

OCCASIONAL ENVIRONMENTAL REPORT MARCH 2013

The scientific evidence is absolutely unequivocal - climate change *is* happening, mainly as the result of human activity. Furthermore, without immediate and drastic action it is likely that we may soon pass tipping points that will trigger irreversible changes to our climate and to the entire global ecosystem. We therefore have the moral responsibility to take action – now – so as to ensure that we leave a sustainable and healthy global environment for future generations.

Brief Overview of International Actions to Deal with Climate Change.

In 1970, a group of concerned scientists, economists, political and social leaders met informally in Rome, to discuss the present and future predicament of man, in light of growing concern about deterioration of the global environment. The ideas emerging from this meeting were reported in detail in *“The Limits to Growth”*, a Report which stimulated discussion about problems of global growth, resource depletion, pollution and sustainability amongst global leaders all over the world. As a direct result of these deliberations, the international community met officially for the first time at the *UN Conference on the Human Environment* in Stockholm in 1972, a meeting which resulted in *definition of principles for the preservation and development of the global environment*, noting the need to develop strategies to protect the poorest and most vulnerable countries and communities – i.e. the *emergence of global environmental justice*. Scientists already recognized the significance of the *greenhouse effect* i.e. that rising global temperatures were due to accumulation of certain gases such as carbon dioxide and methane in the atmosphere. Consequently, the next step was to convene a Conference to analyze this in depth, and this was held in Villach (Austria) in 1980: *“The Assessment of the Role of Carbon Dioxide and other Greenhouse Gases in Climate Variations and other Associated Impacts”*.

In 1992, the *United Nations Framework Convention for Climate Change (UNFCCC)* was developed at the *Rio Earth Summit*, thus providing a framework for negotiating specific international treaties and protocols that may set binding limits on Greenhouse Gas emissions and protect the climate. The *“Parties to the Convention”*, including both industrialized countries and

REGISTRATION: AIA No. A0004465H

ABN 182 270 730 59

OFFICE ADDRESS: Level 1, 15 Collins Street, Melbourne 3000

POSTAL ADDRESS: PO Box 18186, Collins Street East, Melbourne 8003

PHONE / FAX: 03 9421 1602

EMAIL: ncwvic@bigpond.com

WEBSITE: ncwvic.org.au

REGIONAL BRANCHES: Central Gippsland, Geelong, Goulburn Valley (Shepparton)

INDIVIDUAL MEMBERSHIP (Associates)

"Economies in Transition", thereafter met annually at the "**Conference of the Parties'**, the first of which, **COP1**, was held in Berlin in 1995. The objective of the UN Convention was to provide support, leadership and encouragement and to achieve universal agreement on control of greenhouse gas emissions so that the atmosphere would be stabilized at a level that would prevent dangerous anthropogenic interference with the climatic system. ***It was hoped that this would ensure sustainable development that would meet the needs of the poor and that it would enable all nations to improve their quality of life without compromising that of future generations.***

The **Kyoto Protocol**, which was **adopted at COP 3 in 1997**, contained the undertaking entered into by industrialized countries to reduce their emissions by at least 5 % compared with their 1990 levels, over the period 2008-2012. It also included the proviso that targets for further mandatory reduction in emissions would to be settled after 2012. However, since this landmark decision, there has been little progress in achieving a legally binding agreement capable of controlling global emissions and preventing run-away climate change, despite an immense effort by many dedicated delegates and innumerable Conferences, debates and specialist meetings. **Kyoto Mark 2**, a new road-map for more ambitious emission reduction, was scheduled to be finalized by 2015 and brought into effect by 2020, but at the present time its future implementation is in doubt. Unfortunately our political leaders simply do not seem to recognize that there really is an urgent need to take strong action and this is very disturbing, "Short termism" seems to control their thought processes and ***no one will make the first move to take positive action.***

Great hopes had been held for the COP 15 in Copenhagen in 2009, but this conference, like those following in 2010 and 2011, proved to be very disappointing. The dire situation was summed up very succinctly by Fred Pearce prior to the Rio+20 Conference last June:

"During the past two decades, emissions have soared, resource plundering has intensified, nature is still on the retreat, the world has become less equitable and climate change has gone from a distant prospect to a frightening reality".

Unfortunately, once again at the latest UN Meeting in Doha in December (COP18) there was little progress. However, release of the Report "**Turn Down the Heat**" by the World Bank prior to Doha, and statements by the President of the Bank, Jim Young Kim at the **G20 Global Economic Forum in Davos** that followed, were positive and very encouraging. Kim strongly advocated that climate change should be on the top of the agenda at the Economic Forum and should include setting a predictable price on carbon, high enough to give incentive for development of low emission technology. He also stressed that all fossil fuel subsidies world wide **must** be eliminated, the money

thus saved being directed to development of low emission, renewable energy. Globally, in 2011 subsidies on extraction and use of fossil fuels amounted to \$520 BILLION whilst less than 1/10th of that amount was spent on tackling climate change. We will now have to wait and see what effect Kim's statements will have on international negotiators striving to deal with our deteriorating environment.

