The Climate Accountability Scorecard

Ranking Major Fossil Fuel Companies on Climate Deception, Disclosure, and Action
www.ucsusa.org/climatescorecard

Appendix: Methodology

Union of Concerned Scientists

Scope

INVESTOR-OWNED FOSSIL FUEL COMPANIES ASSESSED

According to a recent study, just 90 companies have produced and marketed the fossil fuels and cement responsible for almost two-thirds of the world's industrial carbon emissions over the past two and a half centuries. Fifty are investor-owned coal, oil, and natural gas companies (Heede 2014), of which we have focused on eight.

These eight companies' products are responsible for nearly 15 percent of industrial carbon emissions since 1850 (Heede 2014). They are:

- The five leading investor-owned oil and gas companies in terms of cumulative emissions (**Chevron**, **ExxonMobil**, **BP**, **Royal Dutch Shell**, and **ConocoPhillips**).
- The three leading investor-owned US-based coal companies in terms of cumulative emissions (**Peabody Energy**, **CONSOL Energy**[1], and **Arch Coal**). Peabody Energy and Arch Coal, though currently under Chapter 11 bankruptcy protection, are included in this analysis because of their significant contribution to historical emissions and because they continue to fund prominent individuals and groups that deny climate change or spread disinformation about climate change and climate science.

COMPANY AFFILIATION WITH TRADE ASSOCIATIONS AND INDUSTRY GROUPS INVOLVED IN DISINFORMATION

Seven US industry groups and trade associations were chosen for inclusion in our study. Each of these groups (1) has a well-documented role in spreading disinformation on climate science, and (2) has used disinformation in opposing recent climate policy proposals in the United States. They are:

- **American Coalition for Clean Coal Electricity (ACCCE)**
- **American Legislative Exchange Council (ALEC)**
- **American Petroleum Institute (API)**
- **National Association of Manufacturers (NAM)**
- **National Mining Association (NMA)**
- **US Chamber of Commerce (US Chamber)**
- **Western States Petroleum Association (WSPA)**

Recent affiliation of companies with these industry groups and trade associations could be confirmed, and at least two companies in our sample have recently been affiliated with each of these groups.

Organizations such as Americans for Prosperity, Competitive Enterprise Institute, Energy and Environment Legal Institute, and Heartland Institute have also played a key role in disinformation on climate science and policy, but a lack of transparency regarding these groups' membership and funding prevented verification of corporate affiliations.

AREAS OF ASSESSMENT

The research team developed 30 specific metrics and criteria against which to measure fossil fuel company performance and progress in meeting societal expectations for climate responsibility in four broad areas:

- **Renouncing disinformation on climate science and policy—ten metrics**, including:
  - Accuracy and consistency of public statements on climate science and the consequent need for swift and deep reductions in emissions from the burning of fossil fuels;
  - Affiliation with seven trade associations and industry groups that spread disinformation on climate science and/or block climate action;
  - Policy, governance systems, and oversight mechanisms to prevent disinformation;
  - Support for climate-related shareholder resolutions.
- **Planning for a world free from carbon pollution—eight metrics**, including:
  - Support for the Paris Climate Agreement;

  - Company-wide commitments and targets to reduce greenhouse gas emissions;
  - Use of an internal price on carbon in investment decisions;
  - Commitment and mechanism to measure and reduce carbon intensity of company supply chain;
  - Disclosure of investments in low-carbon technology research and development;
  - Disclosure of greenhouse gas emissions reduction plans;
  - Disclosure of how company manages greenhouse gas emissions and associated risks;
  - Disclosure of greenhouse gas emissions.
- **Supporting fair and effective climate policies—eight metrics**, including:
  - CPA-Zicklin Index of Corporate Political Disclosure and Accountability: Disclosure;
  - CPA-Zicklin Index of Corporate Political Disclosure and Accountability: Policy;
  - CPA-Zicklin Index of Corporate Political Disclosure and Accountability: Oversight;
  - Engagement with the US Congress on federal climate policies or legislation;
  - Consistent support for US policy action to reduce emissions;
  - Engagement with the US Environmental Protection Agency (EPA) on the Clean Power Plan;
  - Engagement with the EPA on the methane rule;
  - Company influence through international or national business alliances or initiatives that are supportive of specific climate policies.
- **Fully disclosing climate risks—four metrics**, including:
  - Disclosure of regulatory risks;
  - Disclosure of physical risks;
  - Disclosure of market and other indirect risks and opportunities;
  - Disclosure of corporate governance on climate-related risks by board and senior management.

