



So for example, after becoming carbon neutral in 2007 ??? the first major company to do so ??? we later set a goal to match 100% of our electricity consumption with renewable energy and accomplished that for the first time in 2017. We're proud of the environmental work we've done. Our recent achievements include:



We started purchasing renewable energy in 2010, and in 2017 we became the first major company to match 100% of our annual electricity use with renewable energy purchases. We have continued to do so for five consecutive years, and in 2020 we set the even more ambitious goal of operating our data centers and office campuses on 24/7 CFE by 2030.



The African Renewable Energy Initiative (AREI) is an initiative driven by Africa. The G7, led by Germany, first declared their support for the initiative at the 2015 Elmau summit. The G7, the European Commission, Sweden, and the Netherlands reaffirmed their support for the initiative during the 2015 Paris climate negotiations. They committed to providing a total of 10 billion US ???

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It aims to support investments in both environmental and social initiatives including the focuses on racial equality, small and medium businesses impacted by COVID-19, as well as affordable housing, clean energy projects and green buildings. clean energy projects and green buildings. Alphabet and Google CFO Ruth Porat wrote in a blog



Progress on round-the-clock clean energy. We're seeing an increase in carbon-free energy across many of our sites due in large part to new renewable energy projects. To date, we have committed approximately \$4 billion to purchase clean energy from more than 50 wind and solar projects globally through 2034.



In 2018, we signed our inaugural renewable energy deal in Asia, the first such corporate power purchase agreement in Taiwan. We will purchase the output of a 10-megawatt solar array (which is part of a larger solar farm) in Tainan City, Taiwan. It will deploy 40,000 solar panels across commercial fishing ponds, maximizing land-use efficiency and benefiting local aquaculture.

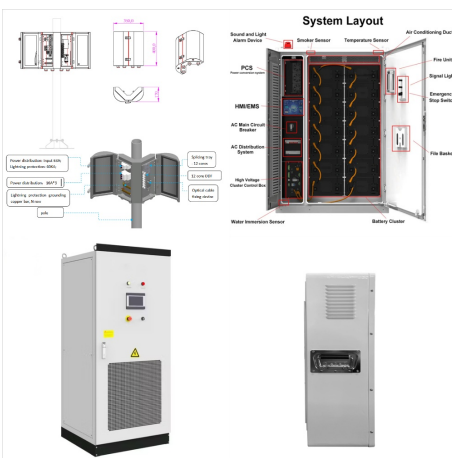
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, we've signed 34 agreements to purchase more than 3.75 GW of new renewable energy. In 2018, we matched 100% of our electricity consumption with renewable energy for the second year in a row. This amounted to more than 10 million megawatt-hours (MWh) of energy???more electricity than is used annually by the state of Hawaii.



In addition, a ground-breaking study by the US Department of Energy's National Renewable Energy Laboratory (NREL) explored the feasibility of generating 80 percent of the country's electricity from renewable sources by 2050. They found that renewable energy could help reduce the electricity sector's emissions by approximately 81 percent .



All told, we've signed agreements to buy power from more than 50 renewable energy projects, with a combined capacity of 5.5 gigawatts ??? about the same as a million solar rooftops. Achieving 100 percent renewable energy year after year is no easy feat, because the amount of computing done in Google data centers continues to grow.

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Our 20 renewable energy projects also help support communities, from Grady County, OK, to Rutherford County, NC, to the Atacama Region of Chile to municipalities in Sweden. To date, our purchasing commitments will result in infrastructure investments of more than \$3.5 billion globally, about two-thirds of that in the United States.

