



Climate Change Practice

History

Troutman Sanders' climate change practice has been active for nearly two decades, evolving from the firm's international work in environmental and energy regulatory policy as well as from its considerable experience in North America's NO_x and SO_x traded markets.

When the United States implemented a market-based approach to reducing acid rain emissions, the firm's environmental practitioners began to collaborate in this new area with their colleagues in the firm's energy trading and derivatives practice. These commercial lawyers brought with them years of wide-ranging expertise in contractually allocating and mitigating the risks inherent in the kind of competitive markets created by a cap and trade regulatory regime. Collectively, these two groups of specialists have advised some of the largest and most sophisticated participants in North America's regional SO₂ and NO_x emissions markets for many years.

The Kyoto Protocol and the European Union Emissions Trading System (EU ETS) embraced the same type of cap & trade regulatory mechanism underlying the U.S. acid rain emissions markets in order to address issues relating to global warming and climate change. As the world moved towards a climate regulatory framework currently embodied in Kyoto, the firm's environmental and energy practices expanded to address the increasing commercial ramifications of global climate change policy and regulation, drawing upon numerous practice areas across its offices in multiple jurisdictions, including:

- State, Federal and International Energy Regulatory Law and Policy,
- Environmental Law (and more specifically, the Air Quality Practice Area),
- Energy & Derivative Product Trading and Risk Management,
- Tax, and
- Project Development & Finance Law.

The Practice

Today, Troutman Sanders is well versed in all aspects of the climate change issue:

- **Carbon Regulation and Legislation.** We actively advise clients on legislative and regulatory developments at the federal and state levels, and our attorneys have twice been called to testify before Congress on climate change issues.
- **Litigation.** We have been involved in most of the principal litigated cases involving carbon dioxide, including in the briefing of the landmark decision of *Massachusetts v. EPA*, both before the U.S. Court of Appeals for the D.C. Circuit and the U.S. Supreme Court.
- **Carbon and Other GHG Credit Trading.** Our attorneys have advised corporations, funds, multi-national organizations and governments, including several of the most advanced energy trading and marketing organizations in the world, on all aspects of greenhouse gas (GHG) trading, and how to harness and monetize the emissions related value of investment in clean development mechanism (CDM) and joint implementation (JI) projects. Further we provide advice on the commercial, legal and policy implications of future actions to address climate change.
- **Project Investment.** We advise on all aspects of investment in and approval of CDM and JI projects and the development, construction, operation and tax structuring of renewable and alternative energy projects worldwide including solar, wind, geothermal and hydropower projects and transactions, as well as alternative "clean coal," ethanol, biodiesel, and biomass-related energy projects and transactions.



Experience

Policy, Regulation and Legislation

- A firm attorney testified before the Senate Committee on Energy and Public Works on the possibility of greenhouse gas regulation under the Clean Air Act following the Massachusetts v. EPA Supreme Court decision.
- A firm attorney testified before the House Government Operations Committee on the legal validity of greenhouse gas regulation under the Clean Air Act.
- The firm closely monitors and advises clients on national legislative developments on the climate change issue on behalf of clients.
- Firm attorneys prepared two energy corporation CEOs to participate in a White House conference on climate change in advance of the Kyoto negotiations. We also assisted one of the executives in writing a book on climate-related energy policy, and to prepare for several appearances as a witness at Congressional hearings on climate and energy policy.
- The firm represents a Canadian energy trade association in discussions with U.S. government officials and industry participants regarding Canadian and U.S. climate change policies and opportunities for common approaches to climate change strategy.
- The firm advised Congressional staff on greenhouse gas bill language.
- The firm has for a number of years monitored the Northeastern Regional Greenhouse Gas Initiative, has participated in drafting comments for clients, and provides ongoing advice on legal and constitutional issues.
- The firm has also for many years monitored California greenhouse gas legislative and regulatory developments and has provided ongoing advice to clients on legal and constitutional issues.
- The firm advised clients on development of Minnesota legislation on greenhouse gas emissions and on legal and constitutional issues.
- The firm participated in state regulatory development of greenhouse gas policies in Colorado, Minnesota and Illinois, including cross-examination of greenhouse gas scientists and regulatory experts in contested case proceedings.
- The firm routinely monitors other state greenhouse gas initiatives.
- The firm participated in proceedings developing the Department of Energy's "Section 1605(b)" greenhouse gas registry.
- The firm is experienced in clean coal technology projects, and has obtained tax benefits for clean coal technology for a client under the Energy Policy Act.

