

WORLD CLIMATE CHANGE REPORT (INDICED CONTROL OF THE PORT OF THE PO

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CLIMATE CHANGE

CLEAN AIR ACT

The authors of this article argue that comprehensive regulation of greenhouse gas emissions will occur regardless of whether Congress acts or not. They say regulatory actions by the Environmental Protection Agency, guidance from the White House Council on Environmental Quality and the Securities and Exchange Commission, efforts by many states, and potential legal liabilities all will act to put a price on carbon dioxide emissions, creating business risks and opportunities that should play a part in corporate and governmental planning. The authors say there is now an opportunity to develop a comprehensive federal program that incorporates existing state and regional programs, displaces legislation by judicial fiat, and creates a North American emissions trading regime.

Race to Regulation of Greenhouse Gases Accelerates Without Clear Destination

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I. Recent Actions Under the Clean Air Act

hile international and national attention focuses on the continued inability of the United States Senate to act on meaningful climate change legislation, accelerating actions by the Obama Administration, the courts, and the majority of states threaten to make Congress a footnote in the United States' response to climate change. These actions have started the United States down the path to economy-wide regulation of greenhouse gas emissions and ensure that there will be costs imposed on major emitters. Although the path forward remains unclear, these actions also set the stage for wider participation by the United States in international carbon markets.

On April 1, 2010, Environmental Protection Agency Administrator Lisa Jackson and Secretary of Transportation Ray LaHood signed a joint final rule representing the first substantive federal action to limit greenhouse gas emissions. The rule ("GHG Mobile Source Rule") establishes emissions standards for passenger cars and light trucks under section 202 of the federal Clean Air Act² and corporate average fuel efficiency (CAFE) standards under the Energy Policy and Conservation Act. The standards will apply to 2012 and later model year vehicles and will require that fuel efficiency increase and greenhouse gas emissions decrease through 2016, by which time the projected combined car and truck fleet will need to achieve the equivalent of 35.5 miles per gallon.

These standards are projected to reduce greenhouse gas emissions from light vehicles by 21 percent, reducing emissions by 960 million metric tons and oil consumption by 1.8 billion barrels between 2012 and 2016, with a cost of \$52 billion and benefits of \$240 billion. The average price of an average vehicle will increase by about \$950, but consumers who pay in full up front will recover that amount in fuel savings over the first three years of the vehicle's life.

Although the rule has significant implications in its own right, it has far broader regulatory implications for other businesses. The rule will render greenhouse gases "subject to regulation" under the Clean Air Act, resulting in the classification of greenhouse gases as "regulated NSR pollutants" subject both to permitting requirements of the Prevention of Significant Deterioration (PSD) program³ and the federal Title V Clean Air Act operating permit program.

Without further action by EPA, this change would have made more than 25,000 heretofore unregulated sources, including large commercial buildings burning fossil fuels for heat, subject to regulation under the Clean Air Act and would have swamped state and federal permitting authorities. EPA therefore promulgated two additional rules to avoid these results. On April 2, 2010, the EPA Administrator promulgated a final interpretive rule (Trigger Rule) in which she reaffirmed the decision of former EPA Administrator Stephen Johnson that PSD and permitting requirements do not apply absent actual, substantive limitations on emissions of greenhouse gases (the Johnson Memorandum). The Trigger Rule clarifies that, in the case of the GHG Mobile Source Rule, such limitations would come into existence on January 2, 2011, when the first 2012 model year vehicles would require a certification of compliance with the GHG Mobile Source Rule.4 The agency will thereafter phase in the application of the PSD and Title V permitting programs under the PSD and Title V Greenhouse Gas Tailoring Rule (Tailoring Rule),⁵ so that smaller sources of greenhouse gas emissions will not immediately require permits under those programs.

These actions followed a spate of other final and proposed actions by EPA, the Securities and Exchange Commission and the Council on Environmental Quality requiring, *inter alia*, reporting of greenhouse gas emissions, financial disclosure of climate change impacts and regulatory risks, and consideration of these issues

under the National Environmental Policy Act. These administrative initiatives are catalogued in Table 1 below.

Several recent judicial decisions also may create new risks for companies that do not proactively address their "carbon footprint." These developments are likely just the first wave of federal actions to address climate change that will affect most sectors of the economy and many fields of legal practice. A rulemaking petition filed by the Center for Biological Diversity and 350.org could set the stage for far broader regulation of greenhouse gas emissions, including the establishment of a cap-and-trade program that could serve as the basis for the United States' participation in international trading programs.

II. The Uncertain Path to Regulation

EPA's recent actions were the inevitable result of the Supreme Court's 2007 decision in *Massachusetts v. EPA.*⁶ There, as a result of a lawsuit brought by states and environmental groups, the judicial branch intervened to force action to address climate change under existing law after shifting political currents in the executive and legislative branches had stymied actions to enable the United States to fulfill its international obligations following its 1994 ratification of the United Nations Framework Convention on Climate Change (UNFCCC or Framework Convention).

Under the UNFCCC, the United States and other developed nations agreed to move first to undertake actions to limit their greenhouse gas emissions with the aim of preventing dangerous anthropogenic interference with the climate system.⁸ However, Congress made it clear that the Senate would not ratify the translation of this requirement into concrete reduction requirements under the Kyoto Protocol⁹ to the UNF-

¹ 75 Fed. Reg. 25,324 (May 7, 2010) (62 WCCR, 4/1/10).

² 42 U.S.C. § 7521.

³ 40 C.F.R. § 52.21(b)(50)(iv) (term includes pollutants "otherwise subject to regulation under the" Clean Air Act).

⁴ 75 Fed. Reg. 17,004 (Apr. 2, 2010).

⁵ 75 Fed. Reg. 31,514 (June 3, 2010).

^{6 549} U.S. 497, 63 ERC 2057 (2007).

⁷ United Nations Framework Convention on Climate Change, May 29, 1992, U.N. Doc. A/AC.237/18 (1992), reprinted in 31 I.L.M. 849 (1992), available at http://unfccc.int/resource/docs/convkp/conveng.pdf.

⁸ UNFCCC, *supra*, note 7 art. 4, § 2 ("(a) Each of these Parties shall adopt national policies and take corresponding measures on the mitigation of climate change, by limiting its anthropogenic emissions of greenhouse gases and protecting and enhancing its greenhouse gas sinks and reservoirs. These policies and measures will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention...

⁽b) In order to promote progress to this end, each of these Parties shall communicate, within six months of the entry into force of the Convention for it and periodically thereafter, and in accordance with Article 12, detailed information on its policies and measures referred to in subparagraph (a) above, as well as on its resulting projected anthropogenic emissions by sources and removals by sinks of greenhouse gases not controlled by the Montreal Protocol for the period referred to in subparagraph (a), with the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases ...") (emphasis added).

⁹ Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 10, 1997, U.N. Doc. FCCC/CP/1997/L.7/Add. 1 (1998) (hereinafter "Kyoto Protocol"), available at http://unfccc.int/resource/docs/convkp/kpeng.pdf.

