

# THE CLIMATE REPORT

## INITIALLY . . .

### ■ 2009 BROUGHT MUCH ACTIVITY, UNCERTAIN RESULTS

The past year brought far more governmental attention in the U.S. to greenhouse gas emissions, and to the closely related issue of low-carbon energy development, than ever before. In February 2009, Congress passed an economic stimulus bill that allocated tens of billions of dollars to support renewable energy technologies, including smart grid development. By July, the House of Representatives had passed the 1,400-page Waxman-Markey climate change bill, which included both a cap and trade program designed to reduce greenhouse gas emissions by 83 percent over the course of a generation and an extensive range of energy-related programs that would affect energy usage throughout the U.S. economy. The Senate Energy and Public Works Committee passed its own version of cap and trade legislation, the Kerry-Boxer bill, in November.

The incoming Obama administration hit the ground running on climate change as well. In March, U.S. EPA issued a proposed rule requiring thousands of U.S. facilities to begin monitoring and reporting their greenhouse gas emissions, and in April, EPA Administrator Lisa Jackson issued a proposed finding that greenhouse gases from motor vehicles endangered public health and public welfare, a finding that would establish the legal basis for regulating such emissions under the Clean Air Act. By September, before the endangerment finding had even become final, U.S. EPA had issued proposed Clean Air Act regulations covering greenhouse gas emissions from

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both motor vehicles and stationary sources. Both the endangerment finding and the mandatory greenhouse gas monitoring rule became final by the end of 2009, and U.S. EPA expects to finalize the two sets of emission standards before the end of March 2010.

Although some state and regional climate change initiatives seemed to stall as the federal government's activity level increased, California and the northeastern group of states known as the Regional Greenhouse Gas Initiative (RGGI) pressed on. California received a federal waiver to impose its own motor vehicle emissions standards and continued to develop a comprehensive state program, including a future cap and trade component, while RGGI continued to phase in its cap and trade program for power producers.

At the judicial level, two different U.S. Courts of Appeals held that private plaintiffs may assert common law nuisance claims based on the alleged contribution of greenhouse gas emissions to weather-related damage events, such as Hurricane Katrina. However, at almost the same time, a California federal court reached the opposite conclusion.

Despite all of this activity, the trajectory of climate change regulation in the U.S. remains unclear. Cap and trade legislation has not reached the floor of the Senate, and in the aftermath of the contentious health care debate, many doubt it will before the November 2010 mid-term congressional elections. Also, it is much too soon to determine whether the product of the United Nations' long-awaited COP-15 summit in Copenhagen—the three-page document known as the “Copenhagen Accord”—represents a workable multilateral template for a decisive successor to the Kyoto Protocol or simply a political “fig leaf” to obscure an insoluble absence of global consensus on the respective responsibilities of 194 sovereign nations.

While politics appears to have stalled, at least temporarily, climate change efforts in Congress and the U.N., U.S. EPA seems determined to use its existing authority under the Clean Air Act to push ahead with greenhouse gas regulation.

However, even that path offers uncertain results in the near term. U.S. EPA's endangerment finding has already been judicially challenged, and it is likely that the emissions standards expected in March will be challenged as well. Moreover, even U.S. EPA acknowledges that the Clean Air Act was not designed to address global pollutants, and few, if any, believe that it can effectively serve as the sole source of greenhouse gas regulation in the U.S.

One trend that appears sustainable entering 2010 is the commitment, inside and outside the U.S., to more aggressive development of low-carbon energy technologies. In the U.S., the issue seems to be one of the few issues capable of attracting bipartisan support in Congress, and with half the states now implementing renewable portfolio standards, a degree of market demand will exist regardless of the timing and outcome of climate change legislation. Outside the U.S., the EU's established programs implementing the Kyoto Protocol already are driving demand for renewable energy, and even if developing nations like China and India resist making commitments to reduce their own emissions, they can still be expected to pursue opportunities to manufacture and sell such technologies to the rest of the world.

Beyond that, it is easier to describe how the landscape has changed over the past year than it is to predict how it will change over the next.

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*On February 10, 2010, Jones Day will present a live webcast entitled, “Two Approaches to Climate Change Regulation: Cap and Trade vs. Clean Air Act Permitting.”*



## ■ NEW CLIMATE CHANGE PROPOSALS CIRCULATING IN SENATE

While Congress's attention has been on health care, competing climate change proposals have circulated the Senate in recent weeks. Although the Kerry-Boxer climate change bill was reported out of the Senate Environment and Public Works Committee on November 5, 2009, no action has been taken on the legislation by other Senate committees with jurisdiction over the bill.

In the meantime, on December 10, 2009, Senators John Kerry (D-MA), Joe Lieberman (I-CT), and Lindsey Graham (R-SC) offered a four-page "framework" for legislation to limit greenhouse gas emissions. Their proposal offered few specifics, but pegged reductions in the U.S. in the range of 17 percent by 2020, relative to 2005 levels, the target specified in the Waxman-Markey bill passed by the House of Representatives in June 2009. In addition to supporting a cap and trade system, the framework likely would include expanded offshore drilling for oil and natural gas, as well as incentives to construct new nuclear power facilities.

The next day, Senators Maria Cantwell (D-WA) and Susan Collins (R-ME) offered a competing bill, known as the "Carbon Limits and Energy for America's Renewal (CLEAR) Act of 2009," to cut U.S. greenhouse gas emissions by 20 percent by 2020 and 83 percent by 2050, relative to 2005 levels. While their bill also proposes a carbon market, it would restrict trading to sources regulated by the bill, would require all emissions allowances to be sold at auction, and would distribute the revenues from such auctions to low- and middle-income households to offset higher energy costs.

