



**A Roadmap for the
Universal Climate
Agreement, Lima,
December 2014:**
*Negotiating a sustainable
solution for moving to a
low- carbon global
economy based on
conflict resolution &
scientific concepts*

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“Sustainable energy is the golden thread that connects economic growth, social equity, and a climate and environment that enables the world to thrive.”

UN Secretary-General, Ban Ki-moon (September 2012)

Introduction

- ☑ Achieving the objective of The United Nations Framework Convention on Climate Change (“UNFCCC”) requires the Parties to be guided by Article 3, UNFCCC; the Kyoto Protocol also endorses this approach:-

“The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof”.

- i. The global problem of climate change is of common concern for humankind - but it has unequal impacts on all countries. Clearly, there is a common responsibility for all countries to participate, and to share in global mitigation actions aimed at reducing GHG emissions.
- ii. But, differing obligations need to be imposed on developed and developing countries by taking into account each country’s cumulative contribution - historical as well as current - to atmospheric GHG emissions. Proposed mitigation actions to prevent, reduce and control GHG emissions - including differences in a country’s economic capacity or technical capability to take action - are also relevant considerations.
- iii. Climate change is based on multi-disciplinary scientific evidence. Climate change and sustainable development are seen as interdependent and mutually supporting. Multi-Parties will be involved in drafting the new Climate Agreement at Lima; there are now 195 Parties to the UNFCCC and 192 Parties to the Kyoto Protocol.

These three features are found in any public interest environmental problem. A roadmap for drafting the new Climate Agreement at Lima, by negotiation, is outlined. It is based on linking contemporary and accepted concepts for environmental dispute resolution to a scientific methodology for achieving sustainability.

The Author: *Dr Ted Christie*

Barrister: Practising Certificate, Bar Association of Queensland, Australia (**Environmental law specialist**)
Legally Accredited Mediator: In accordance with the Australian National Mediation Accreditation System
Environmental Scientist
Author of “Finding Solutions for Environmental Conflicts: Power and Negotiation” (2008, 2009), Edward Elgar, Cheltenham, UK.

W. www.environment-adr.com

W. www.environeg.blogspot.com.au

E. ted.christie@bigpond.com

E. info@environment-adr.com



Dr Ted Christie has been involved in the climate change discussion since the early 1980s. Initially, as an Associate Professor (Applied Ecology) as an invited participant to a UNEP Workshop convened by the late Swedish climatologist, Dr Bert Bolin, at Stockholm.

As an environmental lawyer in the 1990s, articles were published in international law journals on science and regulatory control of carbon dioxide emissions to address climate change; also, legal liability for coastal town planners and environmental professionals for advice related to sea level rise and climate change.

In more recent years, a series of articles on climate change issues - that are based on a cross – disciplinary (law/ science/ADR) & sustainable development perspective - have been published on a number of web sites.

The Warsaw UN Climate Change Conference

Some Key Outcomes

- Under the UNFCCC ,United Nations Climate Change Conferences are held yearly. The first conference was held in 1995 in Berlin.
- The most recent UN Climate Change Conference was held at Warsaw, Poland in November, 2013. However, no agreement was reached for global commitments that set clear GHG emission reduction targets to apply to all nations for the first time.
- Nor was there any agreement on a timetable to apply to all nations for achieving emission reduction targets.
- It was agreed at Warsaw, that in drafting the new universal climate agreement, all countries will treat mitigation similarly.
- This will mean countries being required to prepare “contributions” - rather than asking for specific reduction targets or commitments from some countries.
- **“Contributions” might be reduction targets - but could be other efforts to reduce emissions.**

SOURCE: http://unfccc.int/files/press/news_room/press_releases_and_advisories/application/pdf/131123_pr_closing_cop19.pdf

What are the Next Stages in Preparing for the New, Universal Climate Agreement?

- Marcin Korolec, President of the UN Climate Conference, at Warsaw, stated that “Warsaw has set a pathway for governments to work on a draft text of a new universal climate agreement so it appears on the table at the next UN Climate Change Conference in Peru [December, 2014]. This is an essential step to reach a final [binding] agreement in Paris, in [December] 2015.”
- The final agreement will come into force from 2020.
- As part of a global effort to organize action and ambition on climate change prior to the UN Climate Change Conference in Peru in December 2014, UN Secretary-General, Ban Ki-moon, will be inviting Heads of State and Government - along with business, finance, civil society and local leaders - to a “Climate Summit” in New York in September 2014.

