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Can the Law Facilitate a Finance Shift from Mitigation to Adaptation?

"The past went that-a-way. When faced with a totally new situation, we tend always to attach ourselves to the objects, to the flavor of the most recent past. We look at the present through a rear-view mirror. We march backwards into the future." (*Marshall McLuhan*[1])

A. Introduction: Can Law Address These Crises?

There are two very different ways in which one can connect the declarations of a worldwide financial crisis and a worldwide climate crisis. The first way has relatively clear legal aspects and requires just a bit of extra thought to see the connection. Insofar as institutions and sources of law have attempted to address climate change to date, states have come to regard the United Nations Convention on Climate Change (UNFCCC)[2] and the Protocol thereto, signed during a regular annual Conference of the Parties in 1997 at Kyoto,[3] as the organizing force of all serious legal[4] actions. There are two foci of the UNFCCC and Protocol – mitigation of the causes of climate change and adaptation to the effects of climate change. In the first ten years of life with the UNFCCC, much of the focus was upon mitigation. During that period, adaptation was regarded as only a regrettable fallback position to be considered if we were unable (or as it turns out, unwilling) to mitigate. However, as the years have advanced without necessary cuts in greenhouse gas emissions coming to fruition, we find ourselves talking about already being in the regrettable fallback position in which we need to begin to adapt now, even as we continue to try to mitigate.[5] Climate change is occurring, and since the causes of its deleterious effects upon human beings – particularly the poorest of human beings – are irreversible, we must adapt to those changes if we are to help those being injured and soon to be injured. So what is the connection to the finance crisis? Adaptation takes money. Thus so we come to the first connection of the financial crisis and the climate crisis. In a moment in history precisely when states may seem least able to afford it, they must now spend money on adaptation as well as mitigation.

But before discussing that further, the second and even less obvious connection between the finance crisis and climate crisis should be laid on the table. This second connection is exclusive of legal aspects, although it might in fact illuminate the limitations of the legal solutions. New York Times journalist *Michael Pollan* once asked the seemingly obvious question as to why we should expect government and business, the two entities that brought us the financial crisis,[6] to be the ones to extract us from the financial crisis?[7] *Arne Wittig*, General Counsel of Deutsche Bank, recently reported that there were two clearly traceable causes for the beginning of the worldwide financial collapse at the end of 2008 – the bursting of the American housing market bubble and ... "greed."[8] It is here then that one begins to see the second and less obvious connection between the financial crisis and the climate crisis. During the midst of the annual Conference of the UNFCCC Parties in December of 2009 ("C.O.P. 15"), a CNN-televised debate took place among political scientist and climate change skeptic *Bjorn Lomborg*, millionaire New York Times economics columnist *Thomas Friedman*, actress and environmental activist *Daryl Hannah*, and *Yvo de Boer*, Executive Secretary of the UNFCCC. When asked how best to address the climate crisis, *De Boer* started his answer by saying "this is an ethical problem." So while one considers the legal aspects of the financial crisis and their potential relationships to the legal aspects of the climate crisis, one cannot help but to notice that the experts are telling us that there is something basic to both crises that might not be within the realm or ability of law to fix. It could well be that this second connection must be addressed if we are to solve either crisis, but it is beyond the scope of this discussion to do so.[9]

B. A Conceptual Concern – New Problems for Old Solutions

Energy is an industry. Energy is a market. Can energy, a pre-existing industrial market commodity, be treated as an on-the-shelf tool to be taken down and used for fixing climate change problems? Can financial aid, already allocated in the

1 Marshall McLuhan with Quentin Fiore, The Medium is the Massage: An Inventory of Effects [1967, reissued 2001].

2 United Nations Framework Convention on Climate Change, 1771 UNTS 107; S. Treaty Doc No. 102-38; U.N. Doc. A/AC.237/18 (Part II)/Add.1; 31 ILM 849 (1992).

3 Commonly referred to as the "Kyoto Protocol," UN Doc FCCC/CP/1997/7/Add.1, Dec. 10, 1997; 37 ILM 22 (1998).

4 I am not including the non-binding soft law agreement among the United States, Australia, Canada, India, Japan, South Korea and People's Republic of China signed in 2005 known as the "Asia-Pacific Partnership on Clean Development and the Environment".

