

NON-TECHNICAL SUMMARY (NTS)

MASDAR INFINITY POWER HOLDING 200MW WIND POWER PROJECT IN GULF OF SUEZ

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FINAL



RCREEE 

Regional Center for Renewable Energy and Energy Efficiency
المركز الإقليمي للطاقة المتجددة وكفاءة الطاقة



INFINITY Power
A MASDAR INFINITY COMPANY

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1. INTRODUCTION

The energy sector is a key driver for the socio-economic development of Egypt, representing around 13% of current GDP and thus making economic growth in the country contingent upon the security and stability of energy supply.

Since 2007, Egypt has experienced an energy supply deficit due to the rapid increase in energy consumption and the depletion of domestic oil and gas resources, shifting its position as a net hydrocarbon exporter for the last three decades to that of a net importer.

This has brought a set of challenges to the energy sector, including electricity shortages, caused in part by the decline of domestic gas production, as natural gas is the main source of electricity, accompanied by highly subsidized energy prices, with negative financial implications for already dwindling government revenues.

In response, the Government of Egypt (GoE) has taken bold steps to adopt an energy diversification strategy with increased development of renewable energy and implementation of energy efficiency, including assertive rehabilitation and maintenance programs in the power sector (IRENA, 2018).

To this extent, in 2013, the Arab Republic of Egypt (through the Ministry of Electricity and Renewable Energy) had developed and adopted the Integrated Sustainable Energy Strategy (ISES) 2015 – 2035, which provides an ambitious plan to increase the contribution of renewable energy to 42% of the electricity generated by the year 2035.

In that respect, the GoE issued the Renewable Energy Law (Decree Law 203/2014) to support the creation of a favourable economic environment for a significant increase in renewable energy investment in the country. The law sets the legal basis for the Build, Own and Operate (BOO) scheme to be implemented. Through the BOO mechanism, the Egyptian Electricity Transmission Company (EETC) invites private investors to submit their offers for solar and wind development projects, for specific capacities and the award will be made to that bidder with the lowest Kilowatt Hour (kWh) price. In addition, the GoE (through the New and Renewable Energy Authority (NREA)) provides the land for the investors.

Through the BOO mechanism, Infinity Power Holding (IPH) (hereafter referred to as 'the Developer'), has been selected for the development of a 200-Megawatt (MW) Wind Power Project (hereafter referred to as 'the Project'). The Project is located in the GoS on a land area of 37.5 km² provided by NREA.

2. PROJECT DESCRIPTION

2.1 Project Setting

The Project is located in the Red Sea Governorate of Egypt, around 250km to the southeast of the capital city of Cairo. More specifically, the Project is located near the Red Sea shoreline and within the Ras Gharib District of the Red Sea Governorate, where the closest residential areas include Ras Gharib city (located 18km to the east) refer to the figures below.

The Project is located within a 300km² Strategic Area that has been allocated by NREA for wind farm development Projects with a total capacity of 1,500 MW. Refer to Figure 3 for the Strategic Area location in relation to the Project site. A strategic ESIA study has been undertaken for the 300km² area known as the "ESIA for an Area of 300km² at the Gulf of Suez" (Lahmeyer & Ecoda, 2013) (hereafter referred to as "Strategic ESIA"), where this Strategic ESIA investigated the E&S issues at cumulative and strategic level. Within this, a land area of 37.5 km² (presented in blue in the figures below) has been allocated to the Developer by NREA for the development of this Project.



