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## **G. Environment**

The U.S. statutory framework comprehends national environmental policy in areas such as clean air, disposal of nuclear and solid wastes, wilderness conservation, endangered species protection, mineral extraction, use of chemicals, and workplace safety.

This section considers one area of environmental concern, climate change. It first treats the issue within the context of U.S. law, as interpreted by U.S. courts. The section then outlines international efforts to combat climate change, including one treaty to which the United States belongs. The section concludes by observing that although litigants might cite U.S. participation in such international instruments, none imposes on the United States obligations enforceable in U.S. courts.

U.S. courts are unlikely to see cases directly invoking international legal instruments that pertain to climate change or global warming. Rather, climate change surfaces as an issue in cases brought under domestic environmental, administrative, or tort law. Given U.S. Supreme Court recognition of the global dimensions of climate change, familiarity with the international legal backdrop may inform consideration of domestic cases.

### **1. Domestic Law and Jurisprudence**

The cases discussed here all arise under domestic law. They are related to international law on climate change to the extent that they help to determine the national policy and negotiating stance of the U.S. government.

The key judicial precedents in regulatory actions involving climate change are the decisions in *Massachusetts v. EPA*, 549 U.S. 497 (2007), and *American Electric Power Co. v. Connecticut*, 131 S. Ct. 2527 (2011). This section provides the statutory backdrop against which these decisions took place, and then summarizes both the decisions and some of the other types of regulatory cases brought under federal environmental law.

#### **a. Relevant U.S. Statutory Framework**

U.S. domestic law pertinent to greenhouse gas emissions predates the international climate change regime. Efforts at clean air regulation began with the Air Pollution Control Act of 1955, Pub. L. No. 84-159, 69 Stat. 322, codified as amended at 42 U.S.C. §§ 7401–7671q (2012).

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<sup>1</sup> For what this section contains, see the Detailed Table of Contents, <http://www.asil.org/benchbook/detailtoc.pdf>.

The air pollution regime that now is applied to climate change consists of four statutes:

- Clean Air Act of 1963, Pub. L. No. 88-206, 77 Stat. 392 (codified as amended at 42 U.S.C. §§ 7401-7671q);
- Energy Policy and Conservation Act of 1975, Pub. L. No. 94-163, §§ 501-512, 89 Stat. 871, 901-16 (codified as amended at 49 U.S.C.A. §§ 32,901-32,916 (West 2009));
- Motor Vehicle Air Pollution Control Act of 1965, Pub. L. No. 89-272, §§ 201-09, 79 Stat. 992, 992-96 (codified as amended at 42 U.S.C. §§ 7401-7671q); and
- Air Quality Act of 1967, Pub. L. No. 90-148, 81 Stat. 485 (codified as amended at 42 U.S.C. §§ 7401-7671q).

Before the Court's 2007 decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007), greenhouse gases were not explicitly included in the regulations promulgated under these laws; nevertheless, in promulgating these new post-*Massachusetts* regulations, U.S. federal agencies noted that these earlier regulatory decisions helped to determine the extent of U.S. greenhouse gas emissions. In a 2009 rulemaking notice, for example, the Obama administration explained: first, that the corporate average fuel economy, or CAFE, standards mandated fuel economy in vehicles; and second, that those CAFE standards thus influenced the extent of emissions. Notice of Upcoming Joint Rulemaking to Establish Vehicle GHG Emissions and CAFE Standards, 74 Fed. Reg. 24,007 (May 22, 2009).

Beyond this air pollution regime, a limited number of U.S. statutes directly address climate change. The National Climate Program Act of 1978, 15 U.S.C. §§ 2901-07 (2006), mandates that the President establish a program to “assist the Nation and the world to understand and respond to natural and man-induced climate processes and their implications.” *Id.* § 2902. Pursuant to that Act, President Jimmy Carter consulted the National Research Council, a private, nonprofit organization. Its 1979 report stated:

If carbon dioxide continues to increase, the study group finds no reason to doubt that climate changes will result and no reason to believe that these changes will be negligible. . . . A wait-and-see policy may mean waiting until it is too late.

*Climate Research Board, Carbon Dioxide and Climate: A Scientific Assessment* viii (National Academy Press 1979), available at [http://www.nap.edu/openbook.php?record\\_id=12181&page=R1](http://www.nap.edu/openbook.php?record_id=12181&page=R1).

Several years later, in the Global Climate Protection Act of 1987, Pub. L. No. 100-204, §§ 1101-06, 101 Stat. 1331, 1407, Congress called for the establishment of a “coordinated national policy” that would enhance U.S. leadership in international efforts to address climate change. See 15 U.S.C. § 2901 notes. The Act's goals have yet to be achieved; numerous efforts to create comprehensive climate change legislation have stalled in Congress.

