

THE MISSING LINK: GREENHOUSE GAS
EMISSIONS TRADING BETWEEN THE
EUROPEAN UNION AND THE UNITED STATES?

by

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Abstract

This paper uses existing literature on economic, political, and legal issues surrounding market linkages to analyze the possibility of linking two specific greenhouse gas trading markets: the Regional Greenhouse Gas Initiative in the Northeastern United States and the European Union Emissions Trading System. The opportunity to connect trading systems between the European Union and the United States might be beneficial for both programs because it could create a bigger market and lower costs, while at the same time taking a large international step forward in the process of developing a global greenhouse gas trading market. In order to allow trading from one program to another, however, a link would need to pass constitutional muster. In general, the federal government has the authority to address foreign policy. A link between RGGI and the EU would need to be as informal and private as possible in order to avoid stepping into federal territory.

Furthermore, there are practical considerations that would need to be addressed. Although the cap-and-trade systems in the EU and the United States share many similar features, there are some important differences between the two programs. Creating a link that would be economically and politically salient might require negotiations between RGGI and the EU. Negotiations could greatly implicate constitutional principles, like the dormant foreign relations power, causing linkage to become legally problematic. RGGI and the EU need to keep in mind important legal issues in designing any connection between their trading programs.

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I. Introduction

One approach that nations can take to reduce greenhouse gases is to use emissions trading markets. Once established, there is the potential for countries to link trading markets in order to create an international trading system. In 2005, the European Union became the first nation or group of nations to officially institute an emissions trading scheme. In the United States, although the federal government has not established trading for greenhouse gas emissions, states have begun to create smaller, regional markets for emissions. The state system that is the most mature is the Regional Greenhouse Gas Initiative (RGGI). RGGI is an agreement between nine northeastern states that establishes a greenhouse gas trading market beginning in 2009.

In the future, the EU and RGGI may attempt to link their trading markets in order to create a larger market and reduce costs. RGGI already allows industries to use allowances from the EU trading program as offsets in some cases to meet emissions targets, essentially creating a unilateral link between RGGI and the EU.¹ There are also indications that a bilateral link between the two trading markets might be attractive for both sides. In California, where the state is working to initiate a state-wide market for greenhouse gases, Gov. Schwarzenegger has directed agencies to develop a program “that permits trading with the European Union.”² If California is interested in bilateral trades with the EU, it is reasonable to assume that states participating in RGGI might

¹ REGIONAL GREENHOUSE GAS INITIATIVE, MODEL RULE (Jan., 2007), *available at* http://www.rggi.org/docs/model_rule_corrected_1_5_07.pdf, hereinafter “MODEL RULE.”

² Exec. Order No. S-20-06, ¶ 5 (Oct. 17, 2006) by the Governor of the State of California.

similarly be interested. Finally, the EU has indicated they might try to establish trading with RGGI beginning in 2013.³

The question still remains, however, whether it would be possible to link RGGI to the EU emissions trading scheme. Any kind of connection between the greenhouse gas market of a U.S. state and that of a foreign nation raises constitutional questions about state powers in the area of foreign affairs, especially because greenhouse gas allowances are not exactly the same entities as most products involved in trade.⁴ They are not tangible products, but rather government-created property rights. Although trading may occur between private operators, the ability of an operator to use foreign allowances to meet state-enforced emissions limits depends on government recognition of those allowances through state statutes and regulations.

Typically, U.S. states are not permitted to enter the domain of foreign policy. Establishing informal trading links, however, does not directly influence foreign policy in all cases. The nature of the link would dictate if a state infringed on the authority of the federal government to uniformly negotiate with foreign countries. Whether RGGI would be able to set up operations that included the EU without violating constitutional principles depends on the economic and political details incorporated into such a plan. This paper investigates if and when it would be constitutionally possible for RGGI to establish trading with the EU by considering different options for linkage. It discusses

³ Point Carbon, EU Carbon Trading Could Link With US After 2013, Carbon Market North America (Jan. 31, 2007) at 2.

⁴ See JAMES F. PERKAUS & KEVIN A. BAUMERT, RISKY BUSINESS: LESSONS IN RISK MANAGEMENT FOR AN INTERNATIONAL GREENHOUSE GAS EMISSIONS MARKET 2 (World Resources Institute 2001) (“Although a greenhouse gas allowance is not a traditional financial asset, it does share traits with currencies, stocks, bonds, and other financial instruments.”).

whether it would be wise to link markets, especially because there are significant differences in the two systems.

II. Background on Global Warming and Cap and Trade

A. Global Warming

By now, most of the world is aware of the threat of global warming, which has been characterized as one of the greatest existing environmental problems facing mankind.⁵ In 2007, the United Nations Intergovernmental Panel on Climate Change released its most recent report on the science of climate change and expected impacts. The Panel evaluated research from over 2,500 experts from around the world, completing the most comprehensive, current assessment of global warming risks. They concluded that “warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.”⁶

The large-scale impact of the greenhouse gases responsible for rising temperatures demands attention from all countries individually and through international cooperation.⁷ Such cooperation has already begun to take place. In 1992, 154 countries signed the United Nations Framework Convention on Climate Change (UNFCCC) which later entered into force in 1994.⁸ The Convention is a non-binding treaty to reduce the

⁵ See PEW CTR. ON GLOBAL CLIMATE CHANGE, GLOBAL FINGERPRINTS OF GREENHOUSE WARMING: A SUMMARY OF RECENT SCIENTIFIC RESEARCH (2006), *available at* <http://www.pewclimate.org/docUploads/Pew%20Center%20Global%20Fingerprints%20E06%2Epdf>.

⁶ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS: SUMMARY FOR POLICYMAKERS, CONTRIBUTION OF WORKING GROUP I TO THE FOURTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE 5 (Feb. 2007), *available at* <http://www.ipcc.ch/SPM2feb07.pdf>.

⁷ *Id.*

⁸ PEW CTR. ON GLOBAL CLIMATE CHANGE, THE EUROPEAN UNION EMISSIONS TRADING SCHEME (EU-ETS): INSIGHTS AND OPPORTUNITIES 2 (2006), *available at* <http://www.pewclimate.org/document.cfm?documentID=440> [hereinafter EU-ETS TRADING SCHEME].

greenhouse gas emissions that cause global warming. Signatory nations agreed to meet annually and discuss the progress being made to fight global warming.⁹

Negotiations during the Third Conference of the Parties under the UNFCCC led to the Kyoto Protocol, which was opened for signature in 1997 and ratified in 2005. The Kyoto Protocol sets mandatory emissions limits, requiring member nations to achieve an averaged 5.2% reduction in 1990 greenhouse gas emissions levels by 2012.¹⁰ Over 160 nations have ratified Kyoto. Even so, the United States, one of the largest producers of greenhouse gases, has not ratified the Kyoto Protocol, or even established its own formal system to reduce greenhouse gas emissions.¹¹

The Kyoto Protocol lays out four different options for countries to cooperatively reduce greenhouse gases. First, countries can jointly meet Kyoto commitments by forming what is called a “bubble,” whereby the total emissions from the bubble area would need to be equivalent to the total aggregated emissions allowable under Kyoto.¹² The European Union has made use of this technique – EU member states are meeting Kyoto targets as one.¹³ Thus, some nations in the EU would not have to reduce emissions, as long as the total EU emissions meet Kyoto.

⁹ *Id.*

¹⁰ *Id.*

¹¹ Instead of enacting regulatory measures to decrease greenhouse gases, the United States has chosen to rely on voluntary reductions from businesses. The United States has also encouraged the development of cleaner technologies. Miranda A. Schreurs, *The Climate Change Divide: The European Union, the United States, and the Future of the Kyoto Protocol*, in *GREEN GIANTS?: ENVIRONMENTAL POLICIES OF THE UNITED STATES AND THE EUROPEAN UNION* 207, 219-22 (Norman J. Vig & Michael G. Faure eds., 2004).

