Taking on the commodities challenge
Managing the risks, seizing the opportunities
The commodities markets landscape – turning risks into opportunities

For many companies, commodities represent a significant revenue source and/or cost of production. But because the prices of oil and gas, metals, minerals and agricultural products are highly sensitive to shifts in global demand and supply, corporate earnings are subject to dramatic swings as well. Beyond dealing with the direct risks from trading and derivatives exposure, senior executives in this marketplace have to contend with complex accounting rules and extensive control and disclosure requirements. External factors have contributed to the growing complexity for commodity market participants.

The Commodities Markets group is part of EY’s Financial Accounting Advisory Services (FAAS) practice. We provide comprehensive assistance on a global basis to companies with trading and hedging operations. Our cross-functional team of professionals, based in financial capitals and other business centers around the world, offers advice on financial volatility, compliance, operations and strategy – the four major categories of concern in this area.

Keeping pace with constant change

Key areas of concern in the commodities marketplace

Financial: Volatility in markets and the real economy
- Price volatility and impact on earnings
- Shifts in the cost and accessibility of capital
- Economic shocks and resulting short-term dislocations in energy demand

Compliance: Politics, law, regulation and corporate governance
- Market manipulation and trade surveillance
- Regulatory compliance oversight
- Regulatory constraints
- Uncertain energy policies
- Global rulemaking and compliance

Operations: Processes, systems and people
- Trading cost rationalization
- Complex derivatives accounting landscape
- Global hedge and lease accounting changes
- Aging risk management system infrastructure

Strategic: Customers, competitors and investors
- Inadequate infrastructure to meet technology needs
- Market trend implications
- Competition from new technologies
- Managing long-term investment with the potential for extreme price volatility
<table>
<thead>
<tr>
<th>The challenge</th>
<th>Business implications</th>
<th>EY can help by advising and providing input into your:</th>
</tr>
</thead>
</table>
| Price volatility and impact on earnings | › Significant earnings volatility  
› Risk policy violations  
› Cash flow volatility  
› Return on capital | › Risk-management effectiveness, functions, roles and reporting  
› Pricing, independent valuation, risk-model valuation, structured products and related risk-management issues  
› Risk budgeting, performance measurement, benchmark assessments, and categorization and measurement of risk factors (value at risk, stress testing) |
| Market manipulation and trade surveillance | › Complex regulatory landscape  
› Exposure to market manipulation activities  
› Significant regulatory fines | › Compliance program governance structures and derivatives regulation responses  
› Definition of surveillance criteria and determination of the appropriate scale of systems specific to your business  
› Development of business processes and IT systems for trade surveillance investigation, analysis and testing  
› Annual audits of compliance process and results  
› Understanding and compliance with regulatory requirements related to Sarbanes-Oxley 404  
› Internal investigations related to energy trading or effective use of assets, and your work with counsel to report issues stemming from internal or external investigations |
| Trading cost rationalization | › Higher trade cost compared with peer group  
› Inefficient processes and controls  
› Lower return on investment | › Process analysis, assessment of leading practices, industry benchmarking and training  
› Offshoring of standardized low-risk processes to low-cost locations |
| Inadequate infrastructure to meet technology needs | › Scalability issues  
› Higher cost per trade  
› Control issues | › Identification of systems and process updates needed to comply with new accounting rules and other regulatory matters  
› Assessment, selection and implementation of systems, including vendor analysis and data integration |

### Sample credentials*

**The company needed:**

**EY assisted the company in its:**

<table>
<thead>
<tr>
<th>The company needed:</th>
<th>EY assisted the company in:</th>
</tr>
</thead>
</table>
| Front- to back-office business transformation for a large multinational utility with a multi-commodity trading portfolio | › Development of business and IT blueprints to define an integrated road map covering organizational design, process and control, and technology infrastructure  
› Development of a cross-functional future state process and control model based on leading practices |
| Enterprise risk management program design and implementation for a master limited partnership (MLP) in the upstream (exploration and production) sector | › Design of a company-wide enterprise risk management (ERM) pilot program to address the financial impact of detailed operational, personnel and financial risks  
› Analysis to identify and quantify risks, identify risk drivers and correlations, and define enterprise risk thresholds and multiple ranges for the estimation of market capitalization impact  
› Development of metrics and a program road map and process to sustain ongoing risk management activities |
| Review of the gross margin forecasting process for a retail and wholesale energy company | › Assessment of current state processes and approaches to address variability between gross margin estimates and actualized results for power and gas for residential and commercial and industrial (C&I) businesses  
› Development of a forecasting process improvement plan  
› Establishment of a product control function and intra-month valuation reporting to provide greater visibility into variances  
› Analysis of work streams to resolve gross margin forecasting and data quality issues  
› Analysis and documentation of current state processes and controls and identification of enhancements to reduce variability and explain variances |
| Hedge accounting system selection and implementation for a large US utility | › Performance of a gap assessment of the company's current state hedge accounting process and procedures  
› Documentation of the functional requirements for hedge accounting software  
› Education of general hedge accounting principles related to the software |
| Hedging program assistance for a large US waste management company with commodity exposure | › Development of a “fit for purpose” hedging program to help mitigate inherent risks for commodity and derivative-related activities and that provides scalability and flexibility for planned future growth and meets cross-functional reporting needs of key stakeholders |
| Global regulatory compliance assessment for US and European operations of a large oil and gas company | › Comprehensive review of derivative and physical market trading at 300+ legal entities across the global enterprise in order to improve policies and procedures  
› Performance of a gap assessment of the company’s efforts to comply with new regulations for derivatives and physical transactions under Dodd-Frank Title VII, European Market Infrastructure Regulation (EMIR), Regulation on Energy Market Integrity and Transparency (REMIT), Markets in Financial Instruments Directive (MiFID) and Market Abuse Directive (MAD), and development of a road map toward compliance  
› Creation of a new process to identify potential inside information and disclosure for REMIT compliance |

*Note: Certain of our services for an audit client and its affiliates may be more limited in order to comply with applicable independence standards. Please reach out to your EY contact for further information.
Learn more

For more information, please contact:

**Talib Dhanji**  
Partner  
Ernst & Young LLP  
Commodities Markets, US  
Office: +1 713 750 8441  
Mobile: +1 281 844 8222  
talib.dhanji@ey.com

**Suzanne Kupiec**  
Partner  
Ernst & Young LLP  
Commodities Markets, US  
Office: +1 713 750 8214  
Mobile: +1 713 858 9733  
suzanne.kupiec@ey.com

**Andrew Woosey**  
Partner  
Ernst & Young LLP  
Commodity Trading and Risk Management Leader, UK  
Office: +44 20 7951 8117  
Mobile: +44 77 6649 8328  
awoosey@uk.ey.com

EY | Assurance | Tax | Transactions | Advisory

**About EY**

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

Ernst & Young LLP is a client-serving member firm of Ernst & Young Global Limited operating in the US.

© 2015 Ernst & Young LLP.  
All Rights Reserved.

SCORE no. BB2956  
1411-1358520  
ED none

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com