

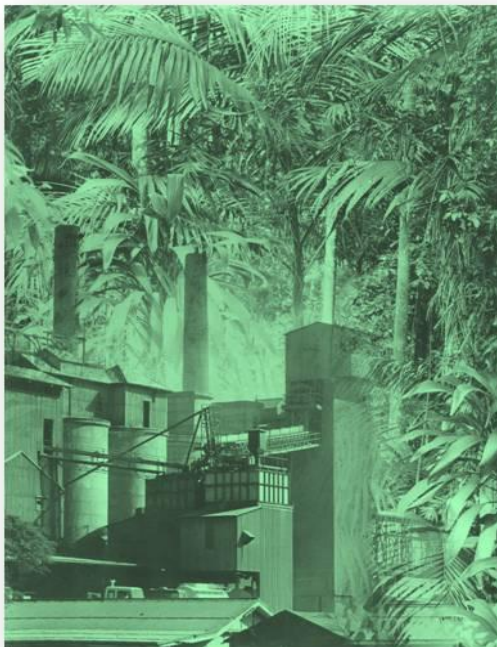
# Towards COP 21 and the New Universal Climate Change Agreement: *Resolving the Deadlock over the “Developed-Developing Country” Divide and Emission Reductions*



By **Dr Ted Christie, Environmental Lawyer & Mediator – 9 February 2015**

## **Disclosure Statement:**

*Ted Christie does not work for, consult to, own shares in or receive funding from any company or organisation that would benefit from this article, and has no relevant affiliations.*



Recently, the UN Secretary-General, Ban Ki-moon, made the observation that we are the last generation able to combat climate change, and called on the UN and the international community to work harder than ever to achieve a sustainable future:

*“We must aim high for the adoption of an ambitious and*

*universal agreement [at COP 21] in Paris in December [2015] to keep the rise in global temperatures below the dangerous threshold of 2°C”.*

From the time UN Member States became signatories to the Kyoto Protocol in 1997 and negotiated its terms, a divide between developing and developed countries has persisted. The divide arises

because of differences in the responsibilities imposed on countries to reduce GHG emissions.

The reason: The high atmospheric concentrations of GHGs were the result of the impact of more than 150 years of industrial activity. So, a heavier burden to reduce CO<sub>2</sub> emissions was placed on the developed countries responsible for most emissions.

The emission reduction target set under the Kyoto Protocol only applied to 37 developed countries and the European Community. Large developing countries, such as China, India and Brazil, were excluded.

But, at COP 20 at Lima in 2014, the divide had become a deadlock for climate agreement negotiations. This deadlock must be resolved if the new, universal climate agreement is to be effectively negotiated at COP 21 at Paris in December this year.

Resolving the deadlock requires an understanding of the position of the opposing UN Member States to emission reductions; as well as understanding the application of a feature of international law: the *“Principle of Common but Differentiated Responsibilities”*. This Principle is an obligation under both Kyoto and the UNFCCC. It is a cornerstone for the divide over GHG emission reductions.

The position of developing countries can be summarised: that richer nations must shoulder much of the responsibility for their past emissions, as well as the costs for damage arising from climate change; concern that too heavy a burden may be imposed on developing countries to reduce emissions compared with the richer

nations; and the need to address the concern of vulnerable developing countries, many still constrained by poverty, that they will struggle to cope and adapt to the projected impacts of climate change.

The position of developed countries is that continuing with the divide, today, is “misleading and inappropriate”; global responsibility to reduce emissions needs to be shared, equitably, with larger developing countries that have emerged, not only as economic superpowers, but also as major GHG emitters.

Finding a solution for the deadlock over the divide and these contrasting positions must be based on objective scientific evidence. The following two recent studies are relevant in this regard.

Research undertaken at the *PBL Netherlands Environmental Assessment Agency*, which assessed global contributions to GHG emissions by developing and developed countries, provides a strong foundation:

*“Taking into account all greenhouse gas emissions emitted during the 1850–2010 period, the relative contribution by developing countries to global cumulative emissions was 48%. The group of developed countries was responsible for 52%. By 2020, the share of developing countries will probably amount to 51%. Hence, somewhere during the current decade, the share of the cumulative historical emissions in developing countries will surpass that of the developed countries (den Elzen et al., 2013).” (1)*

Research undertaken at Concordia University, Montreal, Canada, is also a significant study as it extended the diffusion of knowledge on climate change by UN Member States; from global

contributions of CO<sub>2</sub> emissions, only, to contributions to global temperature rise from CO<sub>2</sub> emissions from fossil fuel use (Table 1).