Figure 1: Project Site in Relation to the Capital City of Egypt



Figure 2: Project Site and Closest Villages

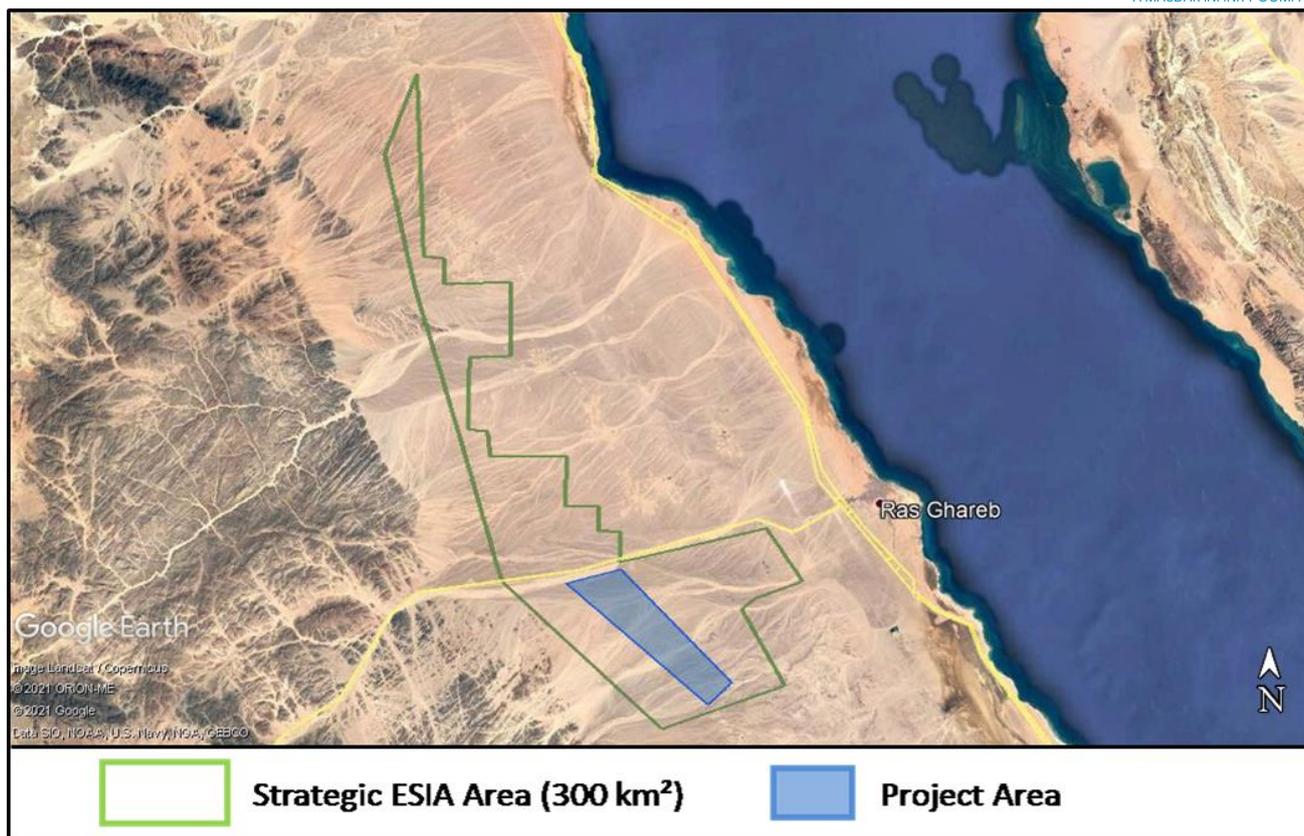


Figure 3: Project Site as Part of the 300km² Area Allocated for Wind Farm Developments

The Project site is located within the Ras Gharib City (or District) and therefore administratively is under the Ras Gharib City Council. The Ras Gharib District is further divided into Ras Gharib town as well as 2 rural (village) local units (Zaafarana and Wadi Dara). The closest community settlement to the Project site is Ras Gharib city (located 18km to the east).

Ras Gharib City is the second-largest city in the Red Sea Governorate, and the most important Egyptian city in terms of oil production.

As discussed earlier, the Project is located within a 300km² area that has been allocated by the GoE to NREA for development of wind farms. Within this, a land area of 37.5km² has been allocated to the Developer by NREA for the development of this Project.

Table 1: Project Site Coordinates

Point	WGS Coordinates	
	Latitude	Longitude
1	28°17'53.90"N	32°50'33.20"E
2	28°18'28.91"N	32°52'40.47"E
3	28°14'0.95"N	32°58'11.68"E
4	28°13'1.15"N	32°56'59.95"E

2.2 Project Components

Wind turbine technology relies on harvesting the kinetic energy in wind (i.e. movement of wind) and turning it into mechanical energy which in turn is used for electricity generation. The key components of the Project include the following:

- **Wind Turbines:** a typical wind turbine is presented in the figure below. For this Project two scenarios consider different models of turbines, for which there will be 26 to 28 wind turbines occupying the project

site, each with a capacity of 7.2 – 7.8 MW. The turbines under either scenario will have a hub height of 110m and a rotor diameter of 182m for a total tip height of 201m.

- Supporting infrastructure and utility elements for the Project which will include:
 - Cables that will connect the turbines to an onsite substation
 - Substation that converts the output from the turbines to a voltage that is appropriate for connection with the National Grid
 - Onsite building infrastructure that will include an administrative building (offices) and a warehouse for storage of equipment and machinery
 - Road network for ease of access of various project components throughout the site
- Associated facilities which will mainly include an Overhead Transmission Line (OHTL) that will connect from the substation onsite to the National Grid

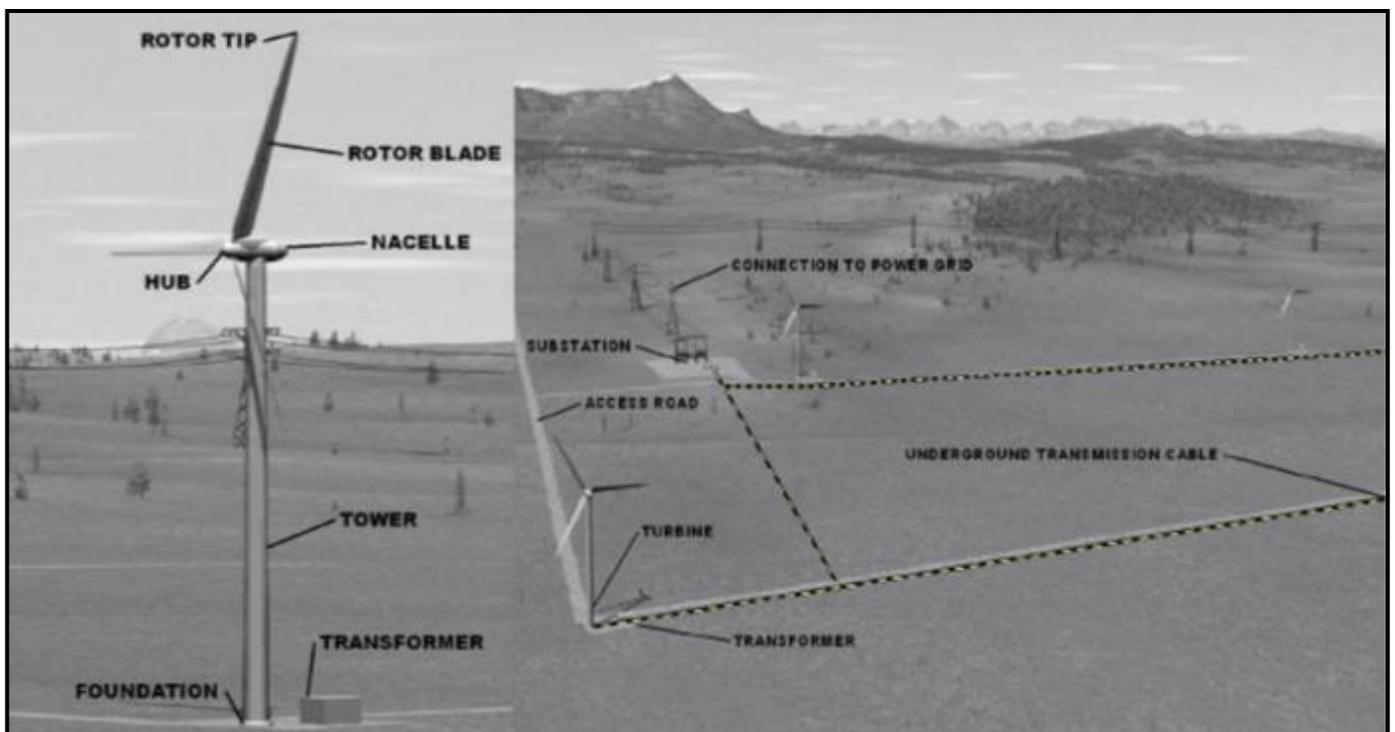


Figure 4: (a) Typical Structural Components of a Wind Turbine, (b) Typical Components of a Wind Farm