Notwithstanding this legislative impasse, the U.S. Executive Branch, in accordance with

its obligations under the decision in *Massachusetts v. EPA*, reconsidered the appropriateness of regulation under the Clean Air Act. In 2009, the U.S. Environmental Protection Agency issued Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 66,406 (Dec. 15, 2009). This endangerment finding, along with subsequent rulemaking under that Act currently serve as the primary U.S. means to set binding limits on greenhouse gas emissions.<sup>2</sup>

### **b. Key Legal Issues in *Massachusetts v. EPA***

The decision in *Massachusetts v. EPA*, 549 U.S. 497 (2007), arose out of a challenge, brought under Section 202(a) of the Clean Air Act of 1970, 42 U.S.C. § 7521(a), to the denial of a petition that had asked the EPA to regulate motor vehicle greenhouse gas emissions. Plaintiffs included several states and local governments, one territory, and a number of nongovernmental organizations. In an opinion written by Justice John Paul Stevens, the Supreme Court held the denial to be “arbitrary, capricious, . . . or otherwise not in accordance with law,” under the judicial review provisions of the Clean Air Act, 42 U.S.C. § 7607(d)(9)(A). *Massachusetts v. EPA*, 549 U.S. at 534. At pages 534-35 of its decision, the Court faulted the agency for not giving a “reasoned explanation for its refusal to decide whether greenhouse gases cause or contribute to climate change”; the EPA, it held, “must ground its reasons for action or inaction in the statute.”

The case set important precedent regarding standing and substantive interpretation of the Clean Air Act, which the following sections detail.

### **i. Standing after *Massachusetts v. EPA***

The Supreme Court held that Massachusetts had standing to challenge the EPA’s decision to deny petitioners rulemaking petition on two main grounds:

1. “[T]he rise in sea levels associated with global warming has already harmed and will continue to harm Massachusetts,” as stated in plaintiffs’ “uncontested affidavits”; and
2. The state faces a real risk, even if remote, of catastrophic harm which would be “reduced to some extent if petitioners received the relief they seek.” 549 U.S. at 526.

To reach this standing conclusion, the Court:

1. Focused on “Massachusetts’ stake in protecting its quasi-sovereign interests” together with its procedural right to challenge the rejection of its rulemaking petition. These, the Court wrote, entitled Massachusetts to “special solicitude in our standing analysis.” *Id.* at

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<sup>2</sup> Two examples of motor vehicle greenhouse gas emissions regulation pursuant to the endangerment finding, which bring together regulatory processes under two statutes cited in the text *supra* – that is, the Clean Air Act of 1963 and the Energy Policy and Conservation Act of 1975 – are the Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards; Final Rule, 75 Fed. Reg. 25,324 (May 7, 2010), and the Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles, 76 Fed. Reg. 57,106 (Sept. 15, 2011). The U.S. EPA also has begun regulating greenhouse gas emissions in its permitting processes for major stationary sources, such as power plants and cement factories. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 40 C.F.R. 52 (2012).

518-20. The opinion does not clarify the extent to which that special solicitude influences its ultimate holding on standing.

2. Focused on injury, stating that the “harms associated with climate change are serious and well recognized.” The Court ruled that the “widely shared” quality of climate change risks did “not minimize Massachusetts’ interest in the outcome of this litigation,” and focused on the harms that the state is experiencing and will experience from sea-level rise. *Id.* at 521-23.
3. Considered causation. Indicating that “EPA does not dispute the existence of a causal connection between man-made greenhouse gas emissions and global warming,” the Court ruled: “Judged by any standard, U.S. motor-vehicle emissions make a meaningful contribution to greenhouse gas concentrations and hence, according to petitioners, to global warming.” *Id.* at 523-25.
4. Focused on remedy. “While it may be true that regulating motor-vehicle emissions will not by itself *reverse* global warming, it by no means follows that we lack jurisdiction to decide whether EPA has a duty to take steps to *slow* or *reduce* it,” the Court wrote, then added: “A reduction in domestic emissions would slow the pace of global emissions increases, no matter what happens elsewhere.” *Id.* at 525-26 (emphasis in original).

