Climate Change and the Energy Sector

Andrew Logan
Director, Oil & Gas Industry Program
Ceres
logan@ceres.org
617-247-0700

Ceres/INCR in Brief

- Ceres is the world’s leading network of investors and environmental groups working to address environmental challenges such as global climate change
- The Investor Network on Climate Change (INCR) is a coalition of over 50 investors managing $4 trillion in assets
- INCR participants include state/city treasurers, financial institutions, public/private/labor pension funds, and foundations

Investors are Increasingly Concerned

Goldman Sachs, Portfolio Strategy Report, August 26, 2005:

"...whether or not an individual investor is convinced that anthropogenic, that is, manmade greenhouse gases are leading to changes in the Earth's climate, ***this issue will have implications for the financial markets and for corporate performance***."

By virtue of its high-C product and long K horizons, the oil sector is uniquely exposed to the risks of climate change.

Risks

- Physical Risk
- Policy Risk
- Market Risk

Opportunities

- Growing demand for low carbon products and services
  - Global market for renewable energy hit $40 billion in 2005; projected to eclipse $150 billion by 2015
  - NG utilization
  - Sequestration

"The CEO of CHK recently named global warming as both the single largest threat to the NG industry and the single biggest driver."- CBSMarketWatch

"Global warming could cause warm Januarys from now on. But it could also stop the burning of coal to stop CO_2 from entering the atmosphere. … It is incumbent on leaders in the U.S. to prove to consumers that they should be paying more for gas than coal."

-Aubrey McClendon, CEO, Chesapeake Energy

IPAA Conference, October 3, 2006

Keeping Climate in Control

In the next 50 years, we need twice as much energy with no increase in carbon dioxide emissions

- 50 times more wind power
- 700 times more solar power
- 60 mpg vehicles
- 34 million barrels per day of biofuels
- 25% increase in building energy efficiency
- 1,400 coal plants replaced with natural gas
- 1,600 gas-fired plants that capture and store carbon

__All__ of the measures would need to be taken

Investor Conclusion: More Action is Needed

- Climate change is one of the most significant long-term risks facing the industry
- Several leadership companies have relatively well-articulated plans for managing this risk
- Laggard companies are either ignoring the issue, or have done a poor job of informing shareholders of their strategies

Shareholders need **more and better disclosure** to properly evaluate the differential risk associated with each company

Companies need **better governance** to appropriately manage climate risk

Shareholders work cooperatively with companies when possible, filing resolutions only when engagement fails.

- Dialogues with Apache, Anadarko, Chevron, ConocoPhillips, Devon, ExxonMobil, Marathon, Tesoro, Valero, Ultra, XTO.

- Investors include large pension funds representing over $1 trillion in assets: CalPERS, CalSTRS, New York State, New York City, Connecticut, North Carolina.

*Investors want to see companies taking a **strategic** approach to climate change, taking steps that will reduce their exposure to climate risk and better position them competitively in the years ahead*

In response to investor concern, companies have taken steps including:

- **Disclosing** operational and/or end-product greenhouse gas (GHG) **emissions**
- Setting absolute GHG reduction **targets**
- Increasing investments in **low- and no-carbon energy** technologies, including renewables and carbon sequestration
- Integrating climate risk into core business strategies, including **factoring carbon costs** into capital allocation decision-making.
- **Assigning boards direct responsibility** to oversee climate change corporate strategies.

What does a shareholder-friendly policy on climate change look like?

- **Governance**

  Climate change has the potential to significantly impact the strategy and economic health of a firm, and should be managed at the board level.

- **Operations**

  What steps is the company taking to minimize its exposure to climate risk?

- **Disclosure**

  Giving shareholders an honest assessment of the implications of climate change for the company, and how it plans to meet the challenges and seize the opportunities that climate change represents.

Corporate Governance
14-Point Climate Checklist

1. Board oversight
2. Board climate review
3. Chain of command
4. Executive compensation
5. CEO leadership
6. 10-K disclosure
7. Sustainability report
8. Emissions offsets
9. Recent inventories
10. Historical baselines
11. Future targets
12. 3rd party certification
13. Emissions trading
14. Renewable energy

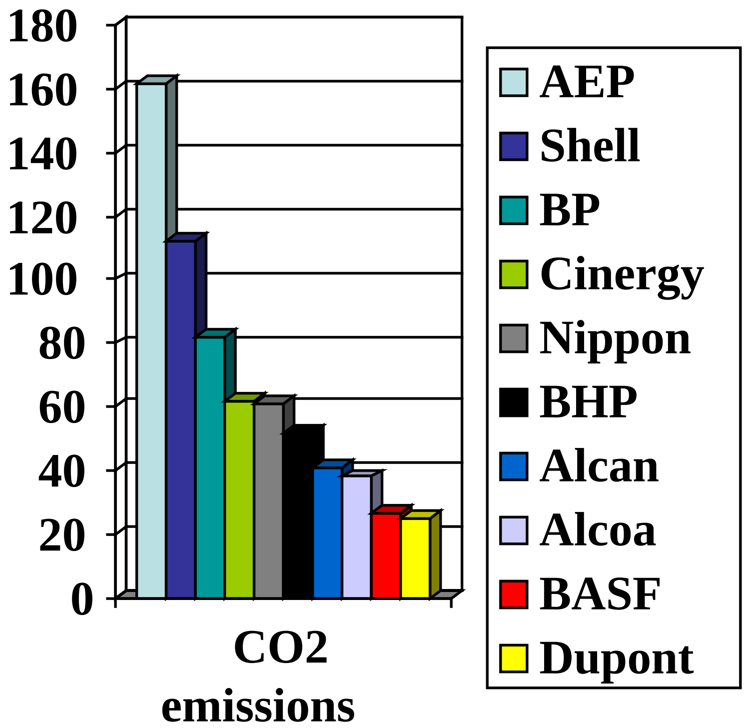
Scoring Companies

• Board oversight	✓ 12 points
• Management execution	✓ 18 points
• Public disclosure	✓ 14 points
• Emissions accounting	✓ 24 points
• Strategic planning	✓ 32 points
	100 points

High Scorers…

- BP – 90 points
- Dupont – 85 points
- Shell – 79 points
- Alcan – 77 points
- Alcoa – 74 points
- AEP – 73 points
- Cinergy – 73 points
- Nippon Steel - 67 points
- BHP Billiton –63 points
- BASF – 59 points

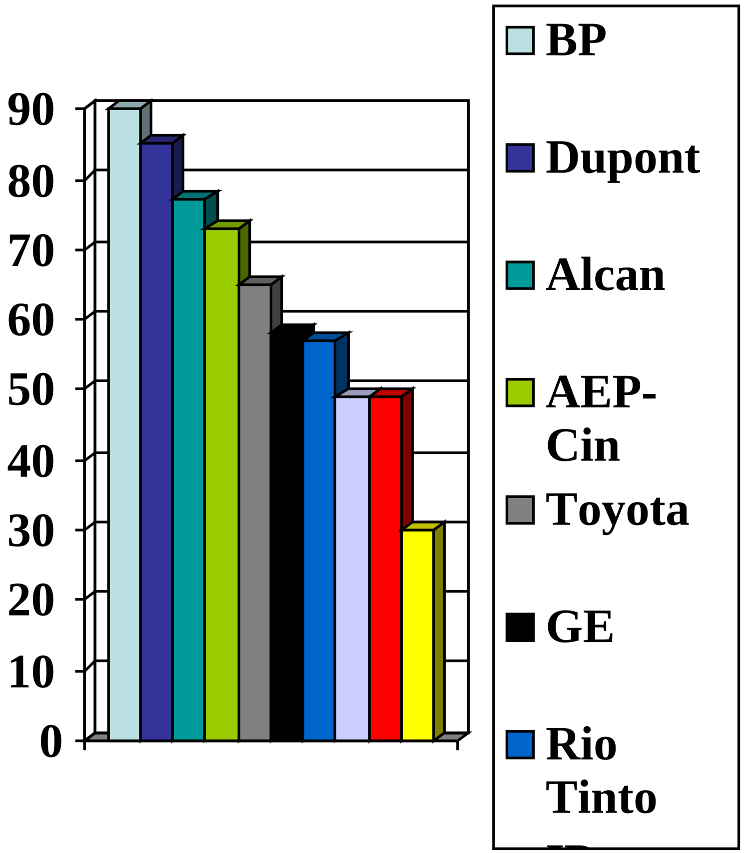
… also can be *high emitters*



Good Climate Governance

Good climate governance is not a measure of which companies are "best" for the climate. It is a measure of who's ***taking responsibility*** for global warming, and by employing these practices, ***defining strategies*** that ***help the market*** sort the winners and losers.

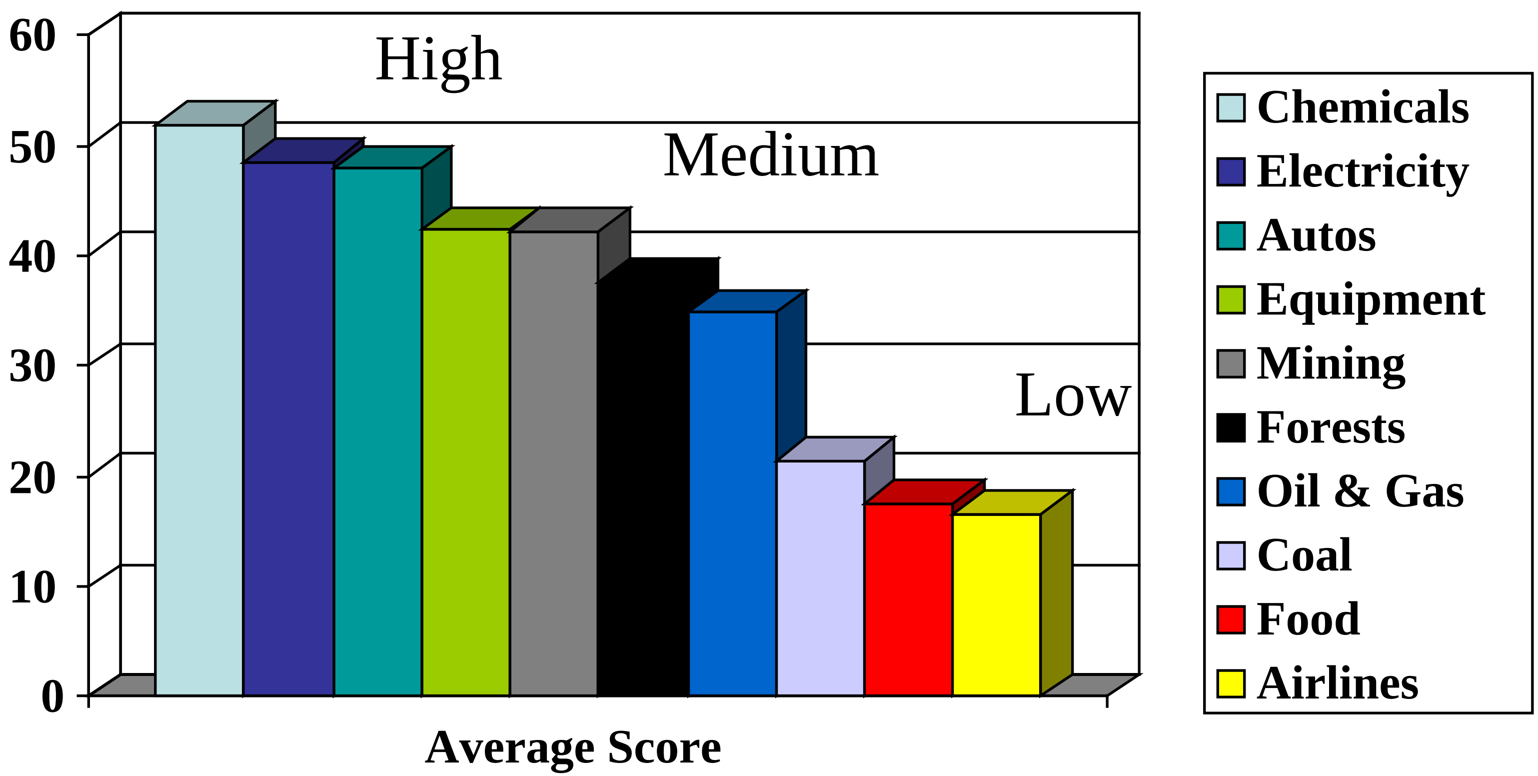
Leaders by Industry



Common Themes

- Boards provide direction and oversight
- CEOs embrace the issue as a priority for their firms
- Managers seek practical, near-term solutions -- not just ‘home runs’

Average Industry Scores



Achieving Higher Scores

- Better disclosure – especially in securities filings and financial statements
- More advocacy – demand a government framework to provide investor certainty
- Early action – take steps now to reduce emissions, preferably below 1990 levels
- Long-term planning – recognize the implications of today's decisions on generations to come

Toward a Clean Energy Future

An energy and technology revolution is needed to stem the rising tide of greenhouse gas emissions. It starts with good climate governance.