¹² Tom Tietenberg, Michael Grubb, Axel Michaelova, Byron Swift, and Zhong Xiang Zhang, *International Rules for Greenhouse Gas Emissions Trading: Defining the Principles, Modalities, Rules, and Guidelines for Verification, Reporting, and Accountability*, UNCTAD/GDS/GFSB/Misc.6, at 23.

¹³ *Id.*

Second, Kyoto allows nations to invest in “project-oriented emission reduction,” or “joint implementation” projects (JI) that reduce emissions in developed nations.¹⁴ Countries who invest in such projects can use emission reduction units (ERUs) to meet Kyoto targets.¹⁵ Third, Kyoto includes the “clean development mechanism,” (CDM) which is a way for individual countries to achieve emissions reduction by investing in economic development projects that environmentally benefit countries which may have a hard time paying for adaptations to address climate change.¹⁶ Countries who invest in CDMs can accrue certified emissions reduction credits (CERs) which, like the ERUs, can be used to meet Kyoto commitments.¹⁷

Finally, Kyoto allows countries to use emission trading to cooperatively meet Kyoto emission targets.¹⁸ Member nations to Kyoto are permitted to trade “assigned amount units” (AAUs) through an international cap-and-trade system. This last Kyoto option, cap-and-trade, is most relevant to this paper. Although Kyoto allows for trading, it does not outline the details of an international emissions trading system. It is still unclear how allowance trading on an international scale would take place as a practical matter.

B. Cap-And-Trade

Before beginning to explore the complexities of international cap-and-trade, it is first important to describe the basic components of cap-and-trade more generally. A cap-and-trade system is a market solution that has been used in the past to address air

¹⁴ *Id.* at 24.

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.* at 23.

pollution. The most well-known cap-and-trade system is the acid rain program that exists in the United States directed at air emissions of sulfur dioxide and nitrogen dioxide.¹⁹

The basic structure of cap-and-trade can be broken down into two main components: (1) the cap, itself and (2) trading under the cap. When a nation decides to use cap-and-trade, it will first decide to focus on one industry or a group of different industries.²⁰ Once regulators decide which industries or sources to regulate, the government will then set a cap on the amount of pollution emitted from those directed sources.²¹ That cap will generally be an amount less than the amount of emissions currently coming from the directed sources. The cap essentially acts as a limit on the total amount of pollution coming from the directed sources.

Once a cap has been set, regulators will then issue or sell permits to the directed sources for a fixed amount of emissions. The amount of emissions issued through permits corresponds exactly to the fixed cap.²² Thus, industry must have a permit or allowance for every amount of pollution that it emits. In that way, regulators can ensure that the amount of total emission is equal to the overall cap.

At the same time, however, the permit system allows industry flexibility in the way that it reduces its pollution emissions. If one source would have to pay high costs in order to make necessary emission reductions, that source can instead choose to purchase allowances from another source for less money in order to comply with emissions caps. Likewise, industry sources that are able to reduce emissions cheaply can then sell extra allowances and make money off of those sales.

¹⁹ Jonathan Remy Nash & Richard L. Revesz, *Markets and Geography: Designing Marketable Permit Schemes to Control Local and Regional Pollutants*, 28 *ECOLOGY L.Q.* 569, 582-87 (2001).

²⁰ *Id.* at 575.

²¹ *Id.*

²² *Id.*

As a result, cap-and-trade systems offer advantages to industry and can result in environmental reductions that are more economically efficient than typical command and control regulations like taxes. Although there are critics of cap-and-trade,²³ many experts agree that cap-and-trade is the most promising method of addressing greenhouse gas pollutants because it creates options for industrial sectors subject to regulation, resulting in a politically favorable alternative.²⁴

Cap-and-trade schemes for greenhouse gas emissions are such a popular alternative that there are a number of countries who have already implemented trading systems within their borders. For example, Japan has started a pilot trading program for a small number of companies (~ 30) in conjunction with subsidies that the government doles out to those same companies in order to encourage emission reductions.²⁵ Norway has recently initiated an emissions trading program, but on a much larger scale.²⁶ Cap-and-trade programs have begun on a sub-national level in Australia, where states have started to initiate trading as they wait for the federal government to decide whether to put a national program into place.²⁷ Additionally, many countries, including Canada, Russia, Switzerland, the Ukraine, and New Zealand, have begun to engage in discussions about emissions trading in the near future.²⁸

²³ See, e.g., David M. Driesen, *Choosing Environmental Instruments in a Transnational Context*, 27 *ECOLOGY L.Q.* 1 (2000) (arguing that an efficient cap-and-trade program requires standardized norms which is unworkable in the international context).

²⁴ See, e.g., Jonathan B. Wiener, *Global Environmental Regulation: Instrument Choice in Legal Context*, 108 *YALE L.J.* 677, 713 (1999).

²⁵ WOLFGANG STERK, MARCEL BRAUN, CONSTANZE HAUG, KATARINA KORYTAROVA, & ANJA SCHOLTEN, *READY TO LINK UP?: IMPLICATIONS OF DESIGN DIFFERENCES FOR LINKING DOMESTIC EMISSIONS TRADING SCHEMES*, WUPPERTAL INST. FOR CLIMATE, ENVIRONMENT AND ENERGY (JET-SET working paper, 2006).

²⁶ *Id.*

²⁷ NIELS ANGER, *EMISSION TRADING BEYOND EUROPE: LINKING SCHEMES IN A POST-KYOTO WORLD 2* (Discussion Paper No. 06-058, Centre for European Economic Research).

²⁸ *Id.*

Aside from these efforts, which are still in the early stages, there are two other nations that have much more mature cap-and-trade programs: the European Union and the United States. The European Union's Emissions Trading Scheme (ETS) is already in operation and is currently the largest emission trading program in the world.²⁹ Within the United States, sub-national trading schemes have started to emerge. The Regional Greenhouse Gas Initiative (RGGI) in the Northeast is set to begin operations in 2009 and has formalized many of the details associated with the trading program.³⁰

If RGGI connected its trades to the EU ETS, such a link could be significant for international climate change efforts. The United States and the EU are both large emitters of greenhouse gases. They are both also major players on the international negotiation stage regarding climate change. A link between RGGI and the EU could spur the United States into formally regulating emissions, and potentially influencing international climate change efforts. Before discussing the potential for a link between RGGI and the EU ETS, however, it is important to describe both trading systems in more detail.

III. The EU Emissions Trading Scheme

The EU ETS is a groundbreaking environmental achievement.³¹ It currently incorporates twenty-five countries (twenty-seven in the near future), six different industry sectors, and about 12,000 individual sources of carbon dioxide emissions.³² The plan

²⁹ Susan J. Kurkowski, Student Note, *Distributing the Right to Pollute in the European Union: Efficiency, Equity, and the Environment*, 14 N.Y.U. ENVTL. L.J. 698, 699 (2006); Council Directive 2003/87/EC, 2003 O.J. (L 275) 32.

³⁰ See *infra* Part IV.

³¹ EU-ETS TRADING SCHEME, *supra* note 8, at 3-4 ("Simply stated, the EU-ETS dwarfs all existing early [greenhouse gas] GHG trading systems as well as the U.S. programs designed to control sulfur dioxide (SO₂) under the Clean Air Act Amendments and nitrogen oxides (NO_x) under the NO_x Ozone Transport Commission.").

³² *Id.* at 1.

covers about 45% of the EU's total carbon dioxide emissions and the EU wants to expand the program to include more emissions in the future. In comparison, the U.S. acid rain trading program for sulfur dioxide only covers one industrial sector and about 3,000 sources of pollution.³³ The U.S. acid rain nitrogen oxide trading system only covers two industrial sectors and about 2,400 sources of pollution.³⁴

The EU ETS is set to run in phases. The first phase started in January of 2005 and runs through this year (2007). It is meant to be a trial phase. Beginning in 2008, the ETS will continue operations in successive five-year phases.³⁵ At the end of every phase, the EU will review the process and make amendments.³⁶ The EU ETS phases will correspond to Kyoto, so that the second EU ETS phase will end in 2012, the same year that marks the end of the first round of Kyoto targets.

