

## Table of Contents

### **The Tierra Solution:**

Monetary transformation, climate change and sustainable development

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

International Institute for Monetary Transformation

[www.timun.net](http://www.timun.net); gaial@rcn.com

May 27, 2011

NATIONAL ECONOMY AND THE BANKING SYSTEM OF THE UNITED STATES,  
ABRAHAM LINCOLN 1865—Number of pages: 1

TIERRA LAND 2025 SCENARIO—Number of pages: 5

Foreword: 2 pages

List of abbreviations and acronyms: 4 pages

#### INTRODUCTION

The transformative nature of the Tierra Fee and Dividend global governance system

The contextual sustainability planning framework

Biocentric orientation

Social and ecological justice

Overview of the contents

Concluding reflections

Number of pages: 7

Endnotes: 9 on 1 page

#### Chapter 1

#### THE CLIMATE CRISIS AND CONTEXTUAL SUSTAINABILITY

Introduction

Financial and ecological indebtedness

Financial creditors and ecological debtors

- Ecological creditors and financial debtors
- Resolving ecological and financial indebtedness between nations
- Dimensions of the climate crisis
  - Physical dimensions of the climate crisis
  - Economic dimensions of the climate crisis
  - Political dimensions of the climate crisis
  - Social dimensions of the climate crisis
  - Ethical dimensions of the climate crisis
- Two important trends
  - The (de)globalization process
  - The global justice struggle
- Quality of response to the climate crisis
  - Reasons for poor response to the climate crisis
  - Reasons for humanity's inadequate response to the climate crisis
  - Geo-engineering
- The organizing principle of contextual sustainability
  - Value-based planning
  - Concept of sustainability
  - Ideological foundations
  - Ecological sustainability and other values
  - Sustainability economics
  - A sustainable international monetary system
- Conclusion
- Number of pages: 42
- Endnotes: 96 on 3 pages

## Chapter 2

### THE FEE & DIVIDEND CARBON REDUCTION METHOD

Introduction

Climate policy development

Principles to support climate policies and their carbon reduction methods

- The four major principles

- The fast or urgency principle

- The formidable or comprehensiveness principle

- The fairness principle

- Globalist principle

- Additional principles

- The consistency principle

- The efficiency principle

- The non-commodification of carbon principle

- The predictability principle

- The revenue-neutrality principle

- The simplicity principle

A selected history of climate policies and reduction methods

- Introduction

United States  
Europe  
The Fee & Dividend method  
Introduction  
Major components of Fee & Dividend  
Rising price of carbon  
A uniform carbon fee  
Full dividend method  
An evaluation of F & D  
The cap-and-trade method  
Shortcomings of Cap-and-trade  
Alternative methods of carbon reduction  
1. Cap-and-dividend  
2. Domestic Tradeable Quotas (DTQs)  
3. Kyoto2  
4. Cap & Share  
5. Contraction and Convergence  
6. Greenhouse Development Rights  
Fee and Dividend and the equitable carbon budget (ECB) paradigm  
Conceptualizing and operationalizing a carbon budget  
Principles of an equitable carbon budget  
Negotiating the ECB Paradigm  
The FD method/TFD global governance system and the ECB paradigm  
Conclusion  
Number of pages: 27  
Endnotes: 33 on 3 pages

## Chapter 3

### THE INTERNATIONAL MONETARY SYSTEM AND THE ROLE OF GOVERNMENTS

Introduction  
Major monetary events in the recent past (July 1944 –May 2011)  
The Bretton Woods UN Monetary and Financial Conference  
August 15, 1971  
Special Drawing Rights (SDRs)  
Destabilizing monetary trends  
Currency manipulation  
Currency speculation  
Unregulated capital flows  
Derivatives  
The Great Recession  
G20 Response  
UN Response  
US response  
Three 2011 responses

Present global monetary/financial system  
Opposing monetary/financial/economic theories  
International Financial Institutions  
International Monetary Fund (IMF)  
The World Bank and its IFC  
The World Trade Organization  
Bank of International Settlements (BIS)  
Non-governmental voluntary monetary organizations  
Six modes of monetary arrangements  
Regional monetary unions  
Complimentary currencies  
Examples of complimentary currencies  
Complimentary currencies, micro credit and LETS  
An expanded view of complimentary currencies  
Complimentary currencies and credit creation  
The global reserve system  
Its origin  
Advantages and disadvantages  
Reforms  
Shortcomings of the present international monetary system  
The role of government in monetary and financial affairs  
Fractional reserve banking in general and the USA  
Increasing the number of public banks  
Public control of the US Federal Reserve System  
Smart monetary power in the 21<sup>st</sup> century  
Conclusion  
Number of pages: 34  
Number of Endnotes: 117 on 7 pages

