



THE TIERRA FEE & DIVIDEND (TFD) SOLUTION:

A proposal for integrated global governance

By Frans C. Verhagen, M.Div., M.I.A., Ph.D., sustainability sociologist

The International Institute of Monetary Transformation (IIMT)

www.timun.net; gaia1@rcn.com

New York City, February 15, 2011

© All Rights Reserved



**STAKEHOLDER
FORUM**

ABOUT SDG2012

SDG 2012 is Stakeholder Forum's Programme on Sustainable Development Governance towards the UN Conference on Sustainable Development in 2012 (UNCSD), also known as 'Rio+20' and 'Earth Summit 2012'. The Programme consists of the following activities:

- **Thought Leadership** – writing and commissioning think pieces on issues relating to sustainable development governance, to stimulate and inform discussion on this issue towards Rio+20
- **Sustainable Development Governance 2012 Network (SDG2012 Network)** – coordinating a multi-stakeholder network of experts to produce and peer review think pieces, discuss and exchange on issues relating to the institutional framework for sustainable development, and align with policy positions where appropriate
- **Information and Resources** – publishing informative guides and briefings and hosting an online clearing-house of information and updates on international environmental and sustainable development governance – 'SDG dossier'
- **Submissions** – making official submissions to the Rio+20 process based on think pieces and dialogue.

ABOUT STAKEHOLDER FORUM

Stakeholder Forum is an international organisation working to advance sustainable development and promote stakeholder democracy at a global level. Our work aims to enhance open, accountable and participatory international decision-making on sustainable development.

Stakeholder Forum works across four key areas: Global Policy and Advocacy; Stakeholder Engagement; Media and Communications; and Capacity Building. Our SDG2012 programme sits within our work on Global Policy and Advocacy.

MORE INFORMATION

If you would like to provide feedback on this paper, get involved in Stakeholder Forum's SDG2012 programme, or put yourself forward to write a paper, please contact Hannah Stoddart, Head of Policy and Advocacy at Stakeholder Forum – hstoddart@stakeholderforum.org

For more information on SDG2012 please visit www.stakeholderforum.org and www.earthsummit2012.org

Introduction

This “think-piece” proposes that the present unjust, unsustainable, and, therefore, unstable international monetary system, which presently functions without a standard, be transformed into one that has carbon-based standard. Such a carbon-based monetary system, the most important pillar of the Tierra Fee & Dividend (TFD) global governance system, put forward in this proposal, would replace the present one, characterized by financial imbalances, volatile exchange rates, currency disputes, currency manipulation and speculation and, last but not least, a global reserve system that costs non-hard currency nations billions of dollars annually.ⁱ Additionally, such a transformation would contribute to solving the challenges posed by the climate crisis, sustainable development and a dysfunctional monetary system simultaneously in that it would also provide the basis for an integrated global governance system. Thus the TFD addresses itself to the two main objectives of the Rio 2012 Earth Summit process, i.e. promotion of a green economy as part of sustainable development and the establishment of a global governance system. Moreover, as noted above, it also addresses the climate crisis, an area of concern that is not included in the present planning process though it is widely acknowledged to heavily impact economies—green or otherwise—and all programs of sustainable development.

The think piece will first describe the carbon based monetary system, the foundational component of the TFD global monetary governance system, followed by a top-down and bottom-up strategy for pursuing this innovative and promising systemⁱⁱ including suggestions for stakeholders in the Rio 2012 Earth Summit process, particularly at its 2nd PrepCom.

Components of the TFD system

The TFD is like a *three-legged stool*. Its three components cannot function separately one from the other. The first component, its carbon-based international monetary system, is utilized to combat climate change by advancing green economies. Its second component, the Fee and Dividend carbon reduction method, is used to reduce GHG emissions; it is selected over cap-and-trade because Fee & Dividend is faster, fairer, more formidable and more global than cap-and-trade.ⁱⁱⁱ Its third component, activist governments, is needed to support the other two legs of this tri-partite global monetary governance system by having the public sector reclaim the sole right of creating credit and liquidity, thus making privately-owned banking systems utilities of deposit and not of issue, i.e. they will not engage in money creation by the use of the fractional reserve system.

