

THE CLIMATE REPORT



■ **HOUSE PASSES CLIMATE CHANGE LEGISLATION, BUT JUST BARELY**

On June 26, the House of Representatives approved H.R. 2454, comprehensive climate change and “clean energy” legislation authored by Congressmen Henry Waxman of California and Edward Markey of Massachusetts, by a slim majority of 219 to 212. Passage of *The American Clean Energy and Security Act of 2009* was assured only after adoption of a last-minute, 309-page amendment to garner additional votes from farm-state House members. Eight Republicans voted for the bill; 44 Democrats voted against it. While the bill would withdraw U.S. EPA’s conventional Clean Air Act authority to regulate greenhouse gas emissions from sources emitting 25,000 tons per year or more, it would require the Agency to establish new source performance standards under the Act for sources emitting between 10,000 tons and 25,000 tons per year.

The bill establishes annually decreasing caps on overall U.S. greenhouse gas emissions, beginning in 2012 and reaching a 17 percent reduction (compared to 2005) by 2020 and an 83 percent reduction by 2050. Compliance with the cap will be regulated via a cap and trade scheme in which about 70 percent of available emission allowances will initially be allocated to emitters for free, with about 30 percent to be auctioned. By 2031, the percentage of allowances to be auctioned increases to about 70 percent

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and remains there. In a controversial move that could someday ignite a trade war, the House included a provision requiring the President to impose “border adjustments” (*i.e.*, tariffs) to protect “energy-intensive, trade-exposed” U.S. companies from competitors in countries such as China and India with less stringent controls, a provision that may be waived only by joint resolution of Congress.

The bill also requires electric utilities to meet 20 percent of demand by 2020 through renewable energy and energy efficiency, and it creates or modifies myriad federal programs and offices to disburse about \$200 billion to develop various forms of “clean energy” and promote energy efficiency. The 1,468-page legislation also seeks to shape consumer energy consumption behavior via federal involvement in everything from “green” building codes to “green” mortgages to “green” homeowners insurance.

The net cost to the federal budget is also as yet unclear. The CBO estimated the bill, as passed, would generate net revenue of about \$9 billion for the government over 2010–2019, but did not include in its estimate any spending called for in the bill “that is subject to appropriation,” including the cost of running the various branches of new federal bureaucracy necessary to implement the bill. However, the CBO estimated such costs under an earlier version of the bill at about \$50 billion over 2010–2019, suggesting that fully implementing Waxman-Markey would cost the government at least \$40 billion.

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(For additional details and analysis of the Waxman-Markey bill, see the July 2009 Jones Day *Commentary* titled “[House Passes the Waxman-Markey Climate Change Bill, but Just Barely.](#)”)

■ U.S. EPA PROPOSES ENDANGERMENT FINDING FOR GREENHOUSE GAS EMISSIONS, A PREREQUISITE FOR CLEAN AIR ACT REGULATION

On April 17, 2009, U.S. EPA issued a “Proposed Endangerment and Cause or Contribute Findings” for greenhouse gas emissions from new motor vehicles and new motor vehicle engines

under section 202(a) of the Clean Air Act. If finalized, the endangerment finding would take the U.S. a step closer to climate change regulation under existing law.

The Agency’s proposed endangerment finding covers the same six types of greenhouse gases regulated internationally under the Kyoto Protocol—carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆). U.S. EPA proposes to treat these gases as a single “air pollutant” that endangers public health and welfare. To find an endangerment of public health, U.S. EPA relies on indirect effects of global climate change, such as more frequent or extreme weather events and the increased spread of disease and pathogens.

During the public comment period for U.S. EPA’s proposal, an unflattering internal Office of Management and Budget (OMB) memorandum surfaced. The undated and unsigned memo, which apparently collected comments on the proposal from other federal agencies, criticized the proposal on several grounds, including its scientific basis and likely effect on the U.S. economy. According to OMB Director Peter Orszag, the document does not reflect any official finding of fault with the proposal by OMB. Still, the document reflects serious concerns about the proposal by some at the federal level and provides a roadmap for commenters that U.S. EPA will need to address if it decides to move forward with the finding.

Although an endangerment finding would not directly trigger any obligations for industries related to new motor vehicles, it would mark a necessary first jurisdictional step toward regulation of greenhouse gases under the Clean Air Act. As a practical matter, the critical impact of the Agency’s proposal may be the message it sends to Congress: U.S. EPA is willing to regulate greenhouse gas emissions under existing law, despite the numerous drawbacks associated with that approach, if Congress does not enact climate change legislation.

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(For additional details, see the April 2009 Jones Day *Commentary* titled “[EPA’s Expected Endangerment Finding for Greenhouse Gas Emissions: The Implications.](#)”)

■ CONGRESS AND FERC SEEK TO MODIFY TRANSMISSION POLICIES TO PROMOTE RENEWABLE ENERGY DEVELOPMENT

In June, the Chairman of the Federal Energy Regulatory Commission (FERC), Jon Wellenbush, testified before the House Energy Subcommittee that a strong and smart electric grid is the key to bringing renewable generation online and reducing greenhouse gas emissions. Recent actions by FERC, as well as draft legislation before both the House and Senate, support the Chairman's view that transmission can help change the nation's energy mix.

FERC's policy shift on negotiated rates for merchant transmission companies (Transcos) is an example of how transmission policy can promote renewable energy development. Under its previous policy, FERC required Transcos applying for negotiated rates to allocate 100 percent of their initial capacity through a preconstruction open season. Transcos could not allocate capacity to so-called "anchor customers" prior to the open season. Such practices were considered discriminatory and nontransparent.

