

Novel Ways of Funding Basic Income

The Cosmic Accounting Economic System

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The problem with BI is where to find the money on a sustainable basis to fund the continuing dividend to the community, especially at a generous level.

This is a problem because at present, with the current economic system, it will be necessary to extract money from the current economy somehow. This will be difficult to start with. People are always resistant to taxes for example, and any system will be hard to sustain and maintain as different political forces hold sway through various periods of time. The other main difficulty is the plain dependence upon the existing economy (and its strength) to extract money from for distribution, for the existing economy is a system that is dependent upon resource exploitation in many and various forms including of the environment, and of labour (underpaying workers). If the social wage, the basic income, is sucked from this existing economic system, then it almost legitimises continuing on with the current extractive and very inequitable economic system. Even the best example of BI, in Alaska, is dependent upon extraction of fossil fuels and their associated increase in greenhouse gasses in the atmosphere.

‘Cosmic Accounting’ is a wholly another way of putting together an economy and it offers a very different pathway of providing an income to everyone on a fully sustainable and environmentally friendly basis.

Cosmic Accounting as an economic system is comprised of three central elements:

1: The unit of exchange becomes energy — the currency (money) becomes a unit of electrical energy—kilowatt-hours or kWh•

2: The price of goods and services literally becomes the amount of energy taken to make the good or perform the service.

3: Everyone receives an *equitable* income of *free* money (kWh) every day. This energy is collected from the sun via renewable energy collectors. This energy is collected on a society-wide - or community basis with large community-owned renewable energy installations. The total amount collected in a day (24 hours) across the society is calculated. This total amount of energy is then divided equally by the number of individuals in the society, and then everyone is given an equal share of this real energy wealth.

You could say that everyone is boosted with an equitable amount of ‘SpendingPower’ or ‘Monergy’ every day. This monergy is distributed through the electricity grid/network and accounted for via distributed energy meters that communicate with a central co-ordinating computer.

In the fullness of time this social arrangement could be applied to the whole Earth.

- The total amount of renewable energy collected on Earth each day is determined (using energy meters logging the data off the globally distributed renewable energy collectors and sending this data via the Internet to a centralised tallying point).
 - Every individual on Earth is freely credited (given) an equal share of the daily global renewable energy income via a globally connected electricity grid/network as promoted by GENI (Global Energy Network Institute). GENI was established in 1986 and is active promoting this idea around the world.
 - A computer readable plastic card will access your current energy credits. The card will be used in purchasing transactions (akin to a debit card).
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- All technological processes for producing goods and services around the world will be assessed for their energy cost^{*}. From this information it will be possible to determine the services and commodities you can afford with your current energy credit balance.

This system is democratic — one-person = one-vote = one-value — a global democracy of shared bounty from the sun. This system literally gives ‘power to the people’.

Consider; energy is real wealth. Energy heats your home, cooks your food, transports your goods, builds your buildings, and lights your buildings. Energy powers education and health care, powers the manufacturing processes, and powers recycling.

Look up at the stars at night and see the massive abundance of energy in the universe—billions of galaxies! Look at our Sun. All the energy that humanity uses in one year is a tiny percentage of the solar energy that arrives on Earth each day.

Now with the development of high technology (thanks to the efforts of millions of humans over thousands of years), humanity can harness and channel this physical energy wealth in a myriad of beneficial ways, to give humanity access to incredible material abundance, social freedom and relative ease. Technically, ‘engineeringly’ the universe can afford to have all humanity living at a very high standard of living.

The first place for an individual (or family) to start spending the initial trickle of free renewable energy that they receive for free would be in their own home on their normal electrical appliances and normal electrical power demand such as their refrigerator, electric kettle, cooking and possibly heating and cooling. Because of the ‘smart’ electricity meter that can communicate to a central computer via modem, the system would be able to track when that individual or household had used up their credit—that day’s free credit of renewable energy. Being able to receive free

^{*} It is possible to determine a specific energy cost for the manufacture of a product. By adding up all the energy processes involved in collecting together raw (or recycled) materials and processing them into a finished product, plus any transport energy necessary to move the product from the factory to your local shop. Also included would be the energy cost of establishing and maintaining manufacturing

solar/renewable energy would be an encouragement and incentive for people to enter this scheme and help it grow. That would look like installing more renewable energy generators that can capture more energy that could be distributed equitably to everyone. As the system grows the basic income that everyone receives would grow and grow. This could lead to everyone being very well off.

In the CA system, like everybody else in society - the owners and the workers in factories and industry would start to receive their free energy income of real-wealth energy currency every day. Over time these people would start having to not worry so much about gaining profit from their factory produce to provide income, for they will already be receiving an income from the solar electricity system. It follows then that industry could start charging the true energy cost of products (without having to put a profit margin on top), and thus progressively start up the Cosmic Accounting system in terms of making the cost of products the exact amount of energy involved. This will move society toward working for the pleasure of working, rather than working because they have to. An aspect of Cosmic Accounting is that people will no longer have to work for a living. A quote from Buckminster Fuller, the eminent American thinker and scientist sums it up.

Never again will what one does creatively, productively and unselfishly be equated with earning a living. People's sense of accomplishment will derive from showing their peers that they vastly enjoy doing their best in the unselfish production of service for others, rather than just the survival needs of themselves and their families.