5 "The Bali Action Plan, adopted at COP 13 in Bali, December 2007, identifies adaptation as one of the key building blocks required for a strengthened future response to climate change to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012. Most recently in Copenhagen, Parties decided to extend the mandate of the AWG-LCA and requested it to present the outcome of its work to COP 16 in Mexico. In addition, the COP took note of the Copenhagen Accord, in which Heads of State, Heads of Government, Ministers and other heads of delegations stress the need to establish a comprehensive adaptation programme. The signatories agree that enhanced action and international cooperation on adaptation is urgently required and that developed countries shall provide adequate, predictable and sustainable financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries. Funding for adaptation will be prioritized for the most vulnerable developing countries, such as the LDCs, SIDS and Africa." http://unfccc.int/adaptation/items/4159.php, last accessed January 31, 2010.

6 Consider for example that American International Group, the biggest beneficiary of the U.S. government bailout, announced in February 2010 it will continue to pay 100 million U.S. dollars in bonuses to the financial products unit – precisely the same people who traded in the derivatives that "imploded in September 2008, leading to the biggest U.S. government bailout in history." Mary Williams Walsh and Sewell Chan, "A.I.G. bonus trims fail to satisfy its critics," *International Herald Tribune*, February 4, 2010, p. 18.

7 *Michael Pollan*, "Cheap Energy, Growing Gardens, Green Virtue," April 21, 2008, www.ecohuman.com/cheap-energy-growing-gardens-green-virtue-249.

8 *Arne Wittig*, Chefsyndikus Deutsche Bank AG, "Regulatorische Antworten auf die Finanzkrise", Vorlesung, Universität zu Köln, Institut für Bankrecht Institut, January 13, 2010.

9 See, *Kirk W. Junker*, "Can States Behave Virtuously and Not Just Legally When Faced with Climate Change?" in *The Philosophy of the Environment: Nature and Crucial Environmental Issues in the 21st Century*, K. Boudouris, ed. (forthcoming, 2010).

budgets of individual countries as well as the EU, be successful as a financial tool for the adaptation of poor countries to climate change? If we are tempted to answer the question affirmatively, we should pause and consider *Pollan's* provocation: why we should expect government and business, the two entities that brought us the financial crisis, to be the ones to extract us from the financial crisis?

Given that the annual UNFCCC Conference of the Parties is a treaty-mandated meeting of an international legal institution, one might easily fall into framing the meeting in legal terms and expecting the success or failure of the meeting to be measured in legal outcomes. However, Nobel Prize-winning negotiator *Adil Najam* of the Intergovernmental Panel on Climate Change (IPCC) thinks otherwise. In reporting on the Copenhagen conference of the parties, he stated emphatically "I am not worried about signing binding agreements. I am concerned with implementing policy. "Negotiation has become a spectator sport."[10]

Equally as disturbing is the real possibility that rationality plays a relatively small role in our attitudes and actions toward climate change. Like the smoker who knows as a rational fact that smoking cigarettes will likely cause his or her death but continues to smoke anyway, societies are unmotivated by the rational facts offered by natural science or economics when it comes to climate change. They seem to be just as unmotivated by the rationality of the solutions offered by law. We have the scientific facts: Climate change is real, humans are largely responsible for it, and it is causing irreversible change to our natural environment in ways that will hurt human beings, especially the poorest of human beings. We have the economic facts: doing nothing now to curb climate change will ultimately cost us more than doing something now.[11] And we have the legal facts: the Kyoto Protocol expires in 2012 and at present we have no further global agreement through which to provide the necessary technical goals and compliance deadlines within the framework of the UNFCCC. And yet we are doing next to nothing about it.

So it would seem that our approach thus far of treating climate change as an emissions problem that can be solved by government and business taking energy market tools off the shelf and "applying" them in a regulation-versus-markets struggle might be in need of some shaking up. What will need to occur to catch enough attention to do so? Hurricanes? Flooding? Loss of coastlines and islands? The worst finance crisis in eighty years?

