

INNOVATION FUND

Driving clean innovative technologies towards the market

LARGE SCALE CALL

2021



Air

Production of sustainable methanol as raw material for chemical products by first-of-a-kind Carbon Capture and Utilization process integrated with world scale electrolysis unit





Air

Beneficiaries: Perstorp Oxo AB, Fortum Sverige AB & Sydkraft AB



Stenungsund, Sweden



EUR 97 000 000 granted



4,06 Mt CO₂ eq emissions avoided



Chemicals



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ANRAV

An innovative CCUS value-chain to realize the first CCUS-cluster in Eastern Europe, supporting the Balkan region to reach its climate goals by 2030





ANRAV

GREEN FUTURE SOLUTIONS

ANRAV

Beneficiaries: Devnya Cement JSC
& Petroceltic Bulgaria EOOD



Devnya, Bulgaria



EUR 189 694 949 granted



7,8 Mt CO₂ eq emissions avoided



Cement and lime



BIOZIN

The world's first commercial-scale drop-in biofuel production facility.
BIOmass from Norwegian forestry and sawmills to advanced low carbon fuels for **Zero** emission transportation **IN**dustry





BIOZIN



Beneficiaries Biozin Holding AS (BZHAS) & A/S Norske Shell (Shell)



Amlı, Norway



EUR 75 000 000 granted



2,57 Mt CO₂ eq emissions avoided



Refinery, Biofuels



C2B- Carbon2Business

An innovative carbon capture technology at Holcim Germany's cement plant providing captured CO₂ as a raw material to different industries in the region





C2B- Carbon2Business

Beneficiaries: Holcim (Deutschland) GmbH
& Holcim Technology Ltd



Lägerdorf, Germany



EUR 109 816 528 granted



13 Mt CO₂ eq emissions avoided



Cement and lime



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CalCC

First industrial-scale carbon capture for lime production integrated with transport of CO₂ to coastal hub and shipping to geological storage in the North Sea





CalCC

Beneficiaries: Chaux et Dolomies du Boulonnais (affiliate of Lhoist Group) & Air Liquide France Industrie



Réty, France



EUR 125 198 197 granted



5,8 Mt CO₂ eq emissions avoided



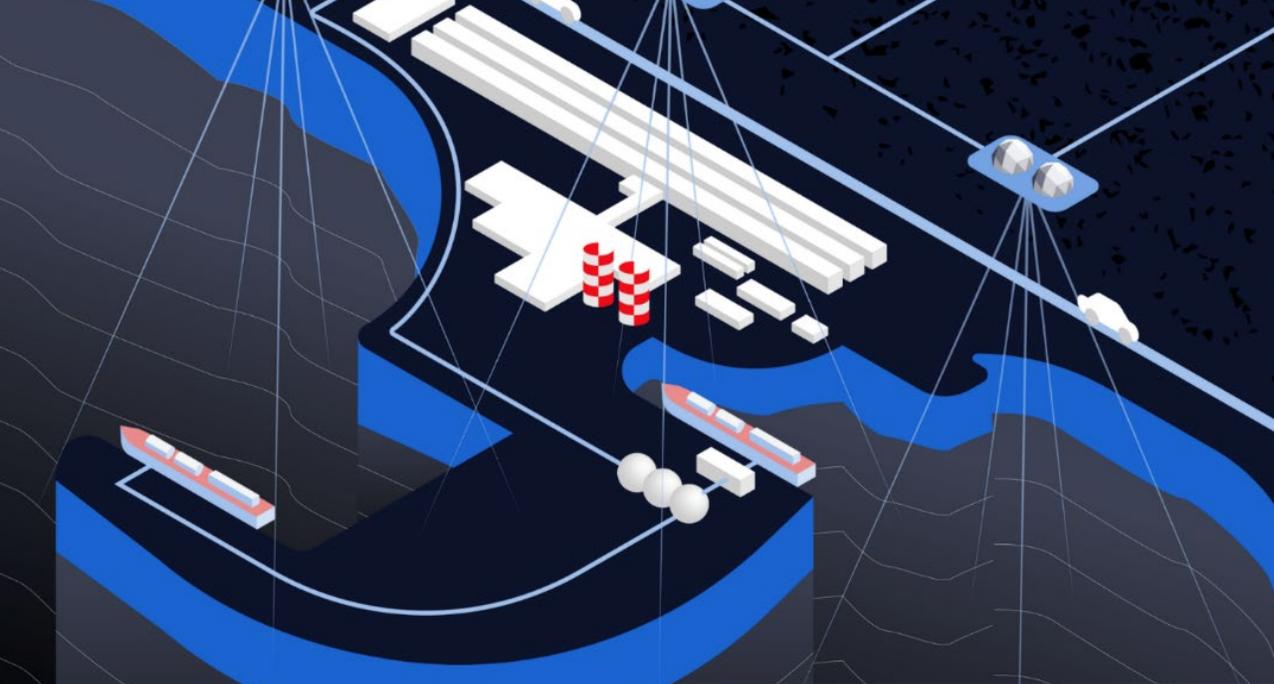
Cement and Lime



Coda Terminal

The world's first carbon mineral storage terminal providing a new, safe and scalable method of permanent CO₂ storage





