# Google Submission 2023 RE100 Leadership Award

#### "Market Trailblazer" category

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### A sustainable future means decarbonizing the electricity grid for everyone

Since 2017 Google has been matching all of our annual electricity consumption with 100 percent renewable energy. However there are still regions and times of day where clean energy is unavailable and we must rely on fossil fuels. That is why we are working towards our moonshot goal of operating on 24/7 carbon-free energy (CFE) by 2030.

24/7 CFE is motivated by a core insight: To successfully combat climate change, we must rapidly decarbonize the world's energy systems – for everyone. Achieving grid decarbonization to keep the world from warming more than 1.5°C will require more than just Google. If we achieve our goal in a vacuum, we will have failed. Further, it is not enough to transition to a carbon free grid at any cost – ensuring an equitable transition to carbon free electricity grids is critical.

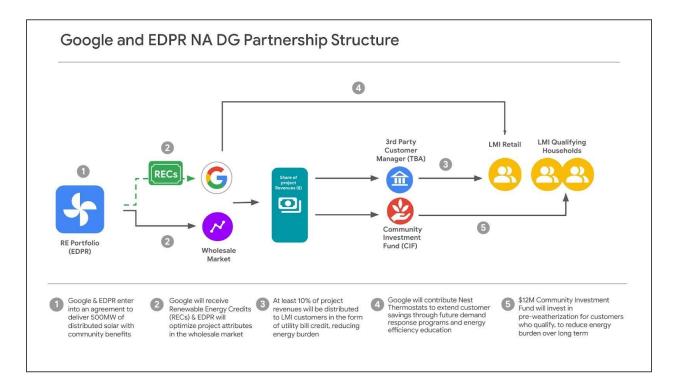
Three years ago we set out on a journey to better understand how we can help lower barriers to an equitable clean energy transition. We interviewed government officials, non-governmental organizations (NGOs) and policy advocates about challenges to an equitable energy transition in their communities and beyond. More precisely, we wanted to understand firsthand how our energy investments and partnerships could ensure that the families and the local communities where we operate <u>data centers</u> were both participating and benefiting from the clean energy transition.

Our findings mirrored those of reputable sources like the American Council for an Energy Efficient Economy, unequivocally highlighting energy burden for low-income households as a top issue. <u>Over 30 million</u> U.S. households are facing a high or severe **energy burden**, which the U.S. Department of Energy defines as spending 10% or more of gross household income on utility bills. This burden <u>disproportionately impacts</u> Black, Hispanic, Native American, and older adult households, and families residing in multifamily, manufactured, or old buildings.

In April 2023 we announced two new models aimed at reducing energy burden and directing distribution of the financial benefits that result from clean energy projects to under-resourced communities.

#### Clean Energy Financial Benefit Sharing Program

In a first-of-a-kind transaction model, we are partnering with EDP Renewables North America to develop the Clean Energy Financial Benefit Sharing Program. This program will deliver a 500MW synthetic community solar portfolio in the regions served by PJM (primarily Ohio), providing over 25,000 households annually with utility bill credit over 15 years. Under this transaction, Google will purchase Renewable Energy Credits, while EDPR will optimize the liquidation of energy and other attributes at a capped return. This will involve setting aside a portion of overall project revenues to be redistributed to households with high energy burden. Households that need it most will receive utility bill credits — directly and immediately reducing energy burden. Additionally, this transaction model requires a minimum share of the resulting renewable energy projects to be built directly in low-income communities. This means the projects will be driven by local labor, generating wage and tax revenues and amplifying impact.

