Wood County Renewable and Sustainable Committee

Date: Wednesday, October 21, 2020 Time: 9:00 am Location: Room 114 - Wood County Courthouse

- 1) Call to order
- 2) Public comments
- 3) Review/approve previous meeting minutes
- 4) Update Faith Technologies
- 5) Review remaining R&S and Lean Process Grants
- Future agenda items
- 7) Next meeting date and time
- 8) Adjourn

Join by phone

+1-408-418-9388 United States Toll Meeting number (access code): 146 366 1285

Join by WebEx App or Web

https://woodcountywi.webex.com/woodcountywi/j.php?MTID=m4142601bd9086cca9198974b67175e4b Meeting number (access code): 146 366 1285 Meeting password: RS1021

RENEWABLE & SUSTAINABLE COMMITTEE MEETING

DATE:Wednesday, June 24, 2020TIME:9:00 AMLOCATION:Wood County Courthouse – Room 114, Wisconsin Rapids, WI

Present: Jake Hahn, Al Breu, Dave LaFontaine, Bill Leichtnam, Mike Feirer,

Others

Present: Reuben Van Tassel, Nancy Turyk, Nicole Gessert, Lance Pliml, Bill Clendenning

- 1. Call Meeting to Order: Supervisor Hahn called the meeting to order at 9:00 a.m.
- 2. Public Comments: None
- Elect Chair:

Bill Leichtnam nominated Supervisor Hahn for Chair. Dave LaFontaine moved to close the nominations.

Motion for Supervisor Hahn as R&S Committee chair carried unanimously.

4. Elect Vice Chair: Dave LaFontaine nominated Sup

Dave LaFontaine nominated Supervisor Leichtnam for Vice Chair. Dave LaFontaine moved to close the nominations.

Motion for Supervisor Leichtnam as R&S Committee chair carried unanimously.

 Review/approve previous meeting minutes: Minutes from the March 5th, 2020 R&S Committee meeting. It was noted that Supervisor Feirer was in attendance but was not listed in the minutes.

Motion: (LaFontaine/Feirer) to approve the prior meeting minutes with the changes. Motion carried unanimously.

- 6. Reuben Van Tassel projects update: Van Tassel updated the Committee that he was still waiting to be contacted by Faith Technologies regarding the energy study. Nancy Turyk indicated she had reached out to Faith Technologies in March but had not heard back and did not pursue further due to Covid'19. Turyk will follow up with Faith Technologies. Discussion ensued.
- 7. Nancy Turyk projects update:

Turyk indicated due to Covid'19 most of her efforts have been focused on coordinating with businesses for economic development.

Midwest Renewable Energy Association (MREA) is coordinating the group buy discount again this year and Wood County is a sponsor. Turyk is looking for guidance from the R&S Committee as to any involvement they would like Turyk to have for promoting the MREA program. Discussion ensued. Turyk will reach out to MREA to see if they will have new postcards for distribution again this. Turyk will also check into possible email information for clerks and town chairmen, and a link on the County's website to MREA.

Turyk shared information regarding the Governor's task force on climate change just starting to open up. Turyk shared the link to the Committee for submitting comments to the task force: https://climatechange.wi.gov/Pages/Home.aspx

8. Savion Solar Project:

Turyk shared basic information on the status of the Savion solar project. Turyk indicated there is an open docket with information available on the Public Service Commission (PSC) website to follow along with the project. Discussion ensued. Supervisor PlimI stated he has been in contact with representatives from Savion and he well set up for a representative to attend a future meeting. Supervisor Leichtnam shared that developer's agreements have been worked on between the County and Savion but the process is behind schedule. He indicated Savion is quite sincere in wanting to have developer's agreements. Discussion ensued.

Renewable & Sustainable Committee Meeting Page 2 Thursday, March 5th, 2020

9. Energy Study:

Discussed earlier under Reuben's projects agenda item. Turyk will reach out to Faith Technologies.

10. Staff Member:

Supervisor Hahn asked Turyk what the status is for needing additional staff time for R&S priorities. Turyk indicated due to the Covid'19 pandemic her resources were directed to Covid'19 but that is beginning to alleviate. Turyk indicated there is potential some of her time may be directed to the Verso closure but she is hopeful that her schedule may allow her to direct more focus on R&S. She would like to reevaluate the priorities that were set forth by the Committee back in March. This will be added as an agenda item to the next R&S Committee meeting.

