NACUBO INNOVATION AWARD
Application Form

NACUBO

To guarantee consideration completed application must be received by **April 6, 2007**

Amy Barbieri, Administrative Coordinator
NACUBO/Innovation Award
2501 M St., NW, Suite 400
Washington, DC 20037

Please submit a program summary no more than 3 double-spaced pages using a minimum font size of 10 points.

Do not include additional information (reports, forms, etc.) with the application. The Awards Council may request such items during the evaluation process.

Program Title: Being Green: Changing Tomorrow, Today

Institution Name: University of Central Oklahoma

Contact Name: Steve Kreidler

Contact Title: Executive Vice President

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Institution Type

- ☐ Research
- ☒ Comprehensive/Doctoral
- ☐ Small Institution
- ☐ Community College

Award Category Type

- ☐ Process Improvement
  Recognizes higher education institutions that have successfully re-engineered or designed a program, improving service delivery of administrative activity in response to a campus need.
- ☒ Resource Enhancement
  Recognizes higher education institutions that have successfully reduced costs, increased revenues or improved productivity in response to a campus need.

Topical Area(s)
(Check all that apply)

- ☐ Accounting, Finance and Tax
- ☒ Campus Operations
- ☐ Human Resources
- ☐ Information Technology
- ☒ Leadership/Institutional Effectiveness
- ☐ Planning and Budgeting
- ☐ Risk Management
- ☐ Student Financial Services
- ☐ Other: _____

NACUBO Primary Representative
(Endorsement required)

Name *(print clearly)* DAVID N. KOEHN

Title *(print clearly)* ASSISTANT VICE PRESIDENT FOR FINANCE

I hereby certify that to the best of my knowledge the statements and calculations contained herein accurately reflect the circumstances reported.

3/29/07
Date

Signature

NACUBO Innovation Award

University of Central Oklahoma

Being Green: Changing Tomorrow, Today

Being Green: Changing Tomorrow, Today

As a part of the University of Central Oklahoma's core values: Character, Community and Civility, the opportunity to take initiative as an individual or a department is strongly encouraged. Our campus culture provides the opportunity to foster needed change and be a leader on campus. The university strives to set the example of being a steward of resources both renewable and non-renewable. There are many facets to our journey of innovation. The two most innovative facets are on-site creation of Bio-Diesel and 100% green energy use through the power of wind.

In 2006, the employees of the Physical Plant took advantage of administrative support and the opportunity to use their abilities to promote change in the world of Bio-Diesel. The employees of the Physical Plant recognized a problem that came with an opportunity and explored a move from Petrol-Diesel to Bio-Diesel fuel for their equipment. Bio-Diesel is fuel produced for diesel engines from vegetable oil or animal fat, which is normally costly to discard. This change allowed UCO to embrace a more economical fuel source, a more environmentally friendly fuel substitute, and create a template for other interested parties to implement.

Beginning in 2004, the University set their goal to become 100% Green Energy dependent by 2007. Our commitment and success is supported through partnerships with Johnson Controls Incorporated, the City of Edmond, and the Environmental Protection Agency- Green Energy Division. Specifically, UCO realized that we could purchase wind power from our local electricity provider, Edmond Electric. The initial assessment of moving to wind energy showed that the production cost of wind energy was more costly than traditional energy. UCO began determining what we could do in order to create a more level playing field between the two energy costs and potentially create cost and energy savings. During this process we discovered existing University resources were insufficient to undertake the project. Creation of the innovative partnership with our vendor, Johnson Controls, Inc., which led to cost avoidance of approximately $3.9 million, enabled the University to endeavor wind energy while attaining maximum efficiency. These efforts, coupled with our commitment to wind power, deliver both energy cost containment and a more amiable environment.

