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Financial System ECOS

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Financial System ECO\$

The current financial system seems to function moderately well for the purpose of generating monetary wealth, the production of goods, providing services, as well as supporting the building of cities, industries, and the transportation infrastructure. However, the financial system does have negative aspects such as contributing to urban sprawl, industrial and mining pollution, income and wealth inequality, and the degradation of nature. Perhaps there is a way we can modernize the financial system to improve upon these negative aspects.

As humans we must recognise the contribution of nature to our very existence: the air we breathe, the food we eat, the water we drink. While a bio-diverse nature's contribution to humanity is in reality something priceless and given freely, for the purpose of preserving and protecting nature, it seems we will need to quantify nature's contributions to humanity.

One might consider our current financial system very one dimensional in its current form. The production and creation that takes place by nature is not recognized. In effect, it is a missing component of the current financial system. The activities of nature currently represent unrecognized economic activity, unrecognized income, and unrecognized wealth. If we add the ECO\$ financial system to the whole then we create a more multi-dimensional and dynamic economic system. The current economic system does have negative aspects that can in part be balanced by the addition of the ECO\$ financial system. This will make the overall financial system more in tune with whole dynamics of our earth and may in the long term provide stability and growth to our global economic system.



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Global ECO\$ Financial System Funds (Estimate)

ECO \$ Valuation for the Earth / Globally	In Billions \$ USD			
		Annually	Past 5 Years	Current ECO\$ Fund ** Past 25 Years
Natures Contributions				
Natures Global contribution in trees	1	\$35	\$175	\$875
Natures Global contribution in oxygen to our globes air/atmosphere	2	\$2,400	\$12,000	\$60,000
Natures Global contribution in cleaning and aerating fresh water	3	\$100	\$500	\$2,500
Combined contribution		\$2,535	\$12,675	\$63,375

** The global population of humans reached 5 billion in 1987 (per World Bank data). We shall consider this the starting point for the accumulation of the ECO\$ Fund

1 Based on the commercial value of a seedling as well as natures contribution to help the tree grow.

2 Based on the commercial cost of a kg of oxygen times natures net photosynthesis production:

Weighted Average Costing used : (70% x \$0.077/kg) + (20% x \$0.155/kg) + (10% x \$1.00/kg)

Weighted average cost \$0.1849 per kg Nature Prodn Cost/benefit used \$0.18 per kg

Additional Assumptions *****

3 Based on the commercial cost of cities filtration plants cost of filtration to purify water

Other Valuations

Not included in the table of valuations are nature's services of water and soil retention as well as the production of humus rich soil. This will be left for experts in those areas to do the research and come up with the respective valuations. As well other services or production may become apparent over time.

Note the commercial costing of oxygen production represents the activity of concentration of oxygen and not the conversion of CO² to oxygen
The actual cost/income figure above for nature should be much higher as nature converts CO² to O² and consumes the C

1st Source of Natures Oxygen production data (pg 91 of handbook; pg 4 of the article; Table1, Annual gains of atmospheric oxygen)
The Handbook of Environmental Chemistry, Vol 1/Part A Edited by O.Hutzinger
Copyright Springer-Verlag Berlin Heidelberg 1980 (Printed in Germany. Not for Sale) The Oxygen Cycle by J.C.G. Walker
College of Engineering, University of Michigan J.C.G. Walker Prof. Emeritus of Atmospheric, Oceanic and Space Sciences

2nd Source of Natures Oxygen production data
Science 10 July 1998: Vol. 281 no. 5374 pp. 237-240 DOI: 10.1126/science.281.5374.237
Primary Production of the Biosphere: Integrating Terrestrial and Oceanic Components
By Christopher B. Field*, Michael J. Behrenfeld, James T. Randerson, Paul Falkowski and more

**** Assumptions used in the ECO\$ Valuation Table above

Conservative estimate 15 to 20% of the Net annual oxygen produced is used by our human civilization

Assume human activities use 10%, by volume of the new oxygen produced, of the existing oxygen in the atmosphere

Assume human activities use 5% of the new oxygen produced into the atmosphere; this 5% was used in the oxygen valuation in the table above

Human Usage: Humans, Industry, Agriculture, Transportation, Urban buildings

Global ECO\$ Financial System Funds Scope

The ECO \$ financial system is meant to be a complementary financial system that works in concert with the current financial system. The following is a proposed framework for the utilization and allocation of the ECO\$ funds. The ECO\$ funding would most likely be allocated to each nation on the basis of their GDP and likely in their own currency. There may need to be some equalization considerations in order to have a more balanced distribution for each nation.