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## ■ DOE AND FERC PRESS FORWARD ON SMART GRID TECHNOLOGIES

The U.S. Department of Energy recently announced \$3.9 billion in "Smart Grid" grant awards. Smart Grid includes technologies to facilitate monitoring, analysis, control, and communication capabilities of the electricity grid in order to improve reliability, reduce energy consumption, and integrate intermittent and distributed generation resources. DOE plans to finalize specific Smart Grid Assistance Agreements by February of 2009. As it negotiates specific terms and conditions, DOE is expected to clarify its data-collection requirements, cyber-security standards, and intellectual property rights in funded projects. In the meantime, DOE announced another \$60 million in stimulus funding for regional transmission planning to facilitate growth in electricity demand, integrate diffuse renewable sources, and implement compatible Smart Grid technologies.

On December 17, 2009, the Federal Energy Regulatory Commission issued its first order pursuant to the Smart Grid Policy it adopted in March 2009, in part to encourage Smart Grid investments. Pacific Gas and Electric (PG&E) proposed a \$50 million investment to install or upgrade synchrophasor measurement devices and associated communication infrastructure on its transmission system. According to PG&E, this technology uses time-synchronized measurements of system parameters to inform operators of potential reliability concerns, and IT should help integrate intermittent and energy-limited renewable generation resources, such as wind turbines. Under the Smart Grid Policy, PG&E is entitled to recover the project's costs through its electric transmission rates and also may recover 100 percent of abandoned plant costs if the project is cancelled for reasons beyond PG&E's control.

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## ■ U.S. EPA ISSUES FINAL ENDANGERMENT FINDINGS FOR GREENHOUSE GASES

On December 7, 2009, U.S. EPA announced a final endangerment finding for six greenhouse gases under section 202(a) of the Clean Air Act and a separate finding that emissions of greenhouse gases from new motor vehicles contribute to a threat to public health and welfare. Both findings will become effective 30 days after publication in the *Federal Register*.

U.S. EPA's findings do not directly impose any regulatory requirements on motor vehicle manufacturers or other sources of greenhouse gas emissions. Under the Bush administration's December 2008 interpretive memorandum, U.S. EPA's current view is that pollutants do not become "subject to regulation"—triggering a duty to regulate their emission under the Clean Air Act—until the Agency adopts a regulation actually limiting their emission. However, a final and effective endangerment finding for greenhouse gas under section 202(a) would allow U.S. EPA and the Department of Transportation to finalize their September 28, 2009, proposal for greenhouse gas emission standards for light-duty motor vehicles.

U.S. EPA believes that finalization of the vehicle emission standards would also trigger stationary source requirements for greenhouse gas emissions under the Clean Air Act's "Prevention of Significant Deterioration" program and Title V operating permit program. U.S. EPA already proposed a "tailoring" rule intended to lessen the scope and regulatory burden associated with triggering PSD and Title V requirements for greenhouse gas emissions from stationary sources. The proposed rule, however, does not resolve all of the legal and practical difficulties associated with PSD and Title V regulation of greenhouse gas emissions from stationary sources. Much still depends on U.S. EPA's response to comments on the proposed tailoring rule.

Moreover, U.S. EPA has announced that it is in the process of reconsidering the PSD interpretive memorandum. If U.S. EPA changes its current view, the endangerment finding alone could trigger PSD requirements for covered stationary source emissions.

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## ■ CALIFORNIA RELEASES PRELIMINARY DRAFT CAP AND TRADE PROGRAM

Under California's Global Warming Solutions Act, known as "AB 32," California must reduce greenhouse gas emissions to 1990 levels by 2020. The AB 32 "Scoping Plan" adopted by the California Air Resources Control Board (CARB) calls for a state "cap and trade" program that links with other regional partner jurisdictions in the Western Climate Initiative as part of a regional carbon market.

On November 24, 2009, CARB released its preliminary draft regulation for a California cap and trade program, an ambitious, far-reaching, and complex program that, if adopted, could affect almost every company that does business in California. CARB's intent is for the cap and trade program to "include a stringent declining [annual] emissions cap. Emissions trading and the limited use of offsets would provide flexibility for covered entities to comply." California's program would cover about 85 percent of the state's greenhouse gas emissions and allow trading of emissions allowances.

The preliminary draft regulation reflects the approach to cap and trade approved by CARB in the AB 32 Scoping Plan, including:

- Requiring sources of greenhouse gas emissions to manage their emissions under an annually declining cap designed to achieve the aggregate 2020 emissions target mandated by AB 32.
- Starting the program in 2012 with about 600 of the state's largest stationary sources of greenhouse gas emissions (primarily industrial sources and electricity generators), along with electricity imports.

- Including emissions from transportation fuel combustion (e.g., gasoline, diesel, ethanol), and from fuel combustion at stationary sources that fall below the threshold for direct inclusion in the program (e.g., residential and commercial natural gas combustion) by covering the suppliers of fuel to these sources.
- Requiring a minimum number of allowances to be auctioned at program start.
- Allowing limited use of “high quality” emissions offsets.
- Establishing rules for carbon trading, emission monitoring, and enforcement.

The preliminary draft regulation also includes a preview of upcoming regulatory revisions to CARB’s mandatory reporting regulations for greenhouse gas emissions to accommodate a wider range of facilities and entities than are currently required to report their emissions. More detailed proposed regulatory language for mandatory reporting will be released in the spring of 2010.

CARB intends to prepare a proposed regulation and preliminary staff report for public comment in spring 2010, with a final proposed draft regulation available for public review in summer 2010. The Board is scheduled to consider the final draft at its October 2010 meeting.

