Updated January 2017

2017 Dane County Departmental SMART Fund

Funding Opportunity Description

The Sustainability Subcommittee of the Public Works and Transportation Committee is responsible for distributing grant money to county departments from a $2 million fund in the county's capital budget. This fund helps support the county's goal of becoming more sustainable. For example, it supports initiatives that fulfill the county's desire for reducing greenhouse gas emissions by implementing systems that result in more efficient energy use and investments in renewable energy production at our various facilities. This fund is a part of the county's continued efforts to ensure that important natural resources and ecosystem services are maintained for current and future generations. The fund can be used by your department to help you implement strategies identified in the Dane County Government Sustainable Operations Plan, to supplement current budget items that do not have enough funds to incorporate additional sustainable measures, or to fully fund projects that are not in the current budget, but that will improve the sustainability of county operations and reduce long-term costs. The committee will select projects to fund based on their consistency with the sustainability principles adopted by the Dane County Board (on October 18, 2012) to guide county government management, operations, and policy making, as well as based on their ability to further implement the Dane County Government Sustainable Operations Plan.

Benefits of this fund:

- Alignment of departments and staff toward a common understanding of sustainability
- Clarity and consistency in assessing and organizing actions and programs for sustainable government operations
- Enhanced policies and programs incorporating a sustainability perspective
- Enhanced reputation as a proactive contributor to a more sustainable community
- Reduced operating costs

Dane County's Sustainability Principles:

Dane County strives to operate in a sustainable way that will:

- Reduce and eventually eliminate county government's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals;
- Reduce and eventually eliminate county government's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances;
- Reduce and eventually eliminate county government's contribution to encroachment upon nature and harm to life-sustaining ecosystems (e.g., land, water, wildlife, forest, soil, ecosystems); and
- Reduce and eventually eliminate county government's contribution to conditions that undermine people's ability to meet their basic human needs.

Eligible Applicants:

Dane County Departments

Award Information:
Application Deadlines: There are 3 application deadlines for 3 rounds of funding. Solicitations for applications will go out via email about 1 month before each deadline.

1. Feb 6, 2017 — At this time up to 50% of the funds will be awarded.
2. July10, 2016 — At this time up to an additional 25% of the funds will be awarded.
3. October 9, 2016 — At this time the remainder of the funds will be awarded.

The subcommittee generally makes award decisions within a couple of weeks of the application deadline depending on complexity of the proposals and the subcommittee meeting schedule.

Examples of types of projects that would be eligible:

- Renewable energy or energy efficiency improvement investments for county facilities, such as solar lighting, LED lighting upgrades, energy efficient boilers, etc.
- Water conservation improvements
- Covering the cost differential between conventional and fuel-efficient vehicles to purchase more fuel-efficient fleet vehicles or convert existing vehicles to more fuel-efficient and lower-emission vehicles
- Purchase of new or upgraded equipment that will improve the overall efficiency of facilities and reduce greenhouse gas emissions, reduce the use and disposal of toxic products, reduce maintenance costs and/or staff time using the equipment, and/or facilitate better tracking, measurement, and verification of sustainable outcomes in county operations

Application and Submission Information:

Apply electronically to Lisa MacKinnon at Mackinnon@countyofdane.com and Carlos Pabellon at Pabellon@countyofdane.com.

Please include the following in your application:

1) A detailed description of your proposed project
2) How the project, if carried out, will meet the county's sustainability principles
3) How the project, if carried out, will implement specific goals, objectives, and strategies identified in the Dane County Sustainable Operations Plan. Indicate which goals, etc.
4) How the county might build upon the sustainability outcomes of the proposed project
5) How your department intends to track and measure the outcomes of the project, if funded, such as cost savings, energy reductions, maintenance reductions, etc. and who will be responsible for measurement and verification.
6) Budget Sheet: Include all costs of achieving the objectives of the project.
7) Estimated cost savings to the county due to implementation of the project and the payback period. Include here information on estimated Focus on Energy incentive savings if your project is eligible for FOE incentives (see https://focusonenergy.com/business or contact Lisa MacKinnon for assistance in getting this information).

Questions are to be directed to Lisa MacKinnon at 267-1529 or Carlos Pabellon 266-4519.