In approving negotiated rates for two Transcos (Chinook Power Transmission, LLC and Zephyr Power Transmission, LLC), FERC abandoned its prior policy and authorized anchor customers to hold 50 percent of the initial capacity on each proposed line. The policy shift makes it easier for Transcos to fund long-distance transmission facilities to bring remote renewable energy to market. FERC has not addressed whether it would apply the same rationale to negotiated rates for transmission projects designed to bring to market energy from remote coal-fired or nuclear generation facilities.

In Congress, both the House and the Senate have drafted bills that direct FERC to supervise nationwide planning with stakeholders for large-scale transmission projects that promote renewable energy and reliability. The Waxman-Markey climate change bill, which passed the House on June 26, 2009, also authorizes FERC to issue certificates of public convenience and necessity to construct or modify transmission projects. The bill also expands FERC jurisdiction beyond "national interest electric transmission corridors," though limited to the Western Interconnect, and authorizes FERC to act when states delay or deny siting permits for regional transmission projects.

The Senate energy bill, which has not yet reached the floor, would grant FERC siting authority for "high priority national transmission projects." Paying for transmission remains a sticking point for stakeholders; unfortunately, the Senate bill offers little on allocating costs, and Waxman-Markey is silent on the issue.

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■ CALIFORNIA ADOPTS LOW-CARBON FUEL STANDARD

As reported in the Spring 2009 issue of *The Climate Report*, the California Air Resources Board (CARB) is establishing various programs to implement California's Global Warming Solutions Act (AB 32), the law that requires a reduction in California's greenhouse gas emissions to 1990 levels by the year 2020. On April 23, 2009, CARB adopted a resolution directing staff to finalize regulations for a Low-Carbon Fuel Standard (LCFS), whose goal is to reduce the carbon intensity of California transportation fuels by at least 10 percent by 2020.

In arriving at the resolution, CARB found that California's transportation sector is the leading source of greenhouse gas emissions in the state, and that the LCFS will complement California's cap and trade program. The new regulations will require providers, refiners, importers, and blenders of fuel to ensure that fuels for the California market meet a declining average carbon intensity standard. Carbon intensity will be determined by examining the sum of greenhouse gas emissions associated with the production, transportation, and consumption of the fuel, also referred to as the "fuel pathway."

Separately, on June 30, 2009, U.S. EPA Administrator Lisa Jackson reversed a decision by her predecessor and granted the state's request for a Clean Air Act waiver that will enable California to implement its own greenhouse gas emissions limits for cars and light trucks until a recently announced federal program is in place, beginning with model year 2012 vehicles. While at least 13 other states have expressed a desire to follow California's lead, automakers continue to stress the need for uniform national standards.

On May 22, 2009, California EPA announced the formation of an Economic and Allocation Advisory Committee that will advise CARB on implementation of AB 32 and the associated cap and trade system. Mirroring a debate that has played out in Congress, a key issue before this committee is whether CARB should auction greenhouse gas emission allowances or allocate them among covered sources for free.

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On September 18, 2007, a Petition for Interpretative Guidance on Climate Risk Disclosure was filed with the U.S. Securities & Exchange Commission by a group composed of investors, environmental groups, and state officials. The Petition requests that the SEC issue guidance clarifying that:

- registered companies must perform a thorough review of the implications of climate change upon their financial condition and operations, including calculation of their current and projected greenhouse gas emissions; and
- registered companies must disclose climate change financial risks that are material, including physical risks, financial risks associated with present and probable future regulation, and legal proceedings.

While the SEC has not yet acted on the Petition, the steady drumbeat from investor activists and environmental groups for increased disclosure of financial risks associated with climate change is unlikely to slow anytime soon.

■ **INVESTOR GROUPS RENEW CALL ON SEC TO REQUIRE CLIMATE CHANGE DISCLOSURES**

Two reports were jointly released in June 2009 by Ceres, the Environmental Defense Fund, and the Center for Energy and Environmental Security asserting that climate change-related disclosure continues to be weak or nonexistent in SEC filings by large companies.

Climate Risk Disclosure in SEC Filings assessed climate change risk disclosure in 2008 by 100 global companies in the electric utility, coal, oil and gas, transportation, and insurance sectors. Overall, the report found “[f]ifty-nine companies made no mention of their greenhouse gas emissions or their position on climate change, 28 had no discussion of the climate risk they face, and 52 failed to disclose actions to address climate change.” Similarly, *Reclaiming Transparency in a Changing*

Climate reviewed climate change risk disclosures by S&P 500 companies from 1995 to 2008. This report concluded that 76 percent of annual reports filed by S&P 500 companies in 2008 failed to mention climate change and only 5.5 percent provided a strategy for managing and mitigating climate change risks.

The bottom line is that both reports allege that investors are not getting from SEC filings the information necessary to assess imminent risks from climate change, as asserted in the pending SEC Petition.

■ **ASTM RELEASES DRAFT STANDARD FOR FINANCIAL DISCLOSURES ATTRIBUTED TO CLIMATE CHANGE**

ASTM International is developing a new standard to provide guidance for the disclosure of financial impacts attributed to climate change in audited and unaudited financial statements. A first draft of the standard was considered in October 2008, and a second draft currently is under review.

The objective of the draft standard is to identify when financial disclosures attributed to climate change are warranted and what the content of such disclosures should be. Various factors identified in the draft standard are to be considered in evaluating whether or not to disclose financial impacts, including existing and predicted changes in governmental regulations related to climate change that could have a material effect upon the business. In addition, predicted changes in resource costs and availability, as well as predicted changes in a company's physical assets that are attributed to climate change, are to be considered as well.

If disclosure is warranted, the disclosure should identify the company's historic and current greenhouse gas emissions (if any), assess risks and opportunities associated with climate change, and include management's strategic analysis of the financial impact of climate change on the company. Assistance in estimating the financial impact of climate change is provided by existing ASTM Guide E 2137—"Standard Guide for Estimating Monetary Costs and Liabilities for Environmental Matters."