Litigation

- The firm represented a client in the landmark case of Massachusetts v. EPA, determining that EPA may regulate greenhouse gas emissions under the Clean Air Act. The firm filed comments before the EPA during the rulemaking process and briefs before the U.S. Court of Appeals for the D.C. Circuit and the Supreme Court.
- The firm represented a client in Connecticut v. American Electric Power Co., a federal lawsuit in which eight states and three environmental organizations attempted to use tort law to hold five electric utilities liable for greenhouse gas emissions.
- The firm represented a client in Comer v. Murphy Oil, a federal lawsuit in which Mississippi residents are attempting to use tort law to hold numerous industrial companies liable on a theory that their emissions intensified Hurricane Katrina.
- The firm represented clients attempting to develop coal-fired electric generation in litigated permit proceedings in several states, in which the greenhouse gas emissions of these projects was a key litigated issue.

Carbon and Other GHG Credit Trading



We have a great depth of experience in drafting and negotiating contractual arrangements for our clients both in the energy and GHG emissions field as well as other aspects of the domestic and international energy industry, including trading and marketing of GHG emission allowances and credits, GHG emissions-related commodities and products, their underlying markets and regulation, and contractually allocating and hedging specific risks inherent in their purchase, sale and production.

Our clients in this practice area span the spectrum, from entities making investments in projects through the Kyoto mechanisms of Joint Implementation (JI) and Clean Development Mechanism (CDM), to those currently engaged in the global trading of energy and energy linked commodities and products. We regularly advise both the American and European energy marketing affiliates of large independent power companies and regulated utilities, the energy trading and procurement divisions of regional electric utilities and gas distribution companies, and financial brokers active in promoting emissions trading globally.

With the European Union implementing the world's largest carbon dioxide emissions trading regime, distinguished by mandatory caps for large industrial sources on carbon dioxide emissions, emissions trading is no longer just an intriguing experiment for power generators in Europe, it is a necessity. Troutman Sanders attorneys have been involved in this rapidly evolving regime as well as others around the world since their inception.

We offer a comprehensive legal service including guidance and advice on:

- Emissions Trading under the EU ETS whether exchange based or OTC (including under European Federation of Energy Traders (EFET), International Emissions Trading Association (IETA) and International Swaps and Derivatives Association (ISDA) single or master trading agreements)
- The Kyoto Protocol and cross-border trading of Assigned Amount Units (AAUs)
- The secondary trading of Certified Emissions Reductions (CERs) and Emission Reduction Units (ERUs)
- The voluntary offset markets and trading in verified emission reductions (VERs)
- Corporate climate change policies and carbon trading strategies

In support of our clients' various energy trading, marketing and risk management activities, Troutman Sanders has developed, negotiated, customized and advised on energy-related ancillary credit support documents.

Our climate change-related business experience includes the following:

- Troutman Sanders is an active participant in the EU's emerging regime through its role as outside general counsel to the European Federation of Energy Traders (EFET), a trade association comprised of over 80 prominent electric, oil and gas and financial institutions based in 18 countries throughout the world, the majority of whom are the significant traders of emission allowances under the new EU regime.
 - On behalf of EFET, Troutman Sanders has developed one of the principal industry standard sets of documentation under which EU emissions market participants are currently trading EU Allowances and has represented EFET in working with the International Swaps and Derivatives Association (ISDA) and the International Emissions Trading Association (IETA) to harmonize the three forms of industry documentation currently in use for trading EUAs. The firm is currently active in the three trade associations' efforts to address the secondary trading of Emission Reduction Units (ERUs) and Carbon Emission Reductions (CERs) as well as EU Allowances (EUAs) in phase II of the EU European Trading Scheme (ETS) and will represent EFET in all further industry efforts to coordinate emissions trading documentation undertaken between the three trade associations.