Coda Terminal

Beneficiaries: Carbfix & Dan-UnityCO2 A/S



Straumsvik, Hafnarfjordur, Iceland



EUR 115 000 000 granted



21,1 Mt CO₂ eq emissions avoided



CO₂ Transport and Storage



EAVORLOOP

A large underground radiator buried at 4,500m providing clean, dispatchable and baseload energy. Operating under a natural thermosiphon requiring no pump and no aquifer, fresh water will circulate through the radiator carrying the heat to surface





EAVORLOOP

Beneficiaries: Eavor Erdwärme Geretsried GmbH



Geretsried, Germany



EUR 91 600 000 granted



439,725 t CO₂ –eq emissions avoided



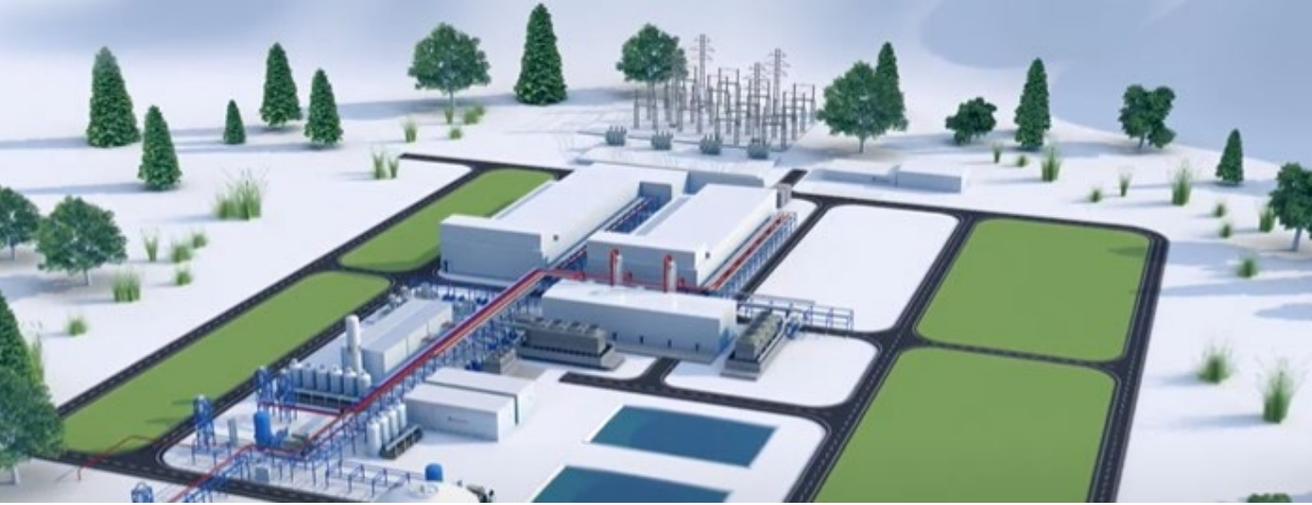
Geothermal energy



ELYgator

Kickstarting a renewable hydrogen value chain for industry and mobility with a highly integrated, flexible large-scale 200MW water electrolyser producing renewable hydrogen and oxygen