As with other ASTM standards, when finalized, this standard will in all likelihood be considered good commercial and customary practice. As such, and especially until guidance from the SEC is issued, any final ASTM standard would provide very important guidance to companies that file or issue financial statements. The final ASTM standard could also have impacts beyond disclosures in financial statements. The new standard could provide a framework for development of corporate strategies for future growth and expenditures considering the potential impacts of climate change. A new standard could also affect the calculation of damages in litigation related to climate change and the evaluation of claims against insurers.

■ **NEW YORK ATTORNEY GENERAL REACHES SETTLEMENTS WITH ENERGY COMPANIES FOR CLIMATE CHANGE DISCLOSURES**

In September 2007, New York Attorney General Andrew Cuomo initiated investigations of five major energy companies. The investigations concerned potential violations of New York State securities law regarding the adequacy of disclosures to investors in the companies' 10-K filings with respect to climate change-related risks and greenhouse gas regulation. In August 2008 and October 2008, the Attorney General entered into settlement agreements with Xcel Energy Inc. and Dynegy Inc., respectively, wherein both companies agreed, without any admission of liability, for the next four years to disclose in their 10-K filings:

- an analysis of financial risks from present and probable future regulation of greenhouse gas emissions;
- an analysis of financial risks from litigation related to greenhouse gas emissions;
- an analysis of financial risks from physical impacts of climate change, including increased sea levels and extreme weather conditions; and
- a strategic analysis of climate change risk and emissions management, including each company's current position on climate change, current and anticipated greenhouse

gas emissions, and reduction strategies and corporate governance actions concerning climate change.

Interestingly, personal jurisdiction for one of these enforcement actions was based on the New York State Common Retirement Fund's "significant" holdings of stock in the company, which did not provide services in the state, an expansive interpretation that could apply to many registered companies that conduct no ordinary business in New York. Indeed, in announcing the settlement, Attorney General Cuomo stated, "This landmark agreement sets a new industry-wide precedent that will force companies to disclose the true financial risks that climate change poses to their investors."

In the absence of a final ASTM standard or guidance from the SEC, the disclosures required by the settlements with the New York Attorney General probably represent a defensible template for those companies that wish to make climate change-related financial disclosures.

■ STATE INSURANCE REGULATORS REQUIRE DISCLOSURE OF CLIMATE RISKS BY INSURERS

The National Association of Insurance Commissioners (NAIC), a voluntary organization of the chief insurance regulatory officials in the 50 states, the District of Columbia, and five U.S. territories, recently adopted a requirement that large insurance companies must disclose to state insurance regulators the financial risks those companies face related to climate change. According to NAIC, climate change will have "huge impacts" on the insurance industry. The mandated disclosure requirements are intended to help state regulators better understand the climate change risks faced by the insurance industry, which include potential impacts on insurer solvency, and on the future availability and affordability of insurance.

The disclosure obligation is satisfied by annual completion of an "Insurer Climate Risk Disclosure Survey" to the domestic insurance regulator in the insurer's lead state. The survey consists of eight topics, including questions related to air emissions and climate change-related risks associated with the assets and business of the insurer, the impact of climate change on the insurer's investment portfolio, and the steps the company has taken to encourage policy holders to reduce losses caused by climate change-influenced events. The first set of disclosures is due in 2010 from insurance companies with premiums in excess of \$500 million in 2009. The threshold is lowered to \$300 million in 2010 and later years.

The disclosures will be available to the public and could be a valuable source of information in evaluating competing insurance companies. They may also provide insight into how to assess climate change-related risks and may assist other types of companies in evaluating their own potential risks.

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(Additional detail on climate change-related financial disclosure topics can be found in a recent Jones Day *Practice Perspectives* article entitled "[Financial Disclosure of Climate Risks](#).")



■ CLIMATE CHANGE REGULATION DRIVES INVESTMENT OPPORTUNITIES IN BIOGENIC ENERGY SOURCES

From a regulatory perspective, all greenhouse gas emissions are not created equal. Biofuels, such as corn-derived ethanol and biodiesel produced from soybeans, release carbon dioxide to the atmosphere when burned, just like the gasoline and petroleum diesel they replace. However, under the climate change accounting practices of both the U.S. Department of Energy and the U.N.'s IPCC, the carbon dioxide emitted by biofuels is not deemed to contribute to climate change. This is so because, through the miracle of photosynthesis, the corn and soybeans were created from biogenic carbon already present in the environment, rather than from carbon that would otherwise remain trapped within the Earth as a fossil fuel.

As climate change regulation imposes ever decreasing caps on the amount of greenhouse gas that may be legally emitted, historic levels of energy consumption—which correlate strongly over time with economic growth—cannot be maintained, much less expanded, without access to energy sources with low (or no) regulated emissions. Accordingly, given the unregulated nature of biogenic carbon emissions, there will be significant business opportunities for those able to develop and/or supply cheap and plentiful energy sources based on carbon stored in biomass.

The Waxman-Markey cap and trade bill just passed by the House of Representatives would require electric utilities to obtain 15 percent to 20 percent of their energy from renewable sources. Such a mandate would be expected to lead to an increase in electricity production from various forms of biomass of more than 700 percent by 2030 (compared to 2005), more than triple what such production would be in the absence of such a requirement. Although wind turbines and solar panels receive most of the “clean energy” media attention, biomass actually generates more electricity in the U.S. today than wind, solar, and geothermal power combined. Corresponding biofuel imperatives for the transportation sector have been

established via the federal “renewable fuels standard” and California’s recently adopted “low carbon fuel standard.”

The pending U.S. cap and trade legislation not only seeks to create demand for new biogenic energy sources, it also would allocate billions of federal dollars to support the development of products to meet that demand. The current version of the bill allocates \$7.5 million per year for a new National Bioenergy Partnership and creates the Clean Energy Deployment Administration to promote access to affordable financing for clean energy and energy efficiency technologies, funded by emission allowances valued at \$110 billion through 2025 for programs at the state and federal levels. This funding would come on top of the \$786.5 million of “stimulus” funding earmarked in May of this year “to accelerate advanced biofuels research and development and to provide additional funding for commercial-scale biorefinery demonstration projects.”