## Chapter 4

### THE MONETARY ARCHITECTURE OF THE TIERRA FEE & DIVIDEND GLOBAL GOVERNANCE SYSTEM

Introduction  
The carbon-based monetary standard (CMS)  
The CMS defined  
The nature of money  
Development of the Standard's proximity formula  
Carbon sources and decarbonization measures  
Financial Standards Index  
Environmental Performance Index  
Global Greenhouse Gas Standard for Cities  
Two main applications of the CMS  
Revaluation of national currencies  
Introduction of the Tierra world currency

The Tierra currency and the carbon standard

The Tierra and other global currencies

The Bancor

Collective Reserve Unit (CRU)

The Phoenix PHOENIX

DEY international unit

Global greenbacks

Petro dollar

Ebcu

The Tierra and the SDR

Fixed exchange rates and the carbon standard

Advantages and disadvantages of the new carbon-based fixed exchange rates

The balance of payments mechanism in the Tierra monetary system

The Global Central Bank in the Tierra monetary system

Recognized need for a global monetary authority

Functions and objectives of the Tierra Global Central Bank

Accounting

Monitoring

Regulation

Credit and liquidity creation

Characteristics of the Global Central Bank

Credit-based

UN affiliated

Self funding

Legitimacy

Democratic governance

The Tierra Monetary Court

Comparison of the Tierra Monetary Architecture and the IMF

Conclusion

Number of pages: 21

Number of Endnotes: 56 on 3 pages

Chapter 5

## PERSPECTIVES ON THE TFD GLOBAL GOVERNANCE SYSTEM

Introduction

The monetary perspective

The US-China currency dispute

The fragile euro

Proposals for a Bretton Woods II

The climate perspective

The TFD as a post-Kyoto alternative

The UNFCCC process

The General Agreement on Reductions of Emissions (GARE)

The ALBA climate negotiations

- Financing of climate in the TFD system
  - Governmental sources of financing for climate
  - Private sector financing for climate
- The financial perspective
  - Monitoring and regulating of the international financial system
  - Providing credit and liquidity and the monetizing of debt
- The economic perspective
  - Providing a coordination mechanism
  - Contributing to sound energy use by the decarbonization of societies
  - Contributing to full employment and social protection
- The trade perspective
  - Increased stability of exchange rates
  - Reduced transaction and reserve currency costs
  - Implementation of environmentally oriented trade policies
  - Allocation of emissions by international aviation and marine transportation
  - Moving from the WTO to UNCTAD
- The global governance perspective
  - Contributes to international coordination in monetary, climate and development matters
    - Yale /UNITAR conference
    - Brown and Garver framework
  - Makes monetary governance central to the proposals for sustainable development governance at the Rio 2012 Earth Summit and beyond

Number pages: 20

Number of Endnotes: 57 on 3 pages

## Chapter 6

### THE TIERRA STRATEGY AND PROSPECTS

#### Introduction

#### The Tierra Strategy

- Near-term and long-term strategy

- The UN Commission of Experts on Monetary Transformation, Climate Change and Sustainable Development

- Rationale for the Commission

- The objectives of the Commission

- Membership of the Commission

- The TFD Global Governance Working Groups

- Role of the International Institute for Monetary Transformation

- Long-term strategy for the TFD

- Implementing the near-term strategy

#### Prospects for the Tierra system

- Rationales for the TFD, their objections and responses

- Cultural reasons, objections and responses

- Ecological reasons, objections and responses

Economic reasons, objections and responses  
Ethical reasons, objections and responses  
Historical reasons, objections and responses  
Methodological reasons, objections and responses  
Monetary reasons, objections and responses  
Political reasons, objections and responses  
Positions of conceptually related communities  
Possible, preferred and probable outcomes  
    Coherence of the TFD global governance system  
    Assertiveness of emerging and developing countries  
    Increased efficacy of civil society in global affairs  
    Spiritual renewal and the broadening ethics  
    Monetary cooperation in the past and future  
Conclusion  
Number of pages: 30  
Endnotes—62 endnotes on 5 pages  
  
Appendices: 3 pages  
References and other—10 pages  
TOTAL pages: about 230