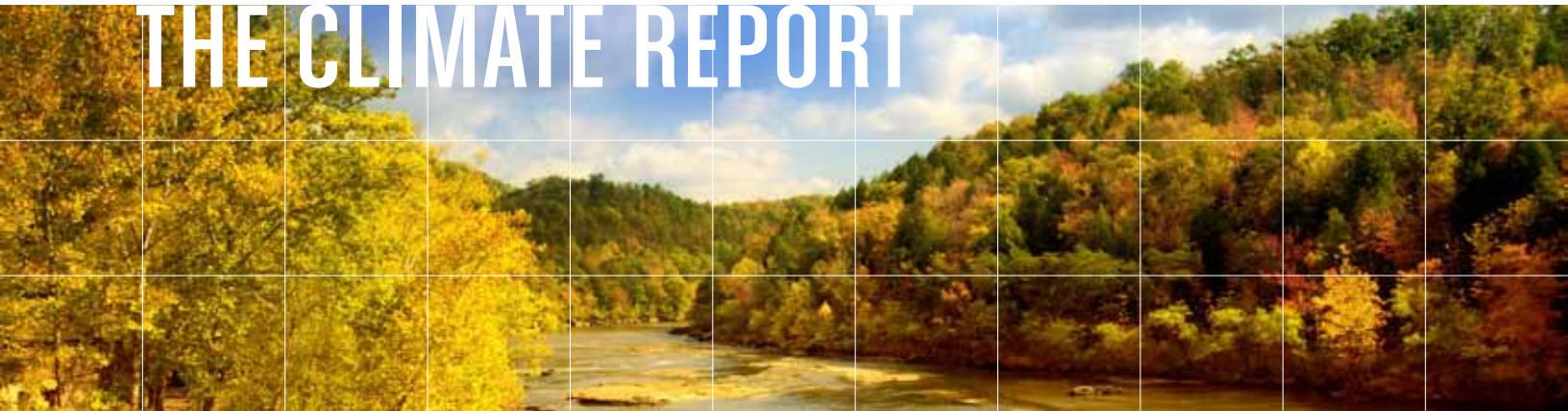


THE CLIMATE REPORT



INITIALLY...

■ FALL BRINGS SIGNIFICANT CLIMATE CHANGE ACTIVITY BY EACH BRANCH OF GOVERNMENT

After a quiet summer, the autumnal equinox marked what arguably was the United States' most significant 10-day period of climate change regulatory activity ever. Every branch of the federal government made headlines, and by the time the dust had settled, a pathway to climate change regulation that most assumed would run through Congress had become a three-way free-for-all.

First, the U.S. Court of Appeals for the Second Circuit reinstated a lawsuit dismissed in 2005 by a federal district court in New York, with the appellate court holding that the federal common law of nuisance encompasses claims that coal-fired power plant emissions cause property damage via their alleged contribution to global climate change. The decision in *Connecticut v. American Electric Power Corp.*, Nos. 05-5104-cv, 05-5119-cv (2d Cir. 9/21/09), rejected the lower court's conclusion that whether the six power company defendants should be ordered to reduce their otherwise-legal greenhouse gas emissions was a nonjusticiable "political question."

The two-judge Court of Appeals panel (consisting of one judge appointed by each President Bush) went on to hold that such common law claims were not preempted by related federal statutes, such as the Clean Air Act and the Global Climate Change Protection Act of 1987, and that even nongovernmental plaintiffs (in this case, private

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land trusts) had judicial “standing” to pursue such claims. The Second Circuit’s decision, if it stands, would enable climate change activists to seek greenhouse gas regulation through the courts on a case-by-case basis.

The next day, U.S. EPA Administrator Lisa Jackson announced the adoption of the United States’ first nationwide greenhouse gas regulatory program, a 711-page rule that applies to approximately 10,000 greenhouse gas emitters, along with distributors of fossil fuels or industrial gases, and manufacturers of heavy-duty engines and vehicles. The new rule does not regulate emissions but instead mandates that covered companies begin actively measuring their greenhouse gas emissions on January 1, 2010, and then annually submit the data to U.S. EPA.

Eight days later, on September 30, 2009, Administrator Jackson took the next step, releasing a proposed rule that would require all new or modified “stationary sources,” such as power plants and paper mills, that emit 25,000 tons of greenhouse gases per year to obtain operating permits incorporating the “best available control technology” for such emissions. When combined with previously proposed greenhouse gas emissions standards for motor vehicles, U.S. EPA has now proposed a relatively comprehensive federal greenhouse gas regulatory program based entirely on its existing authority under the Clean Air Act.

On the same day that U.S. EPA proposed to regulate greenhouse gas emissions from stationary sources via existing law, Senators John Kerry of Massachusetts and Barbara Boxer of California introduced the Senate’s long-awaited version of “cap and trade” climate legislation. Although much of the 821-page Kerry-Boxer bill tracks the Waxman-Markey bill passed by the House of Representatives back in June, several aspects of the Senate legislation—at least as initially crafted—are likely to disappoint some of the centrist swing votes that will ultimately be needed for passage.

First, the Senate bill mandates a 20 percent reduction in emissions by 2020, while Waxman-Markey requires a 17 percent reduction. Second, the Kerry-Boxer bill omits the House bill’s provision that could compel the President to impose tariffs to protect U.S. manufacturers against certain imports from countries that do not impose comparable restrictions on their

manufacturers. Third, the Senate bill directs the President to determine how best to manage the potentially lucrative offset credit program, while Waxman-Markey expressly ceded control over domestic offsets to the Department of Agriculture to gain the support of key farm-state Representatives. Finally, Kerry-Boxer includes narrower preemption of U.S. EPA’s ability to regulate greenhouse gas emissions under existing Clean Air Act authority than does Waxman-Markey.

On the other hand, provisions added to the Kerry-Boxer bill that provide additional research funding for nuclear power and that authorize issuance of valuable offset credits for projects to reduce emissions from coal mines, landfills, and upstream oil and gas operations will likely appeal to some Senators who have been reluctant to support Waxman-Markey. The overall appeal of the latter change will be undercut somewhat by the Senate bill’s more restrictive approach to international offset projects. Prior legislative analyses by U.S. EPA and others have estimated that allowing companies to meet a portion of their cap and trade obligations with offset credits would significantly reduce the market price of emissions allowances, mitigating the economic impact of cap and trade. International offsets are expected to be cheaper and more plentiful than domestic offsets. Thus, it remains to be seen whether Kerry-Boxer’s expansion of permissible domestic offset projects is enough to offset its added restrictions on use of international offsets.

