

Electricity Interconnector
EuroAsia Interconnector

1. General Elements of the Project

1.1 Summary description of the project

The EuroAsia Interconnector is a leading project of common interest (PCI) of the European Union. It consists of the electricity interconnection of the grids of Israel, Cyprus and Greece (Crete) through a subsea DC cable and with HVDC onshore converter stations at each connection point, with a total capacity of 2000 MW. The project is an energy highway bridging Asia and Europe, with a total length of 1208 km. It creates a reliable alternative route for the transfer of electric energy to and from Europe.

EuroAsia Interconnector Limited was designated as the Project Promoter of the Project of Common Interest by the European Commission, on the recommendation of the Cypriot Government (MECI– Ministry of Energy, Commerce and Industry) and the agreed opinion of the Greek Government (MEECC – Ministry of the Environment, Energy and Climate Change).

Since 2013, the project has been included in the European Union's List of Projects of Common Interest (PCI) in the form of a cluster of projects (cluster PCI) consisting of the following sub-projects:

- **PCI 3.10.1 - Interconnection between Hadera (Israel) and Kofinou (Cyprus)**
- **PCI 3.10.2 -Interconnection between Kofinou (Cyprus) and Korakia Crete (Greece)**

Internal interconnection between Korakia Crete (Greece) and Attica (Greece) – Implemented as a National Project by the Hellenic Republic

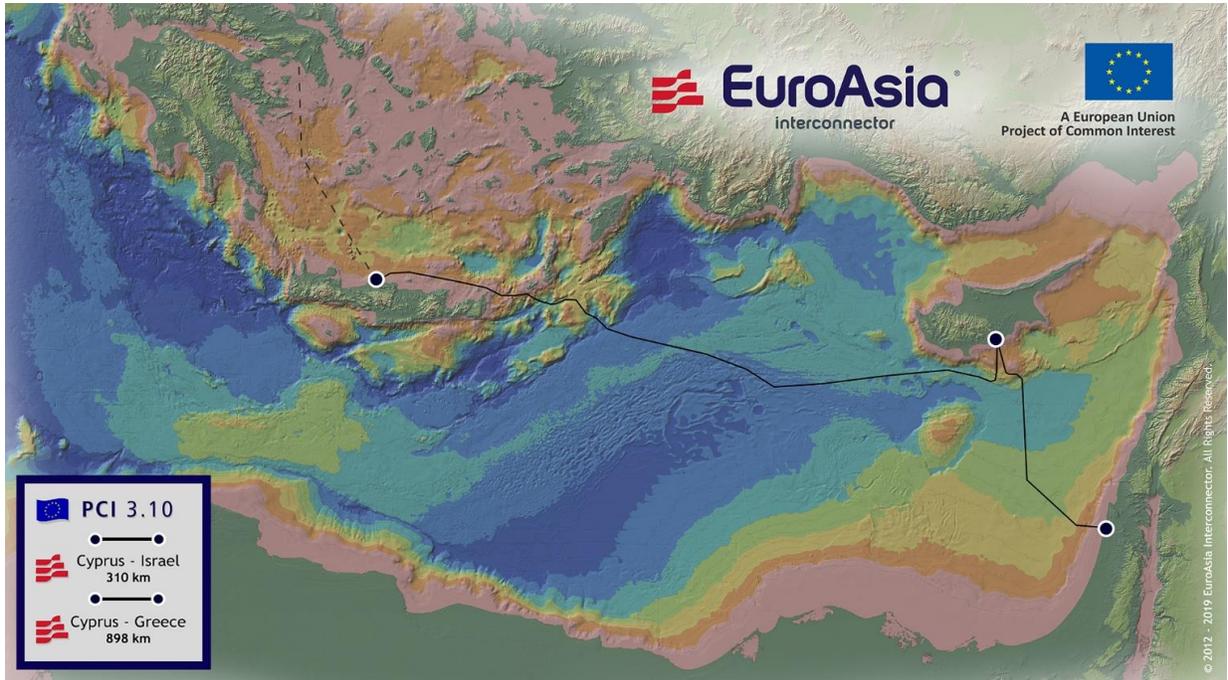


Figure 1.1-1. EuroAsia Interconnector Electricity Interconnection

The project will be constructed in two phases. During the first phase, two transmission cables will be installed on each route, as well as Converter Stations of direct current (DC) to alternative current (AC) with a capacity of 1,000MW. The first phase is expected to be completed in 2025. During the second phase, two additional cables will be installed in the corridors of the cables already installed during the first phase and an additional converter station in Israel and Attica, will increase the capacity of the system to 2,000MW.

The system to be used will be HVDC (high voltage direct current) technology. This technology allows the transfer of high voltage current over long distances. Subsea cables and converter stations with a capacity of 1,000MW each will be used for the application of the technology. At converter stations, direct current will be converted to alternating

and channeled to national networks through adjacent distribution substations. The whole system will allow two-way power flow all the way.