Companies are already responding to these investment opportunities. In 2008, Weyerhaeuser Company, the forest products giant, and Chevron Corporation, the global petroleum company, formed a 50-50 joint venture known as Catchlight Energy LLC to develop the technology to create commercially viable low-carbon biofuels from cellulose-based biomass, such as the native prairie grass known as switchgrass. Commercial production of ethanol is currently limited to food crops that naturally contain ample levels of simple sugars and starches, such as corn, sugar beets, and sugarcane. Perfecting the production of ethanol from more common cellulosic materials, such as switchgrass, waste corn stalks, wood chips, fast-growing trees, and even waste paper, would greatly expand the range of biofuel feedstocks, while reducing the current tension between food and energy demands.

Although Catchlight Energy represents the natural extension of two existing business platforms, growing demand for biofuels can lead established companies in new directions as well. For example, Cliffs Natural Resources Inc., a company built on providing iron ore pellets to the U.S. steel industry for more than 150 years, has established a majority-owned subsidiary known as renewaFUEL LLC to produce and distribute a renewable coal substitute derived from largely discarded biomass, such as wood wastes, crop wastes, grasses, and paper. renewaFUEL processes these materials into “energy cubes”

that can replace a portion of the coal otherwise needed to fuel conventional power plant boilers. In testing conducted by U.S. EPA, a 15 percent substitution of renewaFUEL cubes for coal had no significant effect on overall boiler efficiency or carbon dioxide emissions, but still resulted in a 10 percent net reduction of regulated greenhouse gas emissions, because the carbon dioxide attributed to the renewaFUEL cubes was excluded as biogenic.

These are the sort of innovative investments that will be necessary if cap and trade programs in the U.S. and abroad are to succeed in substantially reducing greenhouse gas emissions without simultaneously stifling the flow of energy that has historically supported economic development.

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■ ECONOMIC DOWNTURN DEPRESSES PRICES ON INTERNATIONAL CARBON MARKETS

EU-ETS in Transition. Although the European Union Emission Trading Scheme (EU-ETS) accounted for approximately three-quarters of the approximately \$126 billion world carbon market in 2008, the current economic downturn, along with uncertainty on the successor to the Kyoto Protocol and U.S. carbon legislation, reduced activity in the European carbon market in the second half of 2008 and early 2009.

Emissions of greenhouse gases from EU operators covered by the EU-ETS fell by 3.06 percent in 2008 as compared with 2007. In Europe, the biggest contributor to emissions is the heat and power sector, followed by the steel sector. As consumer demand and commodity prices collapsed, EU operators substantially decreased production and cut back on power consumption. As emissions correspondingly decreased, companies found themselves holding more allowances than needed for compliance, partly as a result of having been allocated allowances without having to pay for them. EU operators sought to sell EUAs on the market to obtain at least some of the liquidity denied to them by the ongoing credit crunch. These sales were largely conducted on the secondary market, which saw substantial increases in volume in the second half of 2008

and peaking in early 2009, with the average number of daily trades significantly increasing over the prior year.

CDM Markets in Flux. With more than 4,500 projects in the pipeline, the market for Clean Development Mechanism (CDM) projects remains robust but faces challenges as well. As with the EUA market, the financial crisis slackened the pace of projects in 2008 and early 2009 CDM as it became difficult to secure financing for such non-core projects. Moreover, with the CDM Executive Board under increasing pressure to tighten its standards, there have been growing delays in project registrations and CER issuances. In 2008, the rate of automatic registration of CDM projects (*i.e.*, those without a full level of review) was cut in half while the percentage of project rejections significantly increased.

In contrast, the secondary market for CERs continued to grow in 2008 as buyers sought to purchase guaranteed CERs from brokers and other market participants rather than non-guaranteed CER through complex and time-consuming transactions with project developers. While the CER secondary market remains dominated by European traders, U.S. funds and financial institutions have become more active in this market.

Two recent developments may further stimulate the CER markets. First, in 2008, the UN CDM registry, known as the International Transaction Log, was finally linked with the EU trading registry, known as the Community Independent Transaction Log. This long-awaited linkage allows the transfer of CERs from CDM projects into the EU-ETS market, allowing CERs to now be used for compliance under the EU-ETS. Second, to support the post-2012 market value of CERs following expiration of the Kyoto Protocol, the European Investment Bank has launched the €125 million "Post-2012 Carbon Fund" to encourage and facilitate investment in projects with longer time horizons, and to purchase and trade CERs for the post-2012 period.

Pioneering AAU Transactions. While international carbon trading has historically been focused on the EU-ETS and CDM carbon markets, the trading of Assigned Amount Units (AAU) among nations has recently returned to the agenda. Under the Kyoto Protocol, countries with surplus emission credits for the 2008-2012 compliance period, perhaps because actual

emissions are below their mandated targets, may sell AAUs representing such surpluses to countries that expect to require additional credits to meet their targets.

Eastern European nations and other countries that are expected to generate emissions below their mandated targets have become active sellers in this emerging market. Ukraine announced in May 2009 that it is in advanced talks to sell some 3.5 billion AAUs to three companies, and it was announced in June 2009 that New Zealand forest owners have sold 1,000 AAUs to EcoSecurities with an expected resale to a Japanese bank to occur soon thereafter.

To mitigate criticism that surplus AAUs generated in Eastern Europe resulted from ordinary-course shutdowns of older industrial sites, and therefore are not sufficiently “green,” buyers of AAUs have implemented Green Investment Schemes requiring the sellers to use sale proceeds to finance greenhouse gas emission reduction projects or to achieve other environmental benefits. Although AAUs cannot be used for compliance under the EU-ETS, and thus do not compete with EUAs, their increased marketability may reduce demand for CERs.

