

Renewable energy vital for Internet lifestyles: Greenpeace

12 May 2015, by Glenn Chapman



A Greenpeace report charges utilities with hampering efforts to use renewable energy to power data centers needed for services hosted in the cloud

A Greenpeace report released on Tuesday charged utilities with hampering efforts to use renewable energy to power data centers needed for services hosted in the cloud.

Greenpeace praised moves made by Apple, Google and other Internet titans to fill a skyrocketing demand for electricity with solar, wind or other environmentally-friendly sources but lamented expansion of data center capacity in places where utilities reliant on carbon-spewing coal fuel dominate markets.

"A growing number of companies have begun to create a corner of the Internet that is renewably powered and coal free," the report said in an executive summary.

Internet companies that have committed to being completely powered by renewable energy sources include Apple, Facebook, and Google, according to Greenpeace.

Those commitments have driven growth of renewable power in several key markets, and caused some utilities to invest more heavily in that kind of electricity generation to meet demand, the report stated.

However, some locations that have attracted data center investments are in markets ruled by utilities with generation powered mostly by coal, gases from which are a culprit in climate change.

Examples listed included Duke Energy in North Carolina, Dominion Resources in Virginia, and Taiwan Power Company in Taiwan.



A Greenpeace activist sets miniature windmills in front of Strasbourg's railway station during an action aimed at increasing public awareness of energetical transition on February 11, 2012

"These utilities represent the biggest obstacles to building a green Internet, and will require collaborative pressure from data center operators and other electricity customers to secure the policy changes needed to open the market up to competitors that offer meaningful options for renewable energy," Greenpeace said.

Apple leads the charge

Apple continued to "lead the charge" in using clean energy to power Internet operations even as the California-based company rapidly expanded, according to the report.

Apple on Sunday announced broadened renewable energy and environmental protection initiatives in China, including a project with the World Wildlife Fund to promote responsible forest management.

The forestland project aims to protect up to a million acres of working forests used for fiber for paper and wood products, according to Apple.

The project is expected to generate as much as 80 million kilowatt hours annually of clean electricity, enough to power about 61,000 Chinese homes.



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About 87 percent of Apple's global operations run on renewable energy, and the Sichuan Province solar farms will move the company closer to 100 percent, according to the maker of iPhones, iPads, iPods, Macintosh Computers, and Apple Watch.

Google is also pushing to rely on renewable energy, but its progress is under threat by monopolies held by coal-using utilities in some data center locations such as Georgia, Singapore,

Taiwan, and the Carolinas, according to Greenpeace.

Amazon, Microsoft, eBay, and Oracle were among technology giant's who scored low grades from Greenpeace when it came to green energy deployment and advocacy.

"The magic of the Internet seems almost limitless," Greenpeace said. "But each new internet enabled magic trick means more and more data."

Increasing demand for data, particularly streaming video, and processing power in the cloud means ramped up demand for power by data centers doing the online work.

"While there may be significant energy efficiency gains from moving our lives online, the explosive growth of our digital lives is outstripping those gains," Greenpeace said.

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