



#### Good or bad credits from European sources?

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

Czeskleba-Dupont, Rolf

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## 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

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'n' for notes

# Disposition

Economical premises and choices

Ecological choices and premises

How can the EU contribute to sustainable worldsystem 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)?

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

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

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

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**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

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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: $10 \ge 10^9$ \$/year over 10 years Rail transport Organic agriculture 5 - 10 12 66 Soft chemistry 10 20 Energy use 33 " 10 Renewable energy 66 10 - 20 25 TOTAL: " up to <u>100</u> 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

<u>COP-agreements</u> from Kyoto to Marrakesh have been (a) complicating emission reductions by <u>insecure</u>, <u>biological</u> <u>compensation mechanisms</u> through land use, land use change + forestry (LULUCF; political compromise)

(b) introducing all-encompassing notion of <u>CO2-neutrality</u> of incineration of all biomass (regardless of length of plant rotation)

(c)<u>favouring **cutting and regrowth against old forests**</u>, as if this was superior for binding of CO2 (*Odum dogma*)

(d) shifting focus from agriculture as actual net source of greenhouse gases (incl. NOx + methane = GHG) n

# Ecological premises re. forests and CO2

Do OLD forests bind LESS carbon than new ones?

Odum 1969: <u>YES</u>, because their growth will reach a climax level; Carey 2001: <u>NO</u>, old forests are <u>UNDER</u>estimated as global carbon <u>SINKS</u>

<u>Odums fallacy of composition:</u> He scales up from a single tree to more complex stands with unforeseen eco-features such as <u>biome</u> <u>productivity</u> => CO2 measuring towers (E.D.Schulze in Siberia) n <sup>11</sup>

## 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 <u>CLIMATE CHANGE</u> AGGRAVATED BY <u>DEFORESTATION</u>

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

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## **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 <u>documentation</u> for ways and means how to achieve *carbon neutrality*:
- <u>from</u> initial carbon DEBT by wood combustion (being a multiple of CO2 from fossil fuels)
- to carbon DIVIDENDS (see example from Massachussetts 2010 government re-regulation; <u>Manomet 2010</u> + 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 <u>C debt</u> to C neutrality (break even point) and <u>C dividends</u>
- Yet, parameters and their values <u>favour too fast</u> <u>compensation</u> by too optimistic growth assumptions (see critique by Booth 2010)
- Solidaric critique is necessary before using it for down-sizing/eliminating wood combustion projects

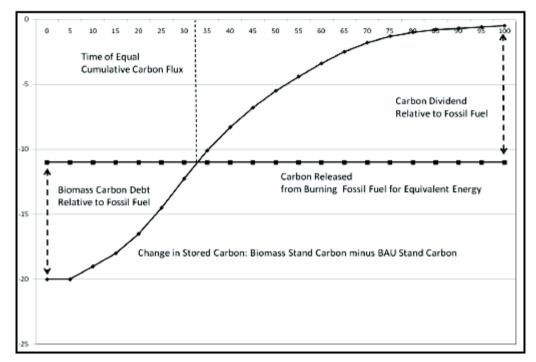


Figure 1 (tonnes of carbon). The schematic above represents the incremental carbon storage over time of a stand harvested for biomass energy wood relative to a typically harvested stand (BAU). The initial *carbon debt* (9 tonnes) is shown as the difference between the total carbon harvested for biomass (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 <u>EU</u> 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 <u>already</u> can invest in

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

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

# Deepening our understanding of infrastructure

Barroso will use euro-bonds for

**<u>Major European infrastructure projects</u>.** 

• 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)

- <u>But it hurries:</u> 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 Massachussetts Secretary of Energy and Environment announced in July 2010:

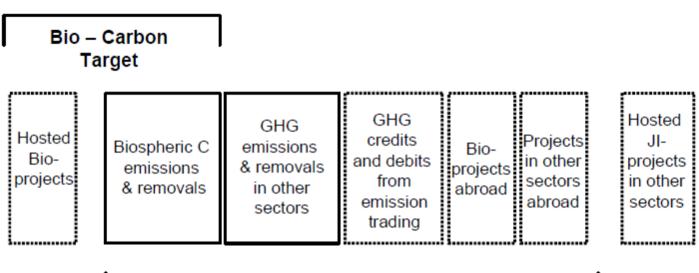
In light of the Manomet study, we have a deeper understanding that the greenhouse gas impacts of biomass energy are far more complicated than the conventional view that electricity from power plants using biomass harvested from New England natural forests is carbon neutral. The findings of the Manomet 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

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# 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:)



GHG Target

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 <u>transparent multi-level governance.</u>
- => Market power of energy + other corporations to be tamed politically - their 'freedom of contracting' is an unequal power play n

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