

Feeling the Heat: How Greenhouse Gas Emissions Standards and Trading Systems Are Creating Risks and Opportunities Around the Globe

By
David Orleans, Vice President
Willis Environmental Practice

Introduction

Whether you use the phrase global warming, climate change or climate crisis, and whether you believe that greenhouse gases are overwhelming or overhyped, one thing is clear: this issue is here to stay. The Supreme Court recently ruled that the EPA has the authority to regulate CO₂ and any other greenhouse gases under the terms of the Clean Air Act. States have enacted aggressive legislation, such as the California law that aims to bring emissions to 1990 levels by 2020. The European Union (EU) has also established emissions standards and a comprehensive trading system to manage and reduce greenhouse gas emissions. Government entities worldwide are now contemplating emissions standards and embedding them in trade agreements and treaties, such as the Kyoto Protocol. Whatever you think of the controversy that arose when the US and China did not sign it, that agreement brought global warming issues to the forefront of international

politics and trade. All of this activity points clearly in one direction: toward increased potential liability.

Meanwhile, green business practices and conservation efforts are gaining popularity, and corporations are being rewarded in the court of public opinion for proactive measures that address global warming. To stay competitive, corporations with any sort of greenhouse gas emissions will soon have little choice but to integrate exposure to global warming liability into their risk management programs. Insurance products being developed in the marketplace are likely to play an important part in these programs.

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Litigation Trends

Liability trends usually start with statistics – on illness, injuries or other measures of undesirable outcomes. Litigation follows. In this case, litigation may be a bit ahead of the supporting statistics. Broad complaints have been filed by numerous environmental groups and government agencies against major oil producers and auto makers alleging that they have

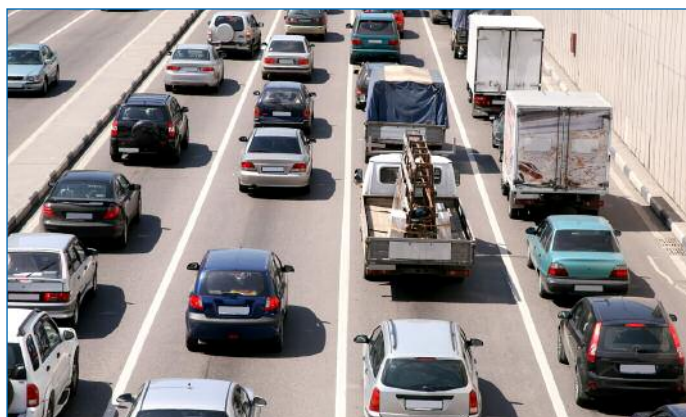


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contributed to global warming. California's attorney general brought a suit against the six largest automakers in 2006, arguing that they damaged the state's natural resources and created a public nuisance as they produced vehicles that collectively emitted massive amounts of greenhouse gases. The suit alleged that since the auto makers were liable for global warming, they were also liable for the costs for the increased emergency response services, health services, and environmental remediation services that global warming will necessitate. The Federal District Court in San Francisco recently dismissed the case on the grounds that causation had not been proved and that a wide variety of factors besides autos contribute to global warming.

Despite this setback, environmental advocacy groups are gaining momentum. While they may not yet have the evidence to prove causation, they are working hard to make the connections necessary to succeed in such legal action. Cases dismissed today, if presented tomorrow in a different light with better science, will likely have the traction necessary to establish that emitters of greenhouse gases are liable for damages to natural resources and other effects of climate change.



Once the statistical foundation is in place, greenhouse gases may follow the pattern set by other liability lightning rod issues. Mention asbestos or mold and corporations are often ready to settle rather than face the ultimate consequences of paying substantial compensatory and punitive damage awards. The tobacco industry provides another bracing example. Litigation against tobacco companies produced a cascade of trials and settlements that reshaped the entire industry, making it much less profitable and much more difficult for cigarette manufacturers to do business. If the statistics in the global warming arena evolve in a similar fashion, organizations involved in greenhouse gas emissions may see a drastic change in the business climate.

