

# Greening Moonshot



By Majed Ghannam



chieving the ambition of the 2030 Agenda for Sustainable Development requires a new approach to everything we do: the more disruptive we are, the more transformational the solutions

will have to be. UNDP knows from experience that incremental change is not enough. We have to be committed to “walking the talk,” adapting the way we operate internally to mitigate, minimize, and offset the impacts of our own operations and programs, and challenge ourselves to define new standards both in the UN and beyond.

One of UNDP’s commitments is to be green, sustainable, and just. While UNDP has been climate-neutral in its global operations by procuring carbon credits since 2015, offsetting is not enough. Over the years, colleagues throughout the organization have developed innovative and effective approaches to reducing UNDP’s environmental footprint, from introducing policy and procedural measures needed to support a 100 percent green electricity target to upgrading UNDP’s fleet to electric vehicles, making UNDP operations paperless, and developing “green” criteria for UNDP facilities. Hence came the launch of the “Greening Moonshot” initiative.

The first round of the Moonshot Facility call for proposals, targeting UNDP country offices, was launched in order to support this transformation and incentivize contributions to the Moonshot targets.

As UNDP’s Programme of Assistance to the Palestinian People, we were ready to replicate and scale existing initiatives, using what we have learned and enabling transformations so that we can operate in an environmentally sustainable manner. We competed with other UNDP Country Offices across five regions, and our business case was among those selected to receive support from the Greening UNDP Moonshot Facility.

Our business case focused on our office building in Gaza and the chronic electricity crisis facing the Strip. The idea was to take initial steps towards transforming the building

into a smart UN facility. One way to improve energy supply and reduce deficit was to find new sources of electricity. With Gaza enjoying 300 days of sunny weather per year, solar energy is most promising to add new resources to the electricity grid.

On average, the office has access to the electricity grid between 4 and 12 hours per day. Therefore, to meet the consumption demands, the office uses three generators of 500-kVA, 250-kVA and 65-kVA capacity that use diesel as fuel, and the cost of diesel for the generators is US\$0.7/ liter.

**To credibly claim climate neutrality, UNDP is committed to reducing greenhouse gas emissions from global operations by 25 percent by 2025 and by 50 percent by 2030, implementing the best waste management in all UNDP premises and minimizing the use of resources.**



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The proposed solution will not only reduce the carbon emissions but also significantly increase the reliability and the electricity supply to the premises, cover the critical load while reducing dependency on generator

fuel, and increase the autonomy of the energy asset in case of outages. The solar PV installation, supported by a storage system, will generate 60 kWp and provide a battery storage capacity of up to eight hours.



**Energy scarcity and lack of access to energy are among the major constraints to Palestinian socioeconomic development, particularly in Gaza. Clean energy can provide affordable solutions that are in line with climate targets and that can help mitigate the effects of the COVID-19 crisis on people's livelihoods and the local economies.**



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With economic savings being strongly dependent on electricity and diesel fuel prices, we estimate an annual cost saving of around US\$19,000 or 71 percent of generator diesel usage reduction, respectively. Switching to renewable energy also has strong environmental incentives. The proposed system can save approximately 75 tons of CO<sub>2</sub> emissions yearly, effectively reducing the carbon footprint on the environment.

The project is expected to be completed in May 2021, followed by a commissioning and testing phase for the whole system, and accompanied by staff training for its operation and maintenance.

Since our office in Gaza does not only host UNDP staff, other UN

agencies can also benefit from implementing a green energy solution, compared to a traditional setup. It will also encourage the local community to adopt a similar approach and contribute to the achievement of the sustainable development goals.

UNDP, through its projects in Gaza, has already generated approximately 2.5 MW of solar energy in educational, health, social, and wastewater treatment facilities, with a total investment of more than US\$6 million, thanks to the support of multiple partners, including Japan, Norway, Islamic Development Bank, Qatar Fund for Development, Saudi Fund for Development, and OPEC Fund for International Development.

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