

Attachment for CAUN Post 2015 - UN Consultation on Environmental Sustainability
online version with active links:

<http://www.synapse9.com/ref/ModelsOFCommonsInterests.htm>

New Institutions for a Global Commons: proposing natural design for a human ecology with self-regulating sustainable development and finance

[Introduction](#), [Proposal I](#), [Proposal II](#), [Proposal III](#)

General Introduction + Foreword & Original for three 2012 Rio+20 Dialogue proposals

Three Proposals



a common trust and place to enjoy being at
home

Helene Finidori and I, Jessie Henshaw, submitted proposals on a commons approach to sustainability, that got attention in the 2012 Rio+20 Dialogues. They outlined ways the UN could foster development and ease the world's combined economic crises, by helping people make choices based on the world's common interests.

Helen's was a general cultural vision and model of the need for new institutions to pave the way to solving the world's problems with a commons approach (1). My two proposals were each for new global economic institutions to allow free market

economies to follow their own common interests to become eco-balanced and self-regulating (2,3). Both followed general principles of natural design, visible to anyone in how nature creates enduring complex systems that thrive in growth, and then also remain creatively evolving and thriving in stability.

The notable difference between these approaches and the numerous other models for world sustainability is that they don't rely on government regulation as the primary means of protecting the economy's self-interests. The models offered by Herman Daly in Beyond Growth, Gus Speth in The Bridge at the Edge of the World, H.T Odum in A Prosperous way down and Tim Jackson in Prosperity without Growth, all use science as the basis of direct government regulation of the world's resource use and development decisions. They don't say how government would either make successful choices for the economies or fail to avoid the "race to the bottom" that has always foiled regulation of conflicting self-interests before.

The common approach starts with the cases where those competing interests can be led to the information needed to understand their own common self-interests. It's then in their interest to use their positions to collaborate on creatively solving their own problems. Very few new rules are needed. Natural choice and fiduciary obligation then applies to making the right choices.

Economic Sustainability Strategies - Managed and Self-managing

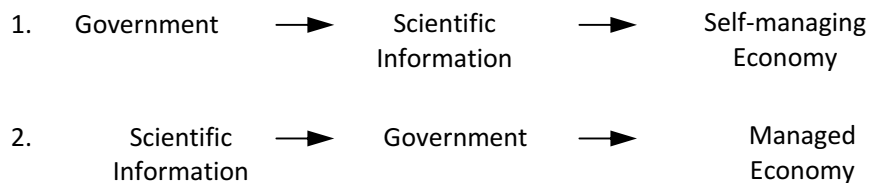


Figure 2

The difficult challenge of a commons approach is finding the "boundary crossing" ways of communicating with other stakeholders, those having different intentions and speaking of different parts of the problem. Some important economic values can be reduced to numbers, like identifying when a resource is overinvested and how much any product relies on using it. But finding common ground for collaboration with people with conflicting interests is hard, even if obviously possible because it's necessary.

Still, the thriving complex systems of nature are the model, evidence of all kinds of collaborative systems that evolve naturally without computers to tell them how. They include biodiversity "hot-spots" like fresh water ponds, and forests, and many other kinds of thriving eco-systems. They also include the thriving human ecologies that people create, the cities and thriving social cultures, the complex emergence of new industries, etc. They're all the same general kind of dense networks of diverse

subcultures. All the parts are acting individually, hardly aware of what each other are doing, but somehow building toward their common interests.

Our understanding of the word "commons" comes importantly from the classic "tragedy of the commons" by Garrett Hardin and following debate (1). Individual self-interest can lead individuals to destroy their common resource, as when people put more cattle on a shared meadow to individually gain at other's expense, leaving the meadow barren though, as everyone does it. So the community makes choices for being productive, that leads to destroying what was making them productive. Now we're doing that with the whole earth, and need a better solution.

A way to overcome that is for everyone to be presented with where their choices would lead, so their neighbors or someone making the mistake can understand, and intercede in a polite way, before the community faces a tragedy from over-taxing their environment. As they all recognize that this is the new way of doing business, they'll help each-other find ways to work together. The "commons sense" is that there's no reason not to act in our common interest, if we can understand what that is.

- 1) Tragedy of the Commons - http://en.wikipedia.org/wiki/Tragedy_of_the_commons
- 2) This draft originates from the "[News of the Commons](#)" blog post of June 7 2012

Foreword

I. "New institutions.. for commons-based economic models"

Helene Finidori

Helene's proposal won the voting for the "*Sustainable Development as an Answer to the Economic and Financial Crises*" topic in [the RioDialogues vote](#), and good recognition! The idea is to NOT use development, as the solution to the world economic crisis, but to create new institutions allowing development efforts to work together, to serve the whole.

