

Good or bad credits from European sources?

Europe's financial credibility is better than populist credits for wood combustion

Czeskleba-Dupont, Rolf

Publication date:
2010

Document Version
Early version, also known as pre-print

Citation for published version (APA):
Czeskleba-Dupont, R. (2010). *Good or bad credits from European sources? Europe's financial credibility is better than populist credits for wood combustion*. Paper presented at Alternative Economic Policy in Europe, Bruxelles, Belgium. <http://www.euromemo.de>

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the public portal.

Take down policy

If you believe that this document breaches copyright please contact rucforsk@kb.dk providing details, and we will remove access to the work immediately and investigate your claim.

HOW CREDIBLE ARE EURO-BONDS – AND CARBON CREDITS FOR WOOD COMBUSTION ?

Rolf Czeskleba-Dupont, Ph.D., M.Sc.
Roskilde University

Social Science Basic Studies

Department of Environmental, Social and Spatial Change

To be presented at the 16th Workshop on Alternative Economic Policy in Europe,
arr. By EuroMemorandum Group, University of Crete, sept.24-26 2010,
Workshop: Dimensions of the Crisis, co-ordinator: F.O.Wolf

'n' for notes

Disposition

Economical premises and choices

Ecological choices and premises

How can the EU contribute to sustainable world-system development?

Threatening forest degradation in the North

EIB loans and political ecology

Kyoto II and EU responsibility

Economical premises and choices

Economic premises

Are environmental expenditures consumption (C)?

YES: They are expenditures taken from current **income** (can be reduced under deficit) !

NO: These expenditures are **investments (I)**;
convert **savings (S)** into investments (**S => I**)

The latter helps realise necessary socio-
technological transformations - or development;
as distinct from growth (= more of the same)

n

Political-economical route NOT taken: Euro-bonds for cohesion

Stuart Holland's 1992/3 Report to the Delors Commission on economic + social cohesion:

- 1) design **reciprocal coordination** between EU + member states' budget;
 - 2) use the legal obligation of the European Central Bank (ECB) to **support** economic policy;
 - 3) formulate '**broad guidelines** of economic policy' for cohesion projects;
 - 4) finance common projects by **Euro-bonds**($S=>I$)
- and not by taxes taken from national income
- Yet, the EIF(Fund) went **from elephant to mouse**

Preferred political-economical route

Stuart Holland: The Treaty of Rome (1958) was driven by **market orthodoxy** NOT DIRECTLY to include the European Investment Bank (was only mentioned in a protocol)

=> The "*balanced and smooth development of the Common Market*" (EIB loan remit) to be guaranteed by the famous **invisible** hand (self-correcting market equilibrium)

Therefore: EIB held invisible through decades (Robinson 2009); EU should not take loans!

Problem regions as a result

- A "Balanced and smooth development of the Common Market" was, however, NOT realised
=> Polarisation in regional development
- The 1986 Single Market: Building on economies of scale + internal deregulation
=> spatial cohesion for sale!
- James Galbraith 2006: "Growth of wages and incomes must be *inversely proportional* to present wage rates"(to converge)

Ecological choices and premises

Political-ecological route NOT taken: precautionary investment

Commoner's 1990 proposal of transformative investments to save the world from climate change:

Rail transport	10 x 10 ⁹	\$/year	over 10 years
Organic agriculture	12	“	5 - 10
Soft chemistry	20	“	10
Energy use	33	“	10
Renewable energy	25	“	10 - 20

TOTAL: up to 100 ” 5–20
 = 50 % of defense budgets world-wide

(B.Commoner1990 Making peace with the planet, 200 + passim)

Side-step in climate politics: Land use, land use change + forestry

COP-agreements from Kyoto to Marrakesh have been

- (a) complicating emission reductions by insecure, biological compensation mechanisms through land use, land use change + forestry (**LULUCF**; political compromise)
- (b) introducing all-encompassing notion of CO₂-neutrality of incineration of all biomass (regardless of length of plant rotation)
- (c) favouring cutting and regrowth against old forests, as if this was superior for binding of CO₂ (*Odum dogma*)
- (d) shifting focus from agriculture as actual net source of greenhouse gases (incl. NO_x + methane = GHG) n

Ecological premises re. forests and CO2

Do OLD forests bind **LESS** carbon than new ones?

Odum 1969: YES, because their growth will reach a climax level;

Carey 2001: NO, old forests are UNDERestimated as global carbon SINKS

Odums fallacy of composition: He scales up from a single tree to more complex stands with unforeseen eco-features such as biome productivity => CO2 measuring towers

(E.D.Schulze in Siberia) n 11

My question in 2005:
How can the EU approach
sustainable world-system
development?

