566
CarBatteryReFactory	Assembly plant for serial production of industrial energy storage systems based on second-life car batteries and disruptive full-pack technology.	Other energy storage	01/01/2022	Operation	FENECON	4.5	1,391,601

## Project overview

Acronym	Title	Description
Aquilon	Airborne wind hybrid renewable microgrid with RedOX Flow battery to provide flat renewable energy to an industrial site	<p>The objective of this project is to create a carbon neutral solution for the energy provision of the gas storage site of Storengy at Peckensen. Storengy considers this site as a demonstrator for future replication to similar sites in their portfolio where similar needs and restrictions apply. This project frames in a larger program of innovative projects targeting the decarbonisation of the Storengy activities and by extension the general movement of the ENGIE group to be a leader in the energy transition.</p> <p>The Aquilon project is a demonstrator for both airborne wind energy (AWE) production at 160 kW scale and an integrated renewable energy and storage (RES) solution including multiple diverse renewable energy sources (PV and AWE) and an advanced storage system (redox-flow battery or RFB of 420 kW) to produce a flat electricity output profile thanks to and advanced microgrid solution incorporating a smart energy management system (EMS). Furthermore the project will test the RFB for ancillary (grid stabilising) applications.</p> <p>The site where we decided to construct this demonstrator is the Storengy Peckensen Underground Gas Storage site because of the need for renewable baseload flat-profile electricity consumption and the specific safety measures and site restrictions to take into account linked to a gas storage site prohibiting the use of more conventional renewable energy production technologies.</p> <p>This project is a good example of a flat-profile consumer with specific needs as well as the perfect proof of usage of AWE and its adapted storage technology. With this project, a total of 1 566 ton CO2 emissions will be avoided.</p> <p>The individual blocks or a similar composition of these blocks can be upscaled to a very wide extend as the AWE have a wide variety of potential application markets (both centralised as decentralised) and the RFB can be implemented in a wide range of high-cyclic applications (either ancillary services or combines to AWE or other renewable assets).</p>
C2B	Carbon2Business	<p>Carbon2Business project will deploy an innovative carbon capture technology at Holcim Germany's cement plant in Lägerdorf, Germany and provide the captured CO2 as raw material to different industries in the region. Holcim will build a new kiln line, using an innovative 2nd generation oxyfuel process and a downstream Compression and Purification Unit (CPU). By implementing this highly innovative technology, Carbon2Business will reduce the greenhouse gas emissions of its cement production by 128% compared to the reference scenario calculated over the first ten years of operation.</p>
CarBatteryReFactory	Assembly plant for serial production of industrial energy storage systems based on second-life car batteries and disruptive full-pack technology.	<p>Energy supply is rapidly turning decentralized and going digital. Electromobility will be the new mobility standard. Turnkey energy storage containers, made from vehicle batteries, will enable high cost savings for industry and grid operators. But so far there is a lack of standardised, industrial (and thus economic and scalable solutions) for the re-use of car batteries. Since over ten years FENECON, a German SME, recognizes the potential of these upheavals; it continues to develop innovative solutions for containerized storage systems. Strong partnerships with the automotive industry led to the implementation of the complete car battery pack, allowing the use of BMS, housing and temperature management. The innovative use of 2nd life batteries in a stationary storage system significantly improves their carbon footprint; no dismantling, rebuilding, or partial scrapping is necessary. An efficient 2nd life battery market will be created as added value after being used in the vehicle, before the ultimate recycling process. Since 2019 the disruptive system FENECON Industrial is tested as a plug-and-play version for stationary and mobile use. Additionally, an open-source, manufacturer-independent and platform-based energy management software was initiated and developed by FENECON, thus allowing all manner of combined applications. Now it is the right time to scale up. FENECON invests in the construction of a plant with an assembly for efficient and sustainable serial production for the disruptive system. This is the CarBatteryReFactory project, a main pillar of the company's future, boosting its growth in terms of turnover and number of employees while reducing the GHG emissions considerably. For the initial market introduction FENECON begins the commercialization on the European markets. The CarBatteryReFactory intends to become the European leader of 2nd life battery energy storage systems.</p>