What is the Purpose of the New York Climate Summit?

- ❖ The aim of the New York Climate Summit will be to facilitate action by governments, business, finance, industry, and civil society on new commitments and contributions to assist the move towards a low-carbon global economy.
- ❖ The New York Climate Summit will not involve any negotiations prior to the UN Climate Change Conference in Paris, 2015. The intention at the Summit will be to build a solid foundation for Paris, 2015 on which to secure successful negotiation; and to assist progress on a roadmap to reduce GHG emissions and to enhance adaptation strategies.

SOURCE: <http://www.un.org/climatechange/blog/2014/01/24/at-davos-forum-ban-urges-leaders-to-intensify-climate-action-ahead-of-summit/>

Some Key Global Warming Facts

- ☑ The industrial revolution era was around 1760-1850. The environmental data set prior to this time is limited because observations had insufficient global coverage.
- ☑ Between 1800-1870, the atmospheric CO₂ concentration, as later measured in ancient ice, was about 290 ppm (parts per million). The mean global temperature (1850-1870) was about 13.6°C. In 2013, atmospheric CO₂ concentration reached 397 ppm - the highest in millions of years. The mean global temperature was 14.6°C, the warmest in thousands of years.

SOURCE: <http://www.aip.org/history/climate/timeline.htm>

- ☑ But, two-thirds of the warming that has occurred from 1975 - 2010 was at a rate of around 0.15°C to 0.20°C per decade: <http://earthobservatory.nasa.gov/Features/WorldOfChange/decadaltemp.php>
- ☑ To manage the risk of dangerous climate change from CO₂ emissions arising from human activities, scientific opinion indicates the need for emissions to peak in this decade. If the world is to limit global warming to maximum temperatures below 2°C of pre-industrial revolution levels, the window in time for global emissions to peak and decline is closing.

SOURCE: <http://www.climatechange.gov.au/international/international-action/global-context-australias-place/pathway-below-2-degrees>

Is There an Agreed Goal for Limiting Global Temperature Rise?

- ☑ The UN Climate Change Conference at Cancun, Mexico in November 2010 “sent the strongest signal of a shift towards a low-carbon global economy”.
- ☑ Countries agreed to a commitment to limit global temperature increase to no more than 2°C above pre-industrial levels. This goal would give a reasonable chance to avoid the most significant environmental and social impacts of climate change.
- ☑ But, the total of official emission reduction pledges from all countries at Cancun was only around 60% of what was needed for a 50% chance to limit the temperature increase to below 2°C pre-industrial levels.
- ☑ Parties agreed at Cancun to review progress made towards achieving the “2°C goal”. This will also include a review by 2015, based on the best scientific knowledge available. The aim: To assess whether the current “2°C goal” needs to be replaced by limiting temperature increase to a maximum of 1.5°C of pre-industrial levels.

SOURCE: https://unfccc.int/meetings/cancun_nov_2010/meeting/6266.php

Limiting Global Temperature Rise : A United Nations Perspective

Proposed Emission Reduction Targets & Timetable

- The opinion of the **United Nations Partners on Climate Change** – a grouping of 38 UN organizations all sharing a common interest in climate change - is that governments could slow and reverse existing emission trends, and ultimately stabilize atmospheric GHG levels; but stronger climate change policies need to be adopted.
- The most ambitious target assessed - **to stabilize GHG levels at 445-490 ppm** - could limit global mean temperature increases to 2-2.4°C above pre-industrial levels. Achieving this target would require global CO₂ to peak by 2015 and to fall to 50-85% of 2000 levels by 2050.

SOURCE: <http://www.un.org/wcm/content/site/climatechange/pages/gateway/mitigation/reducing-emissions>

(Emission Reduction Targets x Time) Commitments for Some “Developed Countries”

1.0 The European Union is committed to climate and energy goals for a competitive, secure and low-carbon EU economy. For 2020, the emission reduction target is 20% below 1990 levels and is **to be implemented through legislation**. For 2050, the EU emission reduction target is 80-95% below 1990 levels “as part of efforts by developed countries as a group to reduce their emissions by a similar degree”: SOURCE: http://ec.europa.eu/clima/policies/brief/eu/index_en.htm

In January 2014, the EU announced a proposal to reduce GHG emissions by 40% below the 1990 level by 2030; and an EU-wide binding target for renewable energy of at least 27% by 2030.
SOURCE: http://europa.eu/rapid/press-release_IP-14-54_en.htm

2.0 At the Copenhagen Climate Change Summit (December 2009), President Obama announced an action commitment for USA. GHG emission reduction targets in the range of (i) 17% below 2005 levels by 2020 (ii) 42% below 2005 levels by 2030 and (iii) 83% below 2005 levels by 2050. In June 2013, President Obama recommitted the United States to meet the GHG emission reduction target of 17% below 2005 levels by 2020.