Together, these four steps created precedent for considering standing in a climate change context. According to these criteria a governmental entity, and particularly a state, that brings a claim of climate change harms likely will meet the standing requirements of injury, causation, and remedy. The focus of the Court in *Massachusetts v. EPA* on the state left open whether private parties might have standing to bring such a claim. This is an issue that the decision in *American Electric Power Co. v. Connecticut*, 131 S. Ct. 2527 (2011), discussed below, did not resolve, and on which lower courts have disagreed. *Compare WildEarth Guardians v. Salazar*, 880 F. Supp. 2d 77, 83-86 (D.D.C. 2012) (ruling that there was no standing) *with WildEarth Guardians v. U.S. Forest Service*, 828 F. Supp. 2d 1223 (D. Colo. 2011) (ruling that there was standing).

## **ii. Substantive Interpretation of General Environmental Provisions in *Massachusetts v. EPA***

The Court’s substantive analysis in *Massachusetts v. EPA* focused on two main issues, as set forth at 549 U.S. at 528-34:

1. Is the EPA authorized to regulate greenhouse gas emissions under the Clean Air Act?
2. If yes, would the EPA be unwise to exercise that authority?

On the first question, the Court stated that the Clean Air Act’s “sweeping definition of ‘air pollutant,’” *id.* at 528, unambiguously included greenhouse gases like carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. No legislative history, nor any issue of overlapping regulatory authority, suggested an opposite conclusion.

On the second question, the Court held that the need to exercise judgment did not allow the EPA to “ignore statutory text,” but only “to exercise discretion within defined statutory

limits.” *Id.* at 533. It explained: “Under the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do.” *Id.* at 532-35.

Since the decision in *Massachusetts v. EPA*, the EPA has decided to regulate greenhouse gas emissions under the Clean Air Act. These regulations have been challenged, but to date no court has invalidated them. *See Coalition for Responsible Regulation v. EPA*, 684 F.3d 102 (D.C. Cir. 2012), *cert. granted in part sub nom. Utility Air Regulatory Group v. EPA*, No. 12-1146, 134 S. Ct. 418 (Oct. 15, 2013) (argument scheduled for Feb. 24, 2014; *see* [http://www.supremecourt.gov/oral\\_arguments/argument\\_calendars/monthlyargumentcalfeb%202014.pdf](http://www.supremecourt.gov/oral_arguments/argument_calendars/monthlyargumentcalfeb%202014.pdf)).

### **c. Other Types of Regulatory Actions**

Many other regulatory actions regarding climate change have been filed in U.S. courts. They are too numerous to analyze in depth here. A Climate Change Litigation flow chart, maintained by Columbia Law Professor Michael B. Gerrard and Arnold & Porter lawyer J. Cullen Howe, is available at <http://www.climatecasechart.com> (last visited Dec. 9, 2013). This section discusses the two primary categories of regulatory action that the chart explores: compelling governmental action and stopping governmental action.

#### **i. Suits to Compel Government Action**

Cases attempting to compel the government to act to regulate major emitters of greenhouse gases have involved not only emissions from motor vehicles, but also from stationary sources, aircraft, ocean-going vessels, trains, and industrial and construction equipment. Many cases have invoked the Clean Air Act of 1970, 42 U.S.C. § 7401 *et seq.* Authorities invoked in other complaints:

- Endangered Species Act of 1973, Pub. L. No. 93-205, 87 Stat. 884 (codified as amended at 16 U.S.C. §§ 1531-44 (2006)), in efforts to compel the government either to list species that are affected by climate change as endangered or threatened, or to take action to protect them;
- Clean Water Act of 1972, Pub. L. No. 92-500, 86 Stat. 816 (codified as amended at 33 U.S.C. §§ 1251-1387 (2006)), in suits regarding water pollution, coastal water impairment, ocean acidification, and harm to glaciers from melting sea ice;
- Global Change Research Act of 1990, Pub. L. No. 101-606, 104 Stat. 3096 (codified at 15 U.S.C. §§ 2931-38 (2006)), in a suit seeking to force timely production of a research plan and scientific assessment;
- Freedom of Information Act, Pub. L. No. 89-554, 80 Stat. 383 (1966) (codified as amended at 5 U.S.C.A. § 552 (West 2011)), in various requests for information;

- Alternative Motor Fuel Act of 1988, Pub. L. No. 100–494, 102 Stat. 2441 (codified as amended at 42 U.S.C. §§ 6374-74E (2006)), in a challenge to extending special treatment to dual-fueled vehicles (ones that run on gasoline combined with either ethanol or methanol) on the basis that this extension results in less fuel efficient vehicles; and
- Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776, Energy Policy Act of 2005, codified as amended at 42 U.S.C.A. §§ 13,201-574 (2011), Energy Policy Conservation Act of 1975, Energy Policy & Conservation Act, Pub. L. No. 94-163, § 502, 89 Stat. 871, 902 (1975) (codified as amended in scattered sections of 15 and 42 U.S.C.), and Energy Independence and Security Act of 2007 (EISA), Pub. L. No. 110-140, 121 Stat. 1492) (codified as amended in scattered sections of 15, 29, 42, and 49 U.S.C.), to compel enforcement of their provisions on energy efficiency, alternative fuel vehicles, and fuel efficiency.