It is apparent that the Kerry-Boxer bill, as introduced, is intended to be the opening bid in an extended legislative negotiation, with many areas of the bill open to modification. Even strong supporters, such as President Obama’s climate change czar, Carol Browner, have expressed doubt the bill will make it to a floor vote this year. Some Senators, such as Byron Dorgan (D-ND), are openly suggesting that Congress focus on enacting an energy bill, which would expand support for renewable energy and smart grid technology, and defer action on cap and trade. In the meantime, however, the two other branches of government seem to be accelerating the pace of their own versions of climate change regulation.

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■ **U.S. EPA PROPOSES TO REGULATE GREENHOUSE GAS EMISSIONS UNDER EXISTING CLEAN AIR ACT AUTHORITY**

While Congress continues to consider various proposals for a new statutory cap and trade program to regulate greenhouse gas emissions, U.S. EPA has released proposals to regulate such emissions from vehicles and factories using the same Clean Air Act provisions that have been used in the past to address air pollutants like soot and lead.

In what they termed the “second phase” of responding to the Supreme Court’s decision in *Massachusetts v. EPA*, the U.S. Department of Transportation and the U.S. EPA jointly proposed on September 15, 2009, a national program to improve fuel economy and reduce greenhouse gas emissions from light-duty vehicles. The proposed vehicle rule applies to model years 2012 through 2016. By 2016, overall light-duty vehicle fleets would be required to have an average fuel efficiency of 35.5 miles per gallon, if all reductions were made through fuel economy improvements. Greenhouse gas emissions from vehicles would be reduced by 12.4 percent by 2020 and 22.9 percent by 2050, reducing overall U.S. greenhouse gas emissions an estimated 2.2 to 6.2 percent between 2020 and 2050.

Final adoption of the proposed standards for light-duty vehicles is contingent on U.S. EPA first finalizing its proposed “endangerment finding” for greenhouse gas emissions from motor vehicles, which the Agency issued on April 24, 2009, under section 202(a)(1) of the Clean Air Act. U.S. EPA has stated that it intends to finalize the emission standards and, therefore, the endangerment finding for light-duty vehicles by March 31, 2010.

If the proposed standards for light-duty vehicles are finalized, U.S. EPA believes that greenhouse gas emissions from stationary sources, such as power plants and manufacturing

plants, would be subject to regulation under the Clean Air Act’s Prevention of Significant Deterioration (PSD) and Title V operating permit programs. However, if applied to greenhouse gases, the Clean Air Act’s relatively low statutory emission thresholds for these programs would encompass so many U.S. facilities that it would likely lead to a paralyzing number of new PSD and Title V applications.

On September 30, 2009, U.S. EPA issued a proposed “tailoring” rule that attempts to avoid this problem by departing from the statute and setting higher emission thresholds for greenhouse gases under PSD and Title V regulations based on doctrines of “absurd results” and “administrative necessity.” Even with this adjustment, U.S. EPA estimates that about 14,000 industrial sources would potentially need to obtain Title V permits for greenhouse gas emissions, including about 3,000 sources that do not currently require such permits.

The Waxman-Markey climate change bill passed by the House in June, formally known as the American Clean Energy and Security Act of 2009, would limit applicability of the Clean Air Act’s new source review permit program to certain categories of sources emitting between 10,000 and 25,000 tons of greenhouse gases per year and sources of significant methane emissions. With the Senate apparently far from completing action on its climate change bill, there is no current legislative impediment to U.S. EPA’s ongoing development of a greenhouse gas regulatory program based on the existing Clean Air Act.

Comments on the proposed motor vehicle emissions rule must be submitted to U.S. EPA no later than November 27, 2009. Comments on the proposed PSD and Title V tailoring rule will be due 60 days after U.S. EPA publishes notice of the proposal in the Federal Register.

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■ **SENATE INCLUDES NUCLEAR ENERGY TITLE IN CLIMATE CHANGE BILL, WHILE OBAMA ADMINISTRATION CONTINUES TO PROMOTE RENEWABLE ENERGY AND SMART GRID TECHNOLOGIES**

In contrast to the House, which combined energy legislation and climate change regulation in the Waxman-Markey bill passed by the House in June, the Senate has chosen to develop separate energy and climate change bills, with the intention of merging the two before a final vote. The American Clean Energy Leadership Act of 2009 (Senate Energy Bill) was voted out of committee in June. Like Waxman-Markey, the Senate Energy Bill provides for a federal renewable electricity standard (RES) and support for “smartgrid” technology, and it goes further than Waxman-Markey by giving the Federal Energy Regulatory Commission (FERC) permitting authority for “high priority national transmission projects” when a state has either been unable to site a project or has denied it.

The Senate’s separate Kerry-Boxer climate change bill includes a nuclear energy title, something not found in Waxman-Markey. Although greater attention to nuclear energy could address one of the objections to the House bill, major nuclear power issues—such as waste storage—remain unresolved in the Senate bill.

Although it is not clear if energy legislation will be enacted this year, federal agencies continue to promote renewable energy. For example, Department of Treasury Secretary Tim Geithner and Department of Energy (DOE) Secretary Steven Chu recently announced an additional \$550 million in awards through the American Recovery and Reinvestment Act of 2009’s “1603 program,” which provides grants to renewable energy producers in place of tax credits. Similarly, the first round of applications for grants under the Smart Grid Investment Grant Program was filed with DOE in August. Two more rounds of applications for grants are due on November 4, 2009, and March 3, 2010, and DOE has taken further action in recent weeks to improve and accelerate federal loan guarantee programs.

DOE’s programs complement efforts by FERC to encourage “demand response” and “advanced metering” technologies. In August, FERC Chairman Jon Wellinghoff testified before the Senate Committee on Environment and Public Works that deploying such technologies could “reduce carbon emissions by as much as 1.2 billion tons of carbon annually.” FERC Staff’s 2009 Demand Response Assessment echoes the Chairman’s position and highlights new rules to increase their use in organized electric markets. See Order No. 719-A.