During the trial phase, the ETS has only covered large industrial sectors³⁷ and one greenhouse gas, carbon dioxide (CO₂).³⁸ However, the EU will likely incorporate more sectors and more greenhouse gases during later phases.³⁹ The six industrial sectors covered during the trial phase include a range of installations: electricity and heat production plants with greater than 20MW capacity, oil refineries, coke ovens, metal, ore, and steel installations, cement kilns, glass and ceramics manufacturing plants, and paper, pulp, and board mills.⁴⁰

As in most cap-and-trade systems, the EU member states distribute a fixed amount of allowances at the beginning of every phase which are valid for all the years in

³³ *Id.* at 4.

³⁴ *Id.* at 4.

³⁵ *Id.* at 7.

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.*

⁴⁰ *Id.*

that phase. Industrial sources can trade allowances during each phase, but must surrender an allowance for every ton of CO² emitted at the end of each year.⁴¹ Individual EU member states determine the amount of allowances to be distributed in each state and the method of distribution.⁴² In phase one, states must give away at least 95% of allowances free of charge, and in phase two, states must give away at least 90% of allowances.⁴³ Installations can trade allowances directly with each other or they can use a market intermediary like a bank, but all transfers must be recorded electronically in order to change ownership.⁴⁴ Member states are also required to establish electronic registries for allowances. The Commission oversees all the registries and monitors for irregularities.⁴⁵

Each Member State must detail their allocation decisions in a National Allocation Plan (NAP) that is submitted to the European Commission before the start of each phase. The Commission reviews and analyzes all the NAPs based on eleven criteria including technical aspects, targets, and competition.⁴⁶ NAPs for the second phase must guarantee compliance with Kyoto emission targets.⁴⁷ Although some Member States did not submit their NAPs to the EU before the start of the first phase on January 1, 2005, at this time, NAPs from all twenty-five participating States for the first phase have been submitted and approved, with modifications in many instances.⁴⁸ In addition, states have begun to submit NAPs for the second phase to the Commission for review. During the first phase,

⁴¹ *Id.*

⁴² Cinnamon Carlarne, *Climate Change Policies and Ocean Apart: EU & US Climate Change Policies Compared*, 14 PENN. ST. ENVTL. L. REV. 435, 464 (2006).

⁴³ Council Directive 2003/87/EC, 2003 O.J. (L 275), art. 18.

⁴⁴ European Commission, Questions and Answers on Emissions Trading and National Allocation Plans, MEMO/05/84 (March 8, 2005) (updated June 20, 2005), at 8, *available at* <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/84&format=HTML&aged=1&language=EN&guiLanguage=en>.

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ LARRY PARKER, CONGRESSIONAL RESEARCH SERVICE REPORT FOR CONGRESS, CLIMATE CHANGE: THE EUROPEAN UNION'S EMISSIONS TRADING SYSTEM (July 2006), at CRS-4.

⁴⁸ Carlarne, *supra* note 42, at 464-65.

banking of excess allowances is allowed from year to year, but whether firms can bank allowances from one phase to the next is left to member state discretion.⁴⁹

For the first phase, states allocated an annual average of 1.83 billion allowances and set aside an annual average of 73.4 million allowances to allocate for new sources. However, the verified emissions for installations were only an average of 1.79 billion metric tons.⁵⁰ So, most states over-allocated allowances to installations (gave them more allocations than they needed). This over-allocation may have caused allowance prices to drop in 2006 because the supply was higher than the demand.⁵¹ The EU has stated they will be stricter when evaluating caps and allocations in NAPs for the second phase in order to prevent such over-allocation from reoccurring.⁵²

Under the ETS, industrial sources have the ability to “opt-out” of the ETS if they are using equivalent means to achieve reductions.⁵³ The “opt-out” option only applies to individual installations, however, not entire sectors, and can only be used during the trial phase.⁵⁴ Sources are also able to pool installations within sectors if they want to work together to meet industry targets.⁵⁵ Additionally, Member States are able to “opt-in” additional sources and sectors that are not already covered in the ETS.⁵⁶

The ETS lays out guidelines for monitoring, reporting, and verification of compliance.⁵⁷ The guidelines describe different methodologies that are ordered in “tiers”

⁴⁹ EU-ETS TRADING SCHEME, *supra* note 8, at 7-8.

⁵⁰ Parker, *supra* note 47, at CRS-5.

⁵¹ *Id.*

⁵² *See id.* at CRS-8.

⁵³ EU-ETS TRADING SCHEME, *supra* note 8, at 8.

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ JOSEPH KRUGER, FROM SO² TO GREENHOUSE GASES: TRENDS AND EVENTS SHAPING FUTURE EMISSIONS TRADING PROGRAMS IN THE UNITED STATES 14 (2005).

based on degrees of accuracy.⁵⁸ Installations are supposed to use the top tier methodologies, but may petition Member States to use methodologies from the lower tiers if they show that it is necessary.⁵⁹ All self-reported emissions must be verified by an independent third-party.⁶⁰

The penalties are large for a firm if it emits more CO² than covered by its allowances – 40 Euro per ton of CO² emitted in the first phase and 100 Euro per ton after that.⁶¹ Installations are also required to make-up missed reductions in the following year. During the trial phase, however, there is one relief.⁶² The European Commission can decide to issue additional, non-transferable allowances to an installation with unusually high emissions if there is a “force majeure” set of circumstances, or an act of God beyond the installation’s control.⁶³

Finally, the European Commission has issued a directive that will allow the EU to link its ETS to other trading schemes and also to project mechanisms of the Kyoto Protocol like the Clean Development Mechanism (CDM) and the Joint Implementation Mechanism (JI).⁶⁴ The EU can link to other trading schemes through bilateral agreements. At this time, no linkages to other schemes have been finalized under the directive, although Norway has agreed to link its trading program to the EU ETS under

⁵⁸ *Id.*

⁵⁹ *Id.* at 14-15.

⁶⁰ EU-ETS TRADING SCHEME, *supra* note 8, at 8.

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.*

⁶⁴ Council Directive 2004/101/EC, 2004 O.J. (L 338) 18.

the European Economic Area Agreement and is currently awaiting approval from Iceland and Liechtenstein.⁶⁵

As for the Kyoto Mechanisms, firms can use credits from developing countries under the CDM in the trial phase and firms can use credits from other countries under the JI starting in the second phase.⁶⁶ There is no limit to the CDM credits in the trial phase, but after that Member States will decide how many CDM and JI credits they will allow in their NAPs.⁶⁷ The European Commission Linking Directive provides that JI and CDM credits must be “supplemental” to a state’s domestic efforts, as defined in a state’s NAP. Each state is likely to define “supplemental” differently, so the limit on credit use will vary from state to state.⁶⁸

It should be noted that the EU is currently reviewing its ETS program and is expected to make amendments to the system later this year before the start of the second phase. As a result, some of the plan structure might change in the near future. However, the EU ETS structure for phase one will be used for the purposes of this paper, as it is the most finalized version and can serve as a general illustration for issues surrounding the linkage of RGGI and the EU ETS.

