The Nanovic Institute for European Studies
2007-2008 Distinguished European Lecture

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Occasional Paper #7

The Carbon Footprint of the Modern Corporation: A European Perspective

UNIVERSITY OF NOTRE DAME

Nanovic Institute Lecture Papers
A. James McAdams, Series Editor

Paper Number 7

The 2007-2008 Distinguished European Lecture
Given 11/01/2007 at the
University of Notre Dame
Notre Dame, Indiana

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Published 2008 by The Nanovic Institute for European Studies
Notre Dame, Indiana

Transcribed from the lecture by Anna K. Van Overberghe.
Edited by Ashby Monk and Gordon L. Clark.

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Acknowledgments

The author gratefully acknowledges Dr. Ashby Monk for providing invaluable editorial assistance during the revision process.

Part I: Lecture

Tonight, I want to talk about the carbon footprint of modern corporations, which is something that I do a lot of. I want to convince you that the modern corporation is an important variable in thinking about the future of the environment, because in many respects, if corporations cannot solve their environmental problems—mitigate their footprint—we are going to have a great deal of difficulty making any appreciable difference to the rate of global warming over the twenty-first century. And with that, I want to thank you all for the invitation to come here. It is a privilege to be here to talk about an issue of such great significance. I enjoyed talking to the undergraduates and graduate students this morning. I know that in my own program at Oxford, undergraduate and graduate students are really a remarkable audience for these issues because we are really talking about the future prospects of everybody in this room.

To personalize it, I often think about the future prospects of my own son (who is nineteen and has just started university in London), but I also think about his children, his children's children, etc. Interestingly, when you talk to people about how far they can look into the future, they see it through the lens of their children and their children's children. Of course, given longevity, the fact that you are going to live to be more than eighty—or maybe even eighty-five or ninety—on average, we are talking now about a sweep of nearly two hundred years. So, we are looking a long way into the future when we look through our children's children's futures, and I think there is reason to be worried. So, I also want to talk about what might be done and what the European response has been to some of these issues. That is to say, why is it that Europeans have been in the regulatory game on the carbon footprints of corporations for such a long period of time now?

It is not only that this is an issue of great significance for Western societies. It is also immensely important in terms of our responsibility for other parts of the world, parts that may be more vulnerable to the worst effects of global warming. In lots of ways, it is somewhat cheeky to get up here and talk about Western Europe's response to climate change and global warming when, in fact, some of the worst consequences over this century are going to be visited upon sub-Saharan Africa. Catastrophes of disease, lack of water, and lack of food are going to accentuate the debate over what our responsibility is for other places, not withstanding our responsibility for ourselves. We—Western Europe, North America—may actually be in the best position to help the rest of the world, but we will do that in the context of enormous conflict over these types of issues. We face the prospect, in 2050, of dealing with millions of people displaced by climate change, by global warming, and by the fact that they will have nothing to eat or drink. These are the prospects for my son, and these, then, are the prospects my son's children themselves will have to deal with over the second half of the twenty-first century.

I do think there is a gathering consensus, represented by the Intergovernmental Panel on Climate Change (IPCC) and academic bodies such as the U.K. Royal Society, about the significance of human-induced global warming. This is not to say that there are no physical processes contributing to climate change, but I do believe that human-induced global warming is significant. By many accounts, warming is already here and will accelerate over the coming decades of this century. I have been convinced by my scientific colleagues on the significance of global warming, not withstanding continued debate about its scope. That was actually quite a striking experience: to go into running the program at Oxford ten years ago thinking, "Well, I am a social scientist; I can do most things, I guess, on policy and policy-related issues," and then over time not only to be convinced by my scientific colleagues to join their world but to come to lead their world. As a result, at Oxford we have sought ways to build intellectual and institutional capacity to promote leadership and responsibility, both locally and globally. We have sought to mobilize the university to take advantage of its global position in order to talk about such a global issue.

I am a cautious optimist in this sense. I believe that we can translate commitment into relevant solutions while recognizing that there is no magic solution out there. There is no magic way of stopping global warming tomorrow. It is really a question of whether we will dampen the rate of increase such that we will look back—you will look back—in 2050 or 2060 and say, "Actually, we made a difference to the rate of increase." Moreover, as a cautious optimist, I think one paradox is that we must work with what we have inherited, and we have inherited market economies and their institutions. We have to work through *them* to transform policies and practices from a short-run orientation to a long-run orientation.

