



On Monday, Apple made big headlines by [announcing](#) that “its global facilities are powered with 100 percent clean energy.” This is a major milestone, and it includes the company’s own renewable generation capacity of 626 megawatts—expected to increase to 1,400 megawatts when projects currently under construction are completed. This is enough generation capacity to power hundreds of thousands of homes. By committing to install so much of its own generation, Apple is not only increasing its own resiliency (by providing itself electricity sources that do not rely on the functioning of the broader grid) but also helping to set an example for much-needed corporate leadership in the climate fight. However, more comprehensive actions, and policies, are still necessary to achieve even the most basic climate targets.

A few pieces of context are important. Apple is one of the best-known US companies and is ubiquitous in many of our lives, but its significant renewables commitment represents a tiny fraction of the overall energy picture in this country (and worldwide). Total US electrical generating capacity is [over 1,000,000 megawatts](#). Of that, the Solar Energy Industries Association estimates that the total solar PV generation capacity in the US is over [50,000 megawatts](#), while the American Wind Energy Association puts total US wind energy capacity at approximately [85,000 megawatts](#). Apple’s 626 megawatts of renewable energy generation worldwide do not reflect its entire renewable energy program—it also draws a lot from other producers—but they are a small part of a much, much larger global fight against climate change. In order to avert the worst of climate change, the majority of the millions of megawatts of global generating capacity will need to be renewable by midcentury.

More significant is the limited scope of Apple’s announcement. Apple’s term “global facilities” encompasses its “retail stores, offices, data centers and co-located facilities in 43 countries.” This is a large footprint; data centers in particular can consume substantial quantities of energy, and if Apple is able to generate all of that energy on-site, as it claims its new Waukee, Iowa data center will, then it will be avoiding a significant amount of

greenhouse gas emissions. (Many Apple facilities are still connected to the public electrical grid—think of retail stores located in shopping centers—meaning that at times they consume whatever mix of renewable- and fossil fuel-generated electrons is delivered to them. But Apple's announcement indicates that it is offsetting this fossil-generated electricity with renewables purchases or its own worldwide generation.)

"Global facilities," however, does not include third-party manufacturing and industrial facilities. Apple does not manufacture its own goods; it contracts with companies located throughout the world to supply and produce raw materials, which are then assembled into final products outside the US (primarily in China). These operations have the potential to emit far more greenhouse gases than relatively low-lift office and retail operations, which form a large portion of the directly owned and operated facilities covered by this week's announcement. (They have also generated significant [environmental](#) and [human rights](#) concerns over the extraction of essential raw materials). Apple did also announce that 23 of its third-party suppliers have made 100% renewable energy commitments, and it has set a broad goal of eventually attaining 100% clean energy across its supply chain. Achieving that goal could be a lot more complicated and expensive, and take a lot longer, than today's announcement might indicate—and it may be much more important to slowing global climate change than the progress Apple has achieved so far. It is not clear whether voluntary action will be able to take Apple all the way.

Apple's announcement and its public commitment to renewable energy, [like those of its tech industry peers](#), are essential examples of private sector leadership in the climate sphere, particularly valuable in the absence of federal action. They are also a good indication of the [falling prices of renewables worldwide](#), which are allowing companies like Apple to take on ambitious targets without government mandates. Apple's announcement should serve as motivation for its peers across industrial sectors to make similar commitments. But real progress will require much more sustained effort from a much broader range of actors—especially policymakers—and continued public pressure to act.