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Center for Regenerative Community Solutions (CRCS)

A NJ Nonprofit Corporation

A New Currency?¹

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Started: Saturday, May 25, 2013; last updated: Sunday, June 2, 2013

The idea of an alternative currency of some kind is not a new one, and there are today many thousands of local and special-purpose currencies of various kinds in the U.S. and around the world.

What I am proposing here, however, is a currency based on sustainable value. The uses to which such a currency can be put are numerous ones, many of which can contribute to offsetting or counterbalancing the cyclical and other negative elements of our contemporary economy. The consequences of "business as usual" are now "the new normal": a system of value creation that is still heavily skewed toward the financial sector, that depletes natural resources and spews out toxic wastes, and that fails to meet the real needs of the majority of people in the U.S. as well as in in other countries.

There is a solution to this. It is the re-evaluation of the totality of our assets, of our unused and underused labor, and of our unmet needs, and the development of a means of valuing these things and putting them to work for the society as a whole. This is what needs to happen, whether we do it through government intervention (which today seems unlikely) or through private entrepreneurial action. It *could* be done using conventional currency, but this would require changes in rules and practices which now benefit those in control — or seem to, and are therefore resisted. Creating a new currency based on resilience, stability, renewable cycles, and social enterprise could unleash a wave of *sustainable* economic development that could restore and protect much of the planet.

Preface

In order to assess the need, merits, and viability of an alternative currency we need to begin by understanding the nature and role of money in the economic system, and how the rules (and the elites) which govern its use and distribution are constraining the real possibility of widespread if not universal prosperity. This is perhaps a strange thing to say, given the extraordinary power of the modern industrial system to create unprecedented global wealth; and indeed we need to give credit where credit is due, and recognize that the modern world has raised the standard of living for many hundreds of millions of human beings, allowing for a population of more than seven billion today and more than nine or ten billion by mid-century.

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¹ Whether the concept presented here will gain traction is of course an open question. I invite criticisms, comments, and counter-arguments. If the idea is sound it will catch on; if it is not, it will cause no harm.

But too many societies have also experienced the downside of our present form of capitalism: enormous and growing inequality, vast disparities in health, education, and wellbeing, and recurrent economic crises that result in the widespread destruction of wealth and the immiseration of many millions as well. These in turn are putting the earth itself in jeopardy, as entire civilizations seek to rise from poverty to more modern standards of wealth, and in the process are overwhelming some of nature's regenerative capacities.

Every civilization runs its course, depending on the potential of its institutions to adapt themselves to changing circumstances and needs. What we call "Western Civilization," despite its present global reach, is no different. If it cannot continue to address humanity's problems something else will emerge, and future denizens of earth will look back on our era with a mixture of pity and horror for our ignorance and our errors.

The immediate cause of what we experienced in 2008 was the collapse of mortgage-backed securities, collateralized debt obligations, and credit default swaps; but the environment was created by America's hubris, the cost of two unnecessarily drawn-out wars, and the increasing "financialization" of the U.S economy. The policies of the incoming Obama administration succeeded in preserving the banking system, but not in putting a floor under the collapsing housing bubble or preventing a global economic decline.

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The Center for Regenerative Community Solutions, as its name implies, is a disseminator of tools, systems, and resources for restoring the planet's ecosystems at a community level. The development of a sustainable-value currency is one of these solutions, and potentially a key driver of ecological restoration. Many people are willing to work to produce a more sustainable future, providing they can be compensated with "a living wage." Many others are innovators and entrepreneurs, for whom a second (or third) currency could provide a field for a range of new social enterprises.

To the extent that these enterprises actually save the government and the taxpayer money, they can be compensated by a share of the savings, in conventional currency. The conversion rate could in principle be one for one, though this might vary over time; what's required is that the new currency operate in a completely different way, according to a different set of rules, and this might include limiting the amount of conversion allowed. To accomplish this we have proposed a global credit exchange (GCX), in which businesses and individuals complete transactions creating and exchanging sustainable value. This credit exchange might be started with other nonprofit corporations, helping to unite the millions of organizations focused on creating a better planet; with major corporations seeking to offset the damage they cause to the environment; and with local governments, business associations, and community groups, entities that currently lack the financial resources to invest in infrastructure, adaptation,

mitigation, and ecological restoration projects. In essence, this new currency fuels the solutions, the work that needs to get done (and the work of managing a parallel currency and economy).

The world's foremost expert on complementary currencies is Bernard Lietaer, a Belgian economist and civil engineer who laid much of the groundwork for the euro, and who has examined much of recorded history for anomalous periods in which dual or multiple currencies assisted societies in reaching extraordinary levels of prosperity. We may live in such an anomalous period today. If this is possible for us, we should take advantage of it as an opportunity for what Karl Henrik-Robert has promoted as "the natural step": reducing our extractions *from* nature, reducing the toxic burden we impose *on* nature, lessening our impact on the habitat of other species, and meeting basic human needs so that fewer of us will feel the need to do these things in order to survive.