Presentation at the 11th workshop on Alternative Economic
Policy in Europe, wg 3,
September 24, 2005

BARRIERS: "***DEBT boomerangs***"

(Susan George 1992)

- 1) GLOBAL **CLIMATE CHANGE** AGGRAVATED BY **DEFORESTATION**
- 2) CASH CROPPING FEEDING **DRUG COMMODITY CHAINS**
- 3) TAX PAYERS **BAILING OUT FAILED BANKS**
- 4) LOSS OF **WORK PLACES + VISIBLE TRADE**
- 5) MIGRATION AND INVOLUNTARY **DISPLACEMENT**
- 6) **ETHNIC CONFLICTS + WAR** (terrorism)

Threatening forest degradation in the North

n

Removing barrier # 1

GLOBAL CLIMATE CHANGE AGGRAVATED BY
DEFORESTATION / degradation of forests

Before accepting and subventioning projects of forest clearing that deliver wood for incinerators:

- Demand *thorough documentation* for ways and means how to achieve ***carbon neutrality***:
- from initial carbon DEBT by wood combustion (being a multiple of CO2 from fossil fuels)
- to carbon DIVIDENDS (see example from Massachusetts 2010 government re-regulation; *Manomet 2010* + critique in paper rcd)

Ambivalences of the *Manomet* study

- **Excellent in demonstrating that CO₂-neutrality from wood combustion is no easy say**
- **Developes an accounting METHOD how (FAST) to move from C debt to C neutrality (break even point) and C dividends**
- **Yet, parameters and their values favour too fast compensation by too optimistic growth assumptions (see critique by Booth 2010)**
- **Solidaric critique is necessary before using it for down-sizing/eliminating wood combustion projects**

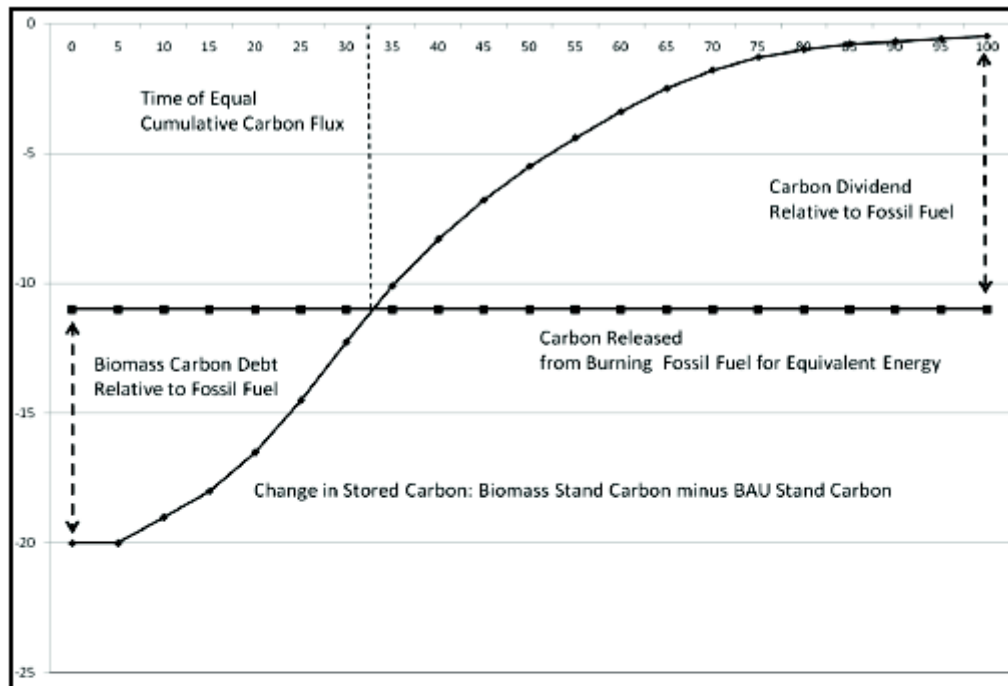


Figure 1 (tonnes of carbon). The schematic above represents the incremental carbon storage over time of a stand harvested for biomass energy wood relative to a typically harvested stand (BAU). The initial *carbon debt* (9 tonnes) is shown as the difference between the total carbon harvested for biomass (20 tonnes) and the carbon released by fossil fuel burning (11 tonnes) that produces an equivalent amount of energy. The *carbon dividend* is defined in the graph as the portion of the fossil fuel emissions (11 tonnes) that are offset by forest growth at a particular point in time. In the example, after the 9 tonnes biomass carbon debt is recovered by forest growth (year 32), atmospheric GHG levels fall below what they would have been had an equivalent amount of energy been generated from fossil fuels. This is the point at which the benefits of burning biomass begin to accrue, rising over time as the forest sequesters greater amounts of carbon relative to the typical harvest.