Helene's idea builds on her own thinking about the nature of systems and the recognized methods of constructing commons solutions

advocated by the Nobel laureate, [Elinor Ostrum](#), collaboration that competitive interests need so the whole can thrive.

She also adapted the ideas discussed in an exceptionally wide ranging debate on the whole issue she led on a LinkedIn forum called [Systems Thinking World](#), catalogued in [Systems Thinking World discussions on the UN Call for Action](#),

Her more recent writings give a broad picture of her poetic vision of the commons and her reasoning of how people can make the world work as a whole.

- [“Commons-Sense”](#) (Aug 2012)
- [In my dreams... the Living WE... accelerating emergence...](#)
- [The Commons at the Core of our Next Economic Models?](#)

Helene currently lives in Barcelona, devoting herself to “Connecting people & ideas across cultures, disciplines & sectors to shape a better future...”

Original

I. Sustainable development requires new institutions to cooperatively steward and manage the global commons and adopt commons-based economic models

Proposal of May 28, 2012, with minor edits and added references

on the RioDialogues 2012 site: <https://www.riodialogues.org/node/240649>
 on Posterous: <http://globalcommons.posterous.com/sustainable-development-requires-new-institut>

Summary

This recommendation calls for the development of a commons sector, alongside the private and public sectors, conferring rights and responsibilities to communities over resources on which they depend. This would ensure that the people who have a long-term stake in the preservation of these resources (natural, physical, intellectual, social, cultural; from local to global) would protect them while enabling the development of a flourishing commons-based economy around them. Commons are the shared resources that we inherit, create and use and transmit to future generations. Vital for our sustenance and livelihood, our individual expression and purpose, our social cohesion, quality of life and well-being, commons also embody the relationships between people, communities and these shared resources.

Background

It seems the current definition of Sustainability as the ability to: “meet present needs without compromising the ability of future generations to meet their needs (WECD, 1987) is not unifying enough to get the ‘forces for good’ to converge and create some action around a shared intention.”

The Global Sustainability Panel of the UN which presented its [Resilient People Resilient Planet: A future Worth Choosing](#) report to the Secretary General last January suggested policy frameworks based on new indicators, means for innovation and entrepreneurship,

for resilience and empowerment, incentives for long-term investments, adoption of some forms of externality accounting, institutions for increased civil society participation. It also quite clearly states in its vision outline that the answers revolve around choice, influence, participation and action, and calls for a process “able to summon both the arguments and the political will necessary to act for a sustainable future.”

So, how can political will be summoned? How can a collective intention for sustainability be generated?

In this perspective, it is interesting to look more closely at sustainability in relation to the concept of commons dear to Nobel Prize winning economist Elinor Ostrom and other economists such as James Quilligan who oppose the inevitability of the tragedy of the commons and show how commons can be co-governed through stakeholder and civil society based institutions in effective ways.

Quilligan defines the commons as the collective heritage of humanity, the shared — natural, genetic, material, intellectual, digital, social and cultural — resources that we inherit, create and use and transmit to future generations. Vital for our sustenance and livelihood, our individual expression and purpose, our social cohesion, quality of life and well-being, commons also embody the relationships between people, communities and these shared resources.

If we consider commons as assets that must and can be preserved and nurtured -just as private and public assets are currently meant to be-, then we give them some materiality and tangibility as socio-economic objects -even when they are intangible-. And if we adopt a patrimonial approach of replenishment and growth of the commons (whether material or immaterial) as the basic discourse for sustainable development and starting point for new economic models, we have a ground for creating new institutions for governing the commons and new kinds of metrics, accounting systems and economic instruments that would help the development of a sustainable economic and financial system and the reconstruction of the relationship between individuals, institutions and the commons. The UN could play a leading role in helping the constitution of civil society / stakeholder governed institutions to steward global commons (commons sector), in complementarity with the nation states (public sector) and the corporate world (private sector).

I am just back from London where I attended a series of seminars by James Quilligan on the emergence of a commons-based economy. Here are the video and transcript of the seminar he held at the Finance innovation Lab on May 10th: [How would a commons approach shape the future of finance?](#)

The article [here lists the initiatives that are currently shaping a ‘new economy movement’ at the edges](#): most can be related to the concept of stewardship of the commons.

