



Law in a Changing Climate

By D. Bart Turner and Chris J. Williams

Mark Twain has often been quoted as saying “everybody complains about the weather, but nobody does anything about it.” While people have and always will complain about the weather, now there are just as many who are looking for a way to do something about it.

This year the United States celebrated its 40th annual Earth Day—a day first set aside in 1970 to encourage awareness and appreciation for our planet’s environment. In the wake of that first Earth Day, Congress began adopting legislation that formed the backbone of present-day environmental law and regulation. Indeed, the 1970s marked not only the creation of the U.S. Environmental Protection Agency but also the passage of a myriad of new laws aimed at addressing public concerns over air and water pollution, conserving natural resources, ensuring safe drinking water, protecting coastal areas, preventing extinction of endangered species, effectively managing chemicals and hazardous waste, and many others. While those laws have been amended and others added to the list, there has been no other comparable period over the last 40 years in which the federal government adopted such broad-sweeping environmental law and regulation. That is, until now. This year the United States appears to be on the brink of enacting new

environmental legislation, unprecedented in scope, to tackle what is perceived by many as being the most significant environmental threat of the current generation—global warming.

All but those who maintain a strict no-media diet have at least some cursory understanding of “global warming”—the name given to the phenomenon associated with the *average* rise in temperature observed worldwide over the last century and the prediction that this trend will continue in the future. A majority of climate change scientists attribute this rise in temperatures to an observed increase in greenhouse gases (GHGs) since the Industrial Revolution. Those gases—carbon dioxide, methane and nitrous oxide to name just a few—are collectively named for their ability to trap heat within the Earth’s atmosphere much like the glass panes of a greenhouse but on a global scale. To what extent global temperatures associated with this “greenhouse effect”—a natural phenomenon described by scientists over a century ago—can be influenced by human activities has, as most everyone knows, been the subject of debate over the last couple of decades. However, the political climate is changing much more rapidly than the Earth’s climate. As a result, the scientific debate has taken a backseat in the drive toward reducing the volume of GHGs

emitted into the atmosphere from human activities. Along with providing background regarding the momentum behind the urgency to enact some form of GHG legislation, as well as offering a forecast of what that legislation is likely to entail,¹ we offer some additional insights about how these changes may impact Alabamians in general and Alabama lawyers in particular.

The Environmental Climate

Although there is some dispute regarding the reliability of measurements, the last 150 years of reliable temperature records suggest a rise in average global temperatures by a little over 1°F. However, it appears that this warming trend has accelerated since the 1970s, and as of 2007, it has been estimated that 11 of the 13 warmest years on record occurred between 1995 and 2007. In the Southeast, along with measurable increases in moderate to severe drought conditions in the spring and summer months, the annual average temperature has risen about 2°F since the mid-1970s. Over the same period the concentration of carbon dioxide, methane and other GHGs, many of which are emitted by human activities such as the burning of fossil fuels, deforestation, agriculture and



other industrial activities, have increased at levels that cannot be entirely attributed to natural causes. The correlation between increases in global temperatures and increases in GHGs was made before the turn of the 20th century, but in 2007, the U.N. Intergovernmental Panel on Climate Change concluded that “most of the observed increase in globally averaged temperatures since the mid-20th century is very likely [i.e. greater than 90 percent certainty] due to the observed increase in anthropogenic GHG concentrations.”²

Predictions regarding the future impacts of this warming trend are fraught with uncertainty, particularly at the regional or local scale. Be that as it may, a balmy planet has already likely contributed to a measurable increase in sea levels over the last century due to the thermal expansion of ocean water as it warms in addition to the melting of land-based ice. Because a large percentage of the population in the Southeast lives along coastal areas, there are concerns that rising sea levels will contribute to contamination of coastal freshwater sources, submersion of coastal infrastructure and destruction of barrier islands which help protect that infrastructure from storm surges. Couple those concerns with the potential that higher ocean temperatures could lead to more frequent and intense tropical storms and hurricanes, and one can

see why coastlines along the central Gulf Coast (already sinking as a result of both natural phenomena and human activities) may be particularly vulnerable. In addition, if future warming trends contribute to the growing frequency of drought conditions in the Southeast, the threats to the region’s agricultural base and drinking water supplies brought on by last year’s drought may become more commonplace. Less water in a region with one of the fastest growing populations (in some measure, due to the warmer climate) could make it even more difficult for southeastern states to equitably apportion water supplies. Specifically, Alabama, Georgia and Florida may find it harder to settle their decades-old dispute regarding whether the water in the Apalachicola-Chattahoochee-Flint River Basin should be delivered to the citizens of Atlanta or allowed to pass down to Alabama for hydroelectric power and flood control or to Florida’s oyster beds.