TABLE 1: SUMMARY OF FEDERAL REGULATORY ACTIONS			
Agency	Action	Status	Description
EPA	Endangerment Finding	Final 74 Fed. Reg. 66,496 (Dec. 15, 2009)	Formally finds greenhouse gas emissions from mobile sources to threaten health and welfare; outgrowth of U.S. Supreme Court decision in <i>Massachusetts v. EPA</i> , 549 U.S. 497 (2007)
EPA	GHG Mobile Source Rule	Final 75 Fed. Reg. 25,324 (May 7, 2010)	Rule establishes first federal regulatory program constraining greenhouse gas emissions through new emission standards for motor vehicles
EPA	"Johnson Memoran- dum" Revisited, a/k/a "Trigger Rule"	Final 75 Fed. Reg. 17,004 (Apr. 2, 2010)	Interprets term "subject to regulation" for purposes of NSR/PSD program and establishing January 2, 2011, as date greenhouse gases will be "subject to regulation"
EPA	''Tailoring Rule''	Final 75 Fed. Reg. 31,514 (June 3, 2010)	Creates <i>de minimis</i> thresholds for regulation of greenhouse gases, at least as a first step towards a comprehensive regulatory program
EPA	GHG Reporting Rule	Final 74 Fed. Reg. 56,260 (Oct. 30, 2009)	Requires annual reporting of greenhouse gas emissions from identified source categories, beginning with 2011 report on data from 2010
EPA	Amendments and Additions to GHG Reporting Rule	Proposed: 75 Fed. Reg. 18,455 (proposal to require additional information), 18,576 (reporting of greenhouse gas injection and geologic sequestration), 18,608 (petroleum and natural gas systems), 18,652 (additional sources of fluorinated gasses) (Apr. 12, 2010) Proposed: 74 Fed. Reg. 16,448 will be finalized for: industrial landfills (Subpart HH), wastewater treatment facilities (Subpart II), underground coal mines (Subpart FF), and magnesium production (Subpart T) (Apr. 10, 2009)	Impose requirements for additional information and reporting by additional source categories
CEQ	Guidance on Address- ing Climate Change Under NEPA	Proposed 75 Fed. Reg. 8,046 (Feb. 23, 2010)	Requires consideration of impacts of green- house gas emissions and sets presumptive threshold of 25,000 metric tons CO ₂ equiva- lent
SEC	Guidance on Reporting on Impacts of Climate Change	Interpretive 75 Fed. Reg. 6,290 (Feb. 8, 2010)	Calls for reporting of impacts of climate change and greenhouse gas regulation

CCC.¹⁰ In response, the Clinton Administration, through two opinions of the EPA General Counsel, took the position that the Clean Air Act provided sufficient authority to regulate greenhouse gas emissions so as to implement the reductions required under the Kyoto Protocol.¹¹ After George W. Bush took office, in 2001, the Administration reversed this position, denied a pending petition to regulate mobile source greenhouse

gas emissions under section 202 of the Clean Air Act and issued a new general counsel's opinion, taking the position that there was no authority to regulate greenhouse gases under the act. The Bush Administration took the position that the Clean Air Act was ill-suited to address the issue of climate change. It was the actions refusing to regulate under the act that were ultimately reversed in *Massachusetts v. EPA*.

At this point the states took a more active role to fill the void left by the federal government. Under the leadership of governors and legislators from both political parties, states used their own authority to limit emissions of greenhouse gases and turned to the courts to compel action under existing law.

Thirty-three states have developed or are developing comprehensive state climate action plans calling for the implementation of a variety of measures tailored to

¹⁰ See Byrd Hagel Resolution, S. RES. 98, 105th CON-GRESS, 1st Sess. (1997) (expressing sense of Congress opposing principle developed nations should limit greenhouse gas emissions in accordance with Kyoto Protocol).
¹¹ See Massachusetts, 549 U.S. at 510-11 (discussing

¹¹ See Massachusetts, 549 U.S. at 510-11 (discussing memoranda of EPA General Counsel Cannon and Guzy finding authority to regulate greenhouse gas emissions under the Clean Air Act).

each state's economy and legal system to achieve emissions reductions consistent with those needed to achieve the objective of the UNFCCC. ¹² Various states have also banded together to establish a common greenhouse gas emissions Registry for North America, ¹³ and three regional organizations have been established to implement a common greenhouse gas emissions cap-and-trade program—the Regional Greenhouse Gas Registry (RGGI), ¹⁴ the Midwestern Greenhouse Gas Reduction Accord, ¹⁵ and the Western Climate Initiative (WCI). ¹⁶ The states also turned to the courts, both bringing actions based on public nuisance against major emitters of greenhouse gas emissions in other states and challenging the federal government's failure to regulate emissions in *Massachusetts v. EPA*.

In *Massachusetts v. EPA*, the United States Supreme Court reversed EPA's denial of a petition requesting that EPA regulate mobile source emissions of greenhouse gases under section 202 of the Clean Air Act¹⁷ and remanded the matter to the EPA to make a factual determination of whether greenhouse gas emissions from motor vehicles contribute to "pollution" that could "reasonably be anticipated" to "endanger public health or welfare." The Court's three holdings are directly rel-

12 Those plans are collected and can be accessed from the website of the Center for Climate Strategies. Available online at http://www.climatestrategies.us/ (last visited, July 2, 2010). The planning process and the mechanisms to incorporate state actions into a federal system under the Clean Air Act are described in a series of articles. See, John C. Dernbach, Robert B. McKinstry, Jr, and Thomas D. Peterson, Making the States Full Partners in a National Climate Change Effort: A Necessary Element for Sustainable Economic Development, 40 Envy'l L. R. News & Analysis 10597 (2010); Robert B. McKinstry, Jr., Thomas D. Peterson, Adam Rose and Dan Wei, The New Climate World: Achieving Economic Efficiency in a Federal System for GHG Control Through State Planning Combined with Federal Programs, 34 N.C. J. INT'L L. & COM. REG. 767 (2009) (hereinafter "New Climate World"); Thomas D. Peterson, Robert B. McKinstry, Jr., and John C. Dernbach, Developing a Comprehensive Approach to Climate Change Policy in the United States: Integrating Levels of Government and Economic Sectors, 26 VA. ENVIL. L.J. 227 (2008) (hereinafter "Comprehensive Approach"); Robert B. McKinstry, Jr. and Thomas D. Peterson, The Implications of the New "Old" Federalism in Climate-Change Legislation: How to Function in a Global Marketplace When States Take the Lead, 20 PAC. Mc-GEORGE GLOBAL Bus. & Dev. L.J. 61 (2007) (hereinafter "New "Old" Federalism")

13 See, The Climate Registry, http://www.theclimateregistry.org/ (consisting of 41 U.S. states, all Canadian provinces and six Mexican states).

¹⁴ RGGI consists of 10 Northeastern states that have implemented a cap-and-trade program to limit emissions for fossil fuel-fired electric generating units of 25 megawatt capacity or greater and held several auctions of allowances. *See* RGGI Web site at http://www.rggi.org/home.

¹⁵ Six Midwestern states and the Canadian province of Manitoba are members of the accord and three states and Ontario are observers in the effort to establish a regional greenhouse gas emissions cap-and-trade program. See http://www.midwesternaccord.org/.

16 Seven U.S. states and four Canadian provinces have subscribed to that system's program to establish an economywide cap-and-trade program, to be phased in beginning in 2012. Additional Western states, Canadian provinces and Mexican states participate as observers. See WCI Web site at http://www.westernclimateinitiative.org/wci-partners-and-observers-

evant to many of the recent regulatory developments that herald the beginning of federal economy-wide regulation of greenhouse gas emissions.

First, the Court held that the petitioners had demonstrated standing based on the impact of emissions on Massachusetts' coastline under the analysis set forth in Lujan v. Defenders of Wildlife, 18 coupled with the special status of states, as set forth in Georgia v. Tennessee Copper Co. 19 Second, the Court held that carbon dioxide and other greenhouse gases were "pollutants" that EPA could legally regulate under the Clean Air Act. Finally, the Court held that EPA's reliance on factors outside of the statutorily prescribed standard to deny the petition required that the matter be remanded to EPA to make a determination based on the statutory standard, which requires EPA to regulate emissions, if they "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 20

The current Administration took office committed to take aggressive action to promote alternative energy and limit emissions, either through legislation or the use of existing authority, including under the Clean Air Act. On December 15, 2009, EPA Administrator Lisa Jackson, made that endangerment finding. She found that elevated concentrations of six greenhouse gases could be anticipated to endanger both health and welfare:

The Administrator finds that elevated concentrations of greenhouse gases in the atmosphere may reasonably be anticipated to endanger the public health and to endanger the public welfare of current and future generations. The Administrator is making this finding specifically with regard to six key directlyemitted, long-lived and well-mixed greenhouse gases: Carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The Administrator is making this judgment based on both current observations and projected risks and impacts into the future. Furthermore, the Administrator is basing this finding on impacts of climate change within the United States. However, the Administrator finds that when she considers the impacts on the U.S. population of risks and impacts occurring in other world regions, the case for endangerment to public health and welfare is only strengthened.²¹

She further found that "emissions of the well-mixed greenhouse gases" from new "[p]assenger cars, light-duty trucks, motorcycles, buses, and medium and heavy-duty trucks" "contribute to the air pollution that may reasonably be anticipated to endanger public health and welfare." 22

The endangerment finding has been appealed by a number of industry groups and states, with a number of environmental groups and states intervening to support

¹⁸ 504 U.S. 555 (1992).

