Cover

THE OPEN SOURCE ECONOMY

The most essential type of freedom *starts with our individual ability to use natural resources to free ourselves from material constraints.*

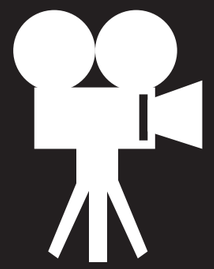
We envision an Open Source Economy *where innovation flows freely and openly so everyone has access to information on how to process raw materials into the life stuff of modern civilization.*

We commit *to giving as many people as possible access to know-how and the right tools so they can harness their environment's abundant raw resources for their own personal happiness and freedom.*

WHAT WE DO

DESIGN

DOCUMENT



TRAIN

BUILD ENTREPRENEUR NETWORKS

GLOBAL VILLAGE CONSTRUCTION SET

We are building a modular, do it yourself, low-cost, high-performance platform of the 50 different industrial machines that it takes to build a small, sustainable civilization with modern comforts. We share our designs openly by providing online documentation and hands-on trainings in machine fabrication and enterprise development.

GLOBAL VILLAGE CONSTRUCTION SET PACKAGES

Construction *Machinery*


Tractor


Backhoe


Loader


Bulldozer


Rotor


Chipper / Hammer Mill


Auger


Saw Mill


Soil Pulverizer


Cement Mixer


Well Rig


Brick Press


Micro Tractor


Power Cube


Trencher

Fabrication *Machinery*


Plasma Cutter


Drill Press


Press Forge


Iron Worker


Welder

Materials Production *Machinery*


Bio Plastic Extruder

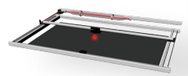

Aluminium Extractor


Induction Furnace


Hot Metal Rolling


Wire And Rod Mill

Precision Fabrication *Machinery*

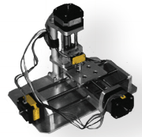

Laser Cutter


Hydraulic Motor


Torch Table


Multi Machine


3D Printer


3D Scanner


Robotic Arm

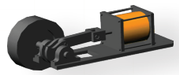

Lathe

Energy Production *Machinery*


Gasifier Burner


Solar Concentrator


Steam Generator


Steam Engine


Pelletizer


Wind Turbine


Nickel Iron Battery

Food Production *Machinery*


Bread Oven


Dairy Milker

Agriculture *Machinery*


Universal Seeder


Micro Combine


Hay Rake


Spader


Baler


Hay Cutter

Transportation *Machinery*


Open Source Car


Truck

Electronics *Machinery*


Universal Power Supply


Electric Motor


CNC Circuit Mill

MISSION

Our mission is to create an **Open Source Economy**: an economy that optimizes both production and distribution, while providing environmental regeneration and social justice.

VISION

- the elimination of material scarcity
- freedom for all
- the enabling of the human spirit
- the widespread adoption of the open ethic

INPUTS

Machine Designers

Design Software

Collaboration Tools
wikis, video chat, email, cloud docs

Metal Fabricators

Fabrication Shops

Entrepreneurs

Farmers

Farmland

Volunteers

Educators

ACTIVITIES

Machine Design

Design Prototyping

Open Source Documentation
videos, fabrication drawings, 3D models, manuals, etc.

Smart Mobs
global networks of technical experts collaborating online

Hands On Trainings

Design Field Testing

OUTPUTS

Training Materials

Field-Ready Designs

Curriculum

Enterprise Plans

Field Evaluations

OUTCOMES

Individuals and communities learn to build, use, and repair their own industrial machinery.

New businesses and jobs are created.

Local economies are strenthened and adopt more ecologically-sound practices.

Other people are inspired to grant their inventions to the public domain under the open source license for everyone's benefit.