Project Information:

Please provide the following information (take as much space as you need to provide details):

<table>
<tr><td rowspan="3">Department: Dane County Sheriff's Office – CCB Jail
Address: 115 West Doty Street
Madison, WI 53703</td><td>Total project costs: $37,193.35</td></tr>
<tr><td>Funding amount in current budget:$0</td></tr>
<tr><td>Funding amount requested: $37,193.35</td></tr>
<tr><td colspan="2">Project Title: DCSO Jail – Chemical Free Cleaning – CleanCore Technology</td></tr>
<tr><td colspan="2">Project Location: Public Safety Building, City County Building, Ferris Center secure jail space</td></tr>
<tr><td colspan="2">Project Description: Obtain chemical free and more efficient cleaning system to continue to abided by legal requirements. Reduced use of cleaning chemicals, reduce CO2 emissions by reducing chemical production, delivery and packaging. Obtain a more efficient cleaning system to reduce the amount of labor and supervision required to clean.

Clean Core Caddy w/ spray bottle with 5% discount, 6 units –
$29,994.00 before discount and
$28,494.30 after discount

Clean Core Fill Station with 5% discount, 1 unit
$2,999.00 before discount and
$$2,849.05 after discount
To be utilized by Stakeholder Facilities Management

Spray bottles with 5% discount, 6 units (allows for chemical free spot cleaning)
$300.00 before discount and
$285.00 after discount

Hygiena ATP Monitor, 3 units (allows for objective cleanliness testing)
$4,425.00 (no discount as Clean Core does not produce this product. Independent testing).

Quote good until June 30th, 2017. Prices will increase effective July 1st, 2017.
Clean Core Caddy will be $5,200.00 per unit effective July 1st, 2017
Clean Core Caddy with Prison retro fit parts will be $5,400.00 per unit effective July 1st, 2017

A CleanCore Caddy is available to view and witness a demonstration. You may contact Sergeant Krist Boldt at 284-6921, 516-5272, or boldt@danesheriff.com</td></tr>
</table>

Describe how the proposed project moves the county toward meeting the following Sustainability Principles. (See the guiding questions in the box below.) Responses to this section will be used to determine the relative level of sustainability for each project.

- Reduce and eventually eliminate county government's contribution to fossil fuel dependence and to wasteful use of scarce metals and minerals;

  The proposed initiative utilizes three things to create a proven cleaning substance, Air (O2), Water (H2O) and electricity to create ozone (O3). Ultimately no reliance upon chemical production, transportation and packaging may be necessary thus reducing to use of fossil fuel.

- Reduce and eventually eliminate county government's contribution to dependence upon persistent chemicals and wasteful use of synthetic substances;

  CleanCore Technology Aqueous Ozone cleaning system defines this goal. Bleach, Peroxide, Glycerin, Propylene, etc.. are not necessary to use to accomplish adequate required cleaning.

- Reduce and eventually eliminate county government's contribution to encroachment upon nature and harm to life-sustaining ecosystems (e.g., land, water, wildlife, forest, soil, ecosystems); and

  Large reduction in the use of cleaning chemicals. Aqueous Ozone – the water evaporates and returns to nature and the ozone (O3) reverts to oxygen (O2). Large reduction in the amount of cleaning chemicals being dumped down a drain and potentially finding their way back to nature.

- Reduce and eventually eliminate county government's contribution to conditions that undermine people's ability to meet their basic human needs.

  Incarcerated individuals still retain constitutional rights and human needs. Most every individual desires a clean environment even if she/he did not volunteer to be present.

Include in your description any estimated reductions of GHGs / CO2 equivalent emissions related to your proposal. Please use the following calculator to do this: http://www.epa.gov/cleanenergy/energy-resources/calculator.html

This calculator's drop down list displays; gallons of gas, kilowatt hours of electricity, MFC on Natural Gas & Passenger Vehicles. The reduction in the use of cleaning chemicals will result in the reduction of gallons of gas – delivery of cleaning chemicals and a reduction in kilowatt hours of electricity – production and storage of cleaning chemicals.

Describe how the proposal furthers implementation of the Dane County Government Sustainable Operations Plan goals, objectives, and strategies in your department and/or countywide. Please identify specific plan goals, objectives, and strategies accomplished.

Cleaning Chemical Cost Reduction (S3 Rogers collecting weekly chemical purchase in pervious weeks).