SOURCE: <http://www.nrdc.org/international/copenhagenaccords/>

(Emission Reduction Targets x Time) Commitments for Some “Developed Countries” (Continued)

3.0 At the UN Climate Change Conference in Doha, Qatar, In December 2012, **Australia's** then Federal Labor Government gave a commitment for an emission reduction target from 2013-2020, that would meet Kyoto's unconditional 2020 target of 5% below 2000 levels.

But, a significant step had been taken earlier (in November 2011) by Australia's Government, independently of Kyoto: **Legislation was introduced for action directed at meeting a long-term target to reduce Australia's GHG emissions to 80% below 2000 levels by 2050: Clean Energy Act 2011 (Cth), section 3(c).**

But, in 2013, The Federal Government of Australia changed, making the status of this statute uncertain? In November 2013, Australia's new LNP Government introduced “Climate Change Bills” in the Federal Parliament to repeal the Clean Energy legislation.

4.0 As a signatory in 1998, Canada ratified the Kyoto Protocol in 2005. However, **in December 2012, Canada withdrew from Kyoto.** It is the first nation to pull out of Kyoto.

UN Climate Change Treaties & Sustainable Development

I The UNFCCC, Article 2 [Entry into force: 21 March 1994]

- ☑ Commencing with its international climate change treaties, the UN has long recognized that achieving sustainable development is crucial for addressing climate change and for moving to a low-carbon global economy.

- “The ultimate objective of this Convention [the UNFCCC] and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention: -

Stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner”.

UN Climate Change Treaties & Sustainable Development

II The Kyoto Protocol, Article 2 [Entry into force: 16 February 2005]

- “Each Party ... in achieving its quantified emission limitation and reduction commitments ..., **in order to promote sustainable development**, shall: (a) Implement and/or further elaborate policies and **measures** in accordance with its **national** circumstances, such as:
- (i) Enhancement of energy efficiency in relevant sectors of the national economy;
 - (ii) ... promotion of sustainable forest management practices, afforestation and reforestation;
 - (iii) Promotion of sustainable forms of agriculture in light of climate change considerations;
 - (iv) Research on, and promotion, development and increased use of, new and renewable forms of energy, of carbon dioxide sequestration technologies and of advanced and innovative environmentally sound technologies;
 - (v) Progressive reduction or phasing out of ... fiscal incentives, tax and duty exemptions and subsidies in all GHG emitting sectors that run counter to the objective of the Convention ...;
 - (vi) ...”

The Current UN Position on Climate Change & Sustainable Development

- 1.0 The obligations imposed in Article 2 of the UNFCCC (that came into force in 1994) and Article 2 of the Kyoto Protocol (that came into force in 2005) clearly highlight the need for integration between mitigation actions to reduce CO₂ emissions, moving to a low-carbon global economy and achieving sustainable development.
- 2.0 The UN Secretary-General launched the “Sustainable Energy for All” initiative in September 2011. Its objectives include doubling of the energy efficiency rate and doubling of the share of renewable energy in the world’s energy mix by 2030.

SOURCE: <http://www.un.org/climatechange/blog/2013/10/23/in-copenhagen-ban-calls-for-clean-energy-transformation-for-more-sustainable-future/>

- ☑ “A Framework for Action” for achieving the Sustainable Energy For All initiative was released in January 2012 by ‘The Secretary-General’s High-level Group on Sustainable Energy for All’.

