First-ever Peace REC (P-REC) transaction drives renewable energy development in Africa



Photo courtesy of Nuru.

OVERVIEW

- + Microsoft purchased P-RECs issued by Energy Peace Partners from Congolese solar developer Nuru's newly commissioned 1.3MW commercial solar-plus-storage project in Goma, DRC.
- + The P-REC purchase helped Nuru fund the recently completed construction of 35 mini-grid-connected streetlights in the Ndosho neighborhood of Goma.
- + The streetlights:
 - Improve quality of life with better nighttime visibility and road safety, and enhance neighborhood security
- Support the local economy by allowing businesses to stay open at night
- Improve air quality by reducing reliance on diesel generators, which are both expensive and highly polluting
- + This transaction unlocks a new renewable energy attribute option that other organizations can now leverage to drive renewable projects in underserved communities around the globe.

Background

Microsoft has long been a leader in corporate sustainability. As part of its commitment to be carbon negative by 2030, Microsoft has pledged to have its operations run with 100% renewable electricity by 2025. The company has developed business models that further the transition to renewable energy, and it seeks opportunities to invest in high impact renewable energy products and stimulate development in under-resourced communities and regions of the world.

3Degrees had been in discussions with Energy Peace Partners (EPP) since 2017, exploring ways in which the two organizations could work together to help operationalize a new and innovative instrument developed by EPP, Peace Renewable Energy Credits (P-RECs).

So when Microsoft issued an RFP specifically geared to driving the adoption of renewables and maximizing associated environmental impacts, 3Degrees included P-RECs in the RFP response.

WHAT'S A P-REC?

- New category of energy attribute certificate (EAC) that supports emerging renewable energy projects in poorly electrified, fragile, and climatevulnerable countries where renewable energy investment remains limited.
- I-REC with supplementary label from Energy Peace Partners certifying project co-benefits:
 - + Represents 1 MWh of renewable energy generated, issued under the I-REC Standard
 - + Supports renewable energy projects that deliver social and economic co-benefits in the same community



P-REC

The inaugural corporate purchase of P-RECs tests a new business model for the deployment of renewables in new geographies.

Creating a New Instrument for Renewable Energy Sourcing

In making this first-of-its-kind transaction a reality, there were some unique challenges that needed to be addressed.

- Because P-RECs are an entirely new instrument, there was little guidance on how they would fit into existing corporate sustainability reporting frameworks, including CDP and RE100.
- The P-REC pilot project is a 1.3 MW ground-mounted solar installation connected to a 520 kW/2.2 MWh battery energy storage system that introduces new electrification to the neighborhood of Ndosho in Goma, Democratic Republic of Congo (DRC) where no electrical grid infrastructure has previously existed. Like many developing nations in sub-Saharan Africa, DRC lacks widespread electrical interconnection, and this plant is not interconnected to other grids beyond Ndosho.



3Degrees, Energy Peace Partners, and project developer Nuru worked collaboratively to create the framework for scalable and accountable corporate sourcing. 3Degrees was key to this success by:

- Developing contractual mechanisms to implement project milestones to mitigate risks that could arise from unexpected issues related to construction of the solar plant and installation of the streetlights. This provided all parties with enough assurances to move forward and make this first-of-its-kind transaction a reality.
- Seeking guidance from leading renewable energy and GHG reporting initiatives to understand how these platforms could accommodate this new and unique instrument.
- Continuing to advocate for standardized guidance on how to report EACs that differ from standard renewable energy usage claims but do directly support market development in regions with limited electrical grid interconnection and renewable energy procurement options. The development of P-RECs has encouraged RE100 to consider P-RECs in the context of flexibility mechanisms for regions like sub-Saharan Africa, although no new guidance has yet been issued.



Photo courtesy of Nuru.



"With P-RECs, companies like Microsoft that are looking to procure renewable energy can invest in regions that are the most impacted by climate change and that are currently deprived of access to modern energy. Companies can maximize the impact of their investments not only from a carbon reduction perspective, but also from a climate equity perspective."

- VANESSA MILER Director, Energy Innovation and Impact, Microsoft



SUCCESS STORY | First-ever Peace REC (P-REC) transaction drives renewable energy development in Africa



"We developed the P-REC in order to support new renewable energy projects in fragile, energy poor regions of the world. With this inaugural P-REC purchase, Microsoft is demonstrating that corporate renewable energy procurement can be high impact by making a difference in communities like Ndosho, where increased access to sustainable and affordable power will be transformative. Energy Peace Partners is proud of this groundbreaking collaboration with Microsoft, 3Degrees, and Nuru."

- DAVID MOZERSKY President, Energy Peace Partners

P-REC PROJECT PROFILE

The Nuru solar energy project

The P-RECs for Microsoft's transaction will be issued by Energy Peace Partners (EPP) and associated with Congolese solar developer Nuru's newly commissioned 1.3MW commercial solar-plus-storage plant in Goma, eastern Democratic Republic of Congo, where less than 3% of residents have access to electricity. The system is one of sub-Saharan Africa's largest solar-plus-storage off-grid mini-grids currently in operation and will provide power to more than 700 households and anchor enterprise clients.

Microsoft's P-REC purchase assisted Nuru (which means light in Swahili) to fund the construction of mini-gridconnected streetlights in the Ndosho neighborhood of Goma, a community impact project co-designed with local stakeholders.



Photo courtesy of Nuru.

The streetlights are improving night time safety and security in the community, allowing businesses to stay open at night, reducing reliance on diesel generators, and expanding renewable energy capacity in an area that has never had grid infrastructure.

3Degrees makes it possible for businesses and their customers to take urgent action on climate change. As a certified B Corporation, we provide renewable energy, transportation decarbonization, and emission reduction solutions to global Fortune 500 companies, utilities, and other organizations that want to join the fight against climate change.



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