Expose Staff and Incarcerated Individuals to less chemicals.

Created process of cleaning efficiently to reduce staff supervision time thus avoiding valid reasons for the Agency to request additional staff positions.

Initial plan is to obtain a limited number products to use primarily during current quarterly cleaning process but to also use more routinely as this is how the product produces it's best results. Quarterly cleaning occurs simultaneously in each facility. This would provide enough time and enough use to adequately and objectively evaluate if this product meet our needs and if this product is durable. The Hygiena ATP Testing device would provide certified objective test results that could be used to determine the reliability of this product and to respond to grievances, claims, and/or lawsuits. The CleanCore caddies would be used by Jail and the CleanCore Fill Station would be used by stakeholder Dane County Facilities Management.

If the product is deemed durable and reliable the plan would be to obtain more of these products (hand held sprayers) so that the current daily cleaning process could utilize this product thus almost entirely eliminating the use of chemical cleaning products.

With a CleanCore caddy system when the vacuumed up oxidized water and debris is drained out a plumbing system the debris water will clean the plumbing system to a certain degree without the use of chemicals.

Describe how the county might build upon the outcomes of the proposed project to work toward greater sustainability.

The requirement to maintain a clean and sanitary environment within the Jail is required by the State of Wisconsin. By significantly eliminating the use of cleaning chemicals the County will not have to spend as much money on Chemical Provider contracts and may not have to spend money on environmental cleanup up due to residual chemicals being discarded via plumbing systems. Thus this project moves the County toward greater sustainability by saving money long term by not routinely purchasing large amount of cleaning chemicals and not have to deal with potentially unexpected consequence of cleaning chemicals.

Describe how your department will track and measure outcomes of the proposed project (i.e., annual cost savings, annual energy savings, resource use reductions, maintenance reductions, etc.). Include a timeline for measurement and reporting outcomes, and the staff member contact who is responsible for conducting the tracking and measurement.

The weekly costs saving can be tracked via Sheriff's Office - Security Services Division – Security Support Specialist assigned to Supply duties. Comparing pervious purchase orders per year/per month/ per week vs future purchase orders once CelanCore Technology cleaning systems are in routine operation will be favorably noticeable.

CleanCore Technology provides a one year warrant on their Aqueous Ozone products. This should be consider a sole source project as CleanCore Technology is the only manufacture that produces a security grade aqueous ozone cleaning system.

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Contact person: Sgt. Krist Boldt	Phone: 284-6921 or 516-5272 E-mail: boldt@danesheriff.com

Guiding questions for the project description. Applicants should include a detailed discussion of the work planned and/or the technical approach used that illustrates what the project will achieve and how it will comply with and implement the county's four sustainability principles and the Dane County Government Sustainable Operations Plan. The following questions provide a guideline to help your department frame and describe the project. Please feel free to address additional issues.

- Has this project been developed with the input of environmental and social sustainability stakeholders?

  Dane County Facilities Management Supervisor Michael Collins and Dane County Risk Management Dan Lowndes were present during a CleanCore Technology presentation and demonstration on Tuesday May 30th, 2017.

- Will this project reduce wasteful dependence upon fossil fuels, underground metals, and minerals?

  This project will reduce dependence on cleaning chemicals some of which contain fossil fuels, minerals and perhaps metals. A reduction in fossil fuels will also occur when cleaning chemicals do not have to be delivered as frequently.

- Will this project ensure that the smallest possible amount of resources is used?

  Working with the manufacture and achieved a 5% discount. The Sheriff's Office is currently the only agency in Wisconsin considering utilizing their product in a Jail setting. Due to manufacture's desire to increase market share this may result in a lower price point for the product, parts, tech labor and/or extend warranty. CleanCore Technology is currently the only company who currently provides a caddy portable cleaning machine and a fixed fill station machine that utilizes aqueous ozone with Nano bubble technology. As with many initiatives, the initial amount of money needed to initiate a product does not list as the resource / money saver. Rather the long term impact of reduced use of expensive cleaning chemicals, the reduced amount of time to apply the cleaning agent, the reduced amount of time to remove the cleaning agent, the potential reduction in lawsuits claiming that the City County Building Jail is sanitarily unfit is where the resource/money saving will be revealed. Put another way, sometimes it takes money to save money (example, installing a geothermal heating/cooling system in your home will initially cost money and take resources to plan and implement. However, money and resources will be saved significantly over time, should the product prove to be durable.

