



Perspective

The misallocation of climate research funding

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ABSTRACT

The window of opportunity for mitigating climate change is narrow. Limiting global warming to 1.5 °C will require rapid and deep alteration of attitudes, norms, incentives, and politics. Some of the key climate-change and energy transition puzzles are therefore in the realm of the social sciences. However, these are precisely the fields that receive least funding for climate-related research. This article analyzes a new dataset of research grants from 333 donors around the world spanning 4.3 million awards with a cumulative value of USD 1.3 trillion from 1950 to 2021. Between 1990 and 2018, the natural and technical sciences received 770% more funding than the social sciences for research on issues related to climate change. Only 0.12% of all research funding was spent on the social science of climate mitigation.

1. Introduction

The natural science of climate change, starting with early discoveries in the nineteenth century and bolstered by large investments over the last three decades, is mature and well established. Thus, 97% of climate scientists agree about the basics of anthropogenic climate change [1], and the Intergovernmental Panel on Climate Change has concluded that it is “extremely likely” that human influence is the dominant cause of ongoing global warming [2].

In tandem with growing knowledge about climate change, a set of technological mitigation options has been widely endorsed, including energy efficiency, wind and solar power, electrification of transport, and reforestation. Moreover, the cost of these solutions is falling rapidly through expanding economies of scale and incremental technological improvements [3]. For instance, from 1975 to 2012, the cost of solar panels fell by over 99%, and since then it has continued to fall [4].

However, one of the most urgent unsolved puzzles is how to get people to act on what they know, that is to say, how to alter society to mitigate climate change [5–7]. Because there is a limited carbon budget, the speed of reductions in annual greenhouse gas emissions is also critical [8,9]. Limiting global warming to 1.5 °C will require reaching 80% zero-emission energy by 2030 and 100% by 2050 [10]. While the impact of climate change and society's adaptation to it will unfold over decades and centuries, there is only a narrow window of opportunity for mitigation. Mitigation is therefore an urgent priority [11,12].

Despite progress in some areas, ongoing changes are too shallow

and too slow to reach such targets. Solar, wind, geothermal, and modern bioenergy combined still make up only 6.7% of the world's total final energy consumption [13]. Meanwhile, in the decade from 2007 to 2017, oil, gas, and coal production grew by 13%, 25% and 8%, respectively and, consequently, CO₂ emissions grew by almost 11% [14]. During the same period, three times more money was spent on oil, gas, and coal facilities than on all forms of renewable energy infrastructure, including hydropower and biofuels [15]. Deforestation and population growth also continue at a high pace [16].

Human habits are difficult to change; doing so requires altering attitudes, norms, incentives, ethics, and politics at the personal, community, and national levels [17]. Therefore, some of the key climate-change puzzles are in the realm of the social sciences broadly defined: anthropology, economics, education, international relations, human geography, development studies, legal studies, media studies, political science, psychology, and sociology [18]. Yet, as we find here, these are precisely the fields that receive least funding for climate research.

Others have made similar points before, but they have lacked comprehensive data to back them up [17,19–22]. To make our case, we therefore analyzed a new dataset of research grants from 1950 to 2021 spanning 4.3 million awards with a cumulative budget of USD 1.3 trillion. This includes funding awarded by 333 organizations, mostly national research councils, from 37 countries, including all major member states of the Organization of Economic Cooperation and Development (OECD) as well as Brazil, China, India, and Russia. The data were obtained by mining the new dimensions.ai database (see further information in the appendices). We examined the share of overall

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research funding that went to research on decarbonization and climate-related topics, the share of this funding that went to the social sciences, and lastly the share of this funding that went to mitigation-related research.

2. Estimating funding allocations

There is no straightforward way to identify funding related to climate change research within such a large volume of data, so we developed alternative search strings: a short string with 9 climate-related keywords, such as “climate change” and “global warming”, and a long string with 89 keywords, all combined with the Boolean operator “OR” and applied to the titles and summaries of all research grants (see the full search strings in the appendices). By using two search strings, we were able to draw up lower and upper boundaries of the possible ranges of funding granted to different fields of research (see Fig. 1), a more cautious approach than trying to make an exact estimate. The two research strings can also be useful methodological tools for future research.

A limitation of our dataset is that it only covers competitive research grants. Much researching funding, for example in China, France, and Germany, is still distributed in the form of basic grants and other non-competitive allocations where it can be difficult to know what research topics the funding was spent on. This limitation of our data should be acknowledged, while emphasizing that our aim is to map the prioritization of funding that is purposively allocated to climate research. Such funding reflects the intentions and priorities of policymakers and may be better than non-competitive funding for supporting policy-relevant and dynamic research. Furthermore, as noted in the literature, competitive research funding is a powerful tool for influencing the general research agenda [23,24].

3. The paucity of social science

Our data support several findings. The first is that hardly any social science research was conducted on climate change before 1990. We therefore truncated the data pre-1990 for the rest of our analysis.

The second observation is how little funding has gone into research on climate change overall since 1990, regardless of discipline. Depending on which search string one uses, climate research accounted for between 2.38 and 4.59% of the total amount of research funding during the period from 1990 to 2018. The higher estimate errs on the high side: very few projects that are really about climate change would not include any of the 89 keywords in the long search string, whereas numerous projects that happen to mention one of those words may not really be about climate change.