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■ **STATES LOBBYING CONGRESS TO ELIMINATE PREEMPTION OF STATE CAP AND TRADE PROGRAMS**

As California and other states continue to develop and implement individual and regional greenhouse gas reduction programs, states now face the potential hurdle of the preemption provision contained in the House-passed climate change legislation, the Waxman-Markey bill (see page 941). Waxman-Markey recognizes existing cap and trade systems such as the Regional Greenhouse Gas Initiative (RGGI) operating in the Northeast and Mid-Atlantic, as well as potential cap and trade programs in other areas, including in California, and would actually allow covered sources holding emission allowances issued by RGGI and California to exchange them for federally issued allowances. Following this initial exchange, however, Waxman-Markey contemplates that the federal program would preempt the operation of any state or regional cap and trade programs for the first five years of the proposed federal cap and trade program, to allow for development of a uniform federal program across all states and regions.

Several states, including California, however, believe that this preemption period would interfere with their ability to set mandatory caps and achieve additional significant carbon emission reductions over time. The state attorneys general

from California, Arizona, Delaware, and New Jersey recently sent a letter to Senate leadership seeking to avoid such a restriction in any Senate climate change bill: "States should continue to be able to adopt caps that are more stringent than federal requirements in order to ensure that the ambitious targets set by the act, and required to avoid disruptive climate change, are met." Nevertheless, the Clean Energy Jobs and American Power Act introduced by Senators Kerry and Boxer on September 30, 2009, included Waxman-Markey's five-year prohibition of state cap trade programs.

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deployment of these technologies, in part by urging U.S. EPA to reduce the regulatory burdens associated with its July 2008 proposed rule. The Senate's Kerry-Boxer climate change bill includes a parallel provision. Even without new legislation, however, carbon capture and sequestration technologies could drive important voluntary measures to address climate change. Through the NODA, interested parties have an opportunity to advocate for an appropriate balance between facilitating these technologies and limiting potential environmental impacts.

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■ **U.S. EPA SOLICITS ADDITIONAL PUBLIC COMMENT ON GEOLOGIC SEQUESTRATION OF CARBON DIOXIDE**

On August 31, 2009, U.S. EPA published a Notice of Data Availability (NODA) and request for public comment on planned regulations for the geologic sequestration of carbon dioxide. The NODA presents information from the U.S. Department of Energy that became available after U.S. EPA's July 25, 2008, publication of a proposed rule to regulate such activities under the existing Underground Injection Control Program, which is designed to protect underground sources of drinking water from fluid injection activities. The NODA also suggests a new process through which U.S. EPA or delegated state authorities could waive injection-depth requirements for carbon dioxide injection wells. U.S. EPA is accepting public comments on the NODA through October 15, 2009, and projects issuing a final rule in late 2010 or early 2011.

Carbon capture and geologic sequestration technologies are likely to take center stage if the U.S. adopts restrictions on carbon dioxide emissions. Section 116 of the House-passed Waxman-Markey bill, for example, relies on the future development of these technologies to allow fossil fuel-fired power plants to meet emission reduction requirements. To that end, the bill also attempts to facilitate the commercial-scale



CLIMATE CHANGE ISSUES FOR MANAGEMENT

Christine Morgan, Editor

■ SHAREHOLDER ACTIVISTS AND INSTITUTIONAL INVESTORS CONTINUE TO PRESS CLIMATE CHANGE INITIATIVES

On July 13, 2009, *The New York Times* reported a relatively abrupt reversal of position on the part of the Securities and Exchange Commission. The SEC announced plans to launch “a very serious look” at requiring public corporations to assess and disclose the effects of climate change on their financial health in their SEC filings. *The New York Times* predicted that the SEC’s decision would drive the government even more deeply into the climate change debate and would shape future corporate management decision-making. All indications are that the SEC plans to take an assertive stance on the appropriate level of inquiry and assessment necessary to determine the impact of climate change on corporations’ bottom lines. For the first time, companies may be required to put a dollar figure on the effects of climate change.

Momentum for change in corporate disclosures concerning climate change has been building for the last few years, intensifying as the debate concerning the science of climate change moved from think tanks and university classrooms into Americans’ living rooms. Ceres, the largest coalition of investors and environmental and public interest organizations in North America, has been leading the charge, clamoring unsuccessfully for years for the SEC to issue formal guidance on climate change disclosure requirements.

Another force for effectuating change in this area has been shareholder activism. Activist shareholders use an equity stake in a corporation to put public pressure on management in pursuit of both financial (e.g., increased shareholder value through changes in corporate policies) and nonfinancial (e.g., adoption of environmentally friendly policies) goals. Shareholder activism can take several forms: proxy battles, publicity campaigns, shareholder resolutions, and direct negotiations with management. In the area of climate change, the shareholder resolution has been the tool of choice.

Mutual Funds

In May 2009, Ceres issued a report entitled *Mutual Funds and Climate Changes: Growing Support for Shareholder Resolutions*. The report focused on mutual funds, because mainstream mutual funds have the ability to affect the outcome of shareholder votes. At the end of 2005, according to the Investment Company Institute, mutual funds collectively held 23 percent of all publicly traded U.S. stocks. The Ceres report analyzed 74 mutual fund families’ proxy votes on shareholder-sponsored climate change resolutions over the past five proxy seasons (2004-2008) encompassing a total of 13,200 votes on 76 resolutions. Collectively, the funds included in the examination manage approximately \$3.8 trillion in assets.

Ceres found that the studied fund families supported, on average, 23.6 percent of the climate change resolutions they faced—up from 14.7 percent support in 2007. In addition to the increase in resolution support, there was an increase in abstentions. The authors attributed the increase in abstentions to a possible ongoing transition in attitude from rejection of climate change resolutions toward approval. Both factors led to a significant decrease in opposition to climate change resolutions by mutual funds. The report interpreted the data to indicate that, as a whole, the investment community is supporting climate resolutions at record levels. However, the report also noted that some of the largest mutual fund companies—American Funds, Fidelity, Vanguard, and State Street Global Advisors—failed to support a single climate resolution.

Shareholder Resolutions

Apart from mutual funds, Ceres and the Interfaith Center On Corporate Responsibility reported in August 2009 that the number of shareholder proposals for corporate action on climate change continued to increase, with 68 resolutions submitted in 2009, up from 61 resolutions in 2008. Resolutions were filed with 57 companies, with some companies being targeted more than once. Of the 68 resolutions filed, 31 were withdrawn when the companies agreed to act. Five resolutions were dropped when their submissions were challenged. In addition, for the first time, a shareholder resolution on climate change garnered more than 50 percent of the vote. The resolution, filed with IDACORP, Inc., requested the energy company to set greenhouse gas emission reduction goals.