EAVORLOOP	The Eavor-Loop first of its kind commercial scale implementation of an innovative closed-loop geothermal technology	<p>The Eavor-Loop at Geretsried, Germany will provide clean, dispatchable and baseload energy for district heating and/or power generation. It consists of a large underground radiator buried at 4 500 metres. Operating under a natural thermosiphon requiring no pump and no aquifer, fresh water will circulate through the radiator carrying the heat to surface. With no greenhouse gas (GHG) emissions during operation, Eavor Loop will avoid almost 100% of the emissions compared to the reference scenario. Eavor Loop also is an environmentally benign solution, with no water treatment issues, fracking or earthquake risks: it can be installed virtually anywhere providing the EU with a scalable, secure source of renewable heat and power.</p>
ELYAS	Smart ElectroLYsis Module manufacturing – upscaling with Automotive production technology with a Sustainability focus	<p>The ELYAS project (smart ElectroLYsis module manufacturing – upscaling with Automotive production technology with a Sustainability focus) takes a significant step towards a cost- and resource-efficient proton exchange membrane (PEM) stack production, by meeting the highest quality standards for secured long-term running. It is expected that 100% relative greenhouse gas (GHG) emission avoidance will be achieved compared to the reference scenario.</p> <p>After starting the production of its new ElectroLYsis (ELY) stack in 2025, BOSCH will industrialise the novel Smart Electrolysis Module (SEM). This combines the ELY stack with cost-efficient, robust and highly available automotive-based power electronics, control unit and sensors, including global service offerings. This unique, pre-assembled and ready-to-use cloud connected system will reduce commissioning efforts of large-scale electrolyzers by up to 80%. It will also significantly increase their operating efficiency and availability. The ELYAS project is designed for rapid scale-up, and the revenue model has been combined with a cloud based digital AIoT (Artificial Internet of Things) service model. It aims to achieve an absolute GHG emission avoidance of 23.6 million tonnes CO2 equivalent over the first ten years of operation.</p> <p>The innovative production scheme of the ELY stack and the Smart ELY Module is an active and important contribution to climate change technology. The ELYAS project will contribute to the widespread implementation of electrolysis technology which will lead to a significant decrease in fossil fuels dependency.</p> <p>The first main industrialisation site will be BOSCH's Bamberg plant, which is ready for transformation from automotive to hydrogen products involving experienced and trusted local suppliers. The regional economy of the Bamberg region is largely based on automotive suppliers (this industry provides almost 15 000 jobs in the region). Many of the local companies produce components for combustion engines. Accordingly, in the Bamberg region, the success of the ELY Stack ramp-up has significant potential for the regional economy. The ELYAS project will accelerate the development of a local supply chain for ELY stack manufacturing. Thus, ELYAS will contribute to job creation and generate local added value for the North Bavarian economy.</p>

Acronym	Title	Description
EVEREST	Improved calcination and carbon capture for the largest lime plant in Europe	<p>The objective of the Everest project is to almost completely decarbonise Europe's largest lime plant, located in Flandersbach, Germany. The project will construct a completely new type of lime kiln and a large-scale industrial separation plant, which will allow CO<sub>2</sub> to be captured and stored, both permanently and safely. The project plans to achieve 89% relative greenhouse gas (GHG) emission avoidance compared to the reference scenario.</p> <p>This innovative project will cover the full CO<sub>2</sub> value chain from an inland lime plant: capture, pipeline transport, liquefaction, shipping, and offshore geological storage. It will bring together all the elements of the carbon capture and storage (CCS) chain, solving potential interface issues and demonstrating the full value chain for the first time on an inland lime plant. For the carbon capture aspect of the project, a CO<sub>2</sub> capturing unit dedicated to flue gas treatment will be connected to a combination of rotary kilns and parallel flow regenerating kilns (PFRK). Moreover, new PFRK Oxyfuel kilns will be built with a specialised technology to capture the CO<sub>2</sub> from these types of kilns which is already highly concentrated. This technology has the potential of wider impact in the sector, since PFRKs are the most commonly used kiln type in the lime industry worldwide. The project is expected to significantly raise the technology readiness level of the key technologies being used, particularly for existing kilns. The fully developed project aims to avoid, through capture and storage, absolute greenhouse gas (GHG) emissions of up to 9.3 million tonnes of CO<sub>2</sub> equivalent over the first ten years of operation.</p> <p>The project will contribute to the European goals of promoting carbon capture and storage technologies, such as the objective of the Net-Zero Industry Act of achieving 50 megatonnes (Mt)/y CO<sub>2</sub> storage capacity by 2030. Throughout its lifetime Everest will share its experiences to support other industries in their efforts to contribute to the EU's objective of achieving climate neutrality by 2050 and will be instrumental to create CO<sub>2</sub> supply chains and a new CO<sub>2</sub> economy.</p> <p>The project will also create potential socio-economic impact, planning to create 40 direct jobs and 500 indirect jobs. Everest shows a high scalability potential on existing plants both at sector level (cement and lime industry), and on an economy-wide level across sectors and across countries, tackling one key "difficult-to-abate" sector. Due to its sheer size, Everest will be a nucleus for the CO<sub>2</sub> infrastructure that is needed in Europe and will help other CO<sub>2</sub> emitters within and outside the lime industry to develop and establish their own CCS projects.</p>