Recommendation

The Commons Action for the United Nations team at the UN has drafted recommended [Measures to Shift to a Sustainable Commons Based Global Economy](#) as well as [Measures to Finance that shift](#) for Rio+20 and additional documents that are attached below that constitute the basis for this recommendation.

Adopting the principles of a commons based economy at the UN level would accelerate the emergence of new practices and behaviors by the mainstream.

To make this happen, the first step to be taken would be for the UN to establish a High Level Panel on the Commons. This would be a natural follow up on the **vision of the Global Sustainability Panel**, the orientation of which is much in the spirit of the commons.

Attachments

- [Measures+to+Shift+to+a+Sustainable+Commons-Based+Global+Economy++12-13-2011Final+Version.doc](#)
- [Measures to Finance the Shift to a Commons.doc](#)
- [Measure to counter threats inherent in a debt based economy.doc](#)
- [Measures to Eradicate Poverty 12-13-2011 \(2\)Final Version.doc](#)

Tags: [#recommendation](#), [Sustainable Development](#), [commons](#), [metrics](#), [commons-based economy](#), [accounting system](#), [externalities](#), [governance institutions](#)

Foreword

II. “The next big challenge: biomimicry for a self-regulating financial commons

Jessie Henshaw

Jessie Henshaw is a scientist doing advanced work on the nature of uncontrolled systems, using a new scientific method for studying their behavior from the succession of their natural development processes, [The Physics of Natural Open Systems](#).

The ability to study the organizational changes of individual complex systems allows useful research to be done on all kinds of “spontaneous”, “uncontrolled” and “emergent” behaviors of natural systems and societal behavior, like economic growth. I’ve published some important papers, under my pen name

P.F. Henshaw, and made several discoveries that aren't quite understood yet. One is a very firm finding that the average energy use per dollar, globally, is going to be a far more accurate estimate of the energy cost of any consumer product than any effort to trace the contributing energy uses individually, [Systems Energy Assessment \(SEA\)](#) the basis of my articles on "reality math".

This becomes a key to calculating scientifically accurate energy cost assessments, so people can measure the true benefit of their energy choices. That is what is used in my second proposal, on how businesses can construct "ecobalance" sheets to guide their choices and reputation for making good choices.

My first proposal is for a way to gauge the point of economic overinvestment in the earth, when compounding investment in obtaining wealth from the earth as our commons is "turning the corner" to become counterproductive. That's the point when increasing investment is making the earth decreasingly profitable, like putting more milk cows on the village green for individual profit, leaving it barren.

Recognizing and responding to that turning point is fundamental to the sustainability of free market economies. They're designed otherwise to exhaust their own resources as fast as possible. Numerous complex societies of history seem to have actually succeeded in doing that, destroying themselves in the process.



So, if we recognize that the profitability of the whole is threatened, it would be just commons sense to do what's needed for us to not exhaust our commons by indecision. Thus the people with a stake in the earth remaining profitable would devise a way to transition from a common investment strategy for growth, to a common investment strategy for sustainability.

The science is that all natural systems initially develop using a "bootstrap" mechanism, a growth process like economic growth, of using the system's products to expand its process, and so multiplying its control of its environment, until that becomes unprofitable.

So there's a point in any system's emergence when the need for self-investment switches from being for multiplying control of its environment to learning to get along with it, becoming responsive as a survival strategy, instead ever more controlling.

Original

A new economic paradigm: The next big challenge, A biomimicry for a self-regulating financial commons

With minor edits and added references [Original RioDialogues Proposal](#) - June 2, 2012

On the Rio+20 Dialogues site: <http://www.synapse9.com/signals/2012/06/02/the-next-big-challenge-a-biomimicry-for-a-self-regulating-commons/>

The proposal is followed by a discussion of some of the systems thinking on “the commons” that developed with a group of contributors to a Systems Thinking World discussion group. It is intended as a sample of the kind of “commons based economic models” proposed in the 2012 RioDialogues, by Helene’s Finidori, to solve the global economic crisis by making the commons work for the whole, as a replacement for the paradigm of “prosperity” with ever expanding development. Below is the original article (with references) for the UNCSO Rio+20 Outreach Forum

The Great Change, To A New Financial Commons

For SD the next bigger private stakeholder challenge is one everyone has seen coming, but we haven’t faced. At present SD is maturing as an idea and practice, as part of a world economy that uses its resources to continually escalate its demands on the earth. SD also helps sustain it at present. We need the economy to become self-regulating as a whole, not just to grow some self-regulating parts. A natural model for how, would be for SD stakeholders to choose:

...we also need to not do business with those growing their businesses or investments like cancers, choosing to endlessly use profits to multiply impacts as it harms society and the earth.

