

# **In Control of Carbon**

## **Climate Law and Policy: managing obligations, liabilities, commercial risks and opportunities**

### **I. Introduction**

It is some six years since the signing of the Kyoto Protocol and a decade away from the debates and analysis that led up to the creation of that treaty. Since that time, the scientific community and, particularly, the International Panel on Climate Change ("IPCC") have reinforced the factual basis surrounding the growing concern of global warming and the direct contribution of man-made activity to it. As such, efforts to conclude and implement international rules governing global greenhouse emissions have continued. At the same time the "machinery" of the Kyoto Protocol has already commenced operations with the CDM Executive Board accepting applications to register projects.

Recent Russian statements, while deferring ratification of the Kyoto Protocol, increasingly point to an intent to ratify in late 2004. Much will depend on whether Russia can reach a deal with the European Union. Despite the fact that Australia has currently not ratified the agreement, the entry into force of the Kyoto Protocol would have significant ramifications for Australian business in a way that is not fully appreciated.

However, even if Russia ultimately decides not to ratify the Protocol, the reality is that around the world many governments have begun implementing domestic legislation and/or policy that creates direct obligations to reduce greenhouse emissions and imposes liabilities on certain sectors. This is occurring at the regional (in particular the EU) and national (in both developed and developing countries) levels. Furthermore, in Australia and the US, despite the federal government positions on non-ratification of Kyoto, there is considerable legislative activity at the state level.

For corporations, and in particular multi-nationals, the emergence of a diversity of climate related laws, in both developed and developing countries, means that a clear understanding is required as to the nature of legal liabilities that now exist or are likely to exist in the future and how best to position themselves. Companies should also be fully aware of the extent to which market based mechanisms within these regimes present opportunities to create carbon assets and offset liabilities or at the very least aware as to how to preserve their ownership of such opportunities. It is necessary for all companies to build capacity to manage such liabilities (both domestically and across jurisdictions) and to be able to understand the carbon ramifications of key investment decisions and acquisitions.

It is also critical for corporations to be aware of the way in which global capital- especially within the investment and insurance industries- is reassessing investments for carbon risk, and the growing reluctance of shareholders to tolerate corporate non-performance on greenhouse matters. When coupled with the recent commencement of climate litigation, companies and their directors need to be fully aware of the ramifications of such matters (both in the short and long term) and understand the most appropriate way for managing them.

## II. Climate Change Law

### International Law

Unlike most other environmental matters addressed at the international level, global warming is truly a global issue with global effects. It cannot be confined to one jurisdiction and as such any successful response must be of a multi-lateral nature. In recognition of this, the framework for coordinating international efforts has been the UNFCCC and the Kyoto Protocol (as further elaborated by the Marrakesh Accords), which together will result in the imposition of binding greenhouse gas emission reduction targets on developed country parties. Upon its entry into force, the Protocol will:

- require developed country parties to reduce their greenhouse gas emissions to their assigned baseline by the end of the first commitment period (2012); and
- allow parties (and ultimately corporations within those countries) to meet their liability in part through market based mechanisms<sup>1</sup> such as investing in greenhouse gas reduction projects in developing countries or trading carbon rights.

Although the Marrakesh Accords set out detailed rules outlining the way in which the Kyoto Protocol is to be implemented, there are many areas that are still to be developed (eg. the actual trading system) or that are the subject of continuing debate (e.g. carbon sequestration projects). It is important for companies to understand these ongoing debates and the impact of such rules on their operations. For example, the EU has proposed placing a temporary restriction on carbon sinks, which could have significant ramifications for the ability of the Australian forestry sector to participate in the NSW trading regime, as this scheme was designed to mirror the requirements for sinks in the Kyoto Protocol. Companies who have already made investments in NSW carbon sinks such as TEPCO and the Italian company Microelectronics, must wait to see what "value" the carbon they have purchased will ultimately achieve.

### Regional and National Regimes

In addition to the international trading regulation under the Kyoto Protocol, many countries have begun to establish their own legal frameworks for the regulation of greenhouse gas emissions, including the implementation of emission trading systems. The new European Union trading scheme is particularly significant as it will come into force regardless of whether the Kyoto Protocol does. The scheme will:

- cover up to 28 countries;
- place a clear emission constraint and liability on over 4,000 energy/industrial facilities, with the potential to expand the scope of the regulations to include other sectors;
- enable companies to purchase EU allowances on the market (currently trading between 3 to 5 Euros per tonne of CO<sub>2</sub>-e) to meet their liabilities; and
- impose penalties of 40 Euros a tonne of CO<sub>2</sub>-e between 2005 and 2007, increasing to 100 Euros a tonne after 2008.

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<sup>1</sup> The attraction of market mechanisms for addressing environmental issues is that they arguably provide the most efficient means to reduce net global greenhouse gas emissions. Generally, carbon trading schemes trade in units of tonnes of carbon dioxide-equivalent ("CO<sub>2</sub>-e"), so that companies are required to reduce their greenhouse gas emissions by a certain number of tonnes of CO<sub>2</sub>-e. Depending upon the regime, if a company reduces its emissions below this level, each additional tonne of CO<sub>2</sub>-e can be used to create a right or allowance, which can be sold to other companies who are having difficulty meeting their obligations.

This poses a significant financial risk for companies with interests in the targeted sectors, with the effect that the management of greenhouse emissions will become a core business strategy issue for directors rather than purely in the domain of the environmental department.

