

# *Cosmic (Green Energy) Accounting*

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## **Introduction to a BIGA Energy Economic System**

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A paradigm shift economic & accounting system concept that might very well deliver  
a world that works for all people and the environment

Consideration of the following elements of Cosmic Accounting may convince you the above  
ambition is possible and open a window in your mind to a truly new way of organising and running  
this world. Cosmic Accounting is a system that operates in a very novel way and has three primary  
features that underpin the concept.

1. Make electrical energy (literally electricity) our new currency - the new form of money. It would  
be measured in the common electrical unit - the 'kilowatt-hour' (kWh)<sup>1</sup> and it would move through  
society through the electric power lines.

At the moment we all agree that dollars (or euros or pounds or yen) have a society-wide understood  
value. They are our common 'medium of exchange'. However the value of these currencies is truly  
arbitrary and these currencies 'do not grow on trees' therefore we are limited to the artificial world  
of bankers or government to regulate the money supply. A preferable alternative is a currency that is  
true to the physical reality nature of the Earth, a currency that has real value, and a currency that has  
a 'natural' supply. Electricity has these features.

2. The only allowable source of this energy-currency is from renewable energy.

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<sup>1</sup> To give a sense of the amount of energy (and value) that is one kilowatt-hour (1kWh) it is worth considering that the amount of  
energy used to power a one kilowatt device (say an electric heater) for one full hour is a demonstration of one kilowatt-hour.  
Similarly one kWh is the amount of electrical energy required to power ten 100W electric light bulbs for one hour.

3. Everyone would be given a free income of electrical energy every day. This seems too good to be true however it is possible because electrical energy is a product of the real physical environment and huge amounts of energy are shining down from the Sun onto the Earth every day. Thanks to recently developed technologies this energy can be harvested very efficiently on a mass scale and given that the sun energy collection technology is truly efficient, and since there is no cost from the Sun for this energy, then it is true that this energy is (nearly) free to society and therefore can be given to everyone. It is another step to then say that this electrical energy is the currency of the society. If we take that step then it is true to say that with this new system everyone receives a free income of money everyday!

And why not; electricity makes a very good currency or money for it carries real physical value that can be transmitted quickly through society (from one person to another) along the electric power lines. Modern lifestyles are energy intensive and the amount of kWhs in a society is a true indicator of the high-tech material wealth of that society. As a currency, electricity can easily be divided into larger and smaller amounts and electricity can either be used immediately, or it can be physically stored in the equivalent of an electrical energy bank vault – a battery. This currency of energy acting as money is inherently valuable, for with it you can heat a home, cook food, power a refrigerator, etceteras, etceteras. Furthermore electricity can power the public transport that we travel in, trains and trams, and in the future there exists the strong potential for electric cars and buses.

In Cosmic Accounting the electricity money can be used directly as just indicated, otherwise it can be used to purchase goods from a shop. For example, when making a purchase in a store, the price of the item (say a loaf of bread) would be displayed in terms of kWhs. Every person or customer would have an energy credit card. The shop attendant would swipe the card (just like eftpos today) and the computer controlled energy banking system would ensure that the right amount of your energy credit be deducted and then would be credited to the shop so as to pay for the loaf of bread. Similarly, if a person did a job for you in this new economic system, you could literally pay them in energy. You would do this by sending electricity from your energy bank account, through the overhead power lines, to their energy account. Your computer-linked energy credit card would manage the transaction.

In Cosmic Accounting, the way to increase the amount of money in the economy is to generate electricity. Electricity-money-as-currency opens up an unprecedented economic opportunity that is

both socially and environmentally attractive. The opportunity is that we can literally capture and collect virtually 'free money' from the Cosmos (the banks can't do that) thanks to advances in the development of renewable energy technologies. In Australia this can be accomplished almost exclusively through the application of vast arrays of solar collector dish mirror power stations, installed in various places across our sunny desert. The energy produced by these solar power stations effectively come for free from the sun. Cosmic Accounting proposes that this captured energy is distributed equitably to everyone, every day, as an automatic and basic guaranteed income (BIG).

