

To the Nathan Cummings Foundation,

Open Source Ecology* is an international agile project management network accelerating the growth of the next economy, an *open source economy*, that optimizes both production and distribution while providing social justice and environmental regeneration. We promote the re-localization of production by expanding access to industrial technology systems that use sustainable manufacturing methods. We also provide local and distance-education programs that promote enterprise-based solutions to chronic unemployment and poverty using regionally-sourced materials; integrating the wealth of communities with the well-being of natural ecosystems.

We are lowering the barriers of entry to the economy by building the **Global Village Construction Set (GVCS)**, a modular, high-performance, do-it-yourself, low-cost platform that allows for the easy fabrication of the 50 different industrial machines that it takes to build a small, sustainable civilization with modern comforts. The GVCS includes machinery, equipment, tools, components, and other infrastructures for creating a complete economy: food, fuel, energy, building materials, transportation, and fabrication. We redesign the conventional technological underpinnings of society so that they are affordable to make at the local level, user serviceable, designed to last a lifetime, and available for everyone to build and use without restriction anywhere in the world. The platform enables more people to produce clean energy, manufacture goods, construct buildings, and grow food locally using machinery that is, on average, 69% cheaper than commercial models when built by the end user.

Through open source, global collaboration, we develop solutions to economic and environmental issues by entering into innovation-sharing partnerships with people who experience these problems most directly. We provide hands-on jobs skills and enterprise development training and create distance learning materials so that people across the world can replicate our open source business models and technology. In turn, we are provided with data from independent replicators on how we can improve the machine designs so that they are more accessible, cost less, more productive, last longer, and integrate further with natural ecological systems.

Our local economic development training programs, **OSE Fellowships**, take place at **Factor e Farm** in Missouri. Established as a community trust, the 30-acre site has hosted dedicated project visits from people all over the world since 2004. We received large construction grants in 2011 and built the **FabLab**, a 3,000 sf training and fabrication facility, as well as the **HabLab**, 10 living units for OSE Fellows. Our buildings are made using earth-block architecture with double-wall construction, insulated with hay grown at Factor e Farm, and outfitted with industrial-grade machine tools purchased in Detroit. The construction process was an open source project using the following GVCS equipment: the LifeTrac (tractor), the Liberator (Compressed Earth Brick Press), soil pulverizer, and the PowerCube (hydraulic power unit). OSE Fellows learn design and fabrication skills by building prototypes and conducting field testing operations.

*OSE was founded in 2003

In order to facilitate independent replication of the Global Village Construction Set machinery, we create the following **training materials** for each design: design rationale, 3D CAD files, fabrication drawings, CAE analyses, CAM files, exploded parts diagrams, bills of materials and sourcing information, scaling calculations, A-Z instructionals, and cost and performance comparisons to industry standards. All documentation is openly available on our wiki, along with high-quality video tutorials showing how to fabricate the machinery. The website also includes a YouTube channel with 840+ video updates, community-developed wiki with 3,400+ pages, online forum, and blog.

We would like to write a grant in the amount of **\$83,560** to develop two Global Village Construction Set tools: the open source 50kW **Wind Turbine** and the open source **Nickel-Iron Battery** to store electricity generated from the Wind Turbine and our Solar Concentrator design. The grant would cover the costs of creating full training materials as well paying OSE Fellows to build prototypes and conduct field testing operations and issue performance reports. The grant period would be for ***12 months**.

Marcin Jakubowski PhD – Executive Director

Open Source Ecology was founded by Dr. Marcin Jakubowski, a 2012 Shuttleworth Fellow and a 2012 Senior TED Fellow who placed 6th on the Best of TED 2011 list issued by the Huffington Post. He is a Princeton graduate with a PhD in Physics from the University of Wisconsin.

Open Source Blueprints for Civilization #6:

<http://www.huffingtonpost.com/news/tedtalks2011>

Joe Justice - Project Leader

Joe is the founder of Team Wikispeed, an all-volunteer distributed Agile/Scrum team that built a 100mpg vehicle, a record for a road-legal gasoline engine, in three months, and is the lightest car ever to achieve a five-star equivalency rating for front, side and rear impact tests.

Adrian Hong - Advisor

Founder and Director of The Pegasus Project, Co-founder and former Executive Director of Liberty in North Korea (LiNK), Mr. Hong is an inaugural TED 2009 Fellow, a 2009 Arnold Wolfers Fellow at Yale University, and an inaugural TED Senior Fellow. In 2009 he was selected to receive the Japanese American Citizens League "Vision Award".

Thank you for considering our letter of inquiry,

Aaron Makaruk

Development Officer

303-861-4652

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PO Box 442

Web: opensourceecology.org/wiki

Maysville, Missouri 64469

***OSE** is currently preparing to file its 1023 in March and partners with **The Terra Foundation** as its fiscal sponsor.

Project Budget

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Budget Item	Concept Design	Prototyping	Field Testing	Training Materials	Total
Wind Turbine	15,860	27,180	4,100	14,020	61,160
Nickel-Iron Battery	6,340	5,300	4,100	3,960	22,400
					83,560
Organization Budget Total (2012)					843,680

Committed Revenue*

(\$)

Ewing Marion Kauffman Foundation	100,000
Shuttleworth Foundation	360,000
Anonymous Donor	103,000
Kickstarter.com	63,573
Total	626,573

Pending Revenue

(\$)

Surdna Foundation	330,000
Rockefeller Brothers Fund	100,000
Alfred P. Sloan Foundation	125,000
Garfield Foundation	43,700
Draper Richards Kaplan Foundation	300,000
US Green Building Council	250,000

Project Outputs

Wind Turbine prototypes (3)	1. Design Rationales	6. Exploded Parts Diagrams
Nickel-Iron Battery prototypes (3)	2. 3D CAD Files	7. Bills of Materials
Field testing reports	3. Fabrication Drawings	8. Scaling Calculations
Training materials:	4. CAE Analyses	9. A-Z Instructionals
	5. CAM Files	
Training videos:		
	1. Fabrication	3. Field Testing
	2. Assembly	4. Operations & Safety

*Also: True Fans - 540 people donate \$10/month as of 2/20/12



Department of the Treasury
Internal Revenue Service

P.O. Box 2508
Cincinnati OH 45201

In reply refer to: 0248464840
Sep. 22, 2011 LTR 4168C E0
77-0298872 000000 00

00012658

BODC: TE

TERRA FOUNDATION
217 WESTMONT AVE
SN LUIS OBISP CA 93405-1055



34798

Employer Identification Number: 77-0298872
Person to Contact: Mrs. Dudley
Toll Free Telephone Number: 1-877-829-5500

Dear Taxpayer:

This is in response to your Sep. 13, 2011, request for information regarding your tax-exempt status.

Our records indicate that you were recognized as exempt under section 501(c)(03) of the Internal Revenue Code in a determination letter issued in MAY 1995.

Our records also indicate that you are not a private foundation within the meaning of section 509(a) of the Code because you are described in section(s) 509(a)(1) and 170(b)(1)(A)(vi).

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for Federal estate and gift tax purposes if they meet the applicable provisions of sections 2055, 2106, and 2522 of the Code.

Please refer to our website www.irs.gov/eo for information regarding filing requirements. Specifically, section 6033(j) of the Code provides that failure to file an annual information return for three consecutive years results in revocation of tax-exempt status as of the filing due date of the third return for organizations required to file. We will publish a list of organizations whose tax-exempt status was revoked under section 6033(j) of the Code on our website beginning in early 2011.