GeZero	First German inland cement plant Geseke becomes net carbon negative by implementing a full CCS chain	<p>GeZero (Geseke Zero Emissions) is a full-chain and a full-scale Carbon Capture and Storage (CCS) project (from source to sink) for Geseke, a Heidelberg Materials' cement plant in North Rhine-Westphalia (Germany). The project plans to build a new second generation Oxyfuel kiln on an industrial scale. This will be combined with several innovations to improve the technical, economical, and environmental performance of the plant, leading to approximately 100% relative GHG emission avoidance compared to the reference scenario.</p> <p>The first-of-its-kind project will contribute to the development of an entire CCS value chain solution for a location which is not in close proximity to the coast nor to inland carbon dioxide (CO<sub>2</sub>) storage options. Starting to operate in 2029, the project aims to safely capture and store approximately 700 000 tonnes of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) annually beneath the North Sea. This is equivalent to about 3.5% of the annual CO<sub>2</sub> emissions of the German cement industry, or the yearly average CO<sub>2</sub> footprint of 66 700 Germans (calculated according to the Federal Environment Agency, 2023). The project is expected to transform the Geseke plant into one of the first fully decarbonised European plants to produce cement and clinker.</p> <p>The project includes a new cutting-edge oxyfuel kiln combined with upstream Oxygen (O<sub>2</sub>) production through an Air Separation Unit (ASU). The purification (concentration) and liquefaction of the CO<sub>2</sub> will take place in a Cryogenic Processing Unit (CPU). GeZero's logistical concept includes rail loading and interim storage facilities. The CO<sub>2</sub> will be transported via train to Wintershall Dea's hub "CO<sub>2</sub>nnectNow" in Wilhelmshaven and from there via ship and pipeline to the final permanent storage site. This transport solution by rail will bridge the gap until a CO<sub>2</sub> pipeline infrastructure is available. The electrical energy demand will be met exclusively by renewable energy. For example, a new solar farm at the factory premises will help to cover a small portion of this demand. In addition, biomass will be used for thermal energy generation and to capture the associated CO<sub>2</sub>, which will create so-called negative emissions, thus sustainably contributing to the EU's CO<sub>2</sub> reduction targets.</p> <p>GeZero contributes significantly to reaching the climate goals of the industrial sector and to establishing a future carbon management infrastructure. In addition, due to its demand for green energy, the project underlines the need for energy transition and aims to be part of the solution by installing its own solar power farm. GeZero will serve as a CO<sub>2</sub> collection hub for smaller local emitters, giving them access to intermediate storage and rail loading infrastructure. Located near four other cement plants, GeZero plays a crucial role to help making this part of Germany a model region for climate-neutral cement production, ensuring the creation of future-proof jobs.</p>
HOPE	High-efficient Onshore PV module production in Europe	<p>The objective of the HOPE project is to establish an additional 3.5 gigawatt (GW) annual production capacity of high-performance Photovoltaic (PV) cells and modules in Europe, to strengthen European supply chains and energy independence. A cell and a module manufacturing facility will be set up in Germany, while an additional module manufacturing facility will be established in Spain. HOPE will introduce the next generation heterojunction technology (HJT), HJT 2.0; with this innovation, enabling the production of longer-lasting, higher-efficient, cutting-edge PV modules. HJT 2.0 modules also have a significant cost advantage for investors and operators. HOPE will supply the modules to build hundreds of new PV power parks in Europe. This project will reduce greenhouse gas (GHG) emissions by 99.9% compared to the reference scenario.</p> <p>In the HOPE project, the HJT 2.0 technology will be introduced to drive HJT-cell based modules to maximum efficiency, leveraging significant advantages in the efficiency of solar cells. With the HOPE project, Meyer Burger will implement a set of major innovations based on a revolutionary production concept, comprising cell and module manufacturing, materials, and smart factory design. HJT 2.0 is based on proprietary technologies and will overcome prevailing but outdated technologies like "passivated emitter and rear cell" (PERC) in the PV market. An absolute greenhouse gas (GHG) emission avoidance of 17 million tonnes CO<sub>2</sub> equivalent is expected. This has been calculated based on the proportional contribution that modules have in a PV power park, alongside other components such as inverters and installations. The total energy generated by the modules is equivalent to twice of the annual electricity consumption of the city Berlin. Additionally, the PV modules will be produced with low emissions, significantly reducing the overall carbon footprint of the PV industry.