¹⁹ 206 U.S. 230, 237 (1907).

²⁰ Clean Air Act § 202, 42 U.S.C. § 7521; Massachusetts v. EPA, 549 U.S. at 534 ("The statutory question is whether sufficient information exists to make an endangerment finding.").

²¹ 74 Fed. Reg. 66,496, 66,516 (Dec. 15, 2009).

²² Id. at 66,536.

EPA's decision.²³ It is unlikely that those appeals will succeed in overturning the decision in light of the Supreme Court's decision in Massachusetts v. EPA, the deference normally afforded an expert agency on scientific issues, and the weight of scientific evidence supporting EPA's decision. That evidence included three reviews of the science by the National Research Council of the National Academy of Sciences, numerous EPA studies, comprehensive reviews of the literature by the Intergovernmental Panel on Climate Change, and a decision by the District of Vermont²⁴ after a Daubert hearing and trial involving the scientific issues in a challenge to Vermont's adoption of automobile greenhouse gas emissions standards.²⁵ A resolution to disapprove the endangerment finding under the Congressional Review Act²⁶ was introduced by Senator Lisa Murkowski,²⁷ but was voted down by the Senate on June 10, 2010.

III. The Mobile Source Rule

In light of the endangerment finding and the holding in *Massachusetts v. EPA*, EPA was under a mandatory duty to adopt the GHG Mobile Source Rule under the Clean Air Act. EPA elected to coordinate its actions with the National Highway Traffic Safety Administration (NHTSA) to adopt a single rule governing both CAFE standards and Clean Air Act standards.

The new standards also are consistent with California's mobile source greenhouse gas emissions standards, which have been adopted by 13 other states and the District of Columbia. Moreover, California is undertaking several other actions, so that compliance with the federal standard will be deemed to satisfy the California standard. The rule was adopted in close consultation with the automobile manufacturing industry, which agreed not to challenge it and to withdraw litigation against states that have adopted the California standards.

The GHG Mobile Source Rule establishes both an individual emissions limit for each vehicle type, based on its "footprint" (size as measured by multiplying the wheel base times the track width) and whether it is a car or truck and a corporate average for all vehicles. If the standards were met solely through fuel efficiency, the standards would increase average fuel efficiency in passenger cars from 33.8 miles per gallon (a greenhouse gas emissions standard of 263 grams of carbon dioxide per mile) in 2012 to 39.5 mpg in 2016 (a green-

²³ Coalition for Responsible Regulation, Inc. v. EPA, D.C. Cir. Dkt. No. 09-1322 (Dec. 23, 2009)

Cir., Dkt. No. 09-1322 (Dec. 23, 2009).

²⁴ Green Mountain Chrysler Plymouth Dodge Jeep v. Crombie, 508 F. Supp. 2d 295, 66 FRC 1157 (D. Vt. 2007).

house gas emissions standard of 225 g/mi) and combined cars and trucks from 30.1 (295 g/mi) to 35.5 (250 g/mi). However, the targets for passenger cars would range from 41.4 mpg for compacts, such as the Honda Fit, to 32.6 mpg for full-size cars, such as the Chrysler 300. These standards can be met by use of a wide range of technologies, including engine improvements, advanced transmissions, stop-start technologies, tire performance, reduced vehicle weight, and increased use of hybrid and advanced technologies.

The GHG Mobile Source Rule also provides considerable opportunity for flexibility by including opportunities for averaging, banking, and trading. Trading can occur among the vehicles in a manufacturer's fleet and among various manufacturers. Improvement in vehicle air-conditioning systems that reduce releases of hydrofluorocarbon (HFC) refrigerants or decrease indirect engine load will generate credits.

EPA also has established a system of credits for flexfuel and alternative vehicles, temporary lead-time allowances for manufacturers with limited vehicle lines, advanced technology credits, off-cycle innovative technology credits, and credits for early reductions in model years 2009-2011. In future rulemakings, EPA intends to assess impacts on "upstream" emissions for alternative-fuel vehicles using electricity.

IV. The Tailoring Rule

One of the arguments raised against regulation of greenhouse gases under the Clean Air Act was based on the contention that the act would be ill suited for addressing the problems of climate change. Critics pointed to the fact that regulation would trigger preconstruction and operating-permit requirements for thousands of smaller sources never before regulated under the Clean Air Act, creating burdens on regulators and the regulated public alike. EPA's recent actions to address this concern provide an example of how, with appropriate rulemaking, the existing authority can be adapted to this new issue.

EPA proposed the Tailoring Rule on October 27, 2009, because of its concern that state and federal permitting authorities would be overwhelmed by an avalanche of permit applications if greenhouse gases became "regulated NSR pollutants." 28 It finalized that rule on May 13, $2010.^{29}$ As is the case with all other greenhouse gas emissions standards, the Tailoring Rule defines greenhouse gases to include all six greenhouse gases (carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, hydrofluorocarbons, and perfluorocarbons) expressed in carbon dioxide equivalents or $\mathrm{CO}_{2}\mathrm{e}^{.30}$ EPA will phase in application of New Source Review and Title V permitting for emitters of greenhouse gases in three phases.

During Phase 1, running from January 2, 2011, to June 30, 2011, only new construction or modification projects that are currently subject to the PSD or Title V permitting programs due to the emission of *other* pollutants (e.g., particulates, carbon monoxide, nitrogen

bie, 508 F. Supp. 2d 295, 66 ERC 1157 (D. Vt. 2007).

²⁵ The National Research Council of the National Academy of Sciences (NAS/NRC) has just released three new reports on climate that further update and support the science underlying the endangerment finding and the need for reductions in greenhouse gas emissions. See NAS/NRC, Advancing the Science of Climate Change (2010); NAS/NRC, Limiting the Magnitude of Future Climate Change (2010); NAS/NRC, Adapting to the Impacts of Climate Change (2010), available at http://americasclimatechoices.org/.

²⁶ 5 U.S.C. § 801 et seq.

²⁷ S.J.Res.26 A joint resolution disapproving a rule submitted by the Environmental Protection Agency relating to the endangerment finding and the cause or contribute findings for greenhouse gases under section 202(a) of the Clean Air Act.

 $^{^{28}}$ 74 Fed. Reg. 55,292 (Oct. 27, 2009) (204 WCCR, $^{10/26/09}$).

²⁹ 75 Fed. Reg. 31,514 (June 3, 2010).

^{30 40} C.F.R. §§ 51.166(b)(48)(i)-(ii); 52.21(b)(49) (definitions of "greenhouse gas" or "GHG" and "carbon dioxide equivalent" or "CO2e," respectively).

oxides, volatile organic compounds, sulfur oxides) will be subject to the PSD or Title V permitting requirements for greenhouse gas emissions. During this phase, new or modified sources that are subject to PSD review will need to determine and employ the Best Available Control Technology (BACT) for their greenhouse gas emissions only when those emissions will increase by 75,000 tons per year of $\mathrm{CO}_2\mathrm{e}$ or more.

Sources that require Title V permits due to emissions of other pollutants will still need to address all applicable requirements relating to emissions when they apply for, renew, or revise their permits, regardless of whether their emissions exceed the 75,000 tpy CO₂e threshold. During Phase 1, no sources would be subject to Clean Air Act permitting requirements due solely to greenhouse gas emissions.