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■ **LEED 2009 REWARDS DEVELOPERS WHO PRACTICE GREENHOUSE GAS CONTROL**

On April 27, 2009, the United States Green Building Council (USGBC) launched its new LEED certification program, which it calls “LEED v.3.” Like its predecessors, LEED v.3 is not intended to be a building code but, rather, a widely recognized voluntary green building certification system. An owner/developer earns “credits,” each worth one or more “points,” by complying with the LEED v.3 requirements.

With the exception of seven general prerequisites (*e.g.* only a complete, permanent building may be certified), the owner/developer of a building is free to choose which credits it will seek. After construction, the building is reviewed to determine whether it will be LEED certified and, if so, its certification level. Under LEED v.3, a building needs 40 points to be rated “Certified,” 50 points for “Silver,” 60 points for “Gold,” and 80 points to be rated “Platinum.”

LEED v.3 retains five major categories of credits: Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, and Indoor Environmental Quality. It makes several changes within those categories:

- There are one hundred total points available, rather than the 64 under the prior version.
- In recognition of the importance of climate change, more points are awarded to attaining those credits that reduce energy consumption and greenhouse gas emissions.
- The Green Building Certification Institute (GBCI), a new entity created by the USGBC, administers the certification process.

There are two categories of “bonus credits”: innovative design (up to five points for design elements, three points for exemplary performance as specified in the LEED Reference Guide, and one point for including a LEED-credentialed “Accredited

Professional” on the project team); and Regional Priority credits of up to four points for elements identified by the USGBC regional councils and chapters as important for their region (e.g., water efficiency in the southwest).

Some Words of Caution. LEED certification is a valuable tool to advance social goals, and certification may increase property values and attract higher rents, but careful drafting of contract documents is important in the decision to seek or commit to LEED certification. A building’s rating will not be known until after construction, and USGBC can change the certification requirements and the rating system at any time. Such changes can affect the cost of achieving (or even the ability to achieve) certification. Contract documents should specify which LEED version will govern, incorporate language on how to determine compliance if GBCI is unwilling to apply an outdated standard to a building it reviews in the future, and address the consequences of failure to comply with a preselected criterion. Architects should review their insurance policies before agreeing to design to a specified standard, lest that agreement be considered a guaranty that voids the coverage.

Local codes must also be considered. Some governments mandate achieving certification at a specified level in their permitting process or as a condition of grants or loans. Because the rating will not be determined until after completion, the owner/developer is at risk during construction. It is also important to recognize that qualifying for some LEED credits (e.g., selection of a site near specific residential densities) may be impossible under local zoning codes.

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■ **IT’S NOT TOO EARLY TO PREPARE FOR U.S. EPA’S GREENHOUSE GAS REPORTING RULE**

As discussed in the Spring 2009 issue of *The Climate Report*, on March 10, 2009, U.S. EPA proposed the United States’ first federal climate change regulation—a mandatory reporting system for greenhouse gas emissions affecting 13,000 or

more U.S. facilities. The proposed rule would require affected facilities to begin collecting data on January 1, 2010. U.S. EPA received more than 250 comments on the proposed rule by the June 9 comment deadline. Although it is impossible to predict how long U.S. EPA will take to review these comments and issue a final rule, since the proposed compliance date is less than six months away, companies may not want to wait to begin considering key issues posed by the rule:

Is My Facility Affected? Although EPA estimates 13,000 facilities will need to report under the draft rule, it estimates 30,000 facilities will need to assess their greenhouse gas emissions to determine applicability. Facilities that do not have a current handle on their level of such emissions may want to conduct an assessment now to determine potential obligations under the rule. This would be particularly useful for facilities very near the applicable reporting threshold that may still have an opportunity to reduce emissions and avoid the reporting obligation.

Will I Need to Install New Equipment? The draft rule requires facilities that currently operate a continuous emission monitoring system (CEMS) to conduct direct measurement of GHG emissions. However, many CEMS are not currently equipped to collect carbon data and may require replacement or retrofitting. Additionally, even when calculations are used in lieu of direct measurement, those calculations may rely on measurement of flow rates or gas concentrations that require installation of new equipment. Given budget cycles, facilities may want to preliminarily plan for these potential capital expenses.

Do I Have Appropriate Data Management and Reporting Protocols in Place?

The draft rule requires facilities to maintain certain records on its greenhouse gas emissions data collection and calculations, including a written quality assurance plan. Facilities that have not previously collected such data either voluntarily or for a state or regional program may need to develop protocols for collecting and processing that data before the first date that emission data must be collected.

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■ **VOLUNTARY OFFSET MARKETS: THE FUTURE IS NOT QUITE NOW**

Companies subject to regional, national, and international carbon reduction regimes, such as the Kyoto Protocol and the Regional Greenhouse Gas Initiative in the Northeast U.S., may use carbon offsets to meet their legal obligations under those programs. However, as consumer interest in climate change issues increases, the purchase of carbon offsets has also become an entry point for otherwise unregulated companies to implement voluntary greenhouse gas reduction policies and “green marketing” initiatives.

Carbon offsetting allows a purchaser to compensate for its own greenhouse gas emissions by, in essence, paying someone else to reduce their emissions. Many companies who claim “carbon neutrality” do so by buying large quantities of offsets. Beyond the opportunity for green marketing, potential benefits of voluntarily acquiring offsets include preparation for a future cap-and-trade system, and the opportunity to achieve greater overall carbon reductions. As companies strive to navigate the complex tendrils of emerging carbon offset markets, they must understand evolving market regimes, and the consequent benefits and resulting burdens, to determine which offsets best fit their corporate goals.

