

Practical information and strategies for owners and managers of food, dairy and meat processing facilities, consulting engineers, builders and others...

## Implementing Cost-Effective Energy Recovery Systems at Food, Dairy and Meat Processing Facilities

**April 10-11, 2008  
Madison, Wisconsin**

**Attend and Benefit!**

- ✓ **Comprehensive, up-to-the-minute information**
- ✓ **Proven energy recovery techniques**
- ✓ **Interactive learning through group discussions and idea exchange**

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Department of Engineering Professional Development  
432 North Lake Street Madison, Wisconsin 53706

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THE UNIVERSITY  
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**WISCONSIN**  
MADISON

COLLEGE OF ENGINEERING ■ DEPARTMENT OF ENGINEERING PROFESSIONAL DEVELOPMENT

In cooperation with  
College of Agricultural and Life Sciences

## Implementing Cost-Effective Energy Recovery Systems at Food, Dairy and Meat Processing Facilities

**April 10-11, 2008  
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- **Proven energy recovery techniques**
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## Implementing Cost-Effective Energy Recovery Systems at Food, Dairy and Meat Processing Facilities

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### **How You Benefit**

The development and implementation of a successful waste-to-energy or energy conservation bio-processing facility requires extensive planning, a clear understanding of engineering practices, and careful technical design. To assist you in this process, our practical new course offers a detailed presentation of topics ranging from energy sources to facility operations.

### **Important Course Topics**

- Market and bio-economy considerations
- Technical options for energy sources and recovery
- Project feasibility studies
- Financial analyses and permitting
- Waste-to-energy processes
- Developing an energy conservation plan and more!

### **Who Should Attend**

- Owners and managers of food, dairy and meat processing facilities
- Consulting engineers
- Contractors and builders
- Planners and regulatory agency staff

### **Interactive Learning**

You will have opportunities for group discussion and idea exchange with other participants and with the faculty. Group interaction provides a significant benefit for learning about energy recovery techniques.

### **Focus on Energy Scholarships Available for this Course**

If you are an employee of a Wisconsin industrial firm, a special 50% scholarship is available for you after attending this course. The scholarship procedure is:

1. Register for this course in the normal fashion (800-462-0876 or at <http://epd.engr.wisc.edu>) and make your course payment to UW-Madison.
2. Reserve your scholarship by faxing a copy of your registration to Focus on Energy at 608-277-2947.
3. After completing the course, fax a copy of your Certificate of Course Completion to Focus on Energy at 608-277-2947. Focus on Energy will send the scholarship check directly to your company.
4. Also, within 6 months of the course, if you complete a qualified energy efficiency project, saving at least 2,000 therms/year or 40,000 kWh/year, Focus on Energy will also reimburse you for the remaining portion of the course fee.
5. Questions on the Focus scholarship? Please contact Janet Kuehl at 800-762-7077.

### **Earn Continuing Education Credits**

By participating in this course, you will earn 1.2 Continuing Education Units (CEU) and 12 Professional Development Hours (PDH).

Enroll online today! <http://epd.engr.wisc.edu/webJ979>

# Implementing Cost-Effective Energy Recovery Systems at Food, Dairy and Meat Processing Facilities

April 10–11, 2008  
Madison, Wisconsin

## Course Outline

### Thursday, April 10

- 7:45 Registration**  
Tong Auditorium  
Engineering Centers Building  
1550 Engineering Drive  
Madison, Wisconsin
- 8:15 Welcome**  
Philip R. O'Leary  
Professor and Chair  
Department of Engineering  
Professional Development  
University of Wisconsin–Madison
- 8:30 Overview**  
Tim Baye  
Professor  
University of Wisconsin–  
Extension  
Platteville, Wisconsin
- 8:45 Assessing Market Trends in the Bio-energy and Carbon Economies**  
William Babler  
Risk Manager  
First Capitol Ag Risk  
Management  
Galena, Illinois
- 9:30 Break**