There appears to be no legal impediment to creating such a currency. It does not require any coins or paper bills: it can be a true 21st century currency, existing only as the record of digital transactions, accessible via a mobile device as well as from any computer. The currency is actually "issued" by businesses and individuals extending credit to the network of users. It is backed up by their promise to deliver sustainable goods or services when the credit is used. They in turn can purchase the inputs they need from a growing number of suppliers accepting the currency in full or partial payment. The supply of this currency is not managed centrally. It is created, managed, used, and expended on a decentralized basis; it does not accrue interest; and it is not created for the purpose of building individual fortunes but for the purpose of creating common or public goods.

Our purpose, in this paper as in others in this series, is simply to work through the logical requirements and implications for implementing such a parallel currency, and to invite others to join us in launching it as a social experiment.

Step 1: Understand How Money Works

The first challenge with money is to understand how it works, and what purposes it serves (and fails to serve) in society today. We operate under the tacit agreement, the delusion, that there is only one kind of money, created by central bankers, and issued as interest-bearing debt. Admittedly, the interest it is currently "bearing" is close to zero, and this is undoubtedly having a stabilizing effect — but apparently without being able to restore society to its previous level of economic activity.

It is one of our premises that the problem is not mainly with the current "monetary policies" that central bankers have adopted (most of which will have proven to have failed within a couple of years), but with the way that money, or finance, is structured, valued, and regulated

in our society. Built into its rules are assumptions, dilemmas, and consequences that benefit some in society but not others, and that incentivize harmful as well as beneficial actions.

The place of money in modern society reveals a strange paradox: on the one hand, we all acknowledge that money "exists" only as a matter of social convention; but on the other hand we treat it as having an external, objective reality, which is often at odds with its usefulness as a medium of exchange or as a store of wealth. It's a tool, but a tool that mostly uses us rather than the other way around. We create it — we "make money" — but it controls almost every aspect of our lives: where we live, what we eat (and indeed whether we eat), whether we get health care when we need it, what we drive, and even for the most part what kind of work we do in the world.

Having created it, money seemingly takes on a life of its own. If we have it, we feel powerful, happy, secure. If we lose it, it's gone, and we fell bereft, helpless, and often desperate. It's like a game of musical chairs: if you stop, there's never enough to go around. You have to keep going, to keep growing your own little pile, and fight to stop others from taking it from you. Everything you have is tied to it, is measured in it, and judged by it. And when the economy "collapses," it's as if the blood is suddenly drained out it, the flow of money slows down or reverses, and everything loses value.

Think about it: the economy doesn't collapse because people suddenly stop working; they suddenly stop working, and lose their jobs, because "the economy has collapsed." One moment it's as if the value of everything will never stop rising; the next moment, panic sets in, and the stock market plunges. The next day it's as if everything has changed, even though the world is much the same as it was the day before. We were riding high, working at top speed to build things and make things and distribute them to anyone and everyone at dizzying speeds; and then it all stops — construction sites are suddenly idled, stores closed, factories shut down, people everywhere are going bankrupt and losing their homes, their bank accounts, and often their marriages. Neighborhoods are blighted and whole communities are abandoned; farms lie fallow, streets are deserted, warehouses shuttered. No physical calamity has taken place, but it might as well have; people's dreams are shattered, their wellbeing compromised, their hopes and aspirations now seen as illusions.

How is all of this possible? A set of numbers changes, and all of a sudden the economy grinds to a halt, or slows down so abruptly that we call it a "crash." It is said that "confidence erodes," but what exactly does this mean? We don't use confidence to buy bread; the baker still gets up in the morning, but now suddenly he can no longer sell his products or afford to buy his supplies. What exactly is going on here?

If money, or the way we use it, is at the heart of the "financial crisis," why is it that we are having so much difficulty dealing with it? As a set of social conventions, or a "social technology,"

money is essentially a tool or vehicle or medium of calculating and exchanging value, but the hold that it has over us is both pervasive and in many ways utterly devastating.

Economists are accustomed to treating money as if it were a sort of quasi-commodity, but like the fantasy of the "rational actor" this seems to be a misleading assumption. It's true that the value of money has something to do with its "scarcity," but of course its availability, or lack thereof, is almost completely arbitrary. Money is simply not like any other commodity, and even though some social actors are seemingly able to control it for their own ends, it is not physically limited. It does not truly represent a natural resource or some kind of manufactured commodity whose production is limited by the availability of raw materials, labor, or even capital.

As Keynes noted in the 1930s:

The outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes....

