University of Dayton Green Revolving Fund
Project Application

GRF Project #	
Date Rec'd	

Shaded Areas for UDGRF Oversight Committee

PROJECT DESCRIPTION AND DETAILS

A. Administration

1. Project Sponsor (Faculty or Department)	2. Project Title
Facilities Management	**Install (6) new VFD's and Motors on three AHU**
3. Project Manager	4. Building Name and Specific Area (if applicable)
Jim Mullins	**Jesse Phillips Humanities Center**
5. Project Type (check all that apply)	6. Technology (check all that apply)
☑ Electric ☐ Gas ☐ Water ☐ Renewable ☐ Other (describe)	☐ Lighting ☐ Lighting Controls ☐ HVAC ☐ Solar ☑ Motors & Drives ☐ Wind ☐ Recycling ☐ Other (describe)

7. Rebates/Incentives/Grants/Donations (Brief description with estimated amount)

$7,300.00 in rebates from DP&L

B. Project Finances

Total Project Cost (Labor & Materials)	
21,915	
Time/Labor (Faculty/Staff)	
Facilities management staff 75 hours	
Total incentives/Rebates/Grants/Donations	
	$7,300.00
Costs after rebates/incentives/grants/donations applied	
	$14,614.00
Final Loan Funding Requested	

Initial draw $21,915.00, rebate check deposited when project complete,
remaining balance $14,614.00

**Note: All rebate/incentive/grant eligible loans must be pursue all rebates/incentives/grants available. Please explain if you are requesting any rebates/incentives/grants.

C. Project Objective

Describe project objective (include educational benefits/behavioral changes)

Objective is to increase efficiency and life of new fan motors in three air handling units in Humanities, by installing new energy efficient motors & VFD's. This will result in an annual electric savings of kWh and $13,783.28 in electric costs per year. Education value is based on graduate engineer students perform a pre/post log, use trend data and analyze and calculate annual savings.

D. Implementation Plan and Timeline

Describe specific project details and anticipated timeline

Order motors and drives 3/21/2016 to have materials here by 4/4/2016 for installation. Once everything is up and running we will post log for the same time period that we pre-logged for to have a measured annual energy savings.

E. Pre and Post Validation
Please include measurement verification data, case studies, web articles.
Dr. Kissock's engineering students have pre-logged the energy use for all six motors and will calculate the savings for installing new VFDs and sis new high efficient motors, the students will generate a report for total energy savings. The students will then follow up after the project is complete and post log the equipment to verify annual savings. See report

F. Environmental Reductions/Impacts
The annual kWh savings from this project is 445,546 kWh this is equal to eliminating 307 metric tons of C02, same as the emissions from 64.7 cars driven for one year. C02 emissions from 42.3 homes electricity use for one year, 34,570 gallons of gasoline consumed, 714 barrels of oil consumed.Equals carbon sequestered by 252 acres of US forest in one year

G. Logistics	
Anticipated Start Date	**4/4/2016**
Anticipated Completion Date	**4/11/2016**
Anticipated funding Draw Date	**3/21/2016**
Project Payback	**0.46**

ACCOUNTING

Please indicate where the savings will be realized. (ie. where are the charges going now)

Fund (s)	Title (s)	% split

Financial Manager of above funds	Email	Phone
Unit Budget Manager	**Email**	**Phone**

APPROVALS			
1. Project Manager (borrower)	Date	2. Project Sponsor	Date
Jim Mullins	3/1/2016		
3. UDGRF Coordinator	Date	4. UDGRF Review Board	Date
5. Vice President for Finance & Administrative Services	Date	6. Vice President for Facilities & Campus Operation	Date

ATTACHMENTS
List any other attachments that need to be submitted to support this application. (Spec sheets, quotes, additional calculations, rebate/incentive/grant/donation information)
See report by Dr. Kissock's engineering students