

**MITIGATION  
NON-BLENDED**

<b>PROJECT NAME</b>	<b>Wind Farm Gulf of Suez<sup>1</sup></b>
<b>COUNTRY/REGION</b>	Egypt
<b>SECTOR</b>	Renewable energy (Wind)
<b>PROJECT/INVESTMENT AMOUNT</b>	EUR 334 million total cost <sup>2</sup>
<b>DEVELOPMENT PARTNER(S)/STAKEHOLDERS</b>	European Investment Bank (EIB), KfW, Agence Francaise Developpement (AFD), EU
<b>BENEFICIARY MINISTRY/ INSTITUTION</b>	New Renewable Energy Authority (NREA)
<b>INVESTOR(S) AND FUNDERS</b>	Public balance sheet from Government of Egypt: EUR [78] million Which leveraged DFI funding from: <ul style="list-style-type: none"> <li>• European Investment Bank (EIB),</li> <li>• KfW,</li> <li>• Agence Francaise Developpement (AFD),</li> <li>• European Commission</li> </ul>
<b>GUIDEBOOK TAXONOMY FINANCIAL SYSTEM ACTOR</b>	Public Balance Sheet Bilateral, Multilateral & Development Finance Institutions
<b>PROJECT OVERALL GOAL</b>	Construct a wind farm of up to 200 MW on the Gulf of Suez to increase Egyptian access to electricity from renewable sources.
<b>PROJECT OUTCOMES</b>	Design, construction, and commissioning of a 200 MW onshore wind farm, including 70 turbines and an electrical 33/220 kV substation, on the west bank of the Gulf of Suez.
<b>ALIGNMENT WITH COUNTRY IDENTIFIED CLIMATE STRATEGIES, NDCs, ETC. (IF APPLICABLE)</b>	Yes: the project directly contributes to Egyptian NDC and the objective is to reach a wind energy share of total energy generation of 12% by 2020 under the power sector development strategy. The wind farm is part of Egypt's plan to produce 42% of electricity from renewable sources by 2035 <sup>3</sup> .
<b>CONTRIBUTION OF THE PROJECT TO THE UN SDGs</b>	<ul style="list-style-type: none"> <li>• SDG 7 - Affordable and Clean Energy</li> <li>• SDG 13 - Climate Action</li> </ul>
<b>SOCIOECONOMIC IMPACT</b>	The project is expected to generate 650MW/year, which will cover the electricity needs of 370,000 people, and avoid 288,000 tons of carbon emissions annually. <sup>4</sup>
<b>ENVIRONMENTAL IMPACT (ON CLIMATE MITIGATION AND/OR ADAPTATION)</b>	<ul style="list-style-type: none"> <li>• Mitigation impact: generate renewable electricity and reduce demand for fossil fuels</li> <li>• Adaptation impact: meet growing electricity demand in Egypt</li> </ul>
<b>ENABLING ENVIRONMENT (SUPPORTING POLICIES)</b>	Renewable energy generation is encouraged in Egypt NDC, as well as through multiple government measures, including the Renewable Energy Law and other supporting legislation.

<sup>1</sup> This case was provided by the European Investment Bank (EIB) as a contribution to the Sharm El-Sheikh Guidebook for Just Financing

<sup>2</sup> EIB. Wind Farm Gulf of Suez. 2015. Available at: <https://www.eib.org/en/projects/pipelines/all/20100544>

<sup>3</sup> Power Engineering International. Egypt's 500MW wind farm in the Gulf of Suez to commence operations. 2021. Available at: <https://www.powerengineeringint.com/renewables/wind/egypts-500mw-wind-farm-in-the-gulf-of-suez-to-commence-operations/>

<sup>4</sup> Enerdata. 200 MW Gulf of Suez wind project (Egypt) gets EUR 267 million European financing. 2016. Available at:

<https://www.enerdata.net/publications/daily-energy-news/200-mw-gulf-suez-wind-project-egypt-gets-eu267m-european-financing.html>

<b>TECHNICAL ASSISTANCE (IF PROVIDED)</b>	A technical assistance grant was provided by Germany (KfW) to conduct feasibility studies, including ornithological studies.
<b>FINANCING MODEL/APPROACH (EX: BLENDED FINANCE)</b>	Public balance sheet finance.
<b>RATIONALE FOR FINANCING MODEL/APPROACH</b>	The wind farm was a key pillar in achieving Egypt's goal of increasing wind's share of total generation capacity to 12% by 2020 and as such a priority for the government. Using the PPP model allowed NREA to attract a blend of loan and grant financing from international donors and appropriately allocate project risk.
<b>FINANCIAL INSTRUMENT(S) (LOANS (COMMERCIAL/ CONCESSIONAL), EQUITY, GUARANTEE)</b>	Loan and grant
<b>DIAGRAM OF THE FINANCING STRUCTURE</b>	

**Executive Summary:** The Gulf of Suez Windfarm project involves the design, construction, and commissioning of a 200 MW wind farm located on the west bank of the Gulf of Suez, some 400 km southeast of Cairo with up to 100 turbines to be installed. The 57 km<sup>2</sup> site is characterised by its arid desert conditions and has very favourable wind resources. The EUR 334 million project is financed by several European donors, including the EIB (EUR 115 million subsequently reduced to EUR 93 million), the AfD (EUR 50 million), the European Commission (EUR 30 million), KfW, and the Government of Egypt. KfW provided technical assistance for feasibility studies, including ornithological studies to protect the habitat of migratory birds. The project is expected to be completed in 2023. It is structured as a PPP.

The project is expected to generate 650MW/year, which will cover the electricity needs of 370,000 people, and avoid 288,000 tons of carbon emissions annually. The project responds to the need for more renewable energy articulated in Egypt's NDC as well as other national policy.

A strong enabling environment for PPPs in the energy sector and the client's (NREA) high capacity for contracting and managing PPP projects contributed to the success of the project.

## Analysis

<b>WHAT MADE THIS PROJECT SUCCESSFUL?</b>	<p>Stakeholder involvement: successful stakeholder coordination between the Government of Egypt, the capital providers, and the other stakeholders was key to the success of the transaction. The corporate governance, procurement, and environmental requirements of the IFIs contributed to the development of a higher quality project, while simultaneously supporting the transition towards a more modern and efficient electricity sector for Egypt.</p> <p>Client capacity: the NREA was experienced in tendering and contracting similar PPP transactions funded by donors and could apply its experience here.</p>
<b>TO WHAT EXTENT IS THIS MODEL SCALABLE?</b>	Since this transaction, there have been further PPP transactions for wind in the Gulf of Suez, engaging private investors alongside donors, for larger farms, e.g. Gulf of Suez Wind II.
<b>WHAT ARE THE NECESSARY CONDITIONS TO MAKE IT REPLICABLE IN OTHER COUNTRIES/REGIONS?</b>	PPP models are replicable to a wide variety of commercially viable technologies and country contexts, but as this example shows, the strength of the enabling environment and client capacity to manage PPPs are key variables in a successful transaction.



<b>CONSTRAINTS/DRAWBACKS OF FINANCING MODEL</b>	Dependent on strong enabling environment and public balance sheet support to facilitate large scale PPPs.
<b>LESSONS LEARNT</b>	<ul style="list-style-type: none"><li>• Strong enabling environment and the strengthening of institutional and management aspects of the energy sector is important to opening the market to private investors.</li><li>• Capacity of the client to manage PPPs is important to delivering strong PPP projects.</li></ul>