That model of self-regulation is simple enough to understand, and would keep people largely out of having to intrude on each other’s business. It asks people to find a higher purpose for their profits than self-inflation, as that starts doing harm. It suggests we apply the investment strategy of mom & pop stores to the world, accumulating investment returns to build the business first, and after that use the profits to sustain other things.

Applying that kind of solution might shock a lot of people, but it matches our absolutely shocking problem. We've adopted a form of "prosperity" that depletes its own resources ever faster to remain stable! The main challenge for sustainability was always that the economic ideal of our society, is to be a machine for endless growth. It has long been clear it needs a new purpose, but it's also been too contentious and complicated to openly discuss.

Now it's clear, with impacts of all kinds multiplying, resources becoming scarce and costly, with financial crises showing it's all not working (1), ignoring it is no longer an option. Still, most everyone finds it unthinkable that the wealthy would stop using their profits to both multiply their wealth and drive endless growth. Reaching consensus for ending that, as the system's choice to live, would give our great engines for growth a much higher purpose.

Scientists like me who study the basic physics of organization in natural systems (2), are not the first to be consulted on great questions of social organization, of course. Discussions on the role of money in society elsewhere, though, really do seem stalled, with people treating it as taboo to discuss the rights others to use their own property.

People forget that money isn't "property", really, but a grant from society of a right to claim one equal share of any material service society can deliver.

Yes, using money to your own advantage, to multiply if you can, is a very ancient and deeply engrained custom. Using steady profits to multiply impacts is also 100% guaranteed to push all relationships with its source of value to the breaking point too, if not halted before that.

There are lots of other "no-growth" proposals with more backing than mine, like Tim Jackson's (3). Mine, to adopt natural principles of self-regulation (6), seems likely to be more effective in keeping the economy profitable and creative. It's not my original invention, but of J M Keynes, discussed in "The widow's cruse" parable (4) and Chapter 16 of The General Theory (5). It's technically a proposal to gradually end the reinvestment of investment profits, the compounding of "unearned income", so investment funds come only from the earned incomes that people save.

1) Henshaw, P.F., 2011 A decisive moment for Investing in Sustainability synapse9.com/pub/ASustInvestMoment-PH.pdf

2) Henshaw, P.F., published writings and research - Blog: [Reading Nature's Signals](#) - [Publication & Resources](#) – [Research Archive](#)

3) Jackson, T “Prosperity without growth” [UK Sustainable Development Commission](#)

4) Henshaw, P.F., “[The one Real option, natural climax](#)” notes

5) Keynes, J.M. [The General Theory, Ch 16. -excerpt from a Gutenberg of Australia ebook w/ reader notes -](#)

6) Henshaw, J.L., “[Adopt natural system principles to keep economies profitable at their limits](#)” submission to Harvard Business Review competition for reforming capitalism

JLH

Foreword

III. Budgeting for “the commons” needs business “ecobalance” sheets.

Jessie Henshaw

For the economy to become self-regulating in responding to its environment will require our having better information. There’s a more accurate way to make physical measurements of our environmental impacts that would change the picture of how we’ve been responding to them. I starts from recognizing what our usual method can’t measure.

Systems that work by themselves, like an economy, a community or an organism, have complex networks of internal organization, necessary for how they work. That organization developed by itself too, with the system. In such systems we just can’t trace the working networks of effects. So.. the “billiard ball theory” of traceable cause and

effect, just doesn’t work, for complex self-organizing systems.

Recognizing that happens to greatly help solve the measurement problem too, that our usual method of tracing things doesn’t work. It prompts you to look for a better alternative. Recognizing that any business depends on the whole economy as such a system, allows your to test ways of estimating the business’s share of the whole economy’s impacts, and if you can’t, assume they’re closer to “average per \$” rather than “0”. I showed that assumption is actually quite accurate for business energy use, and FAR more accurate than what you could trace, [Systems Energy Assessment \(SEA\)](#).

So the strategy is to recognize which affects you can and can't directly trace and find ways of assigning a share of the total for ones you can't. The same will apply to the environmental impacts of businesses as to the economic liabilities for those impacts. You work with the ones for which you have high confidence, and that also informs you on the relative scale of impacts of the whole system you can't assign at all.