Adil Najam, speaking in Bonn recently said that he wanted to "turn the climate change problem on its head. Climate change is about development for most people in the world, and development is not aid, it is adaptation."[12] (Note well that he is not regarding it as an emissions problem, either.) To illustrate the difference, *Najam* reported that by Thursday of the second week of the C.O.P. 15 in December, 2009 in Copenhagen, fewer than twenty-four hours before the conference was scheduled to end with a signed agreement, 100 billion U.S. dollars were on the table in aid at one point – and no one was interested. Brazil went so far as to say it was "not interested in money."[13] In these moments, in not before, it has become clear that the politics of development, insofar as it involves money and finance, can no longer be about aid, but instead must be about adaptation. And adaptation is not a problem to be corrected by taking energy market ideas off the shelf and applying them to excessive carbon emissions through regulation or laissez-faire economics. We must instead shift our questioning to ask how the finance crisis affects development that fosters adaptation.

C. "Menschheit in den Hintergrund"?

Working under the framework of the UNFCCC, the Intergovernmental Panel on Climate Change defines "adaptation" as:

"adjustment in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects or impacts. This term refers to changes in processes, practices, or structures to moderate or offset potential damages or to take advantage of opportunities associated with changes in climate. It involves adjustments to reduce the vulnerability of communities, regions, or activities to climatic change and variability."[14]

How would an adaptation policy or project look different from aid or energy market adjustments? Past practices of development benefit the developer first, and then through assumptions of "trickle-down" economics, benefit the target economy. Adaptation by comparison is actively integrated in the day-to-day work of human evacuation and migration, medicine and availability of food. Adaptation projects range from the large United Nations Development Programme (UNDP)[15] projects to small entrepreneurs. Large UNDP projects include "Coping with Drought and Climate Change" in Ethiopia, Kenya, Mozambique and Zimbabwe, "Responding to Shoreline Change and its Human Dimensions in West Africa through Integrated Coastal Area Management," and "Piloting Climate Change Adaptation to Protect Human Health." The size and type of adaptation project is limited only by imagina-

10 By comparison, consider for example a writing project by conceptual artist *Jochen Gerz* called "Two or Three Roads." *Gerz* explains: "The public is too passive. It would be better if there were more authors, rather than just consumers." The project involves giving 78 people from around the world free places to live for a year. Three cities in the German Ruhr River region donated apartments. In lieu of rent, tenants must write, every day, about anything. "I am trying to create an author's society, a football game where 80,000 are playing and 22 are watching," *Gerz* said. "A democracy with only consumers is no democracy – not for long, anyway." See, *The Week in Germany*, January 18–22, www.germany.info/Vertretung/usa/en/newsletter/The__Week__in__Germany/TWIG__100122,variant=issue.html, last accessed January 23, 2010.

11 According to the *Stern Review Report*, "without early and strong mitigation, the costs of adaptation will rise, and countries' and individuals' ability to adapt effectively will be constrained." *The Economics of Climate Change*, *Nicholas Stern* (2007) p. 458. We have not had the necessary early and strong mitigation and it would seem the time for "early" action has now passed. Moreover, International Energy Agency Executive Director *Nobuo Tanaka* reported to the press on October 6, 2009 from Bangkok that "The IEA 450 scenario is the energy pathway to Green Growth. Yet we need to act urgently and now. Every year of delay adds an extra U.S.D. 500 billion to the investment needed between 2010 and 2030 in the energy sector."

12 *Adil Najam*, "After the Copenhagen Summit. What is to be done?" public lecture at Deutsche Welle, Bonn, January 21, 2010.

13 The UNFCCC defines adaptation as follows: Developing countries require international assistance to support adaptation (Articles 4.4, 4.8 and 4.9). This includes funding, technology transfer and capacity building. Funding for adaptation is provided through the of the Convention, currently operated by the Global Environment Facility (GEF) and the Adaptation Fund Board (AFB). Funding opportunities include: the GEF Trust Fund, including support for vulnerability and adaptation assessments as part of national communications; the Least Developed Countries Fund (LDCF) under the Convention; the Special Climate Change Fund (SCCF) under the Convention; [and] The Adaptation Fund (AF) under the Kyoto Protocol and managed by the AFB. http://unfccc.int/adaptation/items/4159.php, last accessed January 31, 2010.

