

Google buys Altamont wind energy to power Googleplex

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Google has spent \$1.5 billion around the world on clean energy projects cutting the pollution from millions of users clicking on search links, watching YouTube videos and sending emails, but now it's found a powerful electricity source close to home.

The company will announce Wednesday that it is buying power from the Altamont Pass, one of the nation's oldest, largest and most iconic wind farms that is about to get a Google-funded makeover.

The tech giant has no plans to brand the blades with its multicolored logo, but its 20-year power purchase agreement with Florida-based NextEra Energy will dramatically transform the rolling, treeless landscape that connects the Bay Area with the Central Valley here. About 770 old turbines from the 1980s will be replaced this year by 48 new machines producing twice as much energy, enough to power Google's corporate campus in Mountain View with 100 percent renewable power.

"It'll be majestic," said Sam Arons, an energy strategist at Google. "Today there are many small turbines of all different sizes, all different vintages. It's kind of a hodgepodge out there. Once this project is done, you'll see a lot of tall, sleek, majestic turbines that will really de-clutter the landscape."

Google's involvement is the latest green power play from a company that has spent a decade dropping money on wind, solar and geothermal

projects from West Texas to South Africa and the Netherlands, and is an investor in Ivanpah, the massive [solar thermal power](#) plant built by BrightSource Energy in the Mojave Desert. Google says it operates with 35 percent [renewable power](#) worldwide.

Last year, it spent \$3.2 billion to acquire Nest Labs, maker of the slick "learning thermostat." It also quietly named John Woolard, the former CEO of Brightsource, as a vice president for energy. It has several previous deals with NextEra - for [wind farms](#) in Iowa, North Dakota and Oklahoma - and recently invested in Utah's largest solar plant.

But unlike most of those projects, Google's Altamont venture is more than a capital investment. Just 50 miles from Mountain View, it will do more to reduce the Googleplex's carbon footprint than any of the quirky projects on the corporate campus, from the 1.9-megawatt solar array to the plant fueled by landfill gas.

Google is the second Silicon Valley tech giant this week to announce a major local green energy project. On Tuesday, Apple announced an \$850 million agreement to buy power and help build a 280-megawatt solar farm in Monterey County.

Google is paying for 50 percent, or nearly 43 megawatts, of the power that will be produced by harnessing the wind whipping through NextEra's 7-square-mile Altamont site beginning in 2016. The other buyer is undisclosed, but Florida-based NextEra said it is neither a utility nor a tech company.

Neither Google nor NextEra is disclosing the price of the agreement.

"Not only do we think [renewable energy](#) is important from a climate change perspective, it also makes business sense," said Arons, 33, who grew up in the East Bay admiring the turbines.

The buy helps protect Google from higher energy prices in the future, Arons said.

George Lucas was still finishing up his original Star Wars trilogy when the first Altamont turbines were erected in 1981, and some observers were appalled by the sight of robot-like sentinels towering over the ranchlands. Commuters eventually warmed up to the hulking pinwheels, but the birds and their advocates never did. A 2004 study found that the turbines killed thousands of eagles, hawks, owls and other birds each year.

That problem is expected to lessen with the new machines, which will be more carefully situated, far fewer in number and spin at higher elevations. NextEra's new project, called Golden Hills Wind, lies just south and is part of a much larger initiative to decommission more than 4,000 turbines on the Altamont and repower the hills with up to 280 more bird-friendly machines.

NextEra, which is the Altamont's largest energy provider, made a 2010 deal with Jerry Brown, then the state's attorney general, now California governor, to shut down all of its outdated, deadly turbines by November this year. Other companies have been dragging their feet and asking for extensions, but Google's interest appears to have ensured NextEra will finish its 86-megawatt repowering project by the time the old turbines stop spinning.

"Would the project have been built without Google and the other customer? I'd like to think yes," said Anthony Pedroni, NextEra's director of business development. "But Google was the first one to make the commitment. They stepped up and said they'd be the customer for this."

Storm winds and rain tore through the Altamont as a team from Google

and NextEra toured the site with this newspaper Friday. The older-model turbines were turned off, part of a seasonal shutdown to protect migratory birds, but newer General Electric turbines installed by NextEra on a nearby parcel in 2011 were whirring swiftly.

"They're all sort of gentle giants," said Google real estate manager Asim Tahir, wearing a helmet and rain-soaked jacket as he gazed up at the three-blade machine that towered more than 400 feet.

Looking for new methods to power its energy-sucking data centers, Google began leading the way in wind investments years ago but Microsoft, Facebook, Yahoo and other tech companies have followed.

"The price of wind has declined very, very substantially over the past couple of years and the technology has improved," said Ryan Wiser, a staff scientist who studies electricity markets at the Lawrence Berkeley National Laboratory. "The cost of wind [energy](#) is so low that it's not as if these companies are taking an enormous financial risk in locking into these agreements. The price is stable."

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