To be certain, predicting the course of any global phenomenon decades, let alone centuries, into the future is far from an exact science. Assuming one could accurately forecast future warming trends and their associated environmental impacts, it is perhaps even more difficult to fully account for the resulting costs (and benefits) to society of a hotter planet. For example, as the Arctic melts and the fabled

Northwest Passage becomes a reality, will the discovery of new oil and mineral deposits beneath ice-covered waters or reduced shipping costs offset threats to coastal communities from rising seas or the encroachment of salt water into sources of drinking water? Moreover, it appears that even if immediate action is taken to reduce emissions of GHGs, it is unlikely to have any measurable impact on the current pace of global warming, at least in the short-term. Nevertheless, there is little doubt that the uncertainties associated with the environmental, economic and social impacts of climate change have taken a backseat to politics. Congress and the executive branch are now plowing ahead with initiatives aimed at trimming the emissions of GHGs generated in the United States. While there are more forces driving the country toward regulating GHGs than can be discussed here, in order to have some basis for understanding what approach the federal government is likely to take toward reducing emissions, there are several worth mentioning in some detail.

The Political Climate

International political pressure and the adoption of GHG reduction programs in

other countries are high atop the list of driving forces for new national climate change legislation. The 1988 creation of the United Nations Intergovernmental Panel on Climate Change (IPCC) and its first report two years later, lead to the adoption of the United Nations Framework Convention on Climate Change (UNFCCC) at the Rio de Janeiro Earth Summit in 1992. The UNFCCC is an international treaty signed by over 190 countries, including the United States, with the principal goal of reducing worldwide emissions of GHGs. However, the treaty did not set specific emission limits or include enforcement provisions; rather, it allowed for amendments known as “protocols” that would be added later to bind signatory countries to specific GHG emission levels. The most well-known is the 1997 Kyoto Protocol which required participating nations to collectively reduce GHG emissions by 5 percent below 1990 levels by 2012. The Protocol, which took effect in 2005, was essentially set up as a “cap-and-trade” system—a system which has become the model GHG regulatory scheme adopted by other countries. As described in more detail below, this system is the type of regulatory arrangement most likely to be established in the United States.

The United States did not ratify the Kyoto Protocol treaty and did not otherwise commit to reducing GHG emissions in large measure because the Protocol exempted many developing nations, such as China and India, from adopting emission limits of their own. Indeed, the Alabama legislature, following the lead of the U.S. Senate, expressed dissatisfaction with the Protocol and the exemptions given to developing nations in its passage of the Kyoto Protocol Response Act in 1998.³ While allowing for voluntary reductions in GHG emissions, this act prevented the Alabama Department of Environmental Management from “proposing or promulgating any new regulations intended in whole or in part to reduce emissions of GHGs.”⁴ Notwithstanding the position Alabama and the United States took on the international community’s efforts to implement regulation, states and local communities have continued to press forward with voluntary or mandatory emission reduction strategies. With each taking slightly different tacks, even those among the regulated community believe that federal legislation is needed to avoid



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the morass associated with disparate and perhaps conflicting state or local laws.

At least 20 states have established targets for reducing GHG emissions and several more have enacted climate change legislation or appointed advisory bodies. The first mandatory GHG reduction program in the United States, known as the Regional Greenhouse Gas Initiative (RGGI), has been adopted by Delaware, Maryland, New Jersey, New York, and the New England states with Pennsylvania and the District of Columbia signing on as observers. The signatory states associated with this initiative committed to reducing carbon dioxide emissions from power plants in the region by 10 percent by 2019 through a cap-and-trade program that sets a total emissions cap, allocated among the 10 participating states, to be ratcheted down in later years. A similar Western Climate Initiative involving seven states and four Canadian provinces with additional observer states is anticipating launching another cap-and-trade program in 2012, and a Midwestern Greenhouse Gas Accord is also in the works. Similarly, Florida has entered the mix with its 2008 adoption of the Florida Climate Protection Act authorizing the state environmental agency to develop rules for a cap-and-trade program to reduce GHG emissions from electric utilities.⁵ On the local level, over 950 mayors have signed onto the U.S. Conference of Mayors Climate Protection Agreement which requires participating cities to strive toward meeting or exceeding the reduction standards set out in the Kyoto Protocol and encouraging adoption of federal or state legislation aimed at curbing GHG emissions. Included among the list of Alabama mayors who have signed are the mayors of