The converter stations will be of Voltage Source Converter (VSC) technology and will be connected to subsea electrodes at a minimum predetermined distance from other infrastructures and will act as a grounding system in the event of any loss during operation.

1.2 Expected benefits of the project

The main purpose of the proposed project is the interconnection of the electricity networks of Israel, Cyprus and Greece. This interconnection achieves the removal of the energy isolation of Cyprus, the last isolated system of the EU, but also that of Crete, from the rest of Europe. At the same time, it achieves through the creation of an electricity highway connecting Europe with Asia, providing significant opportunities for the development of the energy sector.

The project falls within the energy policy of the European Union and the States concerned and contributes to the energy objectives set by, inter alia:

- It ends the energy isolation of Cyprus, the last energy isolated Member State of the European Union, but also that of Crete. Ending the energy isolation of all Member States is a key objective and priority of the European Union's energy policy.
- It creates a corridor of electricity from Israel - Cyprus - Greece (Europe), through which the European Union can safely be supplied with electricity produced from natural gas reserves in Cyprus, Israel and Greece, but also from renewable energy sources, while contributing to the completion of the European internal market.

- It contributes to the security of the energy supply of the three countries and the EU system as a whole, by integrating the isolated small systems of Cyprus and Crete with the Israeli and European Continental network for uninterrupted energy flow.
- It contributes significantly to the development of Alternative Energy Sources and to the reduction of carbon dioxide (CO₂) Emissions.
- It provides significant economic and geopolitical benefits to the States concerned by promoting cooperation between them and cooperation between other neighboring countries in the Eastern Mediterranean and the European Union.
- It contributes to the target of 10% of electricity interconnection between the Member States of the European Union.
- It provides significant socio-economic benefits to the concerned countries, resulting from the reduction of electricity costs using more efficient ways of generating electricity (natural gas, renewable energy sources) against more energy-intensive and polluting fuels.

More specifically, the main benefits to Cyprus from the implementation of the leading project of common interest, EuroAsia Interconnector Electricity Interconnection, are:

- The EuroAsia Interconnector Electric Interconnection lifts its energy isolation and increases the energy security of Cyprus by interconnecting the electricity systems of Israel and Greece and by extending that of continental Europe.

- The EuroAsia Interconnector significantly supports the development of Alternative Energy Sources and the reduction of carbon dioxide (CO₂) emissions by utilizing renewable energy sources.
- Investments to replace outdated energy-intensive and polluting power plants currently operating are avoided.
- Cyprus derives a significant part of the socio-economic benefits resulting from the implementation of the EuroAsia Interconnector
- The EuroAsia Interconnector creates new jobs both during the construction and operation phase, contributes to the competitiveness and reduction of electricity prices to the final consumer and industry and generates revenue from the export of electricity.
- The EuroAsia Interconnector creates the electric corridor between the eastern Mediterranean and the European Union. Cyprus is becoming an energy hub and is being upgraded geopolitically by contributing to the EU's energy security.
- The EuroAsia Interconnector creates technical advantages in terms of the stability and operation of the smaller systems of Crete and Cyprus.
- Cyprus significantly enhances its political role and importance in the development of political and economic cooperation with the countries of the Eastern Mediterranean by creating strong alliances.

1.3 Permit Granting and Regulatory

In Cyprus, the licensing process has reached a very mature stage since all necessary approvals and permits prior to the commencement of construction have been obtained. The land has been expropriated by the Cyprus Government and leased for the construction of the project. The project secured the Environmental Impact Assessment (EIA) decision and performed public consultations. The Town Planning Permit and the Building Permit for the construction of the Converter Station, the connection to the electricity grid of Cyprus terms has been updated on 17.06.2021 and the lay use and operation of the submarine cable in Cypriot EEZ Permit was issued on 03.09.2021. A Cross Border Cost Allocation (CBCA) decision between Cypriot and Greek National Regulatory Authorities (RAE and CERA respectively) was initially issued on 10 October 2017 and updated on 23.04.2021. In Greece, the Greek National Competent Authority with its decision dated 19.7.2017 has acknowledged the notification of the EuroAsia Interconnector which served as the start of the permit granting process. After the exclusion of PCI 3.10.1 from the PCI list the Greek NCA has amended its decision (annex 7 to Part B - TEN-E compliance form) on 18.10.2021 restarting the pre-application procedure in accordance with the regulation 347/2013 of the EC. Since the common Converter Station will be developed by Ariadne Interconnection, the licensing procedure is limited only to the Landing point and the onshore cable route. The Project Promoter will cooperate with IPTO to use common infrastructure in Crete of the Ariadne project which are already licensed. In the meantime, the EIA study has been completed and submitted to the Greek competent authority on 17 October 2021, currently under evaluation. All other licensing applications required in Greece (Crete) for the construction of the project (i.e. building permits, consents etc.) are in progress and will be submitted to the Greek competent authorities immediately after the Environmental decision is issued. Since the Project has common infrastructure with «Ariadne Interconnection»

project which has reached a very mature licensing stage it is expected that the EuroAsia Interconnector infrastructure licensing procedure will progress fast.