

Royal Academy of Engineering (RAEng)

Update on financial links with fossil fuels corporations, April 2022

This document provides an update on information gathered for the report, *Irresponsible Science?: How the fossil fuel and arms industries finance professional engineering and science organisations*¹, published by Scientists for Global Responsibility (SGR) in October 2019. Information sourced on links to fossil fuel companies from the Academy's publicly available documents is provided first, followed by commentary by SGR.

Investment policy

In its annual review for 2019/20², the Royal Academy of Engineering says that “the Academy understands the importance of sustainable investing practices that are compliant with the United Nations Principles of Responsible Investments (UN PRI)”. It also says that “The Academy’s charitable object is the pursuit, encouragement and maintenance of excellence in the whole field of engineering to useful purpose. The Trustees conclude that a blanket exclusionary policy on certain sectors as followed by many institutional investors is not appropriate for the Academy.”

The Royal Academy of Engineering does not appear to have posted its investment policy in the policies page on its website.

Investments

At 31st March 2020, the Royal Academy of Engineering held a total of £44.3 m in investments.³

Transparency

The Royal Academy of Engineering offers little information on where its investments are held, other than to say in its 2019/20 annual review:

“Investments in the general fund (charity) consist of securities listed on the London Stock Exchange (28% of portfolio), global stock markets excluding UK (38% of portfolio) and fixed interest bonds/diversified assets (35% of portfolio).

The designated income funds consist of funds invested in line with the general fund (charity) investment strategy to support the MacRobert Award and funds invested in a charity common investment fund to support the Colin Campbell Mitchell Award”.

Corporate links

The Royal Academy of Engineering’s corporate partners⁴ include fossil fuel firms Shell and BP.

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

² <https://www.raeng.org.uk/publications/corporate-publications/annual-review-2019-2020>

³ <https://www.raeng.org.uk/publications/corporate-publications/annual-review-2019-2020>

⁴ [https://www.raeng.org.uk/support-us/corporate-partners-\(1\)](https://www.raeng.org.uk/support-us/corporate-partners-(1))

The Royal Academy of Engineering accepts money from the Shell Centenary Scholarship Fund⁵ for its Africa Prize for Engineering Innovation.⁶

As the Royal Academy of Engineering has concluded that “a blanket exclusionary policy on certain sectors ... is not appropriate for the Academy”, it seems likely that the Academy also holds investments in fossil fuel companies.

Education programmes

The Royal Academy of Engineering accepts money from both BP and Shell for education programmes.⁷

Sponsors for the Academy’s This is Engineering programme include BP and Shell.⁸

Sponsors for the Academy’s Connecting STEM Teachers programme include Shell.

Events sponsorship

The Royal Academy of Engineering does not currently appear to be listing any sponsors online for its events.

Environmental policy

The Royal Academy of Engineering has introduced an Environmental Sustainability policy⁹ since publication of the *Irresponsible Science?* report.

Other relevant information

The Royal Academy Engineering says that its overarching goal for 2025 is “to harness the power of engineering to build a sustainable society and an inclusive economy that works for everyone”.¹⁰ On the same page of its website, the Academy adds that it has “a responsibility to provide leadership for engineering and technology and technical leadership for wider society”, delivers “public benefit from engineering excellence and technology innovation” and that the Academy’s values include:

- Progressive leadership – embodying the courage, commitment and ambition to drive positive change for engineering and society;
- Diversity and inclusion – creating cultures in which everyone can thrive and diverse perspectives enrich our collective performance;
- Excellence everywhere – bringing evidence, expertise, integrity and a passion for continuous improvement to everything we do.

In its Environmental Sustainability policy, the Royal Academy of Engineering says:

“Our Fellowship is drawn from the worlds of industry, enterprise and research, many of whom are at the front line of the sustainability challenge. The Academy acknowledges its responsibility and commitment to minimising the impact of its activities on the environment as an intrinsic part of its ambition to harness the power of engineering to build a sustainable society and inclusive economy that works for everyone. The Academy also recognises the importance of using its influence to raise awareness of environmental issues alongside

⁵ <https://www.raeng.org.uk/support-us/trusts-and-foundations>

⁶ <https://www.shellcentenaryscholarshipfund.org/>

⁷ [https://www.raeng.org.uk/support-us/corporate-partners-\(1\)](https://www.raeng.org.uk/support-us/corporate-partners-(1))

⁸ <https://www.thisisengineering.org.uk/more-info/partners/>

⁹ <https://www.raeng.org.uk/about-us/our-policies/royal-academy-of-engineering-environmental-sustain>

¹⁰ <https://www.raeng.org.uk/about-us/who-we-are>

improving its own sustainability performance as an organisation. The Academy's overarching goal in its Strategic Plan 2020-2025 is to harness the power of engineering to build a sustainable society and inclusive economy that works for everyone. A sustainable society is one in which development meets the needs of the present without compromising the ability of future generations to meet their own needs...