Goals for 2013

Goal #1:
Become a World Class Social Enterprise

Strenthen Our Technical Design Processes

Streamline Prototyping and Production

Increase Remote Collaboration Opportunities

Deliver Next Level Documentation

Become a World Class Social Enterprise

from vision to institution

Become a World Class Social Enterprise

Solid Fundamentals

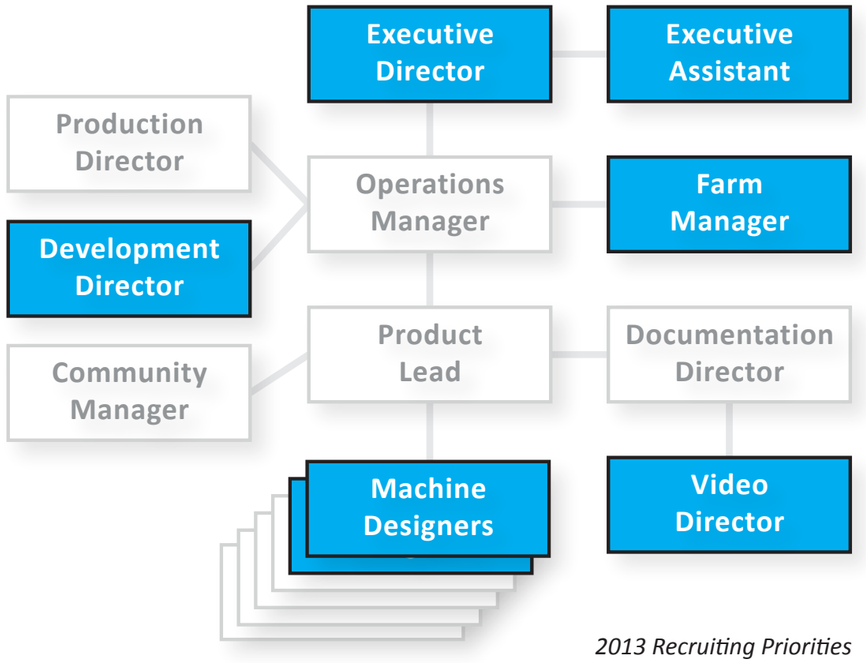
To clarify our critical path, we are publishing a strategic plan, deployment strategy, GVCS rollout sequence, and a clear value proposition with the help of an open network of advisors. We will also incorporate as a for-profit/non-profit hybrid social enterprise and develop processes and policies that stabilize our organization's fundamentals.

Goals for 2013

Planning - we are publishing a strategic plan, deployment strategy, GVCS rollout sequence, and a clear value proposition.

Legal Status - we have filed for 501c3 status, and we are developing plans for a for-profit branch that generates revenue for our charitable programs. We will strengthen our operations to ensure lasting organizational stability.

Business Models - we are testing the development of the first OSE enterprise at Factor e Farm in Missouri, and it will be documented to serve as a model for others to adopt throughout the world.



2013 Recruiting Priorities

Become a World Class Social Enterprise

Building Our Team

To coordinate our team, we will install performance management and quality control using transparent, online work logs as means to document, review, and plan team members' work product on a weekly basis. This turns into monthly and quarterly reports. We will also define quality control standards for production and refine an effective organizational ecology of Product Lead, Project Manager, Operations Manager, and others and figure out how to scale these roles.

Machine Designers - the core developers. We plan to expand from two to six by March 2013.

Product Lead - directs machine design effort.

Documentation Director - assures that documentation is produced alongside the development process and works with the Open Source Hardware Association on documentation standards.

Community Manager - facilitates remote contributions, coordinates volunteers, and recruits involvement in online technical collaboration sessions.

Operations Manager - handles all the moving parts by interfacing between the Executive Director and staff. The Operations Manager coordinates the interplay between machine design, machine builds, remote collaboration, and documentation.

Production Director - leads production and sales to generate earnings to make the operation financially self-sustaining financially.