Regulatory Activity and "Cap and Trade" Systems

Advocates for reducing greenhouse gas emissions are also taking their cases to the legislatures. The regulatory frameworks on greenhouse gas emissions passed in California and in the EU are generating vigorous debate and often high praise. Global warming knows no boundaries; it is therefore probable that industrialized countries everywhere will soon enact their own emissions regulations. International treaties and stipulations in trade agreements add another layer of complexity to this already confusing scenario. Taken together, these factors are prompting solutions that have broad commercial implications.

One of the leading trends is toward cap and trade systems that work in connection with emission limits. Under these systems, companies that emit less than their emission allotment can sell the unused portion of their allotment on an open market. Companies that struggle to meet the standards can then buy that allotment. In effect, the buyer is being fined for polluting, while the seller is being rewarded for having reduced emissions. Critics of emissions trading point to problems with monitoring, enforcement and the initial allocation, but on the whole, the systems have been well received.

The EU trading system began in January 2005 and now includes the 27 EU member states. The program caps the amount of CO₂ that can be emitted from large installations, such as power plants and carbon intensive factories, and covers almost half of the EU's CO₂ emissions. While Phase I (2005-2007) of the trading system received much criticism due to oversupply of allowances and the distribution method of allowances, the EU's Commission has been tougher on member states' plans for Phase II. Most economists and environmental scientists agree that the first phase has in fact established a strong, viable market and compliance was high in 2006, increasing confidence in the system.

Smaller trading systems have also worked. A sulfur dioxide (SO₂) trading system was developed under the framework of the Acid Rain Program of the 1990 US Clean Air Act. Because SO₂ is less prevalent in the environment than CO₂, it has been easier to track and manage. The program is expected to cut SO₂ emissions to 50 percent of 1980 levels by 2010. Some experts argue that the trading system for SO₂ emissions reduces the cost of controlling acid rain by as much as 80 percent compared to other methods. The SO₂ program is serving as a template for CO₂ trading systems.

In Illinois, corporations voluntarily created a private CO₂ emissions trading system. Essentially, it is a smaller version of the EU trading system. The fact that it was done privately without government mandate shows that private industry realizes the value of such programs.

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Opponents of the trading programs argue that the net effect is simply maintaining emissions levels because companies with low emissions must be balanced by companies with high emissions, and because those with high emissions have a simple means of avoiding the potentially greater expense of reducing emissions. Proponents say that the system allows authorities to gradually reduce the allotments permitted, which encourages both sides to reduce emissions. Moreover, the business community clearly sees an opportunity here and will likely want to work with government agencies to develop a regulatory framework that establishes a viable, successful trading system.

Insurance Program Considerations

What are the immediate consequences for risk managers? What can risk managers be doing to ensure their insurance programs are adequately prepared for the new risk exposures associated with climate change?

Property

First and foremost, risk managers considering climate exposures are taking a hard look at their Property programs, seeking to bolster their coverage for wind, flood and business interruption for at-risk properties. In the aftermath of Hurricane Katrina, industries began to note that weather could be an indirect cause of catastrophic loss. Weather damage to older, outdated infrastructure can produce losses not even contemplated in risk management modeling. As a result, many businesses are seeking broader definitions of named perils and coverage triggers.



Climate change is certainly expected to increase frequency and severity of coastal flood and windstorm, but may also create new zones of high weather risk in interior regions as well. These factors have prompted insurance carriers to modify their catastrophe modeling and work to better anticipate how catastrophic events may cascade as a result of secondary effects not traditionally part of their calculations.

General Liability

Litigation and third-party liability related to greenhouse gas emissions are becoming increasingly messy and complex. Allegations of damages caused by greenhouse gas emissions are wending their way through the courts, generating substantial legal fees. While many of the cases are based on public nuisance, trespassing and general negligence laws, and plaintiffs may have insufficient evidence to support their claims, risk managers need only look back on the recent evolution of mold and asbestos liabilities to see what is possible. Huge sums are likely to be at stake, and businesses that emit greenhouse gases will be looking for products that provide coverage for the exposures.



