Towards A Closed Loop transaction involving non-Solar Goods/services

A SolarCoin Use-Case

<u>April 8, 2018</u>

D Allan Gray - <u>allan.gray@sunEtrike.com</u>

Intro

To date, SolarCoin based use-cases have generally involved solar & energy industry participants. These Use-Cases tend to be unidirectional in that a transaction only has a sale going in one direction. This is not a sustainable situation as the seller is accumulating coins which cannot be used to acquire goods/services.

Use-cases which involve the broader Physical Goods economy still tend to be elusive. The following Use-Case will attempt to bridge that gap by distributing vitamins to communities classified as in "Extreme Poverty" (Less than \$1.25 per day). This Use-Case will help to address two of the UN's Millenium Development Goals:

- 1. Eradicate Extreme Poverty and Hunger
- 2. Reduce Child Mortality Rates

This Use-Case describes a multi-step series of SolarCoin transactions involving multiple stakeholders:

1. A solar generator anywhere in the world who produces a fixed (and seasonally varied) sum of SLR coins.

- 2. A solar developer/installer who is active in the local industry (whose compensation model is directly tied to the roll-out of additional solar capacity)
- 3. A distributing agency (most likely non-profit or public health institution) who is already engaged in addressing the MDG goals above.
- 4. A Community in Need (as defined by the Millenium Development Goals)
- 5. A vendor of products who has aspirations to become a Solar generator

Use-Case Diagram



Users

This use-case is attractive to all stakeholders based on the following assumptions about those stakeholders.

<u>Coin Generators -</u> Coin Generators are groups/individuals with existing installed solar capacity who have already registered the facility with SCF.

- They receive coins as per their installed capacity. They may have a seasonal flux in their solar (coin) production.
- As per the mandate of SolarCoin Foundation, the main intention of SolarCoin is to incentivize the installation of more solar.
- Except in cases where the generator seeks to increase capacity, an existing generator's goals are not directly aligned with the goals of SolarCoin. In a competitive energy market, more solar = more supply & competition (ie lower prices).
- A Coin Generator is not expected to "Want" a SLR in the future because the primary intention of the solar was probably installed to REDUCE expenses on existing consumption OR generate Cash-Flow
- At this time, their coin value carries no intrinsic value to anybody operating in the "Physical Economy" (as opposed to the "Paper Economy" that is occupied by investors and speculators).
- On the other hand, it is easily converted into other crypto-currencies (and fiats).
- At current prices, SolarCoin does not contribute in a meaningful way to the profitability of a generator.

<u>Solar Installers/Developers -</u> This group is in the business of putting up new generation capacity.

- This group has a clear and direct profit motive to roll-out additional solar.
- As such, they are the most obvious agents for rolling out the Goals of SCF.
- It is to the installer's benefit to put and keep SLR in circulation.
- An installer would be among the early parties willing to take SLR as payment for their services
- During permitting processes, etc med to large scale developers have certain community relations tasks that may be facilitated by channeling SLR to Communities in Need

<u>Communities in Need -</u> Defined as an average income of less than USD1.25 per day.

- These communities lack basic resources, infrastructure and nutrition.
- They are often in very remote locations.
- Interactions with these communities is difficult and it is not always clear where they feel that aid is best placed
- Pregnant women require additional dietary supplements, timely access to those supplements can improve child mortality rates.
- The timing of a woman within a community becoming pregnant is unpredictable.
- Most economic products generated within the community are agricultural (subject to seasonality/spoilage) or artisanal (limited market scope)
- There is a communication mechanism available (ie SMS) which would permit redeeming a paper wallet loaded with SLR coins for the goods/service requested

<u>Distributing Organization -</u> These organizations (ie hospitals, charity groups) are focused on social welfare and offer goods and services to the public. They are trusted institutions with active operations and budgets from which to distribute aid.

- SolarCoin should be an interesting & fun way for distributing organizations to give to Communities in need
- They should be able to leave a verified paper trail (ie reports & newsletters)
- Administering the need through SolarCoin should not place additional administrative overhead on the Organization. Ideally, this overhead is reduced

<u>Vendors Aspiring to Install Solar -</u> Vendors of the specific goods/services being offered as aid to the Communities in need.

- They occupy a physical location that would be compatible with a solar installation
- They are able to fill an order for products and ensure that they will reach the Communities in Need
- Accepting solar coin in exchange for their goods will get them towards a solar installation faster
- A well-implemented use-case would create new Coin Generators and Interested Vendors alike

Test Run

Coin Generators - The Solar Coin Community

<u>Solar Developer -</u> A&C Green Creations Philippines Corp (Registered Dealer of sunE trike)

<u>Distributing Organization -</u> Community Lighting At iba Pa (CLAP) project. A joint initiative between Rotary Districts 3820 & 3830 (Calabarzon and Makati, Philippines)

<u>Community in need -</u> Sitio Labo & Dayangdang (pop 250), Island of Mindoro, Philippines

<u>Vendor interested in Solar -</u> <u>St Frances Cabrini Hospital</u>, Santo Tomas Batangas Philippines (Tentative)

Sequence of Events

- SolarCoin Communities agrees to donation of Coins for vitamins to Community named above
- Developer makes proposal to Vendor (in Cash and SLR) for a solar installation
- Distributing Organization negotiates price (in Cash & SLR) for specified vitamin packages (including shipping/other details)
- Distributing Organization gives paper wallets to Community in Need gives pricing of vitamins in SLR & Php to Receivers (or representatives within Receiving community)
- As needed, the Community redeems its Paper wallet via SMS including public & private keys to Distributing Organization or Vendor
- Vendor books sale and delivers goods
- Upon appropriate SLR balance, Vendor contracts installer for the solar installation as per quote

Community & Project Profile

Sitio Labo and Dyangdang are both located in the Bansud Region of Oriental Mindoro. They have the following populations:

	Sitio Labo	Dyandang
Families	29	30
Students (male)	26	20
Students (female)	27	25
Total	130	125

Access: Walk-in only

Estimated average income: Php 1000/mo (USD20)



3820 – RC METRO CALAMBA, RC CALAMBA, RC CANLURANG, RC WEST-HAUJAN & CALAPAN, AND RC PINAMALAYAN CENTRAL 3830 – RC PARAÑAQUE SUCAT, RC PARAÑAQUE LAKAN-BINI, RC MAKATI AYALA TRIANGLE, RC LAS PINAS EAST, RC MUNTINILUPA NORTH, RC TAGRIE WEST AND DIE MAKATI SALEEDO