Purpose: (proposed)

- a) To provide funding for genuine environmental organizations in their activities to protect and preserve nature from the activities of our civilization. Example: Friends of the Earth International & Friends of the Earth, Sierra Club, WWF, and more.
Possibly also: International Network for Environmental Compliance and Enforcement (INECE) (www.inece.org), Community Environmental Legal Defense Fund (www.celdf.org), The Global Alliance for the Rights of Nature (www.therightsofnature.org), Natural Resources Defence Council <http://www.nrdc.org/>
- b) To provide funding for cities for activities that directly or indirectly benefit nature:
 - i) Reduce the urban footprint (or at a minimum stop urban sprawl); support urban expansion up not urban sprawl out.
 - ii) Build sustainable infrastructures such as: Modernizing and expanding mass transit capabilities or upgrading a dated sewage system (or building a new system)
- c) To provide funding for industries that directly or indirectly benefit nature: Examples
 - i) Ensure best practices and equipment are used to prevent industrial waste & pollution
 - ii) Clean up of old sites and restoration of nature
 - iii) 100% recycled products initiative on the continent of consumption or where more practical on continent of production.
- d) To provide funding towards returning polluted, waste sites, former industrial sites, mined areas, and land, lakes, rivers, swamps, and ocean to their pristine natural bio-diverse condition, nature reclamation.

Funding Allocation Restrictions (proposed)

Funds should only be allocated when the national government environmental agency **and** the national environmental group(s) (or association of environmental groups) agree on the project and amount of allocation for each project.

Environmental Organizations:

No more than 20% of the total national allocation of ECO\$ annual fund is to be allocated to each nations environmental organizations collectively.

Each organization can receive up to a maximum of 80% of its annual funding from the ECO\$ annual fund.

These environmental organizations should not have any controlling ties by large corporations (directors or executives) or national governments. They should not be a one person centered organization.

Environmental Projects – Urban or Industrial:

Each project should only receive up to a maximum annual contribution of 40% of the total annual project cost from the ECO\$ annual funding. There may be exceptions where all parties agree there is a critical project requiring significantly more.

Environmental Projects – Nature Cleanup, Restoration, and Protection:

Each project can be funded up to 100% from the ECO\$ annual funding.

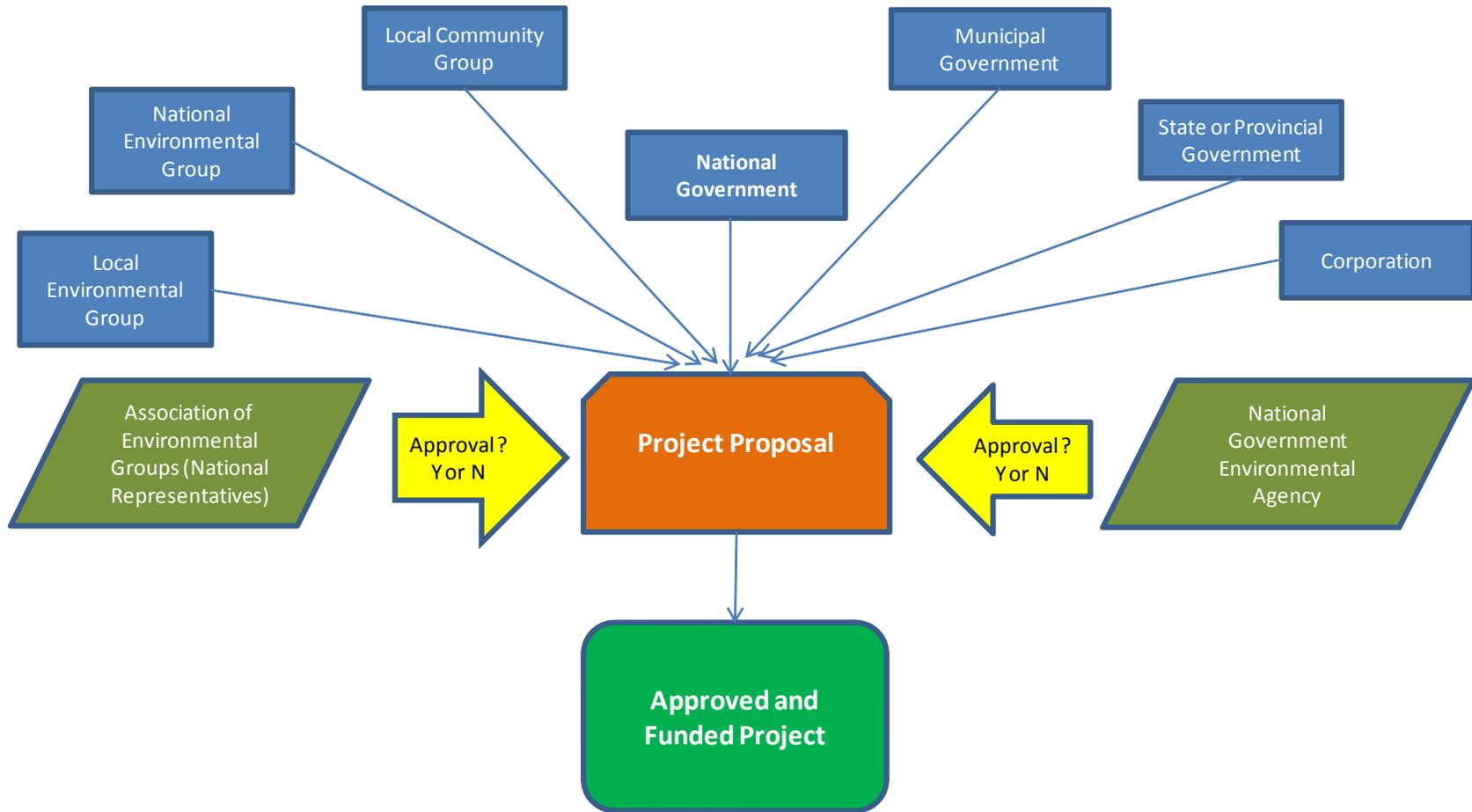
Assumption: For International projects (Arctic, Antarctic, and Oceans) the funding would likely need to be co-ordinated by the environmental groups, effected national governments, and the UN or appropriate agency of the UN.