- Will this project improve access to community services and facilities for all people of the community?

  As mentioned previously, most humans prefer clean environments. This includes Incarcerated individuals, Civilian Volunteers providing services, Civilian contract employees, Staff both Civilian and Sworn.

- Is this project avoiding negative impacts on water bodies, wetlands, etc., and is this project supporting the establishment and management of protected areas in water bodies, wetlands, etc.?

  Yes, this project is avoiding negative impacts on nature. Reduction in the use of cleaning chemicals that get wiped or mopped up and send down the drain.

- Is this project proposing activities to raise awareness about water scarcity, water conservation, or water recycling and will this lead to an improvement of the water quality of a certain water body?

  This project will likely raise awareness about how effective, clean and safe ozone oxidation cleaning is. Many staff members have become educated during the product presentation and demonstration on Tuesday 05/30/17. I can not speak about how the City of Madison's plumbing system deals with chemicals that enter the system. However, if less chemicals enter the plumbing system the more effective the plumbing system will be in controlling the chemicals and not allowing the chemicals to be release into nature.

- Will this project still be beneficial once the funding is used and what, if any, public funding will need to be used for ongoing maintenance?

  Future maintenance funding will be necessary as will all mechanical devices. However these cost can be off set by purchasing less cleaning chemicals on a weekly basis.

- Will this project support jobs in the eco-technology field and/or does this project include training for relevant stakeholders in renewable energy and other clean and sustainable technology?

  Obviously purchasing this product will support CleanCore Technology, a Green Star Certified manufacture. Purchasing this product many expand the use of this product in Wisconsin and mid-west. Training was offered to relevant stake holders by the manufacture on Tuesday 05/30/17. If purchased many Agency members will become knowledgeable and trained in cleaning technology. These members will obviously communicate with family member and other professionals. As a positive message spreads relevant stakeholders are positively effected.

- Has this project developed a strategy for measuring anticipated outcomes of the project?

  Yes. Hygiena ATP testing. Using a certified objective testing system used by hospitals, food service providers, laboratories, etc… is a valid method to determine if this product performs as advertised and performs at the same level after many hours/days/weeks/months of use.

- Has this project developed a strategy for how to disseminate results or best practices?

  Yes. Hygiena ATP testing results can be recorded and shared. Once experience is gain using the system staff can share best/most effective practices.

- Will this project address an identified local need that can have a positive benefit on the local community and improve equity outcomes and quality of life for everyone?

  Yes every incarcerated individual will receive the same quality cleaning efforts regardless of housing location, classification status and / or attitude. Every individual who enjoys the isthmus or Lakes Mendota or Monona can be assured less cleaning chemicals will be used in the Jail or exit the Jail.

- Will this project be beneficial in helping the county to adapt to the effects of climate change (e.g., changes in precipitation, flood and drought risks, heat emergencies, etc.)?

  This project will reduce the use of cleaning chemicals.

- Will this project involve young people that will encourage a new generation to positively contribute to their community and surroundings?

  Unfortunately a limited number of young people find themselves being held in Jail. If this project is approved these young people will see the Aqueous Ozone cleaning system in use and will first hand witness the positive and safe results.

- Will this project support businesses that emit less polluting or hazardous substances to air, water, or soil and has this project considered alternative routings to avoid damaging valuable natural sites and ecosystem services?

  This project supports a business who's cleaning device only emits ozone and oxygen back into the air.

- Will this project raise awareness about waste prevention and recycling among industry, government , resident households, etc., and will the project help reduce the amount of waste going into the landfill?

  Yes. A reduction in the amount of empty cleaning chemical containers with a small amount of residual chemical remaining being taken to a landfill.

- Will this project still be relevant when looking at the demographic changes ahead?

  Yes. As mentioned before most humans regardless of race, religion, politics, etc… desire a clean safe area/environment.

- Will this project consider the most up-to-date technology for recycling and waste reduction?

  Yes. Although some portion of this technology has been used around the world for a long time the CleanCore Technology modernizes the technology and allows it to used effectively on a small scale. Small scale use is an important consideration. When many people charge their household lighting from incandescent to LED the emergency savings were tremendous.