As a charity and the UK's National Academy for engineering and technology, we have an obligation to lead by example and ensure we are applying best practice to minimise our environmental impact and improve the sustainability of our activities."

The Academy's Annual review for 2019/20 says that fellows are expected to follow the Nolan principles of selflessness, integrity, objectivity, accountability, openness, honesty, and leadership.

The Academy says that "Ethics is part of other behaviours such as inclusivity and sustainability, which ensure that both organisations and professions are globally responsible. These behaviours help secure an inclusive economy and sustainable society for all".¹¹

The Academy's Health and Safety policy says that it accepts "our responsibilities for the health and safety of other people who may be affected by our activities".

The Academy recently issued a report on "Rapid low regrets decision making for net zero policy".¹²

SGR comments

SGR acknowledges that the Royal Academy of Engineering has introduced an environmental sustainability policy.

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

Transparency

The Royal Academy of Engineering's transparency on its investments is low. This makes it difficult to ascertain the extent to which the Academy is conducting its investments in a manner that harnesses the power of engineering "to build a sustainable society and an inclusive economy that works for everyone". What is clear is that the Royal Academy of Engineering has not excluded any asset types or individual investments from its investments.

In January 2020, the Charity Commission launched an investigation into factors holding charities back from responsible investments.¹³ With regards to transparency, the regulator said that "people place increasing value on transparency, which research shows is a key driver of public trust in charities". In December 2021, the IET issued a press release about a recent poll showing that engineers are one of the most trusted professions.¹⁴ It would seem appropriate for the Royal Academy of Engineering to provide full transparency with regards to its investments in order to enhance and uphold the trust that its Fellows receive from the public. Others believe that an increased demand for "transparency,

¹¹ <https://www.raeng.org.uk/policy/supporting-the-profession/engineering-ethics-and-philosophy/ethics>

¹² <https://www.raeng.org.uk/policy/policy-projects-and-issues/net-zero-a-systems-perspective-on-the-climate-chal>

¹³ <https://charitycommission.blog.gov.uk/2020/01/15/how-do-charities-approach-investing-in-line-with-their-purpose-and-values-we-want-to-know-and-we-want-to-help/>

¹⁴

<https://www.theiet.org/media/press-releases/press-releases-2021/press-releases-2021-october-december/7-december-2021-engineers-one-of-the-most-trusted-professions/>

accountability and information about the impact of investments on society” arose after the financial crash of 2008.¹⁵

Links to corporations

Given that the Royal Academy of Engineering does not exclude any sectors from investment, it is likely that it has investments in fossil fuel companies.

The Royal Academy of Engineering also has links with the following companies in the fossil fuels sector through its corporate partnership scheme and through sponsorship of educational programmes:

- BP
- Shell

See SGR’s *Data on fossil fuels companies* document for more information on individual fossil fuels companies¹⁶.

These links to, and potential investments in, fossil fuel companies are concerning for a number of reasons:

- They appear to be at odds with the Royal Academy of Engineering’s overarching goal for 2025 “to harness the power of engineering to build a sustainable society and an inclusive economy that works for everyone”.
- They appear to be at odds with the Royal Academy of Engineering’s value of “Progressive Leadership - embodying the courage, commitment and ambition to drive positive change for engineering and society”.
- They appear to be at odds with the Royal Academy of Engineering’s statement in its Environmental Sustainability policy that “the Academy acknowledges its responsibility and commitment to minimising the impact of its activities on the environment...The Academy also recognises the importance of using its influence to raise awareness of environmental issues alongside improving its own sustainability performance as an organisation...As a charity and the UK’s National Academy for engineering and technology, we have an obligation to lead by example and ensure we are applying best practice to minimise our environmental impact and improve the sustainability of our activities”.
- Given the dangers that climate change poses, these links appear to be at odds with the statement in the Academy’s Health and Safety policy that it accepts “our responsibilities for the health and safety of other people who may be affected by our activities”.
- Investment advisers Lane Clark and Peacock have a blog article entitled “Responsible trustees aim for net zero”¹⁷. We at SGR agree but it appears that the Royal Academy of Engineering does not have an investment policy that incorporates this approach.