Because offsets generated under climate change compliance programs, such as CDM projects under the Kyoto Protocol, are used to meet legal compliance obligations, those offsets are generally subject to much more rigorous eligibility criteria and oversight than offsets generated under one of the voluntary standards. The stringent standards of the compliance programs make their offsets both more credible and more expensive. Accordingly, it appears that most purchases for purposes other than compliance involve less expensive offsets certified under a voluntary standard.

Three commonly used voluntary offset standards in the United States are the Voluntary Carbon Standard (VCS), the California Climate Action Registry (CAR), and the Chicago Climate Exchange Offset Protocol (COX). The VCS is a global standard that can be applied to all project types and is touted as “rigorous without being administratively burdensome” (although

critics challenge that the VCS can be slow and challenging in the start-up process). The CAR uses a consensus-based, expert process to develop protocols. CAR credits demand a premium, based on perceptions of the offsets’ value under future cap-and-trade programs being established by California and the Western Climate Initiative. The COX has been touted, based on its longevity, as one of the most convenient for large companies today. Criticisms of COX include lack of local stakeholder consultation and questionable additionality for certain projects.

As demonstrated in the next item, differences among the voluntary standards are reflected in highly variable offset prices. As companies enter the age of carbon markets, they should carefully consider the many variables that contribute to the development and underlying value of a particular carbon offset.

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■ **THE PRICE OF CARBON VARIES SIGNIFICANTLY AMONG THE MARKETS**

The price of carbon varies significantly from one market to another. On June 19, 2009, the price for a credit representing one ton of carbon dioxide equivalent emissions in 2010 varied widely across the carbon markets:

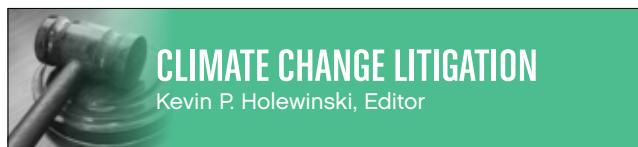
Chicago Climate Exchange.....	\$1.05
EU Emissions Trading Scheme.....	\$18.77
CDM Certified Emission Reductions.....	\$15.99
Regional Greenhouse Gas Initiative	\$3.45
California Climate Action Registry	\$5.05
Voluntary Carbon Standard.....	\$3.70
Retail Offsets—Climate Care	\$12.37

Economists are having a field day analyzing these variations in terms of supply and demand. Stated simply, the price of carbon will be lower on markets where there is a greater supply of credits and allowances in comparison to the demand for credits and allowances needed to satisfy emission reduction requirements.

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■ **CLIMATE CHANGE STANDING: DC CIRCUIT REQUIRES CAUSAL LINK BETWEEN GOVERNMENT ACTION AND INJURY**

The U.S. Court of Appeals for the District of Columbia Circuit recently vacated the U.S. Department of the Interior (“Interior”) Minerals Management Service 2007-2012 Five-Year Leasing Program for oil and gas development on the Outer Continental Shelf (OCS). *Center for Biological Diversity v. U.S. DOI*, ___ F.3d ___, 2009 WL 1025375 (D.C. Cir. April 17, 2009). The Five-Year Leasing Program covers 21 lease sales scheduled between July 1, 2007, and June 30, 2012, in eight OCS areas, including coastal Alaska and the Gulf of Mexico. Although this decision is an important one for holders of OCS leases, it is most significant for the potential impact it will have on any entity ensnared in climate change litigation brought under a variety of federal natural resources statutes. The decision provides useful precedent for those parties sued over their alleged contributions to climate change.

Three national environmental organizations and an Alaskan village challenged the Five-Year Leasing Program under the Outer Continental Shelf Lands Act (OCSLA), National Environmental Policy Act (NEPA), and the Endangered Species Act (ESA). Plaintiffs prevailed on only one of their claims—Interior’s alleged failure under OCSLA to sufficiently assess the environmental impacts to OCS areas. Focusing on Alaska, the D.C. Circuit found that Interior’s analysis was limited to shoreline areas and did not extend to the OCS area (beginning three miles offshore) as required by statute. As a result, Interior did not have the information to conduct a “proper balance” of potential environmental harm versus prospects for oil and gas discovery. The court vacated and remanded the Five-Year Leasing Program to Interior for reconsideration in accordance with the opinion.

The D.C. Circuit dismissed plaintiffs’ separate NEPA and ESA claims on standing and ripeness grounds. The court held that the plaintiffs lacked Article III standing to raise a non-procedural challenge to the government’s actions. Rejecting

plaintiffs' "substantive theory of standing" for their climate change claims, the court limited the Supreme Court's finding of standing in *Massachusetts v. EPA*, 549 U.S. 497 (2007), to claims by a "sovereign" asserting injury beyond general harms to its citizens. *Center for Biological Diversity*, 2009 WL 1025375 at *6.

Similarly, with respect to ripeness, the D.C. Circuit found the alleged climate change impacts from additional oil and gas use were not sufficiently concrete or imminent and implicated too tenuous a causal link to the Five-Year Leasing Program. According to the court, plaintiffs relied on "too tenuous a causal link between their allegations of climate change and the Interior's actions" and because they relied on "speculation" about actions of third parties not before the court. *Id.* at *7-8. The court did find standing for the NEPA-based climate change claim under a theory of "procedural" injury arising from inadequate assessment of the risk to animals affected by offshore drilling, but did not cite any specific evidence. Nevertheless, the court found this claim unripe because approval of the Five-Year Leasing Program is only the first of several stages for OCS development.