See Leora Falk, *Shareholders File 68 Resolutions Seeking Corporate Action on Climate Change in 2009*, (Aug. 25, 2009).

Investment Institutions

Climate change is an issue of concern to investors beyond the United States. On September 16, 2009, a group representing 181 investment institutions called upon world leaders to reach an international agreement on climate change that includes substantial emission reduction targets to encourage private investment in energy and emission reduction technologies. In a statement released during a one-day climate change forum convened in New York by Ceres and the New York State Comptroller's Office, four climate-orientated investor groups representing these institutions called for a 50 percent to 85 percent reduction in world greenhouse gas emissions by 2050 compared to 1990 levels. The four climate-related investor groups behind the statement were the Institutional Investors Group on Climate Change (European institutional investors), Ceres' Investor Network on Climate Risk (North American investors), the Investor Group on Climate Change (New Zealand and Australian investors), and UNEP Finance Initiative (a partnership between the United Nations Environmental Program and the financial sector).

In a released statement, Mindy S. Lubber, President of Ceres, stated: "Investors have a crucial role to play in building a low-carbon, energy efficient global economy." Peter Dunscombe, the Chairman of the Institutional Investors Group on Climate Change, added, "to date investment decision making has been hampered by weak, disparate, and uncertain policies, as well as short time horizons." See Leora Falk, *Investors Call for Deep Emissions Cuts to Encourage Technology Development* (Sept. 17, 2009).

The public policy debate over climate change is dynamic in nature, and there are several catalysts in that debate. The investment community is raising its profile, and it increasingly looks like it will emerge as a true architect of change.

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Taxes touch everything and, given the substantial pools of capital involved in converting to a low-carbon global economy, the greening of the planet is certainly no exception.

■ CONGRESS CONSIDERS TAX IMPLICATIONS OF POTENTIAL CAP AND TRADE PROGRAMS

In June, in connection with the U.S. Senate Finance Committee hearings on Climate Change Legislation, Congress' Joint Committee on Taxation (JCT) prepared a briefing paper to outline federal income tax issues and options presented by current cap and trade proposals. In its exploration of various tax topics, the paper offers a fascinating juxtaposition of fundamental principles of income taxation and policy questions involved in designing a tax system to encourage desired behaviors. By organizing its discussion around basic cap and trade transactions, the paper presents both a clear introduction to the business models that are under discussion and a useful overview of the choices that need to be made to implement a sound tax regime.

The cap and trade proposals addressed in the JCT paper include four basic features:

1. Distribution of "emission allowances," either gratis or for consideration, permitting specified emission levels by "covered" persons (for example, a coal-fired electric plant);
2. Creation and certification of "offsets" generated by "non-covered" persons who engage in activities that produce measurable reductions, avoidance, or sequestration of greenhouse gas emissions;
3. Establishment of an active market for allowances and offsets; and
4. Imposition of penalties on those who exceed their emissions allowances.

These various cap and trade transactions implicate in numerous ways two of the most fundamental aspects of taxation—character and timing.

“Character” is the question of how an item is classified in our income tax system. For example, is the receipt of a government-granted emissions allowance “income” to the recipient? Is the allowance an asset that has a tax basis? Is the allowance or offset a capital asset? Are penalties for exceeding emission allowances deductible?

“Timing” is the question of when the tax system takes an item of income or expense into account. If the grant of an allowance generates income, is it taxable upon receipt or when the allowance is used? If an allowance is taxed on receipt, and thereby acquires a tax basis, is this basis amortizable, generating deductions over a fixed period of time? Or is it recovered only upon sale or use? If a noncovered person incurs costs to generate offsets, for example planting trees or modernizing a livestock facility, when are those costs recovered, and against what income stream(s)?

Overlaying its discussion of these very important yet basic income tax questions, the JCT paper also addresses some more complex issues. How, for example, should the U.S. tax system address cross-border transactions? Should we build our system in coordination with other tax regimes and develop a fairly unified international treatment of cap and trade? Should our system instead reflect internal U.S. priorities, whether or not those create tax arbitrage or inefficiency in the international sphere? How should we treat tax-exempt organizations that create and then sell offsets?

In drafting comprehensive cap and trade legislation, Congress largely controls the answers to these questions, and certain policy choices will drive that decision-making. For example, there could be a desire to treat carbon market transactions as much as possible in the same manner as other commercial transactions. Alternatively, there could be a desire to design particularly favorable rules with the goal of attracting capital to this sector or incentivizing an active market.

The JCT report also considers whether one approach or another will encourage (or discourage) “banking” of allowances, *i.e.*, keeping them for future use rather than selling them into the marketplace. The paper also reveals the tension between designing a system to treat allowances (and offsets) in the same manner, and without regard to the taxpayer involved, versus designing a system that addresses the treatment of these tax elements of cap and trade in the broader context of each particular taxpayer’s overall operations.

Also of interest, although not addressed in the JCT paper, is the manner in which state and local tax regimes will adapt to cap and trade. At a minimum, some sourcing regime will need to be developed, hopefully one that is consistent throughout the states. Other complicated questions will also arise outside the context of income-based taxes. For example, if the federal interest lies in developing a highly liquid market that discourages banking of unused allowances, that interest could be advanced by subjecting unused allowances to annual *ad valorem* property taxes, but it might be hindered by the imposition of state transfer taxes on sales of allowances and offsets. Congress’ Commerce Clause power to preempt state taxation, while anathema to the states, might be usefully considered as part of the overall analysis of cap and trade (or other forms of tax-sensitive) legislation.

The power of the tax system to incentivize commercial behavior is beyond debate. The hard questions are how to identify and achieve the desired ends. The JCT paper helpfully focuses on a number of income tax issues that must be addressed to construct a tax regime for cap and trade transactions. Obviously, predicting the interaction of technical tax rules with economic behaviors in a fairly novel business model is a challenge for policymakers. It will be interesting to see how the pushes and pulls of the legislative process shape the debate, and the resolution, of these issues.

