

The Golden Rule Network

A Strategy to Create a Sustainable World Now

Summary:

The world is at a turning point where it is imperative to leave behind a top down system of power and move to a peaceful and sustainable world. These changes will not be brought about through current government as it represents and maintains the current dysfunctional power structure. We do not have the time or the necessity to try to change or work through government.

By a simple shifting to a bottom up power structure that is private, decentralized, utilizes the voices and diversity of its community members and keeps the wealth of the world in the communities from where it originates we can come together to create a sustainable and abundant world.

We have all the technology and knowledge that is needed to make sustainability and abundance a reality right now. We also have present and accessible all of the wealth needed to finance sustainability right now, but in a form which is currently not utilized.

From the general population a small number of people of goodwill, as few as 65-200, can come together on the private level to start to make the necessary changes by investing in cooperation. There exists a great reservoir of capital assets that is dispersed throughout the middle class that can be used to finance sustainable energy, agriculture and community. These assets can be accessed through the ubiquitous banking system that is in use worldwide and in a manner that is a win-win situation for all involved.

With minimal exceptions all money that is used in the world today is created not through government as is generally believed but through the private banking system. Banks in addition to lending their client's accounts have been given the legislated power to multiply or leverage their initial capitalization 12 to 20 times and create new money through making new loans. By creating a bank of sustainability that functions as a nonprofit public utility instead of a large profit center we can awaken the capital that is present in every community to finance sustainable energy, agriculture and abundant living in an egalitarian manner and within current legislation.

Additionally there is a recent breakthrough technology that makes fuel from biomass inexpensive and practical by utilizing both the cellulosic C5 along with the C6 sugars of biomass at extractions approaching 100% and does so rapidly. The complete process also captures the lignin cell structure in a useable form. This biomass conversion method is completely scalable and has been thoroughly tested in a several million dollar pilot project. It is backed by solid documentation. Several industrial size projects are now in or close to the 3rd front end load stage of implementation. To be competitive with this process oil will need to be priced at \$20-25 a barrel or less which excludes many if not most wells.

If properly directed, utilized and applied this business and technology has the potential to create a trillion dollar industry that can significantly change much of the economics of the world. Or it can be acquired by someone within the current power paradigm and it will be the same "business as usual". The private corporation that holds the technology is available for sale. It could be possible to acquire the corporation through the above proposed bank as one of its sustainability projects.

All readers are invited read further and to participate or profitably invest in making the above a reality.

The Golden Rule Network

Infinite Being, the reality of our own self, is the foundation of the Golden Rule Network along with the truth that I am Thou and Thou art I, which is the real origin (alpha) and conclusion (omega) of the interactions we have with one another. The truth seeking, enlightened individual forms the perfect free society.

The Golden Rule Network or **GRN**, pronounced “grin” for short, is a center for crowd sourced bottom up evolutionary structures in place of top down systems. Organized as an open synergistic network of individuals, groups and organizations **GRN** governs itself through facilitating the sharing of information, ideas, and coming to agreements about and financing of projects that are designed to benefit everyone as a whole.

GRN envisions the world where all are living in abundance, prosperity and peace as happening now. Realizing the foundation we all have in the field of infinite possibilities, **GRN** sees society as a family of individuals living in cooperation rather than a group of potential competitors seeking control of falsely perceived limited assets. Some may call this vision Heaven on Earth, others talk of the New Earth; at **GRN** we also think of it as Home, it's where we live.

Networking is one of the most effective ways of accomplishing objectives and thus of creating abundance and sustainability for everyone. Our plan is to take over the world in the name of everyone though the development of every individual and by bringing together the resources of all individuals through working in cooperation based on choice. The individual is the basic unit of society and like a chain the strength of the society depends on the strength and well-being of each of its links, everyone individually as well as everyone together.

At the present time it goes without saying that an enormous amount of attention and money still goes to funding war, pollution, expensive forms of disease care and other inefficiencies. Yet in the last several decades there has been a huge increase of diverse individuals in groups and organizations all over the world that have made a quiet revolution of consciousness. These people have been dedicating themselves to the promotion of different aspects of the solutions for world problems; personal growth, peace, harmony and abundance and localization of the economy in place of globalization.

Through various applications and developments such as clean energy, environmental sustainability, food production, social justice and equality, natural health modalities, conflict resolution, enlightened education, job training and job creation, to name just a few, these people have been working diligently and creatively to bring about a New Earth. In a real practical sense the New Earth begins at home where each of us is located, creating the changes and sustainability that are needed at the local level. The local level is in a majority of situations a far more efficient frame of reference from which to work and where we can most effectively make the changes to true sustainability. **GRN** looks to interact with and provide a network of support for these people that are making the necessary changes.

Governments have been structured with a top down system of hierarchy that mostly was formed from the misplaced idea that might is right. Top down hierarchy is used as a system of maintaining stability in the society and organizations, i.e. keeping in place the current power structures; so it is very

cumbersome for incorporating creativity and change. It evolved from the use of force and conquest and still emphasizes those forms of controlling a population. Rather than looking at what is needed to truly develop a person enlightened from within it seeks to implement structures of control from without that benefits mostly those in power and maintains the status quo. The psychological basis of top down centralized power is egoism.

Besides being divided into different polarities of political and economic self-interest, top down government is not structured to meet the challenges that we face to protect the environment and create sustainable prosperity. Current government has put the vast majority of its immediate and later response capabilities into the categories of military preparedness, social entitlements and subsidizing large corporate projects. While not all, but certainly the broad majority of the people benefiting from those programs have little to no incentive to see the current situation change.

An effect of the track that centralized government has taken has put a huge strain on communities. The tendency of government to favor large projects and “too big to fail corporations” along with their macroeconomic plans has ended up sucking funds out of smaller community centers where most of us live and experience life. This has channeled the majority of benefits into enriching the giant financial centers and large multinational corporations which are the domain of the wealthiest few.

Since existing government is orientated toward maintaining its current power structure, the approach of **GRN** is not to try to make changes within that structure that will only be resisted by those benefiting from it. Instead **GRN** will work outside of the existing structure to make a new structure that functions in a holistic manner and with people that wish to function in a sustainable system who will naturally gravitate to the new structure. The internet makes an ideal medium for sharing information about the project.