SOURCE: http://www.se4all.org/wp-content/uploads/2013/09/SE_for_All_-_Framework_for_Action_FINAL.pdf

The Current UN Position on Climate Change & Sustainable Development (Continued)

3.0 Under the UN Secretary-General's leadership, Member States at the Rio+20 Conference in Brazil in June 2012, agreed on measures for addressing climate change and implementing sustainable development, including:

- ✓ **promoting more sustainable agriculture;**
- ✓ **improving energy efficiency;**
- ✓ **addressing ocean acidification; and**
- ✓ **enhancing strategies that integrate disaster risk reduction and climate change adaptation into decision-making.**

SOURCE: <http://www.un.org/wcm/content/site/climatechange/pages/gateway/secretary-general>

The Current UN Position on Climate Change & Sustainable Development (Continued)

4.0 On 22 October 2013, at Copenhagen, the UN Secretary-General, Ban Ki-moon, called for a clean energy transformation to help put the world on a more sustainable path - stressing that this will require innovation, investment and collaboration by all partners:-

“Climate change is the single greatest threat to sustainable development. Yet, too often, one important fact gets lost amid the fear: addressing climate change is one of our greatest opportunities.”

5.0 On 24 January 2014, the UN Secretary-General, Ban Ki-moon highlighted the link as one in which:

“Climate change and sustainable development are interdependent and mutually supporting”.

6.0 *The UN Secretary-General also encouraged investors, banks and regulators to work together to ensure that financial markets are conducive to sustainable development.*

SOURCE: <http://www.un.org/climatechange/blog/2014/01/24/at-davos-forum-ban-urges-leaders-to-intensify-climate-action-ahead-of-summit>

Sustainable Development Principles & the United Nations

Achieving sustainability requires mitigation actions to be implemented that have regard to social, cultural, economic and ecological considerations. Three key UN documents are central for ensuring Governments are committed to the UN's sustainable development agenda:-

- **The 'Brundtland Report' ("Our Common Future")** which was produced in 1987 by the World Commission on Environment and Development.
- **The Rio Declaration:** The Earth Summit held in Rio de Janeiro in 1992 (the United Nations Conference on Environment and Development) produced a declaration of 27 principles upon which nations agreed to base their actions in dealing with environmental and development issues.
- **Agenda 21:** Also emerged from the Earth Summit. It provides a future global plan of action for sustainable development. It is based, to a large extent, on the Rio Declaration principles.

SOURCE: <http://www.unglobalcompact.org/aboutthegc/thetenprinciples/environment.html>

Finding a Sustainable Solution for Moving to a Low-Carbon Global Economy

I Overview

- ❖ Agreeing on mitigation actions to reduce CO₂ emissions can lead to polarised opinion and global environmental conflict. Environmental conflicts are, invariably, sustainable development conflicts.
- ❖ A sustainable solution is not a solution weighted in favour of one objective e.g. economics.
- ❖ Finding a sustainable solution for reducing CO₂ emissions requires the multiple and competing objectives of sustainable development – *ecological, economic, social (including cultural)* - to be counter-balanced. That is, to ensure equitable access for all countries to sustainable development.
- ❖ A contemporary methodology for finding a sustainable solution for climate change has its foundation in applying principles and concepts from both conflict resolution (“Principled Negotiation”) and science (“Multi-Objective Analysis”).

Finding a Sustainable Solution for Moving to a Low-Carbon Global Economy

II Understanding Environmental Conflicts

- Conflicts over information and values are the most frequent sources of conflict over environmental issues.
- But, conflicts over scientific information (or data) will almost always be the primary source of conflict. The conflict reflects the relevancy or reliability of the scientific information.
- Relevancy and Information Conflicts: Arise because of a lack of information, misinformation, scientific uncertainty, or divergent scientific opinion as to what information is relevant.
- Reliability and Information Conflicts: Arise because of different interpretations of the same information, or whether experimental and research methods – including statistics and experimental design – are in accord with accepted scientific protocols. Where there are no standard experimental protocols, information conflicts are exacerbated.
- ☑ The key for effectively managing and resolving information conflicts over scientific evidence and environmental issues is to adopt the conflict resolution concept of principled negotiation.