Notice that my long-run orientation is, as I indicated earlier, my children's children's children. Yet, if you talk to the average corporate CEO, they talk about "quarter to quarter" returns. Now of course, they have the promise of great payoff for such a short focus. What we really have to do, then, is find ways of transforming their "short run" to join our "long run," and we have to think of ways to do that in a regulatory manner.

I have come to recognize that these issues have been taken up by business and government leaders with surprising commitment. This is not to say all of them, or even all of the time, but the combination of business leaders and government, along with media coverage, tends to be a magic circle. For example, I have talked to some of the worst polluters in the world, and cement manufacturers are shocking contributors to CO_2 emission but also one of the most remarkable groups of people trying to do something positive about the situation. There have been remarkable instances of global cooperation and commitment, and we see that through the G8 in Africa. Even when we encounter indifference and cynicism, the private funding of leadership programs at leading

institutions—such as this, I might hazard—into the future suggests that there is a gathering momentum.

At Oxford we were recently faced with such a situation. Someone came to us and said, "We will give you an endowment if you build an 'enterprise and environment' program," because he wanted us to enroll business leaders from around the world in this dialogue about how to go from the short run to the long run. I think this is one of the great problems that we face in many respects. That kind of commitment is not something you get from governments. For example, the U.K. government is sheltered on environmental policy by the European Union's very aggressive environmental policy. It would not be nearly as courageous if it did not have the EU to drive the story onward.

There are clearly disputes between nation states over targets for CO_2 emissions. There are conflicts over timetables for implementation of treaties (if you have signed up to them), and there are conflicts over incentives and sanctions. There is a great deal of debate about these issues. Even so, United Kingdom's Stern Report, which was sponsored by the U.K. government as an "independent" assessment of the issues and which I strongly recommend to every person in this room, argued that it is best to act now rather than in fifty years. The costs of doing nothing and waiting for fifty years may be astronomical, which suggests—directly or indirectly—that the timeframes of private institutions such as corporations must be dramatically altered to account for the time horizon of climate change.

Now of course, cautious optimists can be accused of naïvety and complacency. There are many who question the status quo, arguing that globalization, trade, and the growth of financial markets have all accelerated global warming. There is a profound question to be answered: whether or not capitalism—market economies—are consistent with a good environment. There are many people who argue that the global corporation as the embodiment of global capitalism is, in fact, the problem. Especially in Europe, with its strong social democratic tradition—strong states, regulated markets, and restraints on property rights—you get a sense that we actually ought to be reigning in the global corporation far more tightly around community norms, far more tightly around a sense of the public's interest in the future.

One approach that aims at integrating short-run behavior with long-run climate change is the "disclosure movement." This is a private initiative in Europe led by non-governmental organizations and financial institutions such as large pension funds and institutional investors. The goal of the disclosure movement is to encourage corporations to disclose their carbon footprints and thereby prompt changes in their policies and practices. If it comes to pass that a major corporation has a footprint that looks like "x" and "x" is big, the argument is that if this information becomes public knowledge then there is pressure placed on

the corporation to change. In play in this disclosure movement is public interest in the environment, the trust or distrust of corporations, and the value attributed to a corporate reputation (or more particularly, the reputation of a CEO).

The disclosure movement is being led by the United Nations Environmental Programme (UNEP) and a group of institutional investors and asset managers under the heading of the Principles for Responsible Investment (PRI). This initiative has in mind responsible investment that differentiates between corporations on the basis of their carbon footprints. There is a gathering group of institutions that are concerned about the long term and are arguing that corporations are far too short-term oriented. These financial institutions are trying to drive disclosure by corporations, and the PRI initiative has actually been quite a remarkable success. It has gained enormous publicity. It has also gained signatories, but as those in the audience with the United Nations this morning heard, the implications of signing on can be quite differentiated.