Given that the TFD rests upon a transformed international monetary system *the six elements of its monetary architecture* deserve additional attention. They are a carbon-based standard, convertible national currencies or a world currency, fixed but flexible exchange rates, a modified balance of payments, a global monetary authority and a global monetary court.

The TFD's monetary architecture rests upon a *carbon-based monetary standard* of which the Tierra is its unit of account or numeraire. It is set to a specific ton of CO₂e per person, determined by the GHG emission targets of the IPCC.

The need for a monetary standard is increasingly being mentioned as a means to resolve the global financial imbalances and other problems of the present dysfunctional international monetary system which is often called a "non-system".^{iv} Thus, several well-known persons^v have recently raised the issue of the need for a return to the gold standard. However, the classical gold standard will not be an efficient monetary standard because of its deflationary character—an expanding world economy cannot be based on a limited supply of a metal like gold and thus prevent it from expanding. For the 21st century, a carbon-based monetary standard is to be preferred to a gold standard because of its ability to combat the climate crisis. That is, when the value of national or regional currencies is measured in terms of a society's *proximity to a carbon monetary standard*, the decarbonization of societies will be expedited, and as a consequence, it is assumed, their economies will become stronger and so will the value of their currencies. Thus societies will be motivated to reduce the carbon intensity of their economy and the ecological footprint of their citizens leading to more effective efforts to combat the climate crisis, to build a green economy and to promote low-carbon and climate-resilient development in the global North and South. Moreover, a carbon-based international monetary system helps societies to make the climate change challenge the organizing principle of their ecological, economic, social and political policies

Accepting a *carbon-based monetary standard* would lead to the convertibility of national currencies as they would be pegged to the Tierra standard. Nations can also decide to apply the Tierra standard to a world currency.^{vi} Should the Tierra standard become the basis of a world currency, the Tierra would not only remain its unit of account, but also become the means of international exchange between government, business and civil society and a store of value that can be banked. In either case nations would not need to maintain hard currencies such as the US dollar or even the SDRs as reserves. There would be no longer any need for the costly global reserve system, thus saving billions of dollars that can be invested domestically, regionally or internationally.

A second major consequence of having a monetary standard is that *exchange rates* become fixed within a small flexible band, so that currency manipulation and speculation, and foreign exchange disputes are drastically reduced. Monetary disputes like the ongoing US-China currency dispute and their associated financial imbalances are difficult to be resolved without a monetary standard as the 2010 G20 Summit in Seoul has shown. Even after agreeing on the first step of developing indicators for measuring those imbalances in the 2011 Summits in Paris and Washington, the second step of resolving those precisely determined imbalances cannot in all probability be taken without agreeing on a monetary standard.^{vii}

Under the TFD monetary regimen, nations have to settle their carbon accounts as part of their *balance of payments*. Thus, besides the challenges of resolving financial imbalances, nations

have to address the challenges of resolving ecological imbalances. The reduction of both the financial and ecological imbalances would take place through the transfer of convertible currencies from CO2 debtor countries in the North to CO2 creditor countries in the South and from financial debtor countries in the South to financial creditor countries in the North. Bilateral negotiations could substitute the resolution of one type of imbalance for the other. These can take place during the period that the TFD as a whole is being negotiated towards a UN Framework Convention on Monetary Transformation, The Climate Crisis and Sustainable Development, that is to be followed by the adoption of a Tierra Treaty containing enforcement powers.

These four components of the TFD's monetary architecture would be managed by a *federal Global Central Bank* which would be part of the UN system. Its Board of Governors or Governing Council made up representatives of regional monetary associations (RMAs) would administer this carbon-based international monetary system, monitor and regulate global financial flows and engage in the provision of credit and liquidity. The equitable, sustainable and predictable issuance of convertible currencies or the convertible world currency of the Tierra would be one of the major benefits of the TFD system, because the international community now would democratically determine the amount and quality of financing rather than being beholden to the vicissitudes of financial markets, financial black havens, and profit making privately-owned banking systems with their almost exclusive focus on the financial bottom line with the exclusion of the environmental and community bottom lines. Thus, under the TFD system, financing of climate and development programs needs not to go begging for funds from high-income nations in the North that are in great financial straights themselves and are engaged in austerity budgets to overcome their high levels of sovereign debt.