Finding a Sustainable Solution for Moving to a Low-Carbon Global Economy

III The Role of Multi-objective Analysis (“MOA”)

- ❖ **Multi-objective analysis** is a well-accepted scientific methodology. It is widely used as a decision-making aid to resolve public interest environmental and planning conflicts.
- ❖ The core of MOA methodology involves the construction of scenarios: ***A scenario is a hypothetical construction of the environmental conflict*** e.g. a proposed development project; or competing land use interests for the use of natural resources and their co-existence.
- ❖ MOA methodology requires the scenario(s) to be evaluated against specific multiple-objectives. It is this step that becomes the practical aid for environmental decision-making.
- ☑ In terms of preparing for the UN Climate Change Conference at Lima, **each country needs to prepare a scenario setting out their contributions** for reducing their future CO₂ emissions.
- ☑ In order to find a sustainable solution for the Draft Universal Climate Agreement, **the overall “global scenario” – which combines all countries’ contributions for reducing CO₂ emissions - needs to be evaluated against the multiple and competing objectives for sustainable development.**

Finding a Sustainable Solution for Moving to a Low-Carbon Global Economy

IV Multi-objective Analysis & Principled Negotiation

- ☑ The value of MOA, as a decision-making aid for taking action for climate change, can be extended by integrating this methodology with two key elements of “Principled Negotiation”. The advantages of integration would lead to a more effective process for negotiating the Draft Universal Climate Agreement - as well as for finding a sustainable solution for moving to a low-carbon global economy.
- ☑ In defining the contributions by each country to limit or reduce their GHG emissions, one key element of principled negotiation comes into play: The scenario developed by each country must be seen by all other countries as a “creative option for mutual gain”.

This element is the foundation for managing information conflicts on environmental issues.

- ☑ Given that scientific information (or data) conflicts will invariably be a significant source of conflict for climate change, a second key element of principled negotiation must also be applied: “to insist on the use of objective criteria” - not only to understand the scientific information – but also to evaluate it for its relevance and reliability.

This element is the foundation for resolving information conflicts on environmental issues.

A Roadmap for Lima, 2014 for Moving to a Low-Carbon Global Economy

I Overview of Scenario Development

- i. Moving to a low-carbon global economy will require each country to propose a scenario setting out their contributions for reducing their CO₂ emissions - **based on relevant and reliable science.**
- ii. Global experience - **post-UNFCCC and post-Kyoto** - confirms that a scenario setting out a country's contributions to reduce their CO₂ emissions will need to be based on an “energy mix”.
- iii. The **“energy mix scenario”** prepared by each country for Lima should state the projected CO₂ emission reductions to be achieved over time. To facilitate effective negotiations, a common timeline should be set by the UN, before Lima, that applies to all countries.
- iv. For an “energy mix scenario” to be seen as a **“creative option for mutual gain”**, the contributions to reduce CO₂ emissions by each country, should:-
 - (i) be climate change-effective - by effectively contributing to global efforts to ensure future temperature rise remains below 2°C pre-industrial levels;
 - (ii) enhance and promote the cost-effectiveness of mitigation actions; and
 - (iii) be equitable relative to other countries contributions.

A Roadmap for Lima, 2014 for Moving to a Low-Carbon Global Economy

II Contributions to Reduce CO₂ Emissions & “Energy Scenarios”

- Article 2 of the Kyoto Protocol sets out a wide range “national measures” to reduce or limit GHG emissions - and that also promote sustainable development (SEE SLIDE 13). These national measures provide the core for each country to consider in preparing contributions to reduce CO₂ emissions for their “energy mix scenario”.
- The contemporary directions taken by the UN to link climate change and sustainable development are significant. The 2012 UN objectives of “doubling energy efficiency rate and doubling of the share of renewable energy in the world’s energy mix by 2030” (SEE SLIDE 14) should be seen as paramount considerations by all countries in preparing an “energy mix scenario” for Lima – especially as they are both Article 2, Kyoto national measures.
- Contributions to reduce CO₂ emissions could also be specific emission reduction targets or commitments, over time. Such contributions have already been made by developing countries (SEE SLIDES 10, 11) AND:- http://unfccc.int/kyoto_protocol/background/items/2879.php

A Roadmap for Lima, 2014 for Moving to a Low-Carbon Global Economy
II Contributions to Reduce CO₂ Emissions & “Energy Scenarios”(Continued)

- The legal option of regulatory control of CO₂ emissions has received little global uptake – apart from the USA. But, should it be adopted as a mitigation action compatible with Article 2, Kyoto national measures for enhancing energy efficiency? Regulatory control warrants wider global consideration as part of any “energy mix scenario” for reducing emissions.
SOURCE: <http://www.epa.gov/climatechange/EPAactivities/regulatory-initiatives.html>
- Australia, for example, has in place a national environmental protection regulatory framework enabling the Commonwealth, States and Territories to set a uniform national standard for CO₂ emissions to prevent actual or potential environmental harm: but Australia is yet to incorporate regulatory control as part of its future energy mix scenario.
SOURCE: http://www.environment-adr.com/uploads/LexisNexis%20Blog_Climate%20Change_Reg.%20Control.pdf
- The distinction between the role of Kyoto Protocol “national measures” compared to Kyoto Protocol “additional means” for reducing CO₂ emissions needs to be understood. In this regard the comments of the UNFCCC, that follow, are relevant.