EIB loans and political ecology

Removing barrier # 3 ?

TAX PAYERS BAILING OUT THE BANKS

Manuel Barroso sept. 2010 (State of the Union Speech):

- “We should also explore new sources of financing for major European infrastructure projects.
- For instance, I will propose the establishment of EU project bonds, together with the European Investment Bank.”

=> Is the taboo broken that the EEC/EU cannot take loans?

=> Will the bonds be used to lift parts of the financing burden from member states?

(Stuart Hollands argument, see my text contribution)

EIB investments need to be extended

By issuing Euro bonds, the EIB already can invest in

- health, education,
- urban renewal, the urban environment
- technology and innovation (Holland 2010, 9).

=> Areas defined before the combined economical and ecological crisis. The latter demands to include the whole territory (town and countryside, forests)

Deepening our understanding of infrastructure

- Barroso will use euro-bonds for major European infrastructure projects.
- Tell him that the global environment / ecological system is an **”infrastructure of infrastructures”**
(as former World Bank director and economist Herman Daly once put it)
- But it hurries: 20 years have already been lost because of a **”postponed peace-dividend”** (RCD 2009).
- **Cost progressions as presaged by the Stern Review have incurred since 1990, when action should have been taken.** n

No subprime credit for incinerators: redirect renewable energy portfolio!

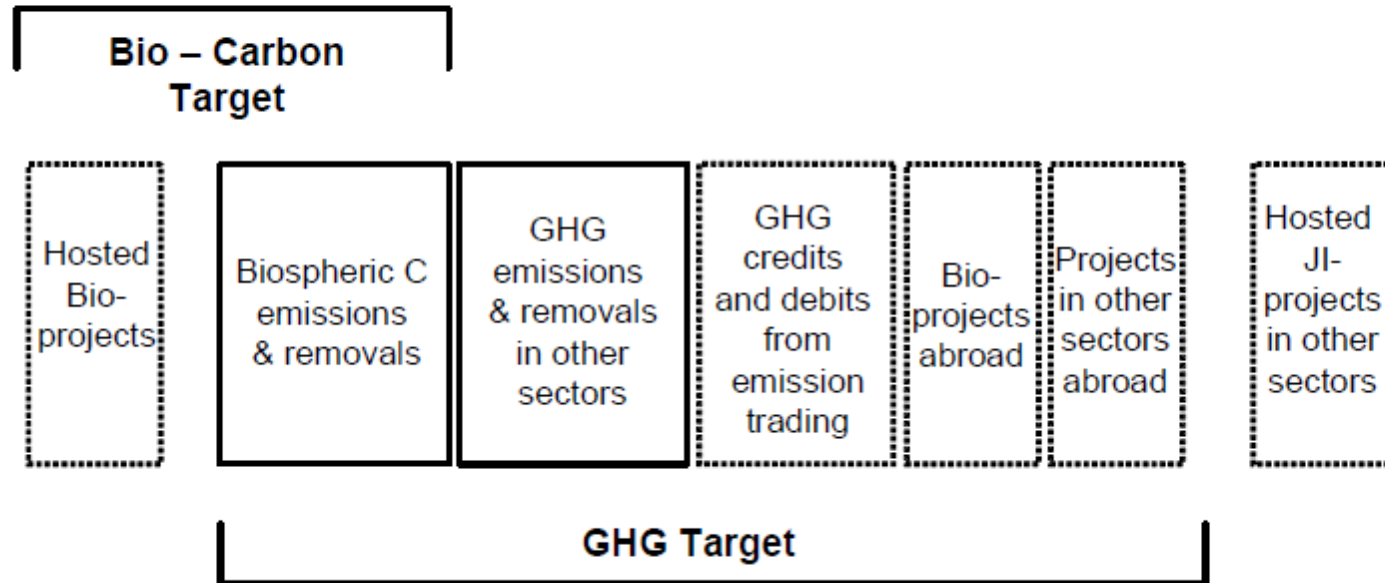
As the Massachusetts Secretary of Energy and Environment announced in July 2010:

In light of the Manomet study, we have a deeper understanding that the greenhouse gas impacts of biomass energy are far more complicated than the conventional view that electricity from power plants using biomass harvested from New England natural forests is carbon neutral. The findings of the Manomet study have changed the policy landscape for biomass energy production derived from wood fuels. Our policy should reflect this current science by moving to support the development and operation of facilities that have the greenhouse gas profile needed to fulfill our emission-reduction

Kyoto II - an EU responsibility

Procedure within Kyoto II (Umweltbundesamt 2007)

- German environmental counsellors went public (WGBU1998) with a warning against pitfalls of LULUCF
- In a 2007 study for the German Ministry of Environment, Schulze et al. proposed a procedural rationality for country reports:
- Take **BIO-CARBON TARGETS** first !
- Then: decide upon **reduction targets** from tailpipes and smokestacks (next slide:)



- Action by the country within its territory
- Flexible mechanisms

Figure 1 Relation between Greenhouse Gas Flux Target and Bio-Carbon Target

EU competency?