Goals for 2013

Become a World Class Social Enterprise

Goal #2: Strenthen Our Technical Design Processes

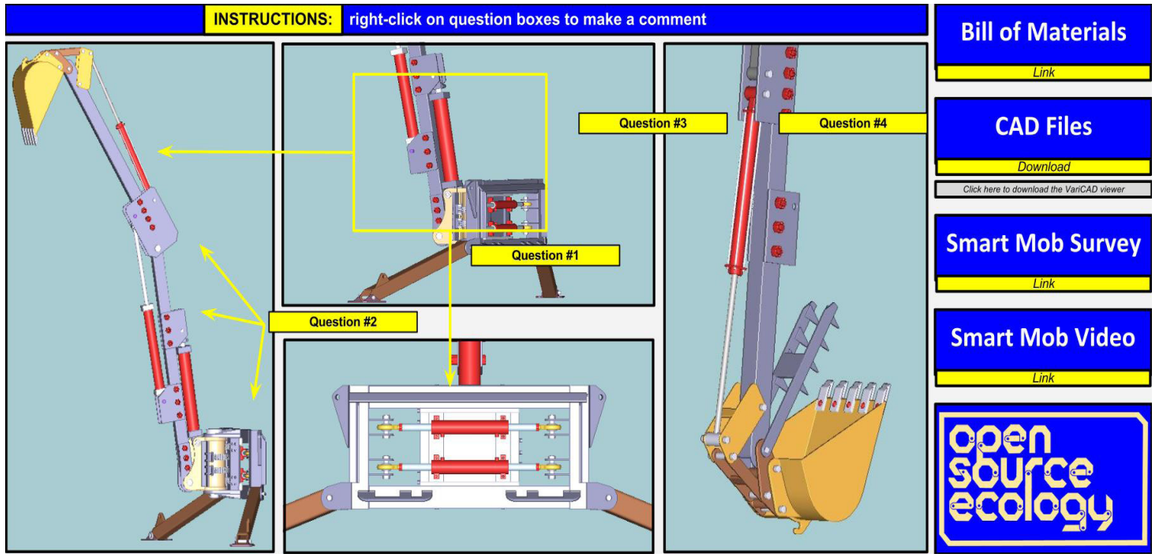
Streamline Prototyping and Production

Increase Remote Collaboration Opportunities

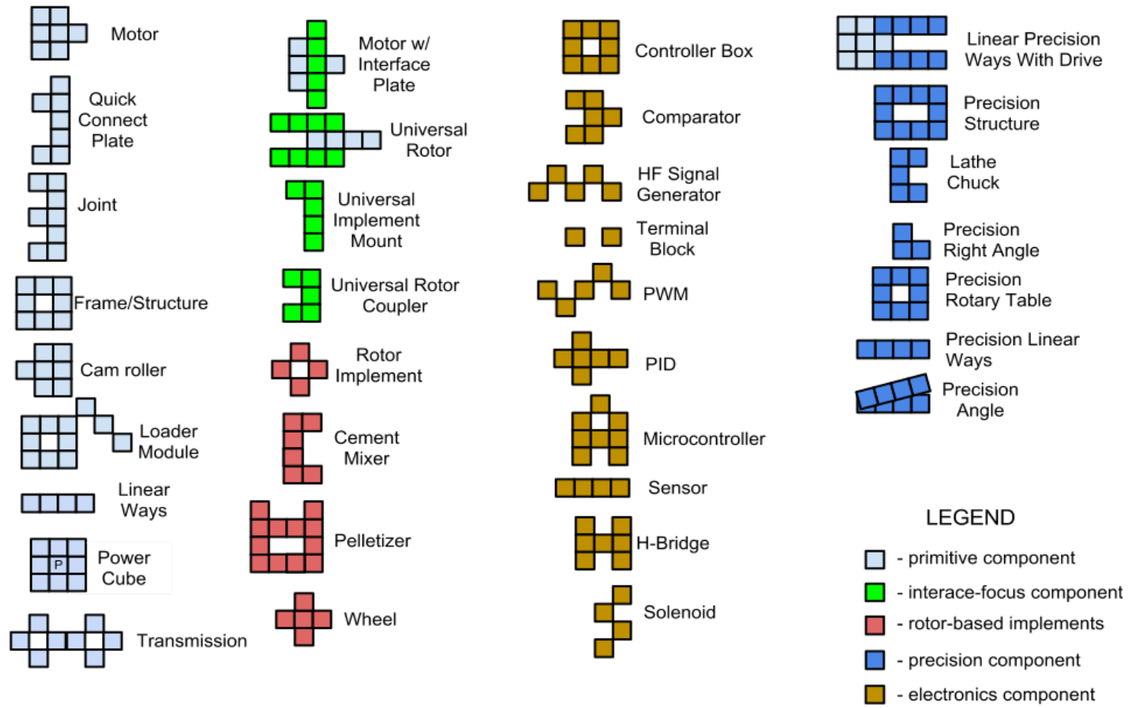
Deliver Next Level Documentation

Strengthen our Technical Design Processes

distributed design and collaborative review



Open source backhoe Smart Mob - November 2012



Strengthening Our Technical Design Processes

Collaborative Review

We are developing a platform for networks of subject matter experts to collaborate online providing technical review and strategy development. We are also recruiting a dedicated Technical Review Board for design review and fabrication optimization. This will add to our capacity to rapidly distill to the best industry standards, and modify them for our purposes.

Technical Review Board - we will continue to recruit high-level technical advisors to review our designs and help us develop strategy.

Smart Mobs - we use digital surveys to build databases of experts with various types of skills. We are building online collaboration tools so that we can call upon people with specific skills to help us rapidly solve problems as they arise.

Goals for 2013

Strengthening Our Technical Design Processes

Module Based Design

We are refocusing development strategically around module-based design – as opposed to machine-based design. It turns out that it takes about 13 modules to build any of the 30 mechanical GVCS machines. To this end, we are developing these 13 adaptable modules with attention to interfaces between these modules - to build a larger set of 30 tools. We are doing the same for electronics and precision machinery. This is a work in progress, and we plan to publish a white paper in 2013.

Mechanical devices - heavy equipment, cars, and various implements of agriculture, construction, and production.

Electronics and Power Electronics - from Arduino to electrical motors to Induction Furnace power supplies.

Hydraulics and Pneumatics - power delivery systems more flexible than mechanical drivers.

Automation - adding sensors and feedback to mechatronics constitutes automation systems.

Precision Drive - adding precision motion to automtion system makes devices such as CNC machines.

Metallurgy - metal melting, rolling, and casting constites the basis of the advanced civilization.

Materials - metallic ores feed metallurgy, and nonmetallic ores yield semiconductors, biomass converted to all organic chemistry including plastic and rubber, rocks turned into metals.