...Interest to-day rewards no genuine sacrifice, any more than does the rent of land. The owner of capital can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But whilst there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital. [In the future] it will still be possible for communal saving through the agency of the State to be maintained at a level which will allow the growth of capital up to the point where it ceases to be scarce.

What's surprising then is that we have grown so accustomed to accepting the reality of the scarcity of money or capital that we run our affairs by how much or how little we have of "it." If it does not actually "exist," as a real substance, how is it able to dominate us?

There are several ways to try to understand this, none of which are genuinely satisfactory.

Traditionalists believe that money once had genuine value, to the extent that it represented a precious metal or some other object with intrinsic utility. But while the role and value of precious metals in our society is a unique one, it is clearly neither an objective standard or source of value, nor a storehouse of it.

Consider the price of gold: who decides what an ounce of gold is worth? We say it's "the market," but if our global trading system failed, gold would have only the value that the farmer or other producer was willing to exchange for it. In other words, gold is just as much a fiat currency as paper money: it's worth what it's worth because we agree to treat it as a means of conveying value. To a starving individual neither coins nor paper have any immediate utility;

it's only if we can purchase food from someone else in exchange for them that they are useful or valuable.

To this it can be objected, of course, that this is exactly the reason that coins or paper notes do have value: they have value to the extent that they can be exchanged for other items that are immediately useful to us. But this is circular: money is worth whatever people agree that it's worth in the context of an exchange of some kind, whether that exchange is between two people or amongst global financial institutions.

It's also the source of most of our difficulties with money. Because it's worth whatever people agree it is, and that agreement is conditioned by the beliefs of the trading entities, it's subject to manipulation, re-evaluation, and even collapse.

For example, if you don't know how much money someone "has" you are essentially in a guessing game with them. In negotiating an exchange, they may tell you whatever they want, and there is no "objective" way of determining it, since money today mainly "exists" in the form of digital information in private bank accounts. If they write you a check, you assume that they have the digital bits to transfer to you. But there are plenty of instances of exchanges based on "false information," from the petty con man to Bernie Madoff (and to the many other Bernie Madoffs who haven't been exposed yet).

What things are worth is, moreover, in many ways a product of mass psychology. What happens during an economic crisis is typically a loss of faith or belief in the previously widely-agreed value of various assets, as measured in money. In the recent housing crisis, certain influential people and institutions woke up to the fact that the housing market was overbuilt (though "overbuilt" only in relation to the effective demand in the market, not to the real needs of individuals), and these assets "lost value" in relation to currency. The houses themselves remained the same, but in many cases people could no longer "afford" to live in them by paying money to their lenders, and were forcibly evicted or voluntarily chose to leave.

Similarly, the phenomena of inflation and deflation are artifacts of agreement, not of external events. This can have an absolutely devastating effect, as in Germany in the 1930s, or in the Third World countries that are crushed by debt; but these effects are triggered by changes in agreements (in this case loan agreements) not by changes in food production or manufacturing or other economic activities, and actually the level of these activities is more affected by the value and availability of money than vice versa.

We also know that only certain things are considered measurable in money, while others are not. Indeed money is often considered to have negative value, to be capable of debasing love or art or spiritual values. Since the invention of the idea of the "Gross Domestic Product" there has been a recurring argument concerning the economic values that are not captured in money,

and the economic injuries that are captured, revealing that the GDP is a measure of the total value of monetary transactions, not of domestic production. If you care for your children or your aging parents at home, the value of your worked is not counted; if you pay for these things, they are considered "production." Conversely, if you can dump CO2 into the atmosphere at no cost, the damage you're causing is not subtracted from the GDP, but if you clean it up the money you spend will add to economic growth.

All of these things are well known, or easily understood when they're explained; but they don't alter the iron grip that money has on us, on our society, and on our own economic activity.

The challenge is, therefore, to rethink money in a way that serves our individual, social, and ecological needs, rather than constraining or defeating our efforts to do so. When there is a growing list of unmet needs in society, and indeed in our natural habitat as a result of our heedless actions, we need a financial system that enables us to address these needs, even if it means inventing a new one alongside the old. The rest of this paper is devoted to addressing this challenge, and doing so in a way that avoids the pitfalls of earlier efforts at reform or revolution.

Step 2: Understand the History of Money

If we're going to reinvent money we truly need to understand how it works today, and how it has developed historically. The history of money is not accidental, but reflects the realities of human historical evolution. By looking at this history critically, from our present vantage point, we can see where historic turning points occurred, and where alternative choices were left on the table. And we can look at previous attempts to reform the financial system, and where and how they have failed.

Lietaer has looked at all of this and more. He's even explored the cultural and psychological underpinnings of a single vs. a dual or multi-currency system. The benefits of the dual or multiple currency system, including in some respects the competition between the forms of transactions, are evident. They are consistent, in fact, with an ecologically-restorative economy, in which the incentives are placed on the exchange of sustainable value rather than being the "perverse incentives" we have now.