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■ EU CONSIDERS MEASURES TO ADDRESS VAT FRAUD IN CARBON TRADING

The European Union's Emissions Trading Scheme (EU-ETS) is the centerpiece of the EU's efforts to reduce greenhouse gas emissions under the Kyoto Protocol. Under the EU-ETS, large emitters must monitor their emissions, and each April they must retire a quantity of carbon credits, such as EU Emission Allowances (EUAs), equal to their greenhouse gas emissions for the preceding year. To meet their reduction objectives, emitters may purchase EUAs on unregulated spot markets or on secondary markets. EU member states have agreed that such transactions are subject to value added tax (VAT), generally collected by sellers and remitted to the government. However, VAT applies only when carbon credits are domestically traded; imports of allowances between EU member states are subject to a VAT exemption.

VAT fraud involving the trading of carbon credits has recently come to light. In May 2009, BlueNext exchange was closed for two days due to suspicion of fraudulent activity. In August 2009, nine people were arrested in London for suspected tax fraud related to carbon credits estimated at £38 million (approximately €41 million or US\$60.5 million). Both cases involved suspected "carousel fraud" involving VAT. Under this scheme, a perpetrator based in an EU member state purchases carbon credits from a seller in another EU country and takes advantage of the VAT exemption to avoid paying any tax. Then the perpetrator sells the credits domestically, with VAT charged to the buyer but not declared. The perpetrator then pockets the VAT paid by the buyer and disappears without remitting the tax to the local government. Such fraud could prevent large sums of VAT from ever being recovered by local tax authorities.

Carbon credits are easily vulnerable to VAT fraud. They are potentially high-value intangible assets with no easy method of tracking. The fact that allowances are surrendered only once a year provides perpetrators with opportunities to misappropriate the related VAT through cross-border transactions. Moreover, the carbon market is particularly vulnerable to fraud because of its high volume, value, and speed

of trade. Carbon credits are largely unregulated, and access to the spot market is easily obtained by opening an account at a national emissions registry, a simple task that merely requires two proofs of address. The credits can then be traded on secondary markets to which anybody has access.

Following the discovery of alleged carousel fraud, three EU member states took unilateral actions to prevent its occurrence within their countries. In June 2009, France exempted carbon credits from VAT. In July 2009, the Netherlands opted for "reverse charging," meaning that the buyer, instead of the seller, is liable to remit the VAT. Effective July 30, 2009, the UK imposed a zero rate of VAT on carbon credits.

However, VAT exemptions on commodities such as carbon credits come under the exclusive jurisdiction of the EU, and member states must apply to the European Commission for a derogation before they can enforce such an exemption. Therefore, the unilateral moves taken by France, the Netherlands, and the UK may be regarded as illegal. Moreover, although these actions might shield each country's respective carbon market from carousel frauds, they will not prevent potential perpetrators from operating in other EU member states.

The need for a EU action effective in all 27 member states is therefore pressing. The EU Commission has acknowledged the urgency of the matter and proposed on September 29, 2009, to permit member states to implement reverse charging for carbon emission certificates and four other types of sales. Although the ability to trade freely in carbon credits is an important feature of the EU-ETS, certain rules of best practice in carbon trading might be established to protect the relevant markets.

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■ COMPANIES CONSIDERING VOLUNTARY GREENHOUSE GAS REDUCTION PROJECTS FACE COMPLEX ISSUES

With the current uncertainty regarding whether, when, and how the U.S. might regulate greenhouse gas emissions, companies considering voluntary projects to reduce such emissions have questions about how to extract the most value from those reductions. The following series of questions from a hypothetical manufacturer highlights some important issues for companies to consider before implementing such a project.

Hypothetical Scenario

Stick Makers Co. owns a facility in the United States that annually emits 500,000 tons of greenhouse gases (expressed in terms of carbon dioxide equivalents or “CDE”) from its exhaust stack for the stick-making process. Stick Makers can spend \$10 million to install a catalyst in the exhaust stack that would reduce the greenhouse gas emissions by 450,000 tons CDE per year. Stick Makers received a proposal from German Catalyst Co. to install the catalyst by July 1, 2010, at no charge to Stick Makers in return for the transfer by Stick Makers to German Catalyst of any carbon credits associated with the reduction of greenhouse gas emissions. German Catalyst agrees to take responsibility for certifying and registering the credits.

Stick Makers should consider the following issues in deciding whether to proceed with German Catalyst:

Early Reduction Credits

Under the House-passed Waxman-Markey climate change bill, does the timing of the installation of the catalyst affect the amount of carbon emission allowances that could be allocated to Stick Makers? In other words, are early emissions reductions penalized?

Section 740 of Waxman-Markey provides one offset credit for each ton of carbon dioxide equivalent reduced for which a credit is issued under specific existing greenhouse gas emissions offset programs. There is some ambiguity in the bill regarding existing offset programs that would be recognized for purposes of early action credits. The bill clearly would accept credits generated under California's Climate Action Reserve and the Regional Greenhouse Gas Initiative. However, it is unclear whether credits issued by voluntary programs, such as the Voluntary Carbon Standard or the Chicago Climate Exchange, would be recognized.

The bill also limits credits to emissions reductions that occur between January 1, 2009, and three years after the earlier of (i) the date of enactment of the bill and (ii) the date the compliance program is developed. Depending on whether and in what year Stick Makers is ultimately subject to a cap and trade program, it might not receive credit for emissions reductions occurring after that three-year period. Additionally, if Stick Makers is subject to regulation under a future cap and trade system, the facility's baseline emissions (for purposes of allocating emissions allowances) could be reduced through installation of the catalyst without receiving full credit for its resulting emissions reductions.

Many groups, primarily stakeholders in the voluntary carbon market, are lobbying Congress for changes to make early action more appealing. In the meantime, Stick Makers will have to weigh the potential benefits of early action against the risk that it may not receive full credit for the accompanying emissions reductions under a future regulatory program.

Registration of Credits

Where could German Catalyst certify and register the carbon emission reduction credits for trading? Is it difficult to register such credits?

Because the Stick Makers facility is in the United States, it would not be eligible for registration as a Clean Development Mechanism (CDM) project under the Kyoto Protocol. As a result, Stick Makers could not obtain credits that would be marketable under the European Union's Emissions Trading Scheme, where they currently would be most valuable.

If Stick Makers is a member of the Chicago Climate Exchange (CCX), excess credits created by the reduction in carbon dioxide equivalent emissions could be sold there. If Stick Makers is not a member of the CCX, the emission reduction credits likely would have to be registered with a voluntary carbon market to have value. Popular voluntary programs include the Voluntary Carbon Standard, The Gold Standard, and the American Carbon Registry. All of those programs share a registration process that is very similar to the CDM process in terms of applicable standards and required documentation.