Bottom Up Decision Making

Nature operates from an omnipresent singularity. An appearance of individuality, the singularity, is created but is sustained on the basis of the whole, the omnipresence supporting the diversity of individuality. One effect is that nothing exists separately or in isolation including power and intelligence. Though there has been a tendency to look at systems in a pyramidal illustrated top down hierarchical manner the truth is nature does not operate as such. That form of looking is a purely intellectual construct to try to support the idea of primacy in certain objects or themes. Though intellectually engaging and satisfying to the ego that has next to no relation as to how life really functions. The power and intelligence of creation is present and maintained everywhere.

When analyzing natural systems we find in general that in stable environments power is present and distributed over many if not all areas of the system. When power becomes concentrated in one area the system begins to destabilize and becomes destructive or possibly explosive in its functioning. The more evenly power is distributed throughout the system the more stable, flexible and creative it becomes. Sustainability calls for the decentralization of power and spreading it throughout the society. This change must come from individuals and communities and not a minority running a controlled central power as is now found in most of the world.

The creation of a new constitution in Iceland gives an example of how a bottom up or decentralized power system can be structured. After considerable public and noisy but nonviolent demonstrations against the course of the then current government's handling of the recent economic disaster and downturn, one thousand citizens were selected at random to meet and develop a new constitution.

Interestingly the random selection takes away the need of campaigning for position and making promises solely to gain popularity. The 1000 number gives a wide range of perspectives to come together and be accounted. It has been documented that the general population has all the expertise present that is found in small committees of selected experts. Thus a rotating random selection will not create a profession of "leaders" but each person is allowed to develop his/her own voice and to understand the responsibility of serving the community in consolidation and accord with the common good in a part time capacity. After much discussion, listening and compromise over personal viewpoints a new constitution emerged that represented the voice of many rather than a ruling elite.

An important consideration that emerged from the group was the concept of an economic commons regarding natural resources and particularly important for an island population regarding who has fishing rights. This most likely rubbed against those benefiting from special concessions obtained from previous legislation, especially in fishing which for centuries had been a traditional mainstay of the economy but had become restricted.

The new constitution was voted on in a special public election and won a majority. However the established government decided not to implement the new constitution, only to give some nods to its existence illustrating that the tendency of government is to maintain and serve those in power. Government, even with democratically elected representatives, does not make an intrinsically progressive institution or represent the common good.

Many persons can be bought or influenced in a particular direction favorable to a minority or well organized group representing wealth or other form of power. Thus modern governments have repeatedly demonstrated that we cannot rely on democratically elected representatives in a structure that tends to entrench power in certain positions. The random selection of representatives, especially if it includes enough diversity through number to represent the different positions that are present in a society, gives us a new model that comes from the bottom up rather than the top down.

Women are not well represented in government and hence the political decision making process. While many women have entered into politics it is the more outward and perhaps aggressive side that is dominate in them that is more often associated with male energy. That leaves the more nurturing side of the feminine poorly represented. Yet women make up a slight majority in most populations. A random selection of representatives which will also include 50% women will truly give a more accurate representation of the population rather than only those with wealth and outward directed influence.

GRN looks to encourage repeated random selection of representation at all levels of decision making as a way of supporting all of the people; from neighborhoods, communities, larger municipalities to states or nations. In its own structure **GRN** seeks to incorporate an open access collective network of all constructive voices and work in cooperation with them as organized groups or as individuals.

Most all social progress has been started by a relatively small number of the populace gaining popular support and dragging a kicking and screaming entrenched government behind it. This happened with individual human rights, ending legal slavery, women's suffrage, recognizing labor, civil rights and all other popular causes. Now it needs to happen with ending war and military power as a presumed solution to problems if we are to be successful in creating a sustainable world. Hence it is more conducive to progress to look to organize ourselves and develop that which is needed outside of presently seated government.

As individuals and community members we must remember that WE are the source, WE are the change, WE are the ones for whom we have been looking and dreaming, and the reality is that WE have everything that we need already. WE have the basic workable technologies and knowhow for all of the needed changes. WE have the needed wealth to do it. It is now up to us working in cooperation to make the changes happen. The time has come to stop looking towards centralized power to accomplish the development that we want to take place in our homes and communities where we live our daily lives.

GRN believes that the funding needed for bringing the changes necessary is based on and sourced from our personal economic development, the abundance and prosperity of all participants and supporters alike. This is self empowerment and happens the most easily on the local level. Centralized government is not now the vehicle to allow this to take place as it is currently a much compromised structure of power. Quite frankly we do not have the luxury of time necessary for government to put itself in order. It will be put automatically in order when we, the people, change how and what we are doing.

Additionally more than just knowing about the environmental degradation and destructive effects of our modern economic practices comes the importance of constructive action, of materially doing something about where we find ourselves. We must bring the new models of living into local physical reality. That is more than just asking other people to behave differently by means of petitions and political influence. It means organizing ourselves to accomplish the vision that we have for the future and not depending on others, especially government, to do it for us.

Currently the implementation of the new models is taking place on the scale of individuals and small groups. The point now is to make these developments into the dominant paradigm through proliferation and the continued results of creative growth and application. **GRN** as a network meeting place and most importantly on the financial side by the ubiquitous practice of credit creation through banking provides a vehicle to make this happen.

GRN sees three areas where society can be developed in a different manner than what we currently encounter. These are in the distribution of wealth, sustainability and individual responsibility. This essay contains a plan of how to arrive at sustainability and a more equitable distribution of wealth. The most important of all, individual responsibility, remains up to each individual. The hope of the author is that with a more sustainably prosperous outer life that more will choose to follow the path of inner development for that is where true prosperity lies. In the area of education there are also a number of simple programs that are secular in nature that help to a great extent to open a person to what more is available in life. Those programs can be encouraged to become an integral part of the educational system.

As indicated there exists a relatively simple strategy to create all of the funding needed for clean energy, ecological development, new civic development and an abundant and prosperous life for all the different peoples of the world. What is involved is to use a system that is ubiquitous in our culture however with a slightly different emphasis than which is normally used. That system is banking, specifically fractional reserve banking.