11. EV Charging Station:

Turyk indicated she believes the grant funds from the VW settlement for EV charging stations have been looped into the Climate Change Taskforce recommendations. Possible recommendations could be available by August 2020 but it will also be dependent on the legislature schedule. Discussion ensued.

12. R&S and Lean Process Grants:

Supervisor Hahn stated the three grant applications received are included in the packet. Discussion ensued.

Motion: (Breu/LaFontaine) to recommend approval of all three submitted grant applications and submit to the PIT Committee. Motion carried unanimously.

- 13. Future agenda items:
 - Savion Representative
 - Nancy Turyk priority list
 - EV charging station
 - R&S and Lean Process Grants
- 14. During discussion for future agenda items it was noted to let the Property and Information Technology Committee (PIT) know of the recommendation to extend the deadline for the R&S and Lean Process grants.

Motion: (LaFontaine/Leichtnam) to recommend to the PIT Committee to leave open the grant deadline for additional grant applications. Motion carried unanimously.

- 15. Supervisor LaFontaine asked VanTassel if he had an idea of how many fixtures have been switched to LED Countywide. Van Tassel indicated he will see what information he can find from other departments countywide.
- 16. Supervisor Clendenning stated he is cautious about the Consolidated Water and Power Co. (CWPCo) tie to the River Block building due to the recent news about the Verso mill closure. Van Tassel indicated he has spoken with the President of CWPCo who has indicated that he believes there is enough of a separation of entities but would be glad to attend a meeting. Discussion ensued. Reuben will reach out to CWPCo about attending a future meeting.
- 17. Next meeting: TBD
- Adjourn Renewable & Sustainable Committee Meeting: Supervisor Hahn declared the meeting adjourned @ 10:14 a.m.

Notes by Nicole Gessert, Maintenance Department



County of Wood

Courthouse - 400 Market Street Wisconsin Rapids, WI 54495-8095

2020 Wood County Renewable and Sustainable Grant (RSG)

Applicant Organization: Wood County Maintenance Department Contact Person/Title: Reuben Van Tassel, Facilities Manager Contact Person Telephone: 715-421-8404 Email: rvantassel@co.wood.wi.us

The purpose of the 2020 Renewable and Sustainable Grant (RSG) Fund

The purpose is to promote creative and innovative approaches that implement renewable and sustainable practices in Wood County government departments and facilities. Wood County is making \$25,000 available in 2020 for renewable and sustainable projects that can serve as catalysts for future renewable and sustainable projects. Grant requests can be made for any amount of \$25,000 or less. A department may submit more than one project application and multiple RSG projects may be funded.

*Grant applications are due by May 22nd, 2020 at 4:30pm, and can be submitted to the Wood County Clerk's Office.

Sustainable practices meet today's needs without compromising the ability of future generations to meet their own needs.

Renewable resources are commodities or resources that are replaceable or replenishable by biological reproduction or reoccurring processes.

Request Overview - Provide a summary overview of your proposed project and explain how it is consistent with the purpose of this grant fund.

Criteria	4	3	2	1	Score
	(Excellent)	(Above Average)	(Average)	(Unsatisfactory)	
Innovation is apparent.	Highly creative,	Somewhat creative,	Few components	Lacks creativity or	
Activities/strategies are	unique and/or	unique and/or	contain creative,	innovation.	
creative and unique.	innovative. May	innovative. May be	unique or innovative	Common request.	
Demonstrates how the	serve as catalyst for	something done	approaches.		
project is consistent	future renewable	before but contains			
with the grant goals.	and sustainable	some originality.			
	projects.				

(If you require additional space, attach separate sheet.)

To become more sustainable, we need to decrease our consumption. One of this year's projects includes replacing some windows at River Block. The new glass will reduce heat loss during winter months by more than 50% and will reduce solar heat gain during summer months by almost 40% compared to the existing windows. The increased efficiency will lead to less consumption of electricity and natural gas, in turn lowering our utility cost.

Return on Investment - Explain how the proposed project will provide a Return on Investment (ROI) to Wood County. ROI should address the measurable financial impact to the County, as well as any non-financial impacts. ROI can be measured over an extended period of time of 1 year, 5 years, and 10 years or longer if necessary. Please be as specific as possible.

Criteria	4	3	2	1	Score
	(Excellent)	(Above Average)	(Average)	(Unsatisfactory)	
Clearly identifies the	Clearly identifies	Specific with some	Mentions a general	Provides no	
need of the proposed	specific data that	data to support the	statement of need	information on the	
project and how it will	shows how the	proposed project	but provides no	need of the project	
accomplish the goal of	project will provide	and how it will	supporting data.	or how the project	
the grant while	a ROI while aligning	provide a return on		will provide a return	
providing a return on	with the purpose of	investment.		on investment.	
investment to Wood	the grant.				
County.					