### Gaining an Income in Cosmic Accounting

In this new energy economic system how do we as individuals gain an income? To have energy as the currency the energy is going to have to come from somewhere. In Cosmic Accounting, it is a rule that this energy currency must come from renewable energy sources only. With Australia's vast sunny desert it is possible to power all of Australia's electricity demand on solar energy only. (See the insert 'Solar Thermal Energy Dishes and Prospects for Australia').

### Methods of Gaining an Energy Income 1 - 4

1. The first way of gaining an income of electrical-energy (money) in Cosmic Accounting requires social co-operation. It proposes renewable energy generating centres (solar, wind, hydro) that are owned by the whole community, generating electricity that could be sent everywhere to everyone via the electrical power transmission network (the electricity grid). The solar power stations would be located centrally in the sunny desert where there is so much energy wealth. In Cosmic Accounting, everyone (every adult, say over the age of fifteen) would receive a free and equitable daily electrical energy income from the system. This would be the primary method for everyone to have an income. It is possible to do this since the sun's energy arrives free of charge, and the solar technology system for collecting this energy, once mass-manufactured, installed and automated, is 'cheap'. Supplying energy-currency this way would give everyone an equal base of power and finance. This method (1.) of gaining an energy income underpins the whole Cosmic Accounting concept and value.

2. The second method (of gaining an energy income) is more usual as we know it.

This method involves attracting (to you) some of the electrical energy (kWhs) that other people have. This is done in the usual ways – by performing services for others, or providing goods. In exchange the other person gives up some of their kWh credits to you in payment.

For example, if you were a very good singer or a pop star, then you could hold a concert and charge the audience (say) 20kWhs each to attend the concert. Or consider a company of workers who are very good at making computers, such as Toshiba. They could sell their computers in exchange for kWhs. The income of energy that Toshiba receives would be used to power their machines of manufacture, factory lighting, etceteras. Any remaining ‘energy profit’ could be paid to the owners and company workers. In general, talented and productive individuals or groups could trade services or goods thereby attracting to themselves more energy wealth than other persons (or groups) who do not apply their talents and time and energy so well. Inevitably, through method 2, some individuals and groups would be more energy wealthy than others in a Cosmic Accounting society, and this is only fair.

3. The third method of gaining an energy income is obvious.

This is for individuals or families to have their own rooftop solar or wind energy collection technology. By this method people could generate their own kilo-Watt-hours directly from the environment, be it on a rooftop or farm or boat (for example). A good thing about this method of gaining an energy income is that it means people are not solely reliant on the ‘big brother’ system, nor are people reliant on having something to sell. This will give a significant degree of economic freedom to individuals and families. If kWhs were the currency, you would see a great deal of spontaneous renewable energy generation, because people could make their own energy-money directly. For example farmers that have waste hay or plant material could burn it inside a special turbine that converts the heat of burning into electricity (in this process there is no overall release of greenhouse gases because the plants have already absorbed carbon dioxide from the atmosphere while they were growing). This ability to generate your own renewable kWh money would be a good thing for everyone and the environment – it would grow the economy of the society.

4. Something that could be considered to be a fourth method of gaining an energy income is to practice energy efficiency in your lifestyle. By using energy efficient appliances, transportation and insulation much energy can be saved, and "a kWh saved is as good as a kWh earned". Cosmic

Accounting, as an economic context, would drive the uptake of energy efficient appliances and lifestyles like nothing else, as people would be so much more energy conscious.

**Why Cosmic Accounting is a good idea – the benefits of:**

If Cosmic Accounting were to be implemented (say in Australia first then expanding to the rest of the World) then many things would be delivered that we would all like to see; harmony in society, a healthy environment, individual wealth, plus more time to do the things that are really worth doing - time to do the things that inspire us rather than just having to 'earn a living'. If Cosmic Accounting were to be implemented (as the operating system of society) the World would be unrecognizable. The struggle to live well would be reduced - the amount of ease and choice in daily life would be expanded. Many of the institutions that currently ostensibly exist to alleviate problems would disappear.