The key criteria for any project are that the reductions are real, permanent, additional, and verifiable. The documentation that these standards have been met can be quite voluminous and take many hours to complete. It is not a simple process, and experience matters. The review of the registration information can be detailed and lengthy.

If Stick Makers is a member of the Chicago Climate Exchange, is it required to trade its reduction credits there or may it register them elsewhere? If Stick Makers registers the credits elsewhere, are there any mechanisms that prevent Stick Makers from selling the credit for the same emission reduction twice—once on the Chicago Climate Exchange and once on another exchange?

Although Stick Makers is a member of the CCX, it is not required to register and trade these reduction credits in that forum and may register and trade them elsewhere. However, the company should be mindful of several consequences of trading the credits in another market. First, in becoming a member of the CCX, Stick Makers committed to legally enforceable emissions reduction schedules at its facilities. Unless the company uses some of the reductions planned from the catalyst project to meet those reduction requirements, it will have to make further reductions (or buy credits from other CCX participants) to satisfy those reduction goals. In addition, unique serial numbers and contractual provisions are used for projects enrolled in the CCX, to ensure that reductions are not “double-counted” (*i.e.*, to ensure that CCX reductions are not credited in other systems).

Value of Emission Credits

What is the value of 450,000 tons per year of emissions reductions?

The answer, of course, is that it depends on what market the reductions qualify to be traded and when they are traded. At the end of trading on September 22, a member of the Chicago Climate Exchange could sell credits representing 450,000 tons of carbon dioxide equivalent emissions in 2010 for \$0.25 per ton, or a total of \$112,500. In contrast, if the reductions had occurred in a developing country eligible to conduct CDM offset projects, which yield certified emissions reduction (CERs), the same quantity of 2010 vintage CERs could be sold on the European Climate Exchange for \$17.84 per ton, or a total of \$8.03 million. If the reductions had occurred at a facility in Europe and, as a result, the company found itself with 450,000 EU Emission Allowances (EUAs) that it no longer needed to meet its annual compliance obligations, those excess 2010 vintage EUAs could be sold on the European Climate Exchange for \$20.77 per ton, or a total of \$9.35 million.

If the project were registered in one of the voluntary standards such as the Voluntary Carbon Project or The Gold Standard, the resulting credits could be sold as well. However, market prices for transactions involving these sorts of voluntary credits are not readily available.

Impact of Future Regulation

Assuming U.S. EPA adopts rules that require Stick Makers to install the emissions reducing catalyst in 2012, would Stick Makers still have carbon emissions reduction credits that could be marketed after the rules become effective?

If U.S. EPA rules require the installation of the catalyst for compliance purposes, it is unlikely such a legally required project would qualify for emissions reduction credits. The emissions credit markets typically require “additionality,” meaning the project cannot be otherwise required but must actually lead to “additional” emissions reductions that would not otherwise have occurred. For example, the Chicago Climate Exchange requires that any project must be “voluntary (*i.e.*, not legally required)” to be marketed. The European Union Emissions

Trading Scheme requires projects to identify alternatives to the project “consistent with mandatory laws and regulations.” Some markets are more lenient on additionality requirements, but a legal requirement to achieve the very same emissions reduction for which a company seeks a credit would greatly undermine that effort.

Obviously, given the current state of flux in the regulatory environment and offset markets, the issues to consider for a voluntary emissions reduction project are complex and project-specific. Companies considering a voluntary project should contact counsel to assist in working through these and other issues.

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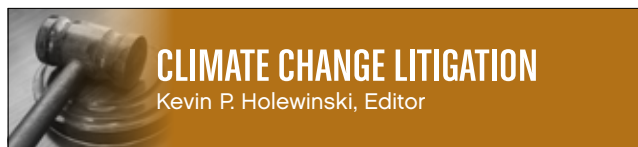
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■ **GEORGIA APPEALS COURT OVERTURNS RULING
VACATING AIR PERMIT FOR COAL-FIRED PLANT**

On July 7, 2009, the Georgia Court of Appeals issued a decision reversing and remanding a significant portion of a June 30, 2008, ruling of the Georgia Superior Court, which had invalidated the issuance of an air quality preconstruction permit for a coal-fired electric power plant in southern Georgia. *Longleaf v. Friends of the Chattahoochee, Inc.*, 681 S.E.2d 203 (Ga. Ct. App. July 7, 2009). Most notably, the Court of Appeals overturned the lower court’s holding that carbon dioxide gas was a pollutant subject to regulation under the federal Clean Air Act (the Act) for purposes of the Act’s new source review (NSR) prevention of significant deterioration (PSD) program.

The case involved an appeal of the issuance of a permit under Georgia’s U.S. EPA-approved PSD program to Longleaf Energy Associates to construct a coal-fired power plant. An administrative law judge ruled in favor of the Georgia Environmental Protection Division (EPD), which had issued the permit, and Longleaf. The Superior Court, sitting as the initial appellate court, reversed that decision in its entirety because, among other things, EPD had failed, as required under its approved PSD program, to conduct a best available control technology (BACT) analysis for carbon dioxide, which that court believed was required under the state’s PSD program. The Superior Court premised its ruling on its belief that the United States Supreme Court’s decision in *Massachusetts v. EPA*, 549 U.S. 497, 127 S. Ct. 1438 (2007), mandated such a review.

In reversing the Superior Court’s ruling regarding carbon dioxide, the Court of Appeals held that the Superior Court’s determination was not compelled by the Clean Air Act or *Massachusetts v. EPA* and “would impose a regulatory burden on Georgia never imposed elsewhere.” The Court of Appeals noted that no Clean Air Act provision or Georgia statute or regulation actually controls or limits carbon dioxide emissions, and that no state or federal court has ever required

limits on carbon dioxide emissions. Noting that U.S. EPA's rulemaking process was underway, the Court commented that the Superior Court's ruling would preempt efforts by Congress and U.S. EPA to formulate a uniform national carbon dioxide emissions policy. The Court of Appeals cited a U.S. Chamber of Commerce report that applying a 250 ton-per-year threshold for BACT requirements under the PSD program would affect "over one million mid-sized to large commercial buildings, including those in food service, health care, and lodging...." See 681 S.E.2d 203 n.3.