Third, out of the funding for climate research, the social sciences received a small share (see Fig. 1). From 1990 to 2018, the natural and physical sciences received a total of USD 40 billion compared to only USD 4.6 billion for the social sciences and humanities (based on the means of the short and long search string results). In other words, according to our estimates, the natural and technical sciences received around 770% more funding than the social sciences and humanities for research on climate change. Furthermore, the countries that spent the most on social science climate research in absolute terms according to Table 1—the UK, the USA, and Germany—in fact spent between 500% and 1200% more on climate research in the natural and technical sciences (based on the long search string).

However, even these numbers do not tell the whole story. Within the social sciences, there is also much research that is climate-related but not about climate change mitigation, for example research on adaptation to climate change, how to manage extreme weather events and recover from disasters, or the effects of past climate change on ancient civilizations. While this research is valuable, it does not tackle head-on the most urgent question: how to change society to mitigate climate change right now.

To determine how much social science research is specifically about the *mitigation* of climate change, we drew a random sample of 1500 climate change-related social science grants from our data using the short search string and assessed each of them. This led to our fourth and most important observation: a mere USD 393 million of funding went to social science research on the mitigation of climate change, equivalent to 5.21% of all funding for climate change research and 0.12% of all research funding.

4. The need to balance natural and social science research

Natural and technical climate-related research is important. There is still a need to better understand the physical causes, trajectory, and impact of climate change, as well as the technological means of mitigation. However, there is a striking imbalance between the growing knowledge about climate change and mitigation technologies and the failure to mobilize people to contribute to mitigation efforts. This indicates that research resources are not distributed optimally.

One might argue that the natural sciences need more funding because they employ more people or require more expensive equipment and materials. However, such arguments easily become circular. The numbers of researchers in different fields is as much a consequence as a cause of the availability of funding and there could simply be more high-cost research projects in the natural sciences because more funding is available for them. It would also be possible to spend large amounts of funding on social science research, for example nationally representative surveys of large numbers of countries, large-scale multi-location field experiments, the design and monitoring of living laboratories, or human coding of large volumes of text or video as a basis for machine-learning. It is therefore difficult to argue that the natural sciences are inherently more expensive. In any case, in our data there is not a significant difference between the average size of climate research projects in the natural and social sciences; in fact, the social science projects tend to be slightly larger.

One might also argue that the social sciences get less funding because they come up with fewer interesting ideas and solutions. But many social science ideas and solutions related to the mitigation of climate change have already been put forth, such as climate clubs, carbon taxes, or grassroots mobilization [25,26]. The question is whether sufficient research funding is available to develop these and other ideas properly.

The prioritization of natural science could also be related to a perceived need to overcome climate skepticism by proving that climate change is due to human greenhouse gas emissions. However, currently, climate skepticism has almost no voice in the scientific community [20] and even fossil fuel companies acknowledge anthropogenic climate change. There remains significant climate skepticism among laypeople, including prominent politicians; however, this is not a natural science problem but one of communication, vested interests, and politics—again the realm of the social sciences.

5. Solutions for advancing social science

Once one realizes how little funding is spent on the social science of climate mitigation, and the related social science side of energy studies, the question arises as to how the situation can be improved. Our main answer to this question is to spread awareness of how little funding is actually going into this field of research, and to contrast it with its urgency.

While our data and analysis cannot explain *why* funding is distributed the way it is, or exactly *how* it should be distributed, they still support some simple but important policy lessons which we present in the next subsections.