Auburn, Bessemer, Huntsville, Opelika, Troy, and Tuscaloosa.

In addition to the momentum generated by the international and domestic regional, state and local initiatives, the United States Supreme Court’s opinion in *Massachusetts v. EPA* and subsequent events arising out of that decision may prove to be the biggest motivator for Congressional action.⁶ In 1999, several environmental groups and a number of states pushed the EPA via a rulemaking petition to regulate GHG emissions from automobiles under the Clean Air Act. The EPA concluded that it lacked statutory authority under the Act to regulate GHGs as pollutants and that even if it had the statutory authority, it could exercise its discretion not to regulate for public policy reasons—namely, that the science regarding the impact of GHGs was uncertain and that regulation under the Act would necessarily be “piecemeal” and would interfere with voluntary reduction programs and international negotiations. The Court rejected the EPA’s arguments and held that the EPA may in its discretion not promulgate regulations but only after making a finding that GHGs do not “endanger public health or welfare.”⁷

Just after the two-year anniversary of the Supreme Court’s decision in *Massachusetts v. EPA* and less than 100 days into the new presidential administration, the EPA released its proposed finding that GHG emissions do in fact cause or contribute to pollution that endangers public health and welfare.⁸ To be clear, the proposal by the EPA was limited to a finding of endangerment—it did not propose any specific regulations for limiting GHG emissions. As such, the EPA’s proposed endangerment finding is a calculated political move designed to urge Congressional action on new GHG legislation. Indeed, the EPA has stated previously and in the press release issued along with the endangerment finding that it preferred comprehensive legislation on the issue rather than trying to regulate GHGs under the Clean Air Act. Under the Clean Air Act as currently drafted, the EPA would potentially be required to permit up to over a million individual sources of carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—the GHGs it stated are the “root cause of human-induced climate change.”⁹

In the meantime, the EPA has already begun setting up the reporting architecture needed for regulating GHGs, whether that regulation is mandated by new Congressional legislation or promulgated under the Clean Air Act. Specifically, the EPA has proposed mandatory annual reporting of GHG emissions by suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more of certain GHGs.¹⁰ This proposed reporting rule, which would affect 85-90 percent of total emissions from approximately 13,000 facilities, was promulgated by the EPA pursuant to the Consolidated Appropriations Act passed by Congress and signed by President Bush in late 2007.

There are, of course, a number of other well-known factors behind the momentum for Congressional action on climate change. Al Gore brought the issue to the big screen with *An Inconvenient Truth* and then later that year shared the Nobel Peace Prize with the IPPC for increasing public awareness. The polar bear, the star of Disney's 2009 film, *Earth*, was listed as a threatened species under the Endangered Species Act due to the threat to its habitat from melting Arctic sea ice. Both presidential candidates supported climate change legislation while on the campaign trail. Perhaps less well-known are the corporations that are actively lobbying for federal legislation through such organizations as the U.S. Climate Action Partnership whose members include Alcoa, Caterpillar, ConocoPhillips, Duke Energy, DuPont, PepsiCo, and Shell. Likewise, before the recession stole its thunder, the 2008 energy crisis and concerns over the dependence on foreign oil opened up more opportunities for renewable energy sources and energy efficient technologies that are also seen as potential solutions to reducing GHG emissions. Moreover, there is a rapidly growing climate change industry—the international carbon markets were valued at over \$100 billion at the end of 2008 and a growing voluntary market in the U.S. was estimated to be worth over \$700 million in 2008—throwing its weight behind U.S. GHG legislation. With all of these forces pushing us toward the likelihood of federal action on climate change in the near term, it seems prudent to ask what kind of regulatory scheme Congress may establish and how will it affect Alabamians and their lawyers.



