



SolarCoin - Fact Sheet

Mainstreaming Solar Energy with Prosumers through Digital Assets: SolarCoin.

"SolarCoin is like airmiles for global solar electricity producers" Joseph Zitoli, SolarCoin Foundation.

SolarCoin (www.solarcoin.org) is a global solar rewards program acting independently and additionally to existing Government-backed subsidies and for a period of 40years. SolarCoin is a Digital Asset created as a means to reward solar energy generation and solar energy producers (both PV and CSP) and incentivize for further solar growth throughout the world. SLR are granted at the rate of 1SLR per MWh of solar power produced. SolarCoins have been granted to solar power producers in 68 countries with over 11.000.000 SolarCoins granted – enough to power the city of Barcelona and its 2million inhabitants during one year.

SolarCoin is a Low-Cost Low Carbon Blockchain for transferring both data and value: ie SLR, Carbon Credits, kWh data and Geolocation... The tools developed with the SolarCoin Community are open source and open-licence, the aim is to allow for using the SLR Blockchain as a Standard Solution in the Solar Industry for Benchmarking, as well as providing a New Monetary system based on proven “Solar Energy” as opposed to gold or debt.

Low Cost Solution :

SolarCoin uses a transaction fee of 0.0001 SLR per transaction, much less than Bitcoin or Ethereum, currently using up to 0.15USD for a single transaction. Additionally, SLR Blockchain can process 20 to 25 times more transactions than the BTC Blockchain ; further, any developments to the BTC Blockchain in increasing speed and redundancy would also be beneficial to SLR.

Low Carbon Solution :

The SolarCoin Blockchain is based on PoSt Algorithym, hence fairly easy to distribute with participants (ie: participants can act as a node ie validator in the SolarCoin Blockchain simply by downloading the SolarCoin Wallet) ; this comes in sharp contrast to the Bitcoin and Ethereum Blockchains (and other PoW Blockchains) which require participants to use Servers (and "mining equipment") to participate as a node-validator and hence require lots of energy.

Blockchain Technological Improvements:

- SolarCoin uses Blockchain Technology with a more carbon friendly algorithm ie using a POST vs. POW for Bitcoin. SolarCoin more than 10.000x more efficient than Bitcoin. While taking an estimated 11 KWh for Bitcoin to process a single transaction at peak efficiency. The SolarCoin Energy Model shows that the SolarCoin Blockchain uses less than 0.01% of the BitCoin Blockchain’s energy to perform an equivalent transaction:

https://docs.google.com/spreadsheets/d/1QzIA5Nd3pVRGn2c48Oc_dqplmrOfYlwp74UzHXjArdE/edit?usp=sharing

- SolarCoin can be more democratically distributed, with no need to “mining” coins such as with large server infrastructure. By opposition, SolarCoin runs under a wallet application sitting on the Desktop of a computers Operating System,
- Wallets available under the [Coinomi](#) application for +1 billion phones rapid deployment (Android, iPhone...) – 3min setup process,



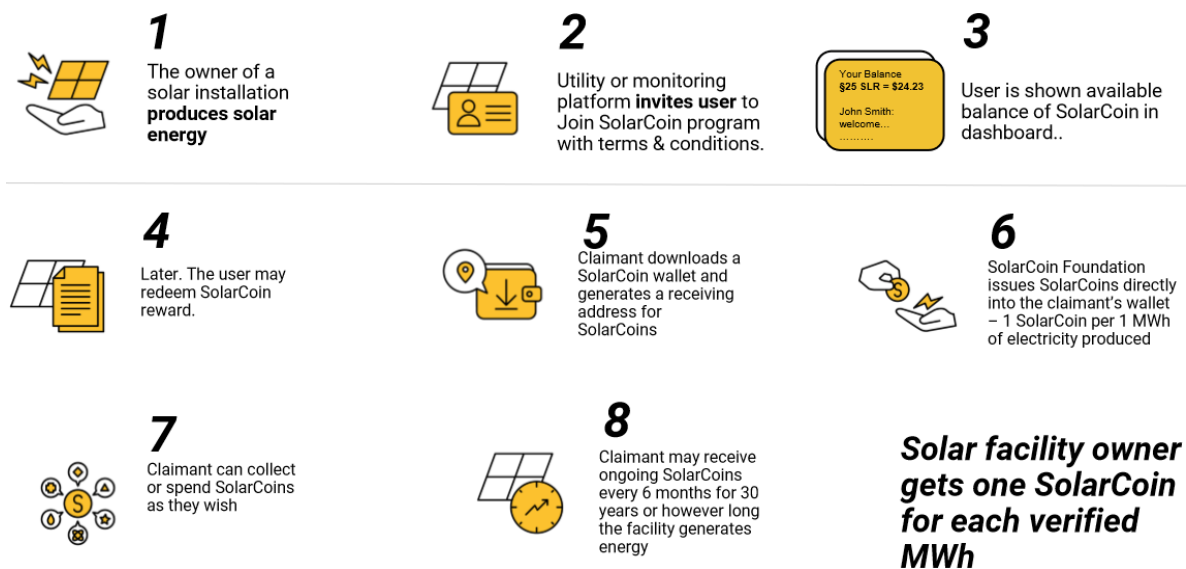
- SolarCoin uses its own Blockchain (ie: it is not an ICO or ERC20 – Ethereum derived token) and hence considered as a Commodity. The blockchain explorer is available at <https://chainz.cryptoid.info/slr/>

Impact:

- Global,
- SolarCoin is a Digital Asset benefiting the entire Solar Value chain: ie the Solar Industry, Asset Managers, PV Owners and Prosumers, Solar Monitoring Companies, EPC's/O&M companies, Utilities and Grid Operators, National Governments, NGOs and supra national institutions, world central banks, and aims to initiate and accelerate the global uptake of Solar Power at a Global Scale and initiating the Global Energy Transition.
- Data Layer: the SolarCoin Blockchain can be used on its datalayer to relay information on a PV system, allowing for Standardization and Benchmarking (PR ratios, V/A/kWh etc),
- Money layer: the SolarCoin Blockchain acts as a means to convey value between parties (SolarCoins, Carbon Credits etc.)

Deployment:

- SolarCoins can be claimed individually by solar power producers with Grid Connection documentation and datapoints required are as low as 2 datasets per year,
- Open-Source tools built up by the SolarCoin Community and Affiliates and made available to the Solar Industry:
 - o Granting APIs (both dynamic and non-dynamic), for solar monitoring platforms,
 - o Script for inverter and datalogger manufacturers,
 - o available and deployed with solar monitoring companies and inverter-datalogger manufacturers for rapid deployment such as with SMAs Sunny Portal and Smappee,
- Dozens of Affiliates to the SolarCoin project are deploying across the world. Affiliates help solar producers register to the SolarCoin program and adopt-adapt the SolarCoin tools (ie. online wallets, blockchain technology, consultancy...) Any solar company may register as an affiliate to the SolarCoin program and earn SLR for free,
- Validation mechanism adapted and validated with the SolarCoin Community, SolarCoin Foundation and Affiliates:





Resources:

- 90 second video on SolarCoin: <https://www.youtube.com/watch?v=OmouEif05IA>
- 5 minute video explaining where SolarCoin gets its value from: Nature of Currency; a theory of network value: https://www.youtube.com/watch?v=_WD3HW6l6gc
- Webinar series on SolarCoin: https://solarcoin.org/en/news/webinar_innovation_series_-_focusing_on_blockchain_and_solar
- SolarCoin prices can be tracked here: <http://coinmarketcap.com/currencies/views/market-cap-by-total-supply/>

Media:

- **IRENA:** <http://www.irena.org/newsroom/articles/2017/Dec/Building-innovation-networks-to-transform-the-energy-landscape>
- **World Economic Forum:** <https://www.weforum.org/agenda/2018/09/5-ways-blockchain-can-transform-the-world-of-impact-investing/>
- **GTM Market Research:** <https://www.greentechmedia.com/articles/read/new-entrants-fuel-energy-blockchain-ecosystem-growth>
- **UN Development Program – UNDP Moldova:** <http://www.eurasia.undp.org/content/rbec/en/home/blog/2018/here-comes-the-sun-to-relieve-you-from-the-burden-of-electricity.html>
- **Reuters:** <https://www.reuters.com/article/us-renewables-tech-moldova/cryptocurrency-may-light-up-renewable-energy-in-moldova-idUSKCN1I12CV>
- **LeMonde:** https://www.lemonde.fr/economie/article/2018/05/17/le-solarcoin-une-cryptomonnaie-alternative-100-solaire_5300403_3234.html?utm_medium=social&utm_source=twitter
- **PVTech :** <https://www.pv-tech.org/guest-blog/solarcoin-incentivising-solar-pv-energy-production-through-blockchain-innov>
- **SolarPowerEurope:** https://solarcoin.org/index.php/en/news/european_solar_association_solarpowereurope_launches_digitalsolar_report