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## ■ GREENHOUSE GAS REGULATORY ACTIONS TRIGGER ADDITIONAL SCRUTINY OF CLIMATE CHANGE DISCLOSURE OBLIGATIONS IN SECURITIES FILINGS

As discussed previously in *The Climate Report*, the Securities and Exchange Commission has shown increasing attention to the issues of how liabilities and risks related to climate change should be reported in SEC filings. This trend resulted both from national and international movement toward greenhouse gas regulation and from activism by investor groups that see climate change risks as sufficiently material, in many cases, to trigger disclosure requirements in securities filings. A number of recent developments on the regulatory front, along with new pressure from investor activists, may elevate the profile of climate change disclosure issues at the SEC and affect the SEC’s path forward in clarifying the disclosure obligations of companies subject to its jurisdiction.

### **Regulatory Developments Affect Climate Change Obligations**

Two significant recent regulatory developments could affect the way companies characterize their climate change risks in securities filings. First, the United States Environmental Protection Agency took a step toward greenhouse gas emissions regulation in October 2009 by promulgating a rule that mandates greenhouse gas emissions monitoring, as well as annual reporting of emissions monitoring data to U.S. EPA, for certain large emitters. Covered facilities will be required to submit monitoring data annually, thereby allowing U.S. EPA to create a large database of greenhouse gas emissions data, which will be available to investor groups and other third parties.

Second, in December 2009, U.S. EPA finalized its “Endangerment and Cause or Contribute Finding for Greenhouse Gases Under Section 202(a) of the Clean Air Act.” In officially finding that greenhouse gases threaten public health and welfare in the United States, U.S. EPA triggered its obligation under the Clean Air Act to regulate mobile and



stationary sources of these pollutants, laying the groundwork for additional climate change regulation by U.S. EPA in the future.

Both of these regulatory developments have potential disclosure implications for companies that are subject to SEC reporting requirements. Environmental groups and “activist” investor groups such as CERES argue that by promulgating the greenhouse gas reporting rule, U.S. EPA has taken a clear, affirmative, and tangible step toward greenhouse gas regulation. With this development, they argue that U.S. EPA is demonstrating a firm intention to regulate greenhouse gas emissions generally, and that the risks related to climate change thereby become a “known trend” under Item 303 of Regulation S-K. Under this analysis, regulated companies could be required not only to disclose their emissions data, but also to analyze the risks posed by such emissions. The risks would include, at a minimum, the risk of mandatory emissions controls and the costs thereof.

In addition, the greenhouse gas reporting rule will require many companies to collect new information regarding their greenhouse gas emissions. While many companies subject to SEC regulation already collect and track such emissions, many have never done so. Thus, compliance with the new requirements will provide many companies with potentially significant new emissions information. Arguably, this data will put regulated companies in a better position to analyze the potential risks they face in the climate change context, including the ability to see how they compare to similarly situated emitters.

More generally, it remains to be seen whether disclosure, even under the “known trend” analysis or under the concept of “new data,” would include climate change risks other than pure regulatory costs. For example, will companies be expected to assess (and, if necessary, disclose) their risks associated with the physical impacts of global warming, such as increased costs for clean water supplies and wastewater treatment and disposal, increased food supply costs due to poorer growing conditions, increased electricity costs due to greenhouse gas regulation, and greater costs associated with coastal port access and operation?

Additionally, once the data collected by U.S. EPA under the rule is published, will companies be expected to evaluate “supply chain” climate change risks associated with specific vendors, suppliers, or customers? These are questions that companies may face in articulating climate change risks in securities filings.

#### **Activist Investors Renew Campaign for Specific Climate Change Disclosure Guidance by the SEC**

As previously discussed in *The Climate Report* and a *Practice Perspectives* article, a coalition of institutional investors filed a petition with the SEC in 2007 calling for the issuance of guidance on the obligations of reporting companies to disclose climate change risks and liabilities. The SEC recently indicated its intention to look seriously at requiring public corporations to assess and disclose the effects of climate change on their financial health.

Based on the regulatory developments described above and international climate change reports prepared in advance of the United Nations’ Copenhagen summit, a number of investor groups filed a supplemental petition on November 23, 2009, again asking the SEC to publish guidance on climate change disclosures in SEC filings. The supplemental petition presents the investors’ argument that the greenhouse gas reporting rule further substantiates the need for the SEC to issue guidance, and it also points to “cap and trade” legislation pending in Congress and U.S. EPA’s (then-proposed) endangerment finding, among other developments, as additional support for the need for such guidance and enhanced disclosure by reporting companies.

With the SEC already indicating an intention to look seriously at requiring public corporations to assess and disclose the effects of climate change on their financial health, the filing of the supplemental petition may well reinforce those plans and increase the likelihood of action. In this context, the issue may not be whether the SEC will issue new guidance, but rather how far the SEC will go in requiring climate change risk disclosure.

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## ■ BROWNFIELDS PROVIDE RENEWABLE ENERGY DEVELOPMENT OPPORTUNITIES

U.S. EPA estimates that there are approximately 490,000 sites and almost 15 million acres of potentially contaminated properties across the country, including Superfund, Resource Conservation and Recovery Act (RCRA) sites, so-called brownfields, and abandoned mine lands. Development of renewable energy facilities at these sites, which generally have limited potential for conventional redevelopment, often presents an economically viable reuse option, because such sites: (i) offer thousands of acres of land with few site owners; (ii) often have critical pre-existing infrastructure, including nearby electric transmission lines and roads; and (iii) are already zoned for commercial development. For example, in recent years solar power systems have been installed on contaminated sites in Colorado, California, and Pennsylvania.

### Driving Factors

When contemplating a solar project on contaminated land, an organization should consider key solar market drivers, such as renewable portfolio standards (RPS) and government incentives. An RPS is a state statute that requires a local utility to supply a specified amount of customer load with electricity from eligible renewable resources by a given date. An RPS may also mandate that a certain percentage of the required renewable energy be provided from solar resources, known as a “solar set-aside.” A utility can meet the solar set-aside either by producing a certain amount of its electricity from solar resources or by purchasing solar energy or the associated renewable energy certificates (RECs) from a third party.