STUDY PERIOD

The research focused on company policies and actions on climate change from January 2015 through May 2016, except where otherwise indicated.

DATA SOURCES

The climate policies and actions of companies in the sample have been assessed based on publicly available information covering the study period January 2015 through May 2016, including:

- Company annual reports, proxy statements, sustainability reports, and CDP submissions;
- Company 10-K and 20-F filings with the US Securities and Exchange Commission (SEC);
- Company websites and press releases;
- Transcripts and recordings of corporate annual meetings;
- Public statements by company executives;
- The 2015 CPA-Zicklin Index of Corporate Political Disclosure and Accountability;
- Major news sources;
- Third-party websites, such as Sourcewatch from the Center for Media and Democracy.

Specific data sources for each area of the assessment are identified under "metrics and scoring criteria" below.

RESOURCES CONSULTED

To aid in our assessment, we drew on existing resources such as CDP Climate Change Reporting (CDP 2016), the Science Based Targets Initiative (Science Based Targets n.d.), the Oxford Martin Working Principles for Investment in Fossil Fuels (Allen et al. 2015), the CPA-Zicklin Index of Corporate Political Disclosure and Accountability (CPA 2015), and the *Guide for Responsible Corporate Engagement in Climate Policy* (Karbassi et al. 2013). We also consulted with a wide range of experts and peer organizations. The methodology was informed by previous studies by the Union of Concerned Scientists (UCS) including *A Climate of Corporate Control* (Grifo et al. 2012), *Tricks of the Trade: How Companies Anonymously Influence Climate Policy Through* *their Business and Trade Associations* (Goldman and Carlson 2014), *Stormy Seas, Rising Risks* (Carlson, Goldman, and Dahl 2015), *The Climate Deception Dossiers* (Mulvey et al. 2015), and *Fueling a Clean Transportation Future* (Martin 2016).

SCORING

Scoring of most metrics was on a five-point scale ranging from "advanced" to "egregious." For some metrics, the scale ranges from "good" to "poor". Some of the criteria are aspirational—that is, none of the assessed companies is yet meeting a standard of climate responsibility on that indicator.

Scoring bands have been developed in order to determine a company's aggregate score in each area of assessment.

FIGURE 1. **Scoring Bands**

Score	Definition	Points Assigned
Advanced	Company is demonstrating best practices	+2
Good	Company is meeting emerging societal expectations	+1
Fair	Company's performance is neither positive nor negative	0
Poor	Company is falling short of emerging societal expectations	-1
Egregious	Company is acting very irresponsibly	-2

Metrics and Scoring Criteria

RENOUNCING DISINFORMATION ON CLIMATE SCIENCE AND POLICY

DATA SOURCES

Company websites, proxy statements, public statements by company representatives, trade association and industry group websites, and third party watchdog group websites in the period January 1, 2015, to May 31, 2016; trade association federal filings from 2014.

SCORING GUIDE

TABLE 2. Renouncing Disinformation on Climate Science and Policy Scoring Guide

Climate Statements: Direct	
Accuracy and consistency of public statements on climate science and the consequent need for swift and deep reductions in emissions from the burning of fossil fuels	
Advanced (+2)	Company meets all of the criteria for "good" and also highlights the urgency and importance of achieving global net-zero CO_2 emissions in order to keep temperature rise well below 2°C and limit risks to society and ecosystems.
Good (+1)	Company meets all of the criteria for "fair" and also affirms the consequent need for swift and deep reductions in emissions from the burning of fossil fuels.
Fair (0)	Company consistently acknowledges the scientific evidence of climate change in all public platforms (such as company websites and statements by company executives).
Poor (-1)	Company does not address climate science on company website in a prominent, easily accessible page (e.g., a page designated specifically to address climate change) or has downplayed the need to reduce greenhouse gas emissions in at least one platform.
Egregious (-2)	Company has misrepresented climate science in at least one platform (e.g., on company webpage or in public statements). Such misrepresentation might take the form of denying the reality of the problem of climate change or disparaging the scientific evidence of climate change.
Climate Statements: Indirect	
Affiliations with trade associations and other industry groups that spread climate science disinformation and/or block climate action, as relevant. Trade associations and industry groups analyzed were the American Coalition for Clean Coal Electricity (ACCCE), American Legislative Exchange Council (ALEC), American Petroleum Institute (API), National Association of Manufacturers (NAM), National Mining Association (NMA), US Chamber of Commerce (US Chamber), and Western States Petroleum Association (WSPA).	
Advanced (+2)	Company meets the criteria in "good" and in leaving, publicly distancing itself from, or never joining the association or group, the company stated explicitly that it was because the group's position on climate science is inaccurate and inconsistent with company's position.

