

TdS Dixon Inc. Energy Training

1 OUR EXPERIENCE

TdS Dixon Inc., led by Stephen Dixon, has for over 25 years, provided energy management services to a broad range of industrial, commercial, institutional and utility organizations. Broadly recognized as a leader in energy management training, our focus is simple; to build the capacity of organizations to use energy more effectively by developing individual skills, organizational best practices and providing tools for energy management. Under the leadership of Stephen Dixon, with more than 35 years of energy management experience, including 800+ energy assessments, TdS Dixon has facilitated over 1,600 energy management workshops, inspiring over 25,000 individuals from more than 1,000 organizations.

Efficiency Nova Scotia 2014 Bright Business Leadership Award

– Awarded to Stephen Dixon

This Leadership Award recognizes an individual's leadership and contribution to the long-term advancement of energy efficiency.

Today our key activities include:

- TdS Dixon is a developer and leading facilitator of the Natural Resources Canada Dollars to \$ense (D2\$) energy workshops. We have delivered these workshops continuously from 1997 to 2016. The D2\$ workshop suite includes EMIS, Energy Monitoring, Energy Management Planning, Spot the Energy Savings Opportunities, Re-commissioning and Energy Efficiency Financing.
- We design, develop and directly/in-directly deliver energy training workshops and seminars to various utility based organizations. Each package is integrated into some form of program or value added service including DSM and energy management. Current work includes energy training for Building Automation Systems and Operational (low CapEx) Energy Reduction in commercial, institutional and industrial situations.
- For a broad variety of MASH sector organizations we have developed and delivered custodian, operator and maintainer training sessions ranging in length from 2 hours to a full day. A key objective of these sessions is to engage the operational staff in day to day energy management. These sessions provide the custodian, operator and maintainer with a perspective on how their facility uses energy – how their actions impact energy – leading them to discover new operational opportunities.
- Support for organizational capacity building through integrating energy management training with strategic technical consulting, including support for energy management system (EnMS and ISO50001) implementation.
- We provide support for the implementation of Energy Management Information Systems (EMIS) through delivery of EMIS training tailored to individual circumstances and needs.
- Advanced energy performance analysis services and training in conjunction with EMIS audits and the development of Energy Monitoring & Targeting systems.
- Provision of open access tools such as the Monitoring Targeting and Reporting (MT&R) Tool. We supported the development of the RETScreen Suite of energy analysis tools, and provide ongoing support and mentoring for RETScreen

2 OUR APPROACH TO ENERGY MANAGEMENT TRAINING

Our experience has demonstrated that the effectiveness of energy management workshops is only partly the result of the curriculum design. The facilitation techniques, and, in particular, the communication strategies employed, are also critical success factors.

Our approach to workshop facilitation accommodates several important adult learning principles:

- Adults have various preferred learning styles and methods for assimilating information;
- Adults respond most positively to a learning environment that addresses their real problems and circumstances, and that provides practical solutions;
- Adults have considerable related expertise and experience, and they appreciate the opportunity to use them in the context of the workshop;
- Not all adults are secure enough in their knowledge to participate fully in discussion; some need extra encouragement and a secure environment;
- Adults appreciate and respond to effective feedback during the learning process.

The communication strategies that we employ to accommodate these principles include the following:

- Learning is facilitated in a variety of ways to optimize the effectiveness of the experience for an individual who may learn best by seeing, or hearing, or touching; these strategies include:
 - ✓ visuals (overhead slides, photographs, charts, flip chart sketches);
 - ✓ oral presentations (mini-lectures on key learning points);
 - ✓ interactive facilitated discussions;
 - ✓ discovery in small-group discussion sessions;
 - ✓ hands-on demonstrations and problem-solving activities.
- Insofar as practical, we encourage workshop participants to share their own energy use issues and data so that discussion and problem-solving are made as relevant and practical as possible; the success of our workshops depends in large measure on the extent to which participants leave with solutions to their problems.
- We view our role as facilitation, rather than instruction per se. Both at the beginning of workshops, and throughout the sessions, we draw out the knowledge and experience of participants by means of leading questions and by providing ample opportunities for participants to share their expertise. In problem-solving discussions, we create a “forum” environment in which everyone in the workshop is encouraged to contribute.
- During workshops, we are careful to observe who is participating and who is not, and direct questions and opportunities to speak to those who need special encouragement to participate. We also use facilitation techniques such as well-managed brainstorming—with the “rules” carefully explained—to give everyone opportunities to participate.
- In our view, facilitation is a two-way process; we spend as much time listening as we do talking. In listening effectively to the input made by participants, we are careful to acknowledge and commend correct and helpful input, and to provide constructive criticism and correction when needed.

3 A SAMPLE OF OUR TRAINING EXPERIENCE

3.1 WORKSHOP/SESSION EXAMPLE: TECHNICAL ENERGY TRAINING	
Client Name	Natural Resources Canada for Various ICI Clients
Workshop Name	Customized Spot the Energy Savings Opportunities Workshop
Summary/ Description	This workshop was a customized version of the D2\$ Spot workshop with a focus on electricity as requested by the client. The workshop was conducted in plant and included a facility walkthrough and dynamic group analysis of savings opportunities,
Length of Workshop	Typically one day
Audience Description	Managers, engineers, production and maintenance coordinators
Number Delivered	More than 250 in the last 5 years.