Additionally, state and local programs often provide rebates, low-cost loans, grants, or tax incentives to reduce the up-front cost of solar installations. Federal programs, such as the 30 percent Investment Tax Credit, also abate the cost of installing new solar capacity.

To leverage these market drivers and incentives, many solar arrays are not purchased outright by the site owner.

Rather, they are typically covered by a Solar Power Purchase Agreement (SPPA), where a solar services provider finances, develops, owns, operates, and maintains the solar system, and a host/customer provides a site for the system on its property and agrees to purchase the system's electric output under a long-term contract, typically at a fixed or reduced rate. The solar services provider (or its investors) retains the benefit of all governmental incentives, as well as the right to sell the RECs generated by the system to third parties, such as utilities, to meet RPS requirements.

An SPPA enables the site owner to avoid many of the traditional barriers to solar installation, such as high up-front capital costs, system performance risk, and complex design and permitting processes. In addition, an SPPA that provides the produced power below prevailing utility electric rates can be immediately cash-flow positive for the site owner. However, for the SPPA structure to be feasible for a brown-field site, state laws must require the local utility to interconnect the solar system to the power grid and include favorable “net metering” requirements, so that customers receive credit on their utility bills for their solar generation.

### Selected Success Stories

At Nellis Air Force Base northeast of Las Vegas, the U.S. Air Force worked with the Nevada Power Company, SunPower Corp., and MMA Renewable Ventures LLC to develop a solar system on property including a former landfill to provide a quarter of the base's energy needs. The Air Force hired SunPower to construct the system from June to December 2007 using private-sector funds from companies that received federal tax credits for solar power investment. MMA owns and operates the system, and the Air Force purchases electricity under a 20-year contract at a guaranteed fixed rate. The local utility, Nevada Power Company, purchases RECs from MMA to meet the Nevada RPS.

In June 2009, Aerojet-General Corp. and Solar Power, Inc. began development of a six-megawatt solar system on a portion of Aerojet's Sacramento, California corporate campus to help supply energy for the remediation system Aerojet uses to clean up contaminated ground water at the site. During its first year of use, the Aerojet system is expected to offset more than 6,000 tons of carbon dioxide, more than 23 tons of sulfur dioxide, and more than nine tons of nitrogen oxide that

would have otherwise been emitted through fossil fuel power production. The local municipal utility district will connect the system to its power grid upon completion of the project. Cost savings, state-mandated targets for greenhouse-gas reduction set by Assembly Bill 32, and a commitment to environmental leadership led Aerojet to undertake the solar installation.

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■ **REAL ESTATE PORTFOLIOS PROVIDE OPPORTUNITIES  
FOR SOLAR DEVELOPMENT DEALS**

As owners of commercial real estate portfolios, such as REITs, continue to search for lower-cost alternatives to power their operations, one increasingly popular source of alternative energy is solar power. In addition to possible energy cost savings, solar facilities can take advantage of underutilized roof space and bestow an immediate public relations boost on the property owner.

Solar power developers, in turn, view these property owners as attractive targets, due to the large amount of potentially suitable rooftop space for panel placement, the continuous demand for energy by building tenants and for common areas, and a single point of access to an extensive number of property locations in states with favorable conditions for solar energy (including high utility rates, large financial incentives, and favorable net metering and interconnection rules).

**Business Issues**

Before rushing into this seemingly perfect marriage, however, critical business issues must be addressed. The primary hurdle for owners and solar developers is the length of the SPPA with the solar power provider. Due to the high cost of solar

power equipment, solar power providers use third-party debt and equity financing for these projects. The cost of the system is then effectively passed through to the property owner/user through power payments under the SPPA, typically over 20 to 25 years. As with any financing arrangement, the longer the period of amortization, the lower the annual payment obligation. Thus, while shorter terms, such as 10 to 15 years, are possible, this results in higher power payments under the SPPA, negating one of the primary benefits of the solar installation to the owner/user.

Further, the party financing the purchase of the solar panels for the solar provider will closely examine the owner/user's credit, often requiring a guarantee of the obligations under the SPPA by a deep-pocketed affiliate. Early termination of the SPPA by the owner will require payment of a significant termination fee to at least cover the lost tax benefits, as well as payment in full of the debt used to finance the solar equipment. For an owner, payment of just one such termination fee could negate the net economic benefit of installing solar panels across the entire portfolio.

Due to the long-term nature of SPPA commitments, real estate owners considering these arrangements must evaluate how long they intend to remain the owner of the properties. While it may be reasonable for a "big box" retailer to expect to occupy its newly constructed stores for 20 years, real estate investors typically do not expect their portfolios of properties to remain unchanged over that length of time. These investors require, above all else, the ability to add or remove properties in their portfolios to address market shifts and changing business needs.

When selling a property within a portfolio, the typical real estate investor has no desire to remain liable as a guarantor for continuing obligations under an SPPA. Moreover, even if the solar power provider and its financing party are satisfied with the proposed purchaser's credit quality, the purchaser may prefer a different solar power arrangement than the one negotiated by the seller, wish to discontinue the program because it does not believe in its financial benefits, or opt to rely on other sources for its energy. If so, the SPPA may



negatively affect the purchase price, because the prospective purchaser considers the property to be “burdened” by the SPPA.

#### **Tools for Managing a Portfolio-Wide Solar Program**

What tools are available for a real estate investor to secure the full benefits of a portfolio-wide solar program, while retaining flexibility to conduct its business? For large, credit-worthy real estate investors, there are two readily identifiable options.

