

A Businessman's Response to Managing Greenhouse Gas Emissions: A View from Russia and Ukraine

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In February 2004, Ukraine ratified the Kyoto Protocol. In November 2004, Russia also ratified the Kyoto Protocol. As a result of these and other actions, the Kyoto Protocol will go into effect in February 2005 and there are now extra financial incentives for energy efficiency and renewable energy investments in Russia and Ukraine.

The extra incentives for Green energy projects derive from the ability of these countries, and their domestic industries, to sell greenhouse gas (GHG) credits (credits) and quotas to other countries and other firms. Buyers might include speculators who believe the price of GHG credits and quotas might rise and buyers can also include investors for whom the cost of reducing greenhouse gas emissions is higher than the purchased price of GHG credits or quotas.

This memorandum is intended to assist businessmen think about how to manage GHG emissions and make money from selling GHG credits.

Background

Many papers and fora recently have focused on risks that the financial community faces when it invests in companies that do not adequately manage environmental compliance. What can we conclude from these papers and other activities?

- First, Western shareholders and investors are being awakened or being prompted to be concerned about potential greenhouse gas/climate change liabilities of companies they invest in. This trend is unlikely to be abated.
- Second, the environmental and energy policy-advocacy community and some elements of the financial community are becoming united and are asking governments for more action on climate change.
- Third, Russian and Ukrainians companies can produce GHG emission reductions for less than their Western counterparts.
- Finally, national governments are asking, and in many cases demanding, regulated companies and governmental facilities to manage GHG emissions.

What should be done?

While companies and other entities that produce GHG emissions in Russia and Ukraine have thought little about managing GHG emissions, there is:

- The near-term reality of future regulations, and
- There is the near-term opportunity to create and sell GHG credit to make more attractive, investment in energy and environmental infrastructure.

What is a manager to do?

We present below a model that has proved successful in assisting companies manage GHG emissions. The model is based on the idea that the decision-making is a process, not a single event. The model illustrates that

decision-making is an ongoing process because environmental and energy data changes over time, interest rates and other economic conditions change over time, and investment opportunities change over time. Thus, decision-making is never over and mid-course corrections to manage risks must be anticipated.

GHG management policies drive GHG management programs. This is true for all corporate activities – policies create programs and programs create individual projects. For example, some companies have policies that seek market share while others seek high profitability per dollar of revenue. In a climate change context, some companies might seek a pure hedge against future GHG liabilities, while others might want a combined strategy of GHG related public relations and some financial hedging. A third company might initiate a policy of hedging by focusing only on new commercial opportunities created in the wind energy or solar power business. A fourth company, a typical Russian or Ukrainian company, might merely seek maximum profits or potential investments that could derive on the back of GHG credit sales.

GHG management programs, at the corporate level, must be developed to support specific emission credit generating activities. However, these activities, especially GHG-credit sales must also have a risk management strategy.

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As stated above, decision-making is a continuous process, even if a company that seeks to meet their GHG obligations by developing a portfolio of internal GHG control measures or buys a portfolio of GHG reductions from others, the portfolio must be constructed and managed on a day-by-day basis. There are too many factors that influence the value of the portfolio and thus, associated investments cannot be made and then ignored for months or years.

What is to be done to manage your risk?

The first step is to act, not impatiently but with logic and resolve. As mentioned above, environmental concerns increasingly affect decision making at a corporate level.

Generally, the above mentioned concerns can be categorized into three aspects that have to be considered when talking about impacts of climate change on corporate policy:

- GHG financial-related risk,
- Reputation risk, and
- Risks associated with ignoring or failing to capture new business opportunities.

Special Address by Tony Blair, Prime Minister of the United Kingdom

On 27 January 2005, Davos Switzerland
World Economic Forum

Ever since Arrhenius first predicted global warming in 1896, it has been fiercely debated. I am not a scientific expert. I only see that the balance of evidence has shifted one way. Some argue this warming is part of a natural cycle such as, by contrast, the mini ice age in the Middle Ages. But glaciers are now in retreat that have not retreated since the last Ice Age, 12,000 years ago. The impact of climate change predicted by modelers is uncannily coming to pass, not least in the European summer of 2003.

So it would be true to say the evidence is still disputed. It would be wrong to say that the evidence of danger is not clearly and persuasively advocated by a very large number of entirely independent and compelling voices. They are the majority. The majority is not always right; but they deserve to be listened to. However, behind the dispute over science is another concern. Political leaders worry they are being asked to take unacceptable falls in economic growth and living standards to tackle climate change.

My view is that if we put forward, as a solution to climate change, something which involves drastic cuts in growth or standards of living, it matters not how justified it is, it simply won't be agreed to. But fortunately that need not be the case. Science and technology cannot alone provide the answer. But they certainly provide the means to ensure that we can reduce greenhouse gas emissions without damaging our economy. Indeed over time they provide the prospect of significant business and economic opportunities.