ELYgator

Beneficiaries: Air Liquide Industrie BV



Terneuzen, Netherlands



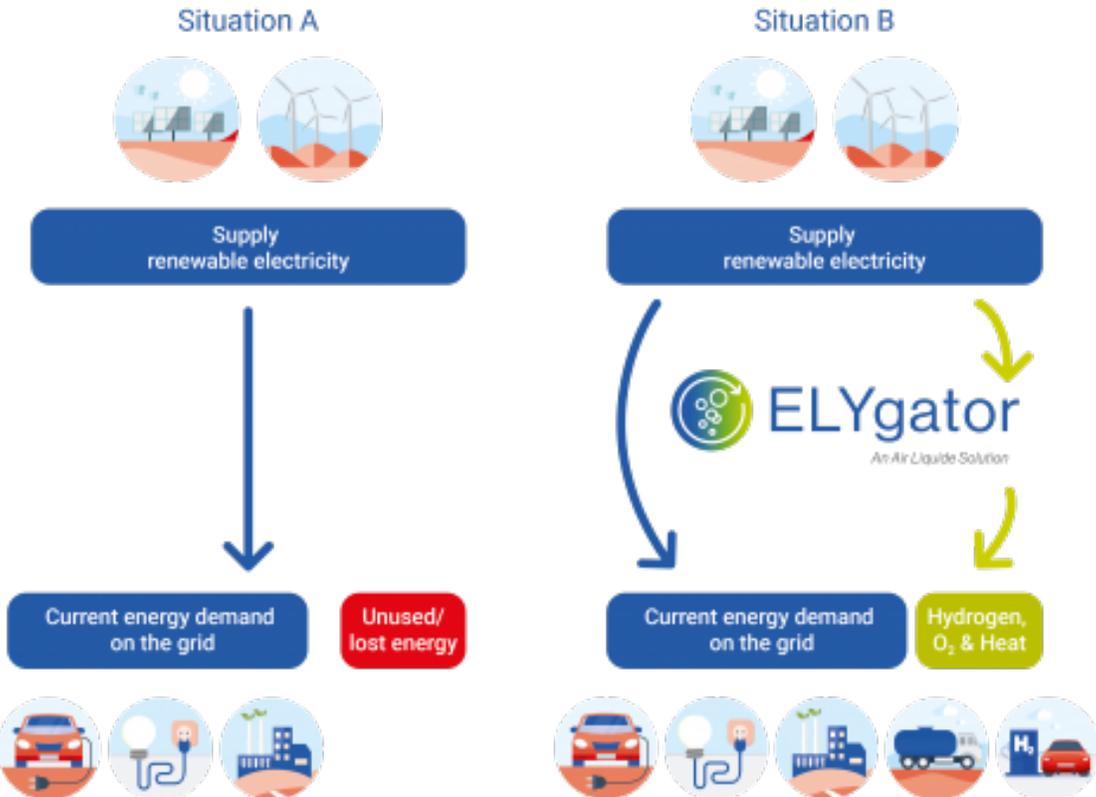
EUR 99 000 000 granted



3,3 Mt CO₂eq emissions avoided



Hydrogen



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FUREC- FUse, REuse, ReCycle

Transforming non-recycle solid waste streams into hydrogen and provides circular feedstock to the chemical industry





FUREC

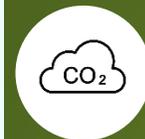
Beneficiaries: RWE Aktiengesellschaft & RWE Generation NL



Buggenum & Geleen, Netherlands



EUR 108 000 000 granted



3,61 Mt CO₂ eq emissions avoided



Hydrogen



GO4ECOPLANET

Using a globally-unique technology for capturing and liquefying CO_2 to fully decarbonize cement production at the Lafarge plant in Kujawy, Poland





GO4ECOPLANET

Beneficiaries: Lafarge Cement S.A.



Bielawy, Poland



EUR 228 210 004 granted



10 Mt CO₂ eq emissions avoided



Cement and lime



HH- Holland Hydrogen

A 400 megawatt electrolyser in the Port of Rotterdam to produce green hydrogen, using renewable electricity from offshore wind farms in the North Sea





HH- Holland Hydrogen

Beneficiaries: Rotterdam Hydrogen Company B.V, Shell Hydrogen Operations & Production B.V



Rotterdam, Netherlands



EUR 89 000 000 granted



5,1 Mt CO₂ eq emissions avoided



Hydrogen



HySkies

The first large-scale synthetic Sustainable Aviation Fuel (SAF) production facility in Sweden, producing around 82000 tonnes SAF and 9000 tonnes renewable diesel per year





HySkies



Beneficiaries: Shell, Vattenfall (SE)
& LanzaTech (US)



Uppsala and Forsmark, Sweden



EUR 80 200 000 granted



2,7 Mt CO₂ eq emissions avoided



Refineries



N20WF- Nordsee Two Offshore Windfarm Innovation Project

A first-of-its-kind offshore wind farm, with a capacity of 450 MW, combined with on-site production, storage and offtake of green hydrogen





N2OWF-Nordsee Two Offshore Windfarm Innovation Project

Beneficiaries: Nordsee Two GmbH



North Sea, Germany



EUR 96 000 000 granted



3,2 Mt CO₂ eq emissions avoided



Wind energy, Offshore Wind



NorthSTOR+

The project aims to both validate the technology development of an innovative, stationary energy storage system (ESS) and to industrialise the production of the solution at a mass-scale





NorthSTOR+

Beneficiaries: Northvolt Systems Poland sp z o.o & Northvolt System AB



Gdansk and Tczew (Poland) & Stockholm (Sweden)



EUR 75 451 457 granted



34,6 Mt CO₂ eq emissions avoided



Manufacturing of components for production of renewable energy and storage



PULSE

Pretreatment and upgrading of Liquefied waste Plastic to Scale up circular Economy with a capacity to process 400 000 tones of waste plastic per year





PULSE

Beneficiaries: Neste



Porvoo, Finland



EUR 135 000 000 granted



10,3 Mt CO₂ eq emissions avoided



Chemicals

ReLieVe- Recycling of Li-ion batteries for electric vehicles

Creating an innovative end-to-end, integrated solution for the closed loop recycling of 50 000 tons of end-of-life lithium-ion batteries and production waste from battery manufacturing processes per year





ReLieVe

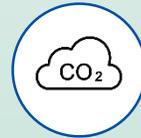
Beneficiaries: Eramet SA



Dunkirk, France



EUR 67 600 000 granted



4,2 Mt CO₂ eq emissions avoided



Manufacturing of components for production of renewable energy or energy storage