IV. The U.S. and the Regional Greenhouse Gas Initiative

The United States is one of the few countries in the world which decided not to ratify the Kyoto Protocol. In 1997, the Senate approved a bill that declared that the U.S. would not ratify any agreement regarding climate change unless the agreement imposes

⁶⁵ Press Release, The Norwegian Government Accepts to Include the EU Emissions Trading Directive in the EEA Agreement (March 2006), *available at* <http://www.regjeringen.no/en/dep/md/Press-Centre/Press-releases/2006/Norway-accept-EU-Emissions-Trading-Directive.html?id=419857>.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ Parker, *supra* note 47, at CRS-21.

adequate emission controls on developing countries and will not cause the United States to suffer harm economically.⁶⁹ Since rejecting the Kyoto Protocol, the United States has focused its climate change efforts on encouraging voluntary emissions reductions and technology development.

Even though the federal government has not taken efforts to initiate a formal climate change program, individual states have taken action. A large number of states and cities have decided to set local targets for greenhouse gas emissions.⁷⁰ Additionally, some states have organized regional trading programs. California recently passed a bill, AB 32, which requires the air resources board to cap emissions at 1990 levels by 2012.⁷¹ The board has free reign to use different mechanisms in order to cap emissions, and will likely employ some sort of cap-and-trade.⁷² California has also started to engage in negotiations with other Western states to initiate an interstate greenhouse gas emissions trading program in an area that would include Washington, Oregon, Arizona and New Mexico.⁷³

The most mature cap-and-trade program in the United States, however, is the Regional Greenhouse Gas Initiative (RGGI) in the Northeast. The process of developing RGGI started in 2003, when New York Governor George Pataki invited eight other governors in the Northeast to develop a regional plan to reduce greenhouse gas

⁶⁹ The Senate passed the bill unanimously. S. Res. 98, 105th Cong. (1997). The House had a similar bill which died in committee. H.R. Res. 211, 105th Cong. (1997).

⁷⁰ Gary C. Bryner, *Carbon Markets: Reducing Greenhouse Gas Emissions Through Emissions Trading*, 17 TUL. ENVTL. L.J. 267, 276 (2004).

⁷¹ Cal. Health and Safety Code §§38501-38599 (2006).

⁷² *Id.*

⁷³ Press Release, Natural Resource Defense Council, *Western Governors Launch Global Warming Initiative*, Feb. 26, 2007, <http://www.nrdc.org/media/2007/070226a.asp>.

emissions.⁷⁴ The agreement resulted in an interstate working group with twenty-five representatives from a variety of states. The working group produced a Memorandum of Understanding, which established the outline of a cap-and-trade program in the Northeast, called RGGI.⁷⁵

Seven states signed the initial Memorandum, including New York, New Jersey, Maine, Vermont, New Hampshire, Connecticut, and Delaware. In 2006, the working group released a Model Rule based on the Memorandum, which details regulations that each participating state can use to write its own implementing legislation.⁷⁶ Since that time, Massachusetts and Rhode Island have both joined RGGI.⁷⁷ Maryland is expected to join very soon, bringing the total number of participating states up to ten.⁷⁸

RGGI is set to begin trading in 2009. Like the EU ETS, RGGI only includes one greenhouse gas, CO₂, and focuses its cap on large industrial plants: electricity plants that are at least 25 megawatts and burn more than 50% fossil fuels.⁷⁹ The plan caps emissions

⁷⁴ MARC BRESLOW, THE NORTHEAST'S GLOBAL WARMING PLAN: A PRIMER (June 2006), available at <http://www.massclimateaction.org/RGGI/RGGIPrimerWeb1.pdf>.

⁷⁵ REGIONAL GREENHOUSE GAS INITIATIVE, MEMORANDUM OF UNDERSTANDING (Dec. 2005), available at http://www.rggi.org/docs/mou_12_20_05.pdf.

⁷⁶ MODEL RULE, *supra* note 1. Each state must adopt its own regulations to govern participation in RGGI by 2008. Sandra Bogdonoff and Jonathan Rubin, *The Regional Greenhouse Gas Initiative: Taking Action in Maine*, 49 ENVIRONMENT 9, 10 (March 2007). Member states have started developing draft rules in their own legislatures based on the Model Rule. See, e.g., Vermont's Draft Rule to Implement the Regional Greenhouse Gas Initiative (Jan. 9, 2007), <http://www.anr.state.vt.us/air/docs/VTPreProposal%20Draft%20Rule%20to%20Implement%20RGGI.pdf>; New York's Draft Rule to Implement the Regional Greenhouse Gas Initiative in the State (Dec. 6, 2006), <http://www.dec.state.ny.us/website/dar/part242draft.pdf>.

⁷⁷ Governor Donald L. Carcieri, 2007 State of the State Address, Jan. 30, 2007, transcript available at <http://www.governor.ri.gov/documents/statemessage07.pdf>; Press Release, The Commonwealth of Massachusetts Executive Department, Governor Patrick Signs Regional Pact to Reduce Greenhouse Gas Emissions, Jan. 18, 2007, available at http://www.mass.gov/?pageID=pressreleases&agId=Agov3&prModName=gov3pressrelease&prFile=reduce_greenhouse_gases011807.xml.

⁷⁸ *Maryland to Join RGGI This Month*, POINTCARBON.COM, April 12, 2007, <http://www.pointcarbon.com/article21631-882.html?articleID=21631&categoryID=882>.

⁷⁹ MODEL RULE, *supra* note 1.

at current levels (~12 million tons) from 2009-2015 and then reduces emissions 2.5% every year resulting in 10% emissions reductions by 2019.⁸⁰

Under the Model Rule, each participating state receives a share of the total emission allowances based on its emissions outputs and then each state distributes allowances to covered power plants at the beginning of trading.⁸¹ States can allocate 75% of allowances as they see fit, but must either auction or sell 25% of allowances and use profits from those sales to benefit the public, such as by promoting renewable energy or by mitigating increases in consumer prices.⁸² Many states have already proclaimed that they will auction off 100% of allowances.

The Model Rule has compliance periods that last three years. As a result, power plants must have allowances that will cover their emissions for three years.⁸³ There is a safety valve for power plants, however. If after 14 months into a compliance period, the rolling average price equals or exceeds \$10/ton for up to 12 months, then the compliance period may be extended by up to three one-year periods.⁸⁴

The Model Rule also allows power plants to use offsets to cover emissions. Offsets can result when plants sponsor CO2 reduction programs from sources outside of power plants (e.g. methane capture from landfills).⁸⁵ Initially, generators are allowed offsets to cover up to 3.3% of emissions and those offsets can come from anywhere in the US. Another safety valve exists for operators in terms of offsets, however. If average prices rise above \$7/ton, generators are allowed offsets to cover up to 5% of emissions.⁸⁶

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

⁸⁶ *Id.*

Additionally, if prices rise to above an average of \$10/ton, generators are allowed offsets to cover up to 5% of emissions for the first three years in a compliance period and 20% of emissions for the remainder of the compliance period and generators can use offsets from outside the United States including from the EU ETS and Kyoto's CDM.⁸⁷ The plan also recognizes early reduction credits for the sponsoring of CO2 reduction from when RGGI is signed until 2009.⁸⁸

Monitoring and reporting will be handled by each state, individually, but the Model Rule requires that power plants install specified equipment that would track and monitor CO2 emissions from each plant.⁸⁹ The Model Rule also establishes guidelines for a northeast registry which will electronically keep track of emissions and allowance transfers. This registry will be based in New York.⁹⁰ The Model Rule specifies that if a plant has more emissions than it has allowances during a compliance period, that plant would be required to surrender three allowances in the next compliance period for every emission unit that it was over.⁹¹ Additionally, plant operators can be held civilly liable and may face jail time depending on the seriousness of the violation. Member states are free to revise or impose additional penalties for violations.⁹²

V. Linking RGGI to the EU ETS

There are potential benefits for both sides by linking RGGI to the EU ETS. Allowing trade across borders would give industry more alternatives in terms of deciding whether to spend money on reduction measures or to buy allowances. A bigger market

⁸⁷ *Id.*

⁸⁸ *Id.*

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.*

⁹² *Id.*

means more options for every operator. More options means greater economic efficiency because the market will allow the installations with the lowest costs to make reductions and the industries with highest costs to buy allowances.