It's a strategy that greatly increases what is accountable, using a physical science rather than an economic science method. It importantly exposes the real scale of the impacts we've been treating as unaccountable, that are not at all.

The business community has been hiring teams of experts for comprehensive sustainability reporting (CSR) to track Environmental,

Sustainability and Governance (ESG) factors. Having measures that expose a new scale of hidden impacts would generate a proportionate response, as business is already making many decisions to avoid the looming liabilities of previously hidden impacts.

Advanced CSR then needs to be combined with similar improvement in Economic Liability Assessments (ELA). ELA reports are that would be the basis of the "Eco-balance sheets", financial impact statements for environmental impacts. They'd be what consumers, investors, governments and businesses themselves would use to understand our common interest in their choices.

a scientific method difference between economic accounting and systems accounting

$$\text{Total demand} = \text{Energy for Capital Equipment} + \text{Business Services}$$

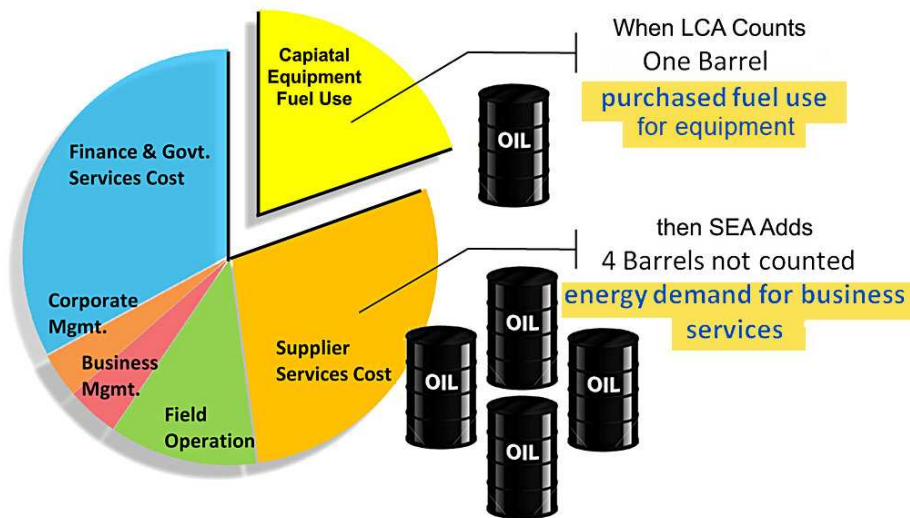


Fig 1. Slices of a business energy pie mostly go uncounted when relying on traceable records, leaving out all the energy demands of business services.

Original

“Budgeting for “the commons” needs business “ecobalance” sheets”, to compare environmental liabilities and benefits.

Proposal of June 5 2012, with minor edits and added references

On the RioDialogues site: <https://www.riodialogues.org/node/247876>

The whole system accounting method called SEA (3), provides a rigorous approach to “slicing up the pie” of global impact assessments, to assign reliable future economic costs for important categories of current impacts. It would allow financial “eco-balance sheets”, like corporate balance sheets, comparing present economic benefits with future economic liabilities, so consumers, government, businesses and investors can all make real financial decisions about our future. As the science is solidified and the metrics used are standardized, it will provide reliable global information on how to invest to keep the earth profitable.

Mankind will definitely pay for the still accumulating degradation of the earth as a place to do business, such as still growing rates of resource depletion, as a swelling direct financial cost to our future.

Investors and business managers can make better investing decisions if ESG measures capture the whole impact.

Those investment strategies incurred very costly economic damage to our future economy that the businesses that created them were not charged for.

For estimating environmental impact costs like that there are various methods, and some major recent innovations.

One of the kinds of measurable costs is for replacing all our energy systems. That’s not yet being considered as a charge against businesses for having developed unsustainably. Business won’t actually make good investment decisions for our future until the value of their decisions is reflected in their bottom line.

Here the method for doing so is to start from the big measurable whole economy costs, and distribute them according to business shares of GDP.

that that is a valid physical measure and method of allocation is part of the new systems physics involved.

By most counts, to maximize short term business profitability the whole economy would need to replace its energy infrastructure more than once, creating is another kind of strategic problem, and large economic liability for short term profits. We should be transitioning to lasting new systems not temporary systems, to reduce the long term economic burden. Now is the time to be putting a \$ cost on these long term effects, or we'll just be repeating the mistakes of the past.

