

## Environmental and Social Data Sheet

### Overview

Project Name:	<i>PORTUGAL IRRIGATION PLAN - REGUENGOS SUBPROJECT</i>
Project Number:	<i>2019-0813</i>
Country:	<i>PORTUGAL</i>
Project Description:	Irrigation system of Reguengos de Monsaraz and the installation of the Álamos Intake located in the Évora district
EIA required:	yes
Project included in Carbon Footprint Exercise <sup>1</sup> :	yes

### Environmental and Social Assessment

#### Environmental Assessment

The project is an allocation under the framework loan (2017-0339) Portugal Irrigation Plan, which finances the National Irrigation Programme of Portugal 2020 (PNREGADIOS). The PNREGADIOS investments aim, among others, at fostering economic development in rural areas and increasing resilience to the effects of climate change. This operation is structured in two components, where the first component aims at financing the expansion and modernisation of existing irrigated areas, as well as the strengthening of the pumping capacity and integration with renewable energy generation, covering a total of approximately 10 273 hectares of arable land in the Reguengos basin of the Alentejo region of mainland Portugal. The second component corresponds to the reinforcement of the conveyor pipeline capacity of the Álamos-Loureiro canal, which is indispensable to supplying water to the Reguengos Hydraulic System.

The operation is launched by the Portuguese government through its Ministry of Agriculture and will be managed by a dedicated, independent project implementation unit (PIU) that was created within the Ministry of Agriculture<sup>2</sup>. The PIU is created with similar procedures and personnel seconded from the managing authority in charge of the Rural Development Program 2014-2020 (RDP2020). This means that the project management, including social and environmental assessment and monitoring, benefits from the procedures already established for the distribution of the EAFRD funds under the RDP2020 for Portugal, that are operational and proven for several years now. The capacity of both the promoter and the competent environmental authorities for the assessment of the environmental impact of the projects is deemed good.

<sup>1</sup> 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 CO<sub>2</sub>e/year absolute (gross) or 20,000 tonnes CO<sub>2</sub>e/year relative (net) – both increases and savings.

<sup>2</sup> The PIU is composed of one representative of the IFAP (presiding); one representative of the Cabinet for Planning, Policy, and General Administration (GPP); one representative of the Directorate-General for Agriculture and Rural Development (DGADR); one representative of the Portuguese Environment Agency (APA); and one representative of the Management Authority for the Mainland Rural Development Programme (PDR 2020). Resolution of the Council of Ministers n. 133/2018 of 12 October, available at <http://dre.pt/application/file/a/116653678>.

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EIA procedures are applied in accordance with EU regulations, as transposed into the national law. The project involves the expansion of irrigation schemes and falls under Annex II of the EIA Directive (2011/92/EU). The component authority has screened in the project and consequently an EIA was required and carried out. The link to the non-technical summary of the EIA is provided on the bank web site.

The project's water abstraction rights have been confirmed in the context of the Guadiana RBMP<sup>3</sup> (River Basin Management Plan), elaborated as per the requirements of the WFD, As a result of this process, EDIA holds the Irrigation Water Resource Use Title to 590 hm<sup>3</sup> of water (14% of the total dam capacity of 4 256 hm<sup>3</sup>) which is a sufficient volume of water for the estimated needs of the project schemes concerned.

### **EIB Carbon Footprint Exercise**

The project will bring about substantial cropping pattern changes from rainfed areas with traditional rotational crops to annual/perennial crops, mainly olives, vine and almonds/fruits. This will have a positive impact on the carbon pools in the soil due to reduced tillage and CO<sub>2</sub> fixation in the plants' roots and woody areas. These savings will out way additional emissions from the farm machinery. . Part of the new power demand to pump irrigation water will be covered by a renewable energy unit (solar), that will be built in proximity of the pumping units with the exclusive purpose of substituting the expense and the GHG footprint of power purchased from the grid. The partial shift to permanent crops translates into a comparative saving of water as, all other factors being equal, irrigated orchards, vineyards and olive groves consume less water per unit of area than irrigated arable crops. Finally, these crops will also require a lower use of N and P fertiliser.

The emissions savings are estimated at 10,400 tonnes of CO<sub>2</sub>-equivalent per year.

For the annual accounting purposes of the EIB Carbon Footprint, the project emissions will be prorated according to the EIB lending amount, as a proportion of project cost.

### **Social Assessment, where applicable**

During the appraisal visit of the Portugal Irrigation Plan FL (2017-0339), it was ascertained that farmers and their water users associations (WUAs) are in favour of the investments included in the draft PNREGADIOS, seeing the opportunity for having adequate and reliable irrigation water sources and the adoption of state-of-the-art on-demand water supply systems. During project implementation, although permanent physical resettlement of populations located alongside the infrastructure is not expected, some degree of temporary or permanent economic displacement due to the installation works (e.g. laying pipes, canals, etc.) and new infrastructure (e.g. filters) cannot be excluded.

The Promoter will undertake to implement these procedures following the standards of the EU E&S and country regulations.

### **Public Consultation and Stakeholder Engagement**

Public consultation and stakeholder engagement events were carried out, as legally required, through the Environmental Impact Assessment procedure. The overall assessment and permitting needs for the project were determined according to relevant EU regulations.

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<sup>3</sup> [https://cdr.eionet.europa.eu/pt/eu/wfd2016/documents/ptrh7/envwpyukq/PGRH7\\_Parte3.pdf](https://cdr.eionet.europa.eu/pt/eu/wfd2016/documents/ptrh7/envwpyukq/PGRH7_Parte3.pdf) (page 91)



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**Other Environmental and Social Aspects**

The project is expected to lead to the creation of additional direct job opportunities equivalent to 617 FTE in the project development area during the operation of the project.

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**Conclusions and Recommendations**

The operation is considered acceptable for EIB finance from the environmental and social point of view.