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■ ENVIRONMENTAL ADVOCACY GROUP ARGUES THAT CARBON DIOXIDE EMISSIONS ENDANGER OCEAN WATERS

Limitations on carbon dioxide emissions are most frequently thought of as being clearly within the purview of the Clean Air Act, but they may also be subject to regulation under the Clean Water Act (CWA) if the Center for Biological Diversity (CBD) has its way. In a lawsuit filed May 14, 2009, CBD argues that the ocean waters off Washington state must be included on the state's impaired waters list pursuant to the Clean Water Act because of ocean acidification caused by the absorption of carbon dioxide from the atmosphere. *Ctr. for Biological Diversity v. U.S. Env'tl. Prot. Agency* (W.D. Wash. No. 2:09-cv-00670-JCC).

CBD alleges that carbon dioxide emitted into the atmosphere, primarily from the burning of fossil fuels, is absorbed by the oceans, causing the pH of the water to drop and the water

to become more acidic. CBD alleges that this acidification decreases the calcium carbonate in the water, impairing shellfish, including corals, oysters, mussels, and plankton, from building proper shells. The acidification also allegedly causes problems with growth, respiration, and metabolism in marine animals, such as fish and squid.

In its complaint, CBD asserts that the Clean Water Act requires a state's impaired waters list to include any body of water that fails to meet any water quality standard. Washington's pH standard for coastal waters is 7.0 to 8.5, with human-caused variation within the above range of less than 0.2 units. CBD alleges that the pH of Washington's ocean waters has decreased by more than 0.2 units since 2000, in violation of the water quality standard. Nonetheless, Washington did not include these ocean waters on its list of impaired waters, and U.S. EPA approved the list.

CBD is seeking a declaratory judgment that U.S. EPA violated section 303(d) of the Clean Water Act by approving the list and failing to establish "total maximum daily loads" of the pollutants that such coastal waters can receive and still achieve the water quality standard for pH, as well as an injunction requiring U.S. EPA to add Washington's coastal ocean waters to the impaired waters list.

It is unclear whether CBD will be successful on its claims, and if it is, how Washington could implement controls to limit ocean absorption of carbon dioxide, a global pollutant. But even in its early stages, this case is a good example of how some organizations may try to use strict readings of statutes that do not traditionally govern air emissions to spur regulatory action regarding greenhouse gases.

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■ CALIFORNIA ATTORNEY GENERAL DISMISSES APPEAL OF CLIMATE CHANGE SUIT AGAINST AUTOMAKERS

On June 19, 2009, the California Attorney General filed with the U.S. Court of Appeals for the Ninth Circuit an unopposed motion to dismiss its appeal from a federal district court's

order dismissing *California v. General Motors Corp.*, No. 06-5755, 2007 WL 2726871 (N.D. Cal. Sept. 17, 2007), in which the U.S. District Court for the Northern District of California held that California's public nuisance suit for damages for alleged injuries relating to climate change presented a nonjusticiable political question.

Briefing was completed in this appeal in August 2008, and oral argument was scheduled for May 8, 2009, but California had obtained a six-month continuance of the argument in view of possible federal action by the U.S. EPA. California listed various grounds for dismissing its appeal, including the likelihood of federal action by the U.S. EPA to regulate greenhouse gas emissions from motor vehicles, which it claimed would serve California's public welfare and environmental interest to such an extent that dismissal was appropriate.

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■ **U.S. EPA'S ISSUANCE OF WAIVER TO CALIFORNIA TO ADOPT VEHICLE GREENHOUSE GAS STANDARDS CLEARS PATH FOR PENDING APPEAL OF SUCH STANDARDS IN VERMONT**

The June 30, 2009, decision by U.S. EPA Administrator Lisa Jackson to grant California's request for a Clean Air Act waiver enabling California to implement greenhouse gas emissions limits for cars and light trucks is likely to remove one legal hurdle to resolution of a pending legal challenge regarding Vermont's adoption of the California limits for new vehicles in Vermont. *Green Mtn. Chrysler Plymouth Dodge Jeep v. Crombie*, 508 F. Supp. 2d 295 (D. Vt. 2007), appeals pending, Nos. 07-4360-CV, 07-4342-CV (2d Cir.). In that case, the District Court rejected auto industry arguments that such state climate change regulations are preempted by the federal Energy Policy and Conservation Act and also impermissibly interfere with U.S. foreign policy.

Plaintiffs appealed the District Court's decision to the U.S. Court of Appeals for the Second Circuit, where it is currently pending. However, after the appeal was filed, the Bush administration filed an amicus brief with the Second Circuit, citing Section 177 of the Clean Air Act and arguing that the case was not "ripe" for review, because at that time U.S. EPA had not granted California a waiver for its version of the regulations. Under Section 177, a state may only "adopt and enforce for any model year standards relating to control of emissions from new motor vehicles or new motor vehicle engines" if "such standards are identical to the California standards for which a waiver has been granted for such model year under Section 209 of the Clean Air Act." Given U.S. EPA's June 30 issuance of such a waiver to California, it now seems unlikely that the ripeness issue will prevent the Court of Appeals from reaching the merits of the auto industry appeal.

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■ **JAPAN IMPLEMENTS INTEGRATED MARKET FOR EMISSIONS TRADING LINKED TO KYOTO MECHANISMS ON TRIAL BASIS**

In the “Action Plan for Achieving a Low-Carbon Society” (Cabinet decision on July 29, 2008), the Japanese government set a long-term target of reducing Japan’s current level of greenhouse gas emissions by 60 to 80 percent by 2050. Although the Japanese government does not impose any cap on greenhouse gas emissions, major Japanese industry groups have, since 1997, drawn up Voluntary Action Plans for reducing such emissions.

Based on the view that emissions trading is a key to promoting greenhouse gas emission reduction efforts in all sectors and to achieving the country’s long-term target, in October 2008, Japan introduced on a trial basis an “Integrated Domestic Market for Emissions Trading” (“Integrated Market”), consisting of a Trial Emissions Trading Scheme (TETS) and options for procuring additional tradable credits. Business entities can participate as either an emissions reduction target holder or a trader who has no emissions reduction target and intends to engage only in emissions trading.