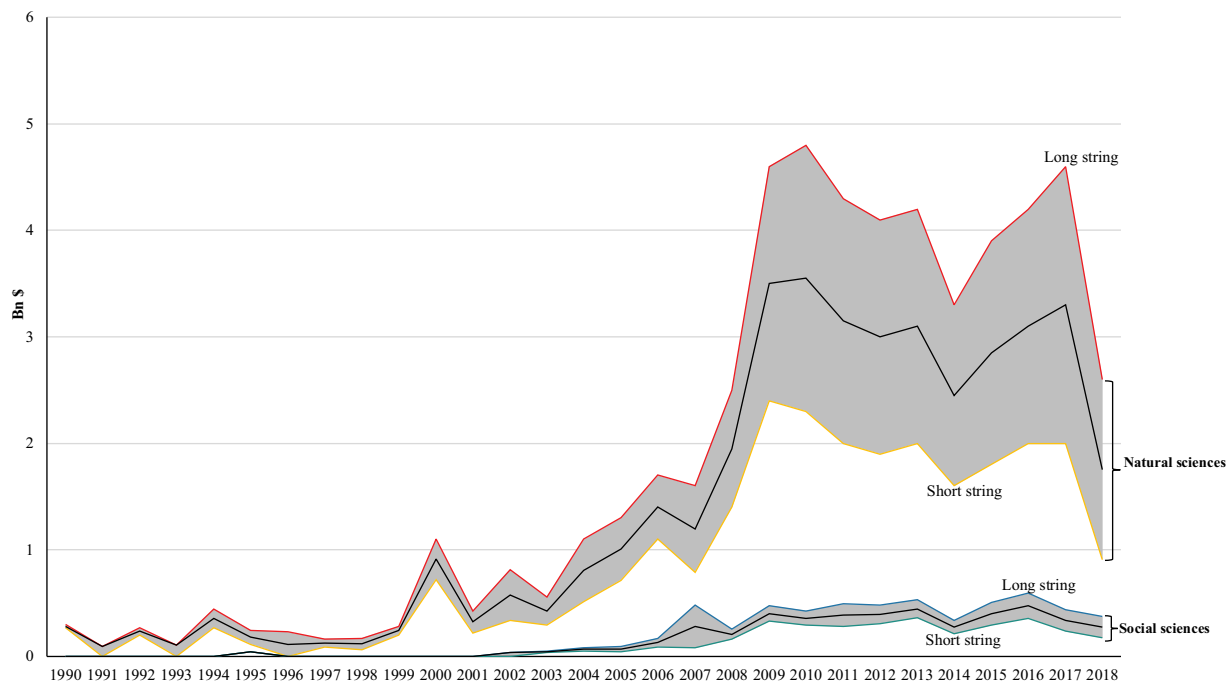


Fig. 1. Funding for climate research in the natural and technical sciences versus the social sciences and humanities (USD). The gray areas represent ranges of estimates derived from short and long search strings.

5.1. Funding for climate mitigation needs to match the magnitude of the threat

Funding agencies need to better secure and prioritize funding for climate change mitigation, across all disciplines. Global annual damages from climate change have already surpassed USD 10 to 40 billion from storm surge alone, and it could surpass USD 100 trillion over the next 80 years [27]. Funding for research on climate mitigation should be increased to address the magnitude of this threat and take into account the narrow window of opportunity for dealing with it.

Such research efforts cannot necessarily be guaranteed to reduce or contain the extent or distribution of climate change impacts, and we also fully appreciate that the magnitude of required research

investment is almost unparalleled. By comparison, the entire cost of the United States space shuttle program, up until 2011 was estimated to cost USD 196 billion [28,29]. But individual research programs have been known to reach into the billions of dollars annually, with the United States federal government spending USD 34.8 billion per year on HIV/AIDS research and treatment in 2019 [30]. If similar efforts were invested into energy and climate social science, they could yield substantial dividends worldwide. A first important step could be a rigorous funding gaps and scoping analysis to determine precisely how much funding is needed, and for which challenges, themes, or problems.

Table 1.

Top countries and funding bodies supporting social science climate research (based on the long search string, USD).

| A. By country | | | B. By funding body | | |
|---------------|----------|-------|---|----------|-------|
| Country | Projects | Bn \$ | Organization | Projects | Bn \$ |
| UK | 1414 | 2.1 | European Commission | 1087 | 2.6 |
| US | 2979 | 1.8 | US National Science Foundation, Directorate for Education & Human Resources | 412 | 0.460 |
| Germany | 747 | 1.7 | UK Engineering and Physical Sciences Research Council | 197 | 0.38 |
| France | 464 | 1.6 | Research Council of Norway | 563 | 0.36 |
| Spain | 367 | 1.4 | US National Science Foundation, Directorate for Social, Behavioral & Econ. Sciences | 720 | 0.18 |
| Netherlands | 488 | 1.2 | US National Science Foundation, Office of the Director | 75 | 0.18 |
| Italy | 423 | 1.2 | European Research Council | 69 | 0.16 |
| Belgium | 448 | 1.1 | US National Science Foundation, Directorate for Geosciences | 347 | 0.15 |
| Sweden | 656 | 0.9 | US National Science Foundation, Directorate for Engineering | 225 | 0.13 |
| Norway | 700 | 0.85 | US National Institute of Food and Agriculture | 517 | 0.11 |

Source: Compiled by the authors.

5.2. Improved funding transparency and coordination

There is a need for better global coordination and oversight of funding for climate research. Our data provide an unprecedented overview of funding for climate research, yet they cover only a fraction of global research funding, much of which is distributed through non-competitive base grants for universities. The lack of oversight can cause significant overlaps in funding in some research areas, while other areas are neglected.

As a concrete fix to this problem, more research financing organizations need to make their portfolios available online with standardized tags for such things as project title, summary, and discipline. Better oversight could be facilitated by the United Nations Framework Convention on Climate Change, or United Nations Educational, Scientific and Cultural Organization, or a coalition of the willing, and could help increase the efficiency of the climate research effort. Some countries, especially those that have been critical of recent IPCC reports, such as Russia and Saudi Arabia, might not be willing to join such an effort, but such actors tend not to fund large sums of energy and climate mitigation research anyway, so their exclusion would not necessarily thwart progress.

Greater transparency of global research funding would give researchers and policymakers a better understanding of what is in the pipeline and help them efficiently allocate time and funding. It could reduce redundancy and serve as a mechanism for research teams to identify synergies and possible collaborators.

5.3. More rigorous social science research

While more funding is needed for social research on climate change, the social sciences also need to rise to the challenge. Firstly, social scientists need to do a better job of ensuring rigor and validity in their research. In their survey of the field of sustainability, for instance, Brandt et al. noted that methods were often chosen based on familiarity or specialization of the researchers involved, rather than their suitability for a given research question [31]. Moreover, in an examination of 15 years of energy research (1999–2013), it was found that almost one-third (29%) of 4,444 studies examined had no research design—or method—whatsoever [32]. Hamilton et al. similarly note that in the domain of energy efficiency and buildings, “analysis is often limited to small datasets and results are not applicable more broadly due to an absence of context or baselines” [33].