Directors and Officers Liability

Sarbanes-Oxley created a new regimen of oversight and transparency that has rippled through all aspects of risk management. Directors and officers must now address environmental risk specifically in their annual reports and tax documents. Soon this area of reporting will also require that greenhouse gas emissions and the potential liability for resulting climate change be addressed. At all levels of planning and financial disclosure, therefore, risk managers will need to contemplate the risks associated with greenhouse gases and offer information about those risks to their shareholders. Corporate directors and officials of companies that could be deemed emitters will want reassurance that their Executive Risks programs provide coverage for any suits alleging failure to safeguard shareholder value from the impact of climate change.

Insurance Industry Response – A Work in Progress

Corporate officers are asking for insurance products that can transfer greenhouse gas emissions risk, and insurers are developing coverage offerings to meet the need. Products on the market now address a range of concerns.

- Renewable energy-related insurance products are allowing more companies and investors to participate in renewable energy projects and fast-growing carbon emissions trading programs.
- Willis has developed a program that can help cover potential underproduction of power from wind farms.
- Some insurers have already introduced programs that are geared toward commercial buildings that follow green standards, with rating guidelines that offer credits for green building materials and upgrades.
- Commercial auto insurers are developing pay-as-you-drive (PAYD) programs aimed at reducing greenhouse gas emissions by encouraging people to drive fewer miles.

Ultimately, however, the most comprehensive response to greenhouse gas emissions liability is likely to come from environmental insurers. Leading Insurers have already issued guidance on how they plan to tailor coverage for greenhouse gas emissions liability and some are developing underwriting guidelines on these issues. We will no doubt see more definitive products and programs soon.

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Given the insurance industry track record for excluding newer environmental risks such as asbestos and mold, it is possible that greenhouse gas emissions will become excluded in standard Property and Casualty policies. This will heighten interest in environmental products. The broad definitions of pollution in current environmental policy forms may already provide coverage, but greenhouse gas emitters will likely demand modifications and endorsements that explicitly address the issue. Coverage will likely apply to off-site remediation costs, property damage, and damage to natural resources. Bodily injury and on-site remediation costs may not be as directly applicable; nevertheless, all of the major coverage issues are expected to be in play.

Additionally, we expect the markets to offer programs that act as a financial guarantee, much like the cost cap or blended programs that have been successful in the past. In the trading markets, industries will need to guarantee that they can meet certain standards with the implementation of available technology. They will want to cap the costs necessary to meet the standards and transfer the risk of potential implementation cost overruns. Insurers will likely offer programs that cover the costs of meeting standards and the additional costs if these efforts fall short and emissions exceed standards.

The markets have already started disseminating literature on how such programs would work. Many are in the beginning phases of developing these programs and are progressing rapidly to meet the growing interest and nascent market demand. As we have in response to other areas of new and complex liability, Willis is working with carriers and industry leaders to develop solutions for these new exposures.

Environmental Insurance Solutions for Real Estate Exposures

By **Brian McBride, Senior Vice President**
Willis Environmental Practice

Site-Specific Pollution Liability and Contractors Pollution Liability insurance products have been available in various forms for more than 20 years, but their application for sophisticated real estate exposures has only recently come of age. While real estate exposures can be broadly categorized as stemming from either site ownership or development operations, each consists of more specific sub-exposures that can – and should – be covered by a comprehensive environmental program.

Site Ownership Exposures

There are distinct environmental exposures associated with past, current and future ownership of real estate. Fortunately, the risks associated with all of these may be mitigated by a Pollution Liability insurance program structured to address site-related exposures for single properties, specific groups of properties or even an entire real estate portfolio.

Current Holdings

The common function of most portfolio programs is to provide protection for an owner's current holdings. Even if the majority (if not all) of the sites in a real estate portfolio do not have any known environmental issues, the potential always exists for a catastrophic loss to arise from unknown pollution conditions.

Such losses usually result from:

- The operations of the site's previous owner(s)
- Pre-existing or new contamination emanating from a neighboring property and polluting the owner's site
- A new pollution condition caused by the operation of the facility, such as an indoor air quality issue (i.e., mold) or a spill or leak from a storage tank used for heating or backup power purposes, etc.

