

# Policy Briefing Paper

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## Whose Green Economy?

By John Dillon

"When I use a word," Humpty Dumpty said in rather a scornful tone, "it means just what I choose it to mean -- neither more nor less."

"The question is," said Alice, "whether you can make words mean so many different things."

"The question is," said Humpty Dumpty, "which is to be master - - that's all."

Lewis Carroll Through the Looking Glass

n the twenty years since the historic 1992 Earth Summit in Rio de Janeiro, calls for "sustainable development" have been heard over and over again. Governments, corporations and civil society groups have all used the term, each in its own way. One scholar has listed over 60 different definitions of sustainability, including six from the 1987 Brundtland report of the World Commission on Environment and Development, Our Common Future. One of the chief authors of that report has stated that the commissioners defined sustainability in several ways – ethical, social, ecological and intergenerational - but only one definition stuck: "development which meets the needs and aspirations of the present generation without compromising the ability of future generations to meet their own needs." For twenty years the term has been used opportunistically by some governments and corporations claiming to be pursuing sustainability while adhering to business-as-usual practices with little regard for their impact on social justice or ecological integrity.

Now on the eve of another UN Conference on Sustainable Development (Rio + 20) to be held in Rio de Janeiro on the twentieth anniversary of the original

Earth Summit, a new and equally malleable term, "the green economy" is becoming contentious. At first glance the definition appears self-evident: an economy characterized by low emissions of greenhouse gases and other pollutants that maintains a high level of social well-being for its citizens. Indeed KAIROS has joined with other Canadian civil society groups in the Green Economy Network to promote a genuine green economy that will "break our addiction to fossil fuels, … overcome poverty and inequality, … [and] create new, decent, safe and healthy green jobs."

There is a clear convergence between the perspectives that Indigenous peoples' organizations and Christian communities bring to the debates that will take place in Rio. For example, the Andean Indigenous Organizations propose that "Rio + 20 should include a fourth pillar of sustainable development: moral and ethical values needed to feed and care for the Earth." Similarly, the Global Justice and Peace Team of the Congregations of St. Joseph assert their belief that "an ethical framework is critical to the transformation of humanity's relationship with each other and with all in earth community. Therefore we maintain that it must be at the heart of the discussions and decision-making at the Rio + 20 Conference."<sup>5</sup> The Sisters of St. Joseph root their call in a theological vision where:

"We recognize ourselves as an integral part in the whole of earth community; one with all of God's creation --- land, air, water, plant life and all God's creatures. We stand in awe of Earth's life-giving capacities. We envision a sustainable economy which enables all of us both human and non-human species, to flourish."<sup>6</sup>

The dominant vision of the "green economy" is lacking this critical pillar and is therefore deeply problematic. In this paper we first discuss that vision and then offer alternatives as a contribution to the debate leading up to and emerging from Rio + 20.

#### Part One: Market-based Green Economy Approaches

A report from the United Nations Environmental Program (UNEP), *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*, provides the essential background for decisions to be taken at the Rio + 20 conference. It defines a green economy as "one that results in improved human wellbeing and social equity, while significantly reducing environmental risks and ecological scarcities." It then adds "The concept of a 'green economy' does not replace sustainable development, but there is now a growing recognition that achieving sustainability rests almost entirely on getting the economy right. Decades of creating new wealth through a 'brown economy' model have not substantially addressed social marginalization and resource depletion." <sup>7</sup>

Some of the measures advocated by the UNEP are consistent with what KAIROS has called for in the past. For example, redirecting subsidies away from fossil fuels and directing public investments to areas such as energy conservation and renewable energy production are welcome suggestions.

However, critics point out that the UNEP bases its analysis too narrowly on misallocation of capital spending without examining the deeper causes of the climate, food, energy and water crises. Social scientist Edgardo Lander comments:

For [the] UNEP, we are dealing with what they describe [as] 'market failures'. However, their response to these severe 'market failures' and their extraordinarily dangerous consequences for life on the planet do not even contemplate the possibility that they might be a consequence of the growing power of the financial markets, of the increasing subjugation of any other social logic, be that democracy, equality, solidarity, or even the preservation of life, to a single criteria: the maximisation of short-term profits for capital.<sup>8</sup>

After defining the problem as primarily "market failures," the UNEP then turns to market-based solutions. These involve treating nature as "natural capital" and putting a price on the "environmental services" pro-

vided by plants, animals and ecosystems, such as their ability to absorb and store carbon dioxide. Accordingly, the UNEP report promotes various kinds of payments for ecosystem services including carbon sequestration, forest preservation, pollination of plants, watershed protection, biodiversity and land-scape beauty.