Secondly, some social science research is wishy-washy, lacking an understanding of the natural sciences and the physical world [34]. Some is caught up in obscure theoretical debates—one assessment identified no less than 96 theories deemed relevant to the fairly narrow topic of the social acceptance of new technologies [35]. Much social science deals with very small groups of people or sample sizes that are difficult to generalize from [36], and that may not be of much relevance for the large-scale mitigation of climate change.

Universities or the research councils often funding them could require remedial training in methods for all social science researchers and also mandate that such training be continuous, similar to what the legal profession does with its Continuing Legal Education (CLE) requirements. According to CLE requirements, all practicing attorneys must maintain their professional certification on a continual basis even after they pass the bar.

Fixing the weaknesses of the social sciences will not be done in a day, but it is nonetheless important to start this work so that they can strengthen their real contribution to reducing greenhouse gas emissions if more funding becomes available.

5.4. Better alignment with emissions sources and trends

Also within the social sciences themselves, there is a failure to prioritize truly problem-solving research on the most burning

mitigation issues. Some of the funding for climate change-related social science research follows the thematic logic of natural science funding, which does not necessarily fit the social sciences.

For example, there has been a significant amount of climate-related social science research on the Arctic [37]. For climate research in the natural sciences, the polar regions are key, both as the world’s “thermometer” and because they are the locus of much of the ice melting that drives sea level rise. For the social science of climate mitigation, the poles are less important because that is not where most emissions come from nor where carbon sinks are located.

Attempts to change the priorities of social science research funding will likely encounter resistance from some entrenched interests, but the academic community has already been fairly progressive at promoting gender diversity in research (fighting patriarchy), highlighting the value of trans-disciplinary research designs (fighting dogmatism and elitism), or arguing in favor of open access publishing regimes (fighting restrictions on information from publishers). This creates a series of precedents for challenging incumbent ways of thinking.

5.5. Do not lose sight of climate change as a global challenge

Although global solutions obviously also depend on understanding the microlevel, it is surprising how little social science research goes straight for the really big issues. Will the Paris Agreement work? What are the concrete suggestions for an alternative and more binding global solution? How could households be convinced to adopt low-carbon lifestyles? How can decarbonization be promoted across cultures and market economies as diverse as China, Russia, Saudi Arabia, Singapore, and the United Kingdom?

Part of the solution could be to organize future research efforts not around disciplines, but around urgent puzzles, which are themselves linked to pressing social challenges related to climate change mitigation and energy systems. This challenges-based approach to research has been relatively successful in other domains, notably national defense (the Defense Advanced Research Projects Agency, or DARPA) [38] and business (Mission Innovation) [39].

However, the problem, challenge, or mission-based approach is only just emerging as a platform to organizing energy and climate research. One example is the Global Challenges Research Fund in the United Kingdom, which asked “How can sustainable development be achieved for all while addressing global climate change?” The European Commission’s Horizon 2020 framework program also structured its research agenda around questions such as “How can Europe achieve a resource, water efficient and climate change resilient economy and society?” and “In what way does social innovation contribute to making energy more secure, sustainable and affordable?” Putting research into the context of challenging questions in this manner can promote focused but interdisciplinary social science work and is an approach that could be replicated by other national, regional, and global funding bodies. One reason why there are not more such calls may be entrenched disciplinary divides, anchored in organizational structures. These will need to be tackled directly by leaders within universities—presidents, provosts, deans, vice deans, pro-vice chancellors, faculty senate members, department chairs, and tenure and promotion committees.

6. Conclusion

The funding of climate research appears to be based on the assumption that if natural scientists work out the causes, impacts, and technological remedies of climate change, then politicians, officials, and citizens will spontaneously change their behavior to tackle the problem. The past decades have shown that this assumption does not hold.

Although the natural and technical sciences often generate results that are, or are perceived to be, clearer and more concrete than the social sciences, they cannot handle issue areas—such as attitudes, norms, incentives, and politics—that are intrinsically social.

The solutions are to make more funding available for social science research on climate mitigation; improve global research funding coordination and transparency; prioritize and align key questions within the social sciences and increase the rigorosity of social science research. Framing climate change more as a global social challenge that cuts across disciplines will expand the scope of research, its ability to offer critical insights, and its social legitimacy among a broader base of stakeholders.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper, apart from being social scientists

Appendices A-H

A. Methodological and empirical specifications

Data were gathered from 11 Dec. 2018 to 20 Jan. 2019 by scraping the dimensions.ai database. Dimensions.ai uses a reverse-engineering technique based on machine learning, where a corpus of manually coded grants are examined and the manual codes applied are reproduced by the algorithm. This is then checked against actual codes, and changes are made to improve the algorithm. This makes it possible to classify very large numbers of research projects efficiently. Funding sums are automatically adjusted for the average exchange rate of the relevant year.

All our searches were done in titles and abstracts.

For fields of research, dimensions.ai uses Australian and New Zealand Standard Research Classification (ANZSRC) because it has clear categories and a large corpus of manually coded grant descriptions that can be used for machine-learning purposes. ANZSRC includes 157 research fields.

For a full overview of fields, see <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/1297.0Contents12008?opendocument&tabname=Summary&prodno=1297.0&issue=2008&num=&view=>

In our research, all fields of research up to and including “Other built environment and design” (ANZSRC code 1299) were counted as natural and technical sciences, the rest as social sciences and humanities.