The Golden Rule Trust and Fractional Reserve Banking: A Financial Solution

Although not commonly known by the general population banks have been given the power to create money. Most all the money that is used worldwide is created through the private banking system and not by governments as is commonly assumed. Governments themselves tax and then borrow the money that is needed to complete their budget shortfalls. Private banks and the central bank system under government regulation create the money that is used in the economy in the form of credit that is backed by debt or the promise to repay the credit that has been extended.

For every credit that is created in the system there is a simultaneous debt created, a promise to repay the credit that has been issued. When a particular debt is repaid the money that was created by that debt is extinguished; it ceases to exist. New money is created by taking out new debt from a bank. All of the money in circulation in bank accounts is in the form of credit entries. That extends to include the Federal Reserve Notes or dollar bills that we call cash which exist as the debt notes of someone in the form of an anonymous bearer note that is portable. We operate on a 100% credit and debt based monetary system. There is no other backing than the promise to repay the debt.

Modern money creation happens through what is called fractional reserve, which is based on the phenomena that not everyone uses all of the money that they have in their accounts every day. Only a small proportion of the total amount of money is transacted on any given day. Thus it is only necessary for a bank to keep in reserve a small fraction of the money held in its accounts to attend to the daily demands of its clients. Hence comes the name “fractional reserve” banking. Banks use the excess capital that does not need to be held in reserve for daily use to make loans. The “original” money comes from credit issued by banks based on their capitalization or from government borrowing from the central bank through bond issues to meet its spending shortfalls that it has not collected through taxation.

Currently the minimum reserve amount in the US is 8% while in Europe it is 5%. This means that a bank in the US may loan out up to 92% of demand deposits, i.e. checking accounts, held by the bank. 100% of time deposits such as savings and time certificates may be loaned. Normally a conservative bank will keep a somewhat larger reserve as it does not want to get close or under its minimum reserve which draws attention to its viability.

For an aside and real world perspective at the time of this writing, Deutsche Bank which is one of the world’s larger banks and politically in the “to big to fail” category is functioning at 2.7% rather than its required minimum 5%. Thus it is drawing considerable attention as to how it can be dealt with to keep an over extended European banking system viable as it is not the only European bank with problems..

Importantly for the purposes of financing global sustainability, in addition to being able to make loans with the majority of its clients' accounts a bank has the power to create money based on its own private capitalization. The capitalization of the bank functions as a reserve which allows a US bank to loan newly created money up to 12 ½ times its initial capitalization, which leaves an 8% reserve in the case of the money invested in its capital stock. Thus if a bank is capitalized by its investor owners with \$10 million it can loan up to \$125 million in new loans for projects, or with \$100 million it can loan up to \$1.25 billion. A bank is literally a money making enterprise in its ability to leverage the money invested in its capitalization into new money.

It is a bank's ability to leverage its capitalization that is of interest to **GRN** far more than the ability to lend clients' money. Along with other suggestions this paper proposes to create two banks that are chartered specifically to create sustainability and prosperity in the world.

A Short Historical Perspective of Modern Money Creation

In many respects fractional reserve banking has been the main driver of the industrial age. The practice created a credit based economy whereby paper notes designated to be payable in the future would be used as official money. This money made of promissory notes became far more available than the practice of needing full value in hard assets such as gold and silver to conduct business transactions.

Modern centralized banking began for earnest with the creation of the privately owned Bank of England in 1694. Formed by a group of business men to finance the continuing war with France after the English treasury had been depleted, they presented the fractional reserve scheme to King William of Orange. They would put up the fractional reserve to rebuild the military also claiming the right to make fractional reserve loans to other businesses, which the Crown accepted.

There are a number of negatives that came along with the fractional reserve banking system in the way it was structured and implemented. First it was specifically designed to benefit a group of already wealthy individuals. The creation of money as credit, while being a highly progressive impetus in the economy, became a profit center controlled predominately for and by the wealthy rather than being a general and necessary service to the common good of the population at large provided at a nominal cost.

To have the actual creation of money along with its availability be a profit center through the charging of interest defeats the very purpose of money to a large degree. People then hoard money solely to gain more money rather than actively invest it to create useful products. Today huge amounts of money are moved from one financial center to another just for small fractions of a percent of interest. Banks use their fractional reserve power to buy quantities of bonds to collect interest payments from their leveraged capitalization in ways that the general public cannot do.

This adds considerable expense to the cost of doing business through the high cost of money and results in higher prices on products across the board. We are taught to think that a small percentage of interest is justified for the use of money, but is it? Thomas Jefferson dryly noted regarding banking that it should be those who have money that should be in the business of lending money. Credit money except for the small reserve amount is created from thin air. How much is this worth? Certainly the nominal accounting

fees for asset backed borrowing, but it is the asset that is guaranteeing the credit issued, not the bank reserve. The bank reserve simply assists with the cash flow of daily operations.

Interest over the life of a loan, especially longer term mortgages and bonds, is far more than a nominal expense. The population at large pays for these excessive costs in small mostly hidden and unnoticeable increments and the resulting higher prices. At the end of the day, or many decades, or three centuries in this case, we are wondering where all of the money went. The money creation system itself functioning as a profit center along with the collusion of government and the wealthy has been designed to do this.

The real functional purpose of money is to act as a reliable medium of exchange that facilitates trade amongst individuals and businesses. In the current system we find that too much paper money is used to generate additional paper money without real production. This benefits the wealthy but does not do enough to stimulate the wheels of industry and create full employment. A much better system will be to have money represent real value and to have a minimal charge to cover only the actual accounting costs of its creation. In other words to have asset backed money made available as a public service and not as a profit center. We will examine more on this a bit further on.

Curiously the money creation system presented in the US Constitution implemented a procedure to do just that. The original intent of the founding of the US Mint was to assay the metal content and to manufacture the coinage at defined calibrations of metal content and weight. Significantly the federal government was not given the power to create money.

The US Confederation that had won the Revolutionary War had hyper-inflated its currency the Continental, along with much help from British counterfeiting operations. With that experience fresh in the minds of those drafting the Constitution the power of the federal government to issue notes was denied in the document. The citizens of the country were to bring their gold and silver to the mint to have the standardized coinage crafted. George Washington led off in a publicized example of rounding up his household silver and sending it to the mint to be coined.