2.3 Project Phases

The Project will include 3 distinctive phases as follows:

- Design and Construction Phase that will include: (i) preparation of the detailed design, (ii) transportation of components to the site, (iii) site preparation activities (land clearing, excavations, etc.), and (iv) installation of components.
- Operation Phase that will include the normal daily operation of the wind farm and the undertaking of maintenance activities as required.
- Decommissioning Phase that will include the dismantling of the various Project components at the end of the life time.

According to the current timeline, construction of the Project is anticipated to commence approximately April 2024, and will require approximately 18 months for construction and commissioning (i.e. till January 2026). Operation of the Project is therefore anticipated to commence in 2026 for a period of 20 years.

3. SUMMARY OF ENVIRONMENTAL AND SOCIAL BASELINE CONDITIONS & IMPACTS

3.1 Introduction

The Environmental and Social Impact Assessment (ESIA) comprised environmental and social baseline studies and an assessment of impacts. Mitigation measures, which are included in the ESMP, were identified for potential significant effects and the significance of residual effects determined. The impact assessment followed an assessment methodology developed to reflect current best practice. The key baseline and impact assessment findings are further discussed below.

3.2 Environmental & Social Baseline Conditions & Impacts

(i) Landscape and Visual

The Project site in general can be classified as a desert area with soil that is formed from sand and rocks. In addition, the site is characterised of being composed of large flat areas with some relatively small hills in some parts.

In terms of visual characteristics, no sensitive visual receptors were identified within the Project area and relevant radius surrounding the site (up to 10km). Project site is located near an industrial area where several activities are noted (as discussed in more details in Section (ii) below).

The key impacts from the Project development are limited to the operation phase and which include impacts from Project visibility. Visual impacts associated with wind energy projects typically concern the turbines themselves (e.g. colour, height, and number of turbines) and impacts relating to their interaction with the character of the surrounding landscape and the visual receptor which might be present.

Nevertheless, such impacts are considered not significant given that there are no key sensitive visual receptors within the area that could be affected. In fact, the Project is located within an industrial area which also includes several other wind farm developments, for which aesthetical value loses some importance.

(ii) Land Use

The Project site location does not conflict with any environmental land use planning such as areas of critical environmental concern – in particular, the Project site is not located within environmental protectorates or Important Bird Areas (IBAs). The closes would be 12 km to the east that is known as Gabal El Zeit IBA.

In addition, as discussed earlier, the Project is located within a 1220 km² area that is under ownership of the GoE and which has been allocated to NREA for development of wind farms.



Figure 5: GoE Allocated Area to NREA

The ESIA also investigated the actual land use of the Project area through a land use survey. No physical activities or economical activities were recorded within the Project site nor any evidence of such activities (e.g. ploughing marks, abandoned structures, livestock remains, etc.). However, some infrastructure elements were recorded within the Project site including unpaved roads and a closed petroleum unit.

Apart from those receptors identified above, the area in general is uninhabited and vacant with no indication or evidence of any physical or economical land use activities undertaken by the local communities or other stakeholder groups (such as grazing, agriculture, nomadic settlements, etc.).



Figure 6: View of the Petroleum Units Onsite

In addition, land use activities in the surrounding area were also investigated. In general, the Project site is located within an industrial area. Key activities noted include the following as presented in the figure below: (i) several army units, an energy substation associated with the OHTL, dumpsite and a dam located east of the project, and petroleum activities in the northeast.

Apart from the above, it is important to note that area is under the “Ghafra System” of Bedouin Groups (although they have no physical or economical activities within the site), which entails involving such Bedouin groups in the Project (through jobs, services, etc.) for their support. In particular, the key Bedouin Groups known in the area are the Tabbna and the Hamadin families.

Taking the above into account, there are no physical or economical displacement impacts anticipated from the development of the Project and no key issues of concern are expected. Nevertheless, the ESIA identifies mitigation measures to be implemented by the Developer at the planning stage to include:

- Establish coordination via NREA with the relevant entity (such as General Petroleum Company) to agree on any specific requirements to be taken into account as part of the detailed design for existing facilities such as the petroleum storage facility and oil rig, amongst other requirements; and
- Establish coordination with the Bedouin Groups for inclusion and engagement in employment opportunities during construction and operation to obtain their support.