This being the case, the challenge now is to demonstrate, as a natural outgrowth of this history, the power of new discovery, of innovation, and of human ingenuity to ensure that humanity *has* a future. It is our proposal that the first work to be funded through the new currency is in fact the fundamental research and development effort that needs to be undertaken in order to exploit the full potential of the new currency to transform the earth into a planet of sustainable communities.

The most important part of this history, of course, is not the primitive origin of money as cattle or cowrie shells, but the actual evolution of money and finance in the twentieth and twenty-first centuries into the unstable, top-heavy, and potentially catastrophic system it is today. Lietaer points out that

The money that is in use today was actually designed in the 17th and 18th centuries, a mostly preindustrial epoch untroubled by pollution, greenhouse effects, and overpopulation. The vast majority of the world's estimated 700 million people back then were farmers living in rural settings, who rarely ventured far from their homes or villages, and whose economic activity consisted mostly of local barter exchanges. Money was in limited use, especially in rural England, the country in which much of the world's current monetary paradigm originated. [Lietaer, Bernard; Belgin, Stephen (2011-12-15). New Money for a New World (Kindle Locations 449-453). Qiterra Press. Kindle Edition.]

The problem is that we are working in a 21^{st} century world with a monetary system that fails to accurately reflect the reality of our economic system, one in which many people are unemployed or underemployed, where the concentration of wealth and the spread of poverty is excessive, and where the price of immediate prosperity is the squandering of our ecological capital.

According to David Graeber's *Debt: The First 5000 Years* (2011), the central problem is one of the tyranny of interest-bearing debt, which has existed since antiquity. But there have also been periods when the official debt-based money has been supplemented and complemented with credit-based exchanges of various kinds, and that's what we're proposing here.

This does not mean that we should abandon the effort to reform the *existing* monetary structure, as it is the predominant financial system, and will likely remain so for some time to come. But the financial system is, at this point, very resourceful and resistant to change. The banks were the first institutions rescued in the crisis; and even today the rules remain essentially unchanged. Millions lost their homes. No Wall Street financiers were treated like Bernie Madoff, and led away in disgrace for having hidden artificial and uncertain values by fabricating opaque investment vehicles, false ratings, and then selling them to unsuspecting or gullible investors. The rich got richer and the poor poorer.

The point is, however, that the monetary system is always changing. Re-reading the opening sentences of Keynes' famous *Economic Consequences of the Peace* (1919), one is struck by both the similarity and the differences between that period and today:

Very few of us realize with conviction the intensely unusual, unstable, complicated, unreliable, temporary nature of the economic organization by which Western Europe has lived for the last half century. We assume some of the most peculiar and temporary

of our late advantages as natural, permanent, and to be depended on, and we lay our plans accordingly. On this sandy and false foundation we scheme for social improvement and dress our political platforms, pursue our animosities and particular ambitions, and feel ourselves with enough margin in hand to foster, not assuage, civil conflict... Keynes, John Maynard (2005-05-06). The Economic Consequences of the Peace (Kindle Locations 10-14). Public Domain Books. Kindle Edition.

Today, not only is our financial history accelerating, but it continues to be true that people are readily deceived by their own prejudices and half-baked ideas, based on assuming the latest twists and turns of the economy are permanent. But the collapse of the Soviet Union should be enough to convince us that rapid, sometimes catastrophic, change can occur when people stop believing in whatever is inflating the bubble, from tulips to investment properties. In short, we need to understand history, and be prepared for dramatic reversals and changes by having alternatives already in place to withstand them. An alternative currency, that works to offset the destructive consequences of the modern economy, to counterbalance its booms and busts, and that creates "islands" of sustainable value wherever it's adopted, is a mechanism that can significantly improve our resilience.

Step 3: Re-imagine the Economy

If we're going to design a new currency to help foster a new economy, we need to spell out in some detail how that economy should work; and there may be legitimate differences as to what actions and outcomes are more sustainable than others. The point is not, however, to provide a blueprint for some centralized state apparatus to implement, but to provide a fertile environment in which new and more sustainable enterprises become possible, and to sow the seeds of a grass-roots evolutionary movement that will accomplish "the Transition" to a more sustainable human future.

To explain the evolution in my own thinking about these issues, in 2006 I began searching for an alternative model of the economy, and started writing about it. At the beginning of 2012 I wrote:

Nothing, it seems, should be more obvious than the need to build an alternative economic system to serve as the foundation for a more sustainable future. As we enter the fifth year of the Great Recession, with more than twenty million Americans still either unemployed or significantly underemployed, as well as millions having lost their homes, their savings, and their self-esteem, and witnessing daily revelations about the bailouts that are propping up a bankrupt system, the need for an alternative approach would seem to be self-evident.

