

Environmental and Social Data Sheet

Overview

Project Name:	MARINE AND ATMOSPHERIC CLIMATE CHANGE RESEARCH
Project Number:	2018-0743
Country:	Greece
Project Description:	The project has two components: a) the marine component concerns the replacement of the existing oceanographic vessel R/V AEGAEO by a new, ocean-going, multi-purpose, state-of-the-art equipped research vessel and b) the atmospheric component refers to the establishment of the Panhellenic Geographical Observatory of Antikythera (PANGEA), a national research infrastructure for climate change.
EIA required:	no
Project included in Carbon Footprint Exercise ¹ :	no

Environmental and Social Assessment

Environmental Assessment

The project comprises two components, the construction of a replacement research marine vessel and the establishment of the Panhellenic Geographical Observatory on the island of Antikythera (PANGEA). The latter component will see the construction of a climate change and weather monitoring station with additional air and space monitoring equipment benefitting from the island's exceptional location. Both components are located in the Attica region of Greece. The new research vessel will be predominantly based in Piraeus near Athens and Antikythera is located between the western Greek mainland and the island of Crete.

The new research vessel and climate monitoring station will contain the latest instrument technology to carry out fundamental research and development activities over a range of scientific and technological fields primarily in the marine environment and in the atmosphere. The new research vessel and terrestrial climate station will also host laboratories and residential facilities for researchers and other staff to enable longer expeditions at sea or longer stays on Antikythera.

The vessel will be constructed and operated in compliance with EU and International Maritime Organisation (IMO) regulations and will operate under an EU flag. The vessel will be classed by an internationally recognised classification society, member of the International Association of Classification Societies (IACS). The vessel is being designed to enable it to participate in longer missions and in deeper waters than the current Greek research fleet.

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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.

Luxembourg, 18 November 2019

The new climate research station will be built using locally sourced materials enabling the facility to blend into its surroundings. The use of metallic structures will also be limited so it does not inhibit the accuracy and functioning of the scientific instruments.

As the climate station will be located on Antikythera, the whole island is contained within a Natura 2000 site. The site is also within a designated forest, but there are no trees just low lying shrubs and plants. The project has been assessed by the competent authorities and been given the authorisation to proceed. The footprint of the new climate station is being kept as small as possible and is located on a former playground hardstanding and next to the remains of two former windmills that are protected cultural heritage structures.

The new buildings will be designed to be a nearly zero energy buildings (NZEB) and will include some passive design measures in an attempt to significantly reduce their primary energy consumption. Moreover, the project investments will seek to reduce their energy consumption with the installation of best available energy efficient technologies, including renewable energy apparatus onsite, and enhancements to the building fabric. The climate station will be connected to the island's existing power network, but will be prepared to be self-sufficient in case of outages. Furthermore the instruments will be continuously recording and monitoring and will require a constant power supply. A copy of the energy model and on completion a copy of the energy performance certificate will be requested by the EIB.

The vessel construction does not require an Environmental Impact Assessment (EIA) under the Directive 2014/52/EU amending the EIA Directive 2011/92/EU.

Research and development buildings of this kind are not specifically mentioned in the EIA Directive 2014/52/EU amending Directive 2011/92/EU, though the project is covered by Annex II of the Directive in relation to urban development. The development of the climate station is exceptional, as such, the competent authorities have confirmed that an environmental impact assessment is not required

Other Environmental and Social Aspects

The project will provide additional facilities to strengthen and enhance the research and development within the Attica region and Greece, increasing the formation of human capital. These additional facilities will enable the two research centres implementing the project to attract high calibre researchers and professors to sustain the excellent research taking place within their respective scientific fields. The research enabled by the new vessel will also support the sustainable use and protection of water and marine resources. The outcomes from the marine and climate research, with the participation of its various other scientific institutes in wider research groups, has provided significant improvements in the understanding of aquatic flora and fauna and aquatic environments and their interlinkages with climate change, as well as increasing the understanding of weather patterns, air and particle movement and dispersal and seismic activity together with their linkages with early warning signalisation and climate change. The impact of the research is also supporting the management, monitoring and reporting of conditions and geographical features in the Aegean and east Mediterranean Seas, which Greece holds responsibility for. Therefore the new facilities will enable Greece, Europe and beyond through its cooperation networks to add to and enhance the body of scientific knowledge and application in technological developments.

Conclusions and Recommendations

The project is enabling two Greek national research centres to create additional state-of-the-art research, development and innovation facilities. The project components both form part of a strategic effort to modernise the research facilities enhancing the working environment for their research and technical staff. Due to the investment and use of new materials and technologies, the new vessel and new buildings will increase the overall energy efficiency of the research facilities.

Conditions:

- None

Undertakings:

- The Promoter shall ensure that all primary contractors and first-tier suppliers will operate consistently in accordance with the conditions and standards stated in the Bank's Environmental and Social Handbook and that these are monitored during project implementation by an independent member of the Promoter's supervisory team or a certified body, acceptable to the Bank;
- The Promoter shall notify the Bank of any social and/ or environmental observations or incidents during the works;
- The Promoter shall ensure that the vessel shall at all times be registered under an EU country flag and operate in compliance with all EU and International Maritime Organisation (IMO) regulations; and
- The EIB will request a copy of the energy model report for the new buildings. In addition, the EIB will request a copy of the Energy Performance Certificate(s) (EPC) or equivalent will be provided on completion of the new buildings.

In light of the above, the overall environmental and social rating of the project is therefore considered to be acceptable for the Bank's financing.