Problems arose both with the scarcity of gold and silver and that gold and silver do not maintain a constant standard relative value to one another. A dollar was defined as having a certain weight of either gold or of silver. Gold became the standard for paying taxes, which at the time were largely composed of import duties along with a few excise taxes. However the fractional reserve credit money of the banks became more readily available rather than the US Mint coinage of gold and silver. There is a rule in economics that bad money drives out good money. People hoard what is perceived as more valuable and desire to spend the lesser. Gold and silver were hoarded and fractional reserve banknote money borrowed and spent.

Another negative regarding the current credit/debit money is that it has become divorced from material reality. For a considerable time paper money kept a reference to the value of the two precious coinage metals, gold and silver. This eroded over time and finally ended in 1971 when then President Nixon closed the gold window for payment of U.S. debt. The US was the dominate economy in the world but was devaluing its currency by not managing its import/export balances well and foreign governments were demanding inter-government payments in gold rather than in US currency. Gold had been leaving the US at a rapid rate. Domestic silver redemption had closed a few years earlier in the US.

These changes represent a significant shift in the character of paper money to where it is backed solely by the ability of the debtor to repay the amount owed in nothing more than additional promissory notes. This completed a change from money representing natural assets to legislated government fiat.

To prop up its faltering currency the US had manipulated an artificial demand for dollars by making a deal with Saudi Arabia, the largest oil producer in the world, in which all oil purchases would be required to be paid in dollars. In return the US supports a repressive Saudi dynasty and its alliances that have little else in common with US interests other than maintaining the dollar and buying US armaments. At the same time the US dollar became the de facto world reserve currency but is now facing serious political challenges from other governments and their currencies.

The result of these changes over time is that money became a totally abstract notion open to all kinds of mental manipulations and in the majority of instances has very little relation with natural reality. This has led to a devaluation of the natural world as certain financiers can become wealthy by just the manipulation of derivative paper products that have little or nothing to do with real world needs such as conservation and sustainability. We postpone attending to many problems or start major projects that have significant long term costs because calculations from this dysfunctional side of the economy can be projected to say that it will be cheaper to attend to them sometime in the future. Private lobbying and legislated privileges and subsidies also play significant roles.

A Necessary Turning Point

The world is in a situation where much new development needs to happen in terms of real sustainability. We have come to a point where we simply cannot continue consuming resources in the manner to which we have been accustomed in the recent industrialized era. Fortunately through science and technology along with the study of sustainable natural systems we have all the knowledge and technology to create a very loving and comfortable sustainable world culture.

The need now is to organize, implement and share what we know works so that sustainability becomes the dominate paradigm. In the last several decades there has been a huge increase of diverse individuals, some alone, some in groups and various organizations all over the world that are participating in a quiet revolution of expanding their consciousness. These people have been dedicating themselves to the development and promotion of different aspects of the solutions for world problems. So the good news is that this is already happening just not yet on the scale that is necessary.

Of great significance to note we also have at hand a tremendous base of capital that currently lies dormant but has the potential of being accessed to finance sustainability. These slumbering assets have values in the multiples of trillions of dollars and can be awoken with relative ease in a manner that is a win-win situation for all participants and is a step toward returning to an asset backed monetary system.

This capital base exists in the equity that the population has in its real estate. In the US more than 36% of homeowners own their property free and clear of encumbrances, others have varying percentages of equity. In addition there is all of the commercial property that is owned outright without debt attached and other business properties with varying percentages of equity.

The Role of the Golden Rule Trust

A central financial feature of **GRN** is its use of fractional reserve banking through the **Golden Rule Trust**, or **GRT** pronounced “great” for short. These banks have been designed to promote abundance and prosperity for all, specially benefiting the environment, sustainability, communities and the individual; they are specifically limited to these activities in their corporate charter.

In a real sense **GRT** is akin to a nonprofit public utility. Its function is to awaken and utilize the dormant capital that every community in the world has in its real estate; which usually is more than sufficient to capitalize most any project which the community would like to see take place. **GRT** creates liquid capital or money from the real estate holdings of the community for the explicit purpose of developing community and sustainability.

GRN and **GRT** remain flexible embodying a network of a variety of knowledge and experiences that can accommodate the priorities decided by the individual communities. **GRT** grows in value itself returning the benefits of its growth to the communities it serves; in a certain way acting as a public commons whereby the community can come together to decide what direction of development it would like to prioritize to use its own native wealth.

Normally to awaken the capital that is present in real estate the procedure has been to mortgage the property and use the debt proceeds to finance a project. However a different strategy will be to provide a net interest free mortgage and to use the proceeds from the mortgage to capitalize a bank which can then leverage that same capital a multiple of times. Two banks are formed whereby one bank will write an interest free mortgage on a property with the condition that the interest free loan must be invested to capitalize the second bank and vice versa. The specific purpose and limitation of the **GRT** banks are that they will solely use their capitalization to finance sustainability in the form of clean energy, sustainable agriculture and sustainable community development.

According to US Census statistics for 2016 there are 135 million home units and 75 million are owner occupied, 36% of homeowners own without debt. This represents over 27 million homeowners at a median valuation of \$185,000 and a combined valuation of approximately \$5 trillion of capital with no debt. This does not include commercial and business properties or property owners that have less than 100% equity. The actual total of private equity that is held in real estate is far higher than the \$5 trillion.

Out of this pool **GRN** needs to find approximately 65 to 400 property owners of goodwill to get **GRT** up and rolling, the exact number depending on the amount of home or commercial equity one will invest. The question becomes: Will I lend the value of my property or portion thereof, without losing the use of it while at the same time personally benefitting, to assist in creating a sustainable world?

A much smaller cash investment with a current ballpark estimate of \$130,000 up to \$1,000,000 will also be necessary which can be raised through private investors or through an internet crowd source funding to provide for initial setup. The immediate goal is to locate and organize these 65-400 property owners who can express a serious however non-binding intent in cooperating with the project. Once we have this informal commitment of the initial founders we can proceed to do the fundraising to form the two banks after which time the actual mortgages and stock shares can be issued. ***You are invited to become***

one of these visionaries now by contacting the author with any additional questions that you may have!

