

Step 1 - choose tags

Eligibility tags - categories of projects that fit within current funding rounds.

Climate solution and Diversity and Inclusion

Discovery Tags - categories you may affiliate your project with that are not in currently funded rounds.

DeFi

Eligibility Explanation:

The Seed Eco-Home - our current development work - is an affordable housing solution that is also a job training program. It is off-grid with 6 kW of photovoltaic panels. It features super-efficient appliances and is an earth contact home. We will be releasing a version of the product with Compressed Earth Block walls made by our open source Compressed Earth Block Press. Our roadmap includes development of energy storage using compressed hydrogen.

The Seed Eco-Home is our beachhead product - an efficient, modular, single family home that can be built in 5 days by 24 people. To construct the Seed Eco-Home, OSE has designed a Department of Labor Registered Apprenticeship that simultaneously up-skills the labor force while providing above-market wages. The combination of employment and education is designed to empower everyone from the formerly incarcerated, to veterans, to the BIPOC community, to off-grid dreamers.

More generally, the vision of Open Source Ecology is a world of collaborative design – for a transparent and inclusive economy of abundance. To get there, OSE is currently bringing to market the Global Village Construction Set (GVCS) –please see the 4 minute TED Talk - https://www.ted.com/talks/marcin_jakubowski_open_sourced_blueprints_for_civilization .

Step 2: Justify Eligibility Tags:

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Step 3: Admin Data

- Has this project received funding? Y
- Project Region: North America

Step 4: Title

Seed Eco-Home: An Affordable Housing Solution That Is Also a Job Program

Step 5: Description

Hook:

Open Source Ecology (OSE) is bringing the Global Village Construction set to market, beginning with a 1000sf single family home that can be built in 5 days with 24 people.

We envision a world of collaborative design for a transparent and inclusive economy of abundance. By making hardware much like open source software, anybody can learn just like wikipedia.

The implications of this model are profound: economic development officials can readily educate and develop infrastructure to decentralize their supply chains towards resilience, strengthen industry balance sheets, and build local wealth. Green collar jobs in open source manufacturing empowers people and strengthens resilience

Our aim is to advance this work in three major ways:

- 1) Create a Best in Class, Hands-On Educational Experience
- 2) Establish a Revenue Generating “Beachhead” Product: [the Seed Eco-Home](#)
- 3) Build out Micro-Factory to increase production capacity and campus accommodation

Open Source Hardware simply means decentralizing access to the manufacturing capability required for physical products. Whereas most companies specialize in developing their IP and guarding it, open source practitioners believe in releasing this knowledge publicly for collaborative learning and replication. [TED Fellow Dr. Marcin Jakubowski](#) pioneered this concept by creating the Global Village Construction Set (“GVCS”) with all details published

readily available in the Wiki. The GVCS includes eco-houses (2 bedroom 2 baths at \$100k), 3-D printers, tractors, aquaponics, brick press, ovens, and more. The price points are lower in open source (\$60k vs \$16k per tractor cost) and the products are designed for lifetime use so maintenance is cheaper. Replacements could be as easy as 3-D printing new parts.

Existing Campus Programming & Infrastructure:

Founded in 2003 and since going viral with 3M+ views online, OSE has recruited nearly 1k students from all around the world to participate in some version of Open Source Ecology's educational programming; which as of 2021 is now registered with the Missouri Department of Labor. In 2006, the project moved to its permanent location in Maysville, Missouri – the Factor e Farm – birthplace of the Global Village Construction Set. This 30 acre property has existing infrastructure including HabLab (8 person shared room accommodation with kitchen, 2 faculty houses (sleeping 2 each), and 2 Seed Eco-Homes (one of which is the founder's primary residence). There is also a 4000 sq ft workshop. In 2021, OSE hosted the Summer of Extreme Design-Build, including a 6 month Apprenticeship program, with a total of 40 participants totaling \$170k revenue.

Strategically, OSE has made the decision and committed itself to perfecting the swarm build training curriculum for the Seed Eco-Home product to be positioned as the product portfolio beachhead; i.e. focusing resources in this one key area and winning that market first.

A Swarm build is a production approach where a large group of people are working in parallel. People work in parallel on different modules, then assemble them rapidly into a finished product. Together with Digital Fabrication and Language Agnostic Instructionals - this allows for industrial productivity on a small scale. For example, the Seed Eco-Home was built using Extensive Scalability: a large number of small, panelized modules were built by about 12 teams in parallel. This allowed for the complete erection of the 1400 sf house in 5 days with a target cost of 100k. For comparison, a typical house takes 6 months to build. This is part of OSE's unique value proposition.

Housing is the number one cost of living and the largest single investment of a family, typically requiring the owners to go into debt. Housing and real estate is an almost \$4 trillion global market and growing rapidly. OSE is interested in participating in this market while reducing the burden on families by offering an efficient, low cost, modular product called the Seed Eco-Home.

Step 6: Logo

Benchmarking for other successful grants, I see brand logos, cad snapshots, and cool digital artwork. If OSE has name recognition in GitHub, maybe we go with OSE logo? Do we overlay it on a CAD of the GVCS or Seed Eco-Home?

Step 7: GitHub URL

<https://github.com/OpenSourceEcology>

Step 8: Project Website

<https://www.opensourceecology.org/> + https://wiki.opensourceecology.org/wiki/Seed_Home_v2
<https://github.com/OpenSourceEcology>

Step 9: Project Twitter

<https://twitter.com/osecology>

Step 10: Your Twitter Handle

@osecology

Mine is @weinberg

Step 11: Team Members

My GitCoin name should be vetsmakeit

My Gitcoin name should be bweinberg09

Step 12: Select blockchain

*Needs to be Ethereum

We need to have an idea of how we are going to promote it?

Email

FB

Twitter

Discords

Engaging with Gitcoin community /Other teams

Need

Clear Content