Buckminster Fuller
Critical Path (1982) p. xii

The above point is critical and points out a viable, possible, pathway to the beginning of CA.

plant, and the energy cost of providing comfortable working conditions for staff—lighting, heating and cooling, i.e. 'cosmic cost accounting'.

In the following a specific project is outlined that would be a step and a start to beginning a Cosmic Accounting version of Basic Income in Australia.

PROPOSAL: Whyalla Solar Oasis Project

(Whyalla is a small city of 20,000 people located in sunny South Australia and adjacent to the coast. Whyalla is connected to Australia's extensive electricity grid that connects most of the capital cities).

The idea of Cosmic Accounting goes only so far... it presents and opens a possibility of a new economic system and a new vision for humanity. However something that is also needed is a path and an access to the new system.

Importantly as a place to start, it is proposed that a specific physical project be undertaken that will move Australia and the world toward the Cosmic Accounting system.

The project idea is to build a large-scale solar power station based upon the excellent mass solar energy collection technology 'Parabolic Dish'. Then with the electrical energy that is produced - provide it freely and equitably to people/homes across the Australian electricity grid, according to the parameters and arrangement of the Cosmic Accounting 'economic-accounting-social-technical' system .

The parameters of the proposed solar power station are as follows,

- A solar farm – an installation of 200 parabolic solar collectors, arrayed somewhere in the sunny desert, feeding energy into the main electricity grid
- This solar farm producing on average 160 MWhs (Mega-Watt-hours) of electrical energy per day, enough for about 20,000 people/10,000 homesⁱ
- Plus a large saltwater desalination plant to make large quantities of freshwater. (The desalination plant makes use of the left over energy from the solar-electricity plant).

From thorough technical investigations it is known that a parabolic dish solar power station that is based upon these parameters will cost about AUD \$70 million dollars.

The proposal is to form a large, loosely co-operating body – say 10,000 people or groups - to contribute the money to build this plant. On average, that would be \$7,000 per contributor. Some individuals or groups may be willing to put in say \$100,000, or even a million dollars. Therefore other individuals or smaller groups may only need to put in say \$100 or \$1,000 - the combined varied input from the many contributors totalling to \$70 million.* If these many people were to agree to contribute the money – \$70M – to build the solar power station and give the power away, that would be great, and obviously it would be an expression of ‘the people’ and it would be an expression of co-operation.

In *Cosmic Accounting*, a design science revolution is spoken of; this is a positive, build-up, technical revolution, as opposed to a negative, breakdown, and political revolution. This proposed project would be the start of this positive design revolution towards, in general, the beginning of the Cosmic Accounting economic system, and in particular the establishment of large-scale solar energy collection in Australia.

There are ‘first things first’ aspects of this project.

A first thing it will take for this initiative to start moving is to discard the disbelief that 10,000 people won’t sponsor a scheme that does not produce a financial return.

Then it will take organising to find those people who are willing to contribute.

And it will take believing that it is possible to get over all the other potential hurdles.

The Cosmic Accounting book (Malcolm Greenstuart, 2001, Pigtail Publishing) is the first step to find those people willing to contribute to this proposal, as the book outlines the very attractive possibility and wonderful outcomes that are associated and naturally delivered with this system.

* It is unlikely this money would be government money as government money is not an expression ‘of the people’ in as much as people have no choice to pay their taxes, and then have limited control as to where government/tax money is spent. Corporate money would be acceptable without the strings attached.

Obviously the proposal is a sponsorship, and not a traditional investment, as no one will receive a monetary return on the money contributed. However the return will be:

1. The building of a wonderful, big, solar power station and hence the beginning of mass solar energy collection in Australia
2. The starting of the primarily co-operatively based, Cosmic Accounting economic system
3. Some people/homes in Australia will start to receive free electricity – those who have ‘smart electricity meters’ that can be computer logged for energy consumption. The electricity from the solar power station will be equally divided amongst those who have smart energy meters. Those sponsors of the project who have (or install) ‘smart meters’ will themselves receive free electrical power

From this initiative, generally and progressively, more people will start to receive free electricity, and further mass renewable energy collection could be achieved.

This effort could quickly move Australia toward sustainability, and it would inevitably attract mass-media interest. That will be an opportunity to let more people know about the Cosmic Accounting system and idea, and thus help to progressively bring this system along.

ⁱ The amount of energy per household:

160 MWh divided by 10,000 (households or subscribers) = 16 kWh of electrical energy available per household per day (on average, depending on the weather and the season). A small to average household might use about 5 – 10 kWh per day. Therefore, from 16 kWh of energy available per day, there is plenty.

For reference: One kWh of energy is the equivalent of an electric clothes iron left ‘on full’ for one hour.

Also one kWh (kilo-Watt-hour) of energy would power an energy-intensive ‘fast boil’ electric kettle for ½ an hour. The power demand of this type of electric kettle is about 2000W (2000Watts = 2kW and $2000 \times \frac{1}{2}$ (hour) = 1000Wh or 1kWh). [Energy = power rating × time]

And one kWh of energy would power a television ‘on’ for about ten hours (power demand = about 100W).