

## **The American Society of Civil Engineers**

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*<sup>1</sup>, published by Scientists for Global Responsibility (SGR) in October 2019. Information sourced from the American Society of Civil Engineers's (ASCE)'s publicly available documents is provided first, followed by commentary by SGR.

The American Society of Civil Engineers—or simply the ASCE – is a large professional organization with over 150,000 members in 177 countries.<sup>2</sup> Its creation dates to 1852, making it the country's oldest national engineering organization.<sup>3</sup>

### *Statement of purpose and values*

The ASCE summarises its main goals on its website as follows.<sup>4</sup>

#### *Mission*

*“Deliver value to our members, advance civil engineering, and protect the public health, safety, and welfare.”*

#### *Vision*

*“Civil engineers are global leaders, building a better quality of life.”*

The ASCE has six “goals” which it describes as follows.

- 1. An ever-growing number of people in the civil engineering realm are members of, and engage in, ASCE.*
- 2. Civil engineers develop and apply innovative, state-of-the-art practices and technologies.*
- 3. All infrastructure is safe, resilient, and sustainable.*
- 4. ASCE advances the educational and professional standards for civil engineers.*
- 5. The public values civil engineers' essential role in society.*
- 6. ASCE excels in strategic and operational effectiveness.*

## **Investments**

According to its Form 990 tax return information obtained via ProPublica, in December 2019 the AAS held \$55.4 m in publicly traded securities.<sup>5</sup> We were unable to obtain further details about these investments.

## **Investment policy**

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

<sup>2</sup> <https://www.asce.org/about-asce>

<sup>3</sup> <https://infrastructurereportcard.org/about-asce/>

<sup>4</sup> <https://www.asce.org/about-asce>

<sup>5</sup> <https://projects.propublica.org/nonprofits/organizations/131635293>

The ASCE does not appear to hold an ethical investment policy but did discover a statement that advocates investments that are “directed towards projects and programs that are built for the future”.<sup>6</sup>

### **Transparency**

The ASCE does not publicly disclose where it holds any of its \$55.4m in investments, giving it zero transparency.

### **Corporate Patrons**

The ASCE does not appear to have any corporate patrons from the fossil fuel industry.<sup>7</sup> In the organization’s 2019 annual report, one company involved in arms manufacturing, Boeing, was listed as a partner since 2006.<sup>8</sup>

### **Education programmes and grants**

The ASCE does not appear to be accepting corporate sponsorship for its education programmes and grants.

### **Events sponsorship**

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

### **Environmental policy**

We were unable to find an environmental policy guiding the organization’s operations or targets for reducing its impacts.

### **Other relevant information**

The ASCE has released “Policy Statement 360 – Climate change”<sup>9</sup> which acknowledges the role of civil engineers in countering climate change.

The ASCE has a Sustainability Committee whose mission statement is: *As the stewards of society's physical infrastructure, civil engineers must lead the next shift in sustainable planning, design and construction.*<sup>10</sup>

The ASCE’s “Sustainability Committee”, “Committee on the Adaptation to Climate Change”, and its “Task Committee on Future Weather and Climate Extremes” have sponsored a number of ASCE publications on the role of civil engineers in mitigating climate change and its effects.<sup>11</sup>

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<sup>6</sup> <https://www.asce.org/advocacy/energy/>

<sup>7</sup> <https://www.asce.org/-/media/asce-images-and-files/membership/documents/active-partners-and-associate-partners.pdf>

<sup>8</sup>

[https://www.asce.org/uploadedFiles/Membership\\_and\\_Communities/Partners\\_Program/Content\\_Pieces/ASCE%20Active%20Partners%20and%20Associate%20Partners%20List-06-30-2020.pdf](https://www.asce.org/uploadedFiles/Membership_and_Communities/Partners_Program/Content_Pieces/ASCE%20Active%20Partners%20and%20Associate%20Partners%20List-06-30-2020.pdf)

<sup>9</sup> <https://www.asce.org/advocacy/policy-statements/ps360---climate-change/>

<sup>10</sup> <http://www.asceoc.org/committees/Sustainability>

<sup>11</sup> <https://ascelibrary.org/doi/book/10.1061/9780784414811>;

<https://ascelibrary.org/doi/book/10.1061/9780784415191>;

<https://ascelibrary.org/doi/book/10.1061/9780784415863>

The organization has also put together a sustainability roadmap comprised of four priorities: “do the right project”, “do the project right”, build “capacity to achieve the visions and principles of sustainable development”, “communicate and advocate” sustainability.<sup>12</sup>

The ASCE receives donations for funds and initiatives set up to support civil engineers involved in sustainable projects: the “Future World Vision Initiative”<sup>13</sup>, its “Sustainable Parking Lot Project” (which aims to renovate the ASCE headquarters’ parking lot as a green stormwater area)<sup>14</sup>, “Sustainable Development Initiatives Fund”<sup>15</sup>, and the “SEI Futures Fund”<sup>16</sup>.