Currently owned properties often represent the easiest category to cover for three key reasons: they have most likely already undergone some level of due diligence, the sites have been put to their intended use, and they have their own individual environmental claim history. With this level of underwriting comfort, insurance carriers can focus on the exposures associated with the current operations performed at the property.

Divested Properties

Many businesses with site exposures focus their risk mitigation efforts on sites they currently own. In the process, they may entirely overlook potentially catastrophic exposures associated with their divested properties.

In the recent past, environmental insurance carriers routinely excluded sites after they had been either divested or abandoned. However, in today's insurance market nearly all carriers can schedule these sites upon request, and coverage can be crafted to apply to pollution conditions that may have occurred during or prior to a company's ownership of a divested facility.



In an effort to decrease their associated premium rate while still protecting against a latent catastrophic event, site owners may elect to take a higher self-insured retention for their divested properties. Usually, their ability to do so will largely depend on their level of comfort with the operations performed at these sites, as well as the number of years since the divestiture of the site.

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Acquired Properties

Regardless of whether or not a seller decides to retain the majority of the liabilities associated with a property, a new owner should *always* consider adding the property to their site-specific Pollution Liability portfolio program. Environmental coverage may serve to bolster an indemnification agreement for pre-existing known and unknown environmental liabilities while protecting the new owner from future exposures.

The ability to obtain insurance for properties with known environmental issues may also allow a real estate firm to shift their acquisition focus toward sites *with* existing contamination. Such sites are usually found with a depressed market value and are often located in areas where infrastructure supporting the site's intended operations is already in place.

The key to obtaining coverage for newly acquired property is demonstrating to carriers that the new owner's due diligence procedures are serving as the first line of defense in a risk mitigation effort. Once a level of comfort is established, lower risk sites (i.e., sites that have had a Phase I with no recognized areas of concern) may be automatically added to the program at a pre-established rate based on square footage and property classification.

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Sites with recognized areas of concern may also be added to the policy subject to a retroactive date matching the acquisition date. However, further information and underwriting would be required to remove or modify the retroactive date and to insure the broadest possible coverages for the site.

Transaction-Specific Programs

Many real estate firms purchase individual site pollution programs for their contaminated property transactions based on seller or lender indemnification requirements. Often, separate “one-off” programs are needed to address the unique issues of each transaction and its participants.

As the requirement for transaction-specific coverage normally results from the existence of active or residual pollution conditions, it is important to notify underwriters of positive changes in site conditions, such as the receipt of a “no-further-action” letter from the regulator with jurisdiction over the site. This should allow for the removal of any coverage restrictions associated with known conditions. It is also good practice to add sites from the existing (or any future) transaction-related programs to a portfolio program as their coverage expires.

Applicable Insurance Products and Coverage Solutions

Several environmental insurance carriers offer Site-Specific Pollution Liability policies that are designed to address fixed facility exposures, including first-party and third-party cleanup costs, third-party bodily injury and property damage (including third-party business interruption and natural resource damage), transportation exposures, disposal liability and defense costs.

Development Exposure

In addition to the site ownership exposures discussed thus far, real estate firms must also address the set of exposures resulting from real estate development and third-party property management.

Covered Operations

During the course of site development, developers will face environmental exposures from the various site activities and operations carried out by or on behalf of the developer – so-called “covered operations”. Coverage for such risks is available through a Contractor’s Pollution Liability policy. These programs may be written on either an annual gross receipt basis or a project receipt basis.

Exposures

The developer’s environmental exposures associated with covered operations during development activities could be classified into the following areas.