14 Intergovernmental Panel on Climate Change (IPCC) Third Report, Working Group II: Impacts, Adaptation and Vulnerability, Chapter 18.1, 2001.

15 See, www.undp.org/climatechange/adapt/program.html, last accessed February 2, 2010.

tion. For example, at the level of direct impact, and not government and business planning, rising tides last year destroyed more than 300 schools in Bangladesh leaving children with no place to learn. In response to the worsening floods, social entrepreneur *Mohammed Rezwan* created twenty-eight "school boats" to bring school to Bangladeshi children. This is one small example of how one entrepreneur and NGOs in countries with large poor populations are trying to adapt to the impacts of climate change now.[16]

As the finance crisis hit in 2008, *Yvo de Boer* quite predictably predicted:

"I'm quite sure that the financial crisis will have effects on our climate policies. We'll have less money to protect the environment because many countries have spent a lot of money rescuing their banks. At the same time, the price of oil has been going down, which is bad news when it comes to renewable energies and energy conservation. But during last week's G-20 summit in Washington, the participating countries stated very clearly that they would not allow long-term problems like climate change to be forgotten."[17]

When asked how he thought that would happen, he replied "At last year's climate summit in Bali, the countries pledged to initiate a process of negotiations that will come to an end next year. The warnings from scientists are taken very seriously. The states realize that we are making investment decisions now for the next 30 to 50 years. In this process, it would be unreasonable to not take climate change into account."[18]

Despite the need for a shift to adaptation, government vision still seems to be looking at climate change in the rearview mirror. One year later, after the Copenhagen conference, *Angela Merkel* echoed in her New Year address that which Federal Minister for Business and Technology, *Karl-Theodor zu Guttenberg* had stated nine months earlier: "Wir alle wissen: Die Konsequenz aus der Wirtschafts- und Finanzkrise kann nicht die Abkehr vom Klimaschutz sein."[19] At the New Year, *Merkel* stated that "Die weltweite Krise darf aber keinesfalls als Ausrede dafür dienen, andere Herausforderungen der Menschheit in den Hintergrund zu drängen." Coincidentally, on that same day the *New York Times* announced that "Economics rather than politics will be the main driver of the fight against global warming in 2010. In 2009, the global recession had a greater impact than all the diplomatic efforts that ended in the Copenhagen flop: energy production had not declined on such a scale since 1981, according to the International Energy Agency."[20] The *Times* then went on to predict the economic reasons for the "world to become slightly greener in the coming year" including high oil prices, low natural gas prices, continued research and subsidies in clean energy, deterrence measures such as a European carbon tax, and rising carbon market prices.[21] "Greener" in this sense is off-the-shelf energy market tools, dusted and used yet again, leaving "Menschheit im Hintergrund".

If we bother to note the empirical evidence record of these energy market tools, we may make connections between adaptation and the financial crisis. *Nobuo Tanaka*, Executive Director of the International Energy Agency had the following to report to the G-8 Energy Ministerial Meeting in Rome on May 24, 2009 as he answered the question of how the financial and economic crisis affected energy investment. He noted first that it was causing difficulties in obtaining credit and creating a higher cost of capital. Second, there had developed an increased aversion to risk among energy investors. Third, the credit markets had become somewhat paralyzed. Fourth, plunging share values had increased debt-equity ratios. Fifth, lower prices and cash flows had made new investments less attractive. And finally, falling demand caused by economic recession had reduced the sense of urgency in finding energy supplies and the appetite for suppliers to invest. He forecasted a drop in renewable energy source financing by nearly forty per cent. "Menschheit in den Hintergrund?" To achieve the 450 mitigation policy scenario,[22] *Tanaka* reported that governments would need to increase funds committed to renewable energy sources sixfold relative to their economic stimulus packages used in late 2008 and the beginning of 2009.[23] Assuming somewhat confidently that will not happen, and yet while hoping for it anyway, adaptation is necessary.