During the second phase, beginning on July 1, 2011, and continuing through June 30, 2013, EPA will build on the first phase by applying PSD permitting requirements to the construction of new sources of greenhouse gas emissions that emit 100,000 tpy CO₂e or more, even if they do not exceed the permitting thresholds for any other pollutant. New and existing sources that emit 100,000 tpy CO2e also will be subject to Title V permitting requirements. EPA also has established "significance levels" for modifications at existing facilities, so that if a modification increases greenhouse gas emissions by at least 75,000 tpy CO₂e, the source will be subject to PSD permitting requirements for greenhouse gas emissions and will need to employ BACT.

EPA estimates that about 550 sources will need to obtain Title V permits for the first time due to their greenhouse gas emissions; most of these sources will likely be landfills and industrial manufacturers. There will be approximately 900 additional PSD permitting actions each year triggered by increases in emissions from new and modified emission sources.

Because states are responsible for most permitting under the Clean Air Act, the final Tailoring Rule requests that states inform EPA whether they must make rule changes to implement the new greenhouse gas emissions thresholds and when such changes will be adopted. If there are cases in which necessary rule changes cannot be made before January 2, 2011, EPA will take appropriate action to ensure that the existing Clean Air Act permitting rules do not apply to sources excluded by the Tailoring Rule. EPA also announced its intent to develop supporting guidance and other information to assist permitting authorities, such as guidance on the development of BACT for greenhouse gas emission PSD permits.

The Tailoring Rule was adopted as an interim measure, and EPA will address smaller sources in two future rulemakings. EPA has committed to undertake a second rulemaking, beginning in 2011 and finishing by July 1, 2012, addressing sources between 50,000 and 100,000 tpy CO₂e, in which it will consider options for potentially excluding certain smaller sources from permitting or developing alternatives, such as permits-byrule, in which it could streamline permitting for these sources and reduce permitting burdens on states and the regulated community alike.

EPA announced that it does not intend to require either PSD or Title V permitting for sources with greenhouse gas emissions of less than 50,000 tpy CO₂e before April 30, 2016. EPA will conduct a study on possible mechanisms for streamlining the permitting of those

smaller sources of emissions or exempting those sources, which it will complete by April 2015. EPA intends to promulgate a third rule by April 30, 2016, in which it will address Clean Air Act permitting for those small facilities.

It is doubtful that EPA could permanently exempt smaller sources from PSD and Title V requirements because the Clean Air Act specifies a 250-ton trigger for most sources. By proposing the Tailoring Rule as an interim measure to be followed by subsequent measures, EPA has sought to insulate the rule from challenges under the Supreme Court's statement in *Massachusetts v. EPA*, that EPA "has significant latitude as to the manner, timing, content, and coordination of its regulations with those of other agencies." ³²

EPA faced a similar problem when it was required to regulate thousands of stormwater sources under the National Pollution Discharge Elimination System of the Clean Air Act. EPA developed mechanisms for employing a permit-by-rule program requiring best management practices that helped eliminate previously unregulated systems of pollution. Given the fact that approximately 40 percent of U.S. greenhouse gas emissions relate to the existing built environment, either as a result of direct emissions or demand for electricity, a similar permit-by-rule and Best Management Practices (BMP) program for energy efficiency could ultimately provide an effective means to reduce greenhouse gas emissions, with appropriate rulemaking.

V. The Trigger Rule and Timing

EPA's promulgation of the Trigger Rule, which adopted and modified the December 18, 2008, memorandum issued by former EPA Administrator Johnson, 33 ensures that there will be adequate time for the Tailoring Rule to go into effect and guidance to be developed before any requirements for PSD or Title V permits will be triggered by the GHG Mobile Source Rule. However, although smaller sources will be temporarily exempt from regulation, EPA's discussion in the Trigger Rule suggests that there may be at least some effects on permit applications for sources that are already subject to PSD.

The Johnson Memorandum was issued following the remand by the EPA Environmental Appeals Board (EAB) of an EPA-issued PSD permit for a coal-fired power plant in which the EAB determined that EPA had not taken a consistent position on what type of regulatory action would make a pollutant a "regulated pollutant" that would trigger PSD and its BACT requirements. The Johnson Memorandum found that the term "subject to regulation . . . requires actual control of emissions of that pollutant" and that PSD requirements "apply to a pollutant upon promulgation of a regulation that requires actual control of emissions."

 $^{^{31}}$ See, 42 U.S.C. \$ 7491(g)(7) (defining "major stationary source," inter alia, as sources with the potential to emit 250 tons per year of any pollutant).

³² 549 U.S. 497, 533 (2007).

³³ Memorandum from Stephen Johnson, EPA Administrator, to EPA Regional Administrators, RE: EPA's Interpretation of Regulations that Determine Pollutants Covered by Federal Prevention of Significant Deterioration (PSD) Permit Program (Dec. 18, 2008) (hereinafter "Johnson Memorandum"); *see also* 73 Fed. Reg. 80,300 (Dec. 31, 2008) (public notice of Dec. 18, 2008 memo).

The Trigger Rule evaluated five "triggering" events that could render a pollutant "subject to regulation" under the PSD program and adopted a modification of the "actual control" interpretation. Where the Johnson Memorandum had stated that the triggering event occurs when the regulation subjecting a pollutant to emission limitations is promulgated, the Trigger Rule found that the pollutant would be "subject to regulation" at the time the regulation controlling emissions actually "takes effect."

EPA concluded that this occurs "when a control or restriction that functions to limit pollutant emissions takes effect or becomes operative to control or restrict the regulated activity." ³⁴ In the case of the GHG Mobile Source Rule, EPA determined that that will occur when the GHG Mobile Source Rule first requires "compliance through vehicular certification before introducing any Model Year 2012 into commerce," which will occur on January 2, 2011. ³⁵ Other dates would apply for regulations promulgated under other sections of the Clean Air Act. EPA further concluded that the same trigger applies to Title V requirements.

Although no requirements will take effect before January 2, 2011, EPA stated that "permitting authorities that issue permits before that date are already in a position to, and should, use the discretion currently available under the BACT provisions of the PSD program to promote technology choices for control of criteria pollutants that also will facilitate the reduction of greenhouse gas emissions." ³⁶ Specifically, EPA directed that, in making BACT determinations, permitting authorities should consider energy efficiency, which will reduce both greenhouse gas emissions and emissions of other pollutants. EPA said it will be developing new guidance on how to consider energy efficiency and greenhouse gas emissions in BACT determinations and issuing it in the future.

This consideration could allow many companies to achieve cost savings. Frequently, capital intensive add-on technologies such as scrubbers will decrease efficiency and increase both greenhouse gas emissions and cost. For that reason, consideration of energy efficiency and cost may tip the balance against those technologies in a BACT determination. Although EPA's discussion was limited to determinations under the Clean Air Act, similar considerations should apply to technology determinations under other statutes, such as evaluations of technologies under the Clean Water Act. This consideration may also tip the balance in favor of fuel switching to biomass or less carbon intensive fuels over add-on technologies.³⁷

EPA expressly refused to adopt a grandfathering rule for pending PSD permit applications. EPA said the permit would be governed by the law in effect at the time that the permit was issued, so that permits issued before January 2, 2011, would not need to include a greenhouse gas emissions BACT analysis, but permits issued after that date would need to do so. EPA stated:

To the extent any pending permit review cannot otherwise be completed within the next nine months based on the requirements for pollutants other than GHGs, it should be feasible for permitting authorities to begin incorporating GHG considerations into permit reviews in parallel with the completion of work on other pollutants without adding any additional delay to permit processing.³⁸

As a practical matter, this will mean that major sources will need to begin considering energy efficiency in technology evaluations today.

VI. Litigation

Recent court of appeals decisions allowing the states and private parties to pursue nuisance lawsuits against large emitters of greenhouse gases create an additional impetus for companies to examine their emissions profiles and take reasonable efforts to reduce greenhouse gas emissions.