EU member states face problem of scope:

- **Territorial resources of renewable energy seem not to match with demands of energy to be supplied.**

=> Principle of subsidiarity: Plan for a low-carbon society together with EU institutions.

- **Huge investments and choice of paths to sustainable energy systems demand transparent multi-level governance.**

=> Market power of energy + other corporations to be tamed politically - their 'freedom of contracting' is an unequal power play

Literature (1)

Booth, Mary S., PhD 2010: Review of the Manomet biomass sustainability and carbon policy study; prepared for the Clean Air Task Force, July

Carey, Eileen V. et al. 2001: Are old forests underestimated as global carbon sinks? Global Change Biology, vol.7, 339-344

Clout, Hugh 1976: The regional problem in Western Europe. Cambridge: Cambridge University Press

Commoner, Barry 1972: The closing circle. Nature, man and technology. New York: A.Knopf

Commoner, Barry 1976: The poverty of power. Energy and the economic crisis. New York: A.Knopf

Commoner, Barry 1990: Making peace with the planet. New York: Pantheon

Czeskleba-Dupont 2009: The 1990 peace dividend – a counter-factual hypothesis. Poster presented at the 1. World Congress on Environmental History, Copenhagen, Aug. 4-8

Czeskleba-Dupont 2010: Communication on climate, energy, natural gas and forests as a problem for energy planning. Contribution to the RUC Sunrise Triple C Conference Climate – Change – Communication. New Perspectives after the COP15, April 20-22 (Ms., 15 p.)

Galbraith, James 2006: Maastricht 2042 and the fate of Europe. Toward Convergence and Full Employment. The Levy Economics Institute of Bard College, Public Policy Brief #87

George, Susan 1992: The debt boomerang. How Third World debt is harming us all. London: Pluto Press

Literature (2)

Holland, Stuart 1993: The European imperative. Economic and social cohesion in the 1990s. Nottingham: Spokesman

Holland, Stuart 2010: Financial crises, governance and cohesion: Will governments ever learn up? In: J.Richardson, ed., From recession to renewal: The impact of financial crises on public services. Bristol: Policy Press, 51-68

Lipietz, A. 1992: Towards a new economic order. Postfordism, ecology and democracy. Postscript to the English Edition, Cambridge, UK, Polity Press

Manomet 2010: Biomass sustainability and carbon policy study. Natural Capital Initiative report at Manomet, June (NCI-2010-3)

Massachusetts Secretary of Energy and Environment 2010: Letter of Ian A.Bowles to Commissioner Philip Giudice, Department of Energy Resources, Boston, July 7

Odum,Eugene P. 1969: The strategy of ecosystem development. Science,164, 262-270

Robinson, Nick 2009:The European Investment Bank – the EU's neglected institution. Journal of Common Market Studies, 47, 3, 651-673

Roos, Hans and Günter Streibel 1979: Umweltgestaltung und Ökonomie der Naturressourcen; Berlin(GDR): Die Wirtschaft

Literature (3)

Schulze, Ernst-Detlev et al. 1999: Productivity of forests in the Eurosiberian forest region and their potential to act as a carbon sink – a synthesis. *Global Change Biology*, vol. 5, 703-722

Schulze, Ernst-Detlev et al. 2002: The long way from Kyoto to Marrakesh. Implications of the Kyoto protocol negotiations for global ecology. *Global Change Biology*, vol. 8, 505-518

Schulze, Ernst-Detlev et al. 2003: Making deforestation pay under the Kyoto protocol? *Science*, vol.299 (14.3.), 1669

Schulze, Ernst-Detlev et al. 2008: Old growth forests as carbon sinks. *NATURE*, vol.455, 11 September, 213-215

Schulze, Ernst-Detlev et al. 2005: Carbon dioxide and methane exchange of a north-east Siberian tussock tundra. *Global Change Biology*, vol.11, 1910-1925

Stern, N. 2007: The economics of climate change – the Stern Review, Cambridge UK, New York: Cambridge University Press

Umweltbundesamt 2007: Kyoto Protocol: Analysis of options for further development of commitments for the Second Commitment Period, part 'Sinks in the Second Commitment Period' Report nr. UBA-FB, performed by Max-Planck-Institut für Biogeochemie, Jena

WGBU 1998, Special Report: **The Accounting of Biological Sinks and Sources Under the Kyoto Protocol: A step forwards or backwards for global environmental protection ?**