Good (+1)	Company has left or publicly distanced itself from the association or group there is clear, incontrovertible evidence that the company has never been affiliated with it.
Fair (0)	Information is unavailable to determine company's affiliation with the association or group.
Poor (-1)	Company is a recent member of the association or group and has not taken any steps to distance itself from the group's climate deception.
Egregious (-2)	Company is a recent member with a leadership role in the association or group and has not taken any steps to distance itself from the group's climate deception.
Policy, Governance, and Oversight	
Policy, governance systems, and oversight mechanisms to prevent climate disinformation	
Good (+1)	Company has made a public commitment to reject climate science disinformation and established a company-wide policy to avoid direct or indirect involvement in disinformation (i.e., through trade associations and other industry-affiliated groups), with clearly delineated responsibilities for board and senior management to ensure accountability.
Fair (0)	Company has made a public commitment to reject climate science disinformation, but does not have clear accountability or systems for implementing a company-wide policy.
Poor (-1)	Company has no policy or commitment on record to avoid direct or indirect involvement in spreading climate science disinformation.
Support for climate-related shareholder resolutions	
Advanced (+2)	Company has recommended support for one or more climate-related shareholder resolutions put forward by established networks of socially responsible investors (e.g., Ceres, the Interfaith Center on Corporate Responsibility, As You Sow, Aiming for A) and is taking action to resolve issues brought forth in these resolutions.
Good (+1)	Company has recommended support for one or more climate-related shareholder resolutions put forward by established networks of socially responsible investors (e.g., Ceres, the Interfaith Center on Corporate Responsibility, As You Sow, Aiming for A), but has not yet taken action to resolve issues raised in these resolutions.
Fair (0)	Company has not faced any climate-related shareholder resolutions put forward by established networks of socially responsible investors (e.g., Ceres, the Interfaith Center on Corporate Responsibility, As You Sow, Aiming for A).
Poor (-1)	Company has recommended against one or more climate-related shareholder resolutions put forward by established networks of socially responsible investors (e.g., Ceres, the Interfaith Center on Corporate Responsibility, As You Sow, Aiming for A).
Egregious (-2)	Company has attempted to block one or more climate-related shareholder resolutions put forward by established networks of socially responsible investors (e.g., Ceres, the Interfaith

	Center on Corporate Responsibility, As You Sow, Aiming for A).

DATA SOURCES: COMPANY WEBSITES, PROXY STATEMENTS, PUBLIC STATEMENTS BY COMPANY REPRESENTATIVES, TRADE ASSOCIATION AND INDUSTRY GROUP WEBSITES, AND THIRD PARTY WATCHDOG GROUP WEBSITES IN THE PERIOD JANUARY 1, 2015, TO MAY 31, 2016; TRADE ASSOCIATION FEDERAL FILINGS FROM 2014.

TABLE 3. Renouncing Disinformation on Climate Science and Policy Scoring Bands

Area Aggregate Score	Definition	Point range
Advanced	Company is demonstrating best practices in the area	+10 – +15
Good	Company is meeting emerging societal expectations in this area	+4 – +9
Fair	Company's performance in this area is neither positive nor negative	(-3) – +3
Poor	Company is falling short of emerging societal expectations in this area	(-9) – (-4)
Egregious	Company is acting very irresponsibly in this area	(-15) – (-10)

PLANNING FOR A WORLD FREE FROM CARBON POLLUTION

CONTINGENT SCORING

A company must both have a positive score in the overall planning section *and* have a positive score in the “company-wide specific commitments and targets” subsection in order to be scored on the execution of those plans. No companies met this standard; therefore, the “execution” metrics and criteria will be developed in a future iteration of the scorecard.