First, the property owner and solar developer may agree that the guaranty obligations of the owner will not extend over the entire term of the SPPA if the property is sold prior to the expiration of such contract. Typically, the first six years of the energy services contract are the most important, due to the potential loss of significant tax benefits if the property is sold. During this initial period, the creditworthiness of the property owner to pay the termination value is critically important to the developer and its financing parties. Early termination fees generally decline at a greater rate after that point.

Therefore, the solar power provider may be willing to either eliminate the credit test for a purchaser that buys the property after the initial time period, or make the test less burdensome. The parties also might agree that even if the guarantor is not immediately released from its obligations at the time of a property sale, such obligations will cease at some designated point in the SPPA term, regardless of the credit of the property owner at that time.

Second, the property portfolio could be divided into different pools such that the investor has a group of properties available to which it could relocate the solar equipment if a purchaser of the original property does not want to assume the SPPA obligations or does not have the level of credit necessary to release the investor from its obligations. Under this approach, an investor can eliminate continuing obligations affecting the sold property, including obligations under an SPPA, by incurring the relatively minimal cost of relocating the solar equipment to another of its other properties.

Using these and other tools, the parties can develop a solar energy program that enables the solar power provider to obtain financing for the equipment on reasonable terms while still providing the real estate owner/investor with enough flexibility to pursue its business objectives.

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## ■ MANDATORY GREENHOUSE GAS MONITORING OBLIGATION TAKES EFFECT, AS U.S. EPA CONSIDERS EXPANDING SCOPE OF RULE

On October 30, 2009, U.S. EPA published the final version of the new mandatory greenhouse gas monitoring and reporting regulation. The final rule took effect December 29, 2009, and required covered sources to begin monitoring on January 1, 2010, with annual submittal of data reports beginning March 31, 2011. Upcoming deadlines and requirements for affected facilities in 2010 include:

- Due to the limited time allowed for installing monitoring equipment, the rule allows temporary use of “best available monitoring methods.” Facilities that wish to utilize “best available monitoring methods” after March 31 must submit an extension request by January 28, 2009. U.S. EPA has indicated, however, that it expects the vast majority of covered facilities to implement the monitoring requirements by April 1, 2010. With a few limited exceptions, monitoring equipment must also be calibrated by that date.
- A written greenhouse gas monitoring plan (available on-site for review, but not submitted to U.S. EPA) must be developed by April 1, 2010.

U.S. EPA has published a fact sheet that provides further details on the rule’s special provisions for the 2010 reporting year.

U.S. EPA already has turned its attention to adding new categories of facilities to the mandatory reporting rule’s coverage. On December 14, 2009, U.S. EPA submitted two draft rules to the White House Office of Management and Budget for review. One draft regulation would require reporting of greenhouse gas emissions from sectors of the oil and gas industry that have “significant fugitive and vented emissions

of carbon dioxide and methane, e.g., natural gas transmission compression, distribution, etc.”

The other regulation would extend reporting requirements to carbon dioxide injection facilities, including geologic sequestration sites. U.S. EPA anticipates publication of both proposed rules in February 2010, with final action in September 2010. The draft regulations contemplate that the newly covered facilities would be required to begin monitoring in January 2011.

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For a more detailed summary of the mandatory reporting rule’s key provisions and requirements, see *Jones Day Commentary*, “U.S. EPA Announces Final Rules for Mandatory Greenhouse Gas Reporting,” October 2009.

## ■ RECS ALLOW GENERATORS OF RENEWABLE ENERGY TO EXTRACT MARKET VALUE

In a previous edition, we discussed how a company can extract value from reducing its greenhouse gas emissions through carbon emission reduction credits. Renewable energy credits (RECs) are another market-traded commodity traceable to climate change concerns. This article briefly describes RECs and how they are generated and marketed. The “Carbon Market Transactions” section of this edition of *The Climate Report* discusses particular projects that generate RECs.

### What Is a REC and How Is It Generated?

When an electricity generator produces electricity, whether from a renewable resource or traditional fossil fuel sources, the electricity is fed onto the electric transmission grid, where it mixes with energy generated by other sources. Once on the grid, electricity from one source is indistinguishable from electricity from other sources. RECs are designed to encourage the generation of electricity from renewable power sources by providing a mechanism to monetize the unique value of such power.

If properly documented, electricity generated through an eligible renewable energy source produces one REC for each megawatt-hour of electricity generated. The REC is a unique commodity that exists separate from the generated electricity and represents a property right to the environmental, social, and other nonpower qualities of renewable power. The REC can be bundled with the electricity and sold as renewable power, or the generator may instead sell the electricity to one buyer and the REC to a separate buyer. However, if the electricity generated by a renewable power resource is sold separately from the REC, the purchaser of that electricity may not claim it as “renewable energy.”

The United States does not have a national REC registry. Depending upon the project location and type, a renewable power generator can register its RECs on a number of regional and voluntary tracking systems. These systems require documentation substantiating the claims of generation of renewable energy. As discussed below, the choice of registry will affect the potential marketability of the REC. Once verified in accordance with the registry’s rules, each REC is given a unique tracking number so that it can be traded, sold, or retired. Links to U.S. REC registries, marketers, and brokers are available on the Department of Energy’s web site.

#### **Who Purchases RECs and What Are They Worth?**

The market for RECs is driven largely by a combination of government mandates to increase the production of electricity from renewable sources and consumer demand for “green” energy. According to the Department of Energy, as of May 2009, 24 states plus the District of Columbia had adopted “renewable portfolio standards,” which require electric utilities to obtain a certain amount of their power from renewable resources by a certain date. Although requirements vary widely, many states either allow or require utilities to meet these standards by generating or purchasing RECs. Many states impose limitations on the geographic area within which the RECs may be generated or require RECs to be generated from specific types of renewable resources (e.g., solar).