- The firm also coordinates the procurement of local country legal opinions addressing enforceability of the EFET Master Agreement, and its EU Allowance Appendix, in 20 European jurisdictions. This role has enabled us to develop and maintain unique personal relationships with both:
 - Internal counsel for all significant players in EU ETS; and
 - EFET's Pan-European group of local legal counsel familiar via these legal opinions with both trading issues and the local legal requirements of participating in the emissions trading market.
- Troutman Sanders, an active member of ISDA, was a participant in ISDA's working group to draft the initial ISDA EU Emissions Allowance Transaction Long-Form Confirmation. The firm has worked with ISDA toward harmonization of the ISDA and EFET Agreements, contributing extensively to ISDA's role in the industry harmonization process resulting in its recent release of new allowance trading documentation:
 - A form of Part [6] to the Schedule to an ISDA Master Agreement for EU Emissions Allowance Transactions and
 - A form of Confirmation of OTC Physically Settled EU Emissions Allowance Transaction (Short Form).
- The firm has advised clients on membership and access agreements on, as well as, where applicable, the purchase of seats on all major global energy commodity exchanges:
 - New York Mercantile Exchange (NYMEX)
 - Chicago Board of Trade (CBOT)
 - UK's International Petroleum Exchange (IPE), now known as the Intercontinental (ICE Futures)
 - UK Power Exchange (UKPX)
 - NordPool Power Exchange for Europe's Nordic energy markets
 - European Energy Exchange (EEX)
 - Amsterdam Power Exchange (APX)
 - Powernext
 - EXAA
- The firm advised the Metropolitan Atlanta Chamber of Commerce in developing an emissions credit banking and trading program which was adopted and implemented by the State of Georgia Environmental Protection Division.
- The firm advised a prominent emissions credit broker regarding its engagement, on an exclusive basis:
 - By a project development company, to provide marketing and brokering services relating to the forward sale of nearly five million potential Certified Emission Reductions (CERs) created as a result of an HFC decomposition project in South Korea, and
 - To provide marketing, brokering, asset management and other advisory services in respect of all CERs resulting from an energy company's conversion and/or replacement of a fleet of vehicles to use liquefied petroleum gas (LPG) instead of conventional gasoline and diesel fuels at various locations in India.
- The firm served as transactional and regulatory counsel to a greenhouse gas broker and registry agent with respect to the purchase, sale, and exchange of emission reduction credits resulting from conversion of an Argentine single-cycle gas-fired power facility to combined-cycle. The project was the first fossil-fuel project recognized by the U.S. as producing net emissions reductions. We assisted the client in forming relationships with the environmental



community and domestic regulators. We also negotiated monitoring and compliance agreements.

- The firm developed a comprehensive analysis and strategy for a client seeking to monetize emissions reduction credits through reforestation. This strategy involved an analysis of the value to the client of various carbon sequestration approaches, the emerging international view of sequestration under the Kyoto Protocol, and U.S. legislative and administrative initiatives in the area.
- The firm worked with an emissions credit broker to assist in the sale of emissions reduction credits resulting from the reduction of methane emissions from ruminant animals. Our work involved the preparation of transactional documents and development of a strategy to promote the sale of such credits.
- The firm advised a client regarding ownership of emissions reduction credits resulting from an industrial process. The client manufactures a product using carbon dioxide that would be emitted as a waste product but for the process, raising novel questions of “additionality” and “sequestration.”
- Troutman Sanders attorneys also advised both Powernext and Clearnet in revising the terms of their spot and derivatives market documents and concluding the terms of an endorsement agreement with EFET necessary for its participants to gain optimal closeout netting rights under French law.
- The firm has advised clients with weather-sensitive risk profiles in the review, negotiation and purchase of over-the-counter weather derivatives, both on a stand alone basis and under one or more master swap agreements. We have also advised clients creating a market in weather derivatives on form documentation, policies and procedures relevant to this product market.

The firm has assisted numerous clients in developing, reviewing and negotiating documentation for transactions involving the certification of traded energy from green and renewable sources, as well as derivative trading in the renewable and green certificates themselves, unbundled from an underlying energy supply.

Project Investment

Our environmental, trading, and project development attorneys advise on all aspects of investment in and approval of CDM and JI projects from project design document (PDD) approval to financing and further monetization using Emissions Reduction Purchase Agreements (ERPAs) in the context of project finance transactions. Further, we have advised on investments in and due diligence on Kyoto related products and funds.

Selected experience in addition to our renewable energy project development experience:

- The firm is advising an ocean energy developer relating to CDM opportunities under the Kyoto Protocol.
- The firm is advising a hedge fund on legal and operational issues relating to an investment in a JI project in Russia.
- The firm has advised on the approval process for various methodologies under Project Design Documents submitted for both JI and the CDM projects, including on the question of additionality.
- The firm advised a leading participant in the worldwide independent power market on how to evaluate and monetize greenhouse gas reductions in its international project development activities and established a template for the capture of carbon dioxide credits in various international power development projects, including developing contracts for the allocation of greenhouse gas credits and risks associated with those credits.



Speaking Engagements and Publications

The firm's attorneys routinely are invited to speak at conferences and publish on greenhouse gas issues. In the last several years, firm attorneys have spoken on these issues at conferences and seminars organized by the U.S. Chamber of Commerce, the Edison Electric Institute, Georgetown University Law School, the Library of Congress Congressional Research Service, and the Carolinas Air Pollution Control Association. Members of the firm are also frequently requested to lecture and speak at industry gatherings on the risks of participating in the EU Member States cap and trade mechanisms and similar implementation activities under the Kyoto framework.



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