Enabling Prosumers to participate into the Energy Transition
SolarCoin
- European Utility Week
- Amsterdam
October 2017
What is a Blockchain?

**A Database**

- A Blockchain is a **Database** for a specific use where EVERYBODY who participates owns a complete copy of it locally.
- No master Blockchain and no central authority for an open Blockchain
- Verification at each stage (every minute) for SolarCoin increases security as “stakers” must verify and exclude the wrong transactions when making a new block, stakers and participants who have the Blockchain must verify a new block when synchronizing.
- Some technology examples:
  - voting, sharing, renting, land register, notary deeds, DAO, BitCoin, Ethereum, Government departments....
- R3: Big Banks Consortium developing Private Blockchain for Back Office purposes (Clearing, Settlement and Custody), trading...
- Private Blockchain
- Public Blockchain vs Side-chains
- Existing Government Subsidy Schemes for solar energy are inadequate
- Access to finance for small and large-scale solar projects is difficult
- Pollution levels worldwide are on the rise (particulate matter PM2.5 and PM10, Nox...)

Source: European Commission

More info:
www.plumelabs.com
www.aqicn.org
www2.prevair.org
**Solar Industry**

- 300GWp at end 2016 vs 7GWp in 2006
- 7 million Solar Facilities worldwide
- Increasing to +200million (household) according to IEA and BNEF figures and 5500GWp by 2040
- Trends in target market, growing 20-35% p.a
- Zero knowledge proof and trustless data for a sector that really needs innovation. (Energy/Utility sector)

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**Market Indicators**

- **7 million solar generators in the world**

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**PV vs CSP**

![Graph showing PV and CSP growth over years](chart.png)

**GLOBAL HORIZONTAL IRRADIATION**

![Map showing global solar irradiation](map.png)
Market Overview
“ElectraSeed” based on Swarm Electrification

In-home optimization & accounting for
- adaptive pricing

Local marketplace for P2P exchange
- incentives for O&M

source: https://www.power-blox.com/
SolarCoin works like a global airmiles reward program for solar energy producers; counterintuitively the more people claiming those airmiles, the more they are worth in $'s. Registering is done at www.solarcoin.org

SolarCoin is at the basis of a virtuous circle in creating value into the solar energy industry and economy
Comes on top of Government-backed subsidies
Coupled to Carbon Credits
SLR Blockchain is POST, uses 3% of Blockchain energy and stakes at 2% interest
How can you get involved

• **Solar Producers**
  - Register your installation to start earning Solar Coins
  - Track Solar Coin prices and trade them on public Exchanges.

• **Solar Installors**
  - Get solar producers to register and claim their SolarCoin and get up to 5% of these SolarCoin
  - Distribute SolarCoin-ready dataloggers and inverters.

• **Solar Manufacturers**
  - Embed SolarCoin technology in your Hardware
  - Get it certified by SolarCoin Foundation
  - Include this as a value-added feature
Claiming SolarCoins

1. Three steps:
   - Validation of solar energy produced
   - Integration through monitoring platform, inverters, dataloggers
   - SolarCoins granted to SolarCoin Wallet
   - SolarCoins circulated within the solar industry/montized with Lykke

2. Change Platform

3. Lykke
The SolarCoin ecosystem

The ElectriCChain is a global platform to accelerate the growth of solar energy, IoT and Blockchain data technology with impacts ranging from the heights of commercial space and climate change research, to the micro-generation & finance in Africa.

SolarCoin is like a free (!) airmiles reward program for solar generators and given at the rate of 1SLR/MWh. The SolarCoin Foundation aims to power the 3rd Industrial Revolution with clean, cheap solar energy, leaving a better world to future generations.

SolarChange is a web & mobile platform working with the SolarCoin Blockchain in incentivizing and enhancing the use of solar energy worldwide. SolarChange presents smart solar energy monitoring, providing verified, multi-sourced, smart insights and predictions, for a variety of applications: from residential energy efficiency, to grid-scale energy management. SolarChange is integrating the IBM Alpha Zone Accelerator program.

Solcrypto acts as Claims Facilitator to the SolarCoin Foundation over the Asia-Pacific region and as a peer-to-peer broker for SolarCoin trades. Solcrypto also provides the bulk of engineering resource for the ElectriCChain projects.
Solcrypto Datalogger

Internet of Things (IoT) Datalogger method that connects to the Blockchain. The device then sends production data to the corresponding user account, then the affiliate site logs this and uses an API to get claims from the SolarCoin Foundation.

Separately, an blockchain records data IRT. Reflects to SolarCoin blockchain/ElectriCChain: 3nodes
Solcrypto Datalogger

Solar panels → Data loggers & monitoring → Data Collection → Data Aggregation & digestion → Users

SUN → Solar panels → Data loggers & monitoring → Data Collection → Data Aggregation & digestion → Users

SolarCoin Ecosystem
- Grovel (2014): 7 mio
- Gobal (2030): 200 mio
- > 50 OEM

1 platform
3 data layers
- Solarcoin: 15 min
- Ethereum: 1 min
- IOTA: continuous

New business opportunities
- TSO
- DSO
- Energy companies
- Meteorologists
- Smart grid
- Energy as a Service (EaaS)

ElectricChain

Information flow

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Crowdfunding solar installs with Bitcoin anywhere in the world

Being rewarded in SolarCoins as additional incentive to initiate the Energy Transition
Thank you for your Attention!

- **Francois Sonnet** - Solar Consultant, Based in Andorra, Advisor to SolarChange & SolcryptoJV and Co-Founder ElectriCChain


- **Christopher Altman** - NASA-trained Astronaut, Based in San Francisco, CA, Advisor ElectriCChain and Chief Scientist SolarCoin Foundation

- **Nick Gogerty** - Financial Analyst, Based in Greenwich CT, Co-Founder SolarCoin Foundation, expert in Financial modeling and Macro-Economics

- **Richard Olsen** - Financial Expert, Based in Zurich, CH, CEO Lykke Corp and Co-Founder OANDA Forex, professor at the Centre for Computational Finance and Economic Agents at the University of Essex

- **Alex Raguet** - Renewable Energy Financial Expert, based in La Rochelle, FR, CEO at Lumo-France and President of the European Crowdfunding Network ECN

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Check out the SolarCoin Foundation website at [www.solarcoin.org](http://www.solarcoin.org) and ElectriCChain at [www.electricchain.org](http://www.electricchain.org) and affiliate websites [www.solarchange.co](http://www.solarchange.co) in EMEA&Americas and [www.solcrypto.com](http://www.solcrypto.com) in APAC regions

Register your solar installation with the SolarCoin Foundation and trial-test your SolarCoin Wallet at [www.solarcoin.org](http://www.solarcoin.org)