DATA SOURCES

2015 and 2016 SEC 10-Ks or 20-Fs, CDP disclosures, sustainability reports, and annual reports; company websites and company press releases for the period January 1, 2015, to May 31, 2016

SCORING GUIDE

TABLE 4. Planning For a World Free From Carbon Pollution Scoring Guide

Planning	
Support for the Paris Climate Agreement	
Good (+1)	Company acknowledges and accepts global goals laid out in the international climate agreement made in Paris in December 2015, in which world leaders committed to limit “the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels” (UNFCCC 2015). The company has made a public statement or taken a public action that illustrates its intention to align its own business model with the goals of the Paris Climate Agreement.
Fair (0)	Company has made a general statement expressing support for the Paris Climate Agreement and its global temperature goals, but has not specified that it will align its business model with Paris goals.
Poor (-1)	Company has not publicly expressed support for the Paris Climate Agreement and its global temperature goals.
Company-wide commitments and targets to reduce greenhouse gas emissions	
Advanced (+2)	Company meets all of the criteria for “good,” and: 1. The company has near-term benchmark and long-term transition metrics to measure progress toward the long-term goal, involving a credible plan to ultimately reduce the net greenhouse gas emissions of its business activities to zero. 2. If it envisages a substantial role for offsetting of residual greenhouse gas emissions, the company provides details of that offset mechanism, including its reliability, its availability at sufficient scale for the global transition, and identification of who is going to pay for it. 3. If carbon dioxide removal plays a substantial role in the company’s plans, the company provides details on how such removal will be achieved, paid for, monitored, and maintained—in effect, permanently.

Good (+1)	Company has set a strong, viable, long-term science-based target for reducing greenhouse gas emissions resulting from company-wide operations and the use of its products and has developed a concrete action plan to achieve those reductions in service of the Paris Climate Agreement's global temperature goal and net-zero emissions. The plan is grounded in available technologies, or, if it depends on future technology, specifies how the company intends to contribute to the development of new technology.
Fair (0)	Company has made a company-wide commitment to reduce greenhouse gas emissions in the service of the Paris Climate Agreement's global temperature goal, but has not set a science-based target or developed a concrete action plan to achieve the target.
Poor (-1)	Company has a plan for reducing greenhouse gas emissions, but the plan is not company-wide and is not in the service of a specific temperature goal or target; or company has a greenhouse gas emissions reduction target that expires in the reporting year or earlier.
Egregious (-2)	Company has no company-wide plan for reducing greenhouse gas emissions.
Use of an internal price on carbon in investment decisions	
Advanced (+2)	Company meets all of the criteria for "good" and extends the use of the price on carbon to components of the supply chain that the company does not directly control.
Good (+1)	Company has set a price on carbon that it uses in investment decisions. The price reflects carbon emitted during all components of the supply chain over which the company has control (including refining and processing of fuels).
Fair (0)	Company has set a price on carbon that it uses in investment decisions, but the price is based solely on one segment of the supply chain, such as aggregate downstream greenhouse gas emissions (e.g., greenhouse gas emissions from end-user burning of the fuel).
Poor (-1)	Company has set a price on carbon that is used in investment decisions but does not disclose what that price is; or has disclosed a specific price on carbon but does not explain how that price is used in investment decisions.
Egregious (-2)	Company does not use a price on carbon in investment decisions.
Commitment and mechanism to measure and reduce carbon intensity of supply chain	
Good (+1)	Company has a mechanism to measure and reduce greenhouse emissions on a full lifecycle basis (e.g., has made a public commitment not to invest in higher-carbon fuel sources, such as tar sands, because of their high carbon intensity).
Fair (0)	Company has a public commitment to measure and reduce carbon emissions in its own operations (e.g., has signed onto World Bank's "Zero Routine Flaring by 2030" initiative).
Poor (-1)	Company has no public commitment to measure and reduce carbon emissions in its own operations.
Tracking and Disclosure	
Disclosure of investments in low-carbon technology research and development	