RECs may also be purchased on the open market by consumers who wish to minimize their personal greenhouse gas emissions. For example, events or companies that claim to be “carbon neutral” often purchase RECs equivalent to their electricity use. Individuals or organizations also purchase and

“retire” RECs to encourage the development of renewable power resources.

Market prices for RECs vary widely. The value of a REC depends, in part, on its eligibility to satisfy a utility’s compliance obligations. For example, prices for registered New Jersey solar RECs, which may be used to meet specific state standards, were between \$660 and \$680 at the end of 2009. In contrast, RECs available in the voluntary market that could not be used by utilities to meet compliance obligations were trading in the range of \$0.75 to \$1.50.

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### **■ CARBON MARKETS REFLECT DECREASE IN VALUE OF CARBON CREDITS**

The price of carbon continues to vary significantly from one market to another. At the end of December 2009, the price for a credit representing one metric ton of carbon dioxide equivalent emissions was as follows:

#### **Market Price**

Chicago Climate Exchange .....	\$0.15
EU Emissions Trading Scheme.....	€12.53
CDM Certified Emission Reductions.....	\$10.98
Regional Greenhouse Gas Initiative .....	\$2.30
California Climate Action Registry .....	\$4.77
Retail Offsets—Climate Care .....	\$14.44

The prices of carbon on the Chicago Climate Exchange and the Regional Greenhouse Gas Initiative are down substantially from the summer of 2009. Although also decreasing, the California Climate Action Registry prices have been more stable, declining by approximately 5 percent. This is similar to the change in the European contract prices.

The lack of a definitive outcome of the U.N. climate talks in Copenhagen does not appear to have had a uniform impact on market prices. Prices appear to be more reflective of conditions in a specific market, such as the supply of carbon credits relative to the demand for them and expectations

about future requirements. Thus, the markets appear to expect the legal requirements underpinning the California and European carbon markets to continue in force.

One curiosity is the price of retail offsets, which have increased by more than 15 percent since the summer of 2009. It is possible that there is a seasonality associated with them. It also is possible that the price reflects changes on the voluntary markets for credits issued under the Voluntary Carbon Standard and the Gold Standard. These credits are traded on over-the-counter markets, and there is no readily available published source of information on trading prices.

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methods for creating and trading emission credits for the sale of low-carbon fuel. The group intends ultimately to develop a model rule for enforcing the standard, which individual states may adopt through administrative or legislative means.

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■ **NORTHEASTERN STATES SIGN LOW-CARBON FUEL PACT**

On December 30, 2009, citing the contribution of fuel use to climate change risks, the governors of 11 northeastern states (Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont) took a first step toward a regional low-carbon fuel standard. The 10 state members of the Regional Greenhouse Gas Initiative, plus Pennsylvania, signed a Memorandum of Understanding committing their states to further reduce greenhouse gas emissions from fuels, including transportation fuels and, potentially, fuel oil used for heating.

The states committed to assess the feasibility of a range of reduction goals by early 2011, including a 10 percent cut in fuel carbon intensity and development of a framework for a regional low-carbon fuel standard to ensure sustainable use of renewable fuels. The framework will also determine the best



## ■ FIFTH CIRCUIT ALLOWS CLIMATE CHANGE TORT CLAIMS TO PROCEED AGAINST INDUSTRY, WHILE ONE FEDERAL DISTRICT COURT DOES NOT

On October 16, 2009, the U.S. Court of Appeals for the Fifth Circuit joined the Second Circuit in allowing a climate change common-law nuisance case to proceed against emitters of greenhouse gases. In *Comer v. Murphy Oil USA, Inc. et al.*, 585 F.3d 855 (5th Cir. 2009), *rehearing petitions filed* (Nov. 27, 2009), the defendants include more than 33 companies from various industries, including utilities, oil, gas, coal, and chemicals. As discussed in our Fall 2009 edition, the Second Circuit recently allowed such a lawsuit to proceed against a group of utility defendants based on a federal common-law public nuisance theory in *Connecticut v. American Electric Power Co.*, 582 F.3d 309 (2nd Cir. 2009), *rehearing petition filed* (Nov. 5, 2009).

Meanwhile, the U.S. District Court for the Northern District of California dismissed common-law nuisance and other state law claims against those same industry segments in a suit brought by an Alaskan native village in *Native Village of Kivalina v. ExxonMobil Corp., et al.*, No. 08-1138, 2009 WL 3326113 (N.D. Cal. September 30, 2009), *appeal pending*.

(Jones Day is counsel of record for Xcel Energy Inc. in *Connecticut*, *Comer*, and *Native Village of Kivalina*.)

### **Comer**

In *Comer*, a group of Gulf Coast landowners brought a class action against a group of companies, arguing that the defendants were responsible for greenhouse gas emissions that caused a sea level rise and increased the severity of Hurricane Katrina. The plaintiffs, among other things, asserted nuisance, trespass, and negligence claims. Unlike the plaintiffs in *Connecticut*, the *Comer* plaintiffs sought millions of dollars in damages, not just injunctive relief.

In its decision on October 16, 2009, a three-judge panel of the Fifth Circuit overturned a lower court's dismissal of the case on political question and standing grounds and allowed *Comer* to proceed in the district court. The *Comer* court relied upon the U.S. Supreme Court's decision in *Massachusetts v. EPA* to find that the plaintiffs had adequately alleged that their injuries were caused by a condition—climate change—that was fairly traceable to the defendants' conduct. The court of appeals went on to find that the resolution of the case did not present a political question.

Like the Second Circuit in *Connecticut*, the Fifth Circuit framed the case as a simple tort suit between private plaintiffs, noting that the Second Circuit's reasoning was "fully consistent" with its own. Also like the Second Circuit, the *Comer* court looked to the historic use of nuisance litigation to resolve cross-border air and water pollution cases and found it to be an adequate tool to address alleged climate change-related injuries.