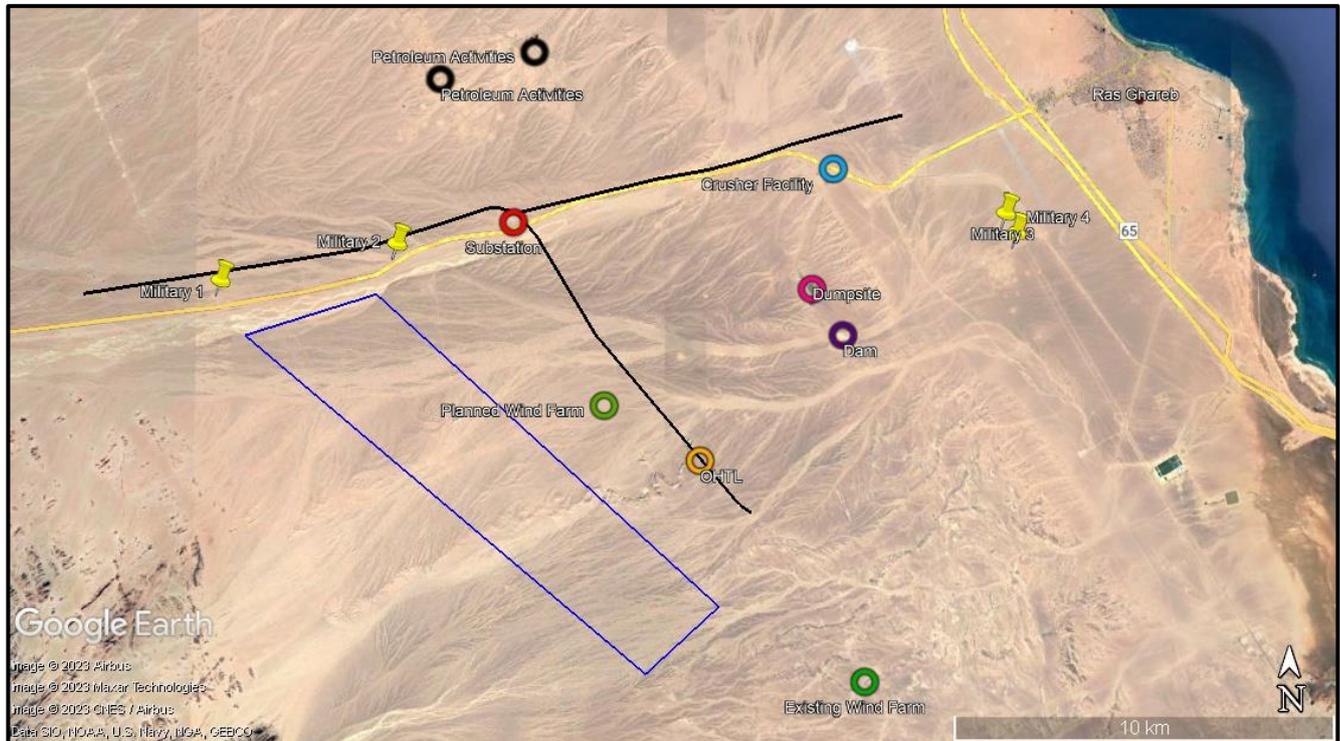


Figure 7: Nearby Structures of the Project Site

(iii) Hydrology and Hydrogeology (Soil and Groundwater)

Key impacts related to the Project include potential for flood risks which could affect the Project site during the rainy season and especially during flash flood events. Nevertheless, a standalone flood risk assessment was undertaken which concluded the following:

- Turbines were considered to be generally safe and are far from the expected places of surface runoff during severe rainstorms as they mostly placed in elevated locations and therefore considered naturally protected. However, this assessment should be refined during the detailed design to identify the specific turbines which may need additional or supplementary protection.
- Drainage lines impact on the roads within the site is not significant. Therefore, in some places, simple cement culverts with a diameter of one meter at most can be placed to accommodate the surface flow and prevent its flow up the road.

Other potential impacts are mainly from improper housekeeping practices during construction and operation (such as illegal disposal of waste to land) which could contaminate and pollute soil which in turn could pollute groundwater resources. The ESIA has identified adequate mitigation measures which aim to control such impacts and ensure proper conduct, waste management and housekeeping practices are implemented. With the implementation of such measures the impact is considered not significant.

(iv) Biodiversity

The biodiversity baseline assessment concludes that the Project site has low vegetation cover with a low number of species (as expected in a desert) and with only few species of conservation concern. The diversity is that typical of the Egyptian Red Sea coast with no exceptional features. In addition, no key or sensitive habitats were recorded within the Project site, and all floral and faunal species recorded where in general considered common and typical to such habitats and generally of least concern. However, special consideration should be given to the globally threatened Egyptian Dabb Lizard *Uromastix aegyptia* and the Dorcas Gazelles (*Dorcas Gazelle*) since the Project site provides a typical habitat for the species.

The main impacts on biodiversity is related to construction activities altering the site's habitat and thus potentially disturbing existing habitats. Other impacts are mainly from improper conduct and housekeeping practices by workers (i.e. hunting of animals, discharge of hazardous waste to land, etc.) during the construction and operation phase. The ESIA has identified adequate mitigation measures which aim to control such impacts and ensure proper conduct and housekeeping practices are implemented. With the implementation of such measures the impact is considered not significant.

However, the ESIA requires the following mitigations to be implanted:

- Prior to construction a detailed Egyptian Dabb Lizard survey should be undertaken for all construction active areas. Should it be identified, the survey should aim to capture and relocate the Dabb Lizard to outside of construction active areas to a similar habitat based on demonstrated good practice.
- Implement proper management measures to prevent damage to the biodiversity of the site. This could include establishing a proper code of conduct and awareness raising / training of personnel and good housekeeping.

(v) Birds (avi-fauna)

A baseline assessment was undertaken that included an avifauna survey that studied the use of the migratory and resident soaring birds of the Project site, while providing a detailed analysis of the durations that these species use the site and the elevations at which they are present, which would eventually provide an in-depth understanding of the predicted impact of the Project on bird species.

The survey was undertaken through four (4) observation points that covered the spring 2021 and 2023 and autumn 2021 bird migration seasons. In total, a maximum of (2) VPs were covered daily, where each observation period covered a minimum of 8 hours per day: in spring 2021 - 1,220 hours, 2023 - 1,521 hours, and in autumn 2021 – 865 hours.

In spring 2021, a total of 62,451 individuals (2,488 records) of 23 were recorded while in spring 2023, the total number accounted for 87,076 individuals (2,798 records) of another 23 species. The most abundant species were, in decreasing order, the White stork (35.34-41.74%), the Steppe Buzzard (19.40-38.72%), Honey Buzzard (7.21-26.96%), the Black kite (5.75-6.27%), and the Steppe eagle (3.07-4.35%). There are 2 endangered species: the Egyptian vulture and the Steppe eagle; 3 are listed as vulnerable (VU) the Sooty Falcon, and the Eastern Imperial and Greater Spotted eagles; and 1 species as Near Threatened – the Pallid Harrier. The remaining species are evaluated as 'Least Concern'.

