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Changes Expected with Trump Administration Approach to Clean Energy

Observers of the clean-energy industry note coming changes or already occurring changes under the new Trump administration. The availability of federal resources in support of clean-energy technology and projects may be impacted. Significant changes at hand include:

- The Trump Administration issued an executive order on March 28, 2017 rescinding the former administration's Clean Power Plan (CPP). CPP is a landmark climate-change initiative/regulation directing the power industry away from coal-burning plants and toward wind and solar farms. This mandate reduces carbon pollution from existing U.S. power plants. With Scott Pruitt now confirmed as EPA head, and Rick Perry at DOE, the executive order will be implemented. The CPP is history.
- The Trump administration's preliminary 2018 budget proposal outlined changes to discretionary spending that, if implemented, would likely reduce spending on renewable energy and other programs that target climate change by:
    - Cutting EPA and DOE budgets by 31% and 6% respectively.
    - Cutting funding to the the Office of Energy Efficiency and Renewable Energy (EERE)—by 53%.
    - Cutting funding for the DOE's Advanced Research Projects Agency-Energy (ARPA-E) and "takes a big axe to the EPA's budget," noted Raj Prabhu, CEO of Mercom Capital Group, a clean-energy research firm.
- The reductions in funding for clean-energy research and development—which are very useful in reducing the cost of solar and other renewable technologies, and important to maintaining U.S. technological and energy competitiveness.

EERE's investment goal is to make clean-energy technologies more available and reliable at a lower cost. Its aggressive agenda over the last eight years has reduced renewable energy costs through grants, research and development, promotion and other efforts to get clean-energy technologies into the market. The major increases in solar deployment and significant decreases in solar power technology costs may be due in part to EERE's efforts.

EERE is now headed by Dan Simmons, formerly vice president of the Institute for Energy Research, a free-market think tank, and brings a different approach and focus to EERE's role and its impact on advancing clean energy. Mr. Simmons believes government policy should treat all power sources equally. He doesn't support government subsidies or tax breaks for "clean" energy (wind and solar).

As EERE's new director, Mr. Simmons may well shift gears on the current government policy of direct financial support for clean energy.

Impact of Changes on Solar's Big Picture

The budget cuts won't impact the federal solar investment tax credit (ITC), carbon tax proposals, or state-based solar subsidies, according to Amit Ronen, director of the Solar Institute at George Washington University. In late 2015, Congress passed a multiyear extension of the ITC incentive that gradually phases down the credit's value from 30 percent to 10 percent.

Even with the new Trump Administration's less aggressive approach to federal assistance and development funds for renewable energy sources—the U.S. power sector's increasing reliance on natural gas and renewable energy, and the continuing decline of coal use, are probably unstoppable. Also, the administration isn't likely to alter consumer demand for distributed and clean energy—which will continue to be a strong driver with cost reductions and sustainability agendas here to stay.

While many fear the new administration's free-market approach to energy will cause clean-energy programs and subsidies to shrivel, or that a "climate policy rollback" will hurt renewable energy, solar energy is now solidly embraced in many areas of the country (like Arizona, California), and that foothold portends a bright outlook for the solar industry, even as government's supportive posture may wane.

Consider the following solar-energy points:

- Solar-power advocates are unlikely to be deterred, and the market and consumers are now pushing renewable energy directly—with an enthusiastic cultural embrace.
- Even with proposed budget cuts and CPP's demise, experts don't believe these will substantively impact solar, or that momentum of renewable-energy installations or adoption of renewable energy will slow. The sector will continue to grow, but the availability of program dollars for implementation will begin to diminish.
- Wind and solar are by far the fastest-growing energy sectors, which signals utilities' and consumers' demand for clean energy is highly unlikely to be clipped by federal regulatory changes. **Solar technology is demonstrating its value to the market.**
    - Solar jobs grew 25% in 2016, representing 2% of all new jobs, according to Solar Jobs Census 2016. Since the solar industry is creating so many new jobs may make it difficult for Congress to go along with disruptive or risky budgetary changes that reduce employment growth in the sector.
    - 50% of U.S. electricity was coal generated in 2005, and 33% was coal in 2015. Coal's share of total electricity generation is expected to drop to 21% in 2030 and to 18% in 2040, according to the EIA. Given this likely decline in coal over time, solar-generated electricity's rise is unavoidable.
    - In 2016, new solar power capacity installations accounted for 32% of all new electrical capacity (higher than wind and coal for the second year in a row), according to a report from GTM Research.
    - Clean energy is a $200 billion annual industry in the U.S. and given that scale, the administration (as an economic growth advocate) will be hard pressed to substantively interfere with the industry's expansion. But, that's different from undoing some programs and subsidies that may no longer meet the economic pragmatism test.