By becoming a Green University, UCO pledges to use a minimum of 18% Green Energy. Green Energy eligible resources include energy produced with wind, solar electric, geothermal, biomass, and

hydro sources. The partnership with EPA, being appointed to the Green Power Leadership Club, winning the 2006-2007 Green Power Partner Challenge and 100% wind energy are all pieces to the bigger picture that contributes to UCO's status as a Green University.

UCO is continually striving to be a Green University. The development, production, and implementation of Bio-Diesel and the investment in Green Energy are examples of UCO's commitment to being environmentally friendly to our community. The benefit's of using Bio-Diesel and Green Energy impacts our stakeholders: students, faculty, staff, local geographic community, and other universities.

Our Bio-Diesel journey is part of being "Green" and is an innovation of our campus environment. For the on-site production of Bio-Diesel the Physical Plant requested waste vegetable oil from the University's Student Union. The Director of Food Services was very supportive, especially since this meant reducing the cost of waste vegetable oil disposal. The oil was harvested and experiments in Bio-Diesel production began with small test runs. After the successful implementation of Bio-Diesel in various heavy equipment applications, the Physical Plant conferred with the Chemistry Department on further testing and for information to improve the Bio-Diesel end production. A bubble washing procedure was implemented to create a higher quality fuel. A Methanol reclaimer was designed and built that enabled the Methanol to be re-used, providing a project savings of approximately 30% in Methanol costs.

By using Bio-Diesel the concern of the Physical Plant in regards to the petrol-diesel stored on campus is being appeased. A 2,000 gallon above ground tank stores the supply for vehicles not currently using Bio-Diesel. This is a potential hazard and the goal is to reduce the storage unit to a 500 gallon tank. The University's plan to expand the Bio-Diesel program will help to meet this goal.

A byproduct of the Bio-Diesel process is glycerin. The motor-pool uses the glycerin as degreaser and soap for the mechanics. The glycerin's use as a degreaser saves the university almost $2,400 per year. The University is currently using Bio-Diesel in their forklift, two trucks, and a John Deere Tractor. The University plans to expand the use of Bio-Diesel to many of their other diesel

running engines. Through the implementation of Bio-Diesel, the University of Central Oklahoma is becoming a more environmentally friendly place to study, work, or just enjoy a Sunday afternoon.

The College of Math and Science and the College of Business have joined efforts in using Bio-Diesel as a medium for learning. Both university colleges have invested their time and the student's class time to learning more about Bio-Diesel. The College of Math and Science and the department of Engineering and Physics have studied the effects of Bio-Diesel on diesel engines and the environment in which they are used. There are students doing independent research on these effects and through this process the students are acquiring real world applications to the theories practiced in class. The same opportunities are occurring in the College of Business. Students have studied the operations management aspect of Bio-Diesel creation, as well as the cost analysis per gallon. The students are gaining value in their education by applying the theories learned in the classroom into the real world.

The Green Energy component of UCO's Green University goal is innovative due to the nature of its impact and level of involvement. Currently UCO is 100% wind energy and one of 32 university's in the United States that are currently recognized as leaders in Green Energy consumption. UCO is one of six universities' that are recognized as 100% Green Energy dependent and in the Top Ten College and University Partners in the United States with a usage of 26,000,000 kWh. Through the contracting and purchase of Green Energy, UCO is continually impacting the community in which they reside. Over the past two years the purchase of wind energy has saved the University of Central Oklahoma over $100,000. These savings have been directed back to the students in the form of well deserved benefits.

It is the responsibility of the University of Central Oklahoma to be stewards of our resources. The City of Edmond, State of Oklahoma, and United State of America confide in our higher education system to create well-rounded, environmentally conscious, and prepared individuals to lead our country in a global economy. As a university we pride ourselves on modeling the change we want to see in our students. We strive to exemplify character, community, and civility by being stewards of our resources. While being stewards the University of Central Oklahoma also strives to be innovative in our processes and continually seek improvement in the way we do business. We are always adapting and ever changing because the world we reside and our students are doing the same.