These market-based solutions reinforce the approach of the World Business Council for Sustainable Development, representing some of the world's leading corporations in 22 sectors including power utilities and oil and gas companies. The WBCSD advocates "incorporating the costs of externalities, starting with carbon, ecosystem services and water, into the structure of the marketplace" as a key feature of sustainable development.<sup>9</sup>

KAIROS' Indigenous and Southern partners strongly object to turning nature into a commodity as though it only has value when it has a price and can be traded for profit. Bolivian ecologist Pablo Solon writes "Instead of putting a price on nature we need to recognize that humans are part of nature and that nature is not a thing or mere supplier of resources. The Earth is a living system, it is our home and a community of interdependent beings and parts of one whole system." <sup>10</sup>

#### **Carbon Markets**

In keeping with its market-based orientation, the UNEP report advocates establishing a "global agreement on carbon emissions and ... a future carbon market and pricing [as an] incentive for further business investment in renewable energy."<sup>11</sup>

In theory, a global carbon market based on a capand-trade system might be a mechanism for reducing greenhouse gas emissions and an incentive for investments in renewable energy. By putting limits, or caps, on how much carbon dioxide (CO<sub>2</sub>) a company is allowed to emit and allowing markets to set the price for each tonne of CO<sub>2</sub>, overall emissions should fall. Our 2009 Briefing Paper *Pricing Carbon: A Primer* explores some of the arguments for and against a cap-and-trade system. Since we wrote that paper, evidence of the failure of carbon markets to curb carbon dioxide emissions has mounted. Greenhouse gas emissions are reported to have grown at a faster pace in countries with carbon markets than in those without them.

For example, the European Union's Emissions Trading System (ETS), the largest in the world, is not working out as planned. Prices on the ETS have been volatile, peaking at  $\le 30$  per tonne of  $CO_2$  in 2008 after falling to a low of  $\le 0.48$  in 2007. Over the latter quar-

ter of 2011 and the first quarter of 2012, prices for CO<sub>2</sub> emission certificates fell by half to just above €6 per tonne. At such low prices it becomes cheaper for utilities to generate power from coal and pay for emission rights rather than invest in emission reduction technology or renewable energy production. *Der Spiegel* journalist Alexander Jung reports that, paradoxically, German government investments in renewable energy have suppressed the demand for emission certificates and thus their price making coal, "a notorious danger to the climate ... more competitive. In other words, emissions trading isn't stopping climate change, but actually speeding it up."<sup>14</sup>

Similarly, the World Bank has chronicled a steep decline in carbon offset markets under the Kyoto Protocol's Clean Development Mechanism. The CDM allows Northern industries to purchase carbon credits from projects in the South deemed to reduce greenhouse gases in lieu of reducing their own emissions. A 2011 World Bank report acknowledges that "carbon offset markets – and carbon markets as a whole – now face major challenges. The value of transactions in the primary CDM market declined sharply in 2009 and further in 2010, amid chronic uncertainties about future mitigation targets and market mechanisms after 2012. A number of other factors are further constraining the potential of carbon finance, including market fragmentation in the absence of a global agreement, transaction costs associated with complex mechanisms, low capacity in many countries, lack of upfront finance, weaknesses in the current 'project by project' approach and non-inclusion of some sectors with significant abatement potential (e.g., agriculture)."15

Despite this collapse the World Bank is still counting on a revival of carbon markets to provide around US\$100 billion a year in financial flows from developed to developing countries. The Bank is encouraging developed countries to increase the portion of their emission reductions achieved through the purchase of offsets from the South rather than lowering emissions within their borders.<sup>16</sup>

While the UNEP report ignores the role that financial speculation played in creating the food, fuel and financial crises, its preferred solution could actually lead to a deeper financial crisis. As we noted in our Briefing Paper on *Pricing Carbon*: "There is ... serious potential for carbon markets to become an out-of-control, multi-trillion-dollar speculative bubble, similar to the subprime mortgage bubble that brought on the 2008 financial crisis. Carbon trading ... is projected to rival the financial derivatives market, currently the world's largest, within a decade. The inter-

national market for carbon trading is forecast to be worth an extraordinary US\$3 trillion by 2020 if the US becomes a full participant."