D. What Changed in Copenhagen?

Technically, developed countries are already obligated to transfer finance to developing countries under Article 4.3 of the UNFCCC, which states that 'agreed full incremental costs' in developing countries should be met by finance and technology from developed countries. But this structure is still focused upon mitigation, not adaptation. According to a report authored by the Environmental and Energy Study Institute,[24] it is "almost certain" that by 2050, droughts, food shortages and flooding caused by climate change will lead to the mass movement of up to 200 million climate refugees. These refugees will require adaptation measures, not energy market development.

At Copenhagen a binding agreement was not reached, but an Accord[25] was drafted by five countries, to be signed by as

16 One World TV, January 15, 2010, http://tv.oneworld.net/ 2010/01/15/bangladesh-reels-from-the-impact-of-climate-change, last accessed February 1, 2010.

17 *Christoph Seidler*, "The Finance Crisis Will Affect Climate Policies," *Spiegel On-Line*, November 18, 2008.

18 id.

19 *Karl-Theodor zu Guttenberg*, "Vortrags- und Diskussionsveranstaltung der BDI-Initiative 'Wirtschaft für Klimaschutz," Haus der Deutschen Wirtschaft, Berlin, March 24, 2009.

20 *Pierre Briancon*, "The Copenhagen Call to Arms," *New York Times*, December 31, 2009.

21 Id.

22 450 parts of carbon dioxide per million is the upward limit of concentration of CO2 in the atmosphere that climatologists use to anticipate the tipping point. "For achieving the 2 degrees target with a probability of more than 60 %, greenhouse gas concentrations need to be stabilized at 450 ppm CO2-equivalent or below, if the 90 % uncertainty range for climate sensitivity is believed to be 1.5 to 4.5 degrees C. A stabilization at 450 (400) ppm CO2-equivalent requires global emissions to peak around 2015, followed by substantial overall reductions in the order of 30 % (50 %) compared to 1990 levels in 2050. In 2020, Annex I [of the Kyoto Protocol] emissions need to be approximately 15 % (30 %) below 1990 levels. Non-Annex I emissions may increase compared to the 1990 levels, but not compared to their baseline emissions (15–20 % reduction). A further delay in peaking of global emissions by 10 years doubles maximum reduction rates to about 5 % per year, and very likely leads to high costs. In order to keep the option open of stabilizing at 400 and 450 ppm CO2 equivalent, the USA and major advanced non-Annex I countries will have to participate in an agreement aimed at reductions within 10-15 years." National Institute for Public Health and Environment, http://unfccc.int/essential_background/library/items/3599.php?rec=j&priref=4965, last accessed January 31, 2010.

23 "The Impact of the Financial and Economic Crisis on Global Energy Investment," IEA Background Paper for the G8 Energy Ministers' Meeting, 24-25 May 2009, www.iea.org/Papers/2009/G8_investment_ExecSum.pdf, last accessed February 1, 2010.

24 "An Uncertain Future: Law Enforcement, National Security, and Climate Change," posted at www.eesi.org, February 2, 2008, last accessed February 1, 2010.

25 http://unfccc.int/resource/docs/2009/cop15/eng/l07.pdf, last accessed January 31, 2010.

many countries as possible by January 31, 2010. This deadline has been extended without limit after a tenuous chain of those type of real events of history that become so meaningful: First, the U.S. domestic climate change legislation stumbled in January because the replacement seat in the U.S. Senate for recently-deceased Democrat *Edward Kennedy* was won by a Republican. Then, in response China said that without U.S. domestic climate change legislation, the U.S. really had nothing to offer so China had no reason to sign the Accord. Further, India saw China's hesitation to be a sufficient reason for its own. Even if the Accord is ultimately signed, there are nevertheless criticisms of its financial soundness, to wit: The mobilization of 100 billion dollars per year to developing countries will not be fully in place until 2020; there is no guarantee or information on where the climate funds will come from;[26] there is no agreement on how much individual countries would contribute to or benefit from any funds;[27] the head of the G77 has said it will only achieve the economic security of a few nations.[28] As if this were not enough, even in the troublesome leaked "Danish Text"[29] at Copenhagen, there was criticism from developing countries that the UN's role in managing finance would be weakened.

