

The D-REC Initiative

Mobilizing corporate leadership to accelerate a just energy transition in emerging markets

The D-REC Initiative is an independent, private-sector led initiative that is creating new mechanisms and incentives for global corporations and climate investors to invest in distributed renewable energy (DRE) in developing and emerging markets.

The Challenge: Achieving Net-Zero and the End of Energy Poverty

The world must now rapidly decarbonize our global energy systems	To avoid the catastrophic impacts of climate change, GHG emissions must be cut in half by 2030 and drop to net-zero by 2050. By 2050, 90% of all decarbonization efforts and initiatives will involve the deployment of renewable energy (source: IRENA)
We are not on track to deliver sustainable energy for all	Over 759 million people continue to lack access to basic electricity and another 2 billion people suffer from inadequate and unreliable access. Every person deserves access to sustainable and abundant energy.
The private sector can help accelerate the clean energy transition	Corporate climate leadership is already driving billions of dollars of investment into new renewable energy in developed countries. Corporate Power Purchase Agreements (PPAs) helped finance 24GW of new power in 2020 , up 18% from 2019. Over 300 corporate members of RE100 with operations in 175 countries are already purchasing 334 TWh of renewable energy per year. Corporate climate ambition is driving a new low-carbon economy.
Climate finance is growing, and its growth is accelerating	Climate investors are also leading the way. Sustainable finance hit a new record in 2020, at \$730 billion. The Net-Zero Asset Managers initiative brings together 87 global investors with \$37 trillion in assets under management that have committed to align their investments with the achievement of the Paris Targets.
Not enough is being invested to accelerate the energy transition in developing and emerging markets	According to a new report ¹ emissions from emerging and developing countries are set to grow by 5 gigatons (Gt) over the next two decades. To achieve net-zero emissions by 2050, investments in clean energy in these economies must grow to \$1 trillion per year by 2030 , a 7X increase over existing investment levels. Achieving universal access to electricity will require annual investments of \$35 billion per year for new centralized and decentralized renewable solutions.

¹ Financing Clean Energy Transitions in Emerging and Developing Economies, World Energy Investment Special Report 2021, International Energy Agency in collaboration with the World Bank and the World Economic Forum



Helping Ambitious Climate Leaders Achieve their Goals

The D-REC Initiative is building new linkages between SDG13 (Climate Action) and SDG7 (Sustainable The Initiative is creating new tools to help global corporations and climate Energy for All). **investors** to achieve their climate goals while also accelerating the energy transition in developing and emerging markets.

The Initiative will help climate leaders:

- Source third-party certifiable renewable energy attributes across multiple markets;
- Achieve 3-6 times the climate impact of traditional corporate PPAs in developed markets; •
- Leverage their expertise to accelerate the energy transition and advance climate justice; •
- Reduce Scope 2 emissions and address Scope 3 emissions through collaborations with • supply chain partners;
- Leverage investment capital to build portfolios of zero-carbon energy projects.

Maximizing the Impact of Corporate Renewable Energy Procurement 580 The climate impact of any new renewable energy project depends on where it is being built and the carbon intensity of the electricity that it displaces. The Climate Impact of New Renewables Traditional corporate Power Purchase Agreements Depends on the (PPAs) that add new renewables will displace, on **Emissions Factor of** average, 402 gCO2e/kWh in the United States, or just the Energy Displaced 255 gCO2e/kWh in Europe. (g CO2e/kWh) Much greater climate impact can be achieved by deploying new renewables in developing and emerging markets. Distributed Renewable Energy (DRE) projects in southern Africa, that displace coal-fired grid electricity, or small-scale diesel generators, achieve 3-6 times the climate impact. The IFC estimates² that there are 20-30 million diesel gensets in 167 developing countries, with a total installed capacity of 350-500 GW. They supply 100-170 TWh of electricity and emit 100 megatons of CO2 each **Small Diesel Generators** year. Southern Africa Grids There is a very strong climate case for integrating developing and emerging markets into corporate energy procurement strategies and net-zero investment portfolios. The case is even stronger when we consider the Grid opportunities to advance climate justice. DRE projects can deliver power where it's needed most: on 4 hospitals & health clinics, schools & colleges, rural ົດ

communities, farms, small and medium sized

businesses, improving lives and livelihoods.

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Sources: IGES List of Emissions Factors, European Environment Agency, US EPA, IFC and CarbonFootprint.com

² The Dirty Footprint of the Broken Grid, The Impacts of Fossil Fuel Back-up Generators in Developing Countries, 2019, IFC



Creating New Tools to Mobilize Clean Energy Investment

The D-REC Initiative has been established to **design, deliver and demonstrate** new ways to certify and value distributed renewable electricity (DRE).

- Design: Engage with multiple stakeholders, corporations, climate investors, DRE project developers and standards organizations to design and create *a new market instrument*, the Distributed Renewable Energy Certificate (D-REC) aligned with several Internationallyaccepted climate accounting standards;
- 2. **Deliver**: Launch **an open-source technology platform** that will help market participants certify, track, claim, and monetize the positive climate impact of DRE projects;
- 3. **Demonstrate**: Facilitate *a series of pilot projects* that demonstrate how the D-REC instrument and technology platform can facilitate new flows of capital into transformative energy projects in developing and emerging markets while supporting corporate and investors' climate objectives.



Specific Opportunities for Corporations and Climate Investors

Corporations and climate investors are invited to collaborate with the Initiative and its partners to:

- a) **Support the electrification of hospitals in Africa.** Pilot the D-REC instrument in 3 African markets, supporting the electrification of over 1,000 hospitals and health clinics in partnership with UNDP. Corporate purchases of D-RECs are required to support the ongoing operations and maintenance of these essential renewable energy systems;
- b) Invest in the energy transition in developing & emerging markets. Pilot a new blended finance de-risking facility that will help mobilize climate finance towards the end of energy poverty, in collaboration with the IFC, climate investors and corporate climate leaders. Potential to deploy \$100m by 2025. Investors earn both financial returns plus a flow of certified renewable energy attribute certificates.
- c) Sign the Corporate Compact for Climate Justice. Collaborate on the development of a new Corporate Compact for Climate Justice, in partnership with UN Energy and other private sector leaders;



The D-REC Initiative

The D-REC Initiative is a not-for-profit, multi-stakeholder, industry-led initiative. Our membership includes climate and impact oriented philanthropic organizations, climate investors, leading global corporations, international standards organizations, technology providers, international development organizations, environmental market agents, sustainability advisors, renewable energy industry associations and project developers in emerging markets.



Please contact us to explore collaboration opportunities

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