In Connecticut v. American Electric Power Company, Inc. (Connecticut v. AEP),³⁹ the Second Circuit held that eight states, the city of New York, and three land trusts could maintain a public nuisance action seeking injunctive relief against six companies operating coal-fired power plants that allegedly emit approximately 10 percent of the United States' carbon dioxide emissions.

In Comer v. Murphy Oil, USA, (Comer),40 a panel of the Fifth Circuit held that residents and landowners injured by Hurricane Katrina could maintain state-law public and private nuisance, trespass, and negligence claims against defendants in the energy, fossil fuel and chemical industries based on allegations that the defendants' greenhouse gas emissions had caused or contributed to their damages. The Comer panel upheld the district court's dismissal of a fraudulent misrepresentation claim, based on the allegations that defendants "unlawfully disseminated misinformation to dissuade government regulation and engaged in a civil conspiracy." Although the panel decision has been vacated under procedural circumstances,41 the Comer decision's reasoning is nonetheless important to developments in greenhouse gas liabilities.

In Connecticut v. AEP, the lower court had dismissed the complaint, holding that it presented a non-justiciable political question. The Court of Appeals broadly rejected this contention, reasoning that the nuisance claims presented a judicial rather than political question. The Court held that the Restatement (Second) of Torts, Georgia v. Tennessee Copper Co., 42 and other public nuisance cases articulated well-established "ju-

³⁴ 75 Fed. Reg. at 17,016.

 $^{^{35}}$ Id. at 17,007.

³⁶ *Id.* at 17,020.

³⁷ In a rulemaking proposal designating maximum available control technology for the emission of hazardous air pollutants from industrial and commercial boilers signed on April 29, 2010, EPA proposed "to require all existing sources to conduct a one-time energy assessment to identify cost-effective energy conservation measures on the boiler's energy consuming systems." Proposed Rule: National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers, 75 Fed. Reg. 31,896, 31,907 (June 4, 2010).

³⁸ 75 Fed. Reg. at 17,021.

³⁹ 582 F. 3d 309, 69 ERC 1385 (2d Cir. 2009).

⁴⁰ 585 F.3d 855 (5th Cir. 2009), vacated after court, en banc,

lost quorum, No. 07-60756 (May 28, 2010).

⁴¹ The Court vacated the panel decision by virtue of granting a petition for rehearing *en banc*, but was forced to dismiss the appeal, over a vigorous dissent, when it lost its quorum. This had the procedural effect of affirming the lower court's ruling from the bench (180 WCCR, 9/21/09).

dicially discoverable and manageable standards" for deciding the case. The Court went on to address three additional important issues: (1) standing, (2) the standards to be applied in a public nuisance lawsuit, and (3) whether the Clean Air Act displaces the federal law of nuisance.

With respect to standing, the Court found that the plaintiff states and land trusts had standing to bring the claims, and, in so doing, clarified the language in Massachusetts v. EPA, regarding the "special status" of states. The Court reasoned that there were two separate grounds for finding state standing based on a state's status as parens patriae and based on the traditional interest analysis articulated in Lujan v. Defenders of Wildlife. 43 The Court found that the states satisfied both the traditional Lujan test under Massachusetts v. EPA, and the parens patriae test.

For the purposes of the latter test, a state needed to show that (1) it has a quasi-sovereign interest, (2) its interest is separate from that of private parties, and (3) the alleged injury affects a sufficiently substantial segment of its population. The Court found that the land trust had standing under a *Lujan* analysis, based on the impacts of climate change on their lands.

The Court found that the states and the land trusts had properly pleaded claims based on the federal common law of nuisance. The Court's analysis hewed closely to Restatement (Second) of Torts, which incorporates a long line of air and water pollution cases founded on the law of public nuisance.

Finally, the Court found that the federal common law of nuisance as applied to greenhouse gas emissions had not been displaced by the Clean Air Act. The Court's analysis involved the companion decisions in *Illinois v. Milwaukee (Milwaukee I'')* ⁴⁴ and *Milwaukee v. Illinois (Milwaukee II)*. ⁴⁵ In *Milwaukee I*, the Court held that Illinois could maintain an action to abate water pollution based on the federal law of nuisance. But in *Milwaukee II*, it held that the subsequent enactment of the Clean Air Act had displaced the federal common law with statutory standards.

In *Connecticut v. AEP*, the Court held that the thencurrent state of regulation of greenhouse gas emissions under the Clean Air Act, where EPA had only proposed the endangerment finding, more resembled the state of the regulation under the Clean Air Act's predecessor law in *Milwaukee I*. The Court concluded:

In sum, at least until EPA makes the requisite findings, for the purposes of our displacement analysis the Clean Air Act does not (1) regulate greenhouse gas emissions or (2) regulate such emissions from stationary sources. Accordingly, the problem of which Plaintiffs complain certainly has not "been thoroughly addressed" by the Clean Air Act. Milwaukee II, 451 U.S. at 320, 101 S.Ct. 1784. We express no opinion at this time as to whether the actual regulation of greenhouse gas emissions under the Clean Air Act by EPA, if and when such regulation should come to pass, would displace Plaintiffs' cause of action under the federal common law.

Under the Court's analysis, it appears that the federal law of nuisance will *not* be displaced unless there is ac-

tual regulation of the particular source or source category under the Clean Air Act. However, it is unclear what type of regulation would displace the federal common law and whether, under the current regulatory structure of the Clean Air Act, such displacement would occur under any circumstances.

Although the Court in *Connecticut v. AEP*, did not find it necessary to address the plaintiffs' assertion of separate state law claims, that issue was addressed by the panel decision in *Comer*, where the panel, sitting in diversity, addressed claims based on the common law of Mississippi. The defendants had moved to dismiss on political question and standing grounds. The District Court granted the motion from the bench "[d]escribing this suit as a 'debate' about global warming . . . 'which simply has no place in the court, until such time as Congress enacts legislation which sets appropriate standards by which this court can measure conduct.' "⁴⁶

The panel found that the plaintiffs easily satisfied Mississippi's liberal standing requirements and met the more rigorous federal standards under a *Lujan* analysis. The nature of the plaintiffs' injuries and the fact that they were seeking damages satisfied the requirements for concrete injury and redressability. With respect to the claims based on nuisance, trespass, and negligence, the panel found that the defendants' argument that the plaintiffs had not satisfied the third requirement that the injury be "fairly traceable" to the defendants' conduct "essentially calls upon us to evaluate the merits of plaintiffs' causes of action" and was "misplaced at this threshold standing stage of the litigation." ⁴⁷

Noting that the complaint alleged causation based on scientific studies and that the defendants' "contention that traceability is lacking because their emissions contributed only minimally to plaintiffs' injuries is also similar to another EPA argument rejected by the Supreme Court in Massachusetts," the panel concluded that the plaintiffs had standing. He Court concluded that the plaintiffs did not have standing to assert unjust enrichment, civil conspiracy and fraudulent misrepresentation claims, which the Court found to be assertions of generalized grievance based on the defendants' public relations statements.

The panel also held that the plaintiffs' claims did not present a political question:

The questions posed by this case, viz., whether defendants are liable to plaintiffs in damages under Mississippi's common law torts of nuisance, trespass or negligence, are justiciable because they plainly have not been committed by the Constitution or federal laws or regulations to Congress or the president. There is no federal constitutional or statutory provision making such a commitment, and the defendants do not point to any provision that has such effect. The most that the defendants legitimately could argue is that in the future Congress may enact laws, or federal agencies may adopt regulations, so as to comprehensively govern greenhouse gas emissions and that such laws or regulations might preempt certain aspects of state common law tort claims. Until Congress, the president, or a federal agency so acts, however, the Mississippi common law tort rules

^{43 504} U.S. 555, 34 ERC 1785 (1992).

⁴⁴ 406 U.S. 91, 4 ERC 1001 (1972).

⁴⁵ 451 U.S. 304, 15 ERC 1908 (1981).

⁴⁶ Comer, 585 F.3d at 860, n.2.