Linking trading markets might also reduce “leakage” problems in both systems. Leakage is a term for when regulated industry escapes across the border and leaks emissions outside of the regulated area. Linking markets cuts down on the area for potential leakage and also gives industry more options. The more attractive the market, the less incentive industry has to leave and leak emissions elsewhere.

Finally, linking RGGI and the EU might have specific international benefits. The EU and the United States are two of the biggest greenhouse gas emitters in the world. Trading between markets would be a small step towards efforts to reduce those emissions. What’s more, such a link would send an even bigger international message to the rest of the world. It could stimulate other countries or the federal government of the United States to reengage in negotiations on global climate change solutions.

In order to decide whether a link between RGGI and the EU would be possible, an important domestic question is whether it would be constitutionally possible for a U.S. state to trade greenhouse gas emissions allowances with a foreign country.

A. Constitutional Issues

At first glance, it might appear that it would be a violation of the Constitution for RGGI to form any sort of connection with the EU because the President and in some cases the Congress have the supreme voice over foreign policy. But, the issue is not that straightforward. Recognizing allowances between trading plans is not directly related to foreign policy. It would depend on the type of connection and the means of achieving

such a connection. The question of whether such a connection would influence foreign policy or could even be classified as foreign policy is much more nuanced. In fact, there might be constitutional room for RGGI to link its trading program especially because the federal government has not directly spoken to the issue of greenhouse gas cap-and-trade programs. In order to evaluate whether a connection would be constitutionally possible, a review of constitutional language is proper.

Foreign policy is not overtly addressed in the Constitution to any great extent. In terms of state powers in the area of foreign affairs, the Compacts Clause in Article 1 is most relevant. It declares that “No state shall, without the consent of Congress, . . . enter into any Agreement or Compact with another State, or with a foreign Power.”⁹³ The Framers’ included this wording because there was worry during the building of the federal government that states might try to cooperate in order to achieve political power over the national government.⁹⁴ Early courts interpreted the terms compact and agreement very broadly, however, so courts eventually relaxed the conditions under which it was necessary for states to get Congressional consent before making an interstate compact. Eventually, courts only required consent if the compact served to increase the political power of states.⁹⁵

State compacts with foreign powers, however, have not been treated so loosely. Courts have distinguished any agreements between states and foreign countries, largely because of the federal treaty power.⁹⁶ The federal government is understood to hold supreme power over federal policy. Although the Constitutional text does refer to foreign

⁹³ U.S. CONST. art. 1, § 10, cl. 3.

⁹⁴ Edward Swain, *Negotiating Federalism: State Bargaining and the Dormant Treaty Power*, 49 DUKE L.J. 1127, 1222 (2000).

⁹⁵ *Id.* at 1223.

⁹⁶ *Id.*

treaties when it discusses the federal government in articles I, II, and VI, the power of the federal government to control foreign policy issues is largely implied by the powers the Constitution provides to the Executive and by the Framers' intent.⁹⁷

Article I, §8, cl. 3 of the Constitution grants Congress the power to "regulate Commerce with foreign Nations."⁹⁸ The Court has extended the plain text of the Constitution to mean that the federal government has the exclusive authority to conduct foreign relations.⁹⁹ Thus, foreign affairs are generally under the purview of the federal government, not that of individual states. Essentially, states ceded any influence over foreign relations in order to become part of the larger union.

Furthermore, the Court has endowed the President with a vast authority to engage in foreign relations.¹⁰⁰ Although Article II, § 2 is the only place in the text of the Constitution that addresses the President's power in relation to foreign affairs¹⁰¹, the Court has assigned the President as the ultimate voice for foreign policy.¹⁰² The President

⁹⁷ See *infra* notes 11-12.

⁹⁸ U.S. CONST. art. I, § 8, cl. 3.

⁹⁹ ERWIN CHEMERINSKY, CONSTITUTIONAL LAW: PRINCIPLES AND POLICIES 385 (2d ed. 2002); *American Insurance Ass'n v. Garamendi*, 539 U.S. 396, 414 (2003) ("If we are to be one nation in any respect, it clearly ought to be in respect to other nations." (quoting *The Federalist* No. 42, 279 (J. Madison)); *Japan Line, Ltd. v. City of Los Angeles*, 441 U.S. 434, 449 (1979) ("Foreign commerce is preeminently a matter of national concern. . . . Although the Constitution, Art. I, § 8, cl. 3, grants Congress power to regulate commerce 'with foreign Nations' and 'among the several States' in parallel phrases, there is evidence that the Founders intended the scope of the foreign commerce power to be the greater.").

¹⁰⁰ *American Insurance Ass'n*, 539 U.S. 414 ("The President . . . possesses in his own right certain powers conferred by the Constitution on him as Commander-In-Chief and as the Nation's organ in foreign affairs." (quoting *Chicago & So. Air Lines v. Waterman S.S. Corp.*, 333 U.S. 103, 109 (1948))); *U.S. v. Curtiss-Wright Corp.*, 299 U.S. 304, 319-22 (1936) (stating in the realm of foreign affairs, "The President alone has the power to speak or listen as a representative of the nation.")

¹⁰¹ U.S. CONST. art. II, § 2 ("[The President] shall have power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur.").

¹⁰² See *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 610-611, 635-36 (1952); see also *First Nat. City Bank v. Banco Nacional de Cuba*, 406 U.S. 759, 767 (1972).

has the authority to not only enter into treaties with foreign nations, but also to issue executive agreements with other countries.¹⁰³

All this is not to say that a state government does not have any way to address international subject areas. Rather, it means that state action related to foreign policy is limited. It follows from the compacts clause that states cannot enter into a formal agreement, like a treaty, with a foreign power absent congressional consent. Whether states can enter into informal agreements is uncertain, however the ability of states to enter into informal agreements with foreign powers is more limited than the ability of states to establish informal pacts with other states. So, states participating in RGGI have a greater authority to create the Model Rule between states than to initiate trades with the EU.

A state's authority to engage with foreign nations depends on how much the action conflicts with or affects foreign policy. The treaty power of the federal government has precedence. To begin with, federal statutes dealing with foreign affairs, international treaties, and executive agreements preempt state statutes and regulations.¹⁰⁴ Typically, the preemption analysis for testing whether a state statute that addresses international matters is preempted by federal action is the same test used to determine whether a state statute is preempted by a federal statute. That being the case, it may prove helpful to say a few words about preemption.

¹⁰³ See, e.g., *U.S. v. Pink*, 315 U.S. 203, 223, 230 (1942); *U.S. v. Belmont*, 301 U.S. 324, 330-31 (1937) (recognizing the Litvinov Agreement preempted state policy on whether to recognize a claims assignment from the Soviet Union to the United States); *Dames & Moore v. Regan*, 453 U.S. 654 (1981) (recognizing that the formation of the Iran-United States Claims Tribunal as a forum to arbitrate against Iran preempted any state litigation on the matter).

¹⁰⁴ See, e.g., *Crosby v. Nat'l For. Trade Council*, 530 U.S. 363, (2000). U.S. CONST. art. VI.

Article VI states that federal law, including treaties, is the “supreme Law of the Land.”¹⁰⁵ Sensibly, this provision is generally understood to mean that state laws that conflict with federal action must yield to federal power. The preemption of state laws can be either express or implied.¹⁰⁶ Express preemption occurs when a federal statute explicitly says a state may not pass a law addressing a particular issue.¹⁰⁷ Alternatively, implied preemption can occur in three different ways. First, a state statute can be preempted if it invades a field of federal law that is “so pervasive” that there is no room for state regulation. This first type of implied preemption is called “field preemption.”¹⁰⁸ Second, a state statute that is in direct conflict with federal law is preempted.¹⁰⁹ Finally, a state statute “which impedes the achievement of a federal objective” can be preempted.¹¹⁰

The preemption analysis for foreign dealings extends even farther than that for domestic affairs. State actions with foreign powers can be constitutionally unsound if they interfere in any way with foreign policy. This type of preemption could be seen as field preemption, but in the specific context of foreign policy has been dubbed the “dormant foreign relations power.”¹¹¹ While the Court has employed it sparsely, as discussed below, this broad power has been used to preempt state laws even when there is not an express treaty on the matter, even if the state law is not in direct conflict with foreign treaties, and even if the state law does not impede federal objectives directly.