A final component of the Tierra monetary architecture would be a *Global Tierra Court* which is to adjudicate conflicts in the new global carbon-based monetary governance system. It is called the Global Tierra Court rather than the Global Monetary Court to emphasize the transformed character of the present international monetary system of which it is a part. It would work with the World Court, the International Criminal Court and the International Court for Climate Justice proposed by the Cochabamba Conference in April 2010.

Comparing the present IMF and the proposed Tierra monetary systems

The following table presents a comparison along some dozen features that illustrates the basic differences between the present international monetary system of the IMF and BIS and the carbon based Tierra global monetary governance system.

COMPARISON OF THE PRESENT IMF AND TIERRA MONETARY SYSTEMS

FEATURES	PRESENT SYSTEM	TIERRA SYSTEM
Monetary standard	None	Carbon standard
Currencies	Most are non-convertible	All are convertible
-Reserve currencies	Several	None –no need
-Global reserve system	Yes and costly	Removed
-Currency manipulation & speculation	High	Well-nigh absent
-single world currency	Difficult to achieve	Phase 2 of Tierra MS
Exchange rates	Floating and volatile	Fixed and stable
Balance of payments	Financial accounts	Financial and carbon accounts
BOP imbalances	Financial	Financial and ecological
Governance	IMF, BIS	UN Federal Central Bank
Surveillance	No enforcement authority	Enforcement authority
Philosophy	Neo-classical economics	Sustainability economics
Equity social/procedural	Minor emphasis	Major emphasis
--climate justice	Missing value	Crucial value
Earth Charter	Absent	Important common value base
Long-term orientation	Weak	Strong
Connection to climate crisis	Absent	Strong and essential
Historical perspective	Reformist	Transformational

© IIMT 2010

The strategy

Developing and implementing the TFD global monetary governance system consists of a *top-down approach via the United Nations and a bottom-up approach via TFD Working Groups*, a dual strategy which is not only directed towards governmental delegates for the Rio 2012 process, but also towards both business and CSO stakeholders.

UN member states are invited to sponsor a *UN General Assembly Resolution to establish an UN Commission of Experts on Monetary Transformation, Climate Change and Sustainable Development* to fully explore the nexus between climate, sustainable development and the international monetary system and to develop for a *Monetary Plan of Climate and Development Action*. Crucial in passing the UN General Assembly Resolution are the member states that make up the GA Second Committee that deals with financial and economic issues. Their findings would be submitted to the UNFCCC in 2011 and, particularly, to the Rio 2012 Earth Summit process. A Metro New York Task Force has been established specifically to promote the above UN General Assembly resolution.

Besides this top-down approach via the United Nations the bottom-up strategy consists in the formation of *national and issue-based TFD Working Groups*. These working groups would engage in the promotion of national debates connecting the climate crisis, development challenges and the need for an effective carbon-based monetary governance system that would

be able to integrate the solutions to those challenges and thus positively influence the financial, economic and commercial systems^{viii}; they engage in the research of integrated solutions^{ix} on climate, development and monetary issues that are generally not undertaken by existing institutions with their discrete focus and they engage in having their nations participate in the above UN commission. Their contributions in research, education and action are needed to make the proposed UN Commission's Monetary Plan of Climate and Development Action a realistic plan that is able to advance UNFCCC's equitable carbon budget negotiations and particularly the global governance and green economy themes of the Rio 2012 Earth Summit.

The above strategy is grounded in an *explicit value-based planning framework of contextual sustainability* that includes the equity article 4 of UNFCCC with its "common and differentiated responsibilities and respective abilities" and the integrated social and ecological values of the Earth Charter with an emphasis on the value of climate justice.^x

Suggestions for action by the Rio 2012 Earth Summit stakeholders

Governmental Stakeholders

- be bold enough to think transformation rather than reform: think hard outside the famous box rather than the inner outsides of the box where good reforms are located
- make connections to ensure an integrated and effective response to climate change, green economies and sustainable development and seriously consider making the resolution of those challenges by utilizing an equitable, sustainable, and, therefore, stable carbon-based international monetary system
- have your nation become part of the group of nations sponsoring the UN General Assembly Resolution for the establishment of the UN Commission of Experts on Monetary Transformation, Climate Change and Sustainable Development leading to recommendations for a Monetary Agenda for Climate and Development Action
- have your nation support a G20 Monetary Transformation, Climate Change and Sustainable Development Working Group besides the several other G20 working groups, high level panels and task teams that have been set up for other purposes.

