

EGYPT SUSTAINABILITY REPORT 2023



GLOBELEQ
POWERING AFRICA'S GROWTH

150

GWh of electricity generated from our ARC Solar plant, with 99.8% availability

74,543

tonnes of CO₂-equivalent emissions avoided by generating clean electricity

Zero

reportable safety incidents in our operations for the third year running

267,040

EGP contributed to socio-economic development projects for local communities

We are expanding the frontiers of green energy in Egypt.

Located at the confluence of Africa, Europe and Asia, Egypt is well positioned to become a global green energy hub. Our investment in energy infrastructure is supporting the Egyptian Government's sustainable development and climate goals, including to source 42% of electricity from renewables by 2030.

To maximise impact, we are focusing on mega projects including green hydrogen, seawater desalination, and large-scale wind, solar and battery energy storage.

In 2023, we secured two greenfield sites near Cairo and Aswan to develop 6 GW of new wind and solar plants. Power from these plants will feed into the large-scale green hydrogen production facility we plan to build in three phases over the next decade.

We also expanded existing operations by acquiring a 49% share in a 25 MWp solar plant adjacent to our 66 MWp ARC Solar plant in Benban Solar Park at the start of 2024. Benban is the largest solar park in the Middle East and Africa, providing 1,465 MW of clean power to the Egyptian national grid.

Ghada Darwish
Country Director,
Egypt



We are continuing to invest in solar power by acquiring a 49% share in the 25 MWp Winnergy plant in Benban Solar Park.



Welcoming students to our solar plant

Solar power is key to the future of energy in Egypt. We welcomed groups of young people to our ARC Solar plant to experience firsthand how it works and learn about its economic and social impact. More than 100 high school students from the Aswan area and 23 engineering students from Aswan University joined tours led by our senior engineer.



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Performance overview 2023

Our development activities and team expanded in 2023 as we made progress on our transformational green hydrogen project (see quote below) and pursued the acquisition of a 49% share in the Winnergy solar plant, which was completed in early January 2024. We hired a business development manager and a female engineer specialising in wind development, both from Egypt, and will now begin monitoring wind potential on the sites we acquired for renewable energy plants to feed our planned green hydrogen facility.

We continued our strong focus on safety, maintaining zero reportable incidents in Egypt since acquiring ARC Solar in 2021. Weekly videos kept operations personnel informed and aware of relevant health and safety topics, and we provided defensive driving training for our employees and ARC Solar operations and maintenance contractors.

On World Environment Day, we held discussions at the plant to raise awareness of the impact of plastic on nature. We also repurposed used plastic bottles and tyres from the plant into containers to recycle water and provide drip irrigation for newly planted saplings.

We contributed to socio-economic development projects run by Benban Solar Park that benefit neighbouring villages in Aswan. In 2023, these projects reached around 5,000 direct beneficiaries and included support for craftswomen, training in various trades for young people, capacity building for non-governmental organisations and tree planting for climate adaptation.

Working in partnership

ARC Solar is one of 32 power plants located within the vast Benban Solar Park – the largest solar park in the Middle East and Africa and one of the biggest in the world. The operation and maintenance contractor is GLA Al Tawakol. Electricity is sold to the Egyptian Electricity Transmission Company (EETC) under a 25-year power purchase agreement.

	2021	2022	2023
POWERING DEVELOPMENT			
Operational power capacity (MW)	66	66	66
Average availability (%) ¹	99.8	99.9	99.8
Electricity generated (GWh)	154	154	150
Consumers reached by the electricity we produce ²	33,600	33,600	34,500
Jobs indirectly supported through electricity generated ³	491	492	366
HEALTH AND SAFETY			
Reportable incident rate ⁴	0.00	0.00	0.00
Lost-time accidents	0	0	0
EMPLOYEES			
Number of employees	4	4	6
– Egyptian nationals (%)	100	100	100
– Women (%)	25	25	33
COMMUNITIES			
Total spend on socio-economic development projects (EGP)	627,343	326,326	267,040
ENVIRONMENT			
Greenhouse gas emissions avoided from renewable power production (tonnes CO₂e) ⁵	76,769	76,837	74,543
Greenhouse gas emissions generated (tonnes CO₂e)	57	31	414 ⁶
Greenhouse gas emissions intensity (tonnes CO₂e/GWh produced)	0.37	0.20	2.77 ⁶
Water use (m³)	217	208	224
Total waste generated (tonnes)	53	1	1
– Hazardous waste generated (tonnes)	52	0	0

¹ Equivalent availability factor for solar calculated in the daytime from the first moment solar intensity exceeds 75W/m² until the last moment it falls below 75W/m².
² Estimated based on actual project-level production and national per capita consumption.
³ Estimated indirect employment enabled by businesses using electricity

generated, based on Joint Impact Model (used by BII).
⁴ Includes incidents resulting in lost time, medical treatment or work restriction. Rate based on OSHA definition (200,000 x reportable incidents/working hours).
⁵ Calculated based on actual energy generation and national grid factors.
⁶ Higher than usual due to increase in electricity consumption following request from offtaker to change plant operation mode.



“I joined the Globeleq London team originally as an intern in 2020. Now, as an employee, I’m leading certain workstreams of our transformational green hydrogen project in Egypt. This is an exciting technology that hasn’t been tested on a large scale. It is so rewarding to put Africa at the forefront of the global energy transition as a key player, helping to decarbonise hard-to-abate sectors, while bringing skills and investment to the region.”

Maeva Rakotoarisoa Business Development Senior Associate, recognised as a Rising Star in the *Women in Hydrogen 50* list 2023