¹⁰⁵ U.S. CONST. art. VI.

¹⁰⁶ CHEMERINSKY, *supra* note 99, at 378.

¹⁰⁷ *Id.* at 380.

¹⁰⁸ *Id.* at 378.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ Brannon P. Denning, *International Decision*, 97 A.J.I.L. 950, 958 (2003).

Basically, a state statute can be preempted regardless of whether the federal government has already acted through statute, treaty, or executive agreement.

Undercurrents of a dormant foreign relations power first surfaced in *Zschernig v. Miller*.¹¹² In that case, the Court evaluated an Oregon probate statute which allowed foreign nationals to inherit property only if there was a reciprocal right for American citizens to inherit property in the foreign country and if there was proof that the foreign government would not confiscate the property in question.¹¹³ Even though the statute did not directly conflict with federal law or treaties, the Court concluded it was “an intrusion by the State into the field of foreign affairs which the Constitution entrusts to the President and the Congress.”¹¹⁴

The Court had previously upheld a similar probate statute in California as constitutional because the statute, on its face, did not directly conflict with foreign policy.¹¹⁵ In contrast, the Oregon probate statute could be distinguished because the application of the statute influenced foreign relations. The Court cited recent decisions in Oregon and other states where courts had conducted inquiries into foreign law and investigations into foreign diplomacy, and found “[t]he practice of state courts in withholding remittances to legatees residing in Communist countries or in preventing them from assigning them [was] notorious.”¹¹⁶ As a result, the Oregon law had affected “international relations in a persistent and subtle way.”¹¹⁷ The Court concluded that the Oregon law impacted foreign relations with the potential to adversely affect the power of

¹¹² 389 U.S. 429 (1968).

¹¹³ *Id.* at 431.

¹¹⁴ *Id.* at 432.

¹¹⁵ See *Clark v. Allen*, 331 U.S. 503 (1947) (holding a California probate statute which required reciprocity did not encroach on federal powers).

¹¹⁶ *Zschernig*, 389 U.S. 440.

¹¹⁷ *Id.*

the federal government to interact with some countries.¹¹⁸ So concluding, it developed a direct effects test that preempts state statutes that directly affect foreign policy.¹¹⁹

Since *Zschernig*, the Court has not often revisited the dormant foreign relations power. *American Insurance Ass'n v. Garamendi* is the only other case in which the Court has expressly relied on the dormant foreign relations power to preempt state statute.¹²⁰ *Garamendi* dealt with the California's Holocaust Victim's Insurance Relief Act of 1999 (HVIRA) that required any insurance company dealing in California to disclose involvement those companies may have had with the insurance policies of Holocaust victims. California enacted HVIRA in order to allow Holocaust victims to gain redress for violations suffered during World War II, when Nazi officials had forced victims to relinquish or cash in their insurance policies.¹²¹

American Insurance argued HVIRA intruded on executive agreements already established which created a foundation with funds to address Holocaust claims.¹²² Those agreements stipulated that any claims would be settled through a voluntary organization, called the International Commission on Holocaust Era Insurance Claims (ICHEIC) using monies from the foundation.¹²³ The majority of the Court agreed with American Insurance and relied heavily on *Zschernig* to reach a 5-4 decision stating the executive agreements preempted HVIRA.¹²⁴

Although the *Garamendi* Court cited *Zschernig* as authority for a dormant foreign relations power, it did not use the same direct effects test. Instead, the Court set up a

¹¹⁸ *Id.* at 441.

¹¹⁹ *Id.*

¹²⁰ *American Insurance Ass'n v. Garamendi*, 539 U.S. 396 (2003).

¹²¹ *Id.* at 401-12.

¹²² *Id.* at 413.

¹²³ *Id.* at 401-12.

¹²⁴ *Id.* at 401.

two-step analysis based on whether HVIRA involved a traditional state interest. If a state law addressing foreign policy did not fall under traditional state competence, the Court suggested field preemption was an appropriate remedy whether or not the federal government had already acted.¹²⁵ If, instead, a state law did fall under state interest, the Court stated the law would need to more directly conflict with federal enactments, and then a court would need to weigh the strength of the foreign policy interest against the importance of the state concern.¹²⁶

In evaluating HVIRA, the Court concluded foreign policy interests outweighed state interests in the matter of “vindicating victims” of war crimes.¹²⁷ Additionally, there was evidence of clear conflict between HVIRA and the executive agreements. The Court stated HVIRA “‘compromises the very capacity of the President to speak for the Nation with one voice in dealing with other governments’ to resolve claims against European companies arising out of World War II.”¹²⁸ The Court went on to say, “[t]he basic fact is that California seeks to use an iron fist where the President has consistently chosen kid gloves.”¹²⁹ HVIRA would compromise the President’s diplomatic intentions.

B. Implications for RGGI and the EU

In the end, the dormant foreign relations power is a complicated constitutional principle. Furthermore, it is still unsettled in the courts as to when a state would cross the dormant line into federal powers. In terms of RGGI and the EU, it is extremely unlikely that they could establish a formal trading agreement because of the Compacts Clause, but it might be possible for them to develop informal reciprocal rules that would apply to

¹²⁵ *Id.* at 420.

¹²⁶ *Id.*

¹²⁷ *Id.* at 421.

¹²⁸ *Id.* at 424.

¹²⁹ *Id.* at 427.

both programs as long as the rules do not violate the dormant foreign relations power.¹³⁰ For example, RGGI could potentially add something to the Model Rule that would allow industries to use EU allowances to meet emissions targets and the EU could include similar language in amendments to its emissions trading scheme directive.

This kind of informal arrangement might be possible especially because the federal government has not expressed a position regarding cap-and-trade programs for greenhouse gases. Although, the federal government has mentioned climate change through a number of different channels, there are no federal actions that directly regulate greenhouse gases.¹³¹ Both the Congress and the President have opposed Kyoto, but have not passed alternative methods to address global warming.¹³²

Although President Bush has presented the Clear Skies Initiative, which many view as an alternative to membership in the Kyoto Protocol, it has not passed muster in Congress.¹³³ The Clear Skies Initiative implements a number of carbon reducing instruments, including a cap-and-trade scheme and the granting of emission-reduction assistance to developing countries.¹³⁴ Clear Skies Acts related to the initiative have since

¹³⁰ See Michael A. Mehling, *Bridging the Transatlantic Divide: Legal Aspects of a Link between Regional Carbon Markets in Europe and the United States*, 7 SUSTAINABLE DEV. L. & POL. 46, 47 (Winter 2007).

¹³¹ David Hodas, *State Law Responses to Global Warming: Is it Constitutional to Think Globally and Act Locally*, 21 PACE ENV'T L. REV. 53, 74 (2003).

¹³² In 1997, the Senate approved a bill that declared that the U.S. would not ratify an agreement regarding climate change unless it addressed developing countries and unless the United States did not suffer economic harm. The Senate passed the bill unanimously. S. Res. 98, 105th Cong. (1997). The House had a similar bill which died in committee. H.R. Res. 211, 105th Cong. (1997). Moreover, President Bush has stated that his administration is opposed to the Kyoto Protocol because it does not include major carbon-producing countries, such as China. Letters to Members of the Senate on the Kyoto Protocol on Climate Change, 1 PUB. PAPERS 235 (Mar. 13, 2001), available at <http://www.whitehouse.gov/news/releases/2001/03/20010314.html>; OFFICE OF MANAGEMENT AND BUDGET, STATEMENT OF ADMINISTRATION POLICY, Oct. 29, 2003, available at <http://www.whitehouse.gov/omb/legislative/sap/108-1/s139sap-s.pdf> (characterizing the Kyoto Protocol as “an international climate change agreement inconsistent with the views of the U.S. Senate”).

