A Practical Approach to Creating Sustainable Value

There is increasing awareness of and interest in the role of complementary currencies in local communities and around the world. In Deep Economy (2007), Bill McKibben notes, “If you really want to make a local economy soar, the most important step might be to create a local currency.” More than 4000 complementary currencies are in use around the world; as the name implies, their role is to supplement traditional currencies, not replace them. In a series of books, the Belgian economist and civil engineer Bernard Lietaer has studied and reported on many of these currencies and demonstrated their usefulness in a variety of contexts. While nowhere near as involved in this area of research, the authors are responsible for the original concept and successful demonstration of a commercial credit exchange, in Ottawa, Canada, in the late 1980s and early 1990s. The present proposal grows out of this experience as well as drawing on the work of Lietaer and others, and is further explained in a companion piece called “A New Currency?” available on request from the authors.

The Global Credit Exchange (“GCX”) is an example of a “regenerative community solution”: a tool that allows individuals, businesses, and communities to develop greater resilience, self-sufficiency, integration with the natural environment, and sustainable human prosperity. It is, in its current application, an original innovation. But it is based on significant historical precedents, in various parts of the world. It complements the existing economy and is intended to stabilize and improve employment, entrepreneurship, and value creation.

2 Lietaer, who many consider the “father” of the single European currency, has been involved in the development of alternative currencies for more than forty years. He is the author or co-author of The Future of Money: Beyond Greed and Scarcity (2001), New Money for a New World (2011), and Money & Sustainability: the missing link (2012), a publication of the Club of Rome.
3 Called Credex, the exchange involved more than 100 companies and operated successful as a pilot project during 1990-91.
Most immediately, it is a rethinking of a successful commercial credit exchange developed by
the authors as a demonstration project involving over 100 businesses in Ottawa, Canada in the
early 1990s. Called Credex, this commercial credit exchange was in turn an unknowing re-
creation of the successful WIR system developed in Switzerland in 1934, a system which has
since grown to serve more than one-quarter of all Swiss businesses (and contributes to
Switzerland’s remarkable stability and prosperity through good times and bad in the global
economy).

The larger purpose of the GCX is to enable individuals, organizations, and communities to
engage in additional economic transactions by expanding credit, investment, and employment
in the service of creating sustainable value. What defines “sustainable value” is the value a
good or service contributes to the long term stability, resilience, and regenerative prosperity of
the planet. It is intended to allow businesses and individuals to create sustainable value in
their local economies, restore deteriorating infrastructure, and regenerate local ecosystems, by
providing a medium of exchange and an expansion of credit in an economy that is capable of
sustainable growth but lacks the capital where it is most needed, at the local or “Main Street”
level.

It addresses several specific problems that have caused great difficulty in modern society: first,
how to devote unused societal resources to productive purposes without causing further harm
to the environment; second, how to determine, measure, and monetize sustainable value; and
third, how to transform our present economy into one that (in the words of Charles Eisenstein)
supports “the more beautiful world that our hearts know if possible.” It does this by adding a
mechanism or tool which supplements, and complements, our existing free enterprise system
which, like it or not, has become the de facto economic system throughout the world.

This tool creates appropriate amounts of capital when and where they are needed, stimulating
the development of innovative solutions, and using the wasted human capacity of the
unemployed and the underemployed. It offers a way to begin creating, on a local scale, the
sustainable human society that all of us ideally want to see; and then expanding this by
replication and inclusion to the rest of the world.

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4 As described by Bernard Lietaer and Stephen Belgin in New Money for a New World (2011). The Credex system
is similar in many respects to the Commercial Credit Circuit (C3), currently in operation in Uruguay, Brazil, and
several other Latin American countries, and which Lietaer describes in some detail in several of his publications.

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How It Works

1. **Individuals and businesses join an Exchange and extend credit to the Exchange Network** — credit which they and others can use to obtain goods and services, create meaningful employment, and add sustainable value. More than one exchange can be created, though such exchanges can ultimately be linked in a common global marketplace, in much the way that banks and other financial institutions in the conventional economy work today, except that the “commodities” being traded are valued and transacted according to different rules, established by the Exchange or exchanges that manage them.

2. **The amount of credit available through the Exchange is directly related to the value added or the “useful work” embodied in labor,** as judged in terms of sustainability, business development, finance, green building, permaculture, renewable energy, energy and environmental conservation, and community development. This provides the new currency with real and measurable value. There may be differences in assigning these values, but like the different values assigned in the conventional economy, these are worked out through the operation of markets in which buyers and sellers establish prices.

3. **The natural economic unit operating in this currency is a social enterprise,** using the strength of innovation and entrepreneurship while taking into account the long-run objectives of resilience, self-sufficiency, and sustainable development.

The underlying principle is that the unit of value is based the eco-social value that is created or preserved through the underlying transaction. In many ways the alternative currency is the offset or counterpart of the conventional currency: it is counter-cyclical, bears a negative rather than a positive interest, and restores what is being consumed, wasted, or damaged by the conventional or “gray” economy. It assigns value based on the extent to which a given product or process is capable of reducing the damage caused or repairing the ecological fabric. This is a value that people, acting alone and together, can create and account for in a currency that expands rather than constraining trade.

Tying the value of the credit to the systemic value created provides an objective measure for the currency, and limits its issuance so as remain in balance at all times with the value being provided. This places a natural constraint on the issuance of credit without limiting its ability to utilize unemployed and underemployed labor, to create public benefit, and to expand the realm of economic activity to encompass the production of social and ecological value.

The central trading institutions or platforms do not issue the credit themselves, but rather enable the exchange of the credit being provided by each member of the network to the whole system. The total supply of currency is equal to the total credit issued by the combined efforts

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of, the Exchange Network, which has to be backed by each member’s willingness to provide restorative and regenerative services for payment in the new currency. Each member is in turn able to draw on that credit on condition that it continue circulating the currency by providing its share of sustainable value. The Exchange is merely pooling the credit of each community, enterprise, and individual.

It’s an important characteristic that how it works is not through a central authority assigning value or charging interest, but through an independent exchange that is simply mediated through one or more managing exchanges or institutions. Indeed, independent currency networks of this type can be established based on other criteria and using other mechanisms of issuance and operation. Our contention is simply that the larger the network, and the more generally recognized the value, the more worthwhile participation in the new currency or credit exchange becomes. This is accomplished by having each entity issue credit based on its estimated capacity to produce sustainable value, and then delivering on this as the credit is taken up or used. Each entity can then in turn use the currency to obtain what it needs to fulfill its promise to deliver measurable value.

The “alternative economy” created by a complementary currency can potentially grow as large as the conventional economy, though it does not need to do so in order to have a real benefit to society as a whole. The “public benefit” we are referring to here is what Adam Smith felt was best created by the operation of “the invisible hand.” In practice, however, the problem is the disconnect between what the conventional economy actually produces, and what the optimal realizable public benefit would be. These are measurable properties. Though people will put different weights on different aspects of public benefit, the reality is that what is in the public interest is what impacts all of us positively. This is identifiable and measurable. Something that benefits only a few but leaves the rest of us less well off may be considered the measure of public detriment, or social cost. Something that contributes to the wellbeing of everyone, or to the wellbeing of some without reducing that of everyone else, is our measure of value, and is the focus of the credit exchange’s transactions.

As Lietaer and others have shown, the traditional monetary paradigm, in which currency is issued as interest-bearing debt by private banking institutions, is largely responsible for the creation of boom-and-bust cycles, the assumption of scarcity and the continuing generation of fear and greed, the devaluation of social capital, and the systemic disregard of “externalities” which damage and deplete the ecosystem services on which all economic activity depends. Indeed, recent assessments have concluded that none of the world’s major industries would be profitable if they had to cover the costs of the “free” ecosystem services they depend on.5


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Some Practical Aspects

In order to make this easier to understand, here are some examples of the practical aspects of this new Exchange.

Let’s say that we want to expand local, organic food production. By allocating some amount of the pooled credit to local organic farmers, and working to get the currency accepted in full or part payment for their needed inputs, we expand the capacity of such farmers to produce. Of course, the amount of credit provided to each producer will differ according to each farmer’s capacity to “repay” the credit being used by providing additional sustainable value, over and above what he or she is currently being compensated for by earnings in the conventional economy. By being able to purchase more seed, or equipment, or energy, or human labor, the farmer can expand production. He or she can then market this production to those who can purchase it using the new credits, thereby allowing the farmer to “pay off” the credits used to acquire the inputs.

Similar assessments can be made of the other major sectors of the economy, and unrealized value be identified as the basis for allocating some of the pooled credit. The purpose of the credit exchange currency is to expand production of sustainable goods and services in every sector. Initially, some conversion or supplementation with conventional currency may be required, and there needs to be a “settlement” process on a regular basis throughout the system. This can be achieved by offering the credits at a small premium to anyone willing to purchase them with conventional currency, and offering to redeem them at a small discount in conventional currency to those who need that. Eventually the currency will establish its own system of value measurement and exchange, and may trade at par with or above the value of conventional currency.\(^6\)

Why is this relevant and possible now? First, as we and others such as Lietaer and Belgin have noted, complementary currencies typically arise when conventional money is scarce, creating a situation of unsatisfied demand and idle productive capacity which need to be connected through a reliable and low-cost medium of exchange. Second, the general outlines of what’s needed to protect and restore the environment are now widely known and understood: cities are developing “sustainability action plans,” states are developing “green banks,” and businesses are hiring sustainability officers and advisors. While a minority may still be oblivious or hostile to sustainability efforts, there’s little or no uncertainty as to what such

\(^6\) This opens the door for extensive economic activity by expanding the credit exchange system: people involved in defining, analyzing, evaluating, and marketing the system can be paid in credits, or a combination of credits and conventional money. They in turn can then purchase goods and services using the credits in preference to the conventional currency.

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efforts require, i.e., lower energy consumption, renewable sources of everything, and the active management of ecosystems and natural communities. Moreover, since resilience in the face of rapidly accelerating climate change requires decentralization and the development of redundant, self-sufficient systems as the norm, rather than the centralization and vulnerability of conventional approaches to mass production in agriculture, industry, education, and other sectors of the economy, the scope of application of such a currency is seemingly unlimited. In practice, the Exchange Network can allocate credit to its members on whatever basis seems prudent and worthwhile at the time, within the overall limits of the credit being provided by the totality of other members. The designation of “public benefit” as the measure of value in turn requires an ongoing determination of that value through a public marketplace. In other words, the pricing established by each member of the network reflects its best judgment of the value it provides to the system, and the price at which it trades is the market’s determination of its value.

The market in tradable public benefit is moreover determined by the values being sought by the members. If what we’re looking for is cleaner water, or better soil, and we can pay for it with credits, we’ll pay only what we conclude it’s worth after negotiation with the seller. There is no central authority allocating these values; the Exchange simply reflects, in the aggregate, what they are at any given point in time. In this respect it’s similar to and indeed part of the existing economy. Like any other asset class sustainable goods, services, and practices are subject to being continually revalued based on changing need or demand, and this is the process that makes it counter-cyclical to the conventional economy. When cash is readily available, businesses will use that to obtain what they need; when it’s not, they will be able and willing to use credit instead, if that credit is essentially provided at no cost. In order for that credit to be valuable, it needs to be accepted in payment for what’s needed in the place of using cash to do so. The challenge, then, is simply expanding the transaction network to cover more kinds of public goods and to be accepted by a growing number of economic actors.

To do this the transactions must be “guaranteed” or supported in some way. There are two ways in which this happens, legal enforcement and insurance. Like all transactions, credit or alternative currency transactions are legal contracts. In addition, all transactions conducted through the Exchange Network are self-insured by setting aside a portion of the credit pool to compensate for losses (which is equivalent to deducting a premium from each member’s available credit).

As far as taxes are concerned, it’s likely that at some point governments will wish to collect revenue from the transactions taking place in the alternative currency. This may be justified as long as the payment of this revenue is equally done in the currency, and that revenue is put back into the economy through offsetting public expenditures in the currency. On the other hand, where the principle value being provided is what would in the conventional economy be considered “charitable” or “nonprofit,” the transaction might be determined to be tax-exempt.
This is likely a matter that will need to play out in legislation and case law if the Credit Exchange reaches a significant level. Up to that point it may be safe to assume that the transactions are not reportable or taxable.

Finally, the small negative interest rate associated with the currency could be pegged to the corresponding positive monetary interest rate. If the current Reserve Bank lending rate is 0.25% (as it is the time of this writing), then the “demurrage” rate of the credit-based currency would be -0.25% annually overall (with potentially higher levels of reducing value in “retail” transactions). Demurrage is a depreciation of a currency over time, which has the effect of expanding transactions as opposed to hoarding. Think of the demurrage charge as a cost of being idle, like a ship in port; unless it’s moving it’s losing value over time. What the eventual demurrage charge should be should perhaps become a function of the operation of the market, but for the time being making it “mirror” the conventional interest rate may be sufficient to accomplish the purpose, which is to accelerate useful economic activity.

In some respects the GCX is similar to Lietaer’s proposal for a “global trade reference currency,” sometimes called “the Terra.” However, the GCX is not primarily about promoting trade or providing a reference for national currency systems. It is only intended to recognize and value the “sustainability value” of restorative economic activities.7

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7 See http://www.terratrc.org for information on the current status of the Terra, first proposed by Lietaer in 2001. A subsequent paper can explore the differences and similarities between GCX, the Terra, and other proposed complementary currencies. What’s important to note here is that there is no incompatibility between the GCX and other proposed solutions to the sustainability challenges the world is currently facing.
Why It Works and What It Helps to Accomplish

The development of the Global Credit Exchange occurs as a natural social innovation in response to the growing need for an alternative to a self-destructive, scarcity-based, and highly unstable economic system of the sort we have today. From a policy perspective, we seem to have a choice between “business as usual,” i.e., doing nothing about the negative consequences of economic activity, and doing whatever is needed to incorporate those externalities into the equation in order counter-act these consequences. From a biological perspective there is no alternative to doing the latter.

Changing the allocation (or “distribution”) of conventional currency is controversial within every society. What’s universally recognized, however, is that that distribution is suboptimal from an effectiveness perspective as well as from a moral one; and that if there is a way to rectify it that way will likely be adopted. As with any tool, once it’s demonstrated and proven effective it’s likely to be widely used and become incorporated into the economy and the culture.

Part of accomplishing this, however, both requires and facilitates a transformation in our ways of thinking — about money, about whole systems, and about the purposes of human society itself. Unless we find ways to exist in harmony with nature we will, in the end, cease to exist altogether. This is, arguably, the direction in which we are currently headed. But the intelligence and self-awareness that is part of what it means to be human is capable of averting this fate, if it starts thinking about the necessary solutions.

These are, in our terminology, “regenerative community solutions,” or social permaculture designs — they are the essential elements of an eventual future if there is to be one. If there is a way for humans to choose freely amongst the outcomes, then presumably we will not willingly choose to terminate the human experiment or severely damage our only planetary habitat. We believe there are many such solutions, and that finding them is the principal task of our own and succeeding generations.

This is the goal of our own nonprofit activity: to offer a range of useful social innovations to communities, in order to increase the sustainability of those communities over time. These social innovations include local reinvestment vehicles, alternative currencies, financing of local food production and decentralized energy generation, and more aligned community planning outcomes.

We propose to make the Global Credit Exchange available as a series of local demonstration programs, particularly aimed at the challenges facing New Jersey’s coastal communities. But it could spread virally to other communities, states, and nations if can be successfully demonstrated in even a single location.

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In our view, the Center for Regenerative Community Solutions is merely one sponsor of the Global Credit Exchange; we fully anticipate partnering with others to make the enterprise a reality. What we bring to this (which is itself recognizable as credit) is a tool which allows others to bring value to society as well. While the concept may initially seem heretical or unfamiliar, in reality it is neither. It simply recognizes what’s already there.

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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:

1. Identify the shore 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 Bank8 as approved by the state of NJ.

Here are the Services We Offer through CRCS

• Consulting, research, analysis, and planning

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8 See Unified Field Corporation, [www.unifiedfieldcorporation.com](http://www.unifiedfieldcorporation.com).

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• 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 others

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9 See [www.sustainablejersey.com](http://www.sustainablejersey.com), [www.iclei.org](http://www.iclei.org), and other organizations seeking to develop more comprehensive tools to quantitatively and qualitatively assess the sustainability of communities.

10 Senior Fellow, Institute for Sustainable Enterprise, Fairleigh Dickinson University and Managing Partner, Acumen Technology Group, LLC. The authors are also co-founders of the Center for Leadership in Sustainability.

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

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