Optics - lasers, mirrors

Goals for 2013

Become a World Class Social Enterprise

Strengthen Our Technical Design Processes

Goal #3: Streamline Prototyping and Production

Increase Remote Collaboration Opportunities

Deliver Next Level Documentation

Streamline Prototyping and Production

Streamlining Prototyping and Production Runs

Prototypes & Production

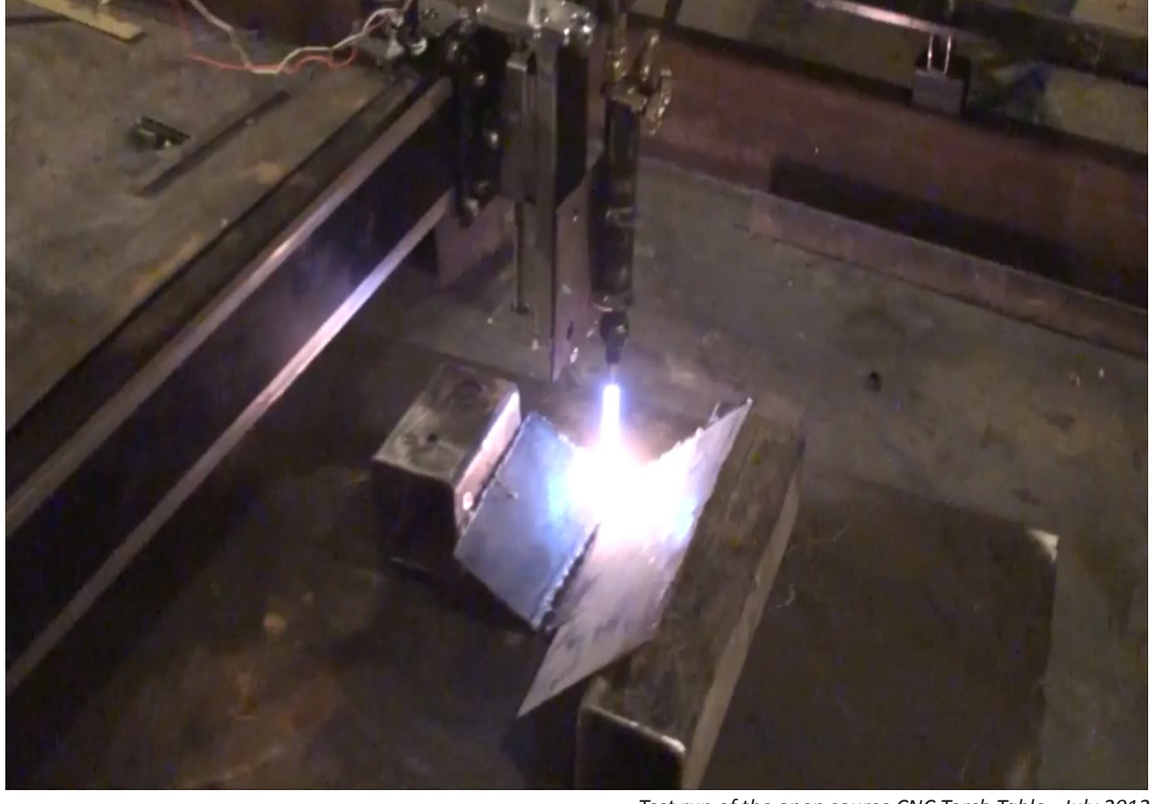
At OSE Headquarters, we have a 4,000 sf. production facility where we build design prototypes and fabricate models for sale to bootstrap fund our operations. In 2012, we learned that a team of novices can effectively work together with impressive results, and in 2013, we plan to streamline the efficiency of collaborative prototyping and production runs.

Goals for 2013

Optimize Prototype Building - we are optimizing machine builds down to a single-day of production time. We aim to optimize several more machines to 1-day production times - including Tractor, Microtractor, Bulldozer, Power Cube, Soil Pulverizer, and Backhoe - as proof of concept that any of our GVCS machines can be taken down to a single day of production.

Optimize Production - we are optimizing production to demonstrate one-day builds of heavy machinery for $5k/day net production earnings. We are considering hiring a full time production director to run these production runs as 1 day events - netting significant revenue for growth of the organization.

Shift to Collaborative Production Runs for Prototype Builds - on the prototyping front - we are taking a major shift away from full time prototypers and towards 2-day intensive production runs with our on-site team. We are further inviting guest Production Run Directors from collaborating open source projects.



Test run of the open source CNC Torch Table - July 2012

Streamlining Prototyping and Production Runs

Streamlining Toolchains

We will strategically develop tools that will accelerate our manufacturing processes to achieve the goal of one day production runs in 2013.

Streamline Production and Development Tool-Chains/ Processes - we will refine physical production tool-chains based on ongoing results, starting with full deployment of CNC Torch Table and Ironworker Machine. We will also streamline complex development path to 24 mission critical steps while creating documentation in an ongoing fashion.

Goals for 2013

Become a World Class Social Enterprise

Strengthen Our Technical Design Processes

Strengthen Our Technical Design Processes

Goal #4:
Increase Remote Collaboration Opportunities

Deliver Next Level Documentation

Increase Remote Collaboration Opportunities

Increase Remote Collaboration Opportunities

Online Community

In 2013 we will expand our opportunities for online collaboration and community involvement. Our work spans everything from economic development to energy production systems development and agriculture, and we will strengthen our digital spaces where people can get involved in many ways based on their skills and interest.