In addition to the EU scheme, many other countries have implemented, or are considering implementing their own domestic trading schemes, such as the United Kingdom, the Netherlands, Australia, Denmark, Greece, Germany, Italy, Norway, Sweden, China and Canada. Trading schemes can be based on emission caps supplemented by emission reductions (as described above). Additionally, policies can be targeted at specific sectors of the economy. For instance, by creating an obligation to source a certain amount of electricity from renewable sources.

In Australia, the Commonwealth Mandatory Renewable Energy Target ("MRET") currently requires electricity retailers to source a certain percentage of their energy from renewable sources, with the capacity to trade Renewable Energy Certificates ("RECs") to meet the legislative obligation. The penalty for failure to comply with this scheme is currently set at \$40/tonne of CO<sub>2</sub>-e. The federal government is also currently reviewing the MRET scheme and considering a range of other options to reduce Australia's greenhouse gas emissions, including national emissions trading or the imposition of a carbon tax.

### **State Based Regimes**

Although the United States and Australian federal governments are not currently intending to ratify the Protocol, individual American and Australian States have been proactive in creating their own environmental and climate change regulatory programs and trading systems. For example, numerous US States have now imposed greenhouse limitations. In Australia, NSW has recently implemented an emissions trading scheme focussed on the electricity sector, which is based upon the Kyoto Protocol principles and methodologies. The Victorian government has stated that if Victoria introduces a trading scheme, the government will consider making it compatible with the existing NSW scheme. Both Queensland and South Australia are also assessing their options.

### **Implications for Australia**

The Federal Government has publicly committed Australia to meeting its Protocol target of 108% of its greenhouse gas emissions in 1990, despite its stance that ratification of the Kyoto Protocol is not in Australia's best interests at this time. If Australia does meet this target, it would occur without the help of the Protocol's projects or trading mechanisms.

There is increasing evidence that if the Protocol comes into force and Australia has not ratified, Australian companies could be discriminated against by parties to the Protocol. In early negotiations on the Kyoto Protocol, the EU raised the possibility of trade sanctions against non-Kyoto Protocol parties. Kyoto Protocol Parties with obligations to reduce their greenhouse gas emissions may incur costs to bring their industries to the standards required to meet the country's target under the Kyoto Protocol. Industries in these countries may perceive it to be unfair that similar industries in non-Parties such as Australia are not being affected in the same way, and may pressure their Governments to "equalise" the cost distribution between Kyoto Protocol Parties and non-Kyoto Parties by imposing trade measures. Such measures could include restrictions on Australian imports, "eco-duties" on Australian products, border tax adjustment or domestic subsidies to offset emission reduction costs.

All of these measures have been imposed at some stage by countries for various political reasons, and there has been much discussion at the World Trade Organisation ("WTO") around the legality of various specific measures, imposed for purposes such as the protection of the environment, which would

otherwise be illegal under free trade rules. Even if a trade measure levied against Australia as a non-Kyoto Protocol Party may (in certain circumstances) breach WTO free trade rules, an effective removal of such barriers would require the Australian Government to mount a challenge through the WTO. If a challenge was successful, depending on the strength of the policy reasons behind the trade measure, the Kyoto Protocol Party may still not withdraw the measure.

Additionally, Australian companies may be excluded from tenders and supply contracts in Kyoto Protocol parties on the basis that Australia has not ratified the Kyoto Protocol. It is also clear that Australian companies will be excluded from direct participation in the Kyoto Protocol mechanisms, and from participation in other markets such as the EU trading scheme.

Notwithstanding representations from some Australian businesses that the introduction of a national emissions trading regime will impact investment decisions in Australia, the implementation of such schemes in the United Kingdom and Europe, and the establishment many years ago of NOx and SOx trading schemes in various US States, have not led to the redirection of investment flows away from those jurisdictions. Also, countries such as China are contemplating implementing their own emissions trading regimes and taking on their own emission reduction obligations under the Kyoto Protocol in the second commitment period. When coupled with countries like Japan imposing taxes linked to greenhouse emitting fuels (i.e. coal), relocation to developing countries would not necessarily avoid some form of carbon impost being placed on production. Given the growing trend in a number of jurisdictions to introduce policy and law to internalise the cost of greenhouse gas emissions, reduce waste and rework production and energy efficiencies, Australia has little to gain by not actively engaging itself in the evolving international market.

### **Managing Climate Laws**

In conclusion, the rapid emergence of a multitude of climate laws in a range of different jurisdictions will continue, regardless of the developments surrounding the Kyoto Protocol. Ultimately companies must be aware of:

- where such laws exist;
- the extent to which they will impact on the day to day operations of a company, including any liabilities imposed or pending;
- how they affect mergers, acquisitions, fundraising, market capitalisation, investments and new projects;
- the opportunities present in terms of cost reductions, climate competitive products, the creation of carbon assets, access to carbon finance and boosting the value of company goodwill; and
- how all these issues can be managed in the most appropriate manner.

### **III. Carbon Opportunities**

The emerging regulatory regimes also provide the opportunity to create a new form of asset as a result of taking direct action to reduce greenhouse emissions. The nature of this asset will vary depending upon the legal regime in which it is created. While such "carbon assets" are designed to offset legal obligations within the scheme that creates them, there is already significant activity in the trading of such assets and the positioning by a number of major international banks, stock exchanges and brokers to establish themselves as major players in the global carbon trading market.