(If you require additional space, attach separate sheet.)

It is difficult to calculate a precise ROI for this project. While a conservative estimate of heating/cooling cost savings is nearly \$1,000 annually, the existing windows are also beginning to leak, resulting in additional repair costs that will be avoided with the new windows.

This project was planned and budgeted for 2020, however, with the change in market conditions and material shortages this year, the windows scheduled for replacement this year will cost \$21,812.64 more than what was budgeted. Delaying replacement of the windows will be detrimental to the building; since this project will increase efficiency and reduce consumption/costs, I am requesting grant funding for the project overage in lieu of requesting funds out of County contingency.

Leveraged or Matching Funds – Are leveraged funding sources or matching funds being applied to the proposed project? If so please explain the amount of funding and the source.

Criteria	4	3	2	1	Score
	(Excellent)	(Above Average)	(Average)	(Unsatisfactory)	
Clearly identifies any	Clearly identifies	Specific sources for	Mentions leveraged	Provides no	
leveraged or matching fund sources being applied to the proposed	leveraged or matching funds with supporting data.	leveraged or matching funds with some supporting	or matching funds with no supporting data.	leveraged or matching funds.	
project.		data.			

(If you require additional space, attach separate sheet.)

\$75,000 was approved in Capital Funding this year for River Block window replacement. Including architect's fees, environmental testing, and contractor cost, the project total is \$96,812.64.

Project Funding Request Summary

	Requested Funding	Total Organization Budget	Other Funding – e.g. grants, volunteers, donations
Wages & Benefits			
101-9901-51592-000-101			
Office Supplies & Expenses			
101-9901-51592-000-311			-
Professional Services			
101-9901-51592-000-219			-
Conferences & Dues			
101-9901-51592-000-172			
Misc. or Other			Capital = \$75,000
101-9901-51592-000-348	\$21,812.64		1
Total	\$21,812.64		\$75,000

(If you require additional space, attach separate sheet.)

Project Reporting Requirement – On approval of the grant funding request, the applicant will submit a 1-page timeline and implementation strategy to the Executive Committee. On completion of the RSG Grant, a 1-page summary will be prepared and presented to the Wood County Executive Committee to be reviewed at their regularly scheduled June meeting.





County of Wood

Courthouse - 400 Market Street Wisconsin Rapids, WI 54495-8095

2020 Wood County Renewable and Sustainable Grant (RSG)

Applicant Organization: Click here to enter text. Wood County Annex and Health Center (Norwood)

Contact Person/Title: Click here to enter text. Lee Ackerman, Maintenance Supervisor

Contact Person Telephone: Click here to enter text. Email: Click here to enter text. 715-384-2188 ext. 3223 Lackerman@co.wood.wi.us

The purpose of the 2020 Renewable and Sustainable Grant (RSG) Fund

The purpose is to promote creative and innovative approaches that implement renewable and sustainable practices in Wood County government departments and facilities. Wood County is making \$25,000 available in 2020 for renewable and sustainable projects that can serve as catalysts for future renewable and sustainable projects. Grant requests can be made for any amount of \$25,000 or less. A department may submit more than one project application and multiple RSG projects may be funded.

*Grant applications are due by May 22nd, 2020 at 4:30pm, and can be submitted to the Wood County Clerk's Office.

Sustainable practices meet today's needs without compromising the ability of future generations to meet their own needs.

Renewable resources are commodities or resources that are replaceable or replenishable by biological reproduction or reoccurring processes.

Request Overview - Provide a summary overview of your proposed project and explain how it is consistent with the purpose of this grant fund.

4 (Excellent) lighly creative, nique and/or	3 (Above Average) Somewhat creative, unique and/or	2 (Average) Few components contain creative,	1 (Unsatisfactory) Lacks creativity or	Score
lighly creative,	Somewhat creative,	Few components	Lacks creativity or	
0,			,	
inique and/or	unique and/or	contain creative	* · · · · · · · · · · · · · · · · · · ·	
		contain creative,	innovation.	
nnovative. May	innovative. May be	unique or innovative	Common request.	
erve as catalyst for	something done	approaches.		
uture renewable	before but contains			
nd sustainable	some originality.			
orojects.	- /			
e ut n	rve as catalyst for cure renewable d sustainable	rve as catalyst for something done before but contains d sustainable some originality. ojects.	rve as catalyst for sure renewablesomething done before but contains some originality.approaches.d sustainable ojects.some originality.	rve as catalyst for sure renewablesomething done before but contains some originality.approaches.d sustainable ojects.some originality.