What is referenced here by the PRI is the responsibility of institutional investors to act in the best long-term interests of beneficiaries in a manner consistent with fiduciary duty. It is a reinterpretation of the investor's responsibility, namely to look not just short term but also long term. In short, investors are asked to look over the life of the beneficiary of an insurance policy or a pension policy. In 2005, a commitment was made to six principles, which are about economic, social, and governance disclosure. These are metrics of measurement (how you measure these issues) and company reporting (what these financial institutions expect), along with a commitment to act on these issues publicly. In the United States, that would mean not only through proxy voting at annual general meetings, aimed at corporate boards of directors, but also privately through engaging these corporations in direct conversation about investor expectations.

It is clear that comprehensive, comparable, and consistent disclosure is very important for financial reporting standards. So, companies that report their footprints would do so in the hope of promoting the growth of European and global carbon markets. A quantitative estimate of a company's environmental footprint is essential for market pricing and, ultimately, the trade in carbon offsets and permits. However, it is also important for institutional investors seeking to value companies, industries, and whole economies in terms of long-term value. Curiously, I had always thought that this would have been a governmental responsibility, but in London and New York start-up companies—venture capital entities—are leading the movement to estimate what that footprint is in a quantitative sense for the twelve thousand largest of traded companies in the world.

So far I have emphasized the development of the disclosure movement and the market for disclosure. By my account, interest in these issues is being driven by a select group of financial institutions. In what follows, I will look more closely at related developments in the European Union, and I will emphasize the incorporation of environmental issues into mainstream corporate reporting through EU legislation.

The European Union has been interested in environmental policy for a long time. Article 6 of the Amsterdam Treaty of 1997 recognized the principle of integrating environmental requirements into other EU policies. In 1999, the European Commission announced a policy aimed at ensuring that environmental policies are consistent with an integrated market. (This, basically, is the mantra of the European Union; we are building an integrated economy that will contain about 350 million people, all of them consumers. So, the EU is an economic project as much as it is a political project.) Next, in May 2001, the commission made recommendations to provide comprehensive guidance on environmental disclosure, and this is the first time that the EU came to the table about the disclosure issue. This revolved around understanding what the corporations are doing and what value one might attribute to their carbon footprints. At the same time, the EU is interested in environmental liability. That is, what has a corporation done in the past that has created environmental harm? Can that liability be priced against the firm's value? In particular, the commission made specific reference to the disclosure of environmental risks and liabilities as they pertain to companies' financial performances.

This is not just a European Union phenomenon. It is also a U.S. phenomenon. Some of the best legislation on environmental liability—strict liability—has come from the United States, at least historically. The real issue is why the United States, from the mid-1990s onward, lost its leadership on the issue. It is partly a political issue, but it is also partly about global position. I would argue that in lots of ways the EU has seen the environment as one of its litmus tests of global influence. The EU recognized that the United States has been reluctant to get involved in the standard-setting process, especially the global standard-setting process, and by their natures, those countries abhor that vacuum. Given that the United States ceded that responsibility—ceded leadership on environmental legislation—to the European Union, the EU has taken it up with gusto.

In 2003, the European Union moved to harmonize accounting practices, eliminate inconsistencies within international accounting standards, and encourage convergence towards principles-based accounting. I will say more on this in a moment. An annual report must now include a fair review of the company's performance, including a description of the principle risks and uncertainties facing the firm. Basically, there must be a narrative description of what the company faces now and in the future. Of course, in many companies—

manufacturing companies—one of the biggest risks faced is what to do with their inherited environmental liability and what to do in terms of carbon and their carbon commitments.

For an adequate description of a company's business, the annual report must also include financial and "where appropriate, non-financial indicators, which includes information related to environmental and social matters, broadly interpreted." In fact, there has been a big debate in the European Union about how to constrain that phrase "environmental and social matters." Should it be narrow? Should it be broad? And of course, in an environment or setting like the EU, where there are strong social democratic traditions and thus some distrust of corporations, the interpretation of environmental and social conditions has been regularly expanded to try and take in the full scope of the global corporation. Companies are not only declaring what they do, say, in Germany but also what they do in South Africa. As such, they are trying to broaden the scope of reporting for Europe-domiciled corporations to include all of their operations; a corporation with locations in sixty countries must disclose what it does in all of those different jurisdictions.