### **Kivalina**

In *Kivalina v. ExxonMobil*, the Native Alaskan town of Kivalina sued a host of major energy companies and electricity providers, arguing that the emissions attributable to their fuels and power plants were contributing to a public nuisance, climate change. The *Kivalina* plaintiffs requested up to \$400 million to enable them to relocate their village, which was allegedly threatened by melting sea ice.

In a decision released shortly before the Fifth Circuit's *Comer* decision, the U.S. District Court for the Northern District of California granted the defendants' motion to dismiss, holding that the case presented political questions not suitable for decision by the judicial branch. The court went on to hold that the plaintiffs lacked standing to bring the suit, because they could not show that climate change was fairly traceable to the defendants' conduct. The *Kivalina* court conceded that the Supreme Court had found standing to challenge a climate change-related injury in *Massachusetts v. EPA*, but it distinguished that case on the ground that the plaintiffs in *Massachusetts* asserted a statutory right, rather than one based on the common law.



The *Kivalina* court reviewed the same authority as did the Second Circuit in *Connecticut* but came to precisely the opposite conclusion. Directly rejecting the reasoning of the Second Circuit, the *Kivalina* court wrote that the *Connecticut* decision failed to articulate any standard by which a judge presented with such a case could arrive at a principled decision. The district court also agreed with the defendants that plaintiffs could not establish that any injury they suffered was “fairly traceable” to the defendants.

The way the courts in *Comer* and *Kivalina* framed the issues led to the different results. The *Kivalina* court identified climate change as uniquely complex, with significant ramifications for national and international policy, and therefore nonjusticiable under settled Supreme Court precedent. The *Comer* court, however, followed *Connecticut* and framed the suit as a simple common-law action between private parties, with limited national or international ramifications. With each of these decisions pending in the appellate courts, most legal observers believe that the U.S. Supreme Court ultimately will be asked to decide the questions presented by these cases.

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The lead petitioner describes itself as a nonprofit organization of businesses that would likely be subject to greenhouse gas regulation under the Clean Air Act. Other petitioners include trade associations involved in mining and cattle production, along with three coal companies and a developer of coal gasification projects. The petitioners are required to file with the court a “Statement of Issues to be Raised” by January 27, 2010. No briefing schedule has been established.

Under the terms of the Clean Air Act, parties seeking judicial review by the D.C. Circuit may file a Petition for Review up to 60 days after U.S. EPA’s final action was published. At least one other organization, the Competitive Enterprise Institute, has publicly announced that it intends to challenge the finding, and the U.S. Chamber of Commerce has indicated that it is considering a challenge.

As U.S. EPA Administrator Lisa Jackson has indicated that she intends to finalize greenhouse gas emissions rules under the Clean Air Act for motor vehicles and stationary sources by the end of March 2010, the D.C. Circuit will likely have an extensive docket of greenhouse gas cases by this summer.

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## ■ INDUSTRY GROUP FILES CHALLENGE TO U.S. EPA’S ENDANGERMENT FINDING

Just eight days after U.S. EPA published in the *Federal Register* its finding that greenhouse gases endanger public health and welfare, triggering Clean Air Act jurisdiction to regulate such emissions, the first Petition for Review challenging the action was filed with the U.S. Court of Appeals for the D.C. Circuit. *Coalition for Responsible Regulation, Inc., et al. v. United States Environmental Protection Agency*, No. 09-1322 (D.C. Cir. December 23, 2009).



## ■ COPENHAGEN SUMMIT FAILS TO PRODUCE NEW GLOBAL CLIMATE CHANGE TREATY

The United Nations' climate summit at Copenhagen, officially known as COP-15, has been unofficially dubbed "Klimafarce" by the Danish press, because leaders of the 194 negotiating nations failed to reach a legally binding international climate agreement to replace the Kyoto Protocol. Instead, the result of the summit is the "Copenhagen Accord," proposed by a U.S.-led alliance (with China, Brazil, India, and South Africa) dated December 18, 2009.

Just shy of three pages long, the Accord has been highly criticized for being vague, heavily caveated, and not legally binding. The Accord, which was merely "noted" at the summit and not formally adopted (which requires the consensus of all of the parties to the UN Framework Convention on Climate Change), is far from the binding international treaty for which many nations had hoped.

It was envisaged that any agreement would contain specific emission reduction targets for the developed countries to ensure that the rise in global average temperatures was kept below 2°C. Instead, the Accord allows developed countries to set their own emission reduction pledges for the year 2020 as they see fit, with no sanctions for failure to comply with their pledges. This failure to reach a binding agreement has heightened concern that temperature rises will exceed 3°C.

On a positive note, the Accord does provide for the creation of a financial system to help developing countries adapt to and mitigate climate change. Developed countries pledge to provide \$30 billion from 2010 to 2012, increasing to \$100 billion a year by 2020, to developing countries for such adaptation and mitigation measures. Further, the Accord envisages the establishment of a "Copenhagen Green Climate Fund" to

administer a "significant" proportion of this money, although very little information has been provided on this new fund.

Despite these provisions, there is no certainty that these amounts will actually be paid. Indeed, a European Commission official stated on December 22, 2009, that the EU will not release the climate funding it has pledged for developing countries until all parties to the UNFCCC adopt the Accord. Given the lack of consensus regarding the Accord at the Copenhagen summit, this may be an insurmountable obstacle.

Additionally, the Accord covers how emission reductions by developed countries and mitigation actions by developing countries can be measured, reported, and verified. It also provides, albeit in vague terms, for establishment of a technology mechanism to encourage the transfer of technology on mitigation and adaptation to developing countries. The Accord also favors developed countries' paying developing countries to reduce emissions from deforestation and degradation, known as "REDD." The implementation of the Accord is to be reviewed in 2015, although there is hope that a binding agreement will be reached at the next UN climate summit, to be held in Mexico in 2010.