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The Regulatory Climate

There are essentially two approaches to regulating environmental pollutants. The first is the traditional command-and-control strategy, in which governmental authorities set limits on how much of a particular pollutant can be emitted. Those limits are enforced via a permitting scheme that requires entities to adopt certain technologies to reduce the amount of pollutants released into the environment. This is the form taken by much of the aforementioned 1970s-era environmental regulations in this country. The second is a market-based approach in which the regulatory system primarily relies on economic forces of supply and demand to achieve pollutant reductions. One such form of market-based regulation is a tax on pollutants designed to encourage voluntary reductions in the amount released into the environment. This is the idea behind passing a “carbon tax” that has been bandied about for some time and which has gained a little more traction as the passage of GHG legislation becomes more likely. However, as noted above, the more common market-based approach in the context of environmental regulation is a cap-and-trade scheme which essentially sets a limit on total emissions of a pollutant for a certain period (the “cap”), and gives each entity the right to release certain amounts of the pollutant into the environment. Entities that reduce their emissions below their total allotment (“allowance”) earn credits which they can then sell or otherwise convey (“trade”) to those who

for whatever reason are not able to emit GHGs in quantities less than their total allowance.

Cap-and-trade is not foreign to the United States. Indeed, amendments to the Clean Air Act in 1990 set up the Acid Rain Program which established a cap-and-trade program for sulfur dioxide emissions from electric utilities. That program, which reduced emissions by approximately 40 percent at less than half the estimated cost, has generally been viewed as a success and was a model for the European Union's GHG cap-and-trade system. However, the Acid Rain Program was limited to reducing the emissions of just two pollutants (nitrogen oxides were added later) from a limited pool of electric utilities. The program also took advantage of the falling price of low-sulfur coal and technological advances in air pollution control that were underway at the time. In contrast, there are more than just two GHGs, and they are emitted economy-wide from virtually all industry sectors. Moreover, unlike the gases that contribute to acid rain, GHGs are much more difficult to capture and store, particularly from coal-fired power plants. Cap-and-trade enthusiasts counter that setting a price on GHGs will incentivize the technological innovation necessary for cutting total emissions, but it is unclear how rapidly such technologies can be developed and implemented.

As always, the devil is in the details, and there are diverging opinions on just how a GHG cap-and-trade system should be set up. In addition to determining which GHGs to regulate, Congress will also have to decide whether to regulate upstream to suppliers of fossil fuels or downstream to the entities that emit GHGs. Because of the government's experience associated with regulating existing large emitters such as manufacturing facilities and power plants, the leading climate change legislation proposed by Congress to date has taken a downstream approach. The stickier issues are how much flexibility should be given to setting the overall cap and how emission allowances should be distributed to the regulated entities. As to the cap, some want a safety valve that would kick in through the issuance of additional emission allowances if the costs of compliance or the price of allowances hit the redline in terms of their potential for economic damage. However, the presence of a safety valve could lead to increased emissions and therefore conflict with the whole purpose of setting up a

cap-and-trade program in the first place. As to the distribution of emission allowances, Congress could choose to distribute them to regulated entities for free or sell them at auction or some combination of the two. Although giving away all the emission allowances would reduce the initial costs of compliance, a 100 percent free allowance system is disfavored because it can lead to windfall profits, particularly if too many allowances are distributed as occurred during the European Union's first go-around at implementing its cap-and-trade program. Alternatively, auctioning all allowances would generate revenue that could be used to offset rising energy costs associated with reducing emissions or be used to fund development of alternative energy sources. An auction could also unfairly impact companies that cannot pass on some or all of the costs to consumers or that lack funds to purchase enough allowances.

A provision for allowing "offsets" is perhaps the most interesting component likely to be considered for inclusion in a U.S. cap-and-trade system. Offsets are emission reduction projects that are developed outside a cap-and-trade program and which generate credits made available for purchase by regulated entities to literally offset any emissions they are unable to reduce below their allowance. Common offset projects could include energy efficiency and renewable energy projects that reduce the demand for electricity from power plants; planting trees, which absorb carbon dioxide, on a formerly treeless tract of land; capturing and destroying GHGs emitted from landfills; and storing GHGs via injection into old oil wells, salt domes or coal seams. Projects like these will create opportunities for entrepreneurs and companies not necessarily directly targeted by GHG regulation if the kinks can be worked out. In particular, for offsets projects to have any real impact on reducing emissions, there will have to be assurances that the projects would not have been undertaken because they were required by other regulations; that they are viable without the income stream from selling the offset credits; that the projects are permanent (e.g., forestry projects have to account for the risk of fire or wind damage); and that the emissions reductions associated with a project are measured and can be independently verified.