(If you require additional space, attach separate sheet.)

This proposed project is designed to save energy, specifically electricity, both immediately and ongoing by adjusting the run times for a specific air handler fan at the Wood County Annex and Healthcare building. This would be accomplished by replacing the outdated pneumatic HVAC controls and heating/cooling water valves on air handler AC-8 with Direct Digital Controls (DDC) and utilizing exiting computer software program for more efficient operation. This fan would then be programed to either shut down or scale back output during times of low usage, such as over night.

Part of this task has already been completed in anticipation for the eventual upgrade; the heating/cooling water valves have been replaced and the operating software, Desigo, in currently in use by all Wood County buildings. This project is in the 5-year plan at present, though sooner action will start save costs immediately.

Return on Investment - Explain how the proposed project will provide a Return on Investment (ROI) to Wood County. ROI should address the measurable financial impact to the County, as well as any nonfinancial impacts. ROI can be measured over an extended period of time of 1 year, 5 years, and 10 years or longer if necessary. Please be as specific as possible.

Criteria	4	3	2	1	Score
	(Excellent)	(Above Average)	(Average)	(Unsatisfactory)	
Clearly identifies the need of the proposed project and how it will accomplish the goal of the grant while	Clearly identifies specific data that shows how the project will provide a ROI while aligning	Specific with some data to support the proposed project and how it will provide a return on	Mentions a general statement of need but provides no supporting data.	Provides no information on the need of the project or how the project will provide a return	
providing a return on investment to Wood County.	with the purpose of the grant.	investment.		on investment.	

(If you require additional space, attach separate sheet.)

A building energy study was performed for the Wood Co Annex (Norwood) in 2016 which identified areas of energy usage that could be minimized by upgrades to equipment. At that time, the AC-8 fan serving the main lobby was noted as having potential for savings by installing the DDC controls described earlier. The savings in utility costs was projected to be \$2,978 per year. The cost estimate for making these upgrades is \$16,000, which gives us an ROI of 5.4 years.

These improvements will also allow Maintenance staff the ability to remotely monitor and make adjustments to the fan operations, detect malfunctions, control fresh air turnover rates (benefits response to Covid-19 and other pathogens), and perform emergency shutdowns.

Leveraged or Matching Funds – Are leveraged funding sources or matching funds being applied to the proposed project? If so please explain the amount of funding and the source.

Criteria	4	3	2	1	Score
	(Excellent)	(Above Average)	(Average)	(Unsatisfactory)	
Clearly identifies any	Clearly identifies	Specific sources for	Mentions leveraged	Provides no	
leveraged or matching	leveraged or	leveraged or	or matching funds	leveraged or	
fund sources being	matching funds with	matching funds with	with no supporting	matching funds.	
applied to the proposed	supporting data.	some supporting	data.		
project.		data.			

(If you require additional space, attach separate sheet.)

The heating/cooling valves were replaced prior to this project in anticipation for the future upgrade. Norwood Maintenance staff will assist with pulling wires and other tasks to keep costs down as much as possible. The control panel and software (Desigo) are already in place and operating many of the other HVAC devices in the building.

Project Funding Request Summary

	Requested Funding	Total Organization Budget	Other Funding – e.g. grants, volunteers, donations
Wages & Benefits			
101-9901-51592-000-101			
Office Supplies & Expenses			
101-9901-51592-000-311			
Professional Services			
101-9901-51592-000-219			
Conferences & Dues			
101-9901-51592-000-172			
Misc. or Other	16,000		
101-9901-51592-000-348			
Total	16,000		

(If you require additional space, attach separate sheet.)

Project Reporting Requirement – On approval of the grant funding request, the applicant will submit a 1-page timeline and implementation strategy to the Executive Committee. On completion of the RSG Grant, a 1-page summary will be prepared and presented to the Wood County Executive Committee to be reviewed at their regularly scheduled June meeting.

Outside Air Reduction

Air handling units serve several functions including space heating, cooling and ventilation. Facility ventilation is generally accomplished by bringing in outside air, mixing it with "return air" at the air handler, and distributing the resulting "mixed air" throughout the facility. Bringing in outside air increases energy consumption during most times of year because the outside air needs to be conditioned. Therefore, it is important to make sure the correct amount of outside air is being supplied to the facility only when needed. Outside air is needed when the facility is occupied, or when large exhaust systems are being operated. The calculations below estimate savings associated with an outside air reduction.

