

REVALUING THE ECONOMY, PT. 2:

Energy-Backed Currency



Into The Future...

The year is 2048. Your alarm clock wakes you up at 9:00AM and you head downstairs to do your morning workout. You hop on the exercise bike for a half-hour, watching the digital readout as it counts how many calories you've burned, miles you've biked and credits you've deposited into your bank account – *say what?!*

Yes that's right, in the future it could be possible to earn money as you work out. How? In an energy-based economy, innovation will spur up everywhere in ways to harness energy. From the shocks on your sneakers to the wind resistance against your car to the perpetual rhythm of the tides – human self-sustenance will finally be born. Just as the “gold standard” led to the “gold rush”, imagine an “energy rush” flowing through all of human civilization. Intuitively, that concept *sounds* like some sort of (r)evolutionary progress (or at least a notion worth investigating).

Oxymoronic: An Unsustainable Future

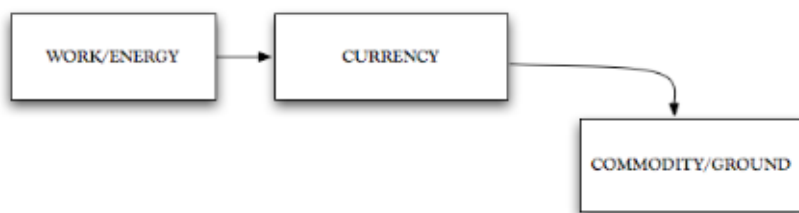
By definition, an unsustainable future cannot exist – if we cannot sustain ourselves now, no future can exist for us later ([see Sustainable Security by Andrew Caplan](#)). Yet beyond linguistics, this blunt fact reveals itself in many fields of thought. First let's explore this notion from the perspective of physics.

In the prequel to this article, we explored the notion of the need for a “solid foundation for liquidity” or a *ground* to tie our currency to. Most literally, then, the question becomes *why* do electrical circuits contain *grounds*? Energy must be *grounded* to avoid high-voltage buildups that can dangerously cause sparks, explosions, fires or electrocutions. What does this tell us about the economy? The word *voltage* is important here.

Voltage is scientifically defined as a “difference of potential energy.” As I described in Part I, potential energy is capital. Thus, brought back to our economic analogy, voltage is most literally translated as an “inequality of capital.” This is no foreign notion to the understanding of how bubbles burst or uprisings break out or why the boom-bust market cycle has intensified in recent years. The inequality of capital is a dangerous high-voltage buildup that is the physical equivalent of socio-economic inequality. There is an impressive amount of power *in* this system, but that power is highly unstable *as* a system.

Commodity Commensalism: A Ground To Stand Upon

Now we turn to the biological perspective. When currency was grounded on the elements of the Earth, such as gold or salt, there were constraints to this high-voltage buildup. Literally, these commodities provided a *ground* that could absorb voltage shocks. I remember in one electrical engineering textbook, I read: “There is a simple solution to these problems: connect your system to the earth.” Hence, when the economy crashes, people can still exchange their money for gold. Psychologically, having faith in the ground upon which you stand provides most with a sense of stability. Through this ground, humanity established a symbiotic relationship with the Earth, defined by a biological term: commensalism (Merriam-Webster: “a relation between two kinds of organisms in which one obtains food or other benefits from the other *without damaging or benefiting it*”). We reaped the Earth and then sowed the Earth so that it could continue to provide us what we needed from it. The Earth was never better or worse off *because of us*, but we were certainly better off *because of the Earth* – we couldn’t exist without it!

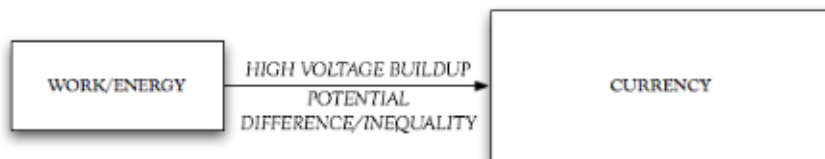


COMMENSALISM: COMMODITY-BACKED CURRENCY

Fiat Parasitism: High-Voltage Hazards

The sudden emergence of fiat currency represents a parasitic phase of human civilization. High-voltage buildups have most literally exploded our natural resources -- we have burnt holes in the Earth and its atmosphere by burning holes in our pockets. We no longer sow and reap the Earth; we now *rape* the Earth and its resources (including human labor). Think of how working more than 12 hours a day has practically become the norm. From investment bankers to medical doctors to restaurant cashiers, for most, life now revolves around one's career.