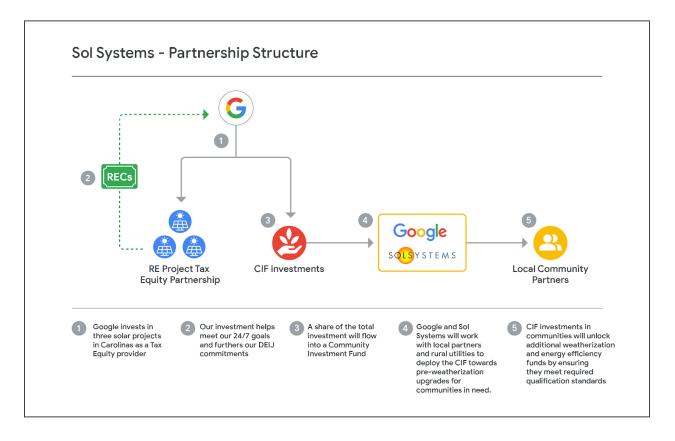


## **Community Investment Fund**

In a second model, we address a key culprit of the energy burden — inefficient housing. Antiquated equipment and poor insulation means wasted energy. Yet, low income households don't qualify for most government energy efficiency programs that would help them make essential upgrades. This is because they need to first complete "pre-weatherization" work — like removing asbestos and repairing leaky roofs — which is costly and not covered by existing assistance programs.

To reduce energy burden over the long term, we have introduced the **Community Investment Fund**, a program that will work with local partners to identify critical home repairs so that households can pursue energy efficiency upgrades and ultimately solarization. In addition to long term energy saving and emission reduction benefits, these upgrades could deliver significant health benefits as they target mold and asbestos removal, fix leaky and substandard roofs, and create local jobs.

We recently announced our first Community Investment Fund in partnership with <u>Sol Systems</u>. Alongside new clean energy projects in North Carolina and South Carolina, this partnership is providing funding to regional community organizations that enable pre-weatherization and safety upgrades to low- and moderate-income (LMI) households. <u>Four</u> regional organizations will receive initial funding from the partnership.



Our new partnership with **EDPR** marks our second community investment fund. In addition to the clean energy financial benefit sharing program (mentioned above), we are working with EDPR to create a \$12 million community investment fund for pre-weatherization. Ultimately, pre-weatherization and safety upgrades will help families improve the livability of their homes

while lowering their utility bills. Over time, this paves the way for them to qualify for additional energy efficiency upgrades that lock in energy costs long-term.

By working collectively to advance toward 24/7 carbon-free energy, we want to transform whole electricity systems, accelerate new industries, and **ensure that all communities benefit in the clean energy transition**. We aim to spur broader grid decarbonization and benefit the communities where we operate along the way. This is just the beginning and we hope to expand this type of benefit-sharing clean energy investment into other markets where we operate and in close partnership with the members of each community.

"As we make progress against our 2030 goal to operate entirely on 24/7 Carbon Free Energy, we will continue to build upon these programs that extend the benefits of our investments to underserved communities. We will share our insights and lessons along the way and encourage others to join us so we can meaningfully reduce the energy burden in the communities we call home."

- Urs Hölzle, Google's Senior Vice President for Technical Infrastructure, in Google <u>blog</u>, April 2023



**Caption**: Google hosted a session on this topic at the BNEF Summit in New York City on April 24, 2023. Google's Head of Data Center Energy, Amanda Peterson Corio (center), moderated the discussion with partners.

Partner Links:

- <u>Google: How we're helping everyone benefit from the transition to clean energy</u> (April 24, 2023)
- <u>EDP Renewables: Google and EDP Renewables sign framework to develop 650MWp of</u> <u>distributed solar energy in the USA, marking the largest US corporate sponsorship of</u> <u>distributed PV</u> (April 24, 2023)
- <u>Sol Systems and Google Announce Partnership to Invest in Solar Energy Projects and</u> <u>Community Organizations</u> (March 7, 2023)

Press Links:

- <u>Canary Media: Google's huge solar buys help fund efficiency fixes for low-income</u> <u>homes</u> (March 8, 2023)
- Data Center Dynamics: Google signs 225MW solar energy deal with Sol Systems for North & South Carolina (March 9, 2023)
- Environment & Energy Leader: Supporting Local Communities: Sol Systems and Google's Renewable Energy Partnership (March 9, 2023)
- <u>CleanTechnica: Sol Systems & Google Team Up To Bring Clean Energy To Low Income</u> <u>Communities</u> (March 9, 2023)
- <u>Yahoo Finance: Google and EDPR Partner on 500 MW AC Environmental Justice</u> <u>Program. Marking the Largest Corporate Backing of Distributed Solar in the United</u> <u>States (April 25, 2023)</u>
- <u>Canary Media: Google's latest climate plan? Skip grid backlog, mimic community solar</u> (April 25, 2023)