## **REDD** – **Reducing Emissions from Deforestation** and Forest Degradation

Both the UNEP report and the draft declaration for world leaders to sign at the Rio + 20 conference, entitled *The Future We Want*, support the REDD initiative that has been hotly debated at UN climate change conferences. In our 2010 Briefing Paper *Decisive Action Vital at Cancún Climate Talks*, we provided a critique of the Reducing Emissions from Deforestation and forest Degradation plan that would put a price on the carbon stored in trees and allow Northern countries to claim credits by paying for deforestation avoided in the South.<sup>17</sup>

Since we wrote that paper new evidence has emerged concerning how forestry offset projects have violated the rights of many Indigenous peoples to Free, Prior and Informed Consent (FPIC) as required under the UN Declaration on the Rights of Indigenous Peoples. An Open Letter of Concern to the International Donor Community about the Diversion of Existing Forest Conservation and Development Funding to REDD, initiated by The No REDD Platform, cites three examples of the denial of Indigenous rights:

- In Ecuador, the government continues to develop a REDD+ program despite the fact that the most representative organization of Indigenous Peoples, the Confederation of Indigenous Nationalities of Ecuador (CONAIE), has explicitly rejected REDD+ policies in the country.
- As Kenya's Mau Forest is made "ready" for a UNEP-funded REDD+ project, members of the Ogiek People continue to suffer evictions, and Ogiek activists are attacked for protesting land grabs.
- In Indonesia, the Mantir Adat (traditional authorities) of Kadamangan Mantangai district of Kapuas in the province of Central Kalimantan, "reject REDD projects because it is a threat to the rights and the livelihoods of the Dayak community in the REDD project area," and have called for the cancellation of a project that has "violated our rights and threatened the basis of survival for the Dayak community." 18

A new film, *The Carbon Rush*, documents cases of peoples displaced from their lands by carbon sequestration projects in Brazil, India, Panama and Honduras

where several *campesinos* (peasant farmers) were killed while trying to defend their lands. <sup>19</sup> In Uganda an estimated 22,000 people have been evicted from their traditional lands at gunpoint to make way for a tree plantation owned by a British firm intent on earning carbon credits. <sup>20</sup> The *Global Alliance of Indigenous Peoples and Local Communities against REDD and for Life* calls REDD a threat "to the survival of Indigenous and forest-dependent communities [that] could result in the biggest land grab of all time." <sup>21</sup>

#### **Green Growth**

The UNEP report embodies a contradictory attitude with respect to measuring progress in terms of increases in Gross Domestic Product. On the one hand it criticizes "conventional economic indicators, such as GDP, [for providing] a distorted lens for economic performance particularly since such measures fail to reflect the extent to which production and consumption activities may be drawing down natural capital. ... depleting natural resources, or degrading the ability of ecosystems to deliver economic benefits." It then calls for an alternative System of Environmental and Economic Accounting that would evaluate stocks of natural capital in monetary terms and incorporate those values into national accounts.

Then on the next page it says its first key finding is that "greening not only generates increases in wealth, in particular a gain in ecological commons or natural capital, but also (over a period of six years) produces a higher rate of GDP growth – a classical measure of economic performance."<sup>23</sup>

Civil society critics of the UNEP's approach reject the incorporation of monetary values for nature's abundance. Rather they assert that water, air, biodiversity and carbon sequestration capacity should not be assigned a monetary value. They also reject the use of GDP as an indicator of wellbeing since "the blind pursuit of GDP growth underlies many of our current environmental and social crises, including climate change."<sup>24</sup>

#### **Conclusion to Part One**

A fundamental critique of the UNEP approach is that it does not break away from the neoliberal paradigm emphasizing private investment, free trade and market-based solutions. It does not address the structural causes of poverty, inequality or ecological degradation. On the contrary it would subjugate nature to the same system of financial speculation that brought on the global economic crisis. While it favours public policies to induce private investment in renewable

energy, these policies are subordinated to the conditions of free trade agreements.