  - **1785:** A Dutch chemist experimenting with water by "sparking" it with electricity notices it creates an unusual odor
  - **1840:** Scientists realize this unusual odor is similar to the smell in the air after a thunderstorm, leading to the discovery of ozone
  - **1850s:** The first experiments using aqueous ozone were to treat or purify water
  - **1906:** The city of Nice, France, built the first water purification plant using ozone; it is still in use today

- **1940:** The number of ozone installations to treat water reaches 119 and increases to 1,043 by 1977 and nearly 2,000 by 1985
- **1984:** Ozone was used to clean and sanitize the swimming pools installed for the 1984 Olympic Games in Los Angeles
- **1996:** FDA clears use of aqueous ozone systems in food preparation facilities
- **2001:** FDA allows the use of aqueous ozone to sanitize food "contact surfaces" during or after the manufacture of food products
- **2008:** Aqueous ozone systems are introduced to the professional cleaning industry in Europe and North America
- **2016:** Aqueous ozone solution becomes Green Seal® certified.

- Will this project use products that are non-polluting or come from an environmentally friendly source that will reduce negative impacts of your project on the environment, e.g., FSC wood, non-toxic, and non bio-accumulative chemicals?

  Yes. This product uses air (O2), cold water (H2O) and a small amount of electricity to create ozone (O3), it's effective oxidized cleaning product. When the cleaning procedure is over ozone reverts to becoming oxygen, and the water returns to standard water.

- Will this project avoid the risks of water, air, and soil contamination?

  Yes. This product uses air (O2), cold water (H2O) and a small amount of electricity to create ozone (O3), it's effective oxidized cleaning product. When the cleaning procedure is over ozone reverts to becoming oxygen, and the water returns to standard water.

- Will this project support the provision of environmental and social services in a certain area (e.g., flood prevention, water purification, air cleaning)?

  Yes. Water purification. Water is initially oxidized by ozone. Ozone reverts to become oxygen over a short period of time therefore unused water is not effected. This is unlike cleaning chemicals mixed with water to create a cleaning solution. The cleaning chemicals can not easily be separated even if attempting to dilute the cleaning solution by adding additional water.

- Has the proposal included green procurement standards for required goods, materials, and services?

  I believe so.

- Will this project lead to a decrease in greenhouse gas emissions?

  By reducing the need of using cleaning chemical, production this will decrease to some degree, the greenhouse gas created during chemical production would also be decrease to some degree.

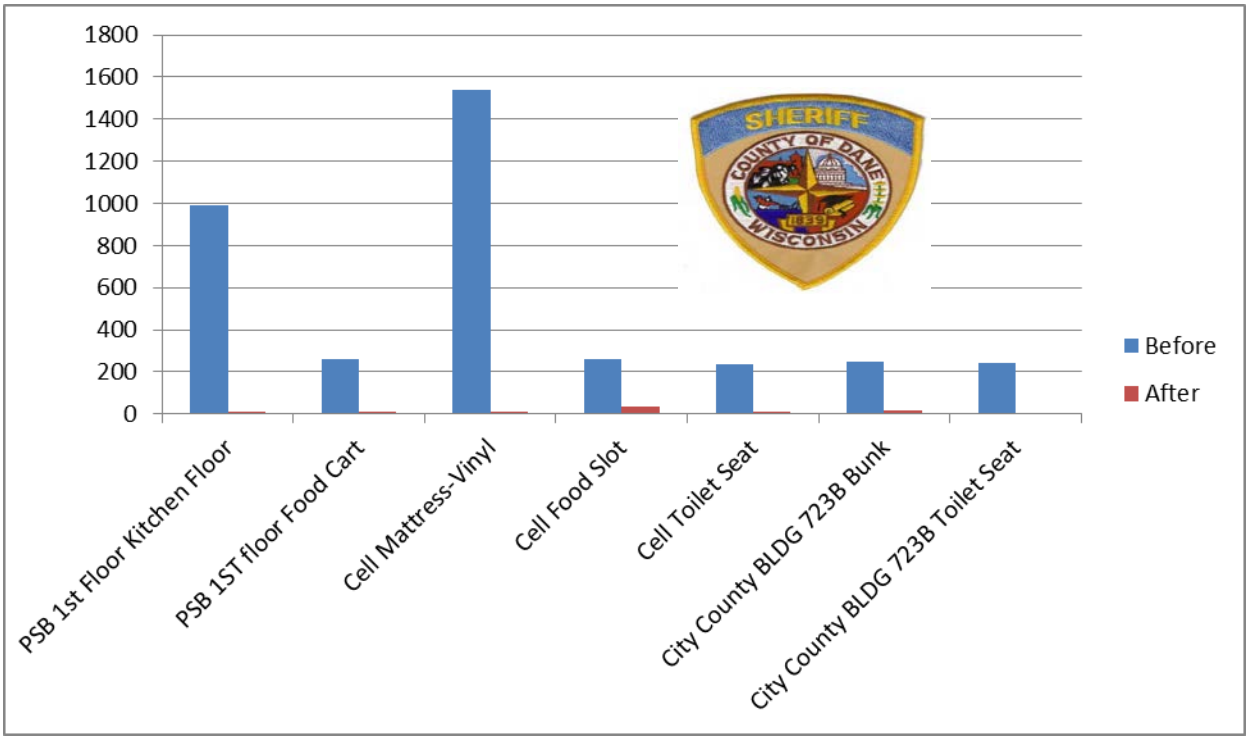
- Will this project reduce the need for fossil fuel-dependent transport, increase public transit use, or increase walking and bicycling?