</p> <p>HOPE will contribute to strengthening European strategic sovereignty in the PV value chain. The innovations in the product and process design will contribute to increased resource efficiency in Europe, and the associated new renewable energy generation capacity will be indispensable for the European Green Deal.</p>

Acronym	Title	Description
		<p>Nearly 1,400 new jobs will be directly generated by the project. Additionally, the job-multiplier of PV-based electricity generation is the largest among renewable technologies, with 2,200 indirect jobs that can be attributed to the project (e.g. at suppliers or linked to installing and operating the power parks). The regional economies will benefit both from local sourcing as well as from the availability of locally produced PV components.</p>
HyNCREASE	Hydrogen-related Novel Components, Robotic Elements, and manufacturing Solutions for Electrolyzers and fuel cells	<p>The HyNCREASE project will provide comprehensive and integrated support to the hydrogen sector, enabling a significant cost reduction of electrolyzers, fuel cells, and hydrogen. Its main objective is to upscale the production capacity for innovative clean-tech equipment. The focus is on designing, constructing and validating highly efficient manufacturing lines that will also guarantee a low environmental footprint of the end products. The proposed innovation will reduce the total cost of ownership of these electrochemical devices which are used to convert power into hydrogen and vice versa. This will reduce the current economic barriers of such clean-tech equipment and facilitate their adoption in the market. The key advantage from the project lies in a relative greenhouse gas (GHG) emission avoidance of 98.21% compared to the reference scenario.</p> <p>The project aims to exceed current industry standards by expanding manufacturing capacity and introducing De Nora's proven innovative electrodes. This will enhance their technological, manufacturing, and commercial readiness. The project focuses on Advanced Water Electrolysis components (innovative electrodes) and Fuel Cells (Gas Diffusion Electrodes) with innovative coatings, shapes, and efficiency that outperform existing technology. Pioneering production techniques, including novel coating techniques and higher levels of automation ensure maximised quality, cost-effectiveness, and optimal resource utilisation. The project thus presents a very strong degree of innovation, through improved technologies and manufacturing processes, which will lead to final products that are cheaper, more efficient, and scalable up to market needs. This will all result in an absolute GHG emission avoidance of 3.923 million tonnes of CO2 equivalent over the first ten years of operation.</p> <p>The project will contribute to the production and use of renewable hydrogen through the provision of affordable and clean technology solutions, and by developing new business models. The project will also create sustainable industrial jobs and contribute to Europe's energy and climate targets, thus aligning with the European Green Deal and the New Industrial Strategy for Europe.</p> <p>Considering all the socio-economic factors generated by this innovative project, the positive impact involving the local economy is particularly important. In particular, the construction period and the required supply of services during implementation will act to stimulate the local economy. The proposed technologies will also lead to cost reductions of components for electrolyzers and fuel cells by bringing to market resilient products without negatively impacting performance and durability.</p>
HydrOxy	HydrOxy Hub Walsum	<p>The HydrOxy Hub Walsum project aims to develop, build, and operate an innovative, large-scale Polymer Electrolyte Membrane (PEM) electrolyser. The electrolyser will have a 157.2 megawatt (MW) capacity and will be located in the middle of one of Europe's most heavily industrialised areas – in Duisburg-Walsum, Germany. HydrOxy will significantly contribute to establishing hydrogen as one of Europe's main decarbonisation pillars. The project will contract a newly built wind park in the North Sea to source the renewable electricity required to produce 16 kilo tonnes of renewable hydrogen per year. Electrolyser off-heat will also be utilised in the district heating sector. The project is expected to achieve 113% of relative greenhouse gas (GHG) emissions avoidance compared to the reference scenario.