

InvestEU Scoreboard¹

Presentation of the financing or investment operation:

Implementing Partner: EIB

Name of the Operation: EAVOR LOOP (IEU GT)

Type of approval :

☒ Individual financing or investment operation

☐ Framework Operation²

Name of the final recipient: Eavor Erdwaerme Gerestried GmbH

Country(-ies) of implementation: Germany

Short description of the financing or investment operation:

The project consists of the design, construction and operation of the first phase of a combined geothermal heat and power system in Gerestried (Bavaria, Germany), with a target thermal output of about 60 MWth, including ca. 8 MWe for gross electricity capacity, on average over the Project's lifetime. The Project is expected to supply ca. 30,000 households with heat transferred to a newly built district heating network at completion, representing 80% of the system net energy output, while the remaining will consist of electricity to be injected to the grid.

Whilst the surface elements are similar to conventional mid- to low- temperatures geothermal heat and power production and distribution, the subsurface elements concern the first commercial demonstration of a first-of-a-kind technology, the Eavor-Loop. The Project shall be composed of four Eavor-Loops.

Public Statement

The project is line with the InvestEU objective of the development of innovative zero- and low emission heat supply systems and combined production of electricity and heat.

In particular, it generates positive externalities in the form of reduced greenhouse gases and other hazardous emissions through the switching to a baseload source of sustainable energy. The Project also contributes at increasing learning-by-doing through the first commercialisation stage of an innovative sustainable technology, which should support costs reductions over time. The Project contributes to the 2030 national RE penetration targets of Germany, i.e. 80% RE in the power sector and 65% RE in the heating sector. The Project also contributes to maintaining or increasing safe delivery of energy.

The Project therefore addresses the following market failures: reducing carbon and air pollution externalities, security of supply and costs reduction of innovative low-carbon technologies.

The Project is aligned with EIB's Energy Lending Policy (Decarbonising Energy Supply and Innovation) and Climate Action (Mitigation / Renewable Energy) eligibility criteria and the policy contribution for Renewable Energy Sources is thus rated as Excellent.

¹ This Scoreboard of indicators reflects the information presented to the InvestEU Investment Committee (IC) for its decision on the use of the EU guarantee for this operation. Therefore, the document does not take into account possible developments that could have occurred after this decision.

² The EIB Lending Envelopes are a delegation mechanism of the approval authority from the Board of Directors to the Management Committee for a series of sub-loans to multiple borrowers that are grouped together under one sector, policy objective or geographical region. Under InvestEU, such sub-projects grouped together are approved by the Investment Committee as Framework Operations.

As a first-of-a kind commercial demonstration operation, the Project entails a number of risks (credit, technology, construction, offtake) which cannot be fully mitigated due to its early-stage nature. This is combined with the limited experience of the Promoter as a start-up company.

EIB will be a key lender that will provide adequate terms and capacity to attract other specialized institutions to complete the funding plan of this project. The EIB financing further complements the EU innovation fund grant to provide a financial package which covers the distinctive risks of the Project. The Project would therefore not have been carried out (to the same extent) by the EIB without the InvestEU support.

Pillar 3 - Market failure or sub-optimal investment situation addressed by the financing or investment operation (**Excellent**)

Pillar 4 - Financial and technical contribution by the Implementing Partner (**Very Good**)

Pillar 5 - Impact of the financing or investment operation (**Very Good**)

Pillar 7 - Complementary indicators³

Key project characteristics

Expected at PCR	
Start of works	10.07.2023
End of works	30.06.2026
Project investment cost	353 MEUR
Mandate eligible investment mobilized	271 MEUR
Mandate multiplier effect	3.80
Mandate leverage effect	1.05
Amount of private financing	[50]
Co-financing with national promotional banks	[32]
Co-financing with structural funds (ESIF)	0.00 MEUR
Energy efficiencies realised	0.00 MWh/a
Climate Action indicator	100.00% Mitigation - Renewable Energy (transversal)
Employment during construction temporary jobs	300 person years
Employment during operation – new permanent jobs	20 FTE
Gender Tag	No Significant contribution to Gender Equality
Employment during project operation - women	unknown

Outputs

Expected at PCR	
Electricity generation capacity from renewable energy sources	9.00 MW

Outcomes

Expected at PCR	
Electricity produced from renewable energy sources	40.00 GWh/yr
Heat produced from renewable energy sources	165.00 GWh/yr

³ The abbreviation PCR stands for Project Completion Report. EIB internal methodologies are used in order to calculate the figures presented in this document. The Promoter's estimates might differ.

Households which could be supplied with the energy generated by the project	30,000.00
Cost of electricity generated with environmental externalities	145.00 EUR/MWh