B. Handling of random sample and definition of mitigation

A random sample was drawn of 1500 social science climate change projects to identify which projects were about climate change mitigation, and which were about other things. The following definitions were applied:

- (a) Mitigation – actions that reduce net carbon emissions and limit long-term climate change.
- (b) Adaptation – actions that help human and natural systems to adjust to climate change.
- (c) Research on new technologies, on institutional designs and on climate and impacts science, which should reduce uncertainties and facilitate future decisions.

These definitions were based on: ar4_3wg, p. 225, referring on to Richels et al., 2004; Caldeira et al., 2003; Yohe et al., 2004 [40–42].

Possible mitigation projects were found by reading through all titles and abstracts in the random sample as well as by carrying out searches for the terms “mitigat*”, “reduction”, “reduce”, “limit”, “curb”, “abate”, “emissions”, “decarbon*”.

Projects were allowed to have multiple / overlapping classifications, for example they could be classified as concerning both mitigation and adaptation.

We operated with two levels of certainty about whether projects concerned mitigation: “Mitigation” and “Maybe mitigation”. This fuzzy logic element enabled us to handle the ambivalence of some projects and ensured that the results were as balanced as possible. Both categories were included in the final count of social science mitigation grants for the article.

We did not assess whether we thought projects were good mitigation projects or not (e.g. wood pellets), just whether the people carrying out the projects present them as somehow contributing to mitigation of climate change.

Projects were not counted as mitigation projects if:

- They aimed at general enlightenment / education on climate change issues. Although enlightening people about the mechanisms behind climate change can lay the basis for mobilizing them to contribute to mitigation, it is not the same as working for mitigation per se.
- Mitigation was a small part of the project (less than 1/3 according to the assessment of the person doing coding). This also means that if research projects just seemed to be 50% about mitigation, they were counted as mitigation projects. This is one of several methodological choices that stack the data against our own arguments.

Projects on the following topics were classified as mitigation projects to ensure that our “mitigation” category was broad enough to capture all possible mitigation projects and again to stack the data against our own arguments: climate justice, a just energy transition, the consequences of mitigation, the financial consequences of mitigation, co-benefits of mitigation

After a pilot run of 300 projects categorized by the lead author, the rest of the random sample of 1500 was categorized by two research assistants. Projects they were in doubt about were discussed in plenary sessions.

and therefore having an interest in increased funding for social science.

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C. Search string development

The purpose of the search strings was to capture all research projects related to climate change in the database. If one simply searches for “climate change” one will miss many projects focused on narrow climate change sub-topics

We harvested possible keywords from several sources:

- o word frequency analysis of IPCC reports
- o climate vocabularies and dictionaries:
 - <https://www.bbc.com/news/science-environment-11833685>
 - https://en.wikipedia.org/wiki/Glossary_of_climate_change
 - <https://climatechange.ucdavis.edu/science/climate-change-definitions/>
 - <https://www.sldh.nsw.gov.au/concord/sustainability/content/pdf/climatechangeGLOSSARY.pdf>

Each keyword was pre-tested separately and the most reliable ones were included in our search strings.

To be on the safe side, we developed two search strings: a short one with a small number of safe terms that are clearly relevant for climate change and neutral vis-à-vis social and natural sciences, and a long, comprehensive one to capture the broader range of projects including fields that are not directly about climate change, but directly relevant for it.

We sought to balance the number of keywords related to the natural and social sciences, to avoid biasing our results. The long search string is helpful in this regard as it is so comprehensive that there are very few climate-related projects of any kind that evade it.

The long search string includes both more words related to climate change and words related to other topics that are highly relevant for climate change, for example “renewable energy”. This is because climate change is the main driver for the development of renewable energy and cutting GHG emissions by changing energy production and consumption is one of the main ways to mitigate climate change. As we are particularly interested in mitigation in our analysis, it makes sense to include such key mitigation components in the long search string.

As natural science is the starting point and foundation for concern over climate change, many natural science terms are also used in descriptions of social science projects (but we still classify those projects as social science). There are also many words that occur in both natural science and social research. Thus, there is a considerable overlap between the vocabularies, which helps reduce the risk of bias somewhat.

An advantage of the long string is that each word becomes less decisive, as there are so many other words and many of them will occur together in a given project description. Thus, the difference in search results due to addition or removal of one word is small.

D. Short search string

“climate change” OR “climate mitigation” OR “climate adaptation” OR “global warming” OR “greenhouse effect” OR “greenhouse gas” OR “GHG” OR “CO2 emissions” OR “climate policy”

