



## Industrial Energy Management

Dan Berkley

**Short Course:** 27 Nov 2011, Fiesta Americana Condesa  
All Inclusive Resort, Cancun, Mexico

Learn about fields of energy management, about principles and approach to successful energy management, about energy analyses, identification and quantification of energy efficiency and GHG emissions reduction opportunities, analysis of their economic viability, monitoring, targeting and forecasting (MT&F) of energy consumption. Relevant case studies from metallurgical and other industries will also be presented.

The course is designed to help participants in developing the ability to understand, recognize, quantify and analyse cost savings measures associated with energy management as well as how to implement changes necessary to achieve these savings.

Participants are encouraged to raise energy management questions relevant to their facilities and related to the topics of the course. Dan will be available for discussions during the networking breaks and after the course.

### Who Should Attend

This course would be beneficial to corporation and plant managers, engineers, technologists, researchers and students involved in the development and implementation of energy management and environmental pollution control programs, and in the identification, evaluation and implementation of energy management and GHG emissions reduction measures in their plant or corporation.

### Course Outline

This industrial Energy Management course is designed to develop a better understanding of methods and approaches related to identification, quantification and analysis of energy management opportunities.

#### **Topics include:**

- Energy Management Overview
- Successful Energy Management Program
- Energy Management Information Systems (EMS)
- Monitoring, Targeting and Forecasting (MT&F)
- Energy Analysis – Structure and Procedures
- Identification of Energy Efficiency Opportunities
- Quantification of Energy Efficiency Opportunities, such as:
  - Waste Heat Recovery
  - Thermal Insulation
  - Exhaust Air Recirculation
  - Compressed Air Systems
  - Adjustable Speed Drives
  - Power Factor Improvement
  - Electrical Load Management
  - Pumps and Fans
  - Boilers, Steam and Condensate





- On-site Co-generation Systems
- Economic Analysis of Opportunities
- Energy Management Tools

### The participants will also receive:

- CD with course material
- Certificate of completion
- A copy of instructor's recently published articles related to energy management
- Lunch and refreshments

### Course Instructor Dan Berkley, M.Eng., P.Eng. – Principal, DB Engineering



Dan Berkley is the principal of DB Engineering, a Canadian consulting engineering firm providing services in the fields of energy management, advanced design analyses and simulations, consulting and design engineering with a focus on metallurgical and other industrial sectors.



Dan has a Master of Engineering degree in thermal engineering and the Consulting Engineer designation from Professional Engineers Ontario. He has an extensive experience in energy-related projects, including energy management, power and co-generation, applied fluid mechanics, heat transfer and simulations.

This experience includes almost 100 energy audits, analyses, assessments, scoping and feasibility studies, and energy-related projects for end-users, government and utilities. He developed an engineering approach to the design of energy efficient plants (DEEP) while working with Hatch Associates and WorleyParsons Metals and Minerals, held on-site and off-site energy management courses and provided assistance, guidance and training in setting-up and **implementing** on-site energy management programs.

Dan has gained a world-wide reputation for excellent work and outstanding knowledge in his fields of expertise through his projects, published articles, energy management courses, workshops and chairing of energy management conference sessions such as those organized by the International Conference of Metallurgists, by the Canadian Institute of Mining and Metallurgy, by Canadian natural gas utilities, and on the site of major metallurgical operations in North America and Europe.

A former Manager of Energy Management / Fluid Mechanics and Associate at Hatch Associates and WorleyParsons Metals and Minerals, Dan has entered in private practice and he is currently the principal of DB Engineering. He can be reached by visiting his website <http://www.dbengineering.ca>.

**REGISTRATION:** <https://www.flogen.com/FraySymposium/registration.php>

