



## Texas Industries of the Future

**November 2012**

### **TEXAS IOF UPCOMING EVENTS IN 2013**

- *Fundamentals of Compressed Air, Feb. 6, 2013, Waxahachie.* Registration will open Dec. 15, 2012
- *Texas Industrial Energy Management Forum, March 7, 2013.* “Energy Management in the Age of Shale Gas”. Brady’s Landing, Houston. Registration will open Feb. 1.
- *Steam End-User Workshop, March 26, 2013 Houston.* Registration will open Feb. 15.
- *Fundamentals of Compressed Air, April 17, 2013, Corpus Christi.* Registration will open March 15.
- *Energy Management, June 6, 2013. At the Texas Chemical Council Annual Seminar.*

Professional development hours are available for participation in all programs.

**REPORT AVAILABLE: LOW TEMPERATURE WASTE ENERGY RECOVERY TECHNOLOGY FORUM.** Texas IOF and the Institute for Industrial Productivity hosted a Technology Forum on May 16, 2012 that drew 40 participants from chemical plants, refineries, technology companies, and research organizations. The report documents the types of low temperature waste energy streams that are untapped at chemical plants and refineries. Presentations from technology developers can also be viewed at <http://TexasIOF.ces.utexas.edu/documents.htm> Click on “Conferences” to view the report and presentations.

**LYONDELLBASELL RECEIVES 2012 INDUSTRIAL ENERGY TECHNOLOGY CONFERENCE AWARD FOR SITE FLARE ASSESSMENTS.** Since 2007 LyondellBasell has been engaged in a comprehensive energy efficiency improvement effort that has resulted in 12% reduction in energy (42 trillion Btus/yr). They decided to focus on flaring optimization, since this is a potential energy reduction target that has traditionally received little attention. They developed their own software tool and methodology to standardize the assessment process. The new tool systematically develops the technical basis and a comprehensive business case for gaining support and mobilizing resources for implementation. The standardized report compares key process data to API 521 standards, EPA guidelines, LyondellBasell Engineering standards, and OEM specifications to focus on the areas of opportunity and generates a project list, brief scope of all the necessary modifications, complete with benefits, planning grade cost estimates, simple financial rate of return and site impact on energy

and carbon reduction. The benefits mostly lie in FG optimization, steam flow control, purge gas and process off-gas control.

LyondellBasell has applied the Site Flare Assessment methodology to 15 manufacturing sites in the US. Assessment of 39 flare systems has identified opportunities that represent \$6-15 Million per year, depending on the price of natural gas. All sites are in different stages of implementation. At the Houston Refinery, assessment of 5 flare systems is complete; all recommendations have been implemented and this has resulted in 500,000 Million Btu/ year documented savings (\$1-3 Million/ Year depending on the price of natural gas). You can download the LyondellBasell presentation on this project at <http://TexasIOF.ces.utexas.edu>

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