In addition to finding that carbon dioxide was not a regulated pollutant under the PSD program, the Court of Appeals, among other things, further held that: (1) that the Superior Court erred in ruling that EPD was required to consider whether the plant should be required to use integrated gasification combined cycle (IGCC) technology to minimize pollution from the proposed power plant; (2) contrary to the conclusion of the Superior Court, EPD and the permittee did not err by using PM-10 as a surrogate for PM-2.5 in air quality modeling done to ensure that the power plant would not cause or contribute to a violation of the air quality standards for PM-2.5; and (3) the Superior Court erred in ruling that licensed professional engineers were needed to set the BACT limits in the permit.

A petition for a writ of certiorari was denied by the Georgia Supreme Court. Jones Day represented several *amici* parties in the appeal before the Georgia Court of Appeals.

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■ **INDUSTRY GROUPS CHALLENGE U.S. EPA'S APPROVAL OF WAIVER FOR CALIFORNIA GREENHOUSE GAS EMISSIONS LIMITS**

In a petition filed with the U.S. Court of Appeals for the District of Columbia Circuit on September 10, 2009, the United

States Chamber of Commerce and the National Automobile Dealers Association sought review of a June 30, 2009, action by the U.S. Environmental Protection Agency granting the California Air Resource Board (CARB) a waiver of preemption under section 209(b) of the Clean Air Act. The waiver permits California to enforce its own greenhouse gas emission standards for new motor vehicles, beginning with model year 2009. Eighteen states and various environmental advocacy organizations have asked to intervene in the litigation in support of U.S. EPA's actions.

The petition asks the Court of Appeals to review U.S. EPA's action but does not detail the petitioners' arguments against issuance of the waiver. Under an order issued by the court on September 10, 2009, the petitioners must set out the basis for their petition in more detail by October 13, 2009.

The California waiver, which allows the state to set more stringent pollution standards than the federal government does, triggered prior legal battles when CARB's request was initially denied by U.S. EPA under the Bush administration. Upon taking office, President Obama requested that U.S. EPA reconsider the matter, a process that ultimately led to approval. The petition for judicial review comes after a May 2009 announcement by the Obama administration that it would adopt uniform national emissions and fuel economy standards beginning in 2012. These new federal standards are to be largely modeled after the CARB standards and would increase fuel-economy requirements by 40 percent over current levels.

Opponents of the waiver are concerned that the waiver could lead to increased costs and enforcement of at least two different sets of motor vehicle emission standards across the United States. It remains unclear what impact, if any, the Court of Appeals challenge will have on either California's or U.S. EPA's efforts to adopt and enforce more stringent emissions standards for motor vehicles.

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■ **ENVIRONMENTAL ADVOCACY GROUP ARGUES THAT CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIRES PROJECT-SPECIFIC CLIMATE CHANGE ANALYSIS**

In August, the Center for Biological Diversity (CBD) filed three lawsuits, one each in the California counties of Tehama, Lassen, and Tuolumne, against the California Department of Forestry and Fire Protection (the Department), alleging that the Department violated the California Environmental Quality Act (CEQA) by approving Sierra Pacific Industries' clear-cutting timber harvest plans without requiring a project-specific analysis of the greenhouse gas emissions that would result from the clear-cutting. Rather than undertaking a project-specific analysis in approving the plans, the Department relied upon the general concept that "[f]orest management through aggressive reforestation, enhancement of conifer site occupancy, genetic improvement, thinning, etc." would adequately address climate change issues.

Because "no appellate cases interpret the duty to analyze the cumulative impact of greenhouse gases on climate change under CEQA," in their lawsuits, CBD relies by analogy on cases that have interpreted the National Environmental Policy Act to require such a greenhouse gas analysis. In addition, CBD argues that the Department violated CEQA because it did not analyze and adopt mitigation measures or feasible alternatives to reduce the emission of greenhouse gases and the climate change impact of the timber harvest plans.

The lawsuits also allege that the Department violated California's Forest Practice Act when it approved Sierra Pacific's plans. Regulations adopted under that Act require timber harvest plans to "be sufficiently clear and detailed to permit adequate and effective review by responsible agencies and input by the public to assure that significant adverse individual and cumulative impacts are avoided or reduced to insignificance." CBD argues that the plans fail to satisfy this requirement, because they do not address greenhouse gas emissions with sufficient specificity.

Although CBD announced in an August 25, 2009, press release that Sierra Pacific Industries withdrew the subject timber harvest plans in response to these lawsuits, CBD did not withdraw its suits. Whether the Department or Sierra Pacific will move to dismiss these suits on mootness or other grounds is not yet known. Nonetheless, as Sierra Pacific has more than two dozen similar plans currently under review by the Department, it is likely that the issues raised by these suits will need to be addressed by a court sometime soon.

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■ THE U.K. SUPPORTS NEW CLIMATE CHANGE TREATY IN COPENHAGEN

Beginning December 7, 2009, world environment ministers and officials will attend the United Nations climate conference in Copenhagen to attempt to conclude a new climate treaty as successor to the Kyoto Protocol. So far this year, complex negotiations have taken place in Bonn and Bangkok, and a final round of preliminary talks will take place in Barcelona prior to Copenhagen. An agreement in Copenhagen must address four essential issues, as identified by Yvo de Boer, executive secretary of the United Nations Framework Convention on Climate Change:

1. How much are the industrialized countries willing to reduce their emissions of greenhouse gases?
2. How much are major developing countries such as China and India willing to do to limit the growth of their emissions?
3. How is the help needed by developing countries to engage in reducing their emissions and adapting to the impacts of climate change going to be financed?
4. How is that money going to be managed?

On September 22, 2009, United Nations Secretary-General Ban Ki-moon convened the UN Climate Change Summit in New York City to provide additional impetus in the lead-up to Copenhagen. China, now the world's biggest carbon emitter, said it would curb "carbon intensity" by a "notable margin" by 2020. President Obama of the United States is also committing to finding a solution. Japan has set out its targets for cutting emissions and has offered finance to developing nations to combat climate change. Further, India has a desire to be an active player, as reflected in Environment Minister Jairam Ramesh's statement that "India is going to aggressively take on voluntary measures. We are now going to go for domestic legislation [that] will enshrine some targets." More than 500

global companies (including British Airways, Virgin, and Shell) signed the "Copenhagen Communiqué," backing an ambitious international climate change deal, which was presented at the UN summit.

The UK government set out its case for an international agreement at Copenhagen in its manifesto entitled "Road to Copenhagen," with the main objectives for the conference being (i) a framework to cut emissions and (ii) a just deal between the developed and the developing world. The document states that \$100 billion will be required by 2020 to finance the necessary initiatives. The UK government wants a deal in Copenhagen that will be legally binding on all parties, to ensure that any commitments entered into at the conference will be met.

The UK's commitment is echoed in its national policies. On July 15, 2009, it published its plans to move the UK onto a permanent low carbon footing in a package of strategy documents. In addition, through the Climate Change Act 2008, the UK was the first country in the world to introduce legally binding carbon budgets, committing the UK to a carbon reduction of 34 percent against 1990 emission levels by 2020, with a long-term goal of an 80 percent reduction by 2050.

The UN's summit in New York suggested a new international willingness reach an agreement in Copenhagen. However, the Bangkok talks ended on October 9, 2009, with deep disagreement between developing nations and developed nations over the amount of funding and the extent of emissions reductions that should be expected from the developing world. Thus, the shape, contents, and extent of such agreement is still no clearer.

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■ FRANCE ADOPTS A CARBON TAX TO COMPLEMENT EU CAP AND TRADE PROGRAM

On September 10, 2009, French President Nicolas Sarkozy confirmed that a carbon tax would be implemented in 2010. The concept of a carbon tax (also referred to as a “green tax,” “ecotax,” or “Contribution to Climate and Energy”) originated in the governmental panel known as *Grenelle Environnement* (Environment Round Table) in the context of the Round Table’s climate change program in 2007. Pursuant to this program, summarized in Article 2 of Law No. 2009-967 of August 3, 2009, France decided to cut greenhouse gas emissions by 80 percent by 2050 compared to its 1990 levels, to a level below 140 million tons of carbon dioxide equivalent per year, by reducing the country’s greenhouse gas emissions an average of 3 percent per year. France has been working on new tools to complement the existing European Union Emission Trading Scheme (EU-ETS) and the Kyoto Protocol’s development of Clean Development Mechanisms and Joint Implementation projects.

In line with the Environment Round Table’s climate change program, a multidisciplinary Committee of Experts and a Round Table on the Contribution to Climate and Energy, chaired by former French Prime Minister Michel Rocard, gathered expert opinions from various sectors and entities (such as services, oil, agriculture, industries, public authorities, scientists, associations, and international organizations) on the concept of a carbon tax.

The carbon tax will apply to households and companies that are not subject to the EU-ETS. The tax’s base is the average consumption of fossil fuel energy (coal, oil, LPG, and gas) and is computed based on the carbon dioxide emissions from these energy sources. Energy from renewable sources (80 percent of which arises from nuclear energy in France) is not included in the carbon tax base.

The initial carbon tax rate is €17 per ton of carbon dioxide emitted (instead of €32 suggested in the report on the Contribution to Climate and Energy), which is approximately the current price of a one-ton emission allowance on the EU carbon market. The carbon tax is expected to raise about

€4.55 billion. While the tax rate is to be expected to increase yearly, the basis for such increases has not yet been established. The Financial Act of 2010 will provide the legal framework for implementation of the carbon tax.

Carbon taxpayers shall be compensated by the government. For households, the compensation, which will be in full, will take the form of either a reduction of income tax (for those subject to such tax) or a “green check” (for those not paying the income tax). Companies shall be indirectly compensated through the withdrawal of the French local business tax.

Although other EU countries (such as Finland, Sweden, and Denmark) have already adopted or are in the process of adopting (such as Germany) a carbon tax, France intends to campaign for adoption of an EU carbon tax, to limit the effects of the unfair competition that could result from the absence of analogous climate change obligations in other EU countries.

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■ INDIA TAKES UP MEASURES TO ADDRESS GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

In June 2008, India released its National Action Plan on Climate Change (the NAPCC), which outlines eight national missions, with set targets wherever possible aimed at strategic and long-term solutions to climate change. These missions aim to promote development and use of solar energy, more efficient use of energy and water, and a better understanding of the impacts and challenges of climate change. The plan led to establishment of a research fund and a stated objective to reach out to the private sector to provide adaptation and mitigation technologies to combat climate change.

The government-commissioned “State of the Environment Report 2009,” published in July 2009, estimates that 700 million of India’s 1.1 billion people are vulnerable to the adverse impacts of climate change. Recognizing the potentially opposing goals of continued economic growth and protecting citizens who would directly be affected by climate change, India has introduced a number of initiatives to help combat its greenhouse gas emissions. The Report suggests options to ensure proper allocation of resources to combat climate change and to adapt to its effects.

In August 2009, the Climate Change Panel, established by Indian Prime Minister Manmohan Singh, reviewed a number of ideas as a follow-up to the missions set up in the NAPCC and approved a solar energy plan. The plan’s goal is to create 20 gigawatts (GW) of solar capacity, growing to 200 GW by 2050, with a decrease in greenhouse gas emissions of 60 million tons per year. However, the plan requires technological know-how and at least \$18 billion to \$20 billion in investments—know-how and investments that the Indian government hopes will, at least in part, come from developed nations.

Also in August, the Indian government approved in principal a national energy efficiency plan. This plan envisions a market for, and trading in, energy efficiency certificates. The government will set energy benchmarks for each industry—those that use more would have to purchase energy certificates, while those that are more efficient would be able to sell certificates. The plan is coupled with a financial mechanism consisting of government support for lenders to companies pursuing energy efficiency projects and a fund to support investment for manufacturers of energy-efficient products and services. Full implementation of the plan would decrease India’s energy usage by an estimated 5 percent and its greenhouse gas emissions by an estimated 100 million tons per year.

Dealing with the causes and effects of climate change requires research and development (and the resulting technology) and funding. During Secretary of State Hillary Clinton’s visit to India this summer, Indian Environment Minister Jairam Ramesh reiterated India’s position that it will be looking to developed nations to transfer technology and to assist in funding India’s efforts to tackle climate change. To show progress (and possibly to win the favor of, and resources from, developed nations), in mid-September, Ramesh announced that India will set national nonbinding carbon emissions reduction targets. It remains to be seen whether this will be a starting point for further discussions with Ramesh, who is seen as the most committed minister to have held that position in India.

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