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Michael B. Gerrard

Edward McTiernan

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Expert Analysis

Effect of the Paris Climate Agreement on U.S. Businesses

In December, 195 countries convened in Paris for the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change. To the surprise and delight of most of the participants, the conference ended in consensus among all the participants¹ on a document, the Paris Agreement, that will be opened for signature on April 22, 2016. President Barack Obama has indicated that the United States will sign it. (Co-author Michael Gerrard participated in the conference.)

The Paris Agreement contains specific requirements for monitoring, reporting and verification; those were authorized when the Senate ratified the original climate treaty in 1992.² Beyond that, however, it is mostly aspirational. It has many declarations of intent and ambition, and it establishes procedures for future actions to achieve those ambitions. It does not on its face have binding, country-specific commitments to reduce emissions or provide financing. This was no accident; the U.S. insisted that such commitments be left out, lest the agreement require Senate ratification, which would be impossible in the current political climate.

The Paris Agreement nonetheless has significant legal and operational ramifications for many U.S. businesses. Those are the subject of this column.

Energy Transition

Article 2 Par. 1 of the Paris Agreement declares the objective of “[h]olding the increase in the global average temperature to well below 2°C [3.6°F] above pre-industrial levels and to pursue efforts to limit the temperature to 1.5°C.” This in turn leads to a sentence that seems to call for the virtual end of fossil fuel use in this century unless there are major advances in carbon sequestration or air capture technology. That, in turn, has important business and legal implications.

MICHAEL B. GERRARD is a professor and director of the Sabin Center for Climate Change Law at Columbia Law School, and senior counsel to Arnold & Porter. EDWARD MCTIERNAN, former general counsel of the Department of Environmental Conservation, is a partner at Arnold & Porter.



By
**Michael B.
Gerrard**



And
**Edward
McTiernan**

Article 4 Par. 1 says, “In order to achieve the long-term temperature goal...Parties aim to reach global peaking of greenhouse gas emissions as soon as possible...and to achieve rapid reductions thereafter...so as to achieve a balance between anthropogenic emissions [i.e., caused by humans]...and removals by sinks [such as forests and oceans] of greenhouse gases in the second half of this century.”

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In other words, emissions from human sources, such as power plants and automobiles, must be fully taken back in by sinks, such as forests and oceans. But these sinks only take in a fraction of emissions. In order to achieve a “balance” between emissions and sinks, we would need to just about end the release of GHGs from fossil fuels.

There seem to be only three ways to continue to use fossil fuels for electricity in the second half of the century (and for transport by the end of the century) and still meet the temperature goal:

- 1) Capture the carbon before it escapes into the air, and sequester it;
- 2) Devise, and deploy on a massive scale, technologies to remove the carbon from the air, and sequester it;
- 3) Create new sinks, such as through the immediate halt to deforestation and a world-wide program of tree planting.

The technologies of carbon capture and sequestration, and of removing carbon from the ambient air, are developing slowly and are nowhere near large-scale deployment. (A price on carbon would create an economic incentive to develop and use these technologies, but politicians in most places are unwilling to impose such a price.)

Finding the land for large-scale tree planting, or for various other techniques to remove carbon dioxide from the air, would face its own challenges in a world where sea level rise, persistent drought, and extreme heat will be rendering much land unsuitable for growing food.

So meeting the demands of society for energy while achieving the Paris goals would require a combination of aggressive energy efficiency and conservation programs, the installation of renewable energy (and, perhaps, nuclear), and the substitution of electric or hydrogen vehicles for those using petroleum, all at an unprecedented pace. The Paris Agreement represents an unmistakable signal from all the countries of the world that a massive energy transition away from fossil fuels is needed. Though there is no assurance that this transition will occur at the pace called for in Paris, this and many other signals create great opportunities for some businesses and great perils for others, unless they find a way to join in rather than be trampled by the transition.

Effecting this energy transition will require enormous amounts of capital. Bloomberg New Energy Finance estimates that capital expenditures of \$12.1 trillion over the next 25 years are needed for electric power generation alone to keep to the 2°C scenario.³ All manner of investments, public and private debt, subsidies, and other financial instruments will have to be deployed.

The centerpiece of current U.S. efforts to meet its Paris pledge is the Clean Power Plan—a set of Environmental Protection Agency regulations under the Clean Air Act designed to reduce the use of coal to make electricity. This plan is under a concerted legal assault and on Feb. 9 it was stayed by the Supreme Court until the litigation concludes,

which probably will not be until 2017 or 2018. But even if the plan survives, it will not be enough to meet the Paris pledge,⁴ and additional initiatives will be required. These will create additional business opportunities in such areas as renewable energy and energy efficiency, storage and transmission; capture of methane and other GHGs; and many other technologies. There is an especially pressing need for the development of “air capture” devices to remove GHGs from the atmosphere, as almost all scenarios for meeting the Paris Agreement’s temperature goals require net negative emissions in the second half of this century.

Disclosure Requirements

The Paris Agreement calls on all countries to strengthen their pledges to reduce GHG emissions, and to monitor their progress and report it to the world. It also says that “all parties should strive to formulate and communicate long-term low greenhouse gas emission development strategies” (Article 4 Par. 19). That looks like strategies under which every country must show how it is controlling its fossil fuel use.