Despite the shortcomings of the Accord, the Copenhagen summit succeeded in putting the issue of climate change on the center stage of global issues. As China's Foreign Minister, Yang Jiechi, stated: "The Copenhagen Conference is not a destination but a new beginning." In the absence of international leadership and binding commitments, responsibility for adaptation and mitigation of its impacts may ultimately rest with individual countries and businesses.

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## ■ CHINA PLEDGES TO REDUCE CARBON INTENSITY AND OTHER VOLUNTARY APPROACHES

As China's greenhouse gas emissions continue to grow at a dramatic pace (recently surpassing the United States as the world's largest emitter), China has come under increasing pressure from the international community to curtail its emissions. Although the Chinese government has resisted committing to aggressive action to curb greenhouse gas emissions, recent years have seen a shift in policy. The Chinese government has moved to position China as a leading promoter of clean technologies and renewable energies, and it may now be willing to assume more of a leadership role in combating climate change.

### Existing Regulatory Programs

The Chinese government has promulgated several new policies and energy-related regulations designed to reduce greenhouse gas emissions. On June 4, 2007, the Chinese government promulgated China's Climate Change Program, China's first comprehensive official guideline addressing climate change. While the Program does not impose any greenhouse gas reduction obligations on any entity or enterprise, it elaborates on the goal of reducing such emissions by outlining specific objectives and principles, as well as general measures to be taken in the years ahead.

To protect the nation from the economic and environmental risks associated with over-reliance on fossil fuels and the destabilizing effects of climate change, China also promulgated several laws and regulations, including the Energy Conservation Law and the Renewable Energy Law. These steps seek to reduce greenhouse gas emissions through a shift in energy consumption, improvements in energy efficiency, and the development of clean energies (e.g., solar, wind, biofuels, geothermal).

China has formed various administrative agencies to implement its climate and energy regulations. At the central government level, the decision-making agency for greenhouse gas emissions is the Leading Group for Climate Change and Emission Reduction, organized by the State Council pursuant to China's Climate Change Program in 2007. The Leading Group is led by Premier Wen Jiabao and consists of the chief leaders of 29 departments of the State Council.

The Leading Group has an office mainly responsible for studying climate change and adopting relevant measures and policies. This office is also part of the National Development and Reform Commission, which is responsible for implementing China's participation in the United Nations Framework Convention on Climate Change, the Kyoto Protocol, and other international climate change agreements on a voluntary basis. China has no mandatory obligations under these agreements. Local branches of the Commission oversee greenhouse gas emission matters at the local level and are authorized to adopt rules applicable to their respective regions.

### Significant Reduction in Carbon Intensity of Economy Sought

Despite its continuing resistance in international climate negotiations to a legally binding cap on China's greenhouse gas emissions, Premier Wen Jiabao reiterated in December 2009 at the U.N. climate change conference in Copenhagen that China would voluntarily seek to reduce its carbon dioxide emissions per unit of GDP, known as "carbon intensity," by 40 to 45 percent by 2020, when compared with 2005 emission levels. China has also incorporated this target into its mid- and long-term blueprint of national economic and social development, and it plans to provide funds and financial incentives to stimulate research, development, and industrialization of clean and renewable energy.

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## ■ CARBON CAPTURE AND GEOLOGICAL STORAGE IN THE EU

Carbon capture and storage aims to reduce carbon dioxide emissions to the atmosphere by capturing carbon dioxide from industrial processes, transporting it via pipeline, and injecting it deep below ground level in geological formations.

The legal framework applying to the carbon capture and storage has been defined by Directive 2009/31/EC of April 23, 2009, on the geological storage of carbon dioxide. This Directive applies to all carbon capture and storage projects located in the territory of EU Member States, except for geological storage with a total storage intended below 100 kilotons for purposes of research and development or testing of new products and processes. Storage sites must obtain a permit, and their operator must provide financial security. At the time of closure, provided that certain conditions are met and in particular that the operator has provided the required financial contribution, future responsibility for the storage site would transfer to a competent regulatory authority.

Directive 2009/31/EC also modifies several other EU directives, by including geological storage of carbon dioxide within the scope of the IPPC Directive and the Environmental Liability Directive. However, the Directive excludes geological storage of carbon dioxide from the scope of Directive 2006/12/EC on waste and Regulation 1013/2006 on shipments of waste, which means that captured carbon dioxide should not be considered a waste in the EU. Member States have until June 25, 2011, to adopt the national measures implementing the Directive, which also bans the storage of carbon dioxide in the water column.

Directive 2009/29/EC of April 23, 2009, added the capture of carbon dioxide from installations covered by the EU's greenhouse gas "cap and trade" system, known as EU-ETS, along with the transport of carbon dioxide by pipelines for geological storage, to Annex I of the EU-ETS Directive. Beginning in 2013, these activities (like those in the energy and aviation sectors) will have to surrender emissions allowances to cover their carbon dioxide emissions, such as leakage of carbon dioxide from the pipeline or storage site. Although the Directive provides that carbon capture and storage activities

will not receive any free emissions allowances, such projects are included in the list of priorities for which at least 50 percent of the revenues from the auctioning of allowances, or the equivalent in financial value of those revenues, should be used to provide development assistance.

Furthermore, to encourage facilities subject to the EU-ETS to use carbon dioxide storage, carbon dioxide emissions that are verified as captured and transported for permanent storage will not be counted in determining the number of emissions allowances the generating facility is required to surrender each year. Thus, facilities that reduce their regulated emissions via carbon capture and storage could save money by purchasing fewer allowances or make money by selling excess allowances on the EU carbon market.

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