Evidence for escalating global warming / climate change.

The dramatic impact of global warming / climate change is already being seen all over the world. For example:

- i) Global temperatures are rising* and extreme temperature peaks are higher and more frequent.
- ii) Globally we are emitting more greenhouse gases.* India and China are responsible for a great proportion of this increase due to proliferation of coal-fired power stations and the lifestyle choices of their growing middle-upper classes. The US is also a major culprit.
- iii) Arctic ice is rapidly melting* – faster than predicted. Loss of white ice and snow, means that less heat from the sun is reflected back into space. Cold water from the melting ice is sinking to the sea bed, disturbing the normal flow of deep sea currents, with an **unpredictable impact on global weather**, surface moisture, rainfall etc.
- iv) There has been a great increase in the frequency and severity of extreme weather events* due to climate change (floods, droughts, hurricanes, heat waves etc). This comes at an **enormous cost** to the people involved and to the Government and will increasingly put **immense pressure on for essential services – hospitals and health systems, education, infrastructure etc** There just won't be enough money to go around. It is therefore obvious that immediate action must be taken to reduce emissions and prevent further damage to our environment before such a crisis develops, impacting on the daily lives of millions of people.
- v) Rising temperatures reduce crop yields*, even if there is sufficient rainfall. Thus there is risk of a **major food crisis** as the global population continues to grow. At present it is estimated that globally 50% of all food produced for consumption is wasted. Dealing with **food waste**, improving farming techniques, constraint in use of water and choice of the best crops to feed the world must be of high priority.
- vi) Rising temperatures results in increased heat stress* and many deaths (e.g. 70,000 deaths in Europe in 2003). They also facilitate **spread of potentially fatal tropical diseases** such as dengue fever and malaria.

vii) Deforestation is contributing to climate change – e.g. through loss of major “sinks” for CO₂, and impact on local weather (trees release water vapour during respiration, creating a moist atmosphere and stimulating local rainfall). Loss of forests means loss of vital ecosystems on which the health of our environment and **biodiversity** depends.

viii) Sea levels are rising, due to melting arctic and Antarctic ice. Approximately ten percent of the world's population - 600 million people - live in low lying areas in danger of being flooded. Thermal expansion of the sea water and increasingly violent storms will exacerbate the problem.

ix) Even if we were able to get an international agreement on emissions control, **GHG levels will continue to rise** due to desorption of dissolved CO₂ from the warming oceans, release of methane from **methane hydrates** on the ocean floor and from **melting permafrost** in northern latitudes.

What do we have to do to avert this imminent crisis?

In March 2012, a very important meeting was held in London, the **“Planet Under Pressure”** conference – in preparation for the Rio+20 Meeting in June. This spelt out the details of our climate crisis in clear, precise detail, pointing out that **continued economic growth is not a measure of a sustainable flourishing economy**- the **GDP** (profit index) could increase whilst all the natural resources of the community were exhausted. Thus a new indicator was proposed: the **“Inclusive Wealth Indicator”** or **IWI** – one that estimates the wealth of nations, i.e. the natural and human resources, the manufacturing capacity, even the social and ecological constituents of human well-being. It was also emphasized that as population increases, natural resources become scarcer (due to increased consumption) and increased demands on energy supplies are of concern. However, this can be avoided if we transcend to a more sustainable economy, switch to low emission/renewable energy, ensure conservation of water supplies, curb personal consumption patterns and repair/renew/recycle whatever is possible. **It is no longer a case of IF we should transcend to more sustainable economy but how quickly we can do it** – we have no choice as the world is approaching dangerous tipping points. It concluded with release of the **“State of the Planet Declaration”**.

In summary:

i) Without urgent action, we could face threats to water, food, biodiversity and other critical resources and risk a humanitarian emergency on a global scale.

ii) In one generation, economic, social, cultural and political pressures have caused fundamental changes in the global environment that may move us beyond safe natural boundaries (“tipping points”). New ideas and global action can halt this.

iii) We must safeguard Earth’s natural processes and protect global ecosystems. **Global sustainability must become the foundation of society** – our prime aim. As part of this we must deal with over-consumption.

iv) Eradication of poverty and protection of human health are vital.

Unfortunately the conclusions of this Conference do not seem to have had much impact on the outcome of the Rio+20 or COP18 Conferences, but this Document may have influenced the ideas promoted in the World Bank Report, “Turn Down the Heat”. Unquestionably, **this Declaration is a sound basis to work on for the future.**

Clearly the unavoidable conclusion is that **we must drastically change our current comfortable lifestyle and our consumer-driven habits and reduce emissions immediately** – endless global expansion and economic growth is simply not possible in a world with limited natural resources, which we have exploited mindlessly in recent decades. Without doubt we are living well beyond our environmentally sustainable means. With “business as usual”, global temperatures are set to rise by 4 C by 2060, but scientists warn that we may reach a “tipping point” well below that temperature, beyond which future climate change will be out of our control. Obviously this will have an unimaginable impact on life on earth, but it will not be us who will be most effected, but our children, our grandchildren and future generations who will have to deal with this avoidable crisis. However, many scientists see little hope of cutting GHG fast enough

Are we prepared to change our lifestyle ? Evidence seems to suggest that we are narrowly focused on our maximum well being in the short term and, for most people in the western world, the long term effects of climate change have not yet sunk in. We are tending to postpone action until it is too late.