⁴⁷ *Id.* at 864.

⁴⁸ *Id.* at 866.

questions posed by the present case are justiciable, not political, because there is no commitment of those issues exclusively to the political branches of the federal government by the Constitution itself or by federal statutes or regulations.⁴⁹

The panel noted the federal courts are not free to reject cases over which they are given jurisdiction nor to invoke the political question doctrine merely because an issue is "politically charged."

In an unusual procedural twist, the Comer panel decision was vacated by entry of an order filed on May 28, 2010. The Fifth Circuit had granted the defendants' request for a rehearing en banc, an action which vacated the panel opinion.⁵⁰ The *en banc* Court was originally composed of nine judges; subsequent to the granting of the rehearing request, one of the judges had to be recused, leaving the en banc court without a quorum.⁵¹ Five of the remaining eight judges declared that the court could not conduct judicial business without a quorum, and that absent that quorum, the appeal had to be dismissed.⁵² Furthermore, these five agreed that "[t]here is no rule that gives this court authority to reinstate the panel opinion, which has been vacated."53 The May 28, 2010, order breathed life back into the District Court opinion, which dismissed the complaint.

A third case will likely give the Ninth Circuit the opportunity to rule on both the standing and political question issues. In *Native Village of Kivalina v. Exxon Mobil*, ⁵⁴ the trial court dismissed the federal common law nuisance claims of an Alaskan village against 24 oil companies, energy companies and utilities on the basis of the political question doctrine and standing. The village alleged damages because it is sinking and suffering from coastal erosion caused by the impact of global warming on permafrost.

Even if *Kivalina* is reversed or the panel's reasoning in *Comer* is adopted in another action seeking damages, causation will remain a significant issue. The plaintiffs seeking damages will need to demonstrate an adequate nexus between the defendants' emissions and the damages that the plaintiffs have suffered.

It also is possible that these issues could eventually reach the Supreme Court. In that case, the Second Circuit's heavy reliance on *Georgia v. Tennessee Copper Co.*, ⁵⁵ a case also cited by the panel in *Comer*, may give a hint of which way Justice Anthony M. Kennedy, the key swing vote, may tend. Justice Kennedy cited that case *sua sponte* in oral argument in *Massachusetts v. EPA*, suggesting that it supported the proposition that states should be afforded special solicitude in the standing inquiry and therefore supports the states' assertion of standing.

VII. Reporting Rule

In the Consolidated Appropriations Act of 2008,⁵⁶ Congress required EPA to develop a GHG Reporting Rule under § 114(a)(1) and § 208 of the Clean Air Act. The objective was to obtain greenhouse gas emissions data from large sources and suppliers to inform future policy decisions. EPA proposed its Reporting Rule on April 10, 2009, and published the final Reporting Rule on October 30, 2009. 57 Although the final rule did not impose requirements on all of the industries proposed (such as, for example, industrial landfills, wastewater treatment facilities, underground coal mines, and magnesium production) and has been subject to subsequent proposed amendments, the final rule nonetheless established the major components of the program. The Reporting Rule became effective on December 29, 2009, and facilities subject to it were required to start collecting emissions data using best available monitoring methods on January 1, 2010.

The Reporting Rule applies to the following general source categories: (1) certain specifically listed source categories, regardless of the level of greenhouse gases they emit; (2) certain sources/processes that emit at least 25,000 metric tons/year of CO₂e; (3) stationary fuel combustion sources with maximum heat input capacity of 30 mmBtu/hour where emissions meet or exceed 25,000 metric tons/year of CO₂e; and (4) suppliers of fossil fuel and industrial greenhouse gases where emissions exceed 25,000 metric tons/year of CO₂e. Specifically listed source categories that must report regardless of their greenhouse gas emissions include electricgenerating facilities, petrochemical production, petroleum refineries and municipal solid waste landproduction. fills, among others. Examples of industry facilities subject to the 25,000 metric tons/year threshold in the second category include pulp and paper manufacturing, glass production, and iron and steel production.

The Reporting Rule requires electronic submittal of an annual greenhouse gas emissions report. The first deadline for the reports is March 31, 2011. The Reporting Rule establishes requirements for measurement, verification, data quality, and information retention requirements. Entities subject to the Reporting Rule must also develop a written GHG Monitoring Plan. Generally, records related to the annual greenhouse gas emissions report, such as data used to calculate the greenhouse gas emissions of each unit, operation, project or activity and certification and quality assurance tests, should be kept for three years. The Reporting Rule permits reporters that emit less than 25,000 metric tons/ year of CO₂e for five consecutive years or those that emit less than 15,000 metric tons/year of CO₂e for three consecutive years to forego the submittal of annual reports. EPA will enforce the Reporting Rule under the Clean Air Act.

As indicated above, the Reporting Rule has been subject to proposed supplemental amendments, several of which were published on April 12, 2010. On that date, EPA published a proposed rule in the *Federal Register* seeking to augment background information requirements in the greenhouse gas emissions Report. The proposal would require a reporter to disclose information

⁴⁹ *Id.* at 870.

⁵⁰ See Comer, No. 07-60757, slip op. at 2 (May 28, 2010). The May 28, 2010, order can also be found on LEXIS. See Comer v. Murphy Oil, USA, 2010 U.S. App. LEXIS 11019 (5th Cir. 2010).

⁵¹ Comer, No. 07-60757, slip op. at 2 (May 28, 2010).

⁵² *Id.* at 4.

⁵³ Id.

 $^{^{54}\,663}$ F. Supp. 2d 863 (N.D. Cal. 2009), on appeal, No. 09-17490 (9th Cir.).

⁵⁵ 206 U.S. 230, 237 (1907).

⁵⁶ Pub. Law 110-161, 121 Stat. 1844, 2128 (2008).

⁵⁷ 74 Fed. Reg. 56,260 (Oct. 30, 2009) (208 WCCR, 10/30/09).

about its corporate parents, provide its primary and other applicable NAICS codes, and indicate whether any of its reported emissions are from cogeneration. EPA proposed two options for reporting corporate lineage. Under Option 1, reporters would need to identify only the highest-level domestic corporate parent company with the largest ownership interest in the reporting company by name and physical address and indicate its ownership status (wholly owned, multiple owners, or single ownership). Under Option 2, EPA proposes to require reporters to identify all domestic parent companies and the respective percentage of ownership.

Also on April 12, EPA proposed to extend the Reporting Rule to additional industry groups by publishing three proposed rules. The first proposal would apply the Reporting Rule to the following industries that are sources of fluorinated greenhouse gases: electronics manufacturing; fluorinated greenhouse gas production; electrical equipment use; electrical equipment manufacture or refurbishment; and importers and exporters of pre-charged equipment and closed-cell foam. Similarly, in the second proposal, EPA offered a revised reporting rule for emissions onshore petroleum and natural gas production, offshore petroleum and natural gas production, natural gas processing, natural gas transmission compressor stations, underground natural gas storage, liquefied natural gas storage, liquefied natural gas import/export terminals and distribution. The third proposal would require greenhouse gas emissions reporting from carbon dioxide injection and geologic sequestration operations. EPA indicates in the preamble for each of the three proposed rules its intent to have these sources begin monitoring emissions in 2011 and submit their first reports by March 31, 2012.

EPA's reporting requirements differ from those of The Climate Registry and most voluntary carbon reporting systems in that EPA requires reporting of only Type 1 emissions (viz. direct emissions from facilities) and the carbon emissions from imports and production of fossil fuel. The Climate Registry and most voluntary reporting systems also require the reporting of Type 2 emissions, indirect emissions arising from the generation of electricity used. Although the Reporting Rule will ensure that total emissions are not double counted, the current reporting system will be less useful in a regulatory program in which it will be necessary to assess the overall impacts of fuel switching between fossil fuels and electricity.