  Jail facilities. This project will reduce the amount of times that cleaning chemicals need to be delivered to the Jail facilities. The CleanCore Technology aqueous ozone cleaning system only require Air (O2), Water (H2O) and electricity to provide an adequately clean materials.

Hygiena ATP Monitor Test Results – Tuesday May 30th, 2017 (results 30 and below acceptable)

Average results

	Before	After
PSB 1st Floor Kitchen Floor	989	10
PSB 1ST floor Food Cart	258	13
Cell Mattress-Vinyl	1538	10
Cell Food Slot	258	35
Cell Toilet Seat	235	13
City County BLDG 723B Bunk	249	18
City County BLDG 723B Toilet Seat	242	4



Updated January 2017

Cleaning Chemical Orders April and May 2017

Prod	Descrip 1	Apr 17	May 17	Total Units	Price	TTL $
11660	108506 Hard Surface Disn			0	$37.27	$0.00
11691	63306725 Aseptic-Wipe II	2		2	66.42	$132.84
10982	6100730 FoodService Foam	30		30	$51.53	$1,545.90
222122	6100693 Peroxide Multi-S			0	$63.64	$0.00
11666	006104 L.O.E. Floor Stri			0	$41.32	$0.00
224117	14542 Neutral Disinfctan	2	10	12	$69.10	$829.20
11661	120215 HDQ Neutral 15gal			0	$149.61	$0.00
11558	6101131 Lime-A-Way Scale	2		2	$31.34	$62.68
228317	311105 Blue Glo Pot Pan			0	$40.55	$0.00
228411	795 laundry detergent wa	15	6	21	$40.55	$851.55
50026	12971 Pantastic Liquid	12		12	$58.20	$698.40
11664	765005 SparClean All Tem			0	$60.32	$0.00
10201	11817 Jet Dry Rinse Addi			0	$65.09	$0.00
10714	6100185 Solid Power XL w	8		8	$79.27	$634.16
30966	CLO30966CT Clorox Ultra			0	$12.93	$0.00
50687	7652 Rinse Aid High Temp			0	$63.27	$0.00
11669	958600 Metering Tips Var			0		$0.00
4055	405505 IShine 25% High s			0	$60.85	$0.00
16566	304003 Spray Buff RTU Fi			0	$28.80	$0.00
10708	607600 SparSan Q Disnfct	4		4	$34.32	$137.28
16468	631000 Stainless Steel C			0	$53.38	$0.00
KAGB1001	901 1oz plastic pump dis			0	$4.02	$0.00
					TOTAL:	$4,892.01

If CleanCore Technology is obtained it is reasonable to believe that cleaning chemical cost may be reduced by 50%.

$4,892.01 divided by 2 = $2,446.00 (i.e. 50% of cost)

$2,446 multiply by 6 = $14,676.03 (potential cost savings per calendar year).

$37,193.35 (CleanCore quote cost) divided by $14,676.03 equals 2.53 (years to recover costs)