The principles-based approach to reporting is based on the notion of a balanced and comprehensive analysis consistent with the size and complexity of the business—again, this is all aimed at the leading global corporations—and with a broad conception of performance indicators, allowing for qualitative and quantitative measures. However, it is reliant upon member states to implement and ensure compliance through their own legislation and regulations, and in the European context, member states are permitted to exempt some companies from these requirements insofar as it pertains to non-financial information.

Of course, the European Union directive on reporting was not exclusively focused on the environment or social standards. It was driven by a long-term project of single-market integration initiated by the Treaty of Rome and by the apparent need to harmonize member countries' corporate governance and reporting practices with respect to global markets. Just as important, however, it was driven by the fallout from recent corporate governance failures. A directive on reporting that includes environmental and social matters thus meets a whole variety of constituencies. It is meeting the social democratic constituency—suspicious of a global corporation—as it is meeting the global financial community's interest—reporting of the most important aspects affecting a company's stock market price. The left and the right of the political spectrum in Europe agree on the global reporting of environmental and social matters.

Likewise, the U.K. Companies Act of 2006 has language comparable to the European Union directive, including a balanced and comprehensive analysis consistent with the size and complexity of the firm. The act requires companies to disclose relevant information insofar as it is necessary for understanding the

current and future development of the firm, including reference to the principal risks and uncertainties facing the company and with explicit reference to environmental matters, the company's environmental impact, and the social and community interest. In effect, the United Kingdom took the 2003 EU directive off the shelf and incorporated it into a rewritten 2006 Companies Act.

A controversial issue during the passage of the act was the scope of directors' duties. The act effectively asks a director to report on things that he or she knows nothing about. For example, what does a company do on the environment in some African country? Since these directors do not go there, this requires an incredible reporting apparatus that ensures consistency from the bottom of the company through to the top. Also, the act places significant responsibility on company directors to promote the success of the company for the benefit of its members as a whole.

Now, what is a "member of a company"? Members are referred to in the sense of community. It is not just shareholders, but also employees. "Members" is code for including the rest of us in the conversation about what corporations do. In particular, directors must have regard for the long-term consequences of their decisions and their companies' impact on the environment and the community. Only "medium-sized" listed companies need not provide information on key non-financial indicators. In other words, the government was convinced by the small- and medium-enterprise constituency that this would force them all out of business.

This represents a major development in U.K. company law and an advance for those who advocate corporate social responsibility. In fact, the U.K. Companies Act is the first explicit codification of directors' duties regarding corporate social responsibility. It reflects the Labour government's goal of promoting the environmental transformation of companies and consumers. They want to create a list of good and bad companies between which one can differentiate. This is a grand ambition, and it includes a commitment to a long-term-impact reporting structure, particularly with respect to environmental interests at home and abroad. It is an attempt to place the United Kingdom at the center of "green reporting" as a business in itself.

Both the EU directive and the U.K. Companies Act allow for qualitative and quantitative reporting with respect to the scope of the environment, but neither is explicit about the precise nature and quality of environmental reporting. The person responsible for the passage of the act in the House of Lords indicated that they *would* have set precise reporting criteria if only they could have agreed on what that criteria should be. So, they have left it to the corporations to build their own reporting systems, and they are leaving it to competition among corporations to determine what the standard-setting process should look like. Now this could be a race to the bottom—reports could be awful—but it actually

only takes a few businesses to do something quite tangibly good for peer-group competition to arise. To this you can add the fact that there are many consulting companies who want to help with this corporate reporting, and thus you are actually building an industry on the reporting side.

Even a cautious optimist should be alarmed at the thought that we must rely on market agents to lead the drive for disclosure of carbon footprints. More often than not it is U.K. and European companies that are proactive about climate change, being concerned about their public reputations. Many fund managers see climate change as a slow and cumulative process reaching far beyond the time frames of conventional investment mandates. So, in fact, is it 2010 or is it 2050? When you are going to rely on financial markets to be the driving force behind the reporting process, you have to understand that almost all managers have a day-to-day, quarter-to-quarter, or year-to-year reporting structure. When asked about the long term, ignorance and cynicism often prevail; responsibility is deflected to government to provide a stable legal framework for meeting the challenge. A cautious optimist like me, recognizing that there is a growing market for disclosure, must also face the fact that many market agents actually find this quite irrelevant to their business.