E. Long search string

“climate change” OR “climate mitigation” OR “climate adaptation” OR “global warming” OR “greenhouse effect” OR “greenhouse gas” OR “GHG” OR “CO2 emissions” OR “decarbonization” OR “decarbonization” OR “climate policy” OR “UNFCCC” OR “United Nations Framework Convention on Climate Change” OR “Intergovernmental Panel on Climate Change” OR “IPCC” OR “Kyoto Protocol” OR “Paris Agreement” OR “nationally determined contribution” OR “INDC” OR “Bali roadmap” OR “climate negotiation” OR “climate action” OR “climate justice” OR “climate ethics” OR “climate skeptic” OR “climate sceptic” OR “climate denial” OR “climate denier” OR “climate migration” OR “climate refugees” OR “cap and trade” OR “emissions trading” OR “carbon finance” OR “carbon credit” OR “carbon tax” OR “carbon market” OR “carbon bubble” OR “CO2 equivalent” OR “carbon sequestration” OR “geological sequestration” OR “carbon capture and storage” OR “carbon sink” OR “radiative forcing” OR “climate feedback” OR “sea level rise” OR “anthropogenic aerosols” OR “carbon footprint” OR “carbon offset” OR “carbon neutral” OR “carbon intensity” OR “carbon price” OR “mitigation potential” OR “climate feedback” OR “climate model” OR “ocean acidification” OR “carbon cycle” OR “climate feedback” OR “climate sensitivity” OR “climate model” OR “carbon uptake” OR “CO2 concentration” OR “coral bleaching” OR “Greenland ice sheet” OR “Arctic sea ice” OR “ice core” OR “ice loss” OR “geoengineering” OR “renewable energy” OR “renewables” OR “wind turbine” OR “solar power” OR “geothermal energy” OR “landfill gas” OR “biofuel” OR “bioenergy” OR “tidal power” OR “solar power” OR “photovoltaic” OR “heat pump” OR “distributed generation” OR “passive house” OR “smart grid” OR “smart energy” OR “microgrid” OR “feed-in tariff” OR “grid storage” OR “demand response” OR “electric vehicle” OR “electric mobility”

F. Short string coded for use via API

The dimensions.ai database we scraped our data from has a cumbersome UI. However, we were able to use URL encoding with hexadecimal numerals via the API to carry out more complex searches more transparently. Here we exemplify this with the short search string limited to the social sciences:

https://app.dimensions.ai/discover/grant?search_text=%22climate+change%22+OR+%22climate+mitigation%22+OR+%22climate+adaptation%22+OR+%22global+warming%22+OR+%22greenhouse+effect%22+OR+%22greenhouse+gas%22+OR+%22GHG%22+OR+%22CO2+emissions%22+OR+%22climate+policy%22&search_type=kws&search_field=text_search&or_facet_for=3243&or_facet_for=3253&or_facet_for=3268&or_facet_for=3283&or_facet_for=3286&or_facet_for=3292&or_facet_for=3313&or_facet_for=3320&or_facet_for=3326&or_facet_for=3335&or_facet_for=3342&or_facet_for=3358&or_facet_for=3364&or_facet_for=3373&or_facet_for=3381&or_facet_for=3389&or_facet_for=3395&or_facet_for=3403&or_facet_for=3410&or_facet_for=3416&or_facet_for=3432&or_facet_for=3443&or_facet_for=3448&or_facet_for=3460&or_facet_for=3468&or_facet_for=3484&or_facet_for=3491&or_facet_for=3494&or_facet_for=3528&or_facet_for=3561&or_facet_for=3531&or_facet_for=3537&or_facet_for=3544&or_facet_for=3549&or_facet_for=3567&or_facet_for=3570&or_facet_for=3577&or_facet_for=3591&or_facet_for=3616&or_facet_for=3626&or_facet_for=3654&or_facet_for=3657&or_facet_for=3669&or_facet_for=3675&or_facet_for=3690&or_facet_for=3693&or_facet_for=3702&or_facet_for=3714&or_facet_for=3735&or_facet_for=3744

G. Categorization of fields of research as natural or social sciences

The dimensions.ai database applies the ANZSCR classification system for fields of research—because it is suitable to the machine learning approach that dimensions.ai uses to classify research projects. We divided the ANZSCR fields into natural and technical sciences on the one hand, and social sciences and humanities on the other, as shown in the following table below. For simplicity, we just refer to natural sciences and social sciences most of the time, subsuming technical sciences and humanities under them.