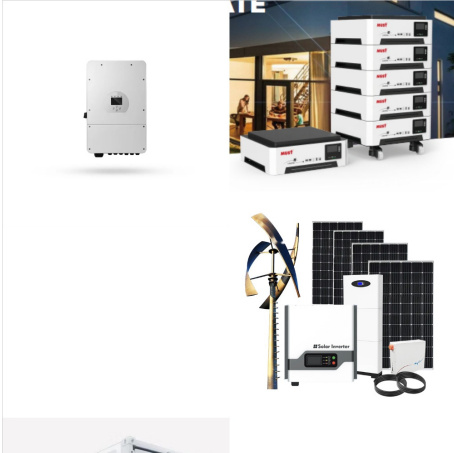


Alphabet Inc., ("Alphabet," "the Company," "we," "us," "our,") is a collection span both environmental and social initiatives (see Figure 1): acquisition, maintenance, and operation of renewable energy projects that are long-term and new to the grid, such as solar, wind, small-scale hydropower generation with a capacity of



mature renewable energy (RE) technologies, such as solar photo- voltaics and wind power, are cost-competitive low-carbon options ^{13,14} . Consequently, corporate interest in RE has increased in

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As a result, we became the largest corporate buyer of renewable energy in the world. Today we're taking another big step by making the biggest corporate purchase of renewable energy in history. This purchase is made up of a 1,600-megawatt (MW) package of agreements and includes 18 new energy deals.



? After years of championing renewable energy, major tech companies are beginning to realize that it may not meet their needs, prompting a shift toward reliable nuclear energy. Firms like Microsoft and Google are in urgent need of more power to support their artificial intelligence (AI) operations and are now investing in nuclear power. These



Electricity costs are one of the largest components of our operating expenses at our data centers, and having a long-term stable cost of renewable power provides protection against price swings in energy. Our 20 renewable ???

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Google data centres consume 50% less energy compared to a typical data centre; Google purchases or produces 24% of renewable energy and the company has 11% renewable electricity already on the grid, thus total use of renewable energy accounts to 35%. The use of remaining 65% energy which is non-renewable is neutralized by carbon offset projects.



Alphabet. bought enough renewable energy last year to match the power needs of all its data centres and global operations, making it the biggest corporate buyer of renewable power in the US..
Neha

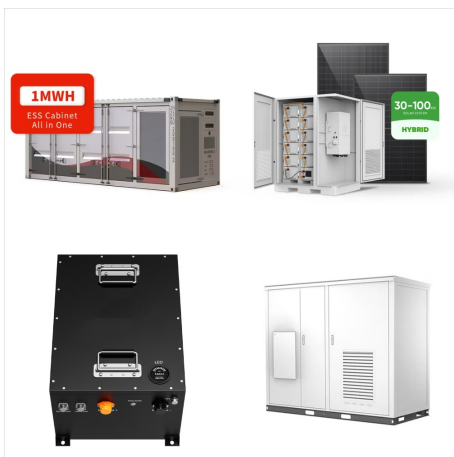


certified renewable energy. We've installed. 184. EV charge points in our car parks We issue regular e-newsletters covering sustainability initiatives and are always exploring new and engaging ways to raise awareness and understanding amongst our employees. Any leftover "old brand" Alphabet merchandise was donated to local charity

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Renewable energy transition is the initiative of the global energy sector to move away from fossil fuels (such as natural gas, oil, and coal) towards renewable energy sources (Hassan et al., 2024). The environmental Kuznets curve (EKC) illuminates the intricate association between environmental decline and economic growth (Wang et al., 2024b) and it is considered ???



RE100 is the global corporate renewable energy initiative bringing together hundreds of large and ambitious businesses committed to using 100% renewable electricity. Mon, 08/17/2020 - 13:22. 10 years of RE100. RE100 is celebrating 10 years, 400+ members and 500+ Twh per year committed to 100% renewables. First launched at Climate Week NYC in



+ cities reduce 1 gigaton of carbon emissions annually by 2030. Cities create 70 percent of the world's emissions. Our Google Environmental Insights Explorer helps more than 100 cities to track and reduce their building and transportation carbon emissions and maximize their renewable energy use, by informing them of their solar potential.

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Through a first-of-its-kind partnership with EDPR NA Distributed Generation, 2 we will create a 500-megawatt (MW) community-based solar portfolio, adding clean energy to the regional U.S. power grid PJM and providing Google with Renewable Energy Credits that contribute to our 24/7 CFE goal. What's unique about this partnership is that at