Cosmic Accounting will free people and society to 'move with the times' (i.e. so we don't become stuck in outmoded technologies or work practices). It is able to do this because people will not be critically dependent on their current skills or mode of employment, and companies won't be critically dependent upon their existing capacities. In general there will be more 'fat' in society (and probably less obesity in the people. Cosmic Accounting is a system that is suitable for the future where change will be the norm. Cosmic Accounting can do all this by building upon the past, by making the best use of the many developments mankind has achieved throughout the course of history and implementing those developments in a way that is novel.

Cosmic Accounting would help deliver material wealth for everyone and as such, much of the suffering in the world today would be alleviated. The reasons to fight and lie and cheat and steal would be diminished. Furthermore, Cosmic Accounting would very quickly bring about the much needed transformation of our energy generating infrastructure (building the right sort of environmentally friendly energy capturing technologies) so that we can harness mass quantities of energy without risking the ecology, the atmosphere or our planet's future.

The following is a grab bag of positive developments/outcomes

\* First of all in the Cosmic Accounting system, where electrical energy is the money/currency, nobody would be poor, everyone will have an income, and hence everyone will be financially empowered. Even if a person is inefficient with their energy money one day and waste it all, then the very next day they will receive a new and fresh income of energy money. Progressively people will learn how to sensibly spend their energy income.

\* People would not have to engage in property (real estate) speculation as a way to make money. This means that property need not be overvalued and people who really need property can afford to buy it. Borrowing from the future won't be possible (how can you harness the wind before the wind blows) therefore over-inflated real estate prices won't occur.

\* People would not have to earn as much because of their automatic free income, therefore they could be paid less. Companies could afford to employ people to engage in time-consuming craftwork. This may reflect in the building industry with more beautiful and elegant buildings.

\* The weight of taxation and regulation imposed on small business could be reduced because the Government would not need the money.

\* People won't do a job that they don't want to do, or don't believe in, just in order to earn some money - to earn a living.

\* People would not have to worry about retirement or superannuation funds, as method (1.) outlined above of income generation ensures that everyone has an income.

\* The people would not be threatened with changes in technology that take away their jobs. The current economic system cannot handle this situation and leaves the unemployed with no income and severe economic hardship. For that reason the current economic system resists change. An example is the renewable energy industry replacing the coal fossil fuel energy industry. However in Cosmic Accounting if a new and better technology comes along that does render a job obsolete then 'the workers' are still covered as they still have an automatic income from the 'solar system'. It is by this method that Cosmic Accounting will free society to move with the times.

\* Cosmic Accounting would support families to look after their own. It would support young mothers to look after their babies rather than having to go out and 'earn a living', and it would support relatives to look after their own sick or elderly family members.

\* People will have time (and the energy and the power) to devote to the things that they think are really worth doing, rather than just competing in the commercial market place for a job and an income (earning a living).

\* Financially desperate people will not have to engage in 'dodgy behaviour' to gain an income – there will be no financially desperate people.

\* People will have time and resources (power) that they can devote to worthwhile projects that don't necessarily 'make money'. For example people could devote their free time and resources to childcare, looking after the elderly, looking after the environment, beautification, craftwork, play, healthy sport, physical activity, cooking, researching history and creative invention.

\* Everyone will have time away from the stress of commercial battle so that they can nurture themselves, others, and the planet. People could be fit and healthy.

\* Male – female relationships might be less stressful as 'money' is commonly recognised as a primary stress between couples.

Obviously a very good thing about Cosmic (Energy) Accounting is that the energy society uses to power all of its activities will come from renewable energy that is 'clean and green'. This means no longer having to worry about the greenhouse effect, global warming and many forms of pollution. Humanity could live within its means (its solar energy income) rather than spending its solar savings account (fossil fuels) or disintegrating its planetary equipment (disintegrating rocks such as uranium and thorium, otherwise known as nuclear fuel) for energy. The planet's environment will be looked after. Humanity can be sustainable.

A good thing with this system is that people will have the opportunity to socially co-operate and organise and express their care for the community in a very focussed and clear cut manner – by organising the building and operation and maintenance of renewable energy facilities.

Cosmic Accounting is so good because of the combination of its few central elements (i) making kWhs the currency, combined with the generation of massive amounts of (ii) renewable energy as a (iii) community or social effort that (iv) can afford to give to every individual an equitable share of the real energy wealth.