More generally, SGR has concerns about investments in and ties to fossil fuel companies by professional science and engineering organisations for these reasons:

¹⁵<https://www.cazenovecapital.com/sysglobalassets/wmmmediaassets/uk/charities/documents/reports/intentionalinvestingreportpdf.pdf>

¹⁶ https://www.sgr.org.uk/sites/default/files/2021-06/Data_on_fossil_fuel_companies.pdf

¹⁷ <https://www.lcp.uk.com/our-viewpoint/2021/01/responsible-trustees-aim-for-net-zero/>

- Such organisations 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 - particularly in a year that the UK continues to hold the presidency for the COP26 climate negotiations.
- As the UK Health Alliance on Climate Change¹⁸ puts it, “engaging with companies whose business model relies on fuel extraction is of limited use—only divestment will stop extraction”. Worldwide, according to the Alliance, over 1,000 organisations with £7 trillion assets have committed to divesting from fossil fuels and instead investing in climate solutions¹⁹. Research indicates that divestment reduces the price of fossil fuel shares. According to a team at the University of Waterloo in Canada²⁰, “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”. 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 ‘well below 2°C’ target, only one-fifth of known fossil fuel reserves can be burned, putting these assets at risk of becoming stranded²¹. 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 business²². In 2020 fund manager CCLA, which invests on behalf of charities including Church of England dioceses and the IMechE, dropped its investments in oil giants Shell and Total²³ for financial reasons. 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 reports²⁴.
- Many fossil fuel companies are relying on carbon capture technology and nature-based solutions being deployed at a huge scale to offset their planned emissions²⁵. 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 scientists²⁶, such technologies are being developed but are “expensive, energy intensive, risky, and their

¹⁸ ukhealthalliance.org/divestment

¹⁹ <https://www.divestinvest.org/11-trillion-counting-divestinvest/>

²⁰ <https://theconversation.com/how-divesting-of-fossil-fuels-could-help-save-the-planet-88147>

²¹ https://www.banktrack.org/download/unburnable_carbon/unburnablecarbonfullrev2.pdf

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

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

²⁴ https://www.theguardian.com/business/2021/jan/27/rating-agency-sp-warns-13-oil-and-gas-companies-they-risk-downgrades-as-renewables-pick-up-steam?CMP=Share_iOSApp_Other

²⁵ <https://insideclimatenews.org/news/16072020/oil-gas-climate-pledges-bp-shell-exxon/>

²⁶ <https://www.climatechangenews.com/2020/12/11/10-myths-net-zero-targets-carbon-offsetting-busted/>

deployment at scale is unproven. It is irresponsible to base net zero targets on the assumption that uncertain future technologies will compensate for present day emissions”.

- Use of fossil fuel sponsors for educational materials is likely to alienate young people and present them with difficult ethical choices, particularly given the high participation in the Youth Strike 4 Climate movement. These are the engineers of tomorrow.

Recently, a team from the University of Augsburg, Germany, found that when equity mutual funds decarbonize by selling climate-damaging shares, the resulting "decarbonization selling pressure" pushes the price of these stocks downwards. What's more, when divested firms experience a stock price decline, they reduce their carbon emissions more than non-divested firms do. The research is the first empirical evidence on the effectiveness of divestment. "Overall, our findings support the divestment movement's hope that a critical mass of investors is able to reduce carbon emissions," write the researchers in their paper in the *Journal of Banking and Finance*²⁷.

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.ON²⁸, have also made major shifts away from fossil-fuel related work.

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

Institutional Benchmarking

Since the release of the *Irresponsible Science?* report, several of the Royal Academy of Engineering's peers mentioned in the report – academic bodies, learned societies and professional institutions in other subject areas – have tightened up their policies on fossil fuels and arms. For example, the Royal Meteorological Society no longer invests in arms or fossil fuels, the Geological Society has introduced investment policies that exclude arms and the most carbon-emitting fossil fuels – thermal coal and tar sands - and is going further than this by not currently investing in any form of fossil fuel, the Institute of Materials, Minerals and Mining does not currently hold investments in the most carbon-emitting fossil fuels or arms, and the Energy Institute brought in an investment policy that excludes arms and presses for alignment with Paris goals.

It is disappointing that during this time period the Royal Academy of Engineering has not introduced any exclusions to its investment policy.

The British Psychological Society, Royal College of Physicians, British Medical Association, the Royal College of General Practitioners, the Faculty of Public Health, the Royal College of Emergency

²⁷ Rohleder, Martin and Wilkens, Marco and Zink, Jonas, The Effects of Mutual Fund Decarbonization on Stock Prices and Carbon Emissions, *Journal of Banking and Finance*, Volume 134, January 2022, 106352, <http://dx.doi.org/10.2139/ssrn.3612630> See also author explainer at <https://www.youtube.com/watch?v=dorMMn2BBn4>

²⁸ 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.

Medicine and the Royal College of Paediatrics and Child Health have all now fully divested from fossil fuels, are in the process of doing so, or have committed to do so. The British Medical Association took the lead, beginning its journey back in 2014. All these organisations also exclude investment in arms companies.

SGR April 2022