

American Statistical Association

This document provides an extension to information gathered for the report, *Irresponsible Science?: How the fossil fuel and arms industries finance professional engineering and science organizations*, published by Scientists for Global Responsibility (SGR) in October 2019.¹ Information sourced from the American Statistical Association's publicly available documents is provided first, followed by commentary by SGR.

The American Statistical Association—or simply the ASA – is a large professional organization with 19,000 members.² Its creation dates to 1839, with the organization beginning to publish its *Journal of the American Statistical Association (JASA)* in 1888.³

Statement of purpose and values

The ASA summarises its main goals on its website as follows:⁴

“Vision Statement

A world that relies on data and statistical thinking to drive discovery and inform decisions

Mission Statement

Promoting the practice and profession of statistics.”

Investments

According to 990 tax return information obtained via ProPublica, in December 2019 the AIAA held \$21.9m in publicly traded securities.⁵ We were unable to obtain further details about these investments.

Investment policy

The ASA does not appear to have an ethical investment policy.

Transparency

The ASA does not publicly disclose where it holds any of its \$21.9m in investments, giving it zero transparency.

Corporate Patrons

We were unable to find any evidence of financial sponsorship from fossil fuel companies.

Education programmes and grants

The ASA does not appear to be accepting corporate sponsorship from fossil fuel companies for its education programmes and grants.

¹ <https://www.sgr.org.uk/publications/irresponsible-science/>

² <https://www.amstat.org/ASA/About/History.aspx?hkey=9e112633-cdf8-42ea-b0de-7a6b0775b8e2>

³ <https://www.amstat.org/ASA/About/History.aspx?hkey=9e112633-cdf8-42ea-b0de-7a6b0775b8e2>

⁴ <https://www.amstat.org/ASA/About/home.aspx>

⁵ <https://projects.propublica.org/nonprofits/organizations/131677290>

Events sponsorship

The ASA does not have any events sponsored by fossil fuel corporations.

Environmental policy

ASA's section on Statistics and Environment (ENVR) includes a vision and mission statement that emphasises the importance of environmental issues.⁶

Other relevant information

In 2007, the ASA endorsed the findings of the IPCC's Fourth Assessment Report, which emphasised climate change as being caused by the actions of humans.⁷

Past ASA president Sally Morton signed a joint letter with presidents of peer organizations to all US Senators summarizing the scientific consensus on climate change.⁸

In 2010, members of the ASA expressed their concerns about climate change being presented in the media as a contested topic within the scientific community.⁹

In 2016, the ASA was one of 31 major scientific organizations to sign a letter to US policymakers emphasising the consensus across the scientific community about the risks associated with anthropogenic climate change.¹⁰

The ASA participated in the sixth and seventh Climate Science Days where leaders of major scientific organizations in the US met with members of Congress or their staff.¹¹

At the organization's Joint Statistical Meetings (JSMs), the ASA Advisory Committee on Climate Change Policy held panels on climate change.¹²

SGR comments

SGR acknowledges that the ASA has gone to some effort to acknowledge the scientific consensus on climate change, along with its current and future impacts.

SGR has continuing concerns, however, on the following aspects:

Transparency

The ASA has very low public transparency on its company investments, with there being no accessible information available on where the \$21.9m highlighted in the company's 990 form for

⁶ <https://community.amstat.org/envr/info/aboutus/visionandmissionstatement>

⁷ <https://www.amstat.org/asa/files/pdfs/POL-ClimateChangePR.pdf>

⁸ <https://www.amstat.org/asa/files/pdfs/POL-climateletterfinal.pdf>

⁹ <https://magazine.amstat.org/blog/2010/03/01/climatemar10/>

¹⁰ <http://www.aaas.org/sites/default/files/06282016.pdf>

¹¹ <https://magazine.amstat.org/blog/2017/05/01/asa-climate-science-day/>,

<https://magazine.amstat.org/blog/2017/05/01/asa-climate-science-day/>

¹² <https://ww2.amstat.org/meetings/jsm/2017/onlineprogram/ActivityDetails.cfm?SessionID=213845>,
<https://ww2.amstat.org/meetings/jsm/2021/onlineprogram/ActivityDetails.cfm?SessionID=220375>

2019 is held. Looking beyond publicly available information, SGR reached out to current president of the ASA Robert Santos. After consulting with the ASA's executive director and others, Santos declined to provide more information on where the organization holds investments or whether the ASA has an ethical investment policy.

Given that many members of the public are deeply concerned about climate change and that those with a background in statistics have a current and future role in understanding, and adapting to the effects of climate change, any investment by the ASA in fossil fuel companies would be concerning to say the least.

Without full transparency regarding the ASA's investments or the public availability of an ethical investment policy, it is impossible to rule out that the ASA is investing in fossil fuels even if it does not receive public support from the fossil fuel sector.

Other comments

As the ASA makes clear in its Ethical Guidelines for Statistical Practice, "the ethical statistician supports valid inferences, transparency, and good science in general, keeping the interests of the public, funder, client, or customer in mind".¹³ Without the ASA being transparent about its financial activities, we cannot by its own measurement conclude that the ASA is ethical in all areas relating to climate change.

As the current US government itself states, if urgent action is not taken on climate change, "the costs of our inaction will be passed down to future generations".¹⁴ Any investments in fossil fuel companies would, therefore, not be acting in the interests of the public in line with the ASA's own ethical guidelines.

