

# Something very wrong with our units of measure

For 9:00 AM Major Group Meeting

Means of implementation (science and technology, knowledge-sharing and capacity building)

## The mismatch between measured impacts and responsibilities: Undermining SD communications

### Statement:

From a basic accounting view, guiding our SD choices using only measures of impacts for business technology, omitting those of business people and services, makes no sense at all. That's exactly what the economists have measured as the "externalities" of business for centuries, and what they adopted to measure environmental impacts too, but it's just not how nature would count them, and not how we should either, especially NOT for making decisions on the redesign of our economy for the future of the earth.

Using metrics very often in error by 80% or more is simply misguided, as it voids the purpose of measurement in general. But it's what we're doing and if you talk to people they don't want to change, as it would seem inconvenience. Wouldn't we do better to think of the "inconvenience" to the investors who have been trusting us, who we are not giving bad information on what to invest in for the future. That would at least put us on the same side of the issue as the environment we need to protect.?

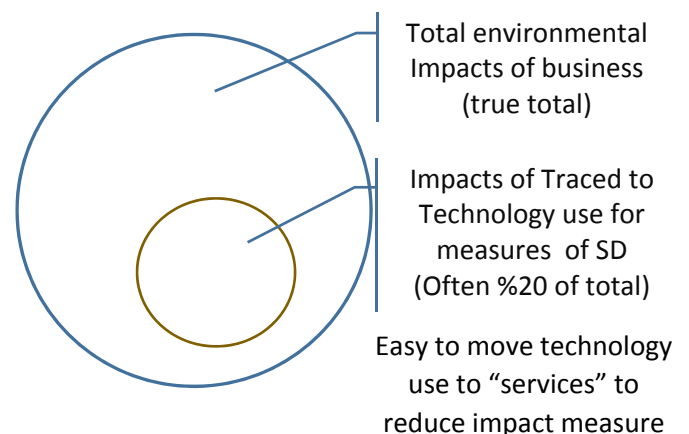
Jessie Henshaw

I'm an environmental and human systems scientist quite familiar with defining physical units of measure. My scientific methods are based on using principles of physics as diagnostic tools, and I've been doing advanced research on emergent organization in nature for over 30 years.

I've produced a practical new general scientific method for studying uncontrolled systems that led to numerous important findings. The peer reviewed research paper solving our error in measuring business impacts is called "**Systems Energy Assessment**". [www.synapse9.com/SEA](http://www.synapse9.com/SEA). A major application is "**Ideal Model SDG's – Capitalism with a Purpose**" [www.synapse9.com/signals/?p=2692](http://www.synapse9.com/signals/?p=2692)

### The definition problem is solved by knowing how much of the untraceable impacts are going unaccounted.

1. the untraceable responsibilities for known environmental impacts are not accounted for at all by adding up what you can trace. That seems to apply to most business sustainability reporting metrics. It makes the units of measure for impact responsibilities scientifically undefined, and the results not being scientifically comparable, for containing "unknown amounts of unknowns".
2. the untraceable responsibilities are generally much larger than the traceable ones (with some exceptions) so you really can't assume the measures provide any real information on a business's environmental impacts, especially not in relation to the financial liabilities being incurred for future societies.
3. how to account for them was solved by thinking through where money goes, and confirming the idea that every dollar both uses the entire world economy, but the people paid to deliver the services from all over the world needed to do the work of delivering goods or services are widely enough distributed to make it necessary to first assume that the work done by any dollar is an average part of whole economy's impacts.



# A full application of the new units of measure

A Natural Systems Approach to

*Caring for What's Profitable & Profiting from What You Care for.*

An Information System for a Self-managing World "Commons Economy",  
and to give real meaning to money.

*The "Ideal Model" for a "New Architecture": Capitalism with a purpose,*

## **The idea**

The natural way economies determine their futures is by "market choices", as financial, business and consumer markets look for how to get what they want from each other and the earth. Then governments, the press, professions and open societies watch out for the common interest. That's what designs of the economy of our future, telling developers what new parts to add or old ones replace.

Those market choices often don't reflect common interests just for our natural lack of information. What was done around the world to deliver goods or services is not collected and passed along as they are paid for, What's becoming possible is like that, ways to identify future societal costs that business may be held responsible for in the future, practices like adding to global inequities or harming our economic future.

Just one new fact about money can release a great wealth of information on that. It's that the "hidden consequences" of using money we don't immediately see have been scientifically shown to most often be close to "average"<sup>1</sup>. In information terms, that serves to "internalize all externalities", opening the door to what has eluded us, a way to make sound decisions for the world as a whole.

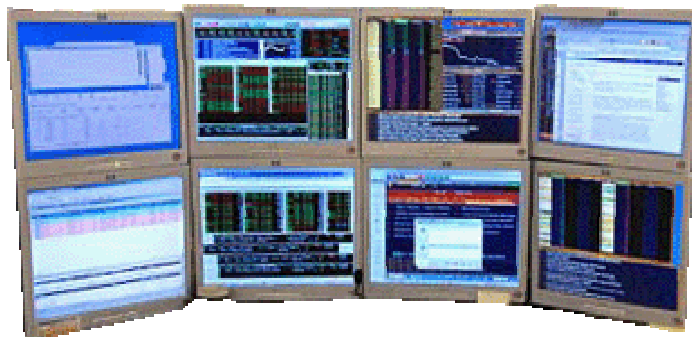
It would let us build an information system

making the choices responsible for impacts transparent for all to see. For example, spending one dollar generally adds **about 1 pound of CO2** to the atmosphere. We might select the least cost engineering option for ending our addition of CO2 to the atmosphere as a standard measure, possibly bio-char, estimated to cost **\$.20 per pound of CO2**. That would be equal to **an impressive "tax" on GDP, of \$.20/\$1**, an indicator of how poorly the earth's profits are being used.

People would then clearly see, for example, that as we build more and more for the future economy to take care of, a natural turning point approaches for investors and everyone else, of diminishing total returns. So as growth becomes seen as a drain on future profits, the most profitable use of profits becomes caring for the environments creating the profits, not compounding our demands on them.

Henshaw, Jessie. 2010 "Systems Energy Assessment", Sustainability MDPI.–

<http://synapse9.com/SEA> - People are "end users" of the consumption economy AND "end servers" of the production economy. The "end producers" for any dollar of goods or services are SO wide spread one must first assume, every dollar is distributed as an average share of GDP and reflects the average impacts of the whole good and bad.



A comprehensive balance sheet, for what development proposals have financially and culturally acceptable world risks and benefits. - Global benefits/People centered -