A Roadmap for Lima, 2014 for Moving to a Low-Carbon Global Economy
II Contributions to Reduce CO₂ Emissions & “Energy Scenarios”(Continued)

❖ “Under the [Kyoto] Protocol, countries must meet their targets primarily through **national measures** that it sets out. However, the Protocol also offers them an **additional means** to meet their targets by way of **three market-based mechanisms**. The Kyoto mechanisms are:

- ☑ International Emissions Trading
- ☑ Clean Development Mechanism (CDM)
- ☑ Joint Implementation (JI)

The mechanisms help to stimulate green investment and help Parties meet their emission targets in a cost-effective way”. SOURCE: http://unfccc.int/kyoto_protocol/items/2830.php

❖ A quandary for countries preparing their contributions for Lima to reduce their CO₂ emissions is that **climate change has been primarily seen as an economic problem**: Climate change has been assessed as the greatest market failure the world has ever seen. So, it is not surprising, up to the present time, that the global trend to reduce CO₂ emissions has been for the market-based ETS to dominate - relative to Kyoto national measures.

A Roadmap for Lima, 2014 for Moving to a Low-Carbon Global Economy
II Contributions to Reduce CO₂ Emissions & “Energy Scenarios”(Continued)

- ❖ However, the future will see a move towards CO₂ emission reduction targets far greater than the existing Kyoto obligation for 2013-2020 of 5%: Continued reliance on carbon-trading systems, as CO₂ emission reduction targets move to 30%, 50% or 80%, may mean that the carbon price could soar to \$200-\$500 for each tonne of CO₂?
- ❖ Could this mean that the cost-effectiveness of the ETS for limiting GHG emissions becoming questionable ? **Could it leave open the question of the fate of the international carbon market?**

SOURCE: <http://sei-us.org/publications/id/416>

- ❖ UN opinion on the linkage between action for climate change, moving to a low-carbon global economy and sustainable development has strengthened over time. So, it is significant that agreement was reached for a plan of action at the United Nations climate talks held at Doha, Qatar in December 2012 to establish a **“new future market mechanism”** – where one of the agreed underlying principles to apply will include **“promoting sustainable development”**.

SOURCE: <http://www.commodities-now.com/reports/environmental-markets/13364-doha-provides-gateway-to-a-2015-global-agreement.html>

A Roadmap for Lima, 2014 for Moving to a Low-Carbon Global Economy

III Developing Countries' Contributions & "Energy Scenarios"

- 1.0 Not all developing countries have contributed to atmospheric CO₂ emissions - but face some of the worst consequences; and generally have the least capacity to cope with the impacts of climate change. Meeting these countries needs and concerns at Lima is a paramount consideration.

SOURCE: <http://www.climateaction.org.za/cop17-cmp7/sa-government-position-on-climate-change>

- 2.0 So, it is significant that the UN Climate Change Conference at Cancun, Mexico, in December 2010 produced a comprehensive package for developing nations to deal with climate change, protect themselves from climate impacts and to build their own sustainable futures:

This package should assist developing countries prepare contributions for Lima 2014. Agreements encompass finance, technology and capacity-building support to help developing countries:

- meet urgent needs to adapt to climate change;
- speed up their plans to reduce CO₂ emissions; and
- adopt sustainable paths to low emission economies that could also resist the negative impacts of climate change

SOURCES: http://unfccc.int/key_steps/cancun_agreements/items/6132.php;
<http://cancun.unfccc.int/mitigation/decisions-addressing-developing-country-mitigation-plans/#c178>

Negotiating the Draft Universal Climate Agreement at Lima, 2014

I The Global Energy Mix Scenario: Initial Evaluation

- ❖ The total of all countries contributions in their individual scenarios to reduce CO₂ emissions, represents the “global energy mix scenario” for moving to a low-carbon global economy. Ideally, it should be evaluated using a risk management approach.
- ❖ The percentage reduction in global CO₂ emissions in the “global energy mix scenario” must ensure the risk of global warming can be managed to an acceptable level of risk: That there is a “high level of probability” arising from the contributions of all Parties to the Draft Universal Climate Agreement for temperature rise from global warming to remain below 2°C of pre-industrial levels.
- ❖ Adopting a uniform time-scale to be applied for reducing CO₂ emissions in each country’s “energy mix scenario” will facilitate the evaluation of the “global energy mix scenario” at Lima - as well as the negotiation process that follows.
- ❖ Challenges on subjectivity in the evaluation process can be avoided by ensuring that the multiple objectives and the criteria that are used are endorsed prior to commencing negotiations.

