IT industry's renewable energy procurement is significant, set to climb

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The percentage of renewable electricity purchased by U.S. companies in the information and communication technology (ICT) sector is growing and will likely increase significantly by the start of the next decade, according to a first-ever analysis by the Energy Department's National Renewable Energy Laboratory (NREL).

The report, "Renewable Electricity Use by the U.S. Information and Communication Technology (ICT) Industry," includes case studies of renewable energy purchased by companies including Apple, Facebook, Google and other key industry figures.

"The ICT sector is a big consumer of electricity in the United States," NREL Senior Energy Analyst Jenny Heeter said. "ICT companies are increasingly making long-term commitments to renewable generation, such as through 20-year power purchase agreements." These long-term commitments often support the development of new renewable-energy generators near new data centers.

NREL's analysis discovered that 113 ICT companies are powering 14% of their electricity needs from renewable sources, and that by 2020 that figure could increase to as much as 48%. In looking at the industry, NREL found:

- 113 ICT companies in the United States collectively consumed more than 59 million megawatt-hours (MWh) of electricity in 2014, which represents 1.5% of total U.S. electricity

consumption.

- Of the 59 million MWh, 14% (8.3 million MWh) came from renewable electricity.
- By 2020, the 113 companies may procure from 18.5 million MWh to 37 million MWh of renewable electricity.

"Twenty leading ICT companies have renewable electricity goals," NREL Analyst John Miller said. "Goals range in size from 8% to 100% renewable electricity use, with an average goal of approximately 64%." Potential renewable energy procurement by the ICT sector may grow as financial incentives and corporate social responsibility goals encourage a larger share of ICT companies to purchase renewable electricity and could prompt companies already purchasing to increase their commitments, the report says.

NREL used data from the 113 companies that report to the U.S. Environmental Protection Agency's Green Power Partnership and/or the Carbon Disclosure Project Worldwide. According to the report, companies outside the scope of the 113 reporting companies could also begin purchasing renewables, which would contribute to larger renewable use by the ICT sector.

Provided by National Renewable Energy Laboratory

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