**Table 1: Contributions to the Historical Rise in Global Temperature Rise from Fossil Fuel Use: Pre-industrial to 2005.**

Matthews et al. (2014 (2))

	<b>UN Member State: Rank</b>	<b>Contribution to Global Temperature Rise (°C)</b>
1.	<b>United States</b>	<b>0.151<sup>0</sup>C</b>
2.	<b>China</b>	<b>0.063<sup>0</sup>C</b>
3.	<b>Russia</b>	<b>0.059<sup>0</sup>C</b>
4.	<b>Brazil</b>	<b>0.049<sup>0</sup>C</b>
5.	<b>India</b>	<b>0.047<sup>0</sup>C</b>
6.	<b>Germany</b>	<b>0.033<sup>0</sup>C</b>
7.	<b>United Kingdom</b>	<b>0.032<sup>0</sup>C</b>
8.	<b>France</b>	<b>0.016<sup>0</sup>C</b>
9.	<b>Indonesia</b>	<b>0.015<sup>0</sup>C</b>
10.	<b>Canada</b>	<b>0.013<sup>0</sup>C</b>
11.	<b>Japan</b>	<b>0.013<sup>0</sup>C</b>
12.	<b>Mexico</b>	<b>0.010<sup>0</sup>C</b>
13.	<b>Thailand</b>	<b>0.009<sup>0</sup>C</b>
14.	<b>Columbia</b>	<b>0.009<sup>0</sup>C</b>
15.	<b>Argentina</b>	<b>0.009<sup>0</sup>C</b>
16.	<b>Poland</b>	<b>0.007<sup>0</sup>C</b>
17.	<b>Nigeria</b>	<b>0.007<sup>0</sup>C</b>
18.	<b>Venezuela</b>	<b>0.007<sup>0</sup>C</b>
19.	<b>Australia</b>	<b>0.006<sup>0</sup>C</b>
20.	<b>Netherlands</b>	<b>0.006<sup>0</sup>C</b>

The Canadian study found that global temperature from pre-industrial to 2005 increased by about 0.7°C. The top seven ranking

UN Member States accounted for about 63% of historical global warming; the top 20 around 82%.

The picture emerging in this study was one where developed countries and major emerging economies led in the historical contribution to global temperature rise through the burning of fossil fuels.

For developing countries such as Brazil, Columbia, Venezuela, Indonesia and Nigeria, the dominant contribution to global warming originated from land-use emissions - the deforestation of tropical forests.

Another dimension to the Dutch and Canadian studies to consider is the relationship between the countries that have mainly contributed to global CO<sub>2</sub> emissions, the historical rise in global temperature and the international trade in fossil fuels.

International trade in coal has two elements. Export of coal has indirect impacts on climate change; import of coal, and its industrial uses, has direct impacts on climate change.

Six of the world's top seven countries that exported coal in 2013 - Indonesia, Australia, Russia, United States, Columbia and Canada (*in decreasing rank order of coal exports*) – were in the top 20 UN Member States, identified in the Canadian study, that contributed to the historical rise in global temperatures (3).

Five of the world's top seven countries that imported coal in 2013 – China, Japan, India, Germany and the United Kingdom (*in decreasing rank order of coal imports*) – contributed to the

historical rise in global temperature in the top 20 UN Member States identified in the Canadian study (4).

Currently, the future of coal as a global energy source is at the crossroads.

One option is now gaining in momentum: Fossil fuels should be phased out completely by 2050, with a move to a **clean energy global economy** and zero carbon emissions?

A **low carbon global economy** is another option. For this option to prevail, the deadlock over the divide between developing and developed countries and their responsibility for reducing CO<sub>2</sub> emissions must be resolved for the decades ahead.

Resolving the deadlock over the divide, under Kyoto and the UNFCCC, should be found within the framework of the “*Principle of Common but Differentiated Responsibilities*”. The principle recognizes that global problems, like climate change, differ in their impact on all countries. The Principle has two elements.

The first element is based on a **common responsibility** for countries to participate; by sharing obligations in international response measures aimed at combatting climate change.

The second element – a **differentiated responsibility** - relates to how countries respond to climate change. This requires each country’s contribution to climate change – not only *historical but also current contributions*, as well as their *ability to combat climate change*. This includes differences in a country’s *economic capacity or capability to take action* to be taken into account (5).

At COP 20, Lima in 2014 a third element was added to the Principle: “*in light of different national circumstances.*” But, it could be argued that this element is simply a variation of the second element of the Principle already in place. The problem is that if the term “*national circumstances*” remains undefined, it will create uncertainty for negotiations - as it is open to many interpretations.

How can the *Principle of Common but Differentiated Responsibilities* be effectively applied to combat climate change if coal-generated energy is to be part of a low carbon global economy in the decades ahead?

The Dutch study makes it clear that the historic divide between developing and developed countries is now inequitable. It needs to be replaced with differentiated responsibilities for reducing CO<sub>2</sub> emissions that extend to emission contributions in the modern world.

But, which countries should the differentiated responsibilities apply under the Principle?