Good (+1)	Company meets all of the criteria for “fair” and also reports on low-carbon investments as a proportion of the total research and development budget and in the context of future budget allocations.
Fair (0)	Company reports annually on low-carbon research and development broken down by specific investments, including in renewable energy technologies and carbon capture and storage.
Poor (-1)	Company does not report annually on low-carbon research and development, and/or does not provide a breakdown of specific low-carbon investments.
Disclosure of greenhouse gas emissions reduction plans	
Good (+1)	Company discloses to shareholders details of its company-wide, long-term, science-based greenhouse gas emissions reduction plan, as well as its progress toward interim goals and benchmarks. Plan must have recived a score of “Good” or better in the above metric, *“company-wide commitments and targets to reduce greenhouse gas emissions.”*
Fair (0)	Company discloses details of its company-wide greenhouse gas emissions reduction plans to shareholders.
Poor (-1)	Company does not disclose details of its greenhouse gas emissions reduction plans to shareholders.
Disclosure of how company manages greenhouse gas emissions and associated risks	
Advanced (+2)	Company meets all four of the requirements under “good” disclosure.
Good (+1)	Company meets the requirements for “fair” disclosure and at least two of the following: 1. Discloses greenhouse gas emissions reduction timelines. 2. Discloses estimated and actual greenhouse gas emissions reductions resulting from emissions reduction activities undertaken by the company. 3. Specifies whether the company has identified any opportunities to benefit financially from its actions to reduce greenhouse gas emissions. 4. When individual greenhouse gas emissions reduction projects are discussed, provides context about larger impacts on the company, such as whether the results are replicable on a larger scale.
Fair (0)	Company provides a detailed description of actions it is taking to reduce, offset, or limit its own greenhouse gas emissions.
Poor (-1)	Company mentions or makes generic claims about greenhouse gas emissions management, but does not provide details or descriptions of actions it is taking to reduce, offset, or limit its own greenhouse gas emissions and associated risks.
Egregious (-2)	Company does not disclose actions it is taking to reduce, offset, or limit its own greenhouse gas emissions and associated risks.
Disclosure of greenhouse gas emissions	

Advanced (+2)	Company discloses adequate data from the entire fuel production supply chain to estimate lifecycle greenhouse gas emissions. It describes the methodology used to calculate greenhouse gas emissions.
Good (+1)	Company meets the requirements for "fair" disclosure and also discloses indirect greenhouse gas emissions from downstream activities (e.g., final use of products, transportation, and distribution).
Fair (0)	Company provides information about direct greenhouse gas emissions from operations as well as indirect greenhouse gas emissions from upstream activities (e.g., purchased goods and services, waste generated in operations, fuel- and energy-related activities) for the current year, as well as the methodology used to calculate emissions.
Poor (-1)	Company provides minimal data, insufficient to inform investors of the magnitude and trend of the company's greenhouse gas emissions (e.g., it discusses the company's greenhouse gas emissions trends but does not provide actual greenhouse gas emissions data, or provides direct greenhouse gas emissions data but no information regarding upstream or downstream activities).
Egregious (-2)	Company does not disclose its greenhouse gas emissions.

DATA SOURCES: 2015 AND 2016 SEC 10-KS OR 20-FS, CDP DISCLOSURES, SUSTAINABILITY REPORTS, AND ANNUAL REPORTS; COMPANY WEBSITES AND COMPANY PRESS RELEASES FOR THE PERIOD JANUARY 1, 2015, TO MAY 31, 2016

TABLE 5. Planning For a World Free From Carbon Pollution Scoring Bands

Area Aggregate Score	Definition	Point range
Advanced	Company is demonstrating best practice in the area	+8 – +12
Good	Company is meeting emerging societal expectations in this area	+3 – +7
Fair	Company's performance in this area is neither positive nor negative	(-2) – +2
Poor	Company is falling short of emerging societal expectations in this area	(-7) – (-3)
Egregious	Company is acting very irresponsibly in this area	(-12) – (-8)

SUPPORTING FAIR AND EFFECTIVE CLIMATE POLICIES

DATA SOURCES

Company websites and major news sources in the period January 1, 2014, to May 31, 2016; 2015 Center for Political Accountability-Zicklin Index and scoring guidelines; and congressional testimony and company comments filed with Regulations.gov in the period January 1, 2014, to May 31, 2016.

SCORING GUIDE

TABLE 6. Supporting Fair and Effective Climate Policies Scoring Guide

<table>
<tr><th colspan="4">General Political Activity and Spending</th></tr>
<tr><td></td><td colspan="3">CPA-Zicklin Index of Corporate Political Disclosure and Accountability scores We condensed CPA-Zicklin scores into three categories—disclosure, policy, and oversight—with a company receiving a possible score of +2 – (-2) for each category.</td></tr>
<tr><td></td><td>Disclosure</td><td>Policy</td><td>Oversight</td></tr>
<tr><td>Advanced (+2)</td><td>+30 – +36</td><td>+14 – +16</td><td>+15 – +18</td></tr>
<tr><td>Good (+1)</td><td>+23 – +29</td><td>+11 – +13</td><td>+11 – +14</td></tr>
<tr><td>Fair (0)</td><td>+15 – +22</td><td>+6 – +10</td><td>+8 – +10</td></tr>
<tr><td>Poor (-1)</td><td>+7 – +14</td><td>+3 – +5</td><td>+4 – +7</td></tr>
<tr><td>Egregious (-2)</td><td>0 – +6</td><td>0 – +2</td><td>0 – +3</td></tr>
<tr><th colspan="4">Direct Influence on Climate Policy</th></tr>
<tr><td colspan="4">Engagement with Congress on federal climate policies or legislation</td></tr>
<tr><td>Good (+1)</td><td colspan="3">Company consistently speaks in support of at least some existing or proposed climate policies or legislation; it calls for climate action in public engagement with Congress.</td></tr>
<tr><td>Fair (0)</td><td colspan="3">Company does not publicly engage Congress on climate policies or engages without supporting or opposing climate policy.</td></tr>
<tr><td>Poor (-1)</td><td colspan="3">Company publicly opposes congressional policy or action on climate and does not offer a specific, viable policy alternative that would have equal or greater benefit to the climate.</td></tr>
<tr><td colspan="4">Consistent support for US policy action to reduce carbon emissions</td></tr>
<tr><td>Advanced (+2)</td><td colspan="3">Company identifies specific US federal or state climate change policies (e.g., the EPA Clean Power Plan, California SB-350) that it supports and advocates publicly and consistently for these policies.</td></tr>
<tr><td>Good (+1)</td><td colspan="3">Company identifies a general category of US federal or state climate change policies that it supports (e.g., carbon tax) and maintains this position consistently across all platforms.</td></tr>
</table>

Fair (0)	Company identifies a general category of climate policy that it supports (e.g., carbon tax) on the company website or in public statements.
Poor (-1)	Company does not identify any climate policy that it supports on the company website in a prominent, easily accessible page (e.g., a page designated specifically to address climate change) or in public statements.
Egregious (-2)	Company opposes US federal or state climate policies without identifying any policy that it supports and has used climate science disinformation as justification for its opposition.
Engagement on the EPA Clean Power Plan (EPA-HQ-OAR-2013-0602)	
Advanced (+2)	Company meets all of the criteria for "good" and advocated publicly for the EPA Clean Power Plan or a specific, viable policy alternative that would have equal or greater benefit to the climate as a policy solution to climate change.
Good (+1)	Company submitted comments to the EPA in support of the Clean Power Plan; or it submitted comments on EPA Clean Power Plan that did not express support for the policy, but presented a specific, viable policy alternative that would have equal or greater benefit to the climate.
Fair (0)	Company did not submit comments to the EPA regarding the Clean Power Plan.
Poor (-1)	Company submitted comments opposing the EPA Clean Power Plan and did not present a specific, viable policy alternative that would have equal or greater benefit to the climate; or the company explicitly referenced and endorsed a trade association or industry group's comments that opposed the EPA Clean Power Plan without presenting a specific, viable policy alternative; or the company, through an industry group, participated in a lawsuit against the EPA regarding the Clean Power Plan.
Egregious (-2)	Company submitted comments opposing the EPA Clean Power Plan and did not present a specific, viable policy alternative that would have equal or greater benefit to the climate and used climate science disinformation as justification for opposition; or explicitly referenced and endorsed the statement of an industry group that used climate science disinformation as justification for opposition; or directly participated in a lawsuit against the EPA regarding the Clean Power Plan.
Engagement on the EPA methane rule (EPA-HQ-OAR-2010-0505-4776)	
Advanced (+2)	Company meets all of the criteria for "good" and advocated publicly for the EPA methane rule or a specific, viable policy alternative that would have equal or greater benefit to the climate as a policy solution to climate change.
Good (+1)	Company submitted comments in support of the EPA methane rule; or submitted comments on the EPA methane rule that did not express support for the policy, but presented a specific, viable policy alternative that would have equal or greater benefit to the climate.
Fair (0)	Company did not submit comments to the EPA regarding the methane rule.

Poor (-1)	Company submitted comments opposing the EPA methane rule and did not present a specific, viable policy alternative that would have equal or greater benefit to the climate; or explicitly referenced and endorsed a trade association or industry group's comments that opposed the EPA methane rule without presenting a specific, viable policy alternative.
Egregious (-2)	Company submitted comments opposing the EPA methane rule and did not present a specific, viable policy alternative that would have equal or greater benefit to the climate and used climate science disinformation as justification for opposition; or explicitly referenced and endorsed the statement of a trade association or industry group that used climate science disinformation as justification for opposition.
Indirect Influence on Climate Policy	
Company influence through international or national business alliances or initiatives that are supportive of specific climate policies	
Good (+1)	Company signed on to business initiatives[2] that demonstrate support for specific climate policies, such as the American Business Act on Climate Pledge, Trillion Ton Communiqué, the Paris Pledge for Action, the Guide for Responsible Corporate Engagement in Climate Policy, or the Oil and Gas Climate Initiative.
Fair (0)	Company has not signed onto any international or national business alliances or initiatives supportive of specific climate policies.
Poor (-1)	Company publicly rejects or disparages climate-supportive alliances or initiatives.

DATA SOURCES: COMPANY WEBSITES AND MAJOR NEWS SOURCES IN THE PERIOD JANUARY 1, 2014, TO MAY 31, 2016; 2015 CENTER FOR POLITICAL ACCOUNTABILITY-ZICKLIN INDEX AND SCORING GUIDELINES; CONGRESSIONAL TESTIMONY AND COMPANY COMMENTS FILED WITH REGULATIONS.GOV IN THE PERIOD JANUARY 1, 2014, TO MAY 31, 2016

TABLE 7. Supporting Fair and Effective Climate Policies Scoring Bands

Area Aggregate Score	Definition	Point range
Advanced	Company is demonstrating best practice in the area	+9 – +14
Good	Company is meeting emerging societal expectations in this area	+3 – +8
Fair	Company's performance in this area is neither positive nor negative	(-2) – +2
Poor	Company is falling short of emerging societal expectations in this area	(-8) – (-3)
Egregious	Company is acting very irresponsibly in this area	(-14) – (-9)

FULLY DISCLOSING CLIMATE RISKS

DATA SOURCES

2016 SEC 10-Ks and 20-Fs and CDP disclosures, if discussed in SEC filings.

SCORING GUIDE

TABLE 8. Fully Disclosing Climate Risks Scoring Guide

Regulatory Risks	
Disclosure of regulatory risks: The company discloses of laws and regulations that will affect it, and discloses the impact of complying with those existing or proposed laws and regulations.[3]	
Advanced (+2)	Company meets all of the criteria for "good" disclosure, and includes: 1. An assessment of whether these laws and regulations will have, or are reasonably likely to have, a material impact on the company's liquidity, capital resources, or results of operations; as well as the basis for the company's conclusions 2. Any material estimated capital expenditures for environmental control facilities 3. How the company will respond
Good (+1)	Company provides a detailed analysis of existing and proposed laws and regulations relating to climate change and their possible effects on the company, including potential financial impacts (quantified, when feasible).
Fair (0)	Company identifies specific existing and proposed laws and regulations relating to climate change that may affect the company, but does not address how it in particular will be affected by those regulations.
Poor (-1)	Company mentions the general existence of risk associated with current or proposed laws relating to climate change, but does not identify specific laws or regulations and/or does not identify effects particular to the company (as opposed to effects that could apply to the sector as a whole).
Egregious (-2)	Company does not disclose its regulatory risks.
Physical Risks	
Disclosure of physical risks: The company discloses physical risks it faces that are caused by or exacerbated by climate change and how the company plans to address these risks.	
Advanced (+2)	Company meets all of the criteria under "good," and also discloses: 1. An assessment of whether these physical risks "will have, or are reasonably likely to have, a material impact on the company's liquidity, capital resources or results of operations," as well as the basis for the company's conclusions (SEC 2010) 2. Past physical impacts, if material