As Edgardo Lander asserts, "it would not ... be acceptable to stimulate the development of investments and innovations in green technologies and products if those generate advantages for national producers that could be interpreted as protectionism." Hence policies like that of the government of Ontario requiring renewable power producers benefitting from feed-in tariffs to purchase 25% the components for wind turbines and 50% of solar projects from provincial suppliers would not be permitted.

#### Part Two: Our Green Economy

KAIROS' vision of a genuine green economy differs from and goes much deeper than that outlined by the UNEP report in several respects. We recognize that poverty, inequality and ecological unsustainability have deeper roots than simply market failures. They have structural causes reflecting power imbalances. Bolivia's submission to a UNEP forum preparing for Rio + 20 identifies several of these structural causes: concentration of wealth in a few countries and in small privileged social groups; mass production of disposable products that use up natural resources unsustainably; concentration of capital in financial speculation; states with weak regulatory systems when dealing with powerful transnational corporations.<sup>26</sup> While transnational corporations enjoy investor rights enforced through mechanisms such as free trade agreements, United Nations declarations on human rights are largely unenforced.

As noted in Part One, there are some noteworthy elements in the UNEP report's version of a green economy. For instance, subsidies for fossil fuels should be removed. But reallocating subsidies, providing tax incentives and price support measures to promote private investment in conservation and renewable energy technologies are not sufficient measures for creating a just and sustainable economy.

The UNEP report states that "the bulk of the investments required for the green transformation will come from the private sector," while the role of public policy is largely confined to "overcoming distortions introduced by perverse subsidies and externalized costs." However, simply reallocating subsidies will not be enough. The International Energy Agency reports that even if annual subsidies for renewable electricity generation were to increase five-fold to US\$180 billion a year, the share of electrical power from renewable sources, other than hydro, would rise from 3% in 2009 to only 15% in 2035. This would largely

be offset by a projected 125% increase in world coal use by 2035. <sup>28</sup> More vigorous policy measures are needed to achieve a decline in coal use prior to 2020 if we are to have any hope of containing climate change. More direct measures such as the prohibition of new coal-fired power plants are needed.

While private investors are taking advantage of government incentives, such as Ontario's feed-in-tariffs, to provide more electricity from wind turbines and solar panels, in Canada renewable power from wind, solar, biomass and geothermal sources is only expected to reach 12% of total electricity supply by 2035. <sup>29</sup> With current market incentives renewable power supplies will not grow fast enough to significantly "green" our electrical systems over the next 23 years.

Promising but underutilized technologies will need more direct public investments. For example, a 2011 report from the Geological Survey of Canada found that that the potential for "in-place geothermal power exceeds one million times Canada's current electrical consumption."<sup>30</sup> The report cautions that "only a fraction of this can likely be produced," but just how much is unknown since data on Canada's geothermal potential only exists for 40% of our land mass. Hence public investment is needed in further surveys and to develop enhanced geothermal power systems and wave and tidal power technologies that are not being undertaken by the private sector. The potential for these and other under-used renewable power generation technologies is discussed in greater depth in our new study A Sustainable Energy Economy is Possible.<sup>31</sup>

Putting a monetary value on watersheds, forests or biodiversity is a step towards turning them into private property to be sold only to those who can afford them. The privatization of water services in such places as Cochabamba, Bolivia had devastating results, effectively denying impoverished people access to clean water. Fortunately, Cochabamba's citizens' organized resistance reversed that ill-advised experiment.

In our vision of a green economy, public provision of essential services including water, sanitation and mass transit is necessary to ensure equitable access for all. This does not, however, mean that every service must be administered by a centralized state. Other models including locally owned cooperatives can provide public services with decision-making and control in the hands of local communities.

#### Financing a Green Economy

The UNEP report assumes that since the "financial services and investment sectors control trillions of

dollars, [they will then] provide the bulk of financing for a green economy."<sup>32</sup> This perspective ignores potential sources of public revenues such as carbon taxes and Financial Transaction Taxes or reduced military expenditures.