The linkage between findings of the Canadian study on contributions to historic global temperature rise with data on the international trade in coal by UN Member States supports the following conclusion: *That some-developed countries and major emerging economies should shoulder much of the burden for coal to remain part of a low carbon global economy.*

In particular, the UN Member States that are involved in international trade in coal; they received significant benefits to their national economies in the past. But, the economic benefits received

by countries involved in the international trade in coal cannot be considered in isolation from potential adverse and disproportionate global environmental impacts on other UN Member States.

What form of commitments could the new climate agreement consider for UN Member States involved in the international trade in coal? One possible example is for UN Member States to pay a levy on each tonne of coal they either exported or imported.

*The levy should be seen as part of a global fund that could be applied to combat climate change through:*

- *Ongoing Technology Research, Development, Deployment and Diffusion (“RDD&D”) into clean coal and new environmentally sound low-carbon technologies to limit CO<sub>2</sub> emissions;*
- *Research into CO<sub>2</sub> emission standards that were both cost- and climate change-effective;*
- *Clean Development Mechanisms in developing countries by enabling investment in sustainable development projects that reduce CO<sub>2</sub> emissions;*
- *An Environmental Performance Bond that would provide funds for vulnerable developing countries to cope and adapt to the projected impacts of climate change. Where environmental damages had occurred, the bond would be used to rehabilitate or repair the environment;*
- *Reducing deforestation in some tropical countries through financial aid and educational support for the UN’s Reducing Emissions from Deforestation and Forest Degradation (REDD) program; and*
- *Sustainable forest management practices, afforestation and reforestation.*



The concept of a levy to facilitate research into primary production is not a new idea. It has long been a feature in Australia, where primary producers have had a levy imposed on each unit of production of wool, wheat, beef and lamb, coarse grains, sugar...produced. The levy was made available for research grants into agricultural R&D and extension directed at specific problems of the industry fund source.

The challenge for UN Member States involved in the international trade in coal, such as: Australia, Canada, China, Columbia, India, Indonesia, Japan, Russia and USA – as well as Germany and the UK (or possibly the EU as a regional economic integration organization to the Kyoto Protocol) - is to accept that they now have a key role as “influential UN Member States” and to pursue the following goal of the World Coal Association:

*“The concept of 21st Century coal is about ensuring sustainability across the entire coal value chain.”*

For coal, to be part of a sustainable, low global carbon economy, there needs to be a commitment and collaboration by UN Member States involved in the international trade in coal in to effectively participate in the pathway to substantial cuts in global anthropogenic GHG emissions.

The *United Nations Partners on Climate Change* (and the IPCC) has already outlined emission reduction targets and timelines for governments to consider for adopting to slow and reverse existing emission trends - and ultimately stabilize atmospheric GHG levels.

The bottom line – which should be non-negotiable - is that clean coal and low-carbon technologies must be developed, through RDD&D, that are climate-change effective, cost-competitive and have widespread availability.

The levy funding mechanism is a trigger for such commitments. It would facilitate RDD&D to reduce CO<sub>2</sub> emissions by UN Member States involved in the international trade in coal. The application of RDD&D should be directed at the UN/IPCC targets to keep the rise in global temperatures below the dangerous threshold of 2°C.

**About Dr Ted Christie and Environmental Dispute Resolution:**

<http://www.environment-adr.com>

**END NOTES: WEB LINKS**

(1) MGJ den Elzen, JG Olivier, N Hohne and G Janssens-Maenhout, '*Countries' contributions to climate change: effect of accounting for all greenhouse gases, recent trends, basic needs and technological progress*', 2013 *Climate Change* 121: 397-412

Doi: 10.1007/s10584-013-0865-6

<http://link.springer.com/article/10.1007%2Fs10584-013-0865-6#page-1>

(2) H Damon Matthews, Tanya Graham, Serge Keverian, Cassandra Lamontagne, Donny Seto and Trevor J Smith, '*National contributions to observed global warming*', 2014 *Environ. Res. Lett.* 1-9

doi:10.1088/1748-9326/9/1/014010

[http://iopscience.iop.org/1748-9326/9/1/014010/pdf/1748-9326\\_9\\_1\\_014010.pdf](http://iopscience.iop.org/1748-9326/9/1/014010/pdf/1748-9326_9_1_014010.pdf)

(3) World Coal Association: World Coal Trade – Top Coal Exporters (2013)

<http://www.worldcoal.org/resources/coal-statistics/>

(4) World Coal Association: World Coal Trade – Top Coal Importers (2013)

<http://www.worldcoal.org/resources/coal-statistics/>

(5) Centre for International Sustainable Development Law, McGill University Faculty of Law Montreal, Canada, (2002), '*The Principle of Common but Differentiated Responsibilities: Origins and Scope*'

[http://cisdl.org/public/docs/news/brief\\_common.pdf](http://cisdl.org/public/docs/news/brief_common.pdf)