¹³² *Id.*

¹³³ Remarks Announcing the Clear Skies and Global Climate Change Initiatives in Silver Springs, Maryland, 1 PUB. PAPERS 226-32 (Feb. 14, 2002).

¹³⁴ *Id.*

been introduced in both Houses of Congress, most recently in 2005, but have not been approved in Congress.¹³⁵

The most relevant greenhouse gas federal action is an executive agreement that the President has entered into with Asian Nations, called the Asia-Pacific Partnership on Clean Development and Climate that focuses on encouraging the development of new technology that can reduce greenhouse gas emissions.¹³⁶ “The Partnership focuses on voluntary practical measures taken by [] six countries in the Asia-Pacific region to create new investment opportunities, build local capacity, and remove barriers to the introduction of clean, more efficient technologies.”¹³⁷

Of all the measures listed above, the Asia-Pacific Partnership is the only formal measure that deals explicitly with federal government action on climate change, but it does not expressly preempt state trading arrangements. In fact, the charter states that the partnership is meant to complement not replace the Kyoto Protocol, and will build on other global initiatives. Thus, it seems rather than prohibiting action, the partnership seeks to encourage other efforts to reduce greenhouse gas emissions.¹³⁸ Furthermore, given that the agreement focuses on developing clean technologies, rather than economic cap-and-trade programs, a state provision to initiate carbon trading with the EU is unlikely to directly conflict with or impede the Partnership. So, it is not probable that the Asia-Pacific Partnership, alone, will preempt state initiatives related to greenhouse gas emissions.

¹³⁵ Legislative Information, EPA, <http://www.epa.gov/air/clearskies/legis.html> (last visited April 6, 2006).

¹³⁶ Statement on the Asia-Pacific Partnership on Clean Development and Climate, 41 Weekly Comp. Pres. Doc. 1226 (July 29, 2005).

¹³⁷ U.S. DEPT. OF STATE, ASIA-PACIFIC PARTNERSHIP ON CLEAN DEVELOPMENT AND CLIMATE (2006), available at <http://www.state.gov/documents/organization/60955.pdf>.

¹³⁸ Charter for the Asia-Pacific Partnership on Clean Development and Climate, U.S. Dept. of State, Jan. 11, 2006, <http://www.state.gov/g/oes/rls/or/2006/59162.htm>.

Whether or not RGGI initiatives with the EU on carbon trading are preempted by formal federal action, they may still be preempted by the dormant foreign relations power. Considering that the Constitution assigns the Congress power to regulate commerce with foreign Nations, federal interest in this area is strong. The Court has also recognized a prominent federal interest in foreign commerce. For example in *Japan Line, Ltd. v. Los Angeles*, the Court struck down a state tax on Japanese shipping companies, stating, “[f]oreign commerce is preeminently a matter of national concern.”¹³⁹

Still, a tax can be distinguished from a trading scheme, especially considering that the Court in *Japan* was largely concerned with negative economic repercussions, including double taxation.¹⁴⁰ A carbon trading link would not affect commerce with foreign nations in the same negative way that a tax might.

A carbon trading link could fall under the police powers of the state to look after the interest of its citizens. A trading scheme would increase environmental well-being by encouraging the reduction of greenhouse gases, while saving businesses money by allowing them to trade carbon credits in a larger market. Reducing greenhouse gases would greatly benefit a state’s “long-term economic well being” because climate change is expected to place a heavy burden on the natural resources of the states, as well as on their agricultural productivity. Successful trading programs could also have other benefits for a state including better air quality, reduced traffic, and lower odors from animal farms.¹⁴¹ Such benefits can be enormous, even just for one state. Linking RGGI to the EU ETS has the potential to make it easier for state businesses to comply with stringent emission caps because the EU ETS is such a large and comprehensive

¹³⁹ *Japan Line, Ltd. v. Los Angeles*, 441 U.S. 434, 448 (1979).

¹⁴⁰ *Id.* at 449.

¹⁴¹ *Id.*

market.¹⁴² As a result, linking the two entities could also save states significant amounts of money and help it to more efficiently achieve its goals.

Even though climate change is often thought to be a global problem with impacts for all, the Court has recently recognized that an individual state can have a strong localized interest in the larger problem of global warming. In *Massachusetts v. EPA*, the Court noted that just because the effects of global warming can be “widely-shared,” that does not minimize the interests of a particular state.¹⁴³ The Court went on to cite sea level rise as one example of a worldwide climate effect that can have local consequences for coastal states.

Allowing RGGI to begin trading allowances with the EU may even be something positive for the federal government. If states are supposed to be laboratories for the nation, then why not have RGGI experiment with trading links? Then, the federal government can better evaluate the most beneficial design for a cap-and-trade program before launching one nationwide. Furthermore, encouraging regional cooperation may be beneficial. Even though climate change is a global problem, the causes and solutions for global warming can vary from region to region. What might be the best way to address climate change for California might not be the best way for states in the Northeast to address the problem. So, it would behoove the federal government to use regional trading programs when they do begin a national cap-and-trade. It could use regional cooperatives that would be administered by a central administrative authority, much the same way that coastal resources are currently managed in the United States. In that case,

¹⁴² See EU-ETS TRADING SCHEME, *supra* note 8.

¹⁴³ *Massachusetts v. EPA*, 127 S. Ct. 1238, 167 L. Ed. 2d, 248, 270-71 (2007).

a strong trading market like RGGI would be beneficial for the federal government over time.

Of course, establishing a trading initiative between the EU and RGGI may interfere with the administration's protests against the Kyoto Protocol. Setting up a trading scheme between the EU and RGGI could undermine the President's disapproval of Kyoto. If Kyoto member states can deal with sub-states, there is not as much need to meet United States' demands. Thus, the efforts of the President and the Senate to integrate developing countries into the Kyoto Protocol would be less effective.

Still, a link between RGGI and the EU would be markedly different from the matter in *Garamendi*. The statute at issue in *Garamendi* affected the President's wartime authority. A link between RGGI and the EU might only affect the power of the government to negotiate environmental treaties. This is especially relevant because the Court in *Garamendi* emphasized that during wartime the President's authority is expanded. A cap-and-trade market linking RGGI with the EU would be aimed at facilitating private voluntary exchanges, not at resolving public international disputes. It is not as if RGGI would be ratifying a formal policy with the EU on how to address climate change, but rather a link would only serve to facilitate efficient trading markets. While it is true that public regulations would need to be in place in order to ensure an efficient trading scheme, the private market would be controlling the trades, rather than public negotiations. As a result, international diplomacy is not at stake in as precarious a way as it was in *Garamendi*.

So, there is potential for some kind of informal link between RGGI and the EU, which brings us to the question of what kind of link would need to be established in order

to have market benefits for both sides. Trading greenhouse gas emissions allowances is not like trading fixed products. Allowances from one trading scheme are not exactly like allowances from another trading scheme.

C. What Would RGGI and the EU Be Trading?

In some ways, RGGI and the EU ETS are very similar. Both programs cover similar industrial sectors and the same greenhouse gas (CO₂). They both also have similarly stringent emissions reductions. Both programs have strong monitoring programs in place and strong penalties for violations. Finally, RGGI and the EU ETS are both decentralized trading schemes that leave many decisions up to the individual participating states.