The ASCE holds its “International Conference on Sustainable Infrastructure” annually.<sup>17</sup>

### **SGR comments**

SGR acknowledges that the ASCE has made some significant effort to emphasise its role as a leader in civil engineering for sustainability, both now and in a future affected by climate change.

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

#### *Transparency*

The ASCE has very low transparency regarding its company investments, with there being no public information available on where the \$55.4m of funds highlighted above is held. This lack of openness is worrying because it undermines the ability of its members and the wider public to scrutinise the organization’s financial activity in relation to its stated aims. In particular, it is impossible to ascertain the extent to which the ASCE is conducting its investments in a manner that complies with the spirit of its “Policy Statement 360 – Climate change”, which emphasises the “immediate need” for action within civil engineering.<sup>18</sup>

Beyond publicly available information, SGR has repeatedly reached out to Executive Director of the ASCE, Thomas Smith, along with the organization’s board of directors, but has received no response regarding the organization’s financial transparency.

#### *Financial links to fossil fuel corporations*

Given the lack of an ethical investment policy combined with lack of transparency regarding the ASCE’s investments, it is reasonable to conclude that the organization has significant funds held in the fossil fuel industry.

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<sup>12</sup> <https://www.asce.org/communities/institutes-and-technical-groups/sustainability/sustainability-roadmap>

<sup>13</sup> <https://www.futureworldvision.org/>

<sup>14</sup> <https://www.ascefoundation.org/asce-sustainable-parking-lot-project>

<sup>15</sup> <https://www.ascefoundation.org/sustainable-development-initiatives-fund-0>

<sup>16</sup> <https://www.asce.org/communities/institutes-and-technical-groups/structural-engineering-institute/futures-fund>

<sup>17</sup> <https://www.icsiconference.org/>

<sup>18</sup> <https://www.asce.org/advocacy/policy-statements/ps360---climate-change/>

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".<sup>19</sup> 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.<sup>20</sup> 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 the costs of capital for the fossil fuel industry, which in turn decreases their ability to explore new resources and exploit proven resources".<sup>21</sup> 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.<sup>22</sup> 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.<sup>23</sup> On January 27<sup>th</sup> 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.<sup>24</sup> There are also signs that oil companies may struggle to recruit employees with the skills they need.<sup>25</sup>
- 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.<sup>26</sup> 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

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<sup>19</sup> <http://ukhealthalliance.org/divestment>

<sup>20</sup> <https://www.divestinvest.org/11-trillion-counting-divestinvest/>

<sup>21</sup> <https://theconversation.com/how-divesting-of-fossil-fuels-could-help-save-the-planet-88147>

<sup>22</sup> <https://www.theguardian.com/commentisfree/2019/oct/13/divestment-bank-european-investment-fossil-fuels>

<sup>23</sup> <https://www.divestinvest.org/church-of-england-fund-drops-remaining-fossil-fuel-investments/>

<sup>24</sup> <https://www.theguardian.com/business/2021/jan/27/rating-agency-sp-warns-13-oil-and-gas-companies-they>

<sup>25</sup> <https://www.ft.com/content/3b53f1bd-4625-4733-afb9-af4301257506>

<sup>26</sup> <https://insideclimatenews.org/news/16072020/oil-gas-climate-pledges-bp-shell-exxon/>

group of 41 scientists and academics, such technologies are “expensive, energy intensive, risky, and their deployment at scale is unproven.<sup>27</sup> 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.<sup>28</sup>

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 engineers, investment in green chemistry would promote the use of alternative renewable feedstocks, and investment in energy conservation measures would reduce energy demand.

#### *Financial links to arms corporations*

We have identified that ASCE has recent financial links with (at least) the following companies in the arms sector:

- Boeing

SGR has ethical concerns about investments in and other financial ties to arms companies by professional science and engineering organizations, especially those that export to nations with poor human rights records or are involved in the development and production of nuclear weapons systems. Hence we also urge professional bodies to minimise their financial links with this sector.

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<sup>27</sup> <https://www.climatechangenews.com/2020/12/11/10-myths-net-zero-targets-carbon-offsetting-busted/>

<sup>28</sup> 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.