There are twelve paragraphs in the Copenhagen Accord.[30] Four of those paragraphs explicitly discuss adaptation, with paragraph 8 focusing upon adaptation most:

"8. Scaled up, new and additional, predictable and adequate funding as well as improved access shall be provided to developing countries, in accordance with the relevant provisions of the Convention, to enable and support enhanced action on mitigation, including substantial finance to prevent deforestation (REDD-plus), adaptation, technology development and transfer and capacity-building, for enhanced implementation of the Convention. The collective commitment by developed countries is to provide new and additional resources amounting to 30 billion dollars for the period 2010–2012 as listed in appendix III with balanced allocation between adaptation and mitigation, including forestry. Funding for adaptation will be prioritized for the most vulnerable developing countries, such as the least developed countries, small island developing states and countries in Africa affected by drought, desertification and floods. In the context of meaningful mitigation actions and transparency on implementation, developed countries support a goal of mobilizing jointly 100 billion dollars a year by 2020 to address the needs of developing countries. This funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance. New multilateral funding for adaptation will be delivered through effective and efficient fund arrangements, with a governance structure providing for equal representation of developed and developing countries."[31]

Three additional paragraphs talk about economics, development or both, without explicitly mentioning the word "adaptation."

E. Conclusions

Even though one sees and hears so much of the talk of business and government persons connecting their interests to climate issues, and insisting they will not allow the financial crisis to stop their efforts to halt climate change, they apparently have not been listening to the people of developing countries. Those people need help with adaptation, not aid, and not some re-application of energy market tools from the shelf. And while we would all like to wait for the magic of technology that fixes everything from cancer to climate change, crops fail, pest migrate, coastlines and islands disappear and people become climate refugees. Mitigation must of course continue, but the time for adaptation is already here and needs money.

Will the Copenhagen Accord matter? *Ned Helme*, president of the Center for Clean Air Policy in Washington, D.C., said that "it is becoming clear that the world's biggest carbon emitters are going to follow through on voluntary pledges they made in the run-up to last month's talks. Now the smoke has cleared, people are now taking the Copenhagen Accord more seriously. [...] You're going to see all the major players sign up."[32] The Copenhagen Accord might contribute to the way forward through adaptation, but signing an agreement is not the act that matters if we interpret it to mean energy business as usual plus a little more charity aid. Business as usual is looking at the present through a rear-view mirror and will march us backward into the future.

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26 "What Copenhagen Did and Did Not Achieve," www.peopleandplanet.net/doc.php?id=3701, last accessed January 24, 2010.

27 "What was Agreed and Left Unfinished in U.N. Climate Deal," http://in.reuters.com/article/specialEvents1/ idINIndia- 44872920091220?sp=true, last accessed January 24, 2010.

28 "Copenhagen Deal Reaction in Quotes," BBC, December 19, 2009, http://news.bbc.co.uk/2/hi/science/nature/8421910.stm, last accessed January 24, 2010.

29 See, *John Vidal*, "Copenhagen climate summit in disarray after 'Danish text' leak," *The Guardian*, December 9, 2009, www.guardian.co.uk/environment/2009/dec/08/copenhagen-climate-summit-disarray-danish-text, last accessed February 6, 2010.

30 For a full text of the Accord, officially the 'Draft decision -/CP.15, Proposal by the President Copenhagen Accord, see http://unfccc.int/resource/docs /2009/cop15/eng/l07.pdf.

31 Copenhagen Accord, *id.*

32 *Juliet Eilperin*, "US Pledges 17 per cent Emissions Reductions by 2020," *Washington Post*, January 29, 2010, www.washingtonpost.com/wpdyn/content/article/2010/01/28/AR2010012803632.html, last accessed January 30, 2010.