These cases all ask the federal government to take action under the relevant statute, and at times have succeeded in compelling government action.

## **ii. Suits to Stop Government Action**

Lawsuits attempting to stop governmental action have been filed in state as well as federal courts. Most of these suits have fallen into one of three categories:

1. Challenges, by a range of plaintiffs, to coal power plants projects, invoking a variety of legal theories, plus other actions challenging other types of plants;
2. Actions brought by a range of plaintiff under the National Environmental Policy Act of 1969, Pub. L. 91-190, 83 Stat. 852, codified as amended at 42 U.S.C. §§ 4321-70H, or similar state statutes, which have sought to require officials to consider climate change in environmental review processes.
3. Challenges to local, state, and federal greenhouse gas regulations, brought by corporate emitters of greenhouse gases under a variety of legal theories.

The first category of cases is the most common type of climate change litigation. Together with the second group of cases, it has slowed down or made more expensive coal fired power plant projects. The third category of cases, seeking to stop government action, has, when successful, blocked or limited regulations that reduce greenhouse gas emissions. These cases, which are numerous, can be accessed at <http://www.climatecasechart.com> (last visited Dec. 9, 2013).

## **d. Public Nuisance Suits Regarding Climate Change, and *American Electric Power Co. v. Connecticut***

Although smaller in number than their regulatory counterparts, public nuisance cases regarding climate change have generated federal litigation. Brought by governmental and private



petitioners against corporate greenhouse gas emitters, the suits have sought injunctive relief or damages on the asserted ground that the failure to limit emissions constitutes a public nuisance.

None of these cases has reached the merits. “The Clean Air Act and the Environmental Protection Agency action the Act authorizes . . . displace the claims the plaintiffs seek to pursue,” the Supreme Court held in *American Electric Power Co. v. Connecticut*, 131 S. Ct. 2527, 2532 (2011). Justice Sonia Sotomayor recused herself, and so only eight justices participated in the opinion and concurrences. The following, drawn from pages at 2535 to 2540 of the decision, summarizes key components:

- *Standing*: By a 4-4 plurality, the Court followed the *Massachusetts v. EPA* approach to standing discussed *supra*.
- *Political Question*: Lower court decisions had focused extensively on whether these suits violated the political question doctrine, with particular emphasis on “the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion”—the third of six factors set out in *Baker v. Carr*, 369 U.S. 186, 217 (1962). But the Court in *American Electric Power Co.* did not analyze political question issues.
- *Displacement*: The participating justices unanimously found that EPA’s authority to regulate greenhouse gas emissions under the Clean Air Act displaced federal common law public nuisance actions. The opinion indicated that if EPA refused to regulate under that authority, the proper remedy would be an enforcement action under the Clean Air Act rather than a federal common law public nuisance action.
- *Preemption*: The Court remanded the question of whether the Clean Air Act regulatory authority preempts state law nuisance claims.

As a result of this decision, federal common law public nuisance claims regarding climate change will not succeed unless Congress eliminates the EPA’s regulatory authority over greenhouse gas emissions under the Clean Air Act. The viability of such claims in that circumstance remains an open question.

## **2. Treaties and Other International Agreements**

In addition to the U.S. domestic sources treated above, as discussed below, a number of multilateral international agreements also address climate change.

### **a. U.N. Framework Convention on Climate Change**

The 1992 U.N. Framework Convention on Climate Change<sup>3</sup> comprises the foundation for multilateral international legal efforts on the issue. In this treaty, states parties, including the

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<sup>3</sup> U.N. Framework Convention on Climate Change, May 9, 1992, S. Treaty Doc. No. 102-38 (1992), 1771 U.N.T.S. 107, available at <http://unfccc.int/resource/docs/convkp/conveng.pdf> [hereinafter Framework Convention]. This treaty, which entered into force on Mar. 21, 1994, has 195 parties (194 countries and 1 regional economic

United States, have committed to work to avoid dangerous levels of atmospheric greenhouse gases.

This treaty follows a framework-protocol approach, common in international environmental law. States parties agreed to a “framework” for adopting mandatory emissions caps in future treaties, called “protocols”; these states did not commit to specific binding emissions reductions in the Framework Convention itself, however.