I want to close now in a couple of different ways. I want to draw some implications about what I have been discussing, but I also want to first talk a little bit about public consciousness. Strong public consciousness of global warming is, in my view, vital for promoting both further European Union debate over the issues and more exacting legislation by the European Commission. Personally, I think that it is the combination of an environmental consciousness in Europe and a corporate sense of social responsibility, driven by the left and social democratic interests, that shifts the pendulum towards a reporting structure (rather than nothing). Without the strong public consciousness, though, this would not be happening. We want more exacting legislation by the commission, but as I said, one of the crucial parts of having legislation is defining clear, coherent reporting standards, and it is here that we are going to continue to rely on market agents.

Reliance on strong public consciousness is apparent in other EU initiatives too, including recent directives on corporate environmental liabilities and eco-design. The EU has, as I said at the start, a gathering momentum of environmental legislation that is the global market leader in relation to the United States, which once claimed the high ground in terms of setting environmental regulation. As a consequence, the EU will lead its member countries and will challenge their policies and practices as well as their established interests. Here specifically, the EU and commission initiatives on environmental policy are done for the union's own political benefit. It is clear that the EU gets a huge return politically from setting the standard. It is the member countries that have to implement the policies, and implementing policies on environmental standards in a member country is often the only political cost.

In a sense, this is the dynamic of standard-setting in Europe. The European Union sets high standards which the member states would not have the political courage to implement. There is a reason why the U.K. Companies Act looks a lot like the EU directive—the Labour government can blame Europe for forcing them to implement this policy. This is a cynical way of looking at it, perhaps, but the politics of it are clear. Once you scale it up to the EU level, where they do not actually have to deal with the local politics of development, they have a political "clean slate" and can set higher standards.

We should recognize, moreover, the coexistence of very different conceptions among European countries regarding the proper role of the corporation. That is to say, a debate is in play about the corporation itself. Even so, there remain strong democratic forces that will impose responsibility for long-term solutions on corporations and that will make claims on governments to promote research and development in the search for long-term cultural and technological solutions. All of this is informed in many cases by deep-seated anti-capitalist and anti-consumerist ideologies, and thus you get that strong focus on corporate responsibility. Those arguments are given voice through the European Union policy-making process.

In conclusion, the significance of climate change and the undercurrents of ideology and commitment suggest an emerging European consensus in favor of stronger regulation. As I suggested, recent directives on eco-design and corporate environmental liability are representative of this, and it will likely continue to develop, as shown by the promotion of disclosure, the counting of carbon units, and a pan-European—or even global—carbon-trading platform. The movement is closely related to the debate over the roles and responsibilities, and even the purpose, of corporations themselves. That is to say, it is not just about the short term; it is also about the long term. And if it is also about the long term, what is the mandate a corporation carries into the global economy? That mandate has its roots in obligations to community and nation, which is a way of discounting claims for short-term economic success in favor of a longer-term perspective in which European companies are held to account for their contribution to the common good. Corporations become the standard-bearers for setting global standards.

Part II: Questions & Response

Q: Do you see any political solutions that could come out of the United States, which does not have that upper-level structure like the European Union? You noted that the Labour government in Britain can avoid the political fallout by deflecting the issue to the EU. How can solutions grow out of the United States?

A: It is a very interesting question. Historically in the United States, the federal government has been regarded as the entity removed from the play of local politics about development and the environment. It is surprising to me that people have lost sight of the role of the government, particularly Congress, as that institution for giving voice to the collective good outside of the local politics of "making good on interests" and "making good on constituents." The federal government has actually become implicated in the local interests rather than removed from them.

I can give you an analogous situation. The passage of the North American Free Trade Agreement (NAFTA) is clearly in the interests of a lot of different people. (I personally think economic and political integration is a good thing. I think global integration is a good thing, and I think this because I am trying to deal with the poverty of people outside the magic circle of developed economies.) Now why is it that the federal government can see through the passage of the NAFTA, but when it comes to the environment, which is even more removed from local interests, the government is so implicated with corporations and with protecting American corporate interests? I think this says something about the politics of the situation at the moment, but I am also saying that it need not be like that in the long term. It does not mean that all future governments should be so implicated with major corporations.