Early trades are taking place and a number of governments, institutions and companies are buying or issuing Kyoto Protocol-compliant rights in anticipation of this regime. For example the Dutch, New Zealand and Danish Governments, the World Bank and Japanese companies, are all active in buying Kyoto-compliant rights and are paying on average between US\$3-8 a tonne of CO<sub>2</sub>-e (but in some cases up to US\$15). Swiss Re has predicted that the carbon emissions trading market could grow to some US\$75-145 billion annually.

**The Nature of Carbon Rights**

An actual physical reduction in volumes of greenhouse gas emissions will be the basis for creating either:

- a distinct legal right under some existing regulatory regime; or
- the basis for securing, under a private contract, legal title to future potential rights derived from the physical activity of greenhouse gas emission reduction.

The legal concept of an international legal right to physical reductions in greenhouse gas emissions arises from the Kyoto Protocol. However, as Kyoto is yet to enter into force, there is no existing regulatory regime which creates a universally recognised legal right to the reduction or removal of emissions of greenhouse gases.

Nonetheless, at both the regional and domestic levels, legal regimes have now been established, or are developing, that create specific legal rights for reduction or removal of greenhouse gas emissions or the generation of renewable energy. Table One provides a brief description of such rights currently in existence.

**Table One: Existing Legal Rights Created by Reductions in Greenhouse Gas Emissions**

<b>Legal Rights</b>	<b>Legal Instrument</b>	<b>Comment</b>	<b>Prices</b>
Allowable Amount Unit (AAU); Certified Emission Reduction (CER); Emission Reduction Unit (ERU); Removal Unit (RMU)	Kyoto Protocol	The Kyoto Protocol creates a range of legal rights that will come into existence once the Kyoto Protocol comes into force. Furthermore, these rights only come into existence when certain legal criteria are met and are used solely for meeting obligations under the Kyoto Protocol (unless accepted by other domestic legal systems). Nonetheless, the terms established by the Protocol are ones that have been adopted generically in the market and in other regimes.  As ratification of the Protocol draws closer, there is increasing market demand for rights that have the potential to become Kyoto Protocol rights or which, at the very least, are consistent with the principles of the Kyoto regime.	Currently trading at up to US\$8
ERUs and CERs (or ERs) purchased by multilateral funds	Multilateral funds such as the World Bank Prototype Carbon Fund and the Dutch Government ERUPT and CERUPT Funds	Multilateral funds that invest in emission reduction projects have generally adopted terms consistent with the Kyoto Protocol.	Up to US\$7 or 6 Euro
ERU; Carbon Right; Carbon Credit (i.e.	Project Contracts	In the absence of any particular pre-existing legal right, rights can still be created under private contracts with	Up to US\$15

Contractual Rights)		project participants.  The early carbon markets witnessed significant trading in emission reduction rights generated under contract. For example, Australian Plantation Timber in Perth sold significant emission reduction rights to Cosmo Oil in Japan. However, as the entry into force of the Kyoto Protocol becomes more likely and there is an increase in the implementation of domestic regulatory regimes, the demand for such contractual emission reductions is decreasing, largely because of the fact that any emission reduction rights which are created will be used for the purposes of compliance with such regimes.	
ROCs (UK); RECs (Aus); NGACs (Aus); Sequestration Rights (Aus); permits and allowances (EU)	Domestic legislation	A number of domestic regimes now exist that create specific legal rights to pre-qualified activities or create permissions to emit. However, such rights are generally for restricted use within the market which creates them.	Vary greatly but UK ROCs are traded for as much as UK£45

Such rights are generally limited to usage within the regional or domestic legal regimes under which they are created and must meet specific eligibility requirements before they are created. Outside the relevant statutory regimes these rights have no legal status (unless specifically recognised), although the activity which creates them can possibly give rise to a future emission reduction benefit or right under some other future regulatory regime (assuming it has not already been utilised to meet a greenhouse obligation).

In managing carbon assets, it is therefore critical that companies:

- identify potential carbon asset opportunities and understand how to maximise value from them (noting the long lead time for carbon projects); and
- secure clean legal title to such carbon assets.

**Carbon Opportunities**

The creation of this new class of valuable assets ("carbon assets") also presents further opportunities for business.

The idea that carbon can be an asset may enable companies to gain a competitive advantage for their products by:

- (i) producing "climate friendly" products (eg: products with no emissions) which consumers will buy for their environmental value;
- (ii) producing carbon neutral products such as emission bundled coal to minimise the imposition of regulation on purchasers of such products; or
- (iii) obtaining a cost advantage over other products. For example, in jurisdictions where the cost of energy is high (e.g. in Thailand), by employing technologies to increase energy efficiency a company can increase the price competitiveness of its products against producing products in markets such as China where ongoing costs are far lower.

Furthermore, those companies such as BP and Shell who have taken a lead on emission issues now have an enhanced market reputation and have had a direct influence over policy development.

Project financiers are also in an excellent position to identify projects which have the added value of a low greenhouse gas signature.

The renewable energy sector also presents significant opportunities. In Australia, the Mandatory Renewable Energy Target constitutes legislation which aims to increase the proportion of renewable energy in the electricity market. Similar schemes have been implemented in other jurisdictions (such as in many US states and the UK) and interact with more general emissions trading schemes (such as the EU scheme), where renewable energy can create carbon assets. Renewable energy investment will only increase, as will renewable markets. BP and World Dutch/Shell have become two of the world's largest investors in renewable energy, and plan to spend between 1 to 2 billion dollars between them between 2000 and 2007. In the United States Senator McCain (just before the close vote on the McCain-Lieberman bill) stated that US\$10-20 trillion will be spent globally over the next 20 years on new energy technologies. This is a significant market in which Australian companies should be getting involved at an early stage.