One can start with the simplest techniques and build from that solid foundation. The cost of CO2 associated with a business's energy use could be priced as equal to the present cost of secure carbon sequestration(1). The cost reporting and estimating standards needed would have to include lots of decisions about practicality and accuracy.

One would need to choose how businesses would report their implied environmental costs on their balance sheets :

1. as accumulative totals, for being at the end of their supply chain, the easiest thing,
2. for only the impacts of their value added to the product they sell, or
3. only for fuel producers, to be then be reported to their purchasers and passed along as a cost would be.

*The most important principle for converting environmental liabilities to economic costs is that using a common proxy measure is ****always**** more accurate than counting the costs as "zero", as we now do.*

For some resources like energy use, which is a highly liquid resource used, traded and priced globally, it's very easy. There also seem to be quite good scientific reasons to consider the aggregate energy use of a business and its whole supply chain as equal to its global average cost per \$GDP. That is close to 8000btu/\$ and .47kgCO2/\$GDP (2). The reason to do it that way is more than any proxy measure being more accurate than "zero".

It's been shown to also be far more accurate than the best available methods of tracing individual energy uses. Because we can't trace individual energy uses throughout the economy needed for any given business to operate, energy impact metrics have been leaving out the great majority. Tracing individual energy uses is so inaccurate that virtually all estimates doing it that

way make those business appear to have *far below average* energy impacts.

For the wind farm case study that served to point out the systemic lack of traceable energy use data that causes it, the implied share of world energy use was *five times* what was traceable.(3,4) This would, of course, involve a substantial research effort, but you'd start with the easy parts. Perhaps people haven't done it not wanting to break the tradition of thinking of the environment as cost free. It probably would have been a bad legal choice to accept any financial liability for one's impacts. It might reduce profits.

I think it wasn't done also because of the "funny math" involved, having to put "soft estimates" and "hard data" side by side, and interpret them. Now we're beginning to see how critical the information is for decision making, though, and that there are some fairly easy places to start. It's simply not sensible to count them all as "zero", which is what we do presently, for not having hard figures.

It would be fairly simple, for example, to introduce them into financial planning at every level, by the very rational scheme of starting with "average" per share of the economy represented. One could readily make the rational assumption that every business uses the whole commons, as it actually does in reality.

There are fairly sound measures for many kinds of environmental damages and resource depletions. There are measures for the global accumulation of toxic chemical pools, for deforestation.

You could accurately estimate the sea level rise, and loss of coast line due to climate change, as a cost per \$GDP. There are the measurable costs of environmentally associated medical expenses, and lots of other things, as foreseeable added costs for someone other than those who profited from them.

They're all real items on the financial budget of the commons.

If every dollar were assigned one equal share, keeping the list of things short at first, it would provide a highly informative proxy measure of our hidden liabilities. It would be a motive to spend more of our money learning how to know what the other choices are.

To be reported on a balance sheet the Ecobalance Table would show each line item in the general business balance sheet, with columns for "average" and "adjusted" eco-costs. It would be in any business's annual report,

comparing financial and environmental balances, and be linked from their product labels for public view.

Without this kind of tool, the now quite obvious looming real financial costs to the commons are completely undefinable. We need to know there's a cost to things like our using ever lower quality and higher cost fossil fuels, for example. We'll continue to expanding our economy's dependence on them, not gain our independence from them, without proper accounting.

We'll keep our outmoded technologies and use of ever depleting resources. Both of those have potentially crippling future economic effects.

1) - Gray N. 2009. [Using charcoal to fix the price of carbon emissions](#). Sustainability: Science, Practice, & Policy 5(2):1-3. Published online Dec 02, 2009.

<http://sspp.proquest.com/archives/vol5iss2/editorial.gray.html>

2) Henshaw, J.L., "[Estimating your DollarShadow](#)"
<http://www.synapse9.com/design/dollarshadow.htm>

3) Henshaw, P.H. [System Energy Assessment \(SEA\), Defining EROI for Energy Businesses as Whole Systems](#), Sustainability, **2011**, 3(10), 1908-1943; doi:[10.3390/su3101908](https://doi.org/10.3390/su3101908) –<http://www.mdpi.com/2071-1050/3/10/1908/>

4) Henshaw, J. L., "[Our curious missmeasure of impacts \(and silver linings\)](#)"

5) Henshaw, J. L., "[Shining Light on "Dark Energy"](#) in [New Measures of Sustainability, Sustainable Brands](#) Nov 2012

Jlh 1/13/13