Carbon taxes are a viable alternative to raising money through carbon markets or the privatization of forests under the REDD initiative. Proposals for a global carbon tax on CO<sub>2</sub> emissions envision a tax initially set at a low rate that would rise over time to reflect the increasing damages from climate change. It is estimated that revenues from such a tax could be between US\$318 billion and US\$980 billion by 2015 and US\$527-\$1,763 billion by 2030.<sup>33</sup>

The Alternative Federal Budget (AFB) compiled by the Canadian Centre for Policy Alternatives estimates that a national carbon tax at a rate of \$30 per tonne of carbon dioxide would raise approximately \$10 billion a year by taxing greenhouse gas emissions from transportation, heating and other small sources. It would generate another \$7.5 billion annually if also applied to approximately 500 large industrial facilities.<sup>34</sup>

Moreover the Alternative Federal Budget proposes that a green tax refund of \$300 per person at an approximate cost of \$7.5 billion annually that would be phased out for families with incomes above \$100,000. Other revenues from a carbon tax would be invested in conservation and renewable energy programs.

As discussed in our Briefing Paper, An Idea Whose Time Has Come: Adopt a Financial Transaction Tax, an FTT could both address one of the structural causes of inequality by curbing the power of finance capital and raise substantial revenue for investing in a green economy. Bolivia's proposal for the Rio+20 conference advocates creating a Sustainable Development Fund to "generate, new, stable and additional resources for developing countries." According to data from the UN Economic Commission for Latin America, a tax of 0.05% on financial transactions applied on a global level has the potential to capture US\$661 billion per year in revenue. 37

World military spending in 2010 reached US\$1,630 billion. While national governments could redirect a substantial amount of this spending to green initiatives, another proposal is to apply a 10% tax to the international arms trade in order to raise about US\$5billion a year to finance green investments.

#### **New Indicators of Wellbeing**

As discussed in Part One, the UNEP report acknowledges that Gross Domestic Product is a misleading measure of progress. However, its suggested alterna-

tive, the System of Environmental and Economic Accounting, is also problematic in that it would evaluate stocks of natural capital in monetary terms. Fortunately, a number of other alternative indicators are available such as the Index of Sustainable Economic Welfare, first pioneered by Herman Daly and John Cobb. Their insights were incorporated into the Genuine Progress Indicator which counts life-enhancing activities as productive while life-destroying activities are deducted as costs. By contrast the GDP either ignores negative ecological costs or counts them as "goods" as occurred when the Exxon Valdez oil tanker disaster resulted in a spike in Alaska's GDP.

Other alternative indicators such as the UNDP's Human Development Index and the Gender-related Development Index give a better assessment of global disparities and especially their consequences for women.<sup>38</sup> Social Watch has developed a new Basic Capabilities Index (BCI) that "combines infant mortality rates, the number of births attended by trained personnel and enrolment rates in primary school."<sup>39</sup> The BCI for 2011 shows how health, nutrition and education indicators have not kept pace with rising incomes, resulting in more inequality despite economic growth as measured by GDP.

While no one of these alternate indicators is adequate for every purpose, their judicious use gives a much clearer picture of progress towards a just and sustainable society.

## Reassert Principles of 1992 Rio Declaration on Environment and Development

One positive outcome from the Rio+20 conference would be to reassert and make a commitment to implement some of the key principles enunciated in the 1992 *Rio Declaration on Environment and Development* but too often ignored in practice.

A good place to start is with the **polluter pays** principle which states that "the polluter should bear the costs of pollution." While this principle has been recognized in international law since the 1970s, it is not applied to such things as greenhouse gas emissions. A direct application would be to tax industries for each tonne of  $CO_2$  or other greenhouse gases they emit.

Another significant principle concerns the **common but differentiated responsibilities** of states. The Rio Declaration declares that "In view of different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on

the global environment and of the technological and financial resources they command."

Unfortunately this principle has not been respected within the UN Framework Convention on Climate Change where it is constantly cited by Southern countries but mostly ignored by the North. The 2011 Durban Conference of the Parties to the UNFCCC all but erased the principle from its program of action. Maria Theresa Lauron, a KAIROS partner from the Philippines, notes that the Durban Platform calls for "a single global treaty in which all countries take on more or less the same mitigation commitments irrespective of [their] level of development. First, it ends the two-track ... process that would have led to a two-tiered system where the difference between developed and developing country mitigation actions was kept. Second, the text makes no reference to the principles of equity, historical responsibility, or common but differentiated responsibility."40

A concrete application of the common but differentiated responsibilities principle would occur if Northern countries were to recognize the ecological debt they owe to the peoples of the global South. Northern countries are responsible for 75% of the carbon emissions that have occurred since the beginning of the industrial era. Some of these emissions remain in the atmosphere for over a hundred years causing climate change that is having its most devastating effects on peoples of the South who have much smaller carbon footprints.