Based on the autumn survey, 14 species were recorded with a total of 577 individual birds. The majority of birds recorded belong to species of Least Concern while species of local and global significance (threatened) were recorded in low numbers with one Endangered Species identified – the Egyptian vulture, and one Vulnerable species – the Sooty Falcon and 1 species as Near Threatened – the Pallid Harrier.

Since birds are considered as a key issue, including all soaring birds in the project area, which are protected by both national and international laws and regulations, regardless of their conservation status, a special focus should be given on all species where all species should be recorded and all species that are significant and local levels are important for the area, regardless their numbers.

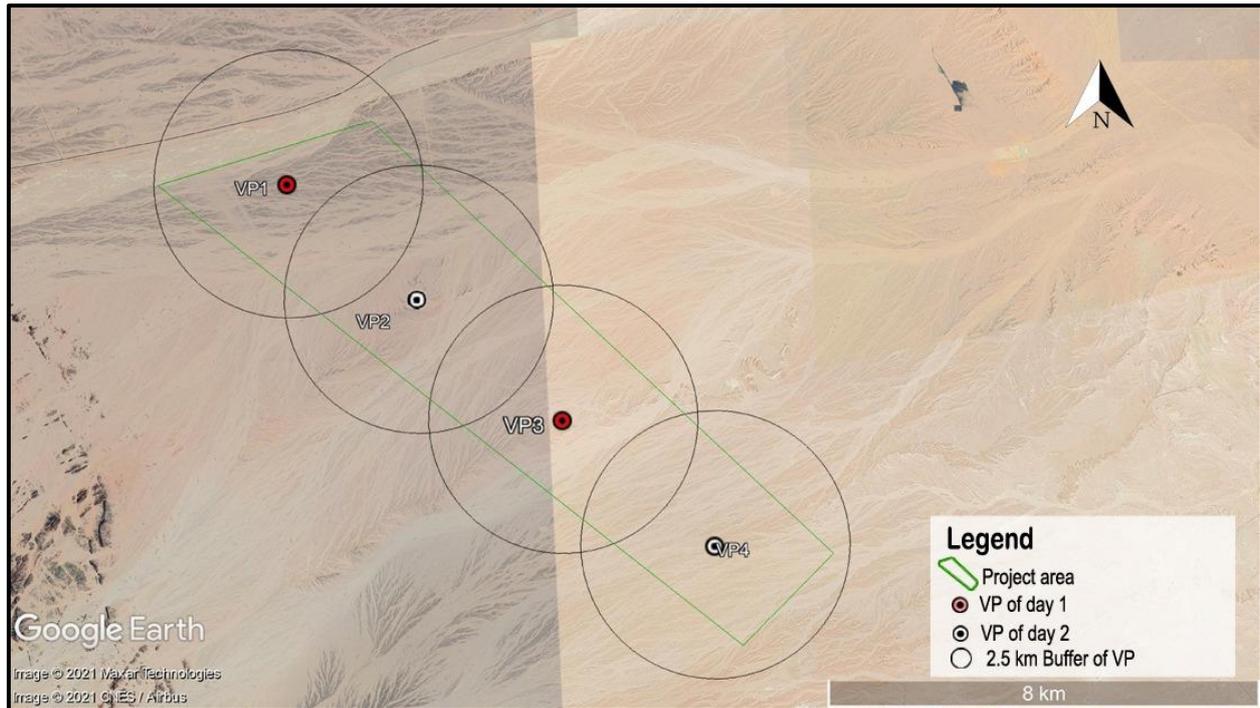


Figure 8: Location of OP at IPH's plot

Key impacts anticipated on birds is during the operation phase and mainly related to risk of bird strikes and collisions with rotors of the operating wind turbines. However, to control such impacts, an Active Turbine Management Plan (ATMP) will be implemented during the operation phase that will include:

- Avi-Fauna Monitoring and On-Demand Turbine Shutdown where during the migration seasons, daily onsite monitoring will be undertaken to shutdown turbine during risky situations to migrating birds to avoid collisions; and
- Fauna Carcass Search that will demonstrate the effectiveness of mitigation measures such as turbine shut down and allow an estimation of the annual number of bird deaths caused by the turbines.

(vi) Bats

A site survey was undertaken at the Project site that included the use of a bat detector. The survey was undertaken during April and May. In general, such months are considered the most suitable period of the year to assess bat activity as bats become active after the hibernation which may last from December to March. The survey was undertaken for a period 3-5 nights each month.

Based on the above, only 1 recording was noted for the *Tadarida aegyptiaca* (Egyptian free-tailed bat) which is of Least Concern.

The site is expected to be of low significance in terms of bat activity. Low bat activity is expected within the area due to arid nature and low vegetation coverage.

Key impacts anticipated on bats is during the operation phase and mainly related to risk of bat strikes and collisions with rotors of the operating wind turbines. Such impacts are anticipated to be not significant due to low activity excepted as roosting sites for bats were not observed on the Project site.

(vii) Archaeology and Cultural Heritage

An archaeological baseline survey has been carried for the Project site. The assessment concludes that there are no records of any sites of interests or significance within the Project area.

The main impact anticipated is during the construction phase from site preparation activities. As noted earlier there are no archaeological remains on the surface of the Project site, and therefore there are no anticipated impacts. However, there is a chance that throughout construction activities, archaeological remains buried in the ground are discovered. Improper management (if such sites are discovered) could potentially disturb or damage such sites. Nevertheless, the ESIA requires the implementation of chance find procedures if such remains in the ground be discovered throughout the construction phase. With the implementation of such measures the impact is considered not significant.