CSO Stakeholders

- be bold enough to think transformation rather than reform: think hard outside the famous box rather than the inner outsides of the box where good reforms are located
- make connections to ensure an integrated and effective response to climate change, green economies and sustainable development and seriously consider making the resolution of those challenges by utilizing an equitable, sustainable, and, therefore, stable carbon-based international monetary system
- establish or join a nation- or issue-based TFD working group, so that the issue of using a carbon-based international monetary system to deal with the climate crisis and sustainable development can become part of a national public debate, leading to input into G20 Summits, UNFCCC's COPs and particularly into the Rio 2012 Earth Summit process

- have CS members of the TFD working groups work towards their nation becoming a sponsor of the above UN General Assembly Resolution and the above proposed G20 Working Group.

Business Stakeholders

- be bold enough to think transformation rather than reform: think really outside the famous box rather than the inner outsides of the box where good reforms are located
- make connections to ensure an integrated and effective response to climate change, green economies and sustainable development and seriously consider making the resolution of those challenges by utilizing an equitable, sustainable, and, therefore, stable carbon-based international monetary system
- establish or join a nation- or issue-based TFD working group, so that the issue of using a transformed international monetary system to deal with the climate crisis and sustainable development can become part of a national public debate, leading to input into G20 Summits, UNFCCC COPs and particularly the Rio 2012 Earth Summit
- have your nation sponsor the above UN General Assembly Resolution to establish the UN Commission of Experts on Monetary Transformation, Climate Change and Sustainable Development
- have the G20 Business Summit Working Group established in Seoul in the fall of 2010 support the above proposed G20 Monetary Transformation, Climate Change and Sustainable Development Working Group.

Conclusion

Given that the Earth Summit wants to develop “New Foundations for the Future”, it is essential that among those foundations the monetary foundation is going to be considered. It is the international monetary system that functions as glue according to monetary historian Eichengreen^{xi}. It binds together the monetary, financial, economic and commercial systems. It also acts like a lubricant making those systems run smoothly. On account of its basic functions of acting as glue and lubricant the international monetary system can be considered to be the linchpin of those systems. As a consequence it is crucial that the Rio 2012 Earth Summit preparatory process give priority to monetary governance in the consideration of governance systems for the 21st century.

The TFD Solution presents a bold global monetary governance system that would use a carbon-based international monetary system to combat the climate crisis by advancing low carbon and climate-resilient development. It is a transformational proposal that satisfies the five requirements for an effective global monetary governance system. It possesses the Five Right Relationship principles proposed by Brown and Garver in their 2009 Right Relationship. Building a Whole Earth Economy; it is based upon an explicit and common value base; it connects and integrates monetary, ecological, economic, commercial and environmental governance; it effectively deals with the 21st century two greatest challenges: climate change and low-carbon and climate-resilient development; it shows how the transition can be made to the Great

Monetary Transformation which would enable an effective integrated global governance system to emerge.

It is in the area of financing for climate and development policies, programs and projects, that the TFD can make its greatest practical contribution. Though many financing efforts are under way, they will fall short of the hundreds of billions of dollars that are needed annually for the next forty years, particularly due to the huge sovereign deficits, austerity budgets and high unemployment in the industrialized countries which will continue to exist for several more years. In the TFD global monetary governance system, the UN Global Central Bank would create ample credit and liquidity for both climate and development purposes. It would create new funding for both an equitable carbon budget approach in climate negotiations as proposed by India, the South Center and others and for the financing of the MDGs and other sustainable development efforts.

The Tierra Land 2025 scenario, available at www.timun.net and in the IIMT's forthcoming book length publication presents the socio-political processes through which the TFD can become a reality within the next 15 years. The transition to this Great Monetary Transformation is to be part of humankind's sustainability revolution which, unlike the agricultural and industrial revolution, is to be consciously planned. This monetary transformation can start within the next decade if effective governments and engaged citizens use vision, reason and resilience in bringing about the proposed carbon-based international monetary system of the TFD global governance system.