While reparations for this ecological debt could involve financial payments, KAIROS' Southern partners insist that first and foremost restitution must take the form of reducing greenhouse gas emissions in the North.

The **precautionary principle**, as stated in the Rio Declaration, means that "lack of full scientific certainty shall not be used as a reason for postponing costeffective measures to prevent environmental degradation." This principle applies not only to outright climate change deniers but also to the sceptics who nowadays accept that humans may induce climate change but question its damages. An extension of this principle would also preclude adoption of geoengineering measures to fight climate change. The risks to people and ecosystems from such things as "blasting sulphate particles into the stratosphere to reflect the sun's rays [or] seeding the oceans with iron particles to nurture CO<sub>2</sub> absorbing plankton" are not fully known.<sup>41</sup>

#### Conclusion

The Rio + 20 conference offers an opportunity to evaluate what has occurred since the 1992 Earth Summit. A holistic view of the barriers to a genuine green economy must take into account the larger structural issues, including the power imbalances in financial markets dominated by the 1% located symbolically on Wall Street. In the words of Social Watch coordinator Roberto Bissio, "the 99% of the world's 7 billion men and women, girls and boys ... [who] were promised sustainability two decades ago ... have found instead their hopes and aspirations ... melted into betting chips of a global financial casino beyond their control."<sup>42</sup>

Building a genuine green economy involves structural changes that would disempower the financial elite while empowering democratic institutions accessible to the 99%. The FTT discussed above is but one measure that would take us in that direction. Preventing carbon markets from becoming an out of control, trillion dollar financial bubble is another necessity.

While the global financial casino can only prosper through continued growth, proponents of a genuine green economy question the viability of such rapid growth. As popular educator Mark Hathaway and theologian Leonardo Boff explain: "Through the magic of debt and more sophisticated financial manipulations, money can grow – often at exponential rates. ... [But] the money accumulating is not real wealth at all." Real wealth cannot grow fast enough to keep up with financial capital expanding at exponential rates. "At best natural wealth (like a forest or crops growing in a field) can grow at rates fixed by the inputs of sun, clean water, air and healthy soil."

Hence, real sustainability implies, in the words of Brazilian economist Marcos Arruda, "limits to growth, reorganizing the economy based on sufficiency, wealth that is shared and not concentrated, and conditions conducive to 'buen vivir'" (that is living well as expressed by Andean Indigenous peoples.)<sup>45</sup>

The experiences of Indigenous peoples living in harmony with nature can serve as guides for the construction of a green economy. The authors of The No REDD Platform note there are examples of how Indigenous peoples have conserved forests in India, the Gambia, Nepal, Brazil and Rwanda without individual land titles or carbon trading payments. These experiences "demonstrate that recognizing community governance over forests and Indigenous Peoples' rights over their territories provide effective and ethically sound incentives for forest conservation and restoration."

One example of an application of ethical principles that both the Andean Indigenous organizations and the Sisters of St. Joseph affirm is to demand that the principle of free, prior and informed consent must be respected when development projects affect Indigenous peoples.

The Vision Statement for the Canadian Green Economy Network emphasizes that our efforts must be "in solidarity with like-minded movements around the world." Indeed solidarity is always a two-way street. Our efforts to build a genuine green economy are inspired by the example of Indigenous peoples in the global South who demonstrate that it is indeed possible to live in harmony with nature.

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KAIROS: Canadian Ecumenical Justice Initiatives unites eleven churches and religious institutions in work for social justice in Canada and around the globe.

#### **Endnotes**

<sup>1</sup> Peter A. Victor. *Managing without Growth: Slower by Design, Not Disaster.* Northampton: Edward Elgar. 2008. Page 19.

http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER synthesis en.pdf

<sup>&</sup>lt;sup>2</sup> Cited in Ibid. Page 19.