With over two thirds of the US public concerned about how little is being done about climate change, it is clear that trust in organizations such as the ASA would be damaged if it were to hold any investments in fossil fuel companies.¹⁵

SGR has concerns about investments in and financial ties to fossil fuel companies by professional science and engineering organizations for these reasons:

- Professional science and engineering organizations have considerable influence with politicians and the public and it's crucial that they put in place robust science-based targets and plans that are compatible with the goals of the Paris Agreement - and end lobbying behaviour that could undermine it;
- As the UK Health Alliance on Climate Change puts it, "engaging with companies whose business model relies on fuel extraction is of limited use—only divestment will stop extraction".¹⁶ Worldwide, according to the Alliance, over 1,000 organizations with £7 trillion assets have committed to divesting from fossil fuels and instead investing in climate solutions.¹⁷ Research indicates that divestment reduces the price of fossil fuel shares. According to a team at the University of Waterloo in Canada, "lower share prices increase

¹³ <https://www.amstat.org/asa/files/pdfs/EthicalGuidelines.pdf>

¹⁴ <https://www.state.gov/policy-issues/climate-crisis/>

¹⁵ <https://www.pewresearch.org/fact-tank/2020/04/21/how-americans-see-climate-change-and-the-environment-in-7-charts/>

¹⁶ <http://ukhealthalliance.org/divestment>

¹⁷ <https://www.divestinvest.org/11-trillion-counting-divestinvest/>

the costs of capital for the fossil fuel industry, which in turn decreases their ability to explore new resources and exploit proven resources".¹⁸ The greater the likelihood of these fossil fuel resources staying in the ground, the more likely we are to meet the international climate change targets agreed under the Paris Agreement in order to prevent potentially catastrophic climate change;

- In order to keep to the below 2°C target, only one-fifth of known fossil fuel reserves can be burned, putting these assets at risk of becoming stranded. The fraction is even smaller when considering how to meet the 1.5°C target. According to the UK Health Alliance on Climate Change, fossil fuels are an increasingly risky investment and fossil fuel free indexes equalled or outperformed unsustainable alternatives for 5-10 years. "Divestment announcements by prominent investors signal financial risks to the market, which in turn depress share prices," say the University of Waterloo researchers. "Therefore, divestment announcements can have a measurable impact on the fossil fuel industry." Shell said in 2018 that divestment had become a material risk to its business.¹⁹ In 2020 fund manager CCLA, which invests on behalf of charities including Church of England dioceses, dropped its investments in oil giants Shell and Total for financial reasons.²⁰ On January 27th 2021, ratings agency S&P warned 13 oil and gas companies, including Royal Dutch Shell and Total, that it is considering downgrading their credit ratings. The agency has increased its risk rating for the oil and gas sector as a whole from "intermediate" to "moderately high" because of the move away from fossil fuels, poor profitability and volatile prices, according to news reports.²¹ There are also signs that oil companies may struggle to recruit employees with the skills they need.²²
- Many fossil fuel companies are relying on carbon capture technology and nature-based solutions being deployed at a huge scale to offset their planned emissions.²³ Heavy reliance on the global scale deployment of carbon capture and storage technologies is misplaced given the lack of progress in this area for the last 20 years. According to an international group of 41 scientists and academics, such technologies are "expensive, energy intensive, risky, and their deployment at scale is unproven."²⁴ It is irresponsible to base net zero targets on the assumption that uncertain future technologies will compensate for present day emissions."

For those keen to retain support for the energy sector, there are plenty of companies that are much more progressive than fossil fuel companies in which to invest. For example, Orsted (formerly DONG, Danish Oil and Natural Gas) has shifted from being a fossil fuel dominated company to one heavily focused on renewable energy. Similarly, some large German engineering companies, such as Siemens and E.ON, have also made major shifts away from fossil-fuel related work.²⁵

¹⁸ <https://theconversation.com/how-divesting-of-fossil-fuels-could-help-save-the-planet-88147>

¹⁹ <https://www.theguardian.com/commentisfree/2019/oct/13/divestment-bank-european-investment-fossil-fuels>

²⁰ <https://www.divestinvest.org/church-of-england-fund-drops-remaining-fossil-fuel-investments/>

²¹ <https://www.theguardian.com/business/2021/jan/27/rating-agency-sp-warns-13-oil-and-gas-companies-they>

²² <https://www.ft.com/content/3b53f1bd-4625-4733-afb9-af4301257506/>

²³ <https://insideclimatenews.org/news/16072020/oil-gas-climate-pledges-bp-shell-exxon/>

²⁴ <https://www.climatechangenews.com/2020/12/11/10-myths-net-zero-targets-carbon-offsetting-busted/>

²⁵ Siemens has committed to the 1.5°C target under the SBTi and E.ON's carbon emissions are aligned with the below 2°C pathway according to TPI.

There is, of course, a narrow window of opportunity to keep global temperature rise below 1.5°C that warrants a fast transition away from fossil fuel dependency. We think that investment in the renewable energy and energy storage sectors would meet demand for energy more cost-effectively and more sustainably whilst continuing to provide jobs for statisticians and other scientists, investment in green chemistry would promote the use of alternative renewable feedstocks, and investment in energy conservation measures would reduce the energy demand.