Moreover, while the rest of the world has pretty much woken up to the end of growth as we know it and started down a different path, we in the US seemingly continue to believe in the illusion of a consumer-driven economic recovery.

There is, frankly, very little that is recoverable about the old economy, which my colleagues at the Institute for Sustainable Enterprise and Transitioning to Green like to call the "gray economy." We're not going back to large-scale manufacturing, or building more housing tracts and shopping malls. What we need to do is enter a new era, an era of small is beautiful, of cleaner energy and more appropriate technology, an era of cooperation rather than competition.

As Bernard Lietaer and Stephen Belgin argue, in New Money for a New World (2011):

We can end the threats to our environment, and aid dramatically in its restoration. We can help provide meaningful work for all, with opportunities that enhance and replenish the world around us. We can effectively address fundamental urban and rural concerns and the many diverse and often divergent needs of developing and developed nations alike. We can create a better world where life and all living systems flourish. This is not an idealistic dream, but is rather a pragmatic attainment, achievable within our very own lifetimes.

But on some level we are as far from embracing such a reality as ever. And this is in large part, I believe, because we cannot imagine a practical transition from here (the world of scarcity, of debt, and of institutions too big to control) to there (a world of sufficiency if not abundance, of community credit, and of institutions too numerous to control).

Sensing the need for radical reform, I set out some ideas for transforming the economy and invited others, suggesting that a Nobel-level prize be awarded for the best ideas and practical innovations in the new economy.

Step 4: Understand the Alternatives Available

...and how they can be combined. In *Money and Sustainability*,² Lietaer and his colleagues provide examples of nine different alternative monetary systems, and argue for an *ecosystem* approach to evolving new forms of currency. Let's look briefly at some of these systems.

Lietaer divides them into two categories: those that can be implemented through private initiative, and those requiring some kind of government enactment. The former are further divided into those that have been used by NGOs and those used by business. The nonprofit initiatives include Doraland, a learning exchange; Wellness Tokens, which reward citizens for

² Report by the EU Chapter of the Club of Rome, 2012

proactively health practices; and Natural Savings, which comes closest to one aspect of the currency proposed here.

Lietaer describes Natural Savings as "a retail savings instrument fully-backed by a natural growth process, and useable as a local medium of exchange." The backing can be any commercially valuable plant or animal that grows organically over time and can be easily harvested, like a forest, or a fish pond, or a game preserve. The goals of the currency are

- 1.To provide an inflation-proof savings instrument for the "rural working poor," who want to put something away but cannot afford to have its value eroded by high inflation
- 2. To reduce the gap between rich and poor without resorting to tax redistribution
- 3. To encourage sustainable resource management including reforestation and sustainable forestry in the developing world
- 4. To provide a local complementary currency to marginally increase the liquidity available in the poorest communities.

How this works in practice, in the example of the managed forest, is that a savings company or coop is formed to own the forest, and it issues shares to those who plant and maintain the trees. Shares can also be earned by doing other needed community work, that the members agree to pay for, while ensuring that any growth in the number of shares issued corresponds to growth in the harvestable value of the forest. Shares can then be traded for other goods and services in the community, held until maturity and the harvesting of the forest, or exchanged for cash if there is a market or the savings company can redeem them.

This is actually a possible application of sustainable value credits also. What is backing the SVCs, however, is not the eventual harvested value of the managed forest, but the value of the continuing renewable resource stream which is being created. Like every other form of cultivation, this activity is meant to produce a "yield," i.e., a value equal to or greater than the labor and other inputs required, using the "free" services of nature, whereby things that are planted grow over time. Rather than creating a purely local currency by issuing and trading shares of the savings company, these shares can be sold for sustainable value credits which to the extent that it is widely used can be exchanged for a broader range of products and services over time.

Of course, since the main purpose of the Nature Savings program is have people use it as a reliable store of value, rather than primarily as a medium of exchange or to serve as the equivalent of legal tender, it may not significantly matter that it cannot readily be exchanged for any other kind of currency, or trade outside the local area. In fact, Lietaer argues that it would be preferable to have many small, locally-owned savings companies, possibly investing in other products, than a single large company serving several communities. But such companies could also be floated using sustainable value credits, and the institutions managing these credits can develop the technical and managerial systems needed to give these shares greater value.

The two business-related currencies are C3 and TRC. C3 is the Commercial Credit Circuit, is similar

to the Business Credit Exchange we developed in Ottawa in the early 1990s. (It is an extension of this concept that we're proposing as the mechanism for issuing and controlling our currency.) The difference is that C3 is backed by high-quality invoices and is exchangeable for conventional currency at any time. In the Business Credit Exchange, companies simply authorized "account credit" to any member of the network up to whatever level they were confortable with the guarantees which the Exchange provided; other member businesses could then purchase up to the maximum of the credit available, or their credit limit, whichever was the lower. The units of exchange were dollars, and all transactions were settled up in dollars at the end of each quarter, which is different from what is being proposed here. The key point, however, is that the pilot program ran effectively with more than 100 companies involved before it was discontinued.