Despite the difficulties associated with developing any new cap-and-trade regulatory scheme, adopting a market-based



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approach is widely viewed as being much more preferable to regulating GHGs under the Clean Air Act. As noted earlier, the Act is based on command-and-control strategies aimed primarily at reducing the direct health effects of regional and local air pollution such as dust, ground-level ozone and toxic air pollutants. It was not designed to address pollutants that are emitted by all sectors of the economy and by human activities throughout the world. Moreover, with the exception of the Acid Rain Program, it is doubtful that the Act gives authority to the EPA to rely on the mechanics of the market to reduce emissions. Rather, the EPA would be in the untenable position of potentially having to permit and monitor over one million businesses based on the threshold pollutant levels set out in the Clean Air Act itself. Congress is well aware of this problem and has seriously considered a number of different climate change bills over the last few years.

The latest, introduced March 31, 2009 by representatives Henry Waxman and Edward Markey, is the proposed American Clean Energy and Security Act of 2009 (ACES), which was passed by the U.S. House of Representatives on June 26, 2009 by a slim margin of 219-212.¹¹ The 1,201-page bill contains the following four major title programs: 1) a "Clean Energy" title that includes provisions related to renewable electricity standards for utilities, carbon capture and sequestration, and smart grid technology; 2) an "Energy Efficiency" title that includes provisions related to energy efficiency in buildings, lighting, appliances and vehicles; 3) a "Transitioning to a Clean Energy Economy" title that includes provisions designed to lessen the impact of the legislation on consumers, employees and

businesses; and 4) a "Global Warming" title that contains the core provisions for reducing GHG emissions via a cap-and-trade program. Under the "Global Warming" provisions of the bill, entities that emit greater than the equivalent of 25,000 tons per year of seven GHGs would be required to obtain federal permits, or emission "allowances" which could be banked for later use, traded, sold, exchanged, transferred, or held by anyone—not just those required to reduce emissions. The legislation allows for approximately 20 percent of emission allowances to be auctioned and 80 percent to be distributed free to regulated entities in the initial years of the cap-and-trade program, but increases the amount of allowances to be auctioned to approximately 70 percent by 2031. In addition to trading allowances, regulated entities would be allowed to emit more than provided for in their individual allowances through the purchase of offsets. The legislation provides that the total quantity of offsets allowed in any given year cannot exceed two billion tons of GHG emissions credits, which can be split evenly between domestic and international offsets. The legislation also proposes an aggressive GHG reduction schedule—compared to 2005 levels, ACES requires economy-wide reductions of aggregate emissions by 3 percent in 2012; 17 percent in 2020; 42 percent in 2030; and 83 percent in 2050.

Whether the Senate will pass all, part or any of the House's proposed climate change legislation is unknown. The biggest hurdle may be one of timing given that we are in the midst of an unparalleled economic crisis. Critics of any proposed legislation assert that we can hardly afford to drive up the cost of energy in the midst of one of the worst recessions on record. Opponents also point out that lack of participation by other nations in reducing their own GHG emissions will thwart any hope of achieving the overall emission reductions believed necessary to have some impact on global climate while at the same time increasing the cost of American products to those manufactured in non-participating countries. In other words, it would provide yet another incentive for U.S. industries and jobs to relocate or expand their operations overseas. Nevertheless, there is still enormous internal and international pressure to make meaningful progress in advance of the meeting at the December 2009 UNFCCC conference in Copenhagen where it is

hoped a successor treaty to the Kyoto Protocol, which expires in 2012, can be worked out in enough time for a replacement to go into effect.