## **How to Introduce Cosmic Accounting**

It may seem very difficult to introduce a new economic system and currency especially when the entire world is geared to the existing system. However the nature of Cosmic Accounting is so different that it can be introduced and interlaced with the existing system without causing a direct disturbance. All that is required is for people to have their own energy 'bank' accounts.

If we want to bring in zero emissions green power very quickly then a very quick way to do this is for a focussed society of people (acting in co-operation) to establish its own renewable electricity generating and retail organisation that gives the power away. There are ideas of how to cover the establishment and ongoing costs of such an operation.

I don't think the Government is representing 'we the people' therefore we cannot wait on and rely on the government to introduce this system; therefore, 'we the people' are going to have to do it ourselves. We are going to have to pool our resources (somehow) to form a green energy generating retail organisation. To make kWhs the currency it makes no sense to apply some other value to it. One can't say for example 'twenty dollars worth of electricity', because the dollar system no-longer operates. Therefore the price of the electricity has to be zero dollars per kWh. Then 1kWh of electricity is worth 1 kWh. This is truly a valuable value and just as nature intended.

Now at a price of zero dollars per kWh the supply to each person is going to have to be finite, otherwise at this (zero) price people can afford an infinite amount of electricity, and clearly the 'system' cannot supply an infinite amount of electricity. The equitable way to limit and make finite the power available to each individual is to make available to each individual an equal share or equal dividend of the total amount of renewable energy captured across the society per period (say per day). This allocation could be done by computer so as to take the easily corruptible human element out of it (or at least to put the human element at arms distance so that it is more transparent). Every time a person receives Cosmic Green energy it is in effect issuing the currency.

#### On the supply side

Build central solar power stations and give the solar generated electricity away across the grid. The cost of an initial project is about AU \$60M. Australia is the right place to start this new system as we have so much sunny area.

#### On the receivers side

Issue people with Electricity Credit Cards, these cards will keep track of the energy credit available to each individual at any given time. These cards must be tied in to the electricity grid network via computers and electricity meters (smart meters) that keep track of the flows of electricity (energy bank account balance) associated with each individual. An idea to raise money for the above described solar power station is to start issuing dummy versions of the Cosmic Card. People could pay a certain amount for their cards and the income from this would be pooled. Eventually there would be enough money to afford to build a real solar power station, then people could be issued with real Cosmic Credit cards so that then they could start receiving their daily renewable energy credit income.



A proposed design for a Cosmic Accounting debit card

### **Underlying factors that support the idea of Cosmic (Energy) Accounting:**

#### **\*Solar Energy**

By using 'Kaneff Solar Dish' technology an area of less than one-thousand square kilometres (in Australia's sunny desert) is all that is required to power all of Australia's current electricity needs!

#### **\*Energy Storage and Battery Technology**

The technology keeps developing in this area. More and more it will be efficient and affordable to store energy. Already the current methods of energy storage are good enough.

#### **\*Not having to work**

Already developed mass manufacture and highly automated industry means that a great deal of production is carried out by machines. Society no-longer requires a great army of workers to achieve material production.

#### **\*The Electricity Transmission Grid**

See: [www.geni.org](http://www.geni.org)

#### **\*Other forms of energy**

Now clearly in our society there are other forms of energy other than electricity and these other forms of energy can specifically be narrowed down to coal, oil (petrol, heavy diesel and light diesel), natural gas, and kerosene for aircraft. The first of these to exit from the equation is coal for coal is almost exclusively used for making electricity and this application will simply be displaced by renewable technologies such as solar and wind. The next to consider is the role of oil in society. Now oil needs to be eliminated as a fuel source for when burnt, oil liberates greenhouse gases. Fuel products similar to oil can be fabricated using the hot heat of concentrated solar energy and these products would be greenhouse neutral. It would be possible to calculate and determine an equivalent cost of these solar synthesised fuel-oil products in terms of kilowatt-hours. For example it could be worked out the equivalent amount of kilowatt-hours that could be produced by that concentrated solar sunshine if it had not been used to synthesize the fuel product. This would give a realistic conversion rate. For example it might work out that one litre of solar synthesized fuel oil equals eighty kilowatt-hours.