The Paris Agreement does not provide a mechanism for enforcement of these provisions. However, some existing domestic laws will become powerful tools to force early planning, or at least disclosures. One key example is the securities disclosure requirements for publicly traded companies. On Jan. 27, 2010, the U.S. Securities and Exchange Commission issued guidance⁵ for the disclosure of climate-related risks. It specifically calls on companies to “consider, and disclose when material, the impact on their business of treaties or international accords relating to climate change.” The Paris Agreement is clearly such an accord, and (if it is vigorously implemented—a big if) it will have material impact on many companies in the business of extracting, processing and using fossil fuels, or making things that run on fossil fuels (such as power plants, motor vehicles, ships and airplanes).

The SEC’s guidance makes clear that management’s discussion and analysis should explore known trends and uncertainties concerning climate regulation. This includes regulation outside the United States that can affect the operations abroad of U.S. companies. Therefore companies should consider and disclose to shareholders the impacts of domestic and foreign restrictions on use of fossil fuel.

Climate disclosures have received increased attention since it was reported in November that New York Attorney General Eric Schneiderman is investigating ExxonMobil under the New York securities law, the Martin Act, over its statements about climate change, and had reached a settlement with Peabody Energy.⁶

Going forward, impact review of energy projects under the National Environmental Policy Act and its counterparts in many states and most

other developed countries should consider the phase-out of fossil fuels that is inherent in the Paris Agreement, while acknowledging the uncertainty over whether this will occur.

Trading

Prior to Paris the last major international climate agreement was the Kyoto Protocol of 1997. It established two major market mechanisms—emissions trading and project-based financing. In the former, countries could pay other countries to reduce their emissions by the purchase of various forms of carbon credits. In the latter, under the “Clean Development Mechanism,” projects in developing countries that reduced GHG emissions (such as wind farms and landfill gas capture systems) would be paid for by developed countries, which would get the carbon credits.

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The Paris Agreement calls for the establishment of successors to both of these mechanisms. Because the U.S. is a signatory, businesses in the U.S. will have the opportunity to participate, unlike in the Kyoto trading regimes, since the U.S. never ratified that treaty.

Article 6 Par. 2 of the Paris Agreement calls for the voluntary “use of internationally transferred mitigation outcomes towards nationally determined contributions.” This new creation—ITMOs—could become major units of international financial trading in the years to come.

Article 6 Par. 4 establishes a “mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development.” This resembles Kyoto’s Clean Development Mechanism in several respects. One key difference is that projects are not limited to those in developing countries.

The existing Kyoto mechanisms will continue until 2020; after that the new Paris mechanisms will be launched (though some voluntary trading could begin earlier).

Adaptation

The voluntary pledges made in advance of Paris do not add up to nearly enough to stay within 1.5–2°C range set in Paris. The most frequently cited estimate has them getting us to about 2.7°C,⁷ and that is only if these pledges are all carried out and no parts of the world experience large-scale economic growth relying heavily on coal.

This large gap between the temperature goals and the Paris pledges means, regrettably, that severe climate change is very likely to occur in the decades ahead. The inertia built into the climate system (especially the oceans) means that regardless of how effective are the world’s GHG reduction efforts, the climate will continue to worsen for at least the next several decades.

As a result, businesses will need to undertake major efforts to adapt to the coming sea level, temperature, precipitation, drought, and other conditions. In the United States one of the most prominent impacts will be the need to relocate much economic activity away from vulnerable coastlines, or to somehow protect it. There will be an enormous demand for buildings, equipment and infrastructure (not to mention crops) that can withstand extremes of water and heat. Most commercial and residential lending and insurance products are too short-term to reflect these dangers, and current federal flood maps are based entirely on past experience, not future trends, so relying on them (as most planners and builders do) is inadequate.

Just as we need a massive transition away from fossil fuels, we also need a massive transition away from development in low-lying coastal areas. This will lead to some very big losers and perhaps some very big winners in the worlds of real estate and other businesses (as well as among individuals and communities).

This, too, has disclosure implications. There is no plausible future in which we have neither radical reductions in fossil fuel use, nor major climate disruptions; some combination of both may be the most likely. Companies need to prepare for these scenarios, and disclose to their investors how they are doing so.



1. Except for Nicaragua, whose delegates objected at the end of the meeting but were disregarded by the chair, the French Foreign Minister.

2. The United Nations Framework Convention on Climate Change.

3. Bloomberg New Energy Finance, “Mapping the Gap: The Road From Paris,” January 2016.

4. John Larsen et al., “Taking Stock: Progress Toward Meeting US Climate Goals,” Rhodium Group, Jan. 28, 2016, available at http://rhg.com/wp-content/uploads/2016/01/RHG_Taking_Stock_of_US_Climate_Goals_Jan28_2016.pdf.

5. Securities and Exchange Commission, “Commission Guidance Regarding Disclosure Related to Climate Change,” Feb. 8, 2010, available at <https://www.sec.gov/rules/interp/2010/33-9106.pdf>.

6. Justin Gillis and Clifford Krauss, “Exxon Mobil Investigated for Possible Climate Change Lies by New York Attorney General,” N.Y. Times, Nov. 5, 2015.

7. Climate Action Tracker, “Climate pledges will bring 2.7°C of warming, potential for more action,” Dec. 8, 2015, available at <http://climateactiontracker.org/news/253/Climate-pledges-will-bring-2.7C-of-warming-potential-for-more-action.html>.