The Terra or Trade Reference Currency (TRC) offers another interesting set of parallels, in that it enables transactions similar to barter but is backed by a basket of commodities that is maintained as a reserve, and is owned by the holders of the TRC. "In short, the Terra would legally be a standardized warehouse receipt that can be used as an international trading currency." But I believe that ordinary commodities futures already serve a similar purpose, and that the Terra simply represents the equivalent value of the commodity basket in the national currency, i.e., what it can be sold for on the commodities market, and not the presently-uncounted value of sustainable or regenerative capacity being provided by nature and by activities such as reforestation, renewable energy, and permaculture.

Finally, of the government-issued or backed currencies, both Civics and ECOs have elements that are similar to the idea of sustainable value credits. Civics allow a city or region to pay for the labor component of social, educational, or ecological projects with an alternative currency that does not add interest-bearing monetary debt to their books. ECOs are a kind of corporate tax that operate in a way that is similar to a cap and trade system, with companies required to pay a certain amount (based on their total sales) in ECOs, an interest-free currency issued by governments in return for emissions-reduction behaviors. Unlike the GCX model, however, both Civics and ECOs require government mandates and enforcement. Civics would be based on a *required* contribution by citizens to provide services specified by local governments; ECOs would be based on a similar government-imposed obligation on corporations above a certain size or having a certain impact on the environment.

Our proposal, by contrast, is to *offer* sustainable value credits as an incentive payment for socially-beneficial activities on the part of citizens and corporations, but not to *require* their use. As noted below, one key element in many the currency successful is providing the appropriate incentives and opportunities for it to be used, e.g., to pay certain kinds of taxes or substitute for conventional currencies in some other way.

Step 5: Work Out the Details for Issuing and Using the New Currency

Obviously there are important details to work out regarding the issuing and use of any new currency. Lietaer has proposed several approaches, including NGOs, private companies, and governments. The intention with sustainable value credits is to allow individuals and businesses to issue and receive credits in payment for sustainable goods and services. The question of what is sustainable, and what it is worth, is largely left to the parties, providing they operate within the guidelines set out from time to time by the principal promoters or advocates of the currency, but there's no absolute or direct enforcement mechanism.

However, every transaction must be recorded through an exchange of some kind, and participants can only exchange credits within that exchange network unless there is a reciprocal agreement with other credit exchanges. Since the exchange provides some rules and guarantees, it must exercise some controls over membership and exchange transactions. Each exchange will post its own rules and guidelines, which are expected to conform to the principles laid out here and elsewhere when the currency is officially launched. We intend to keep a very loose control over the use of the currency by (a) using the Creative Commons licensing agreement, requiring notification and attribution for any use of the currency or any derivation thereof, and (b) monitoring online operations, and "outing" any misuse so that users are aware of potential pitfalls.

Several recent examples of abuse, from users of Bitcoin to the money laundering charges against Liberty Reserve, clearly indicate that safeguards must be put in place to prevent fraud or misuse. Further work needs to be done in this area. Since the purpose of the Global Credit Exchange is to enable the creation and exchange of *sustainable value*, however, it seems less likely to be subverted in order to amass a private fortune (though in principle there might be nothing wrong with people wanting to accumulate sustainably-productive lands and fabrication facilities), or to "launder" money from underworld activities. Since the credit "stands for" some real value being created or maintained in the world, it might well be a place where such ill-gotten gains might be put to good use (better use, perhaps, than going to pay for an army of enforcers).

Most importantly, perhaps, the idea of this currency is not "owned" by anyone, in the sense that he or she alone can create it or trade in it. Ideas themselves cannot be patented; they belong in the public realm, as part of our accumulation of human knowledge. It's specific applications of these ideas that create opportunities for entrepreneurs, software developers, and "true value accountants."

Step 6: Provide Meaningful Incentives and Opportunities to Use the New Currency

The very simplest way to begin to launch and use a new currency is to assemble a group of people interested in doing so, developing or adopting a common set of purposes and a common exchange platform, and beginning to create real transactions. These transactions

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³ Ref. the writings of Peter Burgess.

might be relatively simple ones at first, including paying people in the new currency to encourage its adoption, to develop new areas of application, and to manage and track its transactions. These payments might also need to be supplemented by conventional money transactions at the outset, in order to create a sufficient incentive for their utilization. This can be accomplished by "selling" or "exchanging" a certain number of credits for conventional dollars — based on the anticipated value of the new currency exchange to the existing economy — with those willing to purchase them, either as offsets or as investments.