Community Manager - We are recruiting a Community Manager to manage remote technical contributions, including developing our remote hackathons - Flash Mobs - for coordinated, crowd-based development. Refine Remote Collaboration Standards to create clear pathways and expectations for remote collaboration.

Define Brand Identity - We will refine chapters policy based on certification badges for the level of involvement in OSE.

Reward Contributors - we will establish a contributor badge system, where they are earned based various types of contributions.

Goals for 2013

Increase Remote Collaboration Opportunities

Pilot Projects

We are building partnerships with NGO's throughout the world to help us field-test our designs. Conducting on the ground evaluations where it matters the most will give us the data we need to refine the GVCS and prepare it for mass replication.

Guatemala - in 2012, we began a partnership with organizations in Guatemala building prototypes in one of the country's largest sugar refineries. Throughout 2013, our equipment will be deployed in rural Guatemalan villages, which provides an opportunity for real-world tests to give us data about how well our machines work in providing tangible benefits for individuals and broader communities. The results of these field-testing operations will help us improve our designs.

Goals for 2013

Become a World Class Social Enterprise

Strengthen Our Technical Design Processes

Strengthen Our Technical Design Processes

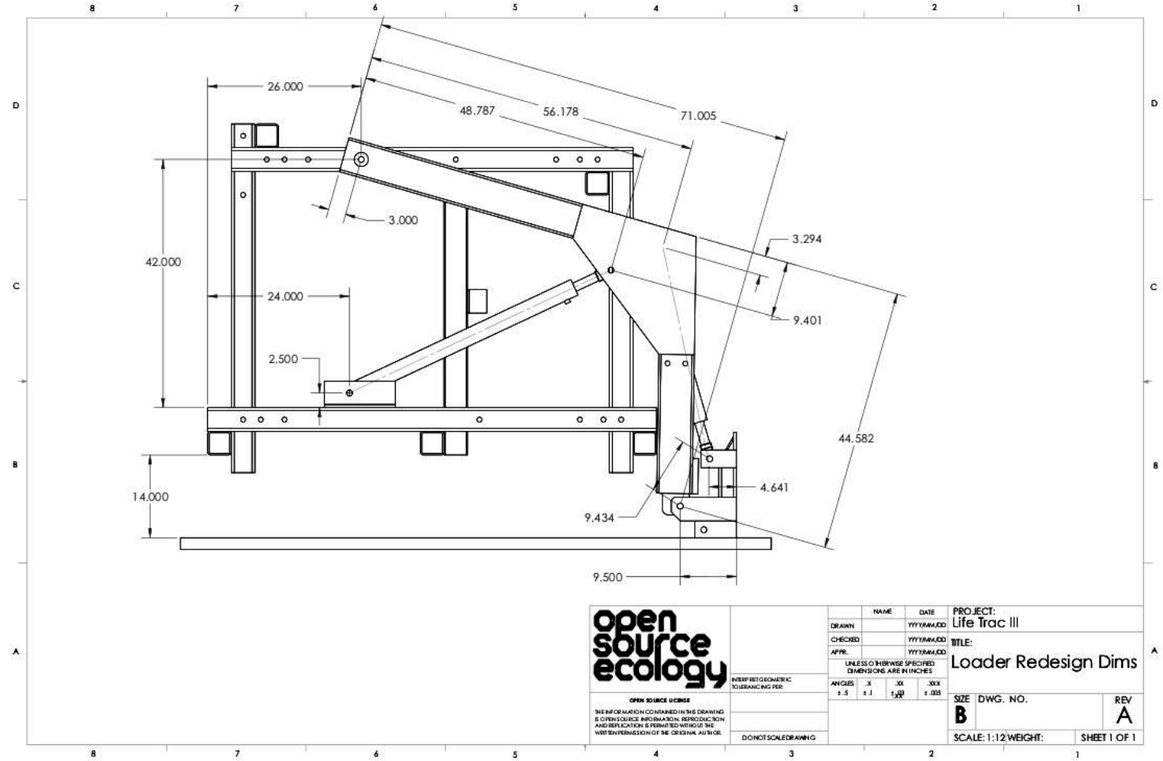
Increase Remote Collaboration Opportunities