| Fields classified as natural and technical sciences | Fields classified as social sciences and humanities |
|--|---|
| 01 Mathematical Sciences | 13 Education |
| 0101 Pure Mathematics | 1301 Education Systems |
| 0102 Applied Mathematics | 1302 Curriculum and Pedagogy |
| 0103 Numerical and Computational Mathematics | 1303 Specialist Studies In Education |
| 0104 Statistics | 1399 Other Education |
| 0105 Mathematical Physics | 14 Economics |
| 02 Physical Sciences | 1401 Economic Theory |
| 0201 Astronomical and Space Sciences | 1402 Applied Economics |
| 0202 Atomic, Molecular, Nuclear, Particle and Plasma Physics | 1403 Econometrics |
| 0203 Classical Physics | 1499 Other Economics |
| 0204 Condensed Matter Physics | 15 Commerce, Management, Tourism and Services |
| 0205 Optical Physics | 1501 Accounting, Auditing and Accountability |
| 0206 Quantum Physics | 1502 Banking, Finance and Investment |
| 0299 Other Physical Sciences | 1503 Business and Management |
| 03 Chemical Sciences | 1504 Commercial Services |
| 0301 Analytical Chemistry | 1505 Marketing |
| 0302 Inorganic Chemistry | 1506 Tourism |
| 0303 Macromolecular and Materials Chemistry | 1507 Transportation and Freight Services |
| 0304 Medicinal and Biomolecular Chemistry | 16 Studies in Human Society |
| 0305 Organic Chemistry | 1601 Anthropology |
| 0306 Physical Chemistry (incl. Structural) | 1602 Criminology |
| 0307 Theoretical and Computational Chemistry | 1603 Demography |
| 0399 Other Chemical Sciences | 1604 Human Geography |
| 04 Earth Sciences | 1605 Policy and Administration |
| 0401 Atmospheric Sciences | 1606 Political Science |
| 0402 Geochemistry | 1607 Social Work |
| 0403 Geology | 1608 Sociology |
| 0404 Geophysics | 1699 Other Studies In Human Society |
| 0405 Oceanography | 17 Psychology and Cognitive Sciences |
| 0406 Physical Geography and Environmental Geoscience | 1701 Psychology |
| 0499 Other Earth Sciences | 1702 Cognitive Sciences |
| 05 Environmental Sciences | 1799 Other Psychology and Cognitive Sciences |
| 0501 Ecological Applications | 18 Law and Legal Studies |
| 0502 Environmental Science and Management | 1801 Law |
| 0503 Soil Sciences | 1899 Other Law and Legal Studies |
| 0599 Other Environmental Sciences | 19 Studies in Creative Arts and Writing |
| 06 Biological Sciences | 1901 Art Theory and Criticism |
| 0601 Biochemistry and Cell Biology | 1902 Film, Television and Digital Media |
| 0602 Ecology | 1903 Journalism and Professional Writing |
| 0603 Evolutionary Biology | 1904 Performing Arts and Creative Writing |
| 0604 Genetics | 1905 Visual Arts and Crafts |
| 0605 Microbiology | 1999 Other Studies In Creative Arts and Writing |
| 0606 Physiology | 20 Language, Communication and Culture |
| 0607 Plant Biology | 2001 Communication and Media Studies |
| 0608 Zoology | 2002 Cultural Studies |
| 0699 Other Biological Sciences | 2003 Language Studies |
| 07 Agricultural and Veterinary Sciences | 2004 Linguistics |
| 0701 Agriculture, Land and Farm Management | 2005 Literary Studies |
| 0702 Animal Production | 2099 Other Language, Communication and Culture |
| 0703 Crop and Pasture Production | 21 History and Archaeology |
| 0704 Fisheries Sciences | 2101 Archaeology |
| 0705 Forestry Sciences | 2102 Curatorial and Related Studies |
| 0706 Horticultural Production | 2103 Historical Studies |
| 0707 Veterinary Sciences | 2199 Other History and Archaeology |
| 0799 Other Agricultural and Veterinary Sciences | 22 Philosophy and Religious Studies |
| 08 Information and Computing Sciences | 2201 Applied Ethics |
| 0801 Artificial Intelligence and Image Processing | 2202 History and Philosophy of Specific Fields |
| 0802 Computation Theory and Mathematics | 2203 Philosophy |
| 0803 Computer Software | 2204 Religion and Religious Studies |
| 0804 Data Format | 2299 Other Philosophy and Religious Studies |
| 0805 Distributed Computing | |
| 0806 Information Systems | |
| 0807 Library and Information Studies | |
| 0899 Other Information and Computing Sciences | |
| 09 Engineering | |
| 0901 Aerospace Engineering | |
| 0902 Automotive Engineering | |
| 0903 Biomedical Engineering | |
| 0904 Chemical Engineering | |

0905 Civil Engineering
 0906 Electrical and Electronic Engineering
 0907 Environmental Engineering
 0908 Food Sciences
 0909 Geomatic Engineering
 0910 Manufacturing Engineering
 0911 Maritime Engineering
 0912 Materials Engineering
 0913 Mechanical Engineering
 0914 Resources Engineering and Extractive Metallurgy
 0915 Interdisciplinary Engineering
 0999 Other Engineering
 10 Technology
 1001 Agricultural Biotechnology
 1002 Environmental Biotechnology
 1003 Industrial Biotechnology
 1004 Medical Biotechnology
 1005 Communications Technologies
 1006 Computer Hardware
 1007 Nanotechnology
 1099 Other Technology
 11 Medical and Health Sciences
 1101 Medical Biochemistry and Metabolomics
 1102 Cardiorespiratory Medicine and Haematology
 1103 Clinical Sciences
 1104 Complementary and Alternative Medicine
 1105 Dentistry
 1106 Human Movement and Sports Science
 1107 Immunology
 1108 Medical Microbiology
 1109 Neurosciences
 1110 Nursing
 1111 Nutrition and Dietetics
 1112 Oncology and Carcinogenesis
 1113 Ophthalmology and Optometry
 1114 Paediatrics and Reproductive Medicine
 1115 Pharmacology and Pharmaceutical Sciences
 1116 Medical Physiology
 1117 Public Health and Health Services
 1199 Other Medical and Health Sciences
 12 Built Environment and Design
 1201 Architecture
 1202 Building
 1203 Design Practice and Management
 1204 Engineering Design
 1205 Urban and Regional Planning
 1299 Other Built Environment and Design

