

We create change in flow

energy monitor



Daniel Bernoulli

Q3 2012



Flow Research, Inc.



The unprecedented Gorgon Project offshore Western Australia is progressing on schedule. Once completed, each of these two LNG tanks on Barrows Island will hold 180,000 cubic meters of LNG at temperatures of -260°F (-162°C).

**Oil & Gas and Refining
Power & Renewables**

Focus:

- Trends in Oil & Gas Flow
- Australia
- The Gorgon Project
- Major Oil Players

A *Worldflow* publication



EZ Faxback Response Form

Please use this form to request more information about any of the studies below. Return this form by mail, email, or fax

√ Check the boxes next to the studies you would like more information about

New-Technology Flowmeter Studies

- The World Market for Coriolis Flowmeters, 4th Edition
- The World Market for Magnetic Flowmeters, 4th Edition
- The World Market for Ultrasonic Flowmeters, 4th Edition
- The World Market for Vortex Flowmeters, 4th Edition
- The World Market for Thermal Flowmeters
- The World Market for Mass Flow Controllers, 2nd

Website

- www.flowcoriolis.com
- www.flowmags.com
- www.flowultrasonic.com
- www.flowvortex.com
- www.flowthermal.com
- www.flowmfc.com

Traditional Technology Flowmeter Studies

- The World Market for Pressure Transmitters, 3rd Edition
- The World Market for Pos. Disp. Flowmeters, 2nd Edition
- The World Market for Turbine Flowmeters, 2nd Edition

- www.worldpressure.com
- www.flowpd.com
- www.flowturbine.com

Cross-Technology Flowmeter Studies

- Volume X: The World Market for Flowmeters, 3rd Edition
- The World Market for Nat Gas & Gas Flow Measurement
- The World Market for Oil Flow Measurement

- www.floweverything.com
- www.gasflows.com
- www.oilflows.com

Analytical Studies

- The World Market for Liquid Analytical Measurement

- www.flowanalytical.com

Flow Research Services

- Worldflow Monitoring Service

- www.worldflow.com

Name _____

Street _____

Title _____

City _____ State _____

Company _____

Country _____ Zip _____

Email _____

Phone _____ Fax _____



Return this form by mail, email, or fax to:

Flow Research

27 Water Street

Wakefield, MA 01880

781-245-3200, 781-224-7552 (fax)

info@flowresearch.com

www.flowresearch.com

Energy Monitor

Q3 2012

Flow Research, Inc.
Wakefield, Massachusetts

Energy Monitor
Editorial Team

Publisher & Executive Editor: Jesse Yoder, PhD

Editor: Belinda Burum

Associate Editor: Norm Weeks

Research Assistants: Leslie Buchanan and Vicki Tuck

Flow Research, Inc.

27 Water Street

Wakefield, MA 01880

(781) 345-3200 Fax: (781) 224-7552

www.flowresearch.com

www.worldflow.com

Copyright © 2012 Flow Research Inc. All Rights Reserved

Disclaimer

While every effort has been made to insure that this report is accurate and complete, Flow Research accepts no liability for consequences of any actions that are based on the findings in this report.

Energy Monitor Q3 2012

*Publisher and Executive Editor: Jesse Yoder, PhD
(jesse@flowresearch.com)
Editor: Belinda Burum (belinda@flowresearch.com)
Associate Editor: Norm Weeks (norm@flowresearch.com)
Research Assistants: Leslie Buchanan and Vicki Tuck*

Table of Contents

Issues and Perspectives . . . 9

Trends in Oil and Gas Flow Measurement. . . 9

Who are the major players supplying the world oil market? ...14

Both parties to promote more fossil fuels ...15

Major oil players...16

Global Spotlight: Australia . . . 18

Energy White Paper 2012: Australia expects to more than double energy production in the next 25 years ...18

Oil & Gas, and Refining . . . 26

In the News . . . 27

BP announces resolution of all U.S. criminal and securities claims from Deepwater Horizon ...27

BP award first contracts for Project 20K to KBR and FMC ...29

SPDC completes 8th Nigerian Oil mining lease sale ...30

BP and AAR settle disputes ...30

Upcoming Trade Shows . . . 31

Industry Pulse . . . 32

Lowest monthly petroleum demand since 1995 but highest natural gas consumption since 2007

(Continued on page 6)

Table of Contents, continued

New Projects . . . 33

Asia-Pacific

- Major construction begins on the Prelude FLNG project ...33
- PNG Cabinet approves InterOil's Gulf LNG plant ...34
- Indonesia approves expansion of Tangguh LNG project ...35
- Satyr-2 & -4 discoveries support Chevron's longterm Gorgon plans ...36

North America

- El Paso Natural Gas to build pipeline to serve Mexico
- Shell increases participation in the Schiehallion Field and divests its Canadian Seal assets ...37
- BP winds bids for Nova Scotia deepwater exploration blocks ...37

Europe

- Shell to increase participation in the Beryl Area Fields in the North Sea ...38

Middle East

- Aramco to develop Red Sea and Midyan gas discoveries ...38
- Aramco to build Jazan Refinery ...39

Latin America

- Light crude oil confirmed in Trion 1 well in Perdido Fold Belt ...40

Company Korner: Gorgon Joint Venture. . . 41

- Unprecedented Gorgon Project on track to deliver first gas in 2014 to meet growing energy needs in Asia & Australia

Power & Renewables . . . 45

In the News . . . 46

- Propel Fuels & Solazyme deliver world's first consumer access to algae-based fuel ...46
- First real-world test of a technology that could revolutionize community energy systems ...47
- ITC: Chinese cells and modules are harming U.S. solar industry ...48

Upcoming Trade Shows . . . 49

Industry Pulse . . . 50

- Populations shifts to warmer climates, plus milder winters, partially explains flattening residential energy needs ...50
- Swiss scientists produce hydrogen from rust, water & sun — look for cheap way to create Chemical energy from sun ...52

New Projects . . . 54

Africa

- KenGen signs steam field development contract with Synopec ...54
- Umoya Energy orders 37 V100-1.8 MW for wind farm in Hopefield ...54

(Continued on page 7)

Table of Contents, continued

South America

Hot Rock and EDC to develop geothermal in Chile and Peru ...55

Europe

Repower to deliver tallest turbine type to Austria ...56

Repower and WSB sign 45 MW contract for Poland ...57

Vestas to supply 13 v112-3.0 MW turbines for Italian wind plant ...57

North America

8minuteenergy Renewables to start building Mount Signal Solar farm ...58

Company Korner: Solahart Industries ...59

Solar pioneer Solahart has delivered 1M+ systems since 1953 ...59

Table of Contents, continued



Boulder Canyon, Boulder, Colorado

Photo by Flow Research

The **Energy Monitor** is part of the Worldflow Monitoring Service. Other publications include the **Market Barometer** and **Flash Reports**. **Worldflow Online** provides more in-depth information and analysis about the instrumentation business. Here is our **Worldflow** schedule:

Q3 2012

Market Barometer—October 2012

Energy Monitor—November 2012

Q4 2012

Market Barometer—December 2012

Energy Monitor—January 2013

Q1 2013

Market Barometer—February 2013

Energy Monitor—March 2013