The United States – classified along with other industrialized countries as an Annex I party – committed in Article 4(2)(a) of this Convention to “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.” (Emissions are said to be “anthropogenic” if they derive from human activities rather than from other sources; “sinks” and “reservoirs” are mechanisms intended to remove harmful greenhouse gases from the atmosphere.)

But the Convention does not tie these commitments to specific action. U.S. obligations thus are limited to:

- Participating in subsequent Conference of the Parties meetings aimed at adopting protocols;
- Reporting on U.S. greenhouse-gas emissions and sinks; and
- Fulfilling its good-faith treaty commitment to avoid dangerous emissions levels.

In sum, although the Framework Convention creates binding obligations, the limited scope of those obligations means that the Convention has not been, nor is it likely to be, invoked in domestic litigation, except in reference to the general obligations of the United States to make constructive efforts to reduce its greenhouse gas emissions.

## **b. Kyoto Protocol to the U.N. Framework Convention on Climate Change**

The 1997 Kyoto Protocol to the 1992 U.N. Framework Convention on Climate Change<sup>4</sup> is the only treaty to have established binding and specific commitments on emissions. Its first commitment period expired in 2012 and, as of the 2011 Durban negotiations, some of the Kyoto

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integration organization, the European Union). U.N. Treaty Collection, *United Nations Framework Convention on Climate Change*, [https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&mtdsg\\_no=XXVII-7&chapter=27&Temp=mtdsg3&lang=en](https://treaties.un.org/Pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXVII-7&chapter=27&Temp=mtdsg3&lang=en) (last visited Dec. 9, 2013). Among them the United States, which ratified on Oct. 15, 1992. *Id.*

<sup>4</sup> Kyoto Protocol to the U.N. Framework Convention on Climate Change, Dec. 11, 1997, 2303 U.N.T.S. 162, [http://unfccc.int/essential\\_background/kyoto\\_protocol/items/1678.php](http://unfccc.int/essential_background/kyoto_protocol/items/1678.php) [hereinafter Kyoto Protocol]. This treaty, which entered into force Feb. 16, 2005, has 192 parties (191 countries and 1 regional economic integration organization, the European Union). U.N. Treaty Collection, *Kyoto Protocol to the U.N. Framework Convention on Climate Change*, [http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-7-a&chapter=27&lang=en](http://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-a&chapter=27&lang=en) (last visited Dec. 9, 2013). The United States is not among the parties to this treaty. *Id.*



Protocol parties committed to a second period, from 2013 to 2020. The Kyoto Protocol imposes no obligations on the United States – although the United States has signed the treaty, it has not ratified it – and so has little import in domestic cases.

### **c. Copenhagen Accord**

The 2009 Copenhagen Accord<sup>5</sup> set different goals for developed and developing country parties, but did not make specific commitments. The United States and other member states negotiated the Accord during the meeting of the Conference of Parties to the Framework Convention that took place in Copenhagen, Denmark, in December 2009. The 2009 Conference took “note” of, but did not officially adopt, the Copenhagen Accord.

Pursuant to the Accord, the United States – using its 2005 emissions as a baseline and 2020 as the target date – committed to cut greenhouse gases “[i]n the range of 17%, in conformity with anticipated U.S. energy and climate legislation.” U.S. Submission in Accordance with Copenhagen Accord, Jan. 28, 2010, [http://unfccc.int/files/meetings/cop\\_15/copenhagen\\_accord/application/pdf/unitedstatescphaccord\\_app.1.pdf](http://unfccc.int/files/meetings/cop_15/copenhagen_accord/application/pdf/unitedstatescphaccord_app.1.pdf). Given contingent language in the Accord, the commitment that the United States submitted has minimal domestic legal effect.

International negotiations among the United States and other countries, in Cancun, Mexico, in 2010 and in Durban, South Africa, in 2011, made additional progress toward but did not result in the adoption of a binding agreement with more specific.

### **d. Conclusion**

In sum, U.S. litigants might invoke Copenhagen Accord commitments, together with the Framework Convention, in an effort to establish a general U.S. obligation to make efforts to mitigate emissions. Neither instrument, however, entails specific obligations enforceable in courts of the United States.

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<sup>5</sup> Copenhagen Accord (Dec. 18, 2009), Decision 2/CP.15, *in* Report of the Conference of the Parties on Its Fifteenth Session, Addendum, at 5, U.N. Doc. FCCC/CP/2009/11/Add.1 (Mar. 30, 2010), *available at* [http://unfccc.int/documentation/documents/advanced\\_search/items/3594.php?rec=j&preref=600005735#beg](http://unfccc.int/documentation/documents/advanced_search/items/3594.php?rec=j&preref=600005735#beg). Signing this Accord were the European Union and more than 100 countries, including the United States.