Q: How far do you think that the disclosure movement will actually go in terms of creating enough of a public consciousness to ultimately reduce carbon footprints? It seems to me that while people are publicly conscious of what these corporations are doing, that consciousness can only take you so far in terms of reducing the footprint, whereas state solutions such as taxing CO_2 emission might actually get you all the way there.

A: I think this is also a good question. I have been interested in how environmentally conscious the average consumer is, for example, and I have been doing interviews with some of the more "boutique" marketing companies in London. I ask the question, "How many among us are environmentally conscious? What is the proportion?" I want to know whether it is 50 percent of us, 60 percent of us, etc. They say, "Gordon, you are such an optimist. It is 20 percent . . . on a good day."

Okay, so 20 percent of us are willing to spend our consumer dollar, or our consumer pound or euro, with a deliberate environmental element. That is

a fairly pessimistic take on things, and it does suggest that if you are going to be successful in mobilizing consumers about the environment, you actually have to provide goods that meet the level of quality of those consumer products that they would otherwise demand. They must be price-competitive in relation to the quality. That is a big lesson.

The other thing that we see, though, is a gathering attempt to mobilize the other 80 percent of the public, the rest of us. There are a variety of different ways that this is happening. In the European Union, for example, the eco-design directive requires that all companies have a certification, a sort of "CE" insignia, on their product that represents the product's conformity with the directive. Now, I am not saying that we are all going to rush out looking for the "CE", but it is very important, especially when you recognize that in my own supermarket just around the corner, people go down the aisles looking for evidence of how far the product they are about to buy has flown in order to get to the supermarket. There is this astoundingly mistaken view that a product having flown a long way to get to consumer shelves is always bad for the environment. It turns out, for example, that the United Kingdom should not produce lamb but should instead import it all from New Zealand. It is just better environmentally, even though it comes such a long distance.

If consumers go down the shelves picking out products on the basis of the distance those products have come, you can mobilize their consciousness to latch on to eco-labeling. This gives you a chance at mobilizing perhaps another 25 to 30 percent of the population. That gets us up to 50 percent, right? That is as far as I can see in terms of the average person; you then have to start thinking about regulations that really affect the production of the product itself, that strip the environmental load out of the production system. To do so means promoting technological change over five, ten, or even fifteen years. That, unfortunately, takes us a little too far into my son's children's futures. So, I think it is a product of both regulation and consumer awareness, but I am a realist about consumer awareness.

Q: It seems like the United States will be slow to adapt to corporate regulation without some sort of big scare, but do you see the European Union leading the world into a position where investors will view a country's environmental rating similarly to how they currently view countries' economic ratings? U.S. investors will invest based on the rating for a country's economy, especially in the Third World. How could this work for environmental policies and procedures, especially in Asia?

A: I think I will tackle the question in a couple of ways. We have, out there, these venture-capital-sponsored companies building big databases on the carbon footprint of about twelve thousand traded companies from throughout the world, at least four thousand of which are American. As this "counting up the carbon" goes on, it will be held against a company's stock price. There may well come

to be a penalty on companies domiciled in the United States, companies not otherwise at the leading edge of environmental management or environmental technology, if their carbon count is significant. That is a possibility, all being well—that is to say, if financial markets value against fundamentals and if the environmental load is significant.

A graduate student and I started looking at what kinds of companies carry that kind of load. Not surprisingly, it is utility companies, commodity companies, manufacturing companies, and industrial companies. The load is not significant for financial companies (which is perhaps why they are interested) or retail companies (unless you look back into their supply chains). It is an exacting discipline that picks out some types of industries but leaves a lot of other kinds of firms, the non-manufacturing or non-"load" type firms out of the picture. At that point, you face the fact that "counting up carbon" is aimed at one segment of global production and will leave out of the picture another segment of global production.

What is interesting, though, is that this other segment of global production, those companies that do not have such a large footprint, may themselves face reputation problems unless they sign up to environmental protocols. In fact, for those companies it is quite cheap. I think we can see a world evolving where the debate in the United States or Britain or Europe on whether or not to have carbon footprinting will not be a concerted "no" among all corporations, because it is only going to be a certain segment of corporations who will be burdened, while a lot of other corporations will benefit in signing up to these protocols in terms of consumer virtue. The constituency then starts to fracture on the corporate side in resisting the disclosure movement.