(viii) Air Quality and Noise

An air quality and noise baseline was undertaken for the Project area. The baseline consisted of a monitoring program targeting key pollutants at 3 points for a total duration of 24 hours at each point. The air quality baseline concluded that the results are significantly lower than the maximum allowable ambient air levels indicated within the legal limits. With regards to noise, the levels for two of the three monitoring points exceeds the national allowable limits at daytime. Additionally, all three monitoring points exceed national limits during night-time. However, this is mainly attributed due to the intensity and speed of the wind at the measurement sites.

Construction and operation activities of wind power project are passive in nature and do not result in any key air emissions or significant noise sources. However, construction activities may increase level of dust and particulate matter emissions, which will temporarily impact ambient air quality. Moreover, the use of machinery and equipment are expected to be a source of noise and vibration within the Project site and its surroundings.

As part of the ESIA, appropriate mitigation measures have been identified for dust suppression and noise control and which will be implemented during the construction phase. This includes for example regular watering of all active construction areas, proper management of stockpiles, the use of well-maintained mufflers and noise suppressants for high noise generating equipment and machinery, etc. With the implementation of such measures the impact is considered not significant.

(ix) Infrastructures and Utilities

Water Resources and Utilities – the Project is expected to require water throughout the construction phase. This will include water for construction requirements (concrete works, minimize dust, etc.) and potable use (drinking, washing, etc.). Similarly, during the operation phase, water will mainly be required for potable use of onsite staff but is expected to be minimal and insignificant. The Contractor and Operator are required to coordinate with Ras Ghareb Water Company to secure water requirements for the Project, most likely through tankers.

Waste Utilities – solid waste, wastewater and hazardous waste generated during the construction and operation phase will be minimal and is expected to be managed and disposed through coordination with relevant authorities for disposal of waste streams (e.g. Ras Ghareb Water Company and Ras Gharib City Council).

Road Networks: Given the increasing size, weight, and length of components of the wind turbines, proper transportation and logistical solutions could be required for managing the heavy-load long-haul requirements. If improperly planned and managed, trucks hauling the various heavy Project components may damage existing roads, highways, bridges, utility lines (e.g. electricity lines), and could also be a public safety concern for other vehicles on the road. The Contractor will be required to prepare a Traffic and Transport Plan before commencement of any transportation activities to ensure that process is properly and adequately managed.

Aviation and Telecommunication: Improper planning and site selection of the Project could impact and affect infrastructure elements related to aviation, telecommunication and television & radio links in the surrounding area. ESIA requires establishing coordination with relevant entities to provide information on the Project and include any specific requirements to be considered as part of the detailed design, if required.

(x) Socio-economic Conditions

The main impact anticipated on socio-economic conditions is related to potential job opportunities for local communities from the Project during construction and operation. However, such impacts are limited taking into account the nature of activities. No details are available at this stage on the number of job opportunities targeted to local communities, type of jobs, duration, etc.

Taking the above into account, the Project is committed to ensuring that priority for job opportunities are targeted for local community members to the greatest extent possible throughout the construction and operation phase for skilled and unskilled jobs.

At a later stage, a local recruitment procedure will be developed by the Contractors and Operator, under supervision from the Project. The procedure will identify the number of job opportunities targeted for local communities and recruitment process will be undertaken through the Governorate's Labor Office. Based on that, the recruitment procedure will also include a selection process that is fair, transparent and provides equal opportunities for all including females.

In addition, the Project will also implement a Social Responsibility Program that will be implemented for the local communities based on their needs and requirements.

(xi) Occupational Health and Safety and Worker Accommodation

During the construction and operation phase there will be generic occupational health and safety risks to workers, such as working on construction sites, exposure electric shock hazards during maintenance activities, working at heights, etc. The ESIA requires that the Contractor and Operator prepare an Occupational Health and Safety Plan (OHSP) tailored to the Project's site and activities. Such plans aim to ensure the health and safety of all personnel in order to concur and maintain a smooth and proper progress of work at the site and prevent accident which may injure personnel. With the implementation of such measures the impact is considered not significant.

In addition, the Contractors will prepare a worker accommodation plan, which will define the minimum health and safety standards and principles for worker accommodation and ensure impacts on community health and safety from worker influx are managed and controlled. This could include impacts related to pressure on infrastructure, services and utilities, introduction of new reservoirs of diseases, inappropriate code of conduct by workers towards local communities, possible increase in social vices, and other.

(xii) Community Health, Safety, and Security

During construction and operation phase the main impacts on community health, safety and security include the following:

- Wind turbines produce noise during operation. In addition, operating turbines also produce shadow flicker effects which occur when the sun passes behind the turbine and casts a shadow away from the turbine's location. As the rotor blades rotate, shadows pass over the same point causing an effect known as 'shadow flicker'. Both noise and shadow flicker could be a source of nuisances and disturbances. However, within the Project site and surrounding there are no sensitive receptors that could be affected by such impacts and therefore this is considered irrelevant.
- Trespassing of unauthorized personnel into the Project site and which could result in potential risks from several hazards of the various Project components. Nevertheless, it is expected that as part of the detailed design the security measures to prevent unauthorized access to the Project site will be identified which in turn will control any such impacts. This could include onsite security guards, fencing of some Project components (substation area), onsite surveillance and other.
- Inappropriate management of security issues and incidents by security personnel towards local communities could result in resentment, distrust and escalation of events. Nevertheless, a Security

Management will be prepared which will identify appropriate measures for hiring, rules of conduct, training, equipping, and monitoring of security personnel to control and manage such issues.

4. ENVIRONMENTAL & SOCIAL MANAGEMENT

The ESIA includes an Environmental and Social Management Plan (ESMP) which provides a high-level outline plan for managing and monitoring the environmental and social impacts during construction, operation and decommissioning of the Project. The ESMP identifies the mitigation measures which aim to eliminate and/or reduce the potential impact to acceptable levels and monitoring actions to ensure that the identified mitigation measures are implemented.