While the emerging climate change law and regulation delivers opportunities, the increasing level of global regulation of greenhouse emissions brings with it a range of broader legal and commercial issues requiring management. Companies with any form of "carbon exposure" need to strategically plan for the long term and take into account the internalising of the cost of emissions into the cost of production. Already we are seeing changing demands of shareholders and investors in relation to the climate change issue, while more extreme risks in the foreseeable future include the threat of climate litigation.

#### **IV. Response of the Investment and Insurance Communities**

Largely in response to the increasing levels of climate change regulation, the investment and insurance communities are now also carefully assessing the climate change risks and opportunities. For example:

- **Investment:** Many of the world's major financial institutions are taking an increasingly aggressive approach towards the emerging carbon market. Rabobank International, for example, has established new divisions to invest in greenhouse reduction and renewable energy projects and to trade financial products deriving from the emerging global carbon and environmental markets. This lead has been followed or is being canvassed by many other banks including ABN Amro, Deutschebank, Standard Bank and, in Australia, ANZ Infrastructure, Babcock and Brown and the Commonwealth Bank. In addition, boutique operations are also emerging such as the recently launched Climate Change Capital. Institutions in both the US and Asia are now engaged in trading. This in itself is providing the stimulus for the creation of new markets.
- **Lending:** Major financiers have begun to re-evaluate their lending policies to incorporate environmental and climate change risk assessment tools, in part as a result of the push towards corporate social responsibility tools provided by the UN Finance Initiative and the Equator Principles. This further reinforces the growing significance that such institutions place on the climate change issue in relation to the potential climate risk that their investments may attract. Nowhere is this more evident than with the Carbon Disclosure Project, which earlier this year saw some 35 participants, representing over US\$4 trillion in assets, target the world's 500 largest companies and request from them disclosure of their efforts to address climate change issues. Whilst 80% of the companies involved stated that

they recognised the importance of climate change as a business risk, 35-40% were actually taking concrete action to address that risks. With participants such as Abbey National, Credit Suisse, Henderson, ING, Merrill Lynch, Munich RE, Rabobank and Société Générale among others, the CDP represents the clearest indication yet of the mobilisation of global capital to further protect its investments by forcing corporations to address the issue of climate change. A study in Australia was also commissioned by AMP Henderson to review the climate change risk management strategies of the largest (by market capitalisation) 100 Australian companies to assess exposure to climate change risks, which recommended an urgent and constructive response to the challenges of climate change for Australian business.

- Insurance: In 2002 Munich RE noted that there was \$50-\$70 billion of losses from natural catastrophes that year and estimated that global warming impacts could cost \$300 billion by 2050. For the insurance sector, the need to find a solution to the global warming issue is obviously of paramount importance to their long term viability and whilst some corporates continue to argue there is not enough scientific evidence to act, the insurance sector has generally taken immediate action on climate change issues, given the strength of recent evidence that climate change is occurring. In addition, some insurance companies have developed new climate change based insurance products.

## V. Shareholder Activism

Shareholder action is on an increasing basis taking the form of shareholder resolutions demanding recognition of, and planned responses to, climate change issues. In the United States in 2002, a record number of "global warming resolutions" were filed against 27 companies, primarily from heavily emitting sectors such as the automobile industry, electric utilities, the oil and gas industries and manufacturing. The average support for these resolutions has more than doubled since 2000. The resolutions all seek greater disclosure from the companies as to how they are identifying and responding to the risks and opportunities presented by climate change, as well as the measures in place to quantify, disclose and reduce greenhouse gas emissions.

What this now means is that any company operating either on a multi-jurisdictional level (or, for that matter, purely within Australia) needs to carefully consider the ramifications of the developing law and policy in the climate change area and the way in which it is influencing corporate actors. The allocation of any climate change risks and potential emission reduction rights should be considered within the scope of any major corporate transactions such as mergers and acquisitions. The responsibility to consider the ramifications of climate change for a company is something prudent directors and senior company officials should be alert to in the proper discharge of their duties.

## EXXONMOBIL CASE STUDY

*"While ExxonMobil continues to gain respect in many quarters for its financials, it has marched into a potential minefield of reputational risk, future shareholder losses, exposure to litigation, and policy costs on the issue of climate change...we find real and increasingly serious risks to shareholders have arisen from the way ExxonMobil has stood out from the crowd and let itself become to obvious chief 'climate change villain'"<sup>2</sup>*

- May 2002: Report released condemning ExxonMobil for incurring unnecessary risks and missed opportunities that could result in more than \$100 billion in lost shareholder value for the company.
- Shareholder activists denounce ExxonMobil's refusal to accept the threat of global warming, to support and establish GHG emission reduction targets and to invest in renewable energy technologies.