Is Investing in GRT Safe?

Remember that banking is literally a money making enterprise. Money invested in **GRT** will be multiplied in the beginning a conservative six to eight times to finance known to be profitable sustainable projects. For example someone investing \$200,000 of home value will be generating \$1,200,000 to \$1,600,000 of value in GRT's portfolio. That boosts the valuation of **GRT's** stock price and the benefit to member/stockholders. Banking is a heavily regulated industry that must meet many governmental standards and inspections. Banks that carefully follow these regulations are known to be among the safest investments possible and serve as backbones of the economic community.

It must be remembered that the nature of **GRT's** sustainability investments are of a very conservative nature. Most of the investments will involve land which will have a lean to **GRT** and **GRT** will have a percentage of 20-30% ownership in most projects in lieu of interest. Furthermore the returns on the investments in wind and solar as well as reforestation in sustainable timber are quite well determined. The demand for sustainable agriculture has outpaced production and community development projects are repaid through municipal budgets. Municipalities partnering with **GRT** will find its loans are more cost effective and replace the need for bond issues.

Affordable housing projects for community development are also a very safe investment. Because **GRT** does not look to make money from interest but instead takes an ownership interest in the project, housing development with **GRT** will be far easier for owner occupants to pay as the interest makes such a large portion of normal mortgage payments. This provides a more prosperous community as the extra savings from reduced mortgage payments can be spent within the community enriching many. The portion that **GRT** will own will serve as rentals for more transient community members.

This strategy creates a conservative winning investment portfolio for the property owners and investors who have become the members of the bank. As **GRT** grows in its investments the people who have mortgaged their properties interest free benefit from the banks' increasing investment portfolios while at the same time retain completely normal use of their properties. The capital that previously was dormant in their properties is growing in value much more rapidly than the normal inflation based rise in the value of real estate. If someone is living in their house they continue living there without restriction. The same applies to owners of rental property and businesses that they continue to receive all the benefits their property. This same strategy can be applied to municipal property also.

Banks get into problems, as with Deutsch Bank previously mentioned, when they are overly aggressive in generating commissions as well as the risk categories of their loan portfolios which result in non-performing loans. The more risk associated with a loan or bond issue the higher the interest rate and profit to the bank. Often this has occurred with exposure to sovereign and other bonds and various defaults. Banks can be overly aggressive regarding expansion into new markets. Rating companies are not always accurate in their risk assessment determinations. Banks use different strategies to offset risk that are not always successful. There is also a more technical situation between banks whereby the same

reserves are counted by more than one bank which can dilute the real strength of the banks. **GRT** has no such need and will not be operating in those aggressive environments and with complex financial arrangements and derivative exposures.

There is tremendous economic power and safety in the proposed banking strategy embodied in **GRT**. In the beginning a relative small number of people of goodwill are needed. As few as 65-200 middle class participants that can be from one community, or from across the country, or the world for that matter, will pool their real assets in cooperation to form a traditional and well recognized credit creating organization that by charter is to serve the community and a sustainable world rather than a group of already wealthy individuals.

GRT and the Block Chain: Safety in transparent accounting

In 2009 an innovative system of counterfeit protection stepped onto the world stage along with what became the first successful “crypto” currency, named Bitcoin, a new form of money that uses the internet as its primary field of creation and operation. This innovation against fraud is called a blockchain and is a means of securing a transaction by independent confirmations from different computer nodes in a worldwide network. Blockchain bases itself on a decentralized system that has no single entity in control of affirming the validity of a transaction; rather it has an independent network of non-affiliated competing computer nodes that confirm each new transaction and its history using a sophisticated algorithm.

For accounting purposes the block chain is a very low cost independently verified trail of all transactions that is published in a computer code that is open source and can be completely transparent. The non-profit international foundation named Ethereum makes available an easy to use code and block chain technology that is available for use as an open source public ledger or registry. Ethereum’s design allows it to be used for making all varieties of contracts as well as be a fungible digital currency. **GRT** will be making use of the services available through Ethereum for keeping all of its transactions transparent and account information easily available. It can also be used as a trading vehicle for GRT stock.

Sustainable energy production

GRN proposes to put a major focus on eliminating the need for the use of fossil fuels with the development of sustainable energy particularly in the categories of solar, wind and biomass. Regional utilities can be built to administer to regional power needs bringing to bear a mix of wind, solar and biomass and providing local and regional employment. Programs for offering community wide solar to houses and businesses can be considered.

Interest expenses are a major cost and influence in the profitability of providing utility size renewable power. **GRT** effectively eliminates the outside expense of interest by utilizing local capital and making renewable energy even more economical than it presently is. All types of local utility development can be considered where there will be enough utilization of the project output to be economically sustainable.

Another possibility will be to install a network of recharging centers for electric cars whereby a number of communities are involved in using their dormant capital to promote such an advance in renewable usage. If electric car companies will cooperate to have a standard removable battery package these could be configured to be switched out rapidly at a recharge center. An inventory of battery packs can be recharged using local solar or wind energy installations. Safer self-driving roadways can easily fall within this type of development.

A Specific Example

There has been a recent development in the alternative fuels industry that will have a tremendous influence in the market place. During the 1990's Amoco Corporation developed a process for extracting sugars from biomass easily and rapidly in preparation to make alcohol based fuels that is scalable for industrial production. The process was verified by the National Renewable Energy Laboratories in Golden Colorado in over 5,000 hours of pilot scale operations. Shortly after Amoco completed the initial work on the process BP Corporation acquired Amoco in 1998. The biomass project entered limbo after being sold to an internal business manager for a nominal fee and whose company later became insolvent due to poor management in 2008.

At the time of this writing (January 2017) the process is owned by a small size private US corporation (\$150 million) who in addition to having a strong scientific team has decades of experience in engineering, procurement and construction. They have done additional research in developing along with the superior sugar capture a method of cleaning the lignin present in the biomass so that it is usable as a high value product. Lignin is the more fibrous structure of the plant cells and makes up about 1/3 of the biomass. The combination of the sugar and lignin production completely changes the economic picture on the profitability of biomass production for fuels.