VIII. Council on Environmental Quality Guidance

The Council on Environmental Quality (CEQ) is tasked by the National Environmental Policy Act (NEPA)⁵⁸ to develop guidance for implementing that statute. NEPA requires all federal agencies to analyze the environmental effects of major actions they propose to take that might significantly affect the quality of the human environment. It establishes a process agencies must comply with to show that they properly considered the environmental implications of their actions.

In so doing, agencies must consider both the environmental implications of their actions and mechanisms On February 23, 2010, CEQ published a notice that it had developed draft guidance for how federal agencies should incorporate climate change and greenhouse gas emissions considerations into the NEPA process. ⁶⁰ The draft guidance is available online at http://ceq.hss.doe.gov. In this draft guidance, "CEQ proposes to advise Federal agencies that they should consider opportunities to reduce greenhouse gas emissions caused by proposed Federal actions and adapt their actions to climate change impacts throughout the NEPA process and to address these issues in their agency NEPA procedures."

The CEQ draft guidance notes that climate change impacts arise in the consideration of the greenhouse gas emissions effects of a proposed action and alternative actions, as well as the relationship of climate change effects to a proposed action and its alternatives.

CEQ's draft guidance asserts that many federal projects have the potential to emit greenhouse gases and enunciates the federal government's commitment to energy conservation-related goals, including eliminating or reducing greenhouse gas emissions. The proposed guidance provides that where proposed actions are subject to emissions "accounting requirements," such as the Reporting Rule for sources emitting 25,000 metric tons/year of CO₂e, this information should be included and considered in the NEPA documentation. Further, the agency's analysis of direct effects of the proposed action should include: (1) quantification of cumulative emissions over the project's life; (2) a discussion of measures to reduce greenhouse gas emissions, including reasonable alternatives; and (3) a qualitative discussion regarding the link between the emissions and climate change.

Despite proposing a 25,000 metric tons/year threshold for direct effects of a proposed federal action, CEQ cautions that this is not meant to be "an absolute standard of insignificant effects." The draft guidance further indicates that both direct (Type 1) and indirect (Type 2) greenhouse gas emissions from a proposed project should be considered. In scoping the project, CEQ directs that agencies should follow the "rule of reason." It warns the agencies to avoid using "useless bulk and boilerplate documentation" and directs that they focus their discussion to correlate with the importance of the GHGs from the proposed action.

CEQ also addresses how agencies can comply with NEPA in assessing the potential impacts of climate change on a proposed action. The project's sensitivity, location and time frame determine the extent to which the current or projected effects of climate change ought to be considered. The effects of climate change can range from impacts on public health and safety to effects on the integrity of a project site or design. The draft guidance recommends that agencies begin by

for avoiding or minimizing adverse impacts. Actions such as issuing a federal permit or providing federal financing typically require federal agencies to comply with the NEPA decision-making process. The NEPA decision-making framework provides an additional mechanism whereby the United States can comply with the requirements of the UNFCCC to implement national programs to mitigate climate change, conserve sinks, and foster adaptive measures.⁵⁹

⁵⁸ 42 U.S.C. §§ 4321 et seq.

⁵⁹ UNFCCC, *suprα*, note 7, art. 4, § 1(b), (d) & (e).

⁶⁰ 75 Fed. Reg. 8,046 (Feb. 23, 2010) (32 WCCR, 2/18/10).

identifying the "reasonably foreseeable future condition of the affected environment" for the no-action alternative and use these conditions as a baseline to evaluate alternatives. Where potential impacts could be significant but are also very uncertain, agencies are encouraged to consider the proposed action and related alternatives against the baseline "drawn as distinctly as the science of climate change effects will support." CEQ also recommends climate change effects be considered for projects designed for long-term use in areas sensitive to climate change. CEQ suggests adaptive management approaches, indicating that monitoring programs may be appropriate where adapting to climate change is important to a particular project.

CEQ specifically requested public input on seven specific issues. Among these are "How should NEPA documents regarding long-range energy and resource management programs assess greenhouse gas emissions and climate change impacts?" and "How should uncertainties associated with climate change projections and species and ecosystem responses be addressed in protocols for assessing land management practices?" The public comment period closed on May 24, 2010.

IX. Securities and Exchange Commission Guidance

Many companies have taken action to reduce greenhouse gas emissions without a specific regulatory directive. These companies have been spurred by a variety of motivations, including demands by investors. A third federal agency, the Securities and Exchange Commission, has taken action that will encourage such voluntary initiatives by ensuring that companies provide relevant information to their shareholders, publishing an interpretive release in the Federal Register providing guidance to public companies addressing climate change reporting.⁶¹ The guidance does not amend current reporting obligations, but rather highlights the expectation that management should be reviewing risks related to climate change to determine whether those risks are material and need to be disclosed. The release also reminds companies that information related to climate change risks should be consistent among required SEC filings as well as voluntary disclosures, such as press releases.

Items 101 (Business), 103 (Litigation), 503(c) (Risk Factors) and 303 (Management Discussion & Analysis) of Regulation S-K may require disclosure of the impact of potential climate change legislation or regulation. Registrants are reminded not to limit their disclosures related to a proposed law to negative impacts, but to include discussion of opportunities and positive impacts. Effects of legislative and regulatory changes include: (1) costs to purchase, or profits from sales of, allowances or credits under cap-and-trade programs; (2) expenditures for facilities and equipment improvements to reduce greenhouse gas emissions to comply with regulatory limits or mitigate the financial consequences of a cap-and-trade law; and (3) changes to profit or loss

arising from increased or decreased demand for goods and services produced by the company due to legislation or regulations and, indirectly, from changes in costs of goods sold. To the extent international treaties and accords affect a registrant's business, registrants should also consider the effects of such measures related to climate change to determine whether disclosure is required.

Evolution of the law, technology, politics and science pertaining to climate change may also create new opportunities or risks that should be disclosed in a company's risk factors, Management Discussion & Analysis, or description of its business. Examples of indirect consequences from these developments may include changes in the demand for products depending on their relative emissions-intensiveness, increased competition to innovate, and demand for alternative energy transmission and generation. Shifts in a company's plan of operations should be disclosed if the facts and circumstances make these opportunities or consequences material to its business operations or financial condition. Registrants should also consider whether their reputation may be affected by public perception due to the amount of GHGs emitted and whether that could have a negative effect on business operations or financial con-

The SEC also notes that some companies may be vulnerable to severe weather or climate-related events and should therefore consider disclosure of those material risks or consequences. SEC identified the following potential consequences of severe weather on businesses: property damage; disruptions to its own operations or those of its customers or suppliers; increased insurance claims and liabilities for insurance and reinsurance companies; decreased agricultural productivity; and increased insurance premiums and deductibles or a decrease in the availability of coverage for plants and operations in areas subject to severe weather.

In addition to the requirements of Regulation S-K, the SEC observes that pursuant to Rule 408 under the Securities Act of 1933, as amended, and Rule 12b-20 under the Securities Exchange Act of 1934, as amended, companies must disclose "such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading."

The SEC plans to monitor the effect of the release on company filings as a part of its ongoing disclosure review program. The SEC also will consider recommendations made by the Investor Advisory Committee as well as comments received at a public roundtable on climate change disclosure that the SEC plans to hold this spring. After the SEC evaluates the input from these sources, it will determine whether it should issue additional guidance or undertake rulemaking.

X. The Future Destination?

In the near term, EPA can be expected to continue to expand the scope of required greenhouse gas emissions reporting and add to the classifications of sources regulated. As noted above, EPA has announced it will issue guidance on conducting BACT analyses for greenhouse gas emissions; and it will likely act on its proposals to expand greenhouse gas reporting. EPA also expects to propose a rule for control of greenhouse gas emissions from heavy-duty vehicles in July 2010. Based on the

⁶¹ 75 Fed. Reg. 6,290 (Feb. 8, 2010). See also, Gerald J. Guarcini, et al., SEC Issues Interpretive Release on Climate Change Disclosure (Feb. 18, 2010), available at Ballard Spahr LLP Legal Alerts, http://www.ballardspahr.com/AlertsPublications/LegalAlerts/2010-02-18_
SECIssuesInterpretiveReleaseonClimateChangeDisclosure.

analysis in the Advance Notice of Proposed Rulemaking, EPA expects to develop regulations covering additional mobile sources (airplanes, locomotives, marine vessels, off-road vehicles, etc.).

We can also expect that EPA will develop new source performance standards (NSPS) covering greenhouse gas emissions for a variety of industrial stationary sources as it updates the NSPS under section 111 of the Clean Air Act, 42 U.S.C. § 7411. Section 111 contains endangerment language identical to that found in section 202 of the Clean Air Act, and EPA has received a number of rulemaking petitions directed at both NSPS and mobile source categories. EPA's statement in the Trigger Rule that energy efficiency and greenhouse gas emissions should be considered in developing technology-based emissions limits should apply equally to rules establishing NSPS.

Although these developments are significant, there are many more coming, even if comprehensive legislation remains stalled in the Senate. The Center for Biological Diversity and 350.org have submitted a rulemaking petition to EPA requesting that it establish a National Ambient Air Quality Standard for greenhouse gas emissions. ⁶² There is no deadline for EPA action on that petition. However, when a similar petition was filed after EPA had established regulations limiting lead emissions under section 202 of the Clean Air Act, the Second Circuit held that the EPA's endangerment finding created a mandatory duty to list a pollutant that is emitted from diverse sources under section 108 of the Clean Air Act and to establish an NAAQS for that pollutant under section 109 of the Clean Air Act. ⁶³

If EPA is required to list greenhouse gases as a priority pollutant, states would be required to develop and implement plans identifying a range of measures across a variety of economic sectors to reduce greenhouse gas emissions under section 110 of the Clean Air Act. 64 These could very well include cap-and-trade programs.

⁶² Center for Biological Diversity and 350.org, Petition to Establish National Pollution Limits for Greenhouse Gases Pursuant to the Clean Air Act (2009), available at http://www.biologicaldiversity.org/programs/climate_law_institute/global_warming_litigation/clean_air_act/pdfs/Petition_GHG_pollution_cap_12-2-2009.pdf.

⁶³ NRDC v. Train, 545 F.2d 320 (2d Cir. 1976) held that the additional language in section 108, "but for which he plans to issue air quality criteria under this section," does not change the mandatory nature of the duty to list. NRDC, 545 F.2d at 325. In the Advance Notice of Proposed Rulemaking: Regulating Greenhouse Gas Emissions Under the Clean Air Act (hereinafter "ANPR"), 73 Fed. Reg. 44,354 (July 30, 2008), EPA raised the possibility that the decision in Chevron v. Natural Resources Defense Council, 467 U.S. 837 (1984), may change that conclusion. ANPR 73 Fed. Reg. 44,354 at 44,477 n. 229. However, there is nothing in Chevron's holding regarding the deference owed agency determinations in the area of the agency's expertise that would appear to overturn the simple issue of statutory interpretation resolved in NRDC v. Train. În NRDC v. Train, the court specifically rejected the argument that the phrase "but for which he plans to issue air quality criteria under this section" made the decision to list lead one within the discretion of the Administrator. NRDC, 545 F.2d at 325. The Supreme Court's treatment of a similar issue of statutory construction in Massachusetts v. EPA, where it found that the term "in his judgment" did not create discretion not to act in the face of similar mandatory language, would seem to undercut reliance on Chevron.

⁶⁴ 42 U.S.C. § 7410.

In fact, it is possible that these plans might include the existing regional cap-and-trade programs established under the RGGI and the WCI. 65 A cap-and-trade program could also be established under this authority even without Congressional action. A cap-and-trade program could also be established under section 111(d) of the Clean Air Act if EPA does not establish an NAAQS and call for State Implementation Plans (SIPs). 66

EPA has repeatedly stated that it favors an amendment to the Clean Air Act specifically addressing greenhouse gas emissions. The House has passed the American Clean Energy and Security Act, ⁶⁷ which would create such a program, integrating regulation under the Clean Air Act with incentives to develop clean and alternative energy and energy conservation measures and a program for regulating carbon markets. At least two bills that would establish similar cap-and-trade programs have been introduced in the Senate. ⁶⁸ The proposed federal legislation would temporarily or permanently preempt state cap-and-trade programs.

Legislation would remove particular uncertainties regarding authority to establish a comprehensive nationwide federal cap-and-trade program and, therefore, could speed the course of comprehensive federal regulation and reduce the likelihood of successful challenges in court. However, legislation that displaces the existing state and regional cap-and-trade programs would disrupt implementation of existing and welldeveloped trading initiatives if no effort were made to incorporate those programs into the federal system. Use of the existing State Implementation planning authority under the current Clean Air Act could avoid such a result by incorporating those programs into a single national program similar to that currently employed in the European Union.⁶⁹ Such a result could also be avoided by calling for the incorporation of the current trading programs into the federal program rather than their displacement.

The 10 Eastern states participating in the RGGI have already held a series of successful auctions of carbon emissions credits and are using the revenues to finance programs to implement energy conservation and efficiency programs and to develop alternative low- or nocarbon sources of electric generation. These include, for example, Efficiency Vermont and the Delaware Sus-

⁶⁵ See http://www.rggi.org/home; http://www.westernclimateinitiative.org/about-the-wci. See also 42 U.S.C. § 7410(a) (2) (A) (authorizing inclusion of market-based mechanisms in SIPs).

⁶⁶ 42 U.S.C. § 7411(d).

⁶⁷ H.R. 2454, available at http://www.govtrack.us/congress/billtext.xpd?bill=h111-2454. The House approved the bill June 26, 2009 (121 WCCR, 6/26/09).

⁶⁸ The Senate Environment and Public Works Committee approved S. 1733 Nov. 5, 2009, on a vote of 11–1. All Republicans on the committee boycotted the vote (212 WCCR, 11/5/09). Sens. John Kerry (D-Mass.) and Joseph Lieberman (I/D-Conn.) unveiled the American Power Act on May 12, 2010. The bill would cap emissions from electric utilities in 2013 and from manufacturers starting in 2016 and would require oil companies to purchase carbon emissions allowances to limit transportation sector emissions (92 WCCR, 5/12/10).

⁶⁹ John C. Dernbach, Robert B. McKinstry, Jr., and Thomas D. Peterson, *Making the States Full Partners in a National Climate Change Effort: A Necessary Element for Sustainable Economic Development*, 40 ELR NEWS & ANALYSIS 10597 (2010).

tainable Energy Utility. The WCI has developed the framework for a more comprehensive, economy-wide cap-and-trade program that will begin to be phased in during 2012.

Failure to incorporate existing state and regional initiatives into a federal program could also disrupt the nascent attempts to create a North American greenhouse gas emissions trading system. The WCI trading program already includes Canadian provinces representing 80 percent of the Canadian economy, as well as seven Western U.S. states. A number of Mexican states participate in the WCI as observers. Most of Canada, all Mexican border states and 41 U.S. states are members of The Climate Registry, 70 whose program for measuring greenhouse gas emissions and reductions will serve as the basis for the RGGI trading program and the WCI's international trading program. EPA has not made a serious effort to incorporate the states' experience in measuring and registering emissions into its emerging regulatory programs.

It appears increasingly clear that comprehensive regulation of greenhouse gas emissions will occur regardless of whether Congress acts or not. EPA regulatory actions, actions by the CEQ and SEC, actions by the states and potential liabilities will all put a price on carbon emissions and create business risks and opportunities that should play a part in corporate and governmental planning in a variety of contexts.

There is now an opportunity to develop a comprehensive and rational federal program that incorporates existing state and regional programs, displaces legislation by judicial fiat and creates a North American greenhouse gas emissions trading regime. The precise form of the future regulatory program is emerging rapidly, but could still evolve in any number of directions.

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The opinions expressed here do not represent those of BNA, which welcomes other points of view.

⁷⁰ See http://www.theclimateregistry.org/.