Goal #5: Deliver Next Level Documentation

Deliver Next Level Documentation

from vision to institution

Open Source Hardware Logo



Goal #5: Deliver Next Level Documentation

Defining Standards

In partnership with the Open Source Hardware Association, we will develop universal standards and guidelines for the documentation of open hardware. This will raise levels of quality for the larger community and help others quickly identify and adopt best practices.

Open Source Hardware Association - the OSHA ...

Goals for 2013

Goal #5: Deliver Next Level Documentation

Documentation Director

We will recruit a person dedicated to information architecture and the management of remote collaborators who work on documentation. Our publications will reach new levels of quality in 2013.

Document and Publish - On the documentation front, we will recruit a Documentation Director to assure that all the machines follow open source hardware documentation standards and to ensure that processes are documented equally well for transparency. We will continue publishing a regular biweekly newsletter, continue weekly video updates, and create a system to involve remote video editors in the future. Finally, we will define publishing platform (CNX.org or Booktype), and define our social media strategy.

It took MacDonalds about 20 years to scale to 5000 branches from start-up. *We are aiming to match this rate for startup of open* **OSE Incubators** *and* **OSE Campuses** *by achieving about 3000 branches in 12 years from the first OSE Incubator.*

An OSE Incubator is a training facility for training the distributive entrepreneurs - those who will train others to replicate further Incubators. We intend to, first, create 144 Incubators - and these incubators will train entrepreneurs who then build open source ecology in their respective communities.

The distinction between Incubator and Campus is that the explicit role of the Incubator is to train distributive entrepreneurs **(OSE Distributive Enterprise Fellows)** *- while the role of the Campus is to unleash entrepreneurs* **(OSE Fellows)** *dedicated to community economic development, without the explicit role of training other distributive entrepreneurs.*

Beyond 2013: the Open Source Economy

OSE Incubators

We intend to spend 2016 creating a curriculum for a 2-year replication training immersion program for social entrepreneurs - and specifically, for OSE Distributive Entreprise Fellows. We intend to start the first class of Fellows in 2017, with 12 graduates by 2019. During the course of their immersion curriculum, Fellows will participate in production runs and capture their productive value as capitalization assistance for their future startup. Upon graduation, these Fellows will work closely with OSE International to set up 12 Incubators by 2020, and 144 worldwide by 2023. This includes:

Recruiting Incubator staff
Building Incubator infrastructure with the Staff, with capitalization assistance of $100-150k as above ($80k/month net production model from OSE Microfactory)
Recruiting a class of 12 further Fellows

The established Incubators will work closely with the Fellows to reach the 144 Incubator milestone. Upon these being established, the function of the Incubators will shift from training OSE Distributive Eneterprise Fellows to OSE Fellows. The distinction is that the latter are agents of open source economic development in their communities, as opposed to trainers of new Fellows.

Beyond 2013: the Open Source Economy

OSE Campuses

An OSE Campus is defined an a land-based, autonomous entity with a 4000 sq ft workshop which clears approximately $1M of value generation per year and serves as a economic engine and responsible development hub within a surrounding economy. OSE Incubators train OSE Fellows - the startup entrepreneurs who build the OSE Campus.

The design of the OSE Campus is intended to be scalable on a month replication time scale, such that the OSE Campus may scale its operation readily. Because Campuses are autonomous in operation, they may scale as the centers of a networked economy in a world where nation states have diminished in their relevance as political centers of organization. The OSE Campus is intended to be an economic hub of a regional, resource-based economy.

Budget

Financial Statements

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