<sup>&</sup>lt;sup>3</sup> Excerpted from *Vision Statement – Green Economy Network* at <a href="http://www.greeneconomynet.ca/">http://www.greeneconomynet.ca/</a>

<sup>&</sup>lt;sup>4</sup> Contributions of Andean Indigenous Organizations on the Zero Draft "The Future We Want". Joint document of five Andean Indigenous organizations: Consejo Nacional de Ayllus y Markas del Qullasuyu (CAONAMAQ, Bolivia), Confederación de Pueblos de la Nacionalidad Kichwa del Ecuador (ECUARUNARI), Organización Nacional Indígena de Colombia (ONIC) y Confederación Nacional de Comunidades del Perú Afectadas por la Minería (CONACAMI), articuladas en la Coordinadora Andina de Organizaciones Indígenas (CAOI). Lima, March 15, 2012.

<sup>&</sup>lt;sup>5</sup> Global Justice and Peace team of the Congregations of St. Joseph. Rio + 20 Statement by Congregations of St. Joseph. London, Ontario: March 2012.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> United Nations Environment Programme, UNEP, 2011, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication* - A Synthesis for Policy Makers, Page 2. at

<sup>&</sup>lt;sup>8</sup> Edgardo Lander. The Green Economy: The Wolf in Sheep's Clothing. Amsterdam: Transnational Institute. December 2011. Page 6.

<sup>&</sup>lt;sup>9</sup> See World Business Council for Sustainable Development. *Vision 2050*. at <a href="http://www.wbcsd.org/vision2050.aspx">http://www.wbcsd.org/vision2050.aspx</a>

- <sup>10</sup> Pablo Solon. Why the Green Economy is a Wrong Path to Restore the Equilibrium with Nature and What Alternatives Do We Have? at http://www.focusweb.org/content/why-green-economy-wrong-path-restore-equilibrium-nature-and-what-alternatives-dowe-have
- <sup>11</sup> United Nations Environment Programme. Op. Cit. Page 15.
- <sup>12</sup> See John Dillon. *Pricing Carbon: A Primer*. KAIROS Briefing Paper No. 20, November 2009 at <a href="http://www.kairoscanada.org/wp-content/uploads/2011/09/PBP20-CarbonPricing1.pdf">http://www.kairoscanada.org/wp-content/uploads/2011/09/PBP20-CarbonPricing1.pdf</a>
- <sup>13</sup> Cited in World Development Movement et al. Statement on the Outcome of the United Nations Conference on Sustainable Development. November 1, 2011. Page 3.
- <sup>14</sup> Alexander Jung. "The EU's Emissions Trading System Isn't Working." Spiegelonline. Feb. 2, 2012 at <a href="http://www.spieget.de/international/business/0,1518,815225,0">http://www.spieget.de/international/business/0,1518,815225,0</a> 0.html
- <sup>15</sup> Cited in Chris Lang. "Leaked World Bank report confirms carbon market collapse." REDD-Monitor. September 29, 2011.
- 16 Ibid.
- <sup>17</sup> See John Dillon and Dorothy McDougall. *Decisive Action Vital at Cancún Climate Talks*. KAIROS Briefing Paper No. 26, November 2010. at <a href="http://www.kairoscanada.org/wp-content/uploads/2011/09/PBP26-Cancun.pdf">http://www.kairoscanada.org/wp-content/uploads/2011/09/PBP26-Cancun.pdf</a>
- <sup>18</sup> The No REDD Platform. Open Letter of Concern to the International Donor Community about the Diversion of Existing Forest Conservation and Development Funding to REDD+. REDD Monitor. 2011. P.2.
- <sup>19</sup> To view the trailer for The Carbon Rush visit <a href="http://www.thecarbonrush.net/">http://www.thecarbonrush.net/</a>
- <sup>20</sup> Cited in *Rio* + 20: *Whose green economy?* London: World Development Movement. May 2012. Page 3.
- <sup>21</sup> Cited in Ibid. Page 3.
- <sup>22</sup> United Nations Environment Programme. Op. Cit. Page 5.
- <sup>23</sup> United Nations Environment Programme. Op. Cit. Page 6.
- <sup>24</sup> World Development Movement et al. Op. Cit. Page 1.
- <sup>25</sup> Lander. Op. Cit. Page 7.
- <sup>26</sup> Statement of the Plurinational State of Bolivia at the 12<sup>th</sup> Special Session of the Governing Council / Global Ministerial Environmental Forum of the United Nations Environmental Program. Nairobi, February 20, 2012.
- <sup>27</sup> United Nations Environment Programme. Op. Cit. P.38.
- <sup>28</sup> International Energy Agency. World Energy Outlook 2011.Paris: International Energy Agency. Executive Summary page 5.
- <sup>29</sup> National Energy Board. *Canada's Energy Future: Energy Supply and Demand Projections to 2035*. Ottawa: National Energy Board. 2011.
- <sup>30</sup> S.E. Grasby et. al. "Geothermal Energy Resource Potential of Canada." Geological Survey of Canada Open File 6914, Ottawa:

Natural Resources Canada. 2011. at <a href="mailto:ftp://ftp.nrcan.gc.ca/36ra86j9nc37q07t4gl1.pdf">ftp://ftp.nrcan.gc.ca/36ra86j9nc37q07t4gl1.pdf</a>

- <sup>31</sup> See John Dillon. *A Sustainable Energy Economy is Possible*. Toronto: KAIROS. May 2012.
- <sup>32</sup> United Nations Environment Programme. Op. Cit. P.35.
- <sup>33</sup> Cited in Edward Barbier. "The policy challenges for green economy and sustainable economic development." *Natural Resources Forum 35*. New York: United Nations. 2011. Page 241.
- <sup>34</sup> See the 2012 Alternative Federal Budget. Ottawa: Canadian Centre for Policy Alternatives. Page 31 at <a href="http://www.policyalternatives.ca/sites/default/files/uploads/publica-">http://www.policyalternatives.ca/sites/default/files/uploads/publica-</a>
- tions/National%20Office/2012/03/AFB2012%20Budget%20Document.pdf
- <sup>35</sup> See John Dillon. *An Idea Whose Time Has Come: Adopt a Financial Transactions Tax*. KAIROS Briefing Paper No. 24 May 2010 at <a href="http://www.kairoscanada.org/wp-content/uploads/2011/09/PBP24-TimeHasComeAdoptFinancialTransTax1.pdf">http://www.kairoscanada.org/wp-content/uploads/2011/09/PBP24-TimeHasComeAdoptFinancialTransTax1.pdf</a>
- <sup>36</sup>See Proposal of Bolivia to Rio+20. *The Rights of Nature* at <a href="http://boliviarising.blogspot.com/2012/01/proposal-of-bolivia-to-rio20.html">http://boliviarising.blogspot.com/2012/01/proposal-of-bolivia-to-rio20.html</a>
- <sup>37</sup> Comisión Económica para América Latina. *Impuesto global a las transacciones financieras es una prioridad para la estabilidad y el desarrollo*. Comunicado de Prensa. 24 de agosto de 2011.
- <sup>38</sup> See Ecumenical Coalition for Economic Justice. "Through a Different Lens: Alternative Indicators and Our Work for Economic Justice." *Economic Justice Report*. Vol. IX, Number 3, October 1998 and "Numbers that Lie." *Economic Justice Report*. Vol. VI, Number 4, December 1995. Toronto: Ecumenical Coalition for Economic Justice.
- <sup>39</sup> Roberto Bissio et. al. "Sustainable Development: The Right to a Future." Social Watch Report 2012. Montivideo: Instituto del Tercer Mundo. 2011. Page 1.
- <sup>40</sup> Maria Theresa Lauron. "The Durban Package: escape hatches, empty shells, and a death notice to equity." Manila: IBON. December 20, 2011.
- <sup>41</sup> See Diana Bronson et al. *Retooling the Planet? Climate Chaos in the Geoengineering Age*. Stockholm: Swedish Society for Nature Conservation,. 2009. Page 5.
- <sup>42</sup> Roberto Bissio. Op. Cit. Page 5.
- <sup>43</sup> Mark Hathaway and Leonardo Boff, *The Tao of Liberation: Exploring the Ecology of Transformation*, Maryknoll, New York: Orbis, 2009, p. 48.
- 44 Ibid., p. 48.
- $^{\rm 45}$  Marcos Arruda. Davos y el Capitalismo. Masa Critica No.58. Rio de Janeiro: PACS
- <sup>46</sup> The No REDD Platform. Op. Cit. P.3.
- <sup>47</sup> See *Vision Statement Green Economy Network* at <a href="http://www.greeneconomynet.ca/">http://www.greeneconomynet.ca/</a>