						-			
EXISTING	AC-1	AC-2	AC-3	AC-4	AC-5	AC-6	AC-7	AC-8	AC-9
	Therapy and East Wings	Pathways and Admissions	Crossroads and Bridgeway	Administrative Offices	Dining Rm	Nursing Offices (Pathways and Admissions) and Middle Lobby on Level 3	Clinical Services Area (Medical Records)	Main Lobby	Maintenance Wing
CFM of Supply Air Design	11,730	8,810	10,675	4,880	4,930	5,740	5,050	3,835	9,380
CFM of Supply Air Actual	10,493	7,171	9,374	3.842	5,189	6,658	4,399	2,999	4.885
CFM of Outside Air	4.640	2.082	1.586	1.008	1.837	3.546	1.329	1.625	10
AHU Motor Size (hp)	20.0	20.0	20.0	10.5	8.5	9.0	10.5	6.5	10.0
AHU Motor Efficiency	87.6%	87.6%	87.6%	85.3%	85.3%	85.3%	87.5%	83.8%	87.2%
AHU Motor Load Factor	65%	65%	65%	65%	65%	65%	65%	65%	65%
Hrs/Wk OA is Supplied:	168.0	168.0	168.0	168.0	168.0	168.0	168.0	168.0	168.0
Wks/Yr OA is Supplied:	52	52	52	52	52	52	52	52	52
Heating Balance Point (F):	55	55	55	55	55	55	55	55	55
Heating Degree Hours:	144,795	144,795	144,795	144,795	144,795	144,795	144,795	144,795	144,795
Heating System Efficiency:	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Is the facility cooled?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cooling Balance Point:	60	60	60	60	60	60	60	60	60
Cooling Degree Hours:	28,965	28,965	28,965	28,965	28,965	28,965	28,965	28,965	28,965
EER of Cooling System:	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Conversion Factor	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Avg Gas Use (th/yr)	8,710	3,908	2,977	1,892	3,448	6,656	2,495	3,050	19
Average therm Rate	\$0.543	\$0.543	\$0.543	\$0.543	\$0.543	\$0.543	\$0.543	\$0.543	\$0.543
kWh/yr	104,652	100,276	99,428	53,869	45,355	50,761	53,107	35,638	48,596
Average kWh Rate	\$0.073	\$0.073	\$0.073	\$0.073	\$0.073	\$0.073	\$0.073	\$0.073	\$0.073
Annual Energy Cost	\$12,369	\$9,442	\$8,875	\$4,960	\$5,183	\$7,320	\$5,232	\$4,258	\$3,558
PROPOSED									
CFM of Outside Air	3,080	2,120	2,880	730	740	2,350	755	575	1,430
Hrs/Wk OA is Supplied:	168.0	168.0	168.0	55.0	84.0	70.0	70.0	70.0	52.0
Wks/Yr OA is Supplied:	52	52	52	52	52	52	52	52	52
Avg Gas Use (th/yr)	5,782	3.980	5,406	449	695	1,838	591	450	831
kWh/yr	101.984	100,341	101,641	17.606	21.834	20,651	21.832	14,187	16.048
Motor kW only	96,714	96,714	96,714	17,071	21,004	18,623	21,180	13,691	15.036
Annual Energy Cost	\$10,584	\$9,486	\$10,355	\$1,529	\$1,971	\$2,506	\$1.915	\$1,280	\$1,623
Annual Energy Cost	\$10,004	\$5,400	\$10,000	\$1,023	ψ1, 3 11	φ2,000	\$1,510	<i>\$1,200</i>	ψ1,020
SAVINGS									
th/yr	2,928	-72	-2,429	1,443	2,753	4,818	1,904	2,600	-812
kWh/yr	2,668	-65	-2,213	36,263	23,521	30,110	31,275	21,451	32,548
Annual Cost Savings	\$1,785	-\$44	-\$1,480	\$3,431	\$3,212	\$4,814	\$3,317	\$2,978	\$1,935
Project cost Estimate									
Incentive									
Simple Payback	Immediate	Immediate	Immediate	Immediate	Immediate	Immediate	Immediate	Immediate	Immediate
	minoulato								

Summary

Yellow cells indicate that information from your facility is required for calculations.

These spreadsheets are meant as a rough estimate of energy use and savings potential. FOE nor its contractors can guarantee the results calculated by this tool. For a reasonableness check, contact a Preferred Ally or your FOE Energy Advisor.