For example, in Europe all nations have ratified the Kyoto Treaty. It will come into force on February 16. The European trading scheme is in place. This will be a powerful driver to more sustainable means of energy generation, industrial production and to business activity.

So what do we hope for the G8 whose countries, after all, account for 65 per cent of global GDP and 47 per cent of global CO2 emissions?

First to set a direction of travel. Whether because of the risks associated with climate change or related issues of security of energy supply, we need to send a clear signal that whilst we continue to analyze science – and the conference in Exeter next week will help – we are united in moving in the direction of greenhouse gas reductions. I support the Kyoto Protocol. Others will not and that position is understood. But business and the global economy need to know this isn't an issue that is going away. My clear view, for what it is worth, is that the debate will be how and on what time scale it is confronted; not whether. I intend to make progress on this with the EU Presidency later this year as well as through the G8.

Secondly, through the G8 process I want to develop a package of practical measures, largely focused on technology, to cut emissions. And here I don't just mean research into new technologies, important though that is. I also think we need to work much harder to find ways to implement the vast range of low-carbon technologies that have already been developed. Energy efficiency. Renewable energy sources. Cleaner fossil fuels. Avoiding waste. All of this can be done, and often at a much lower cost than we realize.

The following steps provide an overview of how to approach risk management of these three issues:

- 1) Establish a GHG inventory to know your own risk exposure.
- 2) Project future emissions under a "business as usual" scenario, and
 - a) Model policy scenarios (volume risk)
 - b) Model pricing scenarios (price risk)
- 3) Based on above assumptions and calculations, assess and evaluate instruments at hand to avoid and mitigate risk (creating internal reductions, buying emissions reductions, or investing in projects),
- 4) Based on a company's risk profile and evaluation of expected regulatory developments, a priority list and subsequent action plan should be developed,

- 5) Action plans consists of policies, programs and projects, and
- 6) Implement the use of parameters, monitoring mechanisms and re-evaluation assessments to constantly adjust action plan to accommodate changes in the regulatory, technological and market environment.

Hand-in-hand, with a GHG risk management plan, goes the assessment of reputation. Do you want to maintain and protect your current corporate reputation or do you want to enhance your company’s environmental reputation? The following steps can be taken to address this concern:

- 1) Assess current reputation and develop parameters to quantitatively assess status quo and risk,
- 2) Set boundaries (main corporation only, affiliated brands etc.),
- 3) Set baseline year (if you want to have a standard base year, e.g. 1990 levels),
- 4) Define desired scope of efforts (local, regional, national, international),
- 5) Assess possible measures for desired outcome (conferences, good deeds, environmental reporting, teaming up with NGO etc),
- 6) Rank, prioritize and select suitable measures,
- 7) Develop and implement action plan, and
- 8) Implement the use of parameters, monitoring mechanisms and re-evaluation assessments to constantly adjust action plan to accommodate changes in the regulatory, technological and market environment.

Apart from commercial risks, immediate profit-making business opportunities may arise out of new environmental legislations. Even when Russia or Ukraine require companies to meet new energy and environmental laws, a well designed corporate environmental compliance program can fulfill mandatory emission control obligations while at the same time provide for a good “green image” and exploit immediate business opportunities. Energy efficiency upgrades can lower a company’s GHG exposure while at the same time save money. Major investments in energy and environmental infrastructure may turn a liability into an opportunity; for example one attractive type of project would be a fuel switch from coal to biomass, partly financed from the sale of resulting emission reductions credits.

Environmental regulation and climate change policies create their own jargon that may seem to the outsider like a wild jungle of fuzzy acronyms, assumptions and regulations. However uncertain and fuzzy the government’s policies might be and however confusing the jargon, a company’s first step toward managing potential risks is to assess one’s own exposure and sensitivity to this risk. Then develop systems to measure and track your company’s exposure to specific risks. Once such an oversight system is in place, it is possible to start modeling price scenarios – if credits are cheap, this means acting one way; if GHG credits are expensive, then act in another way. Remember, you can’t manage what you can’t measure.

There are two non-commercial entities that have been formed to assist Russian and Ukrainian industry and governments better develop environmental trading programs.

These organizations are:

<p>In Russia:</p> <p>CEEM Executive Director: Dr. Anton Galenovich Telephone number: E-mail addresses:</p>	<p>In Ukraine:</p> <p>FEEEM Executive Director: Vadim Diukanov Telephone number: E-mail addresses: enalt@ukrpack.net</p>
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These organization, sister organizations, exist solely to assist industry, regulators, environmental interest groups and other better apply market-based environmental programs in both Russia and Ukraine.