The current vast level of inequality cannot sustain itself. A pyramid cannot stand on its head, and that is exactly what we are attempting right now. The top 1% of our population owns over 50% of the global wealth. This is not to say *anyone* has to *sacrifice* any standard of living in the long run. There is no reason that we cannot both sustain our level of living and distribute our wealth. In fact, the latter may help support and fuel the former. For now however, our currency is bound to a flawed system in which perpetual inflation is an accepted externality. Inflation has spread our global economy thin. In the process, labor has become a slave to the towering inflated currencies of the world. Monetary capital becomes more valuable than human capital. This is how modern society became enslaved by money (or those who have a lot of it). This is the nature of a capitalistic circuit gone fiat.



PARASITISM: FIAT CURRENCY

“I see all this *potential*, and I see it *squandered*. God damn it, an entire generation pumping gas, waiting tables — *slaves with white collars*. Advertising has us chasing cars and clothes, *working jobs we hate so we can buy shit we don't need*. We're the *middle children of history*, man. No purpose or place. We have no Great War. No Great Depression. Our great war is a spiritual war. Our great depression is our lives.”

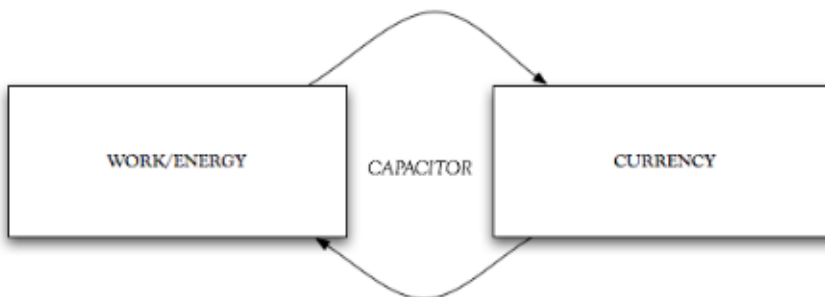
-*Fight Club*

Energy Cycle Mutualism: Capacitors Measure Economic Capacity

How could humanity’s symbiotic relationship with the Earth emerge as a form of mutualism? How could we become *significant* in respect to the world around us – providing us with some salvation from a meaningless nihilistic end? The answer is simple: we could save endangered species, protect human rights and preserve natural habitats and sanctuaries.

Humanity will attain its own significance, peace and prosperity – its own spot under the sun – by doing the hardest thing, humbling itself in recognition of all it has overcome. To learn not only to transcend the Earth, but to also include the Earth. Not like a man dominates his technology, but like a Russian doll contains within it all previous iterations of itself – caring and nurturing all of the life and ecological processes that parented its own arising. We can become the caretakers of life on Earth.

This type of self-sustaining system does not need a ground, nor does it explode – it is a *capacitor*, accurately measuring the *capacity* of *capital* in the economy. More simply, it is a battery that *stores* energy that can be released at a controlled rate. No longer is the human race one that runs straight into a coffin in the *ground*, nor does it spiral into a *high-voltage* explosion. Rather, the economy becomes an evolving battery: a cyclical self-sustaining system that becomes more and more alive with a capacity for more and more energy.



MUTUALISM: ENERGY-BACKED CURRENCY

The further beauty of an energy-standard is that it actually runs the technologies that have enabled mankind to rise to new heights. Growth in material wealth need not be sacrificed. Progress need not be regress even though these new heights, in the past, had been destructive to the environment – wasting energy inefficiently and accelerating the journey toward heat death, “a state of no thermodynamic free energy to sustain motion or life.”

becomes the prime mover of technological innovation and societal progress. Houses become more efficient. In fact, your house could work *for you*, depending on how many solar panels you have on your roof. Any excess power you generate would be deposited into your bank account. Labor and technological automation cease to be competitors, and humanity is able to organize an economy around the possibility of abundance rather than a resignation to scarcity. Increases in technological capacities begin to increase the productivity and value of human capital itself and decreases the amount of work hours necessary in a day.

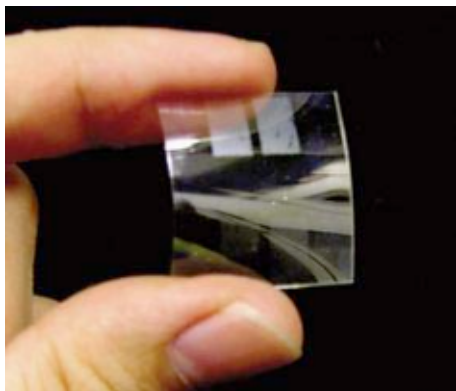
To some, this idea will certainly seem far-fetched. After all, how can we measure the amount of energy one has produced, stored, or consumed? How can we harness energy? Most importantly, how can we store it for later use?