3.2 WORKSHOP/SESSION EXAMPLE: BUILDING OPERATOR TRAINING	
Client Name	Various MASH Sector Customers
Workshop Name	Customized Spot the Energy Savings Opportunities Workshop for Building Operators
Summary/ Description	The workshops objectives where to create awareness amongst building operational, maintenance and supervisory staff of the various actions that they can take to reduce energy consumption and ways they can participate in and contribute to the city wide program to reduce energy consumption. Using selected and operator and maintainer relevant sections this workshop showed how participant facilities used energy and where they could have impact on savings.
Length of Workshop	Half Day and Full Day depending on situation
Audience Description	Municipal facility operators, maintenance staff, coordinators, supervisors, managers.
Number Delivered	More than 50 in the last 5 years.

3.3 WORKSHOP/SESSION EXAMPLE: TRAIN-THE-TRAINER	
Client Name	Natural Resources Canada for Various CI Clients
Workshop Name	Customized Energy Awareness Train-the-Trainer Workshop
Summary/ Description	This workshop, built partially on the Spot workshop, overviewed and built upon, the previous Spot workshops aimed at finding energy savings. The “Train-the-trainer” aspect provide tools and experience so that participants to go back to their respective units and more effectively influence Energy and Sustainability initiatives in the workplace. The agenda included instruction, collaborative design of new sessions and practice presentations.
Length of Workshop	2 days
Audience Description	Facility energy and environmental coordinators
Number Delivered	Approximately 10 in the last 5 years.

3.4 WORKSHOP/SESSION EXAMPLE: SYSTEMS LEVEL TECHNICAL TRAINING	
Client Name	Natural Resources Canada for Various Industrial and LDC Clients
Workshop Name	NRCan Dollars to Sense Pumps, Motor Driven Systems Workshop
Summary/ Description	<ul style="list-style-type: none"> • Energy Management Concepts / Principles • Principles of Motor Driven Systems • Identifying Savings Opportunities, Case Study Reviews & Demonstrations
Length of Workshop	Typically One Day
Audience Description	Operations and maintenance personnel, energy and environment coordinators for various industrial customers of LDCs
Number Delivered	Approximately 10 in the last 5 years.

3.5 WORKSHOP/SESSION EXAMPLE: MUNICIPAL ENERGY FINANCING	
Client Name	Association of Municipalities of Ontario/ NRCan
Workshop Name	DOLLARS TO \$ENSE Energy Efficiency Financing Workshop for Municipalities
Summary/ Description	<p>This workshop is a highly customized financing workshop is designed to assist municipalities in the implementation of energy project required capital investment: Workshops topics include:</p> <ul style="list-style-type: none"> • Aligning energy management projects with asset planning • Financial analysis basics • Developing the business case. • Using financial analysis tools on a case study • Pitching the business case.
Length of Workshop	One Day
Audience Description	Municipal administration staff, energy and environment coordinators, supervisors, managers, and other staff.
Number Delivered	Approximately 15 in the last 5 years.

3.6 WORKSHOP/SESSION EXAMPLE: MUNICIPAL PLANNING	
Client Name	Association of Municipalities of Ontario/ NRCan
Workshop Name	DOLLARS TO \$ENSE Energy Management Planning Workshop for Municipalities
Summary/ Description	<p>This workshop is a highly customized planning workshop for municipalities incorporating elements of the Spot workshop. It is designed to prepare municipalities to meet the reporting and planning requirements of the Green Energy Act (O Reg. 397/11</p>
Length of Workshop	One Day
Audience Description	Municipal administration staff, energy and environment coordinators, supervisors, managers, and other staff.
Number Delivered	Approximately 20 in the last 5 years.

3.7 WORKSHOP/SESSION EXAMPLE – LDC CDM STAFF	
Client Name	Ontario Power Authority/ NRCan
Workshop Name	Energy Efficiency Training For LDC CDM Program Sales Staff - Industrial & Business Markets
Summary/ Description	<p>This training was intended to build the confidence of LDC business and industrial program sales staff or their directly-employed contractors in discussing common end uses and energy savings opportunities with your commercial and industrial customers. This 3-day workshop is a highly hands-on and interactive experience. Facilitators utilized a variety of demonstrations, worksheet activities, graphic slides, stories, case studies and colourful discussions to create and stimulate a highly effective and enjoyable learning environment.</p> <p>Days 1 and 2 focused on building knowledge and providing the skills and tools to confidently conduct walkthrough of a commercial or industrial facility to identify and discuss energy savings opportunities with your customer. Day 3 will consist of an actual onsite walkthrough evaluation of a commercial facility.</p> <p>Key topics include training on meter and bill interpretation, benchmarking and instruction on the use of calculators and tools such as RETScreen to help quantify savings opportunities for customers.</p>
Length of Workshop	3 days
Audience Description	Ontario local distribution company (LDC) Key Account Managers and other various utility and OPA staff.
Number Delivered	Approximately 10 in the last 10 years.