H. Research funding organizations covered

| Funder | Country | Grants | Available Years |
|---|---------------|---------|-----------------|
| Japan Society for the Promotion of Science (JSPS) | Japan | 879 197 | 1964 – 2018 |
| Natural Sciences and Engineering Research Council (NSERC) | Canada | 279 874 | 1991 – 2017 |
| National Natural Science Foundation of China (NSFC) | China | 199 966 | 1989 – 2016 |
| National Research Foundation (NRF) | South Africa | 175 584 | 1950 – 2018 |
| Russian Foundation for Basic Research (RFBR) | Russia | 174 499 | 1993 – 2018 |
| German Research Foundation (DFG) | Germany | 116 261 | 1964 – 2018 |
| European Commission (EC) | Belgium | 111 993 | 1981 – 2019 |
| Directorate for Mathematical & Physical Sciences (NSF MPS) | United States | 91 476 | 1963 – 2019 |
| Social Sciences and Humanities Research Council (SSHRC) | Canada | 76 282 | 1998 – 2017 |
| Directorate for Engineering (NSF ENG) | United States | 72 553 | 1958 – 2019 |
| Swiss National Science Foundation (SNF) | Switzerland | 69 774 | 1975 – 2019 |
| National Science Foundation (NSF) | United States | 64 854 | 1952 – 2018 |
| National Endowment for the Humanities (NEH) | United States | 64 676 | 1953 – 2019 |
| Directorate for Geosciences (NSF GEO) | United States | 62 715 | 1963 – 2019 |
| Directorate for Biological Sciences (NSF BIO) | United States | 62 226 | 1962 – 2019 |
| National Research Foundation of Korea (NRF) | South Korea | 60 511 | 2009 – 2015 |
| National Cancer Institute (NCI) | United States | 60 503 | 1963 – 2018 |
| Directorate for Computer & Information Science & Engineering (NSF CISE) | United States | 52 963 | 1960 – 2019 |
| Canadian Institutes of Health Research (CIHR) | Canada | 48 776 | 1986 – 2018 |
| São Paulo Research Foundation (FAPESP) | Brazil | 46 865 | 1989 – 2019 |
| National Institute of Allergy and Infectious Diseases (NIAID) | United States | 44 987 | 1974 – 2019 |
| National Heart Lung and Blood Institute (NHLBI) | United States | 42 893 | 1963 – 2018 |
| Directorate for Education & Human Resources (NSF GOVERNMENT) | United States | 39 993 | 1971 – 2019 |
| National Institute of General Medical Sciences (NIGMS) | United States | 36 215 | 1964 – 2018 |
| Directorate for Social, Behavioral & Economic Sciences (NSF SBE) | United States | 36 040 | 1964 – 2019 |
| Ministry of Science and Higher Education (MniSW) | Poland | 34 072 | 1994 – 2018 |

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|---|----------------|--------|-------------|
| National Aeronautics and Space Administration (NASA) | United States | 32 818 | 1982 – 2019 |
| National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) | United States | 32 806 | 1964 – 2018 |
| The Research Council of Norway (RCN) | Norway | 31 701 | 1988 – 2018 |
| National Institute of Neurological Disorders and Stroke (NINDS) | United States | 29 278 | 1968 – 2018 |
| United States Department of Health and Human Services (HHS) | United States | 28 133 | 1982 – 2017 |
| National Institute of Mental Health (NIMH) | United States | 27 462 | 1972 – 2018 |
| National Institute of Food and Agriculture (NIFA) | United States | 27 427 | 2007 – 2017 |
| National Health and Medical Research Council (NHMRC) | Australia | 26 484 | 1986 – 2019 |
| United States Department of the Navy (DON) | United States | 26 296 | 1982 – 2018 |
| Australian Research Council (ARC) | Australia | 25 624 | 2001 – 2018 |
| Council for International Exchange of Scholars (CIES) | United States | 24 917 | 2006 – 2019 |
| Wellcome Trust (WT) | United Kingdom | 24 264 | 1997 – 2018 |
| United States Department of the Air Force (DAF) | United States | 23 282 | 1982 – 2017 |
| National Council for Scientific and Technological Development (CNPq) | Brazil | 22 988 | 2012 – 2018 |
| National Institute of Child Health and Human Development (NICHD) | United States | 22 955 | 1957 – 2019 |
| Office of the Director (NSF OD) | United States | 20 787 | 1957 – 2019 |
| Engineering and Physical Sciences Research Council (EPSRC) | United Kingdom | 20 350 | 2006 – 2019 |
| Netherlands Organisation for Scientific Research (GOVERNMENT) | Netherlands | 19 055 | 1993 – 2021 |
| National Science Center (NCN) | Poland | 17 356 | 2008 – 2018 |
| National Institute on Aging (NIA) | United States | 17 220 | 1975 – 2018 |
| Belgian Federal Science Policy Office (BELSPO) | Belgium | 17 070 | 1964 – 2018 |
| Innovate UK (Innovate UK) | United Kingdom | 17 040 | 1999 – 2018 |
| Czech Science Foundation (GAČR) | Czechia | 16 543 | 1993 – 2017 |
| National Institute on Drug Abuse (NIDA) | United States | 16 385 | 1971 – 2018 |
| Congressionally Directed Medical Research Programs (CDMRP) | United States | 16 218 | 1992 – 2017 |
| Swedish Research Council (SRC) | Sweden | 15 988 | 2006 – 2019 |
| United States Department of the Army (DA) | United States | 15 629 | 1982 – 2017 |
| National Oceanic and Atmospheric Administration (NOAA) | United States | 15 122 | 1996 – 2019 |
| FWF Austrian Science Fund (FWF) | Austria | 14 551 | 1965 – 2019 |
| Biotechnology and Biological Sciences Research Council (BBSRC) | United Kingdom | 13 666 | 2006 – 2019 |
| VINNOVA (VINNOVA) | Sweden | 13 636 | 2008 – 2019 |
| Foundation for Science and Technology (FCT) | Portugal | 12 723 | 1999 – 2017 |
| National Agency for Research (ANR) | France | 12 632 | