

**Environment and Natural Resources Trust Fund
2018 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 175-E

Stove Swap: Improving Air and Health; Avoiding Violations

Category: E. Air Quality, Climate Change, and Renewable Energy

Total Project Budget: \$ 1,008,389

Proposed Project Time Period for the Funding Requested: 2 years, July 2018 to June 2020

Summary:

Stove Swap incentivizes replacement of inefficient wood burning devices, provides cleaner burning options, helps meet air quality standards by reducing 43 tons/yr of emissions, and improves our health and economy.

Name: William Droessler

Sponsoring Organization: Environmental Initiative

Address: 211 North First Street, Suite 250
Minneapolis MN 55401

Telephone Number: (651) 253-3908

Email bdroessler@en-in.org

Web Address www.environmental-initiative.org

Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Visual conveys 24 project counties, 40% of particulate emissions is from wood smoke, project will annually remove particulate equivalent of 268,000 cars from the road, and provide health and economic co-benefits

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	_____ %



I. PROJECT STATEMENT

Project Stove Swap provides average incentives of 37% for residents, small businesses, and nonprofits to replace obsolete or inefficient wood burning devices with the newest, most efficient pollution reducing technology and EPA certified models. Providing a better way to burn with devices that can last decades, this combines very cost-effective emissions reductions with economic and health co-benefits. This proposal will:

- reduce 15 tons/year of particulates and 28 tons/year of ozone precursors
- incentivize 320 wood burning device change-outs
- eliminate the particulate equivalent of removing 268,000 cars from the road annually
- gain immediate economic co-benefits - many of the new products installed are manufactured in Minnesota and all the vendors are local; this also allows for continued use of locally sourced wood

Threat:

Minnesota flirts with violating federal particulate and ground-level ozone standards; and, therefore lacks regulatory authority to implement additional emission-reduction requirements. Minnesota also faces challenges related to a changing mix of pollution sources and diminishing easy emission-reduction options. More than 75% of our air pollution now comes from small, dispersed, and less regulated sources related to transportation, small businesses, and rapidly increasingly wood burning. Wood smoke is a primary source, and one of the very few growing sources, of particulate and ozone emissions in Minnesota. Project Stove Swap is the only Minnesota effort directly reducing these emissions. Because the cost effectiveness and air quality importance to of change-outs, we are working with the MPCA to determine long-term statewide goals and impact. This project:

- provides voluntary emission-reduction options that can be done without regulation or legislation
- leverages private corporate and foundation support with local, state, and federal government funds
- achieves particulate matter and ozone precursor emission reductions as well as reducing greenhouse gases, including carbon monoxide, volatile organic compounds, black carbon, and benzene

Benefits:

This project also provides health and economic benefits. A Minnesota Chamber of Commerce study estimated that it would cost Minnesota businesses \$189 to \$266 million annually to comply with the regulatory requirements associated with federal air quality violations. Businesses’ physical growth and expansion are also restricted once an area is declared in violation. Exposure to low and even moderate air pollution levels can contribute to health problems and premature death. The MPCA estimates that annually in the Twin Cities:

- 6 to 13 percent of all residents who died, and about 2 to 5 percent of all residents who visited the hospital or ER for heart and lung problems, did so partly because of particulates or ozone exposure
- the cost of hospital/ER visits, lost workdays, asthma, and heart attacks exceeds \$150 million statewide

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: *Change-out participant recruitment*

Budget: \$37,265

Project Stove Swap is an EPA approved, innovative change-out effort; which uniquely focuses on high emissions reductions and building and sustaining community support. With a highly dispersed population, outreach to project participants will require specific, targeted efforts. Proven effective outreach strategies include:

- partnering with trusted local agents, such as tribal organizations, community groups (e.g., American Legion, hunting/sportsmen clubs, etc.) and health groups
- partnership with local units of government, area manufacturers, and vendors

Outcome	Completion Date
1. <i>Engagement/recruitment materials developed and dissemination network est’d</i>	Nov. 30, 2018



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<i>2. Manufacturers and vendors begin marketing efforts</i>	<i>Dec. 30, 2018</i>
<i>3. Begin receiving participant applications</i>	<i>Dec. 30, 2018</i>

Activity 2: Wood stove change-outs implemented Budget: \$971,124

Project Stove Swap provides partial support for residents, small businesses, and nonprofits to replace obsolete or inefficient wood burning stoves with newer EPA certified models that cut heating expenses, reduce air pollution, and increase safety. An income qualified set aside will be established based upon existing program eligibility. All participants can receive varying incentive amounts based upon EPA approved protocol, which are set depending on the type of equipment replacement, wood use reduced, and anticipated emission reductions. Using our proven partner network, programmatic infrastructure, and brand awareness, we would be able to scale up operations to new counties through this proposal, thus increasing and expanding its impact.

Implementation will involve:

- Operating in high exposure areas such as the Twin Cities area and high wood use counties to achieve the greatest impact on human health and maximize emission reductions
- Subsidy amounts per an EPA scaled system considering income, wood use, and technology being adopted
- A competitive RFQ to vendors/installers for discounted EPA-certified fireplace and wood stove units
- Administration of the equipment change-out process, working directly with vendors and end-users

Outcome	Completion Date
<i>1. Program structure best practices researched and established</i>	<i>Nov. 30, 2018</i>
<i>2. Vendor network/outreach strategy est'd to promote participation in high-impact areas</i>	<i>Jan. 31, 2018</i>
<i>3. 320 wood heater replacements coordinated to reduce pollution by 40 tons/year</i>	<i>June 30, 2020</i>

III. PROJECT STRATEGY

A. Project Team/Partners Environmental Initiative will receive staffing support to administer change-outs and lead outreach and recruitment efforts. We have extensive, nationally recognized experience creating and implementing successful, large-scale, complex emission-reduction projects. Project Stove Swap formally launched in January 2017 and has an established network of manufacturers, vendors, installers, and community organizations in Northeast Minnesota. Many relationships will continue into additional metro counties. Because Minnesota is in attainment of federal standards, it is difficult to compel individuals or companies to do emission reduction activities. Thus, voluntary public/private efforts such as Project Stove Swap are vital and critical to ensure equitably healthy air and attainment of federal standards, while also providing economic gains.

B. Project Impact and Long-Term Strategy This project’s impacts will be:

- cleaner, healthier air
- economic gains and a sustained market to burn wood cleaner
- maintaining federal air quality standards

This project’s long-term strategy is to:

- expand our current limited program and demonstrate scalability into a full-scale statewide program
- secure major private and public funding to maximize emissions reductions and protect public health

Environmental Initiative has a proven history of securing at-scale funding with multiple projects.

C. Timeline Requirements: This project will be completed in two years with no timeline constraints or conditions required to complete this work.

2018 Detailed Project Budget

Project Title: Project Stove Swap

IV. TOTAL ENRTF REQUEST BUDGET 2 years

BUDGET ITEM (See "Guidance on Allowable Expenses", p. 13)	AMOUNT
Mikey Weitekamp, Senior Project Manager: (69% Salary, 31% Benefits) 45% FTE for Year 1 and 41% for Year 2; grant-supported	\$ 61,146
Bill Droessler, Senior Program Director: (69% Salary, 31% Benefits) 12% FTE for Year 1 and 11% for Year 2; grant-supported	\$ 24,826
Erin Niehoff, Project Associate: (63% Salary, 37% Benefits) 22% FTE for Year 1 and 27% for Year 2; grant-supported	\$ 24,182
Damian Goebel, Communications Director: (69% Salary, 31% Benefits) 12% FTE for Year 1 and 8% for Year 2; grant-supported	\$ 15,235
Contracts: Average subsidy of \$2,750 to wood stove installers for 320 change outs. We will use an RFQ (Request for Qualifications) process to select seven wood stove installers.	\$ 880,000
Equipment: We will also provide 200 moisture meters at \$15 each, which will allow us to better quantify the reductions in wood smoke.	\$ 3,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 1,008,389

V. OTHER FUNDS (This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period: Indicate any additional non-state cash dollars secured or applied for to be spent on the project during the funding period. For each individual sum, list out the source of the funds, the amount, and indicate whether the funds are secured or pending approval.	N/A	N/A
Other State \$ To Be Applied To Project During Project Period: Indicate any additional state cash dollars (e.g., bonding, other grants) secured or applied for to be spent on the project during the funding period. For each individual sum, list out the source of the funds, the amount, and indicate whether the funds are secured or pending approval.	N/A	N/A
In-kind Services To Be Applied To Project During Project Period: Indirect Costs - costs of operating and renting our office space, telephone, computer, insurance, audit and other infrastructure costs. Proportional cost related to this project.	\$ 100,000	Secured
Past and Current ENRTF Appropriation: Specify dollar amount and year of appropriation from any current ENRTF appropriation for any directly related project of the project manager or organization that remains unspent or not yet legally obligated at the time of proposal submission. Be as specific as possible. Indicate the status of the funds.	N/A	N/A
Other Funding History: funding secured and expected to be expended by 7-1-18 Minnesota Power ~\$800k, other corporate funders ~\$200k; Pending EPA proposal \$350k for complementary Project Stove Swap activities, work dates and location/s to be determined.	\$ 1,350,000	

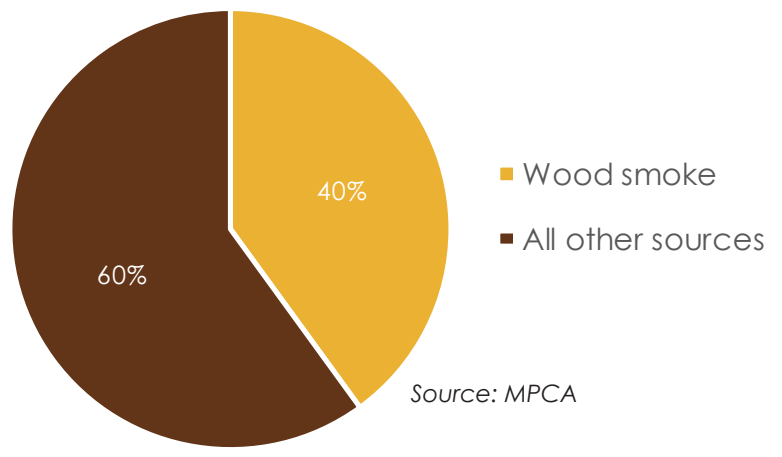
PROJECT STOVE SWAP

Project Stove Swap is a voluntary program that provides financial incentives to consumers and businesses to replace older wood heating appliances with more efficient, less-polluting technologies.

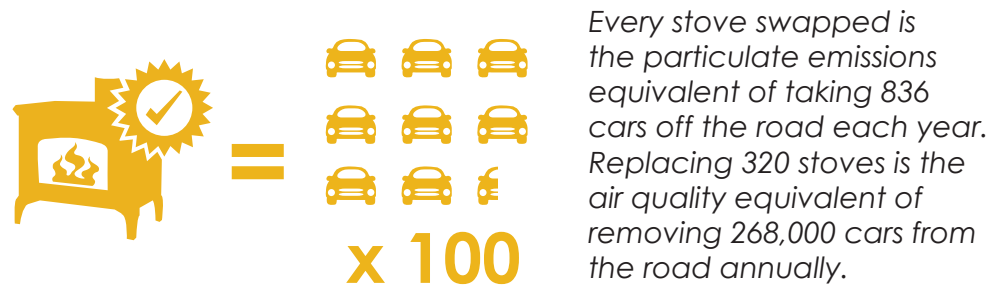


Projected 2018 Project Stove Swap service area

Fine particle emission sources



Impact on air quality



Impact on the local economy

Project Stove Swap works with local retailers to purchase and install replacement heating appliances, many of which are manufactured in Minnesota.



Environmental Initiative is a 501(c)(3) nonprofit organization based in Minneapolis that builds partnerships with business, government and nonprofit leaders to develop solutions to Minnesota's environmental problems. Founded in 1992, Environmental Initiative is known for developing collaborative solutions to Minnesota's environmental problems. In the early 2000s, Minnesota's air quality was recognized as a problem and Environmental Initiative took a proactive approach, convening leaders from businesses, environmental groups and government agencies to develop strategies and projects that measurably improve air quality. Environmental Initiative has qualified staff experienced in business outreach and assistance, technical emissions reduction solutions, and communication around air quality and environmental issues. Biographies for primary project staff are below.

Bill Droessler, Clean Air Program Director; Director of Strategic Project Planning
Much like Clean Air Minnesota's partners, Mr. Droessler brings experience and perspective from all sides of the issues. Prior work experience includes environmental law for the Zurich American Insurance Company, Program Director for Minnesota Public Interest Research Group, Director of Outreach and Programming for 1000 Friends of Minnesota, and National Energy Program Director at the Izaak Walton League. He led Clean Air Minnesota and Project Green Fleet through their beginning stages and brings substantial expertise on diesel emission reductions and air quality. He holds a BA in Government and History from Beloit College and a law degree from the Environment and Energy Law Program at Chicago Kent - College of Law, Illinois Institute of Technology.

Damian Goebel, Communications Director
Damian Goebel joined Environmental Initiative in 2017 and has worked in nonprofit communications, engagement, event planning and program management since 2008. As Communications Director, he is responsible providing strategic communications direction and support for internal and external audiences in all of Environmental Initiative's program areas and general operations. Prior to joining the organization, he has worked on projects ranging from regional transportation, land use, economic development, community development and workplace benefits. Prior to working in nonprofits, he spent nine years in the private sector in sales, marketing and customer service roles. Damian has a B.A. in Communications Studies from Hamline University.

Mikey Weitekamp, LEED AP BD+C; Senior Project Manager
With strong expertise in business sustainability consulting, program management, and strategic communications, Mikey Weitekamp is responsible for day-to-day management of emissions reduction projects under Project Green Fleet and Clean Air Minnesota. Mr. Weitekamp has worked on program development and business sustainability consulting with the Minnesota Chamber of Commerce, business plan and program development for explorer Will Steger's environmental retreat center, and economic modeling of forest products industries in the state of Minnesota. Mr. Weitekamp graduated from the University of Minnesota Magna Cum laude with dual degrees in Environmental Science and Marketing, along with a minor in forestry.

Erin Niehoff, Project Associate
Erin Niehoff joined Environmental Initiative in April 2016 and has been in the role of Project Associate since January 2017. In this role, she supports the implementation of a wide variety of