The Future Climate

Without question, some of Alabama's major industry sectors will be directly and indirectly affected by whatever regulatory scheme is ultimately approved by Congress or promulgated by EPA. The current proposed cap-and-trade program would cover entities such as utilities, liquid fuel refiners and blenders, and certain steel and iron manufacturing facilities (depending on the volume of their GHG emissions). Due to their heavy reliance on coal-fired electric plants, utilities in the Southeast are particularly likely to be hit the hardest. However, because we all use electricity in our homes and businesses, we will all share in the increase in electric generation costs associated with the utilities' purchase of allowances either originally from the government or on the open market to reduce emissions below individual power plant allowances. Alabama's iron and steel industries are also likely to be heavily affected due to the GHG emissions generated when coke and iron ore are transformed into iron and steel and from increased electricity costs.

Of course, with these challenges come new opportunities. For example, new cap-and-trade legislation that allows regulated entities to avail themselves of offset projects will open up the possibility for new ventures in existing industries such as the coalbed methane business. Presently, various pilot projects involving both private industry and the Department of Energy are evaluating the effectiveness of enhancing coalbed methane production while sequestering carbon dioxide for long-term storage. These various pilot projects are focused on novel drilling technologies and production processes that yield useful natural gas products while creating areas to store GHGs in unmineable coal seams.¹² The injection of carbon dioxide for storage could, in turn, further stimulate additional yields of natural gas production at higher efficiencies through displacement principles. The key to successful implementation in states like Alabama is the development of cost-effective technologies and measured efficiencies with respect to natural gas



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recovery, purification and long-term storage of carbon dioxide in these seams. Once these objectives are met, new and existing power plants and fuel-processing facilities within Alabama could have the ability to increase production efficiencies of natural gas recovery operations while reducing carbon dioxide emissions.

Alabama's forestry and agricultural industries may also find new sources of income by establishing offset projects. As alluded to above, trees and crops absorb and ultimately store carbon dioxide in their trunks, branches, foliage and roots, as well as in the surrounding soils. For example, it is estimated that pine plantations in the Southeast can accumulate almost 100 metric tons of carbon per acre per year. The voluntary carbon markets such as those offered through the Chicago Climate Exchange, currently provide opportunities for landowners to sell credits generated from afforestation (planting on formerly treeless land) and

sustainable management of existing forests. Some Alabama landowners and timber companies are already exploring this market. While prices per acre are wide-ranging, the average annual income expected in 2008 was \$5 to \$10 per acre for land enrolled in one of the voluntary carbon offset programs. The agricultural industry likewise may be able to capitalize from offset projects such as capturing methane from livestock manure and food waste management systems or adopting no-till farming practices.

Outside the regulatory system, the increased cost of producing energy from traditional sources with heavy GHG emissions will help feed the growth of renewable and alternative energy sources in Alabama such as biomass. Biomass burned for energy is considered "carbon neutral" because trees and plants absorb carbon dioxide while they are growing. Although burning the biomass releases GHGs back into the atmosphere, as long as new plants or trees are grown wherever the biomass was originally harvested, one can theoretically achieve a balance between the amount of GHGs stored and the amount emitted. Indeed, a major energy supplier in Alabama recently announced that it will join 36 other electrical cooperatives and municipal electric companies throughout Alabama, Georgia and Florida in purchasing power from a planned biomass-fired power plant on the Chattahoochee River. This planned facility will generate electricity from wood waste feed products from such sources as timber harvesting residuals, non-commercial trees harvested for thinning purposes, lumber

An advertisement for Casemaker 2.1 software. The background features a large sunflower. At the top left, a red curved banner contains the text "DID YOU KNOW?". To the right, blue text reads "The BROWSE feature within Casemaker allows you to browse within the reporters to locate a case within CaseLaw?". Below this is a screenshot of the software interface for "The State Bar of Indiana". The interface includes a navigation bar with "Home", "State Libraries", "Federal Libraries", and "Legal Topics". Below that is a search bar with "Ohio Case Law Search" and a "Browse Search" button. An orange arrow points to the "Browse Search" button. At the bottom, the text "CASEMAKER 2.1" is displayed in large, bold, orange letters.

scraps and wood reclaimed from landfills. GHG regulation should similarly support the nascent Alabama biofuels industry which has grown to at least seven biofuel processing plants, with additional facilities expected to come online within the next few years. Those that grow the common feedstock for biofuels, such as corn or soybeans, may also benefit.