Harnessing energy is what we hear about all the time these days. Solar, wind, hydroelectric, biomass, natural gas, nuclear, oil and coal are all sources of energy that we are slowly discovering how to harness efficiently. Yet, the real gold mine lies in how we will *store* that energy. Rather than relying on an energy grid that requires instant consumption of energy, we will invest in our own sustenance. Sustainability is not achieved through green-energy, but rather, in the age-old capitalist notion of capital reserves – the battery.

For the most part, generated power generally needs to be used and consumed right away these days. However, in the future, this will no longer be the case, and this seemingly simple technological innovation will result in an extraordinary paradigm shift in which we are no longer investing in the future but are able to *invent* the future. The economy would no longer be based on debt and loans, but on credit and efficiency. This freedom from debt will be the freedom of humanity to live in a world fulfilled by creative abundance.

Batteries As Usual: Universal Bootstraps

Warren Buffet's most recent investment in Chinese battery manufacturer, BYD, illustrates the growing importance of this industry ([see Buffet Buys BYD Battery Brain Trust](#)). Buffet purchased 10% of BYD at \$230 million (although his request to purchase 25% of the company was rejected). Buffet and his all-star team have surely recognized a very lucrative opportunity – expanding their investment beyond the perceived horizon of electric cars. The development of new high-density batteries is likely the most underestimated developing industry on the market.



Indeed, our future currency (dollars and cents) may literally be thin-film flexible batteries – not merely backed by energy, but actually *storing* energy. Imagine – carrying batteries in your wallet! Of course, by that point in technological development, we will likely only need *one* battery (or card) to carry all of our stored energy for the day, rechargeable by plugging them into the wall and withdrawing power from one's energy-credit bank account (stored at a large hydro-electric or supermagnetic facility). Most literally, one may be able to fuel the half-hour commute to work by getting on the exercise bike for an hour in the morning.

On the way to work, you drive by the energy-farm, a place where the most unfortunate members of society can go to earn capital – working their way up the capitalist machine. You peer inside and see dozens of people

literally pulling themselves up by their bootstraps. They earn their dollar by providing a dribble of energy into the economy, by providing old-fashioned physical labor – only this time, by exercising on a bicycle.

Revaluing the Economy

How can all of this help the environment? How do we prevent a sudden “oil rush” in search for the easiest (though most environmentally-destructive) energy source? Here, the beauty of the gold standard’s karat scheme returns in a new form. 24 karat energy could place the highest value on manpower so that individuals are easily able to pull themselves up by their bootstraps – literally valuing human dignity above all else. 18 karat energy could be solar power; 14 karat, wind; 8 karat, nuclear; 4 karat, natural gas; 2 karat, oil and coal. Of course, this scheme is a mere illustration. The scheme itself would be perfected through economic models that are yet to be fathomed or designed.

The beauty of this scheme is that the government would tax the least efficient energy (work) within the economy (e.g. 2 karat oil), based on both the externalities of its production and consumption. Of course, the energy created from oil is measured in the same way as the energy from manpower – joules. However, only a portion of those joules would be credited to one’s account upon their production. The rest would replace the traditional role of the taxpayer. This could assist in ameliorating the age-old problem of “dead-weight loss.”

From Debt-Based Economics to Credit-Based Ecologies

Some remain confused by this concept. They ask: “How does a doctor *produce* energy?” or “How does a movie star *produce* energy?” These are not the proper questions for understanding how a commodity backs currency. Doctors do not produce any more energy than they do gold. The point is that they are *paid* in energy, in exchange for a *material* service, so that they can convert that energy to *matter* (material goods) at a later date.

For the first time in history, every time we make a purchase, we may actually “get our money’s worth.” We move from an economy based solely on indebtedness to the future, to an economy based on credit of a merited past. No longer do we need to “manage” the economy (economics, *nomos* “management”). Rather, the economy can now *manage itself*. We program a self-sustainable inner logic (ecologies) that mirrors the self-sustainability of our own environment *without* us (ecology).

This all remains in the conceptual phase so I welcome criticisms and suggestions so that this vision of the future may be further investigated and improved upon. At its core however, this article is a call for more creative approaches to economics and public policy. I seek to break open the box that has constrained our thought for far too long.