Good (+1)	Company discusses the physical climate-related risks it faces, with some specific details, including at least one of the following: 1. The operational segments and/or specific company facilities that might be impacted 2. The magnitude and time frames of the anticipated impacts (quantified, when feasible) 3. How the company plans to respond to physical impacts
Fair (0)	Company acknowledges physical risks it faces and includes some discussion of climate change as a contributor to those risks, but with few or no details about the nature of those risks, their magnitude, or how they may impact the company.
Poor (-1)	Company generally acknowledges physical risks it faces, such as weather, but does not include discussion of climate change as a contributor to those risks.
Egregious (-2)	Company does not disclose its physical risks.
Market and Other Risks and Opportunities	
Disclosure of market and other indirect risks and opportunities: The company discloses indirect risks associated with climate change, such as impacts on demand or reputation, and how the company will anticipate and respond to these risks.	
Advanced (+2)	Company provides a detailed analysis of how its financial condition or operations may be affected by climate-related developments in the marketplace, including all points under “good” disclosure, as well as: 1. Impacts on suppliers and customers (e.g., changes in demand for new and existing products and services due to their greenhouse gas emissions profiles) 2. Impacts on the company’s reputation 3. Magnitude of the anticipated risks and opportunities (quantified, when feasible) 4. Basis for the company’s conclusions
Good (+1)	Company provides some details or examples of how it may be affected by indirect risks and opportunities, including: 1. An assessment of whether identified risks and opportunities will have, or are reasonably likely to have, a material impact on the company’s liquidity, capital resources, or results of operations 2. Key variables and other qualitative and quantitative factors (e.g.. financial data, anticipated external macro-economic conditions, interest rate, or economic growth trends), which are particular to and necessary for an understanding and evaluation of the individual company
Fair (0)	Company provides some details or examples of how it may be affected by indirect risks and opportunities from climate change, but provides limited analysis of their potential financial impacts for the company.
Poor (-1)	Company broadly mentions shifting market and other indirect risks and opportunities from climate change, but does not specify potential impacts on the company.
Egregious (-2)	Company does not disclose its market or indirect risks.
Corporate Governance	

Disclosure of corporate governance on climate-related risks by board and senior management: The company discloses how its board and executives will monitor and manage climate-related risks.	
Advanced (+2)	Company meets all four of the criteria under “good” disclosure.
Good (+1)	Company discloses some details of corporate governance on greenhouse gas emissions management and climate risks and opportunities, including disclosing at least two of the following: 1. How the board is engaged on climate risks and opportunities 2. Which executives are in charge of addressing these risks and opportunities 3. Whether and how executive compensation is tied to meeting corporate climate objectives 4. How senior management and the board monitor and gauge the effectiveness of the company’s climate change strategies and goals
Fair (0)	Company mentions or makes generic statements about climate-related environmental governance.
Poor (-1)	Company mentions or makes generic statements about environmental governance, but does not specifically describe climate-related governance.
Egregious (-2)	Company provides no disclosure of corporate governance on climate issues.

DATA SOURCES: 2016 SEC 10-KS OR 20-FS AND CDP DISCLOSURES, IF DISCUSSED IN SEC FILINGS

TABLE 9. Fully Disclosing Climate Risks Scoring Bands

Area Aggregate Score	Definition	Point range
Advanced	Company is demonstrating best practice in the area	+6 – +8
Good	Company is meeting emerging societal expectations in this area	+3 – +5
Fair	Company’s performance in this area is neither positive nor negative	(-2) – +2
Poor	Company is falling short of emerging societal expectations in this area	(-5) – (-3)
Egregious	Company is acting very irresponsibly in this area	(-8) – (-6)

[ENDNOTES]

1 As of July 2016, CONSOL Energy shed its last West Virginia coal mines, pursuing its increased focus on natural gas (Levesque 2016). In this report the company is classified in the coal sector based on its cumulative historical

2 Reference to these initiatives should not be considered an endorsement by UCS of any particular business initiative on climate change.

3 Where the necessity and certainty of eventual regulatory action to address global climate goals is clear, the absence of a specific regulatory proposal should not relieve companies of their disclosure obligations.

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