FRACKING SCORECARD: EVEN WITH INDUSTRY DOWNTURN, IMPROVEMENT SEEN IN RISK REPORTING, BUT FAILING MARKS STILL DOMINATE

7 Out of 10 Oil and Gas Companies Engaged in Hydraulic Fracturing Still Failed on Investor Scorecard; BHP Billiton Ranked 1st for Fracking Disclosure; Noble Energy Rises to 2nd Place.

BOSTON, MA - December 14, 2016 - While the coal industry used its recent setbacks as an opportunity to shuck off environmental responsibilities, 20 of 28 oil and gas companies engaged in hydraulic fracturing ("fracking") actually improved their scores in an annual investor report card ranking the companies on how they report their policies to reduce risks from fracking operations. Even so, much work remains to be done, with seven out of 10 fracking companies still earning failing scores.

"Disclosing the Facts 2016: Transparency and Risk in Hydraulic Fracturing Operations," (www.disclosingthefacts.org) was released today by As You Sow, Boston Common Asset Management, and the Investor Environmental Health Network --- a coalition of investment advisory firms and advocacy organizations.

Why does risk disclosure matter? Without it, investors cannot accurately assess how, or whether, these companies manage key risks of fracking, including use of toxic chemicals, water consumption and water quality, waste management, air emissions, and community impacts. Unmanaged risk can be costly to investors. Indeed, opportunity for fracking companies to operate remains at risk as communities living with the impacts of fracking, or facing its prospects, continue to pressure operators and governments to halt or greatly limit fracking operations.

Key findings include:

- A total of 11 oil and gas companies made "substantial progress" in their 2016 disclosures. The report ranks BHP Billiton Ltd. (BHP) as the highest scoring company for the third year in a row, improving its score from 32 points in 2015 (out of a possible 39 points) to 40 (out of a possible 43) in 2016.

- Hess Corp. (HES), Apache Corp. (APA) and Noble Energy, Inc. (NBL) built on their leadership positions from 2015, disclosing information for more than half of the 2016 scorecard indicators. Tied with Hess in fourth place, Southwestern Energy Co. (SWN) and Range Resources Corp. (RRC) dramatically improved their scores in 2016. Carrizo Oil & Gas, Inc. (CRZO) made the largest improvement in 2016, jumping into 5th place, with its score soaring from zero points in 2015 to more than half -- 23 out of 43 possible -- in 2016.

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- DTF 2016 also showed that while most (20 of 28) companies improved their scores from 2015 to 2016, roughly seven out of 10 still earned failing scores by providing information on less than half of DTF's indicators in 2016.

- In addition, most companies still lag in taking and disclosing actions to address key investor and community concerns. For example, methane, which has more than 84 times the global warming impact of carbon dioxide over a 20-year period, remains a critical environmental challenge. Fracking companies must do a better job of demonstrating voluntary commitments to measuring and reducing methane emissions beyond regulatory requirements and disclosing details of their leak detection and repair programs. Also, communities remain concerned with the growing number of earthquakes (induced seismicity, primarily from waste-water injection wells) associated with hydraulic fracturing. Approximately two-thirds of the companies reported inadequately on this critical issue, including how or whether they ensure responsible contractor practices.

Richard Liroff, executive director of IEHN said: **"Despite the fracking downturn, a core group of companies within the industry has maintained and enhanced disclosures of their practices for managing the environmental risks and community impacts of their operations. We find it very encouraging that some companies responded to our challenge in this period. And two companies have developed concise disclosure frameworks that could be a model for others."**

"It is encouraging each year to see new companies jumping into the top five of *Disclosing the Facts* but the problems with the greater industry persist," said Danielle Fugere, president of As You Sow. "**Fifteen (15) companies – more than half of those reviewed – failed to report on even 1/3 of the key metrics we examine, making it extremely difficult for investors and the public to assess and compare companies' performance and to gauge how well these companies are addressing environmental and community impact risks."**

Steven Heim, a managing director of Boston Common Asset Management said: **"Our report shows that several good practices are becoming more widespread. Companies are disclosing numerous operational and technological innovations that reduce their environmental footprint, yield bottom-line benefits, and reduce social conflicts. Companies are sourcing water for hydraulic fracturing operations from treated municipal wastewater, drawing water from deep saline aquifers for which there is no current competition from other users, and treating their own wastewater. These are very positive signs. However, absent greater disclosure on things like methane leakage, other air emissions and growing concerns around induced seismicity, there remains an accountability problem for oil and gas companies using fracking to unlock energy reserves."**

The 2016 scorecard benchmarks the public disclosures of 28 companies on 43 key performance indicators. It distinguishes companies disclosing more information about practices and impacts from those disclosing less. The scorecard assesses disclosures in five areas of environmental, social, and governance metrics, emphasizing, on a play-by-play basis: (1) toxic chemicals; (2) water and waste management; (3) air emissions; (4) community impacts; and (5) management accountability. The scorecard relies solely on publicly available information that companies provide on their websites, in corporate SEC postings, or in other reports linked from their websites.

The report focuses on "play-by-play" disclosure, as distinct from reporting at an aggregate level such as company- or country-wide. "Play-by-play" is shorthand for localized reporting, which is appropriate since health and environmental impacts and social license controversies are usually localized. However, in addition to facilitating understanding of local stakeholder relations, localized reporting is important because it offers insight into how company systems for managing risks and impacts are functioning in practice.

The complete ranking of the fracking companies is as follows:

COMPANY **2016 SCORE (OUT OF POSSIBLE 43 POINTS)***

Company and Ticker Symbol	2015 Score	**2016 Score**
BHP Billiton Ltd. (BHP)	32	**40**
Noble Energy, Inc. (NBL)	19	**35**
Apache Corp. (APA)	20	**29**
Southwestern Energy Co. (SWN)	16	**27**
Hess Corp. (HES)	21	**27**
Range Resources Corp. (RRC)	11	**27**
Carrizo Oil & Gas, Inc. (CRZO)	0	**23**
CONSOL Energy Inc. (CNX)	19	**22**
EQT Corp. (EQT)	14	**21**
Newfield Exploration Co. (NFX)	6	**20**
Anadarko Petroleum Corp. (APC)	15	**20**
Royal Dutch Shell plc (RDS)	11	**15**
ConocoPhillips Corp. (COP)	11	**15**
QEP Resources, Inc. (QEP)	15	**12**
Chesapeake Energy Corp. (CHK)	4	**12**
Occidental Petroleum Corp. (OXY)	10	**12**
Encana Corp. (ECA)	8	**10**
EOG Resources, Inc. (EOG)	8	**8**
Antero Resources (AR)	-	**7**
Chevron Corp. (CVX)	4	**7**

Pioneer Natural Resources Co. (PXD)	3	**7**
BP plc (BP)	8	**6**
Exxon Mobil Corp. (XOM)	4	**6**
Cabot Oil & Gas Corp. (COG)	8	**5**
WPX Energy, Inc. (WPX)	3	**4**
Devon Energy Corp. (DVN)	7	**3**
Continental Resources, Inc. (CLR)	2	**2**
Whiting Petroleum Corp. (WLL)	2	**2**

***2015 Disclosing the Facts had a total of 39 possible points.**

ABOUT THE GROUPS

As You Sow (http://www.asyousow.org/) promotes environmental and social corporate responsibility through shareholder advocacy, coalition building, and innovative legal strategies. Its efforts create large-scale systemic change by establishing sustainable and equitable corporate practices.

Boston Common Asset Management, LLC (http://www.bostoncommonasset.com/) is a sustainable investment firm dedicated to generating competitive financial returns and meaningful improvements in corporate performance on environmental, social, and governance (ESG) issues. We are long-term investors. We believe that markets typically misvalue the timing and magnitude of risks and opportunities presented by ESG factors. Therefore, our investment strategy is to build and grow diversified portfolios using the high-quality but undervalued sustainable stocks that our integrated investment research identifies. As part of this, we look to add value through targeted company and industry engagement efforts.

The Investor Environmental Health Network (IEHN) (http://www.iehn.org) is a collaborative partnership of investment managers and advisors concerned about the impact of corporate practices on environmental health.

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