The Exchange is itself a business that creates sustainable value, but it will only succeed if it spawns dozens of other social enterprises that can leverage the currency to create, and share in the ownership of, sustainable value. In order to encourage the development of such enterprises, I have suggested that an annual prize be offered for the most valuable contribution made to the use of the currency and/or to the development of a more sustainable economy. I called this the "Altonomy Prize," and would be happy to see it created and offered to the public at large.

Contributions may be in the form of specific economic innovations, new discoveries concerning human or natural economic systems, or deeper understandings of ecological economics. The prize would be paid in an alternative currency, or in a combination of alternative and conventional currencies, as determined by the coordinating committee.

In addition, the Exchange itself could offer several tiers of membership, based on the value provided by members in exchange for the credit approved for them. This value could partly accrue to the Exchange and partly to the individuals and enterprises composing the network; but would in any event represent real "stored value" in the world (adding, in effect, to our natural capital assets) created and owned by work of the members. New social enterprises using the currency could be featured or promoted by the Exchange; and easy ways found to attract new users to the network. Ordinary individuals could become members for free, whereas organizations might pay a small monthly fee in conventional currency to participate as buyers or sellers.

Step 7: Provide Effective Safeguards against Fraud or Default

A number of issues are likely to arise with any kind of currency in actual use. The most obvious ones are fraud and default. Sustainable value credits are no more or less likely than ordinary currency to be the object for fraud, deceit, false advertising, etc., and there's no single response. We seek to achieve 100% complete transparency, without violating users' privacy rights; at the same time, discovered instances of fraud will need to be addressed through changes in rules and practices in the field. Our exchange — and we hope any other exchange established to trade using the currency — will require a licensing agreement to participate in our exchange network which allows us to review buyer-seller transactions in much the same way as credit

cards do. This means that the "rules police" can also determine if these transactions are violating the letter or the spirit of the agreement under which the currency is issued and the use that users agree to make of it, and make changes to the rules if needed.

The issue of involuntary default is somewhat different. In the case of the Business Credit Exchange, accounts were to be settled in conventional dollars at the end of each quarter; and the Exchange took at 1% fee to insure against the risk that could be projected with prudent management. In the case of sustainable value credits traded through the Global Credit Exchange, we don't anticipate converting the new currency back into the old one, or requiring a "settling of accounts" at frequent points in time. Similarly, one goal of the new currency is to provide purchasing and investing power to those who currently do not have it, and are therefore by definition bad credit risks. Consequently a certain amount of default can be and has to be anticipated, and safeguards put in place to control it.

Moreover, the system cannot be allowed to get "out of whack" to the point where it is unusable for its intended purpose. If people were not required to "earn" sustainable value credits by actually creating a definable sustainable value, or if credit were allowed to accumulate in the system indefinitely, the currency would not itself represent real value. It's important to understand these elements, and explain them clearly to each participant so they are aware of them as the basis for using the currency with complete confidence in its value.

There are two essential elements that guard against this. Firstly, participants can only trade up to the lesser of their limit or that of the seller. The second is that for every credit issued there has to be a corresponding sustainable value. This value is, to be sure, whatever is recognized as such by the exchanging parties. But within the network overall the assigned values will tend to converge, as in any open marketplace. What might serve as a check on this is the need to acquire, e.g., 10% of the value created, and "bank it" for a future need.

In Conclusion: Sustainable Value Units, Complementary Currencies, and Offset Credits

There will of course be counter-arguments to some of the points I have put forward here. Alternative currencies have been around for a long time, and if they have not caught on it may be because they were not backed by "the full faith and credit" of governments, or for some other reasons that have yet to be fully understood. Some small experiments have been

⁴ Lietaer believes that deep archetypes underlie the development of currency systems, and the meanings that people place on money. He argues that money "monocultures" typically predominate in patriarchal societies, whereas more feminine or matriarchal societies have often used a variety of currency models to thrive. If this is true, then the shift away in our society from a paternalistic and patriarchal model to a more feminine and transformative one, as suggested in many of the versions of the Great Transition to a post fossil-fuel economy, should provide fertile ground for the development of this new economy.

successful, for local or specialized usage; but nothing like a true alternative currency, capable of facilitating the exchange of sustainable value, has emerged.

The idea presented here may be seen as naïve, or optimistic, or misguided. It combines two distinct concepts — a currency backed by sustainable value, and a credit exchange — and assumes that transactions in the currency can begin to occur locally, autonomously, and spontaneously, without a central controlling authority but with multiple facilitative institutions.

From an ecological standpoint, the central problem with our current tax system is that it rewards undesirable behavior (pollution, fossil fuel consumption, etc.), and penalizes desired behavior, such as working or being successful in business. By reversing this, we could create a series of economic incentives for sustainable behavior, and a series of disincentives for ecologically-harmful behavior.

Another way of accomplishing the same result, however, is developing a complementary currency and economic system that rewards sustainable activities, and essentially pays for offsets for unsustainable ones. The idea of the Global Credit Exchange is to offer this concept to whoever is interested in implementing, on a local or a global scale, expressions of it that are consistent with its mission and overall goal, namely to foster and facilitate the emergence of a new and more sustainable world.



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Center for Regenerative Community Solutions

8 Revere Drive, Basking Ridge, NJ 07920

Background on the Center for Regenerative Community Solutions

Our mission is stated as follows in our Articles of Incorporation:

- 1. Providing local communities with educational services on the effects of climate change and other related issues that can affect their long term ability to regenerate their ecological and economic systems,
- 2. Providing local government institutions with assistance to undertake actions and initiatives to reduce and ameliorate present and expected extreme weather and other climate change effects,
- 3. Partnering with small businesses and non-profit organizations by providing expertise and funding for sustainable development projects in low and moderate-income communities, including communities impacted by Hurricane Sandy.

The CRCS Toolkit

Through our work in both the for-profit and the nonprofit sectors, we bring a range of tools and resources to bear on the challenges of regenerating communities. These include:

- "Deep Ecology" frameworks that allow people to embrace transformative change while conserving the best of what people can accomplish in working in harmony with nature
- Expertise in a variety of fields, including ecosystem regeneration, economic revitalization, and social cohesion
- Asset mapping, community engagement, and collective leadership
- Financial capital and vehicles for local reinvestment
- Experience in a wide range of areas in resilience and sustainability, including energy, food systems, the built environment, and business restoration
- An expanding circle of relationships and connections with state and local officials, university researchers, project managers, group and process facilitators, and environmental experts
- An understanding of the basic laws of human behavior and interaction, which helps us coordinate differing perspectives and synthesize inspired futures
- Innovative financial mechanisms, including complementary local currencies
- Collaborative partnerships with Regenesis Group, Sustainable Solutions, and others who can
 address community-level permaculture design and planning, restoring regenerative functioning,
 and re-establishing a deep alignment within human and natural communities

Our Process

We engage community leaders — civic officials, business owners, neighborhood opinion leaders, and interested residents — in a community dialogue that allows a wide variety of voices to be heard. While we acknowledge that people have differing perspectives and viewpoints, we "listen for" the elements of shared vision and understanding that guide action. We bring world-class expertise to bear along with on-the-ground experience — and, in association with partners, the ability to deliver practical solutions. By providing factual information, we can assist communities in developing their own sustainable redevelopment plans and processes.

Here are the steps we currently see as needed to produce regenerative outcomes:

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- 1. Identify the coastal communities where we can add the greatest value
- 2. Approach community leaders to discuss our contribution to the reconstruction effort
- 3. Draw people together through engagement in participatory decision-making processes guiding the choice of community investments
- 4. Identify sustainable economic opportunities in the community that warrant investment
- 5. Provide a vehicle through which local and non-local investors can invest in the sustainable reconstruction of the community
- 6. Provide research, advisory, and educational services to the community
- 7. Draw people together through engagement in participatory decision-making processes guiding the choice of community investments
- 8. Share with people the overarching ecological framework of sustainable coasts
- 9. Listen for the community's vision of the future, and find profitable ways of contributing to realizing this vision
- 10. Engage the community in investing in this future, initially, through participation in RCV's local investment funds, where appropriate, and in the longer term, by establishing its own Unified Field Bank⁵ as approved by the state of NJ.

Here are the Services We Offer through CRCS

- Consulting, research, analysis, and planning
- Educational seminars and programs
- Community engagement initiatives, permaculture design, and local resilience
- Local sustainable economic development —planning, funding, and implementing high impact local projects in one or more of the nine areas of sustainability
- Contacts and connections with reputable service providers
- Connecting the community's grass roots funding potential to the implementation of local sustainable projects — keeping local money working locally
- Developing and deploying complementary currencies
- Applying these principles as a demonstration of sustainable local whole systems economics

Attainable Long-Term Outcomes

- Sustainable and resilient reconstruction
- Strengthened local economies
- Increased employment
- Cross-generational integrity and young adult retention
- Sustainable partnership community banking, as approved
- Increased community wealth
- Communities that are resilient and sustainable in social, economic, environmental, and cultural terms
- Comprehensive and evolving sustainability action plans
- Increased levels of performance on sustainability indexes such as those provided by Sustainable Jersey, ICLEI, and others⁶

⁵ See Unified Field Corporation, www.unififiedfieldcorporation.com.

⁶ See <u>www.sustainablejersey.com</u>, <u>www.iclei.org</u>, and other organizations seeking to develop more comprehensive tools to quantitatively and qualitatively assess the sustainability of communities.

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⁸ Regenerative Community Ventures, Inc., is a licensee of Unified Field Corporation.

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