Negotiating the Draft Universal Climate Agreement at Lima, 2014

II Framing the Multiple Objectives for Sustainable Development

Examples of multiple objectives for achieving sustainable development that could be framed for Lima follow. They are based on recommendations and decisions arising from past UN Climate Change Conferences:

1.0 Ecological Objective:

To ensure that the combined total of contributions by all Parties to the Universal Climate Agreement are effective in stabilizing atmospheric CO₂ concentrations at a level that prevents dangerous anthropogenic interference with the climate system.

2.0 Economic Objective:

To enhance and promote the cost-effectiveness of mitigation actions to reduce CO₂ emissions whilst ensuring that mitigation actions do not aggravate existing inequities within and across Parties to the Universal Climate Agreement.

3.0 Social Objective:

To minimize the extent environmental costs and economic benefits are shared disproportionately between all Parties to the Universal Climate Agreement.

4.0 Cultural Objective:

To provide financial and technology capacity-building support for developing countries for preparing their contributions to reduce CO₂ emissions in moving to a low-carbon global economy and for achieving sustainable development.

Negotiating the Draft Universal Climate Agreement at Lima, 2014

III Defining the Criteria for Evaluating Sustainable Development

- ❖ The criteria enables an assessment of the compatibility of the “global energy mix scenario” with each of the the multiple objectives for sustainable development.
- ❖ An adequate database of relevant and reliable science to evaluate the objectives for sustainable development is crucial.
- ❖ In defining the criteria, the aim should be to avoid problems associated with using unnecessarily complex criteria or criteria which cannot be evaluated e.g. because of scientific uncertainty or “unattainable or unknowable science”.

For example, the criteria to evaluate the “Ecological Objective” could include promoting sustainable agriculture, improving energy efficiency, addressing ocean acidification, integrating disaster risk reduction and climate change adaptation into decision-making ...

- ❖ The evaluation is based on each objective for sustainable development, and all of the criteria, having equal weight.

Conclusions

The draft Universal Climate Agreement for the global environmental problem of climate change is to be negotiated at Lima in December, 2014. There are many advantages in the roadmap outlined in this article for drafting this Agreement. The roadmap is based on the conflict resolution concept of principled negotiation - linked to a scientific methodology for achieving sustainable development.

- ☑ The roadmap recognizes that in moving to a low-carbon economy, climate change and sustainable development are interdependent and mutually supporting.
- ☑ The roadmap ensures that the risk of significant environmental and social impacts arising from climate change can be managed to an acceptable level of risk.
- ☑ The roadmap is based on the evaluation of relevant and reliable science using the concept of principled negotiation to manage and resolve information conflicts over scientific evidence.
- ☑ The roadmap relies on the scientific methodology of multi-objective analysis to provide a logical and systematic process to ensure equitable access for all countries to sustainable development.

In moving to a low-carbon global economy, the framework recognizes a common responsibility for all countries to share in global mitigation actions aimed at reducing CO₂ emissions. Because of unequal contributions to CO₂ emissions between developed and developing countries, each country's cumulative contribution to CO₂ emissions, over time, as well as proposed mitigation actions – including differences in a country's economic capacity or capability to take action – are paramount considerations.

Further Reading/References

1.0 Principled Negotiation and Conflict Resolution:

- ☑ Fisher, Roger, William Ury and Bruce Patton (1991), **Getting to Yes: Negotiating Agreement Without Giving In (2nd Edition)**, Century Business, London, UK.

2.0 Finding Sustainable Solutions for Environmental Conflicts by Negotiation and Multi-objective Analysis:

- ☑ Christie, Edward (2008, 2009), **Finding Solutions for Environmental Conflicts: Power and Negotiation**, Edward Elgar, Cheltenham, UK.