<sup>2</sup>Risking Shareholder Value? ExxonMobil and Climate Change: An Investigation of Unnecessary Risks and Missed Opportunities" page 4

- ExxonMobil declared to be out of step with its peers, other industries, authorities of climate change and policy makers all over the world.
- One million motorists boycott Esso petrol stations in Britain in Greenpeace's StopE\$\$o campaign in protest.
- Deutsche Bank warned ExxonMobil that being tarred with the label of "environmental enemy number one" is a brand risk to its business.
- The 2001 International Day of Action targeted ExxonMobil to spearhead the boycott campaign in response to US President George Bush's withdrawal from the Kyoto Protocol process.
- Dramatic increase of shareholder activism within ExxonMobil. "Climate Change" resolutions enjoy 22% support in 2003 compared with 8.6% in 2001.
- September 2002: ExxonMobil acknowledge that climate change is an issue. *"The risks of climate change and its potential impacts on society and the ecosystem are widely recognised. Doing nothing is neither prudent or responsible..."*
- ExxonMobil announces global management system to reduce greenhouse gas emissions and to identify opportunities to reduce energy use. Results are to be stewarded and reported annually.
- November 2002: Announcement of a decision to invest US \$10m per year over the next decade in a global climate change and renewable energy project led by Stanford University.

## VI. Climate Litigation

*"First it was tobacco and asbestos. Then it was the turn of the food sector. Now litigators have a new target in their sights: those responsible for climate change."*

*Climate Change could be the Next Legal Battlefield* by Vanessa Houlder;  
Financial Times, 14 July 2003

Early litigation against a government entity or company on the basis that they were responsible for causing climate change is not about proving a particular party is responsible for climate change. Rather, it is about causing maximum publicity to force change in the attitudes of companies and governments – not only those who may be the subject of litigation, but also those with similar businesses. No corporation wants to run the risk of having an important project stopped, its resources tied up in court, exposure to significant legal costs or its reputation damaged because it has become the subject of climate change litigation.

A report released in May 2002<sup>3</sup> estimates that legal costs alone of a company like ExxonMobil in fighting climate change suits could amount to some US\$200 million to \$1 billion per year and, should liability ever be established, damages could potentially exceed US\$100 billion. As seen below, significant publicity and organised action led to the moderation of Exxon's views on climate change, and the implementation of an environmental and risk management strategy by the company to repair its reputation as an anti-environment campaigner.

As the physical effects of climate change are felt more resoundingly, and if there is a continued failure to adequately address the issue, there is no doubt that climate change litigation will surface, either:

- (i) to recover the costs incurred by those who are negatively affected by the changing weather patterns caused by rising levels of greenhouse gas emissions; or
- (ii) as a public interest case to prevent such damage from occurring in the future.

<sup>3</sup> "Risking Shareholder Value? ExxonMobil and Climate Change: An Investigation of Unnecessary Risks and Missed Opportunities" by Mark Mansly May 2002 Claros Consulting in London

## The emergence of climate change litigation

There is increasing momentum, both at the international and national levels, behind the initiation of legal actions related to the phenomenon of climate change. As the scientific community has largely agreed that rising greenhouse gas levels in the atmosphere will affect our weather systems, causing weather extremes that will bring drought, floods, health damage and disease as the earth's temperature rises, increasing focus has turned to the avenue of redress for such damage. Last summer's catastrophic floods in central Europe have led to estimated financial losses of \$150 billion over the next 10 years. As the physical damage caused by global warming becomes more marked, attempts to "claw back" such losses from governments who fail to regulate rising levels of greenhouse gases, or companies whose emissions are understood to cause climate change, would seem inevitable.

Indeed, this process has already begun. At the international level, the Pacific Nation of Tuvalu has previously threatened to bring a lawsuit in the International Court of Justice against the US, UK and Australia for their alleged failures to contain greenhouse gas emissions which could exacerbate global warming and its adverse consequences, namely the possibility that Tuvalu will be uninhabitable within the next 50 years<sup>4</sup>.

At the same time, several climate change based legal actions have commenced in the United States against the US Environmental Agency ("US EPA"), founded upon the conviction that the Bush administration is not doing enough to address global warming. For example:

- In December 2002, the International Centre for Technology Assessment ("ICTA"), the Sierra Club<sup>5</sup> and Greenpeace filed a complaint against Christine Todd Whitman, the then Administrator of US EPA, for the failure to provide a substantive response to ICTA's petition for legislation concerning the emissions of greenhouse gases from motor vehicles in violation of the *Administrative Procedure Act* 5 U.S.C.
- In February 2003, the States of Connecticut, Maine and Massachusetts filed a suit against the US EPA under the US Clean Air Act for failure to regulate carbon dioxide emissions. The claim maintains that the US EPA breached its obligation to analyse, on an eight yearly basis, the health and environmental impacts of power plant emissions. It is contended that such an analysis would show that carbon dioxide should be added to the list of emissions considered to be regulated pollutants.
- The Sierra Club and Our Children's Earth Foundation have announced that they are bringing an action against the US EPA for its failure to update emissions standards for power plants.

None of these actions have proceeded to judgment at this stage. However, it is a sign that actions of this nature are on the increase.

In Australia, the issue of climate change-related litigation is now well on the agenda. As early as 1994, the issue was first raised in a litigious context, when Greenpeace challenged the first Redbank power station was an example of this type of preventative action. That litigation was not successful in stopping the construction of the Redbank I power plant. However, last month the NSW Minister for the Environment rejected the development application for the Redbank II power plant, which was likely to

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<sup>4</sup> The Foundation for International Law and Environmental Development (FIELD) along with Climate Action Network and others have for some time been advising the Alliance of Small Island States (AOSIS) on the potential for actions in public international law.

create higher emissions of greenhouse gases than existing power stations in the area, on greenhouse grounds. Interestingly, now that the EPA has recognised that high emissions of greenhouse gases can constitute harm to the environment, this may lend more credibility to an action against existing high emitters of greenhouse gases for "pollution" under the NSW environment protection legislation, as discussed above.

Due to the growing realisation that high emissions (without a feasible offset strategy) can cause harm to the environment, projects that emit large amounts of greenhouse gas will increasingly need to reduce their emissions or source alternative offsets in other projects. This should be factored into the costs of projects and taken into account from other market players such as finance providers and insurance companies.

Furthermore, only a few months ago, over 130 major Australian companies, including investment, electricity and retail companies, were served notice by the NGO Climate Action Network Australia (CANA)<sup>6</sup> to the effect that companies which fail to address the effect of their actions on climate change face the risk of litigation. Such initiatives clearly highlight the potential for future litigation on the basis of corporate response (or lack of response) to climate change. While Australian companies have not traditionally been the target of class actions, this is certainly changing and it is foreseeable that legal actions could be pursued against companies on grounds such as a breach of directors' duties, state based environmental law or breach of corporate disclosure obligations.

## Potential Claims and Claimants

Despite the fact that there is no explicit legal prohibition on the emission of greenhouse gases, this does not prevent an action being brought under Australian law if such emissions cause damage to a plaintiff or the environment. For example, smoking is not illegal, but a number of court cases have established that it is possible to find companies legally responsible for causing smoking-related health problems.

In relation to the types of damage caused by climate change, the following effects have been identified by the Australian Climate Litigation Project<sup>7</sup> as particular types of damage which may form the basis of climate change litigation:

- Increased surface temperatures (estimated to be 1.4-5.8 deg Celsius between 1990 and 2100);
- Rising sea levels (estimated to be 5mm per year for the next 100 years);
- Bleaching and reduced calcification of coral reefs;
- Loss of snow/glacial cover;
- Negative impacts on coastal ecosystems (eg mangroves, sea grass beds, reef fish and fisheries);
- Increased occurrences and extremities of natural hazards;
- Impacts on human health (eg increase in tropical diseases such as dengue, or diseases linked to water quality); and
- Impacts on endangered species (temperature increases, inundation or impacts on habitat).

Further impacts also include increased extreme weather events such as hail or flooding and the resultant effects on insurance premiums as well as damage to personal property, crops or livestock.

<sup>6</sup> The Australian branch of a non-profit making corporation organised under Californian law with more than 70,000 members in the US whose national priority is (inter alia) to combat global warming.

<sup>7</sup> The Role of Science in Climate Litigation Think-paper prepared by the Climate Litigation Project for its meeting on 23 January 2003.

Legal standing for environmental suits can be broad and there are a wide range of potential plaintiffs for climate change actions. Litigants can be divided into three main categories:

- States and Governments: local or state governments may bring actions for incidences such as rising health costs or damage to public land.
- Private industries/companies: industries which have suffered particular damage (for example the tourism or fishing industry as a result of coral bleaching) may choose to bring actions to recover their losses or particular companies which have suffered damage or financial loss as a result of the effects of climate change (for example where buildings are destroyed by weather events) may decide to litigate.
- Individuals: individuals who suffer damage to their health (through increased incidences of tropical disease) or property (through major weather catastrophes) may bring actions for damages.

A recent lawsuit in the United States illustrates the potential scope of climate change litigation, with local governments, individuals and non-government organisation joining under a single action to seek redress for a range of adverse impacts of climate change.

On 27 August, 2002, Friends of the Earth, Greenpeace, the cities of Boulder, Oakland and Arcata have filed a lawsuit against Overseas Private Investment Corporate and Export Import Bank of the United States. The suit includes the following claims of damage:

- The Local government of Boulder Colorado's water supply and electricity system is fed by a glacier that is likely to have melted to slush in 30 years time as a result of rising temperatures. The ensuing severe drought will result in water restrictions and an increase in wildfires, which coupled with dwindling energy supplies, may result in a forced relocation of the town at huge cost and upheaval.
- a North Carolina couple who fear that their retirement property will be lost due to the increasing incidence of violent storms, erosion and the rising sea level;
- a marine biologist whose life-work is being threatened by the disappearance of the coral reefs due to bleaching from rising ocean temperatures; and
- one of the largest maple producers in Vermont who believes that his business will be ruined by the disappearance of maple trees from the area.

## Potential Defendants

With billions of individuals, companies, industries and governmental entities worldwide causing greenhouse gas emissions on a daily basis, upon what criteria does one judge that a person or entity is legally responsible for damage caused by global climate change? In other words, how can any particular emitter of greenhouse gases be held legally responsible for a problem that is caused by so many people?

In a recent article, David Grossman has suggested a simple solution: apportion liability according to a product's carbon content or market share.<sup>8</sup> On this basis fossil fuel companies, electric utilities, carbon intensive industries and automobile companies could all become potential defendants in a climate change

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<sup>8</sup> insert: article in Columbia Journal of Environmental Law.

action. Even a State Government could be held responsible on the basis of the percentage of its total GHG emissions on a world-wide basis.

It is unlikely that a company will be sued merely because it emits greenhouse gases. However, where a company actively lobbies against legislative measures to lower those emissions, or continues to fund and engage in activities that aim to frustrate measures to reduce global warming and address climate change, the risk of attracting the attention of potential litigants and NGOs is undoubtedly higher.