In addition, the development and implementation of an Environmental and Social Management System (ESMS) during the construction and operation is considered a key requirement under EBRD and IFC requirements. Therefore, the Developer also prepared a Health, Safety, Social and Environmental (HSSE) Management System (MS) Manual which includes the following:

- Identification of the overall structure and outline for the HSSE MS that will be implemented for the Project during both construction and operation;
- Identification and outline of the key procedures and plans to be developed at a later stage by the Contractors and Operator that will handle the key impacts and risks during construction and operation (e.g. air quality management plan, waste management plan, etc.)
- Identification of an institutional framework to ensure that such plans and procedures are implemented effectively and efficiently. This includes identification of roles and responsibilities, training requirements, monitoring and reporting requirements, and other as applicable;
- Identify approach for periodically auditing entities involved during the construction and operation phase to ensure that HSSE MS requirements are implemented effectively;
- Identification of a high-level framework for labour management that should be adhered to during the construction and operation phase; and
- Identification of a strategy and commitment in relation to local hiring and community support initiatives.

5. ESIA FOR THE OHTL

As discussed earlier, the electricity generated from the Project will be connected from the substation to the National Grid through an Overhead Transmission Line (OHTL) that will be developed by Egyptian Electricity Transmission Company (EETC).

The main component of the OHTL is the transmission towers which will transport the electricity from a substation located within the Project site to the High Voltage National Grid. The OHTL will consist of around 35 towers that will be distributed throughout the route. The height of each tower will be around 50m.

Two possible options for the OHTL were investigated: Option A with a total distance of 12 km (5.1 km within the project site) and Option B – 13.6 km (7.5 km).

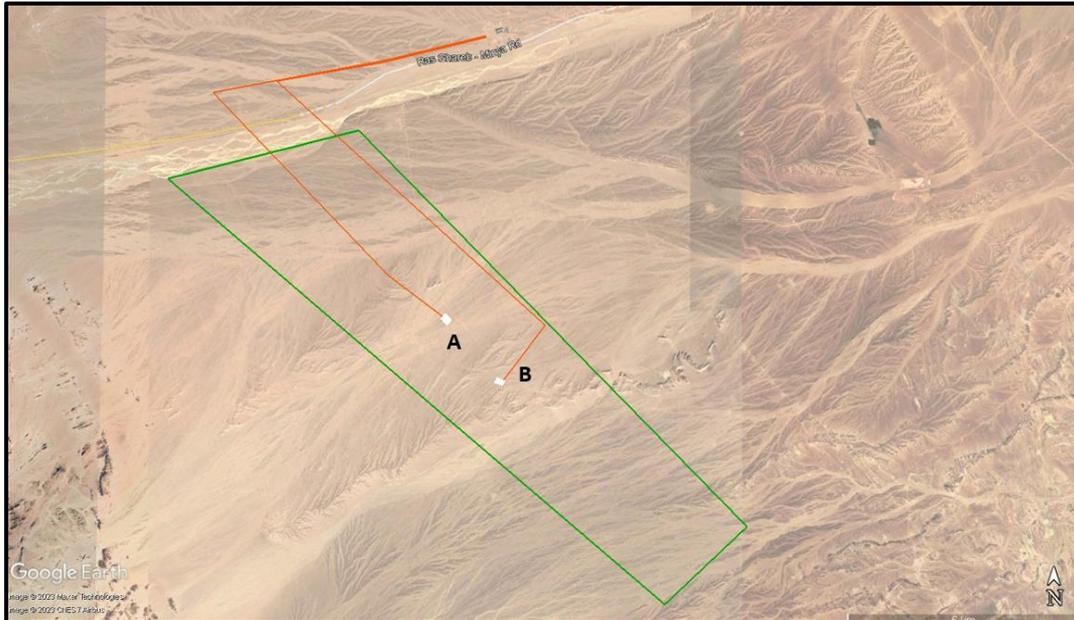


Figure 9: OHTL Routing Options

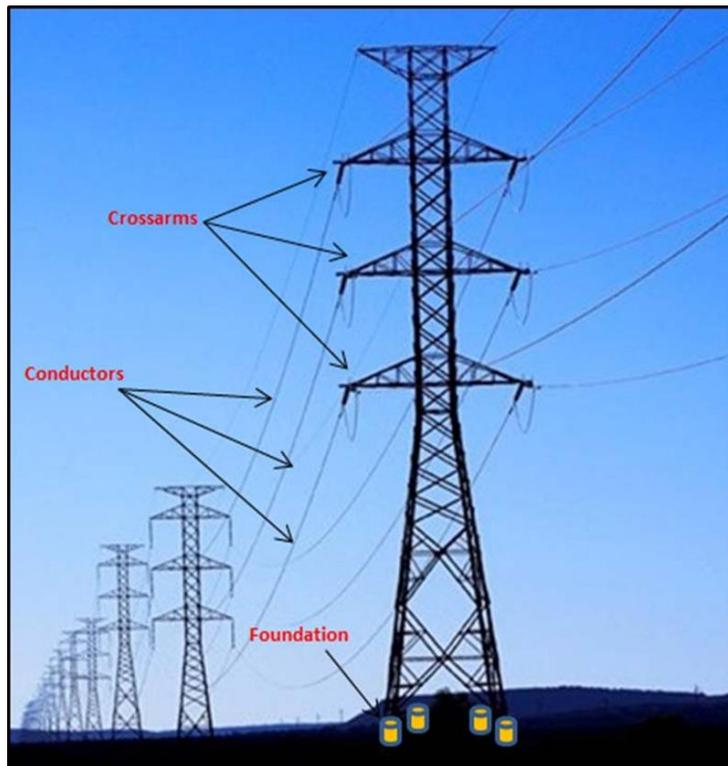


Figure 10: Typical Structural Components of towers

The OHTL was studied as part of the ESIA and concludes that there are no key issues of concern. The key outcomes are as follows:

- The visual impacts of the components of the OHTL (color, height and number, etc.) and impacts related to their interaction with the surrounding landscape and to which a visual receptor may be present but given the industrial location of the area such impacts are considered insignificant

- Inappropriate siting of Project components could result in land-use impacts related to physical or economic displacement yet these impacts are not anticipated for the Project at hand due to the following characteristics of the site:
 - The Project site (including the OHTL route and a 100m buffer on both sides) is uninhabited and does not host physical nor economic land-use activities
 - The land is under governmental ownership and was allocated to NREA; thus, no land acquisition nor compensation process is required
- The OHTL route is similar to the Project Site, featuring low vegetation and a low number of animal species. However, special consideration should be given to the globally threatened Egyptian Dabb Lizard as the project site is exemplary of the habitat suitable to these species and the same mitigation identified previously should be applied (i.e. capture and relocation program prior to commencement of construction activities).
- The main risk of the OHTL is the risk of collision for birds due to the size of OHTL components. However, the ESIA requires the installation of bird deterrents to mitigation such impacts.
- Routine mitigation and management measures for waste management, dust and noise control, occupational health and safety, and chance find procedures to be implemented during construction and operation as applicable.

It is important to note that EETC is considered a governmental entity which the Developer has limited or no influence on and therefore the ability to manage impacts of the associated facility will be limited and the Developer will liaise and interact with the EETC to try to influence and have some key mitigations implemented, as those identified above.

6. STAKEHOLDER ENGAGEMENT PLAN (SEP)

Stakeholder consultation and engagement activities were undertaken as part of the ESIA process. This included consultations with national governmental entities, regional/local governmental entities, Non-Governmental Organizations (NGOs), local communities and others. In general, stakeholders were supportive of the Project and all comments and issues of concern raised throughout such consultations were taken into account and considered within the ESIA process.

In addition to the above, a Stakeholder Engagement Plan (SEP) has also been developed for the Project that will be implemented by the Developer. The SEP identifies in details the stakeholders that are relevant to the Project to include local communities, national governmental and permitting authorities, local government, Non-Governmental Organizations (NGOs) and other. The SEP identifies previous stakeholder engagement activities undertaken for the Project and the key outcomes of such engagement activities. This included in particular several entities such as Red Sea Governorate, Ras Gharib City Council, Bedouin Groups, General Petroleum Company and other. In addition, it also describes the outcomes of a public disclosure session that was undertaken in Ras Gharib City with local communities and other key local governmental entities.

The SEP also identifies in detail a future stakeholder engagement strategy and plan which identifies activities that will be undertaken throughout the Project duration, which provides an opportunity for all stakeholders, including local communities, to express their views and interact with the Project.

The SEP also includes a stakeholder grievance mechanism that is responsive to any concerns and complaints from affected stakeholders and communities.

7. CRITICAL HABITAT ASSESSMENT (CHA) AND BIODIVERSITY MANAGEMENT PLAN (BMP)

A Critical Habitat Assessment (CHA) has been undertaken for the Project which aimed to identify whether there are any critical habitat qualifying species or habitats. The assessment concludes that Critical Habitat has not

been triggered for this project but there are a number of Priority Biodiversity Features (PBFs) that will need to be safeguarded during the construction and operational phase to ensure no net loss of these features. This includes species of birds and reptiles.

All PBF species were included in the Biodiversity Management Plan (BMP). The BMP fully details all relevant construction mitigation measures (Construction BMP) and habitat restoration and operation mitigation and enhancement measures (Operation BMP) which will be completed during and after the construction period to achieve the objectives of No Net Loss for PBFs. The Operational BMP will also include all measures included in the Active Turbine Management Plan (ATMP) to prevent collision events of birds with operational turbines. The ATMP will be further revised based on further Project relevant surveys and monitoring as well as those completed for other Projects in the region. This will include utilising data to highlight elevated risk situations.

8. CUMULATIVE EFFECTS ASSESSMENT (CEA)

A Cumulative Effects Assessment (CEA) was undertaken which analysis the potential cumulative effects on birds of the Project together with existing and potential wind farm developments in the Gulf of Suez. The analysis identified priority bird Valued Environmental Components (VECs) (IFC 2013) that were likely to be at greatest overall risk from the Projects. This includes 13 species which are considered priority VECs.

In addition, the CEA identified high-level mitigation and monitoring actions that will be adopted as well as additional actions that the developers in the study area should undertake or support to address their contribution to the cumulative effects of their developments together with others in the region.

9. ESIA DISCLOSURE & CONTACT DETAILS

It is of utmost necessity to ensure that stakeholders are kept well informed about the Project throughout its life cycle, thus information will be accessible to the public, key stakeholders, and local communities through dissemination of related documents.

The disclosure package will include the following key documents that are available publicly in Arabic and English language.

- Environmental and Social Impact Assessment (ESIA) for the Wind Farm and the associated Overhead Transmission Line (OHTL)
- Non-Technical Summary (NTS)
- Stakeholder Engagement Plan (SEP)
- Cumulative Effect Assessment (CEA)
- Critical Habitat Assessment (CHA)
- Biodiversity Management Plan (BMP)
- Flood Risk Assessment
- Health, Safety, Social and Environmental (HSSE) Management System (MS) Manuel
- Environmental and Social Action Plan (ESAP)

The above documents are available at the following avenues:

- EBRD website (www.ebrd.com)
- Hard copies available at Red Sea Governorate and Ras Ghareb Local Governmental Unit

Ras Ghareb City Council
Location: Al-Mina Street

City: 11432 Ras Ghareb – Red Sea
Tel: 01001318480 – 01201958777

- Soft copies can also be made available to stakeholders via email to info@weareiph.com

To communicate the outcomes of the above process, instead a public disclosure session will be held with stakeholders. An advertisement will be taken out in the national newspaper about the project, the availability of the disclosure package and the details about an upcoming disclosure event. The same will be done on the Project's website and LinkedIn.

The whole event will be recorded and a summary report on the event and the Q&A session will be made available.