</p> <p>Hydrogen is crucial for the transition to a post-fossil fuel era. Yet, intermittent renewable energy poses challenges in maintaining a constant hydrogen supply. Therefore, HydrOxy goes beyond the state-of-the-art by integrating a large battery system of 25 MW to decouple the hydrogen generation from the fluctuating renewable energy generation. This will result in higher security of supply and higher annual electrolyser operating hours. Coupling the electrolyser with a large battery system will reduce the degradation of the electrolyser and increase the service life and efficiency. In a cross-sector decarbonisation approach, the renewable hydrogen from HydrOxy will be used in the steel sector (contributing to steel production through Direct Reduced Iron technology) and shipping sector at an industrial scale. The hydrogen produced by HydrOxy will be directly used in the port of Duisburg for the first climate-neutral container terminal, as well as in the hydrogen filling stations for heavy load transportation. Additionally, the electrolyser's renewable off-heat will be utilised in decarbonising an existing district heating network located nearby. With the delivery of 13.6 kilo tonnes per annum of green hydrogen to a nearby steel plant, the complete project will realise an absolute GHG emission avoidance potential of nearly 1.3 million tonnes CO2 equivalent during its first ten years of operation.</p> <p>The Hydroxy Hub Walsum project will directly contribute to the European objective of reaching climate neutrality by 2050, by accelerating the transition towards green hydrogen adoption in hard-to-abate sectors like shipping and steel. The project will also contribute to the objectives of the European Hydrogen Strategy to develop domestic production of 10 million tonnes of renewable hydrogen by 2030, as well as contributing to the REPowerEU goal of reducing fossil fuel consumption in industry and transport and rolling out electrolyser capacity installation in Europe.</p> <p>The project is expected to make a significant contribution to the local and regional economy through the creation of 31 direct job positions and 800 indirect jobs, mostly in the Duisburg area.</p>
MoReTec-1	Fully electrified chemical recycling of plastic waste for deep decarbonisation of the polymer industry	<p>With its proprietary MoReTec advanced recycling technology, LyondellBasell (LYB) aims to return post-consumer plastic waste to its molecular form. This will be used as a feedstock for new plastic materials that offer expanded applications, including medical and food packaging. LYB plans to build a MoReTec advanced recycling technology demonstration plant (MoReTec-1) in Wesseling, Germany. This represents the next step towards addressing the challenge of hard-to-recycle plastics at scale. This project is expected to provide LYB with the valuable operating experience and additional technological know-how that is needed to scale-up and fully commercialise the MoReTec technology. The plant will be designed to produce 40 kilotonnes/year (kt/yr) of pyrolysis oil and 7 kt/yr of pyrolysis gas, achieving a relative greenhouse gas (GHG) emission reduction of 100% compared to the reference scenario.</p> <p>Plastic waste is one of the most complex material mixtures from a recycling perspective. Recycling reduces incineration, landfill and the associated carbon emissions. Chemical or advanced recycling – the core of the MoReTec technology – will contribute towards a circular, climate neutral economy.</p> <p>The project converts plastic waste into pyrolysis oil and gas. The pyrolysis oil can be used in LYB crackers, replacing naphtha from fossil crude oil as feedstock for new plastic materials such as polyethylene and polypropylene.</p>

Acronym	Title	Description
		<p>The project will demonstrate a first-of-its kind, breakthrough technology which includes a continuous process and advanced catalysts heat integration. This combination of technology will lead to high energy efficiencies, high yields, increased scalability potential and optimised capacities. The required heat inputs will also be supplied using 100% renewable electricity. The aim is to demonstrate the technical and economic feasibility of the technology for implementation at a large-scale plant capacity of up to 200 kt/yr as envisaged for future assets. MoReTec-1 is expected to achieve an absolute GHG emissions reduction of 823 484 CO2 equivalent over its first ten years of operation.</p> <p>Most plastics are still produced from fossil-based feedstock. Especially for challenging segments like food packaging and healthcare products, no circular solutions at industrial scale exist worldwide. MoReTec technology is intended to provide circularity solutions. It will contribute to interrelated EU policy objectives such as the Integrated Strategic Energy Technology Plan, the New Industrial Strategy for Europe and the recovery plan for Europe and the new Circular Economy Action Plan.</p>
N2OWF	Nordsee Two Offshore Windfarm Innovation Project	<p>N2OWF project will build and operate a first-of-its-kind offshore wind farm, with a capacity of 450 megawatt (MW) combined with on-site production, storage, and offtake of green hydrogen. The innovative technologies concern the wind turbine (approximately 15 MW each), the foundations (amongst others, especially the installation of one-piece monopiles) and a hydrogen solution (combination of a 4MW electrolyser on the offshore substation and a service operation vessel running around 80% on green hydrogen) in the German North Sea. The project aims at a 100% of relative greenhouse gas emission avoidance during the first ten years of operation compared to the reference scenario.</p>