Q: What about worldwide livestock production, with its methane and nitrous oxide gases? Will those emissions be converted to "CO_2 equivalence" to determine the carbon footprint of those companies?

A: That is a wonderful long-term prospect, though one that I think is very difficult to conceptualize. It is in fact very difficult to count or to give a source to it. Carbon footprinting works because you have an entity, an owned entity, with production sites and product particularities. When you look at agriculture, large agriculture such as the Midwest pork industry, it is very hard to do the same kind of counting because you are not necessarily attaching it to a specific firm. You are attaching it to an entire industry in an unbounded sense. Carbon footprinting, then, is very difficult. This is not to say that people will not try it, but it will not have the same resonance for financial markets as counting up the footprint of General Electric, for example, which you know is going to be significant.

Q: Is this not, essentially, a voluntary scheme?

A: Yes. It has started as a voluntary scheme. The European Union directives will

have it be a mandatory scheme. What is still not mandatory is the question of how you measure the footprint, because no one quite knows how to do that. So, it starts off as voluntary, but the EU has effectively made it mandatory by coming in, albeit with a big "but": how to measure a carbon footprint in a consistent way so that everyone agrees. That is where the competition is in the financial industry.

Q: What did you think of Al Gore's film, An Inconvenient Truth*?*

A: I was in Toronto recently, and one of my friend's children went off to see Al Gore in a lecture theater of fourteen hundred people—and this is sixteen- to eighteen-year-olds! You know, I cannot think of a better way to mobilize my constituency for the long term: "Everyone come to Oxford!" is what he should have said at the end! I do think he has been tremendously important in mobilizing young people about the issue. I go around talking about these issues, and it falls on deaf ears when I talk to people sixty years and older, because they do not talk about what they owe their children. They actually talk about what their children owe them, and I think that is a real and profound problem.

I have not seen Al Gore's film, because I could not face sitting there and getting angry with him about where I felt he went wrong. There is a hell of a lot of debate about these issues, you know—a hell of a lot of debate about how the climate system works. What is "cause"? What is "effect"? Is the system of climate structure well-known? Does it have well-known properties? That is not clear. I could see myself getting angry, and I did not want that. What is the use of being angry from north Oxford about something that is a big success?

A film I have seen, and which I do recommend, is *The Corporation*. That is a great film! I like that film, and I encourage all of my students to go and see it, because it comes a little bit closer to the corporate decision-making logic that I think is both tangible and an area in which you can make a difference.

Gordon L. Clark is the Halford Mackinder Professor of Geography at the University of Oxford. He is currently also the executive director of the Oxford University Centre for the Environment (OUCE) and the head of its corresponding academic department, the School of Geography and the Environment. As such he is responsible not only for the center's academic and research programs but also its development, including a new initiative—joining with the Prince's Trust to offer a new M.Sc. degree for practicing professionals that links urban development and design with long-term environmental sustainability. Furthermore, in the graduate school of the OUCE, Professor Clark leads teaching and research on financial markets and corporate responsibility, including the accounting of environmental liabilities and the scope of corporate environmental and social accountability. He holds a professorial fellowship at Saint Peter's College, is cross-affiliated with the Oxford Institute of Ageing, and has been a program director (Executive Education) in the Säid Business School at Oxford.

Professor Clark received a D.Sc. from the University of Oxford, and in 2005 he was elected a Fellow of the British Academy. He has taught at Harvard University and is currently a senior research associate of the Labor and Worklife Program at Harvard Law School. He is an honorary professor at the University of Melbourne and has also taught at the University of Chicago, Carnegie Mellon University, and Monash University in Australia. He received the Distinguished Alumni Award from McMaster University, where he earned a Ph.D., and also the Chancellor's Medal of the University of California–Santa Barbara. Professor Clark has been an Andrew Mellon Fellow at the National Academy of Sciences in Washington, DC and a DAAD Fellow at the University of Marburg in Germany. He serves on the Scientific Advisory Board of Lund University in Sweden and on the Visiting Committee of Geography and Environmental Engineering at Johns Hopkins University.

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