What the GEPSD ECO\$ financial system proposal can mean for various organizations:

Organization or Group	Benefit
National Governments	Economic stimulation without increasing national debt. Directing the national allocation of the global \$60 Trillion (USD) Accumulated ECO\$ fund as well as the apportioned national ECO\$ annual funding. Employment income and corporate revenues from the ECO\$ funding will generate additional tax revenues.
Provincial or State and Municipal Governments	Additional urban redevelopment funding
Construction and Development Industries	Additional urban and industrial redevelopment opportunities, projects and revenues
National Environment Agencies	Additional significant long term funding for programs
Environmental Groups and Organizations	Additional significant long term funding for operations, programs, and projects
Universities	Additional significant long term research funding and projects. Employment path for students.
World Bank or assigned Financial Institution(s)	Administering a portion of the \$60 Trillion USD in Accumulated ECO\$ funding via an implemented GEPSD ECO\$ Financial System Proposal.
General Population	Gainful employment opportunities

ECO\$ Process Flow & Participating Organizations

ECO\$ PROCESS FLOW



Since the ECO\$ Funding belongs essentially to “Nature” and the environmental organizations represent nature’s interests. Funds should only be allocated when the national government environmental agency **and** the national environmental group(s) (or association of environmental groups) agree on the project and amount of allocation for each project.

Possible Allocation of ECO\$
(Sample of all countries; top 10 countries by GDP)

Allocation of ECO\$ Top 10 Countries by GDP					Available Accumulated ECO\$ Fund \$63 Trillion	Available Annual ECO\$ Fund \$2.535 Trillion
Factoring by GDP 60% , Land Area 30%, and Population 10%					Less 5% \$3 Trill for International Allocation: Arctic, Antarctic & Oceans	Less 5% \$0.127 Trill for International Allocation: Arctic, Antarctic & Oceans
Country name	2011 GDP USD	Population 2012 Data	Land Area sq km	Allocation of Accumulated ECO\$ Fund \$60 Trillion	Allocation of Annual ECO\$ Fund \$2.408 Trillion	
United States	14,991,300,000,000	313,914,040	9,147,420	\$9.115	\$0.366	
China	7,318,499,269,769	1,350,695,000	9,327,490	\$6.059	\$0.243	
Japan	5,867,154,491,918	127,561,489	364,500	\$3.182	\$0.128	
Germany	3,600,833,333,333	81,889,839	348,570	\$1.971	\$0.079	
France	2,773,032,125,000	65,696,689	547,660	\$1.554	\$0.062	
Brazil	2,476,652,189,880	198,656,019	8,459,420	\$2.474	\$0.099	
United Kingdom	2,445,408,064,516	63,227,526	241,930	\$1.346	\$0.054	
Italy	2,193,971,063,086	60,917,978	294,140	\$1.220	\$0.049	
Russian Federation	1,857,769,676,144	143,533,000	16,376,870	\$3.067	\$0.123	
India	1,847,976,748,681	1,236,686,732	2,973,190	\$2.368	\$0.095	
Whole Earth	69,737,759,203,708	7,046,368,813	148,429,000			

Note Source of Data: 2011 GDP, Population 2012, and Land Area obtained courtesy of World Bank Website.