- 9:45 Characterizing Biomass-derived Energy Sources**  
Poul Rasmussen  
Director  
Renew Energy  
Odense, Denmark
- 10:45 Evaluating Technical Options for Energy Recovery**  
Cecil Massie  
Executive Vice President  
Innovation Technology &  
Engineering  
Bloomington, Minnesota
- 12:00 Lunch at The Pyle Center**
- 1:00 Performing an Initial Feasibility Study: The "Go, No Go" Decision Point**  
Tim Baye
- 2:00 Permitting and Preparation of Environmental Impact Reports**  
Russell Anderson  
Environmental Analysis and  
Review Program Supervisor  
Wisconsin Department of Natural  
Resources  
Fitchburg, Wisconsin
- 2:45 Break**
- 3:00 Analyzing Project Finances and Ownership Arrangements**  
Greg Lynch  
Attorney, Corporate and  
Securities  
Michael Best & Friedrich LLP  
Madison, Wisconsin  
John May  
Vice President  
Stern Brothers Co.  
St. Louis, Missouri
- 4:30 Adjourn for Day**

### Friday, April 11

- 7:45 Coffee and Conversation**
- 8:15 Processing Waste-to-Energy Matter Through Anaerobic Digestion**  
Ricardo Palomo  
CEO  
Renewable Energy Resources  
Mahtomedi, Minnesota
- 9:30 Break**
- 10:00 Developing and Initiating an Energy Conservation Plan**  
Tom Tucker PE  
Principal  
Kinergetics LLC  
Madison, Wisconsin
- 10:45 Energy Conservation Considerations for Refrigeration Systems**  
Dan Dettmers  
Associate Researcher  
Department of Engineering  
Professional Development  
University of Wisconsin–Madison
- 11:30 Lunch**
- 12:30 Successfully Managing Community and Government Relations**  
Todd Palmer  
Attorney  
DeWitt, Ross & Stevens, S.C.  
Madison, Wisconsin
- 1:30 Implementing Bio-gas Utilization in Food Processing Facilities: A Case Study**  
Steve Dvorak  
CEO  
GHD, Inc.  
Chilton, Wisconsin  
Norval Dvorak  
V.P. Marketing  
Fuel Makers  
Manitowoc, Wisconsin
- 3:00 Final Adjournment**

## Four Easy Ways to Enroll

### Need to Know More?

Call toll free **800-462-0876** and ask for

#### Program Director:

Philip R. O'Leary

#### Program Associate:

Edie Vitale

Or e-mail [custserv@epd.engr.wisc.edu](mailto:custserv@epd.engr.wisc.edu)

### General Information

**Fee of \$895 Covers** Notebook, course materials, break refreshments and lunches. Enrollees receive a certificate of participation. We do not publish proceedings. Course notes are distributed only to participants.

**Cancellation** If you cannot attend, please notify us by April 3 and we will refund your fee. Cancellations received after this date and no-shows are subject to a \$150 administrative fee. You may enroll a substitute at any time before the course starts.

**Location** This course will be held at the Tong Auditorium in the Engineering Centers Building, 1550 Engineering Drive, Madison, Wisconsin.

**Accommodations** We have reserved a block of sleeping rooms (\$104/single; \$119/double, including parking and Madison Taxi's silver cab from the airport) for course participants at the Campus Inn, 601 Langdon Street in Madison. To reserve a room, call 800-589-6285 or 608-257-4391 and indicate that you will be attending this course under group code 73703. Room requests made later than March 10 will be subject to availability. Your enrollment confirmation will include other hotel/motel information.



**Phone:**  
**800-462-0876** or  
608-262-1299 (TDD 265-2370)



**Internet:**  
<http://epd.engr.wisc.edu/webJ979>



**Mail to:**  
Engineering Registration, The Pyle Center  
702 Langdon Street, Dept. 107  
Madison, Wisconsin 53706



**Fax:**  
**800-442-4214** or 608-265-3448

#### Course Information

- Please enroll me in **Implementing Cost-Effective Energy Recovery Systems at Food, Dairy and Meat Processing Facilities**  
**Course #J979** April 10–11, 2008 in Madison, Wisconsin Fee: \$895
- I cannot attend at this time. Please send me brochures on future courses.

#### Personal Information (Please print clearly.)

Name \_\_\_\_\_

Title \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone (\_\_\_\_) \_\_\_\_\_ Fax (\_\_\_\_) \_\_\_\_\_

E-mail \_\_\_\_\_

#### Additional Enrollees

Name \_\_\_\_\_

Title \_\_\_\_\_

E-mail \_\_\_\_\_

Name \_\_\_\_\_

Title \_\_\_\_\_

E-mail \_\_\_\_\_

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