Can we move nations and people in the direction of sustainability? Such a move would be a modification of society comparable in scale to only two other changes: the Agricultural Revolution of the late Neolithic, and the Industrial Revolution of the past two centuries. These revolutions were gradual, spontaneous, and largely unconscious. This one will have to be a fully conscious operation, guided by the foresight that science can provide. If we actually do it, the undertaking will be absolutely unique in humanity's stay on Earth.^{xii}

William D. Ruckleshaus, Head of the U.S. Environmental Protection Agency 1970-73

ENDNOTES

ⁱ Remark by Dr. Robert Vos, research director of UNDESA, made during the March 10, 2010 financing meetings at UN Headquarters.

ⁱⁱ Maurice Strong, Secretary-General of the 1972 and 1992 Earth Summits, believes that basing the international monetary system on a carbon standard is "innovative". He also stated in medio October 2010 that such carbon-based international monetary system "seems to be very promising in light of the stalemate for post-Kyoto prospects".

ⁱⁱⁱ The Fee & Dividend method was proposed by Jim Hansen in his 2009 STORMS of my grandchildren. The Truth About the Coming Climate Catastrophe and Our Last Chance to Save Humanity and adopted by the 350 organization of McKibben and an increasing number of other organizations, gaining ascendancy over the still dominant cap-and-trade method.

^{iv} Monetary economist Robert Mundell has called it a "criminal system".

^v On November 3 Robert Zoellick, president of the World Bank, raised the issue as a possible issue of discussion at the G20 Summit in Seoul; on November 10 republican strategist Jeffrey Bell seemed to be consulting with possible 2012 presidential candidates on the issue and on November 14 James Grant presented his somewhat glib brief in the Week in Review section of the New York Times.

^{vi} A single world currency has many advocates ranging from John Stuart Mill in the 19th century to Paul Volcker in the 20th century.

^{vii} <http://www.newsdaily.com/stories/tre71c1jr-us-g20-eu/#>

^{viii} Note that the international monetary system acts like glue (2008Eichengreen) keeping those systems together. As a consequence transforming the monetary system also substantially transforms those systems.

^{ix} The collective of several dozen scientists involved in the sophisticated www.Adamproject.org, centered in the Free University of Amsterdam, published in 2010 their findings in Global Climate Governance Beyond 2012 without making connections to other global governance systems.

^x The above strategy and contents of the TFD was first presented at the International Peace Research Association Conference in *Sydney in July 2010* with a PowerPoint entitled "Monetary Peace: A new challenge for peace researchers, educators and activists". More comprehensively, the TFD was presented at the second *Yale/UNITAR conference* on Global Environmental Governance (*September 17-9, 2010*) in terms of its financing potential for climate and development and as a post-Kyoto global governance alternative. <http://conference.unitar.org/yale/environment-sustainable-development>. Most recently the TFD was presented at the Cancun UNFCCC conference using different communication media: direct discussions with some 120 persons, comments and questions during many side-events, distribution of three circulars, a press release and media advisory and, last but not least, by an interview by Climate TV and the conducting of two press conferences with their associated Powerpoints. The latter information can be found on http://webcast.cc2010.mx/webmedia_en.html?id=264 (December 9 press conference), http://webcast.cc2010.mx/webmedia_en.html?id=295 (December 10 press conference) and <http://www.climate-change.tv/frans-verhagen-december-2010>. Finally, in the beginning of 2011 the TFD will be presented in a book length publication entitled THE TIERRA SOLUTION: Using a transformed international monetary system to combat climate change by advancing low-carbon, climate-resilient and socially inclusive development.

^{xi} See his 2008 *Globalizing capital. A History of the International Monetary System*

^{xii} "Toward a Sustainable World" in *Scientific American*, September 1989.



**STAKEHOLDER
F O R U M**



SDG2012 – Stakeholder Forum’s Programme on Sustainable Development Governance towards the UN Conference on Sustainable Development in 2012.

www.stakeholderforum.org

www.earthsummit2012.org