Emissions Trading. TETS is a voluntary mechanism under which participants set carbon dioxide emissions reduction targets and achieve their targets through emissions trading, as well as their own reduction efforts. (Carbon dioxide generated by energy use is the only greenhouse gas currently covered by this scheme.) While the Japanese government will examine and confirm whether participants achieve their emissions reduction targets, failure to achieve such targets does not result in any penalty under TETS.

As of March 19, 2009, 523 organizations had applied to participate in TETS. The likely reasons for participation include the company’s need to achieve targets established in the Voluntary Action Plan adopted by its industry group and a desire to obtain experience with emissions trading.

Target Setting. Emission reduction targets are set voluntarily by participants based on Voluntary Action Plans of each industry group. Participants can set their emissions reduction targets for one or more target years of their choice within the FY 2008 to FY 2012 period. Participants with emissions reduction targets can choose either a target for total emissions or a target for emissions per unit of production. Those who choose a specified target for total emissions can be assigned emission allowances equivalent to their own targets in advance of their target year.

Trading. Assigned emission allowances can be traded directly among participants through accounts in a system operated by the Japanese government. However, to minimize potential overselling of assigned emission allowances, those who receive emission allowances in advance of achieving their actual reduction targets may not trade more than 10 percent of those initially assigned emission allowances until after they have demonstrated achievement of the target for such period.

In addition to assigned emission allowances, participants are allowed to achieve their emissions reduction targets using credits issued under the Kyoto Protocol’s mechanisms (“Kyoto Credits”) and using credits generated from Domestic CDM projects. Banking and borrowing of emission allowances are also permitted.

Domestic CDM. Large-sized companies may provide financial and technical support to small- or medium-scale companies to implement carbon dioxide emission reduction projects in Japan in exchange for emission credits (“Domestic Credits”) under the Domestic CDM scheme. This mechanism is intended to promote additional emission reduction efforts within Japan, especially in the agricultural and consumer sectors, as well as efforts by small- or medium-sized companies in all sectors. Domestic CDM is also intended to encourage domestic investment of funds that may otherwise be spent outside of Japan to purchase Kyoto Credits.

Domestic CDM project plans and emissions reduction achievements reported by project participants will be examined and certified by the Domestic CDM Credits Certification Committee under standards similar to those used for Kyoto Credits. Domestic Credits are resalable, but details and rules for resale transactions have not yet been determined. As of

June 19, 2009, 37 Domestic CDM projects had been approved by the Domestic CDM Credits Certification Committee, and Domestic Credits had been certified for three such projects. Eighty-one more Domestic CDM projects were awaiting approval.

Conclusion. Through this trial, the Japanese government expects to establish effective rules that lead to technology development and greenhouse gas emissions reduction efforts, and to develop a market based on a real demand that does not lend itself to manipulation. It also expects to clarify requirements, system design challenges, and other issues for implementing a full-scale emissions trading system in the future. Whether or when Japan will introduce such a system is yet to be determined. Considering that the Integrated Market experiment is set to continue until the end of the first commitment period of the Kyoto Protocol in 2012, it is unlikely that Japan will adopt a full-scale emissions trading system before then.

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■ **THE EU COMMITS TO A 20 PERCENT TO 30 PERCENT EMISSIONS REDUCTION FOR A POST-KYOTO AGREEMENT**

Under Annex B to the Kyoto Protocol, the European Union is subject to a reduction of its greenhouse gas emissions of 8 percent against the 1990 levels. The EU has committed its Member States to more stringent targets in order to reach the 8 percent target. These binding targets have to be achieved by the year 2012, which will mark the end of the first five-year commitment period (2008-2012) under the Kyoto Protocol.

Discussions on international commitments for the post-2012 period have been ongoing at the last yearly Conference of the Parties (COP) of the UNFCCC. In particular, during the 13th meeting of the COP (COP13), which took place in Bali, Indonesia, in December 2007, parties adopted the Bali Action Plan, setting the end of 2009 deadline for completing the negotiations on the terms of a post-Kyoto climate agreement to allow time for governments to ratify and implement the treaty by the end of 2012. At COP14 in Poznan, Poland, in December 2008, parties agreed that the first draft of a concrete agreement would be available at the UNFCCC working sessions in Bonn, Germany, in June 2009. During the Bonn working sessions, parties indeed provided general comments on the draft agreement, stated reservations and objections to elements of the text, and proposed additions and modifications. This resulted in a revised draft, which will be discussed at three additional working sessions before COP15 in Copenhagen in December 2009, the meeting at which the parties intend to agree on the final text of the successor to the Kyoto Protocol.

At the EU level, the EU adopted its independent climate change and energy package in December 2008. Pursuant to this package, the EU has set for itself the target of increasing the share of renewable energy use to 20 percent by 2020. The EU has also committed to reduce its emissions by 20 percent compared to 1990 levels by 2020, irrespective of whether or not an international agreement is reached. The EU indicated that it would adopt “a 30% reduction target in the context of a sufficiently ambitious and comprehensive international agreement that provides for comparable reductions by other developed countries, and appropriate actions by developing countries.”

On April 23, 2009, following up on its climate change and energy package, the EU adopted a set of regulations, directives, and decisions addressing issues such as biofuels, carbon dioxide emissions from vehicles, carbon capture and storage, options available to Member States to meet national emission reduction targets and the EU's cap and trade scheme for emissions reductions. Most notably, Directive 2009/29/EC amends the existing EU-ETS trading system to align future annual

emissions caps with the target of a 20 percent reduction, and provides that the bulk of EU-ETS allowances under the scheme will be auctioned, rather than distributed for free, beginning in 2013. Thus, the EU seems committed to meeting its post-Kyoto goal of reducing its overall greenhouse gas emissions by 20 percent compared to 1990 levels by 2020.

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