However, there are still significant differences between the two plans. First, the way that both programs allocate allowances is not the same. The EU gives most of its allowances away for free while RGGI states will likely auction off most of its allowances for profit. In the short term, this means that industry in the EU might have more money to make reductions or buy allowances, but this difference probably won't have large effects over time.¹⁴⁴

A more significant difference is that the EU and RGGI operate using different trading units. An allowance in the EU is equal to one ton of CO₂, but an allowance in RGGI is only equal to a short ton of CO₂, which is about 90% of a regular ton.¹⁴⁵ So, at the very least, some sort of minimal exchange rate would have to be established in order to allow industry in the RGGI area and the EU to make equal trades.¹⁴⁶

¹⁴⁴ Sterk, *supra* note 25.

¹⁴⁵ *Id.*

¹⁴⁶ *Id.*

Further complicating the matter is that RGGI states have the ability to bank allowances for unlimited periods of time. This means that a RGGI operator can save an allowance it is not using until the price is high at which time it can sell that allowance for a good price. Banking was not allowed during the trial phase of the EU ETS and may or may not take place in later phases, depending on how individual participating states decide to act. If most EU member states decide not to allow banking, RGGI operators would have more flexibility in the market than EU operators to hold out and wait for better prices before they buy or sell allowances.¹⁴⁷

Additionally, RGGI's complicated system of safety valves might create even greater wealth for RGGI industries. Under the RGGI system, if the price reaches a certain amount, compliance periods could be extended by up to three years, granting RGGI industry more flexibility in meeting emissions targets which means they would have more freedom to buy and sell allowances.¹⁴⁸ Furthermore, RGGI operators are able to use offsets to meet ~3% of their emissions targets, while EU operators can only use CDM and JI credits as supplemental to other efforts, as defined by each member state. RGGI operators even have the potential of using offsets for up to 20% of their emissions when the price of allowances increases. So, again, RGGI operators have more flexibility in the market because they are able to meet emissions targets using offsets while still holding on to allowances for trade.

Finally, the EU is more limited in the amount of RGGI allowances it can use to meet emission targets under Kyoto since the United States has not ratified Kyoto. The EU would have to ensure that it would have an adequate amount of allowances and have

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

a means to stop trading with RGGI if a large amount of RGGI allowances started entering the EU market.¹⁴⁹

As a result, simple reciprocal rules recognizing allowances on both sides might not be economically or politically favorable for either RGGI or the EU if there were large restrictions or great amounts of wealth transfers from one area to another.

D. Solutions

Based on the differences between the two trading programs in RGGI and the EU, there are both economic and political disadvantages to creating reciprocal rules that would leave the two programs unchanged. To begin with, RGGI's use of banking, compliance periods, and safety valves has the potential to create economic advantages for RGGI over the EU. RGGI industry might become wealthier by selling a large amount of allowances to industry in the EU for high prices. Depending on the market, the EU might be able to make some gains in wealth too. If EU member states continue to over-allocate allowances, EU industries will have a greater amount of allowances to buy and sell giving them some advantage. Whether RGGI or the EU has a greater advantage in the market, however, it is probable that there will be wealth discrepancies between programs one way or another.

What's more, the potential for economic discrepancies creates political unrest. If RGGI has a lot to gain by linking, it is likely that the EU political leaders will want to create some advantage for the EU before putting reciprocal rules into place. Likewise, political powers in RGGI states will want to protect their own industry before agreeing to informal rules.

¹⁴⁹ *Id.*

In order to mitigate for economic and political complications, there are a few options. As mentioned above, RGGI and the EU could establish some kind of exchange rate that would accommodate the difference in value between the two allowances. An exchange rate could be as simple as something like one RGGI allowance equals 1.5 EU allowances, or it could be a flexible exchange rate that would depend on market conditions from day to day. If a flexible exchange rate was put into place, there is the potential for private groups to step in and help set exchange rates as well as help negotiate trades, much like banks already are able to do in the EU ETS.

RGGI and the EU ETS could also establish some sort of gateway, whereby trading could only take place up to a certain point.¹⁵⁰ Once a set threshold is passed, the gate closes and trading would stop. This might be an especially good solution for the EU's Kyoto problem. The EU could establish a total amount of allowances that it would recognize from RGGI. Once that amount of allowances entered the EU, trading would be stopped.¹⁵¹

Finally, RGGI and the EU could change their programs entirely to match each other, completely eliminating the possibility of wealth transfers. This would be the most extreme option for both sides.

Unfortunately, although these solutions might solve economic and political inequalities, using any of these solutions has the potential of making a link less constitutionally viable under the dormant foreign relations power. Engaging in any of these sorts of modifications would involve negotiations between RGGI states and the EU. Such negotiations would have a greater chance of implicating foreign policy. RGGI

¹⁵⁰ Mehling, *supra* note 130, at 51.

¹⁵¹ Sterk, *supra* note 25.

states could be seen as passively causing the EU to change its climate change measures. It would also mean that the EU could engage in negotiations with sub-states of the United States, giving the EU less incentive to talk to the national U.S. government. In the worst case, RGGI could cause the EU to change its policies regarding climate change. That might have the potential of sending mixed messages. The United States would not be speaking with one voice anymore.

Table 2 displays these trade-offs more visually. It lists the linking options in order from the most legally viable to the least legally viable option. Creating reciprocal rules without changing the program at all or creating unilateral linkage by recognizing offsets from one program or another (the first two options) would impinge on the dormant foreign relations power the least amount. They would involve almost no public negotiations because nothing in the programs would need to be changed. There would only need to be mutual, informal understandings about allowance recognition. Most of the trading could happen in the private sector with minimal public supervision.

Although legally strong, the first two options are economically and politically disadvantageous. As a result, it is likely that RGGI and the EU might explore one of the solutions at the bottom of the table. Unfortunately, attempts to gain advantages economically or politically implicates legal issues to a greater extent. All three solutions at the bottom of the table would almost certainly involve some sort of extended negotiation between the two sides which would be a constitutional problem. Using a gateway or changing both programs entirely would be even worse. In terms of the gateway, the public sector would have to be involved in monitoring when and how to open and close the gates. Finally, changing the structure of the program would be the

worst option because the states could be seen as directly impacting foreign policy by affecting the EU Directive.

VI. Conclusion

International markets for greenhouse gases are a promising option for combating global climate change, but they are still in their infancy. Only a small number of countries have initiated emissions trading schemes within their borders. Two programs, the EU ETS and the Regional Greenhouse Gas Initiative in the United States, however, are mature enough to explore options for linkage. Trading across borders could have economic advantages for both sides as well as serve as an experiment for the practicality of linking greenhouse gas markets on a larger scale.

There are important legal issues to keep in mind as RGGI and the EU embark on connecting their programs in any way. Most prominently, constitutional principles like the dormant foreign relations power have the potential for limiting linking options. There are significant differences between RGGI and the EU ETS, so regulators might be inclined to engage in ways to reduce economic and political problems, but negotiations would negatively implicate the dormant foreign relations power. Regulators from RGGI and the EU will need consider legal issues when trying to adjust for economics and politics. An exchange rate might be the best compromise between all three variables.

Still, bringing trading to the international level may be worth the effort, even if a connection between the EU and RGGI has the potential of violating the Constitution. Such a connection could entice the United States to regulate greenhouse gases on a national level or even to reengage in Kyoto talks. Whether or not RGGI and the EU decide to embark on this experimental linking path, it is likely that an international

trading market will emerge at some point. This study demonstrates the difficulties involved in linking across systems based on the different ways every program may define its allowances. It will be important to remain aware of these differences into the future and to weigh the risks and opportunities for all sides.

Table 2: Legal, Economic, and Political Viability of Linking Options

	Legal	Economic	Political
Linking As Is	+	-	-
Unilateral Link	+	-	+
Exchange Rate	+/-	+/-	+/-
Gateway	-	+	+
Change in Programs	-	+	+