Some further details can give an idea of the enormity of this development for biomass fuels. Normal industrial processing of biomass to release its sugars for alcohol production requires up to 12 hours of preparation in an acid bath. Over this time period the sugars begin to ferment and produce furfurals which act as inhibitors to the overall efficiency of the production. Sugar extractions run at efficiencies in the 40% to mid-70% range. The Amoco team took an entirely different approach and achieved verified sugar extraction of 95%+ using a phenomenal five seconds of pretreatment.

A \$6 million pilot study has been completed recently with a matching grant partnership from the Commonwealth of Pennsylvania using hardwood forest waste as a feedstock. They are now looking to locate and finance a major project within the Commonwealth using hardwood forest by-products.

In the US corn ethanol production has been a questionable industry with consistent criticism of food waste. In current practice the lignin content that is leftover from the sugar extraction of biomass if used at all is burned as a fuel at a value of \$30/ ton. That is the previous technology. However the 95%+ sugar extraction against the 40-70% current industry efficiencies is now combined with a \$500/ ton revenue stream from the cleaned lignin capture. The new lignin foam products increase profitability by 500% over a transportation fuel only operation. The new proprietary processing can use a number of different feed stocks such as switch grass, Napier grass, cassava, wood chips, cotton gin waste, sugar cane and or sugar

cane bagasse. There will also be the possibility of growing feed stock in brackish water which is not currently used for agricultural production.

Currently one barrel of US crude costs \$50+. In terms of measured energy one barrel of US crude oil produces 5,729,000 Btu. One metric ton of sugar cane is capable of producing 100+ gallons of ethanol with the above processing. One ton of sugar cane in Peru cost between \$28-40 per ton in 2016 depending on location with the majority at the lower to mid-price range. 100 gallons of ethanol produces 7,610,000 Btu which is 1.33 times more energy than a barrel of crude oil.

Thus crude oil will need to be priced at \$20-25 a barrel to be competitive energy wise with Peruvian sugar cane ethanol with the new processing. Other cellulosic feed stocks can yield similar results too depending on price per ton. Initial research indicates that ethanol and crude may be in the same ball park regarding processing costs with ethanol perhaps having the advantage with the new process.

In addition one ton of cane produces about 450 kilos of dry leftover lignin to which other components of glycerol, starch, sodium carbonate and citric acid are added at a cost of slightly less than \$500 to make 1 ton of the starch foam which sells at approx. \$1000 ton. Thus the lignin processing brings in another \$500 per ton of processed cane above the ethanol produced.

There are two reasons for mentioning the above development here. One is to show by an example of how **GRT** can function. Most often a smaller corporation such as the one involved that owns the processing will be purchased by a large company and all of the profit will go to the large corporation, its executives and shareholders. Business as usual with minimal trickle down in that the big fish eat the small fish and grow even bigger. The reality is that the more people in a given community that have something of an even share the more money will be spent locally enriching the different businesses and trades in a community.

What can happen with **GRT** and a collective investment of approximately \$20 million in real properties mortgaged at 80% of appraised value and invested in the stock of **GRT**? How many homeowners need to be involved in an investment of this magnitude? Using the average home value in the US as \$185,000 thus about 115 average US homeowners could make an investment of this size possible at a calculated leverage of seven times.

The investment can be repaid over a shortened time frame because interest expenses are not involved. As mentioned before interest expenses over the life of a project can be considerable and this especially applies in renewable energy projects where loans or bonds are repaid over a period of years. Interest expenses can make or break a project, thus to have a means of obviating this problem makes a huge difference in any project.

GRT can through leveraging its capitalization and purchasing the \$150 million corporation have a business which then becomes a central part of the **GRN-GRT** sustainability program. In this instance **GRT** and its middle class shareholders become the owners of the breakthrough biomass to fuel and foam products technology that verifiably presents a trillion dollar potential as it is a major technological and economical step in replacing the use of petroleum.

With **GRT** when a new biomass to alcohol and lignin foam production facility is licensed and built it will become part of the GRT worker-management owned corporations or cooperatives that once the loan is repaid most of the profits of the operation will go to the community where it is situated instead of a group of distant investors. In this particular example building the complete full production facility will cost around \$200 million which can be financed through **GRT** with mortgages totaling around \$35 million in value. Using the average home value only 230 average homeowners could make a facility of this size realizable. This illustrates the tremendous economic power available through **GRT** whereby even a small community can muster a large development.

Give some time to envision what can happen when the bulk of the money that is now collected by the petroleum industry can remain in local regions of ecologically sound agricultural production around the world to the benefit of those that live there. Do you too see a bright and abundant reality?

The initial profits of the ethanol lignin facility will go to repaying the credit that was issued by **GRT**. Supporting a corporate business structure of recognizing work and cooperation by having a significant percentage of ownership stay in the hands of the people who are actually doing the work **GRN** and **GRT** engage in an equitable distribution of profits that benefit community. The portion that is retained by **GRT** acts as a commons for the development of new projects. As the common assets of **GRT** grow it can be possible for **GRT** to take on a role of research and development as well.

The incumbent business model for ethanol production is dominated by large corporations which become larger still as they take on new projects. Although there is some “trickle down” effect through employment it is generally minimal. The agricultural giant ADM is the present largest producer of ethanol in the world and is developing international projects to keep expanding. ADM has engaged in a policy of political influence and seeking legislative favoritism for years and is a major player in globalism and so-called “fair trade” legislation which is written by and in favor of the biggest corporate players.

As **GRT** takes on additional projects and the initial credits are repaid to **GRT** its portfolio of investments grows the value of its stock whereby the people that have mortgaged their properties interest free can reap the benefits by selling an amount of their shares when needed as with any stock investment. Operating costs for **GRT** will be offset by nominal fees added to the loan payments. **GRT** will be licensed and operating as a bank but will be a nonprofit bank.

Sustainable Agriculture

A way of approaching sustainable agriculture in both developed and developing nations and simultaneously helping the development of the local population will be in purchasing large tracts of land and dividing these tracts into smaller individual farms. From these family sized farms a cooperative will be formed to coordinate an overall plan of production with an emphasis on the facilities and production of value added products so that the cooperative is selling more than just raw product. As the individual farmers pay off the debt of the project they will become the owners of their own farms and maintain the cooperative. At the same time programs for education in the business aspect as well as family education shall be promoted in the community.