- Solar now demonstrates an ability to succeed in the marketplace, and this will continue even if the government isn't mandating closure of solar's competitors (like coal-fired power generation plants). Many now argue that solar doesn't need to be spurred into reality by government-dictated outcomes. The market is embracing solar because it makes sense, not because other alternatives are forced out by the government. What's really driving solar installation demand now is lower costs—not climate policy or the CPP.
- The momentum for solar is at the state level. State policies are helping, and technology has fostered the rapid reduction in the price of solar, and many solar customers are reimbursed for extra energy they produce. Many regulations, rebates, and subsidies affecting solar installations—including selling solar power back to utilities—are governed by states. These are unlikely to change much, given the market's increasing demand for clean energy.

  States will continue taking an active role in helping themselves foster economic environments and policies that support clean energy. Fifty states innovating on policy ideas to advance clean energy's technology, affordability, and market embrace is an accelerator, and diverse policies and programs designed to aid and incentivize clean-energy projects will likely emerge in the face of a pullback at the federal level.
- President Trump's focus on infrastructure development will assist all forms of energy development and will further strengthen solar's posture and strength, which will further diminish arguments for ongoing government programs supporting it.
- The actions of investors show they are bullish on clean energy (e.g., the recent $1.6 billion sale of sPower, a clean-energy firm with over 150 solar-generating installations). Investors are still directing money into low-carbon power, despite the new administration's hand's off posture. This reveals the inevitable shift away from fossil fuels, no matter the political climate or who occupies the White House.
- Most Fortune 100 companies have adopted specific policy goals to increase their renewable energy use. This explains why industry executives believe the renewable-energy market has ample momentum. Companies are deciding on their own to transition to renewables, for both economic and sustainability reasons. These companies are unlikely to change these policies because of a modified posture at the White House, especially since energy-sourcing decisions stretch two to three decades.

These have all made the solar investment equation much more appealing (and feasible, practical), and arguably diminish the need for federal policy support. "Regardless of who's in the White House, solar is a winning technology, a winning energy source, a winning solution for America," said Tom Kimbis, interim president of the Solar Energy Industries Association (SEIA).

Sense of Urgency and Optimism

No doubt, some solar-friendly agencies and their programs are in trouble. We are now clearly entering a time of uncertainty with respect to existing government programs supporting clean-energy implementation. The risk is that no one fully understands or can predict how these changes will impact the programs and the economic opportunities to implement solar installations.

Despite the industry's emerging strength and independence, the Trump administration's policy posture change—allowing the solar market to do what markets do—may cause large-scale investment in solar to diminish, and the availability of federal resources and programs aimed at supporting solar installation for industry and consumers may soon begin declining. Electric utilities will likely continue to install solar and wind infrastructure, but not to the same extent.

Because of this uncertainty, 2017 is the right time to take maximum economic advantage of existing policies and programs. This makes now the time to undertake solar projects, because federal programs that exist today, may be winding down as the free market is permitted to step in.

What the government gives, it can take away. As the clean-energy market morphs and matures, the political viability of programs fostering adoption of clean-energy technologies changes. Wind and solar subsidies since 2008 have dwarfed those of all other energy sources. As the sector's product pricing declines and its employment grows solidly, justifying continued high subsidy levels is increasingly difficult politically. So, political sands are shifting as the economics of solar improve.

The point: take advantage of these programs now while they're still here. 2017 is time to move into solar and take advantage of remaining programs before they sunset.

Conclusion

Renewables are standing on their own now, and no longer need the government propping them up. That said, this portends a fleeting opportunity to take advantage of government programs and support while it remains available. We know government's role is going to wind its way to new levels, but we don't know how long it will take or where it will end up. For now, all players who want to ride the clean-energy train have an incentive to get on now, rather than wait.