Well, what do we have to do?

Firstly we have to wake our Governments and our leaders out of their torpor, their complacency, activate them to look further ahead than the next election and take positive steps to control our environment – after all the Government and our leaders have to do the big stuff and make the big decisions. Strong action to support the **development of low emission power generation** such as wind, solar power, geothermal energy etc. must be high on the agenda and all subsidies must be removed from industries associated with fossil fuels. Australia receives more sunshine than any other country in the world (i.e. potential for solar power) and possibly also has the best conditions for generation of power from wind. **The technologies are there and proven**

and they are affordable. The **carbon tax** on facilities generating excessive GHG emissions especially CO₂ is an excellent idea – but this money MUST be mainly directed towards rapid deployment of non polluting energy sources and **there is no way that the polluter like the coal-fired power stations and other industries which generate excessive emissions should be compensated**, as is the case at present. The **CarbonTax MUST** be seen as a **FINE** for illegal pollution of the atmosphere. Furthermore, a “Carbon Price” must reflect the true environmental cost of generating power (OECD). Finally, **export of coal and LNG must cease immediately** – here we are exporting to the rest of the world enormous amounts of potential greenhouse gas emissions without having to take any responsibility for these emissions – a “carbon bomb”. These fuels are mainly sourced from valuable agricultural land at a time when food production should be our top priority, in view of diminishing food availability in many countries. In many cases the mining/gas extraction activity pollutes critical water sources in the area, not to mention the environmental damage caused by construction and dredging of port facilities and the impact of shipping close to the coast. Damage to the Great Barrier Reef is of particular concern.

What about involvement of women and young people in global action on the climate?

The effect of climate change on people’s lives clearly must be considered from the perspective of *human rights, justice and equity* and this means that *men and women should have an equal say* in negotiations dealing with this complex global problem. *Young people* who will have to deal with the results our transgressions, must also be at the forefront of the debate. Encouragingly, several women including Harlan Brundtland, and the German Chancellor, Angela Merkel have demonstrated great strength and determination in arguing the case for the involvement of women, and this has been furthered by establishment of the *Mary Robinson Foundation for Climate Justice*. At the UN Climate Change Conference in Cancun in 2010, the promotion of gender balance in discussions on environmental issues and sustainable development were supported broadly. Now **in 2013, gender is firmly on the Agenda of the UNFCCC (United Nations Framework Convention on Climate Change)**.

On Day 3 of the COP18 meeting in Doha, female delegates representing 100s of women’s organizations and environmental groups from all over the world expressed their frustration and dissatisfaction at the lack of progress at the Conference, demanding firm commitment and “fierce energy and ambition” from all participating Governments to reach an *agreement that would ensure a future for our children and their descendents*. Ulrike Roehr of “LIFE - Education, Education Equality” added that it was imperative “to urgently act to support developing countries facing the *impact of our historic misbehaviour*” – i.e. to make real and lasting changes to the lives of people most affected by the impact of climate change and extreme weather events.

“The adoption of a new decision at COP18, which sets a goal of gender balance to improve women’s participation and representation, will send a strong political signal and ensure that women and men elected to UNFCCC bodies and involved in the negotiations fully address the gender dimensions of climate change” (Mary Robinson). However we are yet to see real progress in tackling global warming as a result of this decision.

The **participation of young people** in the climate debate is also increasing rapidly. Clearly, as the future leaders and workers of the world, youth are major stakeholders in the climate crisis and how it is to be solved. The **International Youth Climate Movement (IYCM)** links youth NGOs from all over the world - a large group of connected friends, campaigners and optimistic humans lobbying for a fairer, cleaner and healthier world for all. Several Youth groups in Australia are active participants in this action, including the **Australian Youth Climate Coalition**, and several centered at our University campuses (See Australasian Campuses Towards Sustainability). Three days before the start of COP18, Doha hosted the **8th Global Conference of Youth (CDY8)** which has now become a central feature in the International Youth Climate Movement, providing a platform by which young campaigners can stand together in pursuit of a clean fair future. Many of the side events at Doha focussed on introduction of young people to key terms and themes, and training skills to engage more effectively with the negotiators. Another important global initiative is **Connect4Climate** launched by the World Bank and several other international organizations in 2011. This is a global partnership program dedicated to climate change communications. Through social media and the web, C4C helps to give voice to local stakeholders that have stories to tell about climate change and it gives creative young people from around the world the opportunity to share or sing their personal stories about climate change.

In conclusion, **the world desperately needs an inspired global Leader** who can break down the current barriers between different countries and different cultures and create a world-wide united front to tackle global warming. We only have one world, and its future as a habitable planet depends on how mankind behaves over the next couple of decades. This is an issue which involves every one of us. We have loitered so long, and we have a lot of ground to make up so let’s go!

Dr Pat Phair