



# The SFA Quarterly Report

## SFA Pacific's Fuels and Power Program

An Ongoing International Service of SFA Pacific, Inc.

2012 Edition

**29th consecutive  
year of objective  
analysis**



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## **THE SFA QUARTERLY FUELS AND POWER PROGRAM**

### **PROGRAM DESCRIPTION**

*The SFA Quarterly Fuels and Power Program* is SFA Pacific's ongoing technology surveillance service. Now in its twenty-ninth year, the program is dedicated to critically and objectively analyzing technologies, projects, and programs in refining, power generation, emissions control, fuel utilization and conversion, alternative feedstocks, and related fields. At the core of the program is *The SFA Quarterly Report*, which includes expert opinion and incisive analyses in these areas. Since its inception in 1984, the program has become a well-respected service for industry worldwide.

The SFA Quarterly Program emphasizes objective examination and perspective on the reality of important developments. Comprehensive technical and economic evaluations are conducted on commercial and demonstration projects or technologies. Concise, updated analyses and information are provided on a continuing basis. It is not a reiteration of news releases or optimistic cost and performance estimates based on promoter projections.

Participation in the program includes the opportunity for subscribers to discuss pertinent subjects with the program staff. Additional assistance is provided to subscribing companies on their specific process technology, application, market, or resource issues.

### **REPORT FORMAT AND TOPICS**

Each edition of *The SFA Quarterly Report* consists of several short current news items plus two longer feature analyses. The reports are written in a concise, readable style, objectively presented with the sole purpose of informing the technically astute reader. The reports are issued on a quarterly basis in order to provide timely analysis of new developments. Report topics are continually updated to include the latest data on status, operations, and economics. Convenient references to past topics are provided as successive reports are issued. In addition to subscription to the 2012 and/or 2011 program years, analyses from reports for years prior to 2011 are made available at nominal cost to current subscribers in need of additional historical information.

Comprehensive evaluations are conducted for important commercial and demonstration projects or technologies critical to program subscribers. These evaluations are performed on the same consistent and detailed basis that SFA Pacific employs for project and process evaluations. Relevant technologies and projects are assessed in regard to the likelihood of their successful commercial application and long-term industrial impact. The probability of success is evaluated by judging technical, economic, market, and other critical business factors.

Feature articles typically analyze a technology, a project, a market, a resource, or the impact of a critical regulatory issue. Article topics are selected in consultation with program subscribers.

#### **Suggested topics for *The 2012 SFA Quarterly Report* include:**

- **Methanol Fuel Outlook**
- **Impact of Emissions Regulations on Existing 350 GWe North American Coal Plant Fleet**
- **Petroleum Coke Markets—2012**
- **Food-for-Fuel—How Bad Is It?**
- **The “New” Unconventional Oil from Fracturing Shale and Tight Sands**
- **Waste Biomass Co-Processing in Existing Coal-Fired Power Plants**
- **LNG—2012**
- **Recycling Plastic Wastes—Status and Outlook**

# SFA Pacific, Inc.

## A History of Insightful Analysis

Several SFA Quarterly Report evaluation articles have anticipated events in the past few years. For example, one Quarterly analysis accurately predicted the rapid growth of unregulated power generation in the United States and its expansion to other countries. Another Quarterly analysis correctly forecast the direction that successful atmospheric fluidized bed combustion would take. This technology has since expanded broadly and is tracked in the Quarterly as part of an extensive worldwide database of FBC projects. Other examples of significant insights presented in the Quarterly include the realities of coal-based energy development in China, the success of improved bottom-of-the-barrel hydroprocessing technologies, and the emergence of aeroderivative combustion turbine technology. The feature topics addressed in *The 2011 SFA Quarterly Report* were:

- **Unconventional Gas Status 2011—Going Global**
- **Growing Global Thirst for Freshwater: Part II—Demand Issues with a Focus on Water for Food and Nature**
- **Clean Automotive Diesels—Update and Outlook**
- **Canadian Oil Sands—Upgrading Operations and Outlook**
- **Wind Power—A Reality Check**
- **Growing Global Thirst for Freshwater: Part III—Water for Cities, Water for Energy, Energy for Water, and Desalination**
- **Residue Oil to Petrochemicals—Jump on the Propylene Bandwagon**
- **Shell Pearl Gas-to-Liquids Project Analysis—Conservative Design A Winner**

An extensive index of feature articles presented in *The SFA Quarterly Report* from 1984 through 2011 is included at the end of this brochure. Each feature is listed and cross-referenced under appropriate subject categories.

## PROGRAM SUBSCRIBERS

The program is annually supported by about 25 international companies at the forefront of energy technology. Program subscribers (partial list) have included:

- ABB Lummus Company
- Air Products and Chemicals, Inc.
- Babcock & Wilcox Company
- Babcock Hitachi K.K.
- BASF Aktiengesellschaft
- BHP Research
- BP plc
- British Gas plc
- Chevron Energy Technology Co.
- Chiyoda Corporation
- Dow Chemical U.S.A.
- Duke Energy
- General Motors Corporation
- Idemitsu Kosan Company, Ltd.
- JGC Corporation
- Japan Energy Corporation
- Kawasaki Heavy Industries, Ltd.
- Kobe Steel, Ltd.
- Norsk Hydro ASA
- Osaka Gas Company, Ltd.
- Peabody Energy
- Praxair, Inc.
- Rio Tinto Technology
- Saudi Aramco Services Co.
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- Snamprogetti S.p.A.
- Statoil ASA
- Suncor Energy Inc.
- Tokyo Electric Power Company
- Toyo Engineering Corporation
- TransAlta Corporation
- TransCanada PipeLines

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