- Land development activities associated with site development performed by or on behalf of the developer, including:
 - Sudden and accidental events resulting in new pollution conditions
 - Development activity which exacerbates known or unknown pollution conditions
 - Lead, asbestos, PCB, mercury and silica exposure from demolition and construction activity
 - Inadequate contractor and subcontractor coverage
 - Project delays resulting from pollution conditions



- Third-party property management activities, including:
 - Paint fume and new carpet (and other building material) off-gassing exposure claims
 - Mold exposures (i.e., from plumbing, weatherproofing)
 - Potential releases from jobsites to environmentally sensitive areas
 - Transportation
 - Non-owned locations (not specifically associated with a particular insured property, such as a landfill or warehouse)

Applicable Insurance Products and Coverage Solutions

Several environmental insurance carriers offer Contractors Pollution Liability policies, which are designed to address covered operations exposures including third-party cleanup costs, third-party bodily injury and property damage (including third-party business interruption and natural resource damage, soft costs (project delays), transportation exposure, disposal liability and defense costs. These programs may also be utilized to satisfy a project-specific or fixed-base operator requirement.

Rolling Wrap-Up

Developers who have several concurrent projects may consider a rolling wrap-up approach to address multiple years of multiple project exposures with a single policy. Such a program can address covered operations/completed operations exposures for a

developer's projects in a single program designed to include (or wrap up) all of their contractors on a multi-project (or rolling) basis. This may be written on a flat (non-auditable) or multiyear basis (i.e., a project may be defined as one to three years of project receipts).

Some of the major benefits of a wrap-up approach are:

- Elimination of "pass through" insurance premiums from contractors or subcontractors
- Continuity of coverage throughout the project and after its completion (limits, terms and conditions, post-project maintenance of coverage)
- Elimination of potential claims issues between contractors and subcontractors from overlapping/deficient coverage and multiple carriers
- Dedicated limits for a single or multiple projects

Conclusion

While site ownership and development exposures each have their own respective insurance solutions in Pollution Legal Liability and Contractors Pollution Liability coverage, one or more insurance carriers may also have the ability to address both risks utilizing either two forms with a linked basket aggregate limit or even a single combined form. The latter option may be the optimal choice for a real estate firm with combined exposures to consider, so they can most comprehensively address their current and future environmental exposures.

Key Contacts

Practice Leadership

Mike Balmer
Environmental Practice Leader
Boston
Tel: 617 351 7530
michael.balmer@willis.com

Rick Hawkinberry
National Practice
Pittsburgh
Tel: 412 586 3530
rick.hawkinberry@willis.com

Brian McBride
Southeast Regional Team Leader
Atlanta
Tel: 404 224 5126
brian.mcbride@willis.com

Chuck Zaher
Midwestern Regional Team Leader
Chicago
Tel: 312 621 4745
zaher_ch@willis.com

Beverly McCoy
South Central Regional Team Leader
Houston
Tel: 713 625 1011
beverly.mccoy@willis.com

Anthony Wagar
New York Regional Team Leader
New York
Tel: 212 915 7768
anthony.wagar@willis.com

Richard Sheldon
Northeast Regional Team Leader
Radnor (Philadelphia)
Tel: 610 254 5625
richard.sheldon@willis.com

Jeff Clarke
Western Regional Team Leader
San Francisco
Tel: 415 955 0219
jeffrey.clarke@willis.com

To locate your local Willis Environmental Practice Associate, please visit our web site, [http://www.willis.com/Services/Environmental/Extras%20\(NA\)/Contacts.aspx](http://www.willis.com/Services/Environmental/Extras%20(NA)/Contacts.aspx).

Disclaimer: This update is intended to provide US readers with general information regarding developments on environmental insurance and risk management issues. Please consult your attorney for legal advice on these issues.



New Faces



Rick Hawkinberry joined the Willis Environmental Practice as a Senior Vice President in October. He is a national resource based in our Pittsburgh office. Initially, Rick's primary role is to lead our Environmental Service Firm Industry Initiative, but he will also help roll out other sales initiatives and support complex placements. Before joining Willis, Rick was Risk Manager for Shaw Environmental & Infrastructure, Inc., where he managed complex international and domestic insurance programs and procured environmental insurance policies for both private and federal environmental liability transfer deals. Prior to Shaw, he was with AIG Environmental, where among other roles, he helped develop their mine reclamation insurance program. Early in his career, he held marketing and underwriting positions with Kemper Environmental and CIGNA/ACE USA. Rick has more than 10 years of previous experience as a Certified Safety Professional in the oil industry.