The Legal Climate

As environmental lawyers it is clear to us that even without federal legislation or a mandate from the EPA requiring regulating GHGs in the United States, issues associated with climate change are becoming more and more central to our clients' businesses. Yet, even Alabama lawyers who have never delved into environmental law should begin thinking about how their clients and their law practices could be impacted by legislation which will affect nearly every industry sector. Certainly, lawyers who represent businesses that are expected to be directly regulated should counsel clients to incorporate their GHG emissions in future planning by at least calculating total emissions and assessing opportunities to achieve potential future emission limits. Indeed, many companies, particularly those that have aligned themselves with the growing trend to adopt "green" business strategies, are well on their way to fully incorporating climate change considerations in their businesses and are going to be at a competitive advantage to those that are slower to respond. Litigators should continue to follow the growing wave of toxic tort lawsuits filed against companies with heavy GHG emissions for damages allegedly associated with climate change. Attorneys who represent forest landowners and agricultural operations should be looking for opportunities for their clients to participate in offset projects and then educating themselves on the mechanics, risks and rewards associated with such projects. Lawyers who find themselves representing new businesses in the alternative and renewable energy industry will be faced with understanding and potentially protecting new technologies as well as giving advice on how to structure project financing, including seeking sources of free and cheap money from government energy subsidy programs. Even companies that are unlikely to be directly

affected should begin assessing their energy use and discovering more efficient ways to run their businesses. Perhaps, most importantly, because law offices are businesses too, lawyers should incorporate the increased cost of doing business in managing and planning infrastructure that supports their own practices from the electric bill to paper use. Indeed, the American Bar Association recognizes lawyers and law firms for taking a few extra steps to adopt better office paper management, purchasing renewable energy and use energy efficiently (see box on this page).

Ultimately, whether or not science or politics is driving the current push to do something "about the weather," all Alabamians and their lawyers should stay informed regarding what will likely be the most comprehensive environmental legislation in decades. As with any significant change, there will be opportunities and challenges, and being armed with good information is the surest way to navigate the rapidly changing environmental, economic and political climate.



Endnotes

1. The pace of change on the issue of GHG regulations is extremely rapid. Indeed, as we were preparing a final draft of this article, the U.S. House of Representatives passed sweeping climate change legislation. Although the legislation faces an uphill battle in the U.S. Senate, some of the specific observations about the type of legislation expected to be enacted may very well be dated by the time this article is sent to press.
2. IPCC, CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS. CONTRIBUTION OF WORKING GROUP I TO THE FOURTH ASSESSMENT REPORT OF THE INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *Summary for Policymakers* at 10 (2007).
3. ALA. CODE § 22-28A-1 through § 22-28A-5 (2009).
4. *Id.* at § 22-28A-3.
5. FLA. STAT. 403.44.
6. *Massachusetts, et al. v. U.S. Environmental Protection Agency*, 549 U.S. 497 (2007).
7. *Id.* at 532-533.
8. Proposed Endangerment and Cause or Contribute Findings for GHGs Under Section 202(a) of the Clean Air Act, 74 Fed. Reg. 18886 (Apr. 24, 2009).
9. *Id.* at 18895.
10. Proposed Mandatory Reporting Rule of GHGs, 74 Fed. Reg. 16448 (Apr. 10, 2009).
11. H.R. 2454, 111th Cong. (2009).
12. See generally, "Enhanced Coalbed Methane Production While Sequestering CO₂ in Unmineable Coal Seams," available at www.netl.doe.gov/technologies/carbon_seq/index.html.

Earlier this year, Maynard, Cooper, & Gale PC adopted a new firm sustainability policy in its efforts to be a leader among law firms and within the larger business community in the state of Alabama in the sustainability context by reducing the firm's overall carbon footprint and environmental impact. In support of that policy, the firm's Birmingham headquarters has adopted the following practices: recycling office paper, reducing overall paper use, purchasing paper made with recycled materials, purchasing green power, and using energy more efficiently. In recognition of its efforts, the Birmingham headquarters was the first large law firm in Alabama to be named a Law Office Climate Challenge Partner by the American Bar Association. For more information on the ABA's program or Maynard Cooper's sustainability policy, please visit our Web site at www.maynardcooper.com/sustainability.aspx.



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