A simple yet effective example of vertical integration can be installing freezing and storage, especially of fruit production so that it is not necessary to sell all of the harvest at one time. Freeze drying can be incorporated as another form of preservation at the same facility. Other processing facilities can be made available that individual farmers are not able to sustain but that are proven to be sustainable as a cooperative. In the present model it is mainly larger corporations that have access to large scale financing but **GRT** as a bank of sustainability changes the bias of that model.

Different practices of sustainable agriculture have been developed for small farmers. Many of these center around animal husbandry, fruits and garden vegetables. Through intelligent planning and marketing of crops cooperatively much can be done for small farmers who grow the vast majority of food in the world.

Africa alone has more than enough agriculturally developable land to grow food for the entire world population. That the world has a potential food shortage is a complete fabrication by large multinational agri-businesses mainly hoping to find advantage in political fear mongering to extract legislated advantages for their interests and wishing to promote their engineered and patented products.

What we do have are poor channels of distribution and a lack of natural farming education as there is already more food grown to feed everyone in the world except for significant waste and distribution problems. **GRN** and **GRT** aim to work with different NGO's that are active in agricultural education and renovation whereby sustainable marketing programs along with vertical product development can be shared with rural communities. These programs will include proper understanding of health and nutrition for better childhood development as well as general education and the value of cooperation within the communities.

Deforestation has been a significant problem with expanded demand for agricultural development. A program to deal with that and at the same time increase agricultural production could be to make charcoal, or biochar as it is sometimes called, from the material that is currently being burnt. The biochar is then buried and stays in the ground which has been shown to have a very positive effect on conditioning the soil and housing beneficial bacteria helping plant absorption of nutrients and lasts at least centuries. Thus there will be minimal carbon loss. By continuing with a program of growing appropriate feed stock and harvesting for the production of biochar to be incorporated into the soil in a short time the soil can contain more carbon than was present previously giving a net carbon gain instead of a carbon depletion.

In general **GRN** considers forests and wilderness to be the most valuable as forests and wilderness. We will seek to preserve them while at the same time look to make forestry and forest products profitable for those living in the forest. There have been a number of successful projects of integrating multiple crops within the forest environment often in coordination with NGOs. With funding through the financial power of **GRT** for this type of sustainable economic development **GRN** will be in a position to intelligently promote programs of cooperation with nature that governments in those regions do not have the resources available to do. Where there is pressure to invade **GRN** partnering with NGOs already present can take a role in promoting sustainable development in a far broader sense than is currently present in the government programs which apply to the developing world in Asia, Latin America and Africa.

Sharing the Wealth

When most everyone in the community has the support of the community it is far easier to have a prosperous community. Thus **GRN** looks to create structures that offer a wider distribution of the wealth. Worker owned companies are a good step in this direction and there are a good number of successful companies that have structured themselves in this way.

By policy **GRT** looks to favor or create companies that are formed as such as well as work with existing companies as needed. With this structure communities can be self-sustaining and at the same time through **GRN** learn more how other communities are maintaining themselves. By awakening its dormant capital every community can have the finances to grow and prosper. A practice can be when the owners of a successful private company in a community need to sell their interests in the company that through the cooperation and the proposed banking system the community can come together to fund the purchase of the company.

Good management is essential to every business and recruiting experienced management and training managers will be a high priority focus of **GRN** and **GRT**. When looking to start an enterprise having a good management team is most always the essential ingredient. Every community and business must focus on educating managers to take care of ongoing operations. Again this is a program that deserves utmost attention that will be supported through the overall approach of **GRN**.

Some individuals have a great capacity to lead and inspire. While we tend to look at those individuals with admiration and gratitude the truth is that we all originate from the same infinite source and all have the same infinite value. The recognition of this truth that each in our own way we all have the ability to offer something to life makes a leader someone that we want to be with. The real characteristics of leadership is actually service and humility. In some respects that displays the meaning of the first shall be last and the last first. A position of responsibility as a director obtains its fulfillment in offering a better life to those being directed.

The very essence of leadership is love, respect and an understanding of what is needed to guide someone to being more and doing more. This style of leadership does not normally resort to force or try to make all fit into the same mold; rather it displays the power of lighting the way. We may address this thesis of equality openly yet within the general context of working within a company to acknowledge that there is a goal to be reached; yet there can be many avenues to reach that goal. We realize that some may need more guidance than others; rather that we are in the position of being an elder brother and not a drill sergeant. That represents action on the basis of the truth of "I am Thou" and the ultimate honoring of ourselves and others that is contained therein and forms the basis of right action. Love thy neighbor as thyself.

Workers are an essential part of any enterprise and must be honored for their contributions, as well as those of management and investors. That all people working have a living wage is essential. Worker owned companies are one way to give structure and proper importance to this relationship. At the same time to have proper respect for those who perform services for others raises the necessity of the application of living wages and is fundamental to the philosophy of **GRN**.

Here we are proposing to implement shifts in the formation of corporations that **GRT** is helping to start to policies that favor workers' contributions and ownership. A general approach of **GRN** and **GRT** is in favor of regional companies owned by the local communities and worker and management cooperatives. Energy, agricultural and community development easily fall into these categories. The fundamental idea is to keep the profits of business in the community or region where services are performed.

GRN will be operating as a non-profit entity. **GRT's** own corporate structure, while being a stock issuing corporation will accommodate the voice of all of its participants. As previously mentioned **GRT** functions as a public utility bringing an essential service of project funding to the public. In order to recognize the diversity of interests and opinions each investor participant will have one vote regardless of the number of shares held. The goal is to accommodate the greatest number of voices rather than the most wealth. A further preference is to have a large consensus not just a majority for taking action. To arrive at consensus will be a process of listening and discussion with listening having the priority.

GRN and **GRT** favor decision making processes similar to the forming of the new constitution for Iceland and one that is being adopted by several populations around the world. That is where the intelligence and voice of the community at large is accessed through random selection and accommodating differences through informed discussion and decision making to arrive at a high enough consensus about how to advance the community where few if any will be left out. We admire Bhutan who has been cited for its declaration of looking at a Gross National Happiness index as its way of measuring successful development and its commitment to 100% sustainability.

