



At A Glance *Climate Change*

Our Focus

Greenhouse gas emissions and climate change are increasingly important concerns for governments and businesses across the globe. As governments move to enact policies and regulations that will curtail greenhouse gas emissions, firms must understand and prepare for the possibility of a reduced greenhouse gas future. NERA's understanding of market structure, regulatory incentives, and the economic instruments relevant to most climate change policies can form a key component of firm and industry strategies for dealing with greenhouse gas challenges.

NERA's advisory services build on expertise gained as economists at the US President's Council of Economic Advisors, the World Bank, the UK Department of Transport and HM Treasury, the US Environmental Protection Agency, as well as from many years' experience in various industries subject to environmental regulation.

Greenhouse Gas Emissions Markets

New climate change policies, whether they be binding targets for renewable energy, caps on net emissions, or "carbon taxes," will create new markets and place a price on emissions of carbon dioxide and other GHGs. These new markets will create both new challenges and new opportunities for individual firms and industries. Understanding these new markets will be crucial for firms wishing to succeed in the new environment.

NERA's Environment practice has been involved with all of the major emissions trading programs to date in the United States, and has helped the European Commission, the UK government, and the Irish government with the design and implementation of greenhouse gas trading schemes. NERA has also helped many private clients analyze the effects of emissions trading schemes on their businesses. NERA understands all aspects of trading program design, and has practical experience to go along with theoretical understanding. NERA experts can help firms to analyze the marginal costs of emissions reductions, determine optimal allocation mechanisms and other program design issues, assess their market position as allowance buyer or seller, manage GHG liabilities, and design bidding strategies for allowance auctions.

Product Markets

The added costs of complying with climate change regulations will change the overall cost structures of many sectors, notably electric power and other energy-intensive industries. These new costs will affect the operations of individual facilities and the output of the market as a whole. In most cases, some additional costs may be passed on to customers through higher product prices, and to suppliers through lower input costs. NERA economists have considerable expertise analyzing market characteristics and how they affect firm and sector performance. NERA's experience in the energy sector gives our experts important insights into the effects on input and output prices, and in the ways these affect other sectors. NERA can also help firms to understand interactions between climate change policies and other environmental requirements.

Client Experience

Implementation of UK government's National Allocation Plan under the EU ETS

NERA has provided assistance to the UK government to design and implement the UK's National Allocation Plan under the EU Emissions Trading Scheme. NERA has helped the government to address a wide range of issues raised by various affected industries, including recognizing early action, providing for new entrants, incentivizing CHP, and providing for rationalization of production.

Advice on preparing for EU ETS

NERA helped a major European electricity producer to understand how different approaches to allocation of emissions allowances by its government would affect its position and its overall business. NERA advised the client on how best to make a case for preferred approaches to allowance allocation, and provided further advice on how to prepare for the advent of the trading scheme.

International carbon emissions trading: Challenges and opportunities

NERA recently completed an in-depth study for a major Japanese utility to develop quantitative estimates of the effects of emissions trading programs, including effects on emissions trading and electricity markets. The analyses evaluated the effects of alternative allocation formulae, marginal CO₂ abatement cost curves, and trading implications, estimating the effects on the company's revenues under alternative scenarios. As part of the project, we met with officials at utilities in both Europe and the US to discuss climate change risk strategies.

Evaluation of alternative initial allocation mechanisms in a European Union Greenhouse Gas Emissions Allowance Trading Scheme

This study for the European Commission evaluates alternative allocation mechanisms for use in the planned European emissions trading program for greenhouse gases. The report has been circulated widely among top policy-makers, business leaders, and industry representatives, and formed the basis for discussion within European Member States about how best to distribute emissions rights.

Greenhouse gas trading: Assessing the impacts of alternative allocation mechanisms on the electric power industry

This study for the Electric Power Research Institute examines the impacts of alternative emission permit allocation mechanisms on the electric power industry. Results were developed using NERA's linear-programming model of the US electric utility sector, which simulates emissions trading in the power industry. The study provides insights on trading between emissions sources, and impacts to firm profitability, consumer rates, and energy services.

Publications

Consultation Document on UK's Implementation of the CO₂ National Allocation Plan Under the European Union Greenhouse Gas Emissions Trading Programme

Emission Trading: Experience, Lessons, and Considerations for Greenhouse Gases, prepared for the Pew Center on Global Climate Change

Evaluation of Alternative Initial Allocation Mechanisms in a European Union Greenhouse Gas Emissions Allowance Trading Scheme

Commentary: Obstacles to Global CO₂ Trading

Priorities for the Development of GHG Trading Programs: Implications of the US Experience

Tradeable Permits for Air Pollution Control: The United States Experience

About NERA

NERA Economic Consulting is an international firm of economists who understand how markets work. Our more than 45 years of experience creating strategies, studies, reports, expert testimony, and policy recommendations reflects our specialization in industrial and financial economics. Our global team of more than 600 professionals operates in over 20 offices across North and South America, Europe, Asia, and Australia.

NERA Economic Consulting (www.nera.com), founded in 1961 as National Economic Research Associates, is a unit of Mercer Specialty Consulting, an MMC company.

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