## Causation

The main barrier to the success of a climate change action is that of causation - namely, showing a link between the action of the emitting party and the damage suffered by the plaintiff or damage to the environment.<sup>9</sup> This will without doubt continue to be a significant barrier.

Despite increasing consensus in the scientific community that climate change is making extreme weather more common, (indeed IPCC's scientific report of 2001 concluded there is a better than 2 in 3 chance that most of the observed warming over the past 50 years is due to the increase in greenhouse gas concentrations) scientists still remain unable, and insist that it is impossible, to attribute any singular weather-based event to climate change. However, as science moves forward, the likelihood of proving such a link increases.

When litigation against the tobacco industries first commenced 15 years ago, it was almost impossible to establish, on a scientific basis, that smoking caused lung cancer.<sup>10</sup> Today the use of epidemiological evidence has been successful in satisfying the causal nexus between use of tobacco products and the development of cancer in a plaintiff. In a similar way, as climate change technology advances, so may the ability to show evidential links between greenhouse gas emissions and specific climate events which may cause harm to the environment or potential plaintiffs.

## Potential Legal Basis for the Action

There are numerous potential avenues from which climate related litigation could emerge including tort law, trade practices law and corporations law. While not addressing these in any detail, it is particularly interesting to note that while such grounds have clear difficulties. The following examples are only intended to give a brief overview.

General Australian State environmental legislation presents a real basis for legal action. This legislation generally provides that it is an offence to cause "waste" or "pollution" to be emitted into the air, with a very broad definition of these terms. In some States, individuals have standing to bring actions against companies for breach of the legislation. Individual directors can be held responsible for such breach – in fact, if a corporation breaches the legislation, there may be a rebuttable presumption that the directors or managers are also liable. Potentially, such legislation would enable injunctions to be sought preventing companies from emitting greenhouse gases, which could obviously have a devastating effect on any production business.

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<sup>9</sup> Indeed, there have already been suggestions as to how to deal with the problem of causation. One such suggestion is the statistical approach as put forward by Dr Myles Allen. Under this method, one determines the percentage increase of a certain risk that is attributed to climate change and then causes the emitter to be responsible for the proportionate portion of damage caused. For example, if risk of a river flooding had increased tenfold due to past emissions of a nearby polluter, the polluter would be responsible for 90% of the damage caused by any such flood.

<sup>10</sup> It should also be noted that the acts of smoking and selling cigarettes were and remain legal.

For example, the Protection of the Environment Operations Act 1997 (the "PEO Act") in NSW does not specifically deal with the emission of greenhouse gases into the atmosphere. However, arguably there are general clauses which could have sufficient scope to capture greenhouse gas emissions, such as the provision making it an offence to "wilfully or negligently dispose of waste in a manner that harms or is likely to harm the environment". Under the definitions of the PEO Act, "waste" includes any unwanted or surplus substance whether solid, liquid or gaseous. There is also a general offence applying to the occupier of a premises who operates any plant in such a manner which is not proper or efficient so as to cause air pollution.

Potentially, it could be argued that the emission of excessive quantities of greenhouse gas amounts to air pollution. There is a defence available to these offences if a person can prove they were not aware of the harm or that they had used "all due diligence" to prevent the harm occurring. There is also a general duty to notify the Environment Protection Authority if a person becomes aware of a pollution incident causing or threatening material harm to the environment. Individuals can begin actions for a breach of the PEO Act with the leave of the NSW Land and Environment Court.

The Victorian Environmental Protection Act works in a similar manner to the NSW legislation, and, as with NSW, the offence within the Act ("polluting the atmosphere") is potentially wide enough to embrace climate change related damage. However, in contrast to NSW, in Victoria the Environment Protection Authority must appoint a person to take proceedings for offences under the Act.

Other States (for example, Queensland), create a general offence for causing serious or material environmental harm nuisance without authorisation. Again, the definitions in the legislation of "environmental harm" or "nuisance" are potentially broad enough to encompass damage caused by climate change (e.g. river flooding, damage to ecosystems due to increased temperatures etc.) Members of the public are able to seek restraining orders under the Queensland legislation.

While the success of any attempted action under state based legislation remains to be seen and is not without its hurdles (including a raft of public policy issues), it nonetheless provides a further basis for objection to those emitting significant greenhouse emissions.

## **VII. Directors and Officers**

Finally, as legally and regulatory regimes develop and begin to impose liabilities upon corporations, directors and officers of companies should be considering the implications that arise.

Under the Corporations Act directors have statutory duties to act in the best interests of their company, and with reasonable care and diligence. Failure to comply with these duties is an offence under the legislation for which the director can be personally responsible. One of the major duties of corporate directors is to protect the company assets (and ultimately the assets of shareholders) and to effectively address the risks and opportunities underlying the company operations. Climate change regulation and the potential for litigation are a risk for many companies.

Under the "business judgment rule", a director can discharge his or her duties to the company by making an objective judgment, in good faith, that he or she rationally believes is in the best interests of the company. However, to invoke the "business judgment rule" a director must first inform themselves about the subject matter of the decision. Therefore, a litigant may claim that by not obtaining adequate information about climate change and the related risks and opportunities for the company, a director is not acting in the best interests of the company and is in breach of his or her duties as a director, exposing directors to potential criminal prosecution or civil proceedings.

Companies have general obligations under the Corporations Act to disclose their activities in various corporate documents such as annual reports and prospectuses, particularly with regard to matters which may have an impact on the value of the company. Such disclosure generally must include details of the company's performance in relation to environmental regulation. There is potentially an argument that a company's levels of emissions should be disclosed, as they present a future risk or liability for the company that may impact upon its share value should the Kyoto Protocol come into force or a new national emissions trading scheme be implemented. However, until such regimes are in force, it is difficult to assess the financial impact of future climate change regulations or environmental harm in actual dollar terms, and potentially ASIC may consider that there are no reasonable grounds for the inclusion of such information in general corporate documents at this point in time.

Nonetheless, for companies such as electricity retailers in NSW there is a clear known cost of compliance and this should be openly factored into disclosures to shareholders. Additionally, as discussed above, shareholders and insurers have begun to insist that corporate boards disclose the inherent risks and opportunities for the operations of a company due to the problem of climate change. Environmental Finance recently reported that Swiss Re, the world's second largest reinsurance provider recently began asking companies to characterise their formal responses to climate change in renewal forms for directors' and officers' liability insurance.

## **V. Conclusion**

In summary, the risks that climate change regulation can present to a business (as well as the risks inherent in rising global temperatures) include increased penalties for non-compliance, negative publicity, potential litigation and difficulties in securing investment or obtaining insurance. Such risks are becoming too large to ignore. Conversely, the opportunities that climate change presents for innovative corporate governance, investment and funding opportunities and new technologies should also be considered by every corporation. Climate regulation will not go away, nor will the issue of global warming.

**Speaker and Key Baker & McKenzie Contact for In Control of Carbon Project:**

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Martijn Wilder is responsible for Baker & McKenzie's global climate change and renewable energy practice. Martijn advises clients that include governments (the European Commission, Malaysia, México and Southern African States, NSW), the World Bank's Carbon Finance Unit, European Bank of Reconstruction and Development and a range of corporations, financial institutions and renewable energy project developers. He regularly advises on the legal aspects of the emerging climate legal regimes, the development of CDM and JI projects and design, the trading of carbon and other environmental rights and the implementation of laws and policies. Martijn was appointed as an adviser to the Australian Greenhouse Office's Greenhouse Gas Abatement Programme and is the legal representative on the Australian Federal Government's *National Oceans Advisory Group* to the National Oceans Ministerial Board. Martijn is Co-Australian Representative on the International ILA Committee on the *Trans-National Enforcement of Environmental Law*. Martijn is a Visiting Professor to Hofstra University's (New York) Summer School Programme and *Adjunct Lecturer* in International Environment Law at the University of NSW. He has honours degrees in both Economics and Law and a LLM (Master of Laws) from the University of Cambridge where he studied as a Commonwealth Trust Scholar.

## Baker & McKenzie

Baker & McKenzie was the first law firm to recognize the importance of an international perspective and remains the only truly global law firm. Through its network of over 3,000 lawyers in 62 offices in 35 countries, the firm is able to offer an unparalleled service in countries leading the development of climate change reform.

Recognizing the emergence of emissions reduction opportunities and the development of associated trading markets, Baker & McKenzie has assembled a specialized team of key experts from its Environmental, Finance and Major Projects Practice Groups to address the implementation of national and international GHG emissions reduction requirements. This team combines expertise in environmental law, energy law, project finance, major projects, international trade, taxation and public international law and has already advised on related initiatives throughout the world.

As one of the largest generators of GHG emissions, the energy sector has traditionally been a strong target of regulatory GHG reform and will face some significant challenges in any carbon-constrained environment. Baker & McKenzie has a strong understanding of the energy sector, being advisors to a large number of energy companies and having worked at the cutting edge of international developments in GHG emissions trading. We continue to assist renewable energy companies and emerging green energy funds.

Baker & McKenzie's team has participated in the international negotiations on climate change, advised numerous national governments, multilateral organizations, foreign exchanges and multinational corporations on issues related to climate change and other emissions trading schemes and has been intricately involved in many of the early carbon trades and projects under the Clean Development Mechanism (CDM) and Joint Implementation (JI) mechanisms of the Kyoto Protocol. We are key legal advisers to the World Bank's Carbon Finance Unit, the European Bank for Reconstruction and Development and a number of national governments who have already commenced trading Kyoto rights.

Internationally, our lawyers have advised the UK, EU and Brazilian Government delegations during the Kyoto Protocol negotiations and we are currently advising a number of governments on the development of climate laws and policy, including drafting the registry regulations for the EU emissions trading regime.

We have specific experience in the following areas:

- international negotiations;
- drafting climate change laws and providing policy advice and assistance to national, state and local Governments;
- advising and assisting corporations in the development of greenhouse and climate change policies;
- advising on early carbon trades, including the development of bilateral and multilateral trading platforms, support to early exchanges, and identifying possibilities for securing carbon rights;
- advising on and structuring of, early climate change projects, including CDM and JI projects;
- advising and working directly with key market leaders;
- assisting with the design of and participation in new environmental markets in the renewable energy, carbon, water and biodiversity areas;

- assisting participants in greenfields renewable energy projects, including drafting Power Purchase and REC and ROC Sale Agreements;
- advising ethical investment and technology funds;
- assisting with climate project financing; and
- advice to forestry managers, investors and brokers on developing and securing rights over carbon sinks.

### **Key Global Contacts:**

For further information or advice on climate change issues please do not hesitate to e-mail one of Baker & McKenzie's regional climate change contacts:

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