Further **GRN** and **GRT** can cooperate with and accommodate different organizations and their interests by accepting investments for specific projects that are within the scope of sustainability and creating employment. A group that has an interest in clean energy can direct its funding to be used in that theme for example. Another group more attuned to ecological development can request to have its funding applied to their interest such as sustainable development in the rainforest or reforestation projects, while another group might be interested in organic, bio-dynamic or permaculture food production. Within the different project categories there is also the possibility of an investor role in project management as experienced managers are needed for all projects.

While **GRT** is a nonprofit all of its projects need to be ascertained to be economically sustainable; the projects must be able to repay the credit granted. It is possible that a portion of profits could be directed towards charitable projects or general research grants that benefit the quality of life as a matter of policy within **GRT's** articles of incorporation and once **GRT** has built. That is a choice to be made by the investor/members as a group as well as the motivations of the communities that it serves. By following its normal policy of keeping profits in the various communities **GRT** supports the full development of the population and their charitable choices.

GRT as an Asset Backed Currency

For a number of years there has been a call for innovation in the issue of currencies and an examination of what is money and how does it function. In the last three decades there have been a number of experiments with alternative currencies or mutual credit systems. A recent entry in 2009 and so far the

most successful alternative to government controlled currencies has been Bitcoin along with a number of other crypto-currencies following in its tracks. The major innovation of a public registry called the “blockchain” which is used to certify the validity of each Bitcoin has been presented regarding the safety of **GRT**.

The blockchain has a variety of applications and a very promising use of it is for the general elimination of corruption or fraud in many other types of transaction outside of Bitcoin. The blockchain can provide a verifiable history of all transactions very economically that pertain to a particular “coin” or a particular contract or other document that can be published to a registry that is completely transparent and made available to the public. A modification and improvement of the Bitcoin blockchain model that goes beyond being only a currency and incorporates open use has been made by the nonprofit Empereum and which has received considerable international support. **GRT** will make use of this innovation to provide complete transparency of its operations.

As its investments and holdings grow in size and diversity **GRT** will have a function of being a shared economic commons as noted before with real asset value. The vast majority of governments, including the US, have had a dysfunctional style of operation whether intended directly or not of currency devaluation. Government overspending, political corruption and fiat currencies along with manipulation from large financial interests have created different boom and bust cycles in a variety of countries, again including the US. When there is economic collapse it invites emergency selling of properties for a fraction of their value or government sponsored bailouts of private corporations. There have been too many who have taken advantage of that situation.

GRT will establish an electronic trading market for its shares of stock that can have a twofold purpose. The first is to allow member/investors the ability to sell shares when they have a need to access their equity with the previous obligation of repaying their mortgages. This gives the ability of new member/investors to enter into **GRT** with simply making cash purchase of shares. The second purpose is the possibility of using **GRT** shares as an asset backed currency that can be both electronic and physical bearer notes and which will probably involve trading in fractions of shares. **GRT** shares will be attractive as a conservative way to maintain a real asset value in transactions as either a virtual cyber-currency or physical notes that does not need to suffer from inflation caused by political irresponsibility.

In the event of an economic collapse and currency devaluation due to the overburden of tremendous debt that exists in the world and numerous large businesses it is envisioned that the commons created by **GRT** will provide a safety net of an asset backed currency as noted above. In the future it will be less and less necessary to use the artifice of fractional reserve as the reality is that in its real estate every community has the value to create the money that it needs for all of its abundance.

In Closing:

At this time in the history of the world we are presented with the opportunity and necessity to make some very large changes in the economic and political course of society at large. All readers are invited to participate through the strategy presented here by contacting the author or through a strategy of their own.

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I was born and raised in Spokane, Washington. My educational background is a BFA 1967 and MFA 1971 in painting along with much work experience in ceramics. I have traveled and lived in different parts of the world. I have much curiosity about life and have continued studying, learning more than I did with formal education.

I participated in what I believe were the first and also second organized anti-war Vietnam protests, marches that occurred in Berkeley in 1965. So I was a peacenik at that time. I campaigned for George McGovern in 1968. Yet those experiences left me very doubtful over the efficacy of politics and government. I remain socially progressive and fiscally conservative.

I became a teacher of the Transcendental Meditation technique in 1970 and have been practicing spiritual or inner development for most of my life. I take a mystic's approach to life and the world.

My interest in economics began with studying the financial markets from a point of view of speculation. Eventually someone approached me asking if I knew about finances in the late 1980's. Specifically he was questioning if I knew something regarding money creation and banking which I did not. He encouraged me to investigate which I began to do over a few years' time. I became sufficiently interested to pursue the investigation over the course of many years since.

Somewhere in the early 90's I began entertaining a personal inquiry into the nature of what money is or could be. At this time I came to the idea that real estate or usable land formed the perfect base for money creation. It is the most universally available asset for everyone in the world. It is stationary and generally stable in quality. It has universally recognized value and is a necessity for human life.

I became involved with a couple alternative currency projects which are usually based on mutual credit systems. I wanted to promote something that could function in the mainstream economy. I thought to use real estate as a backing for affordable housing development on a community level, basically using mortgage notes divided into bearer notes and account credits as a currency that could be readily interchangeable with the national currency. This would be similar to Federal Reserve Notes which represent someone's debt or promise to pay; but instead of only debt the divided and denominated mortgage notes would represent a real asset too. Thus a credit and asset based economy could be had. However starting an alternative currency is a lot of dedication with little financial return and a difficult education process for a public that knows close to nothing about money creation.

In the last two years I came to the idea of using the fractional reserve system as presented in this white paper. It's a step in the direction to a system whereby money could be returned to being backed by real assets, ubiquitous usable land, while using the credit of fractional reserve to finance sustainability.

I remain very interested in the theme of sustainability and have consistently studied regarding different agricultural developments and renewable energy.

Economics has huge influences in the lives of everyone and contains a solution to most of the problems faced in the world today with the exception of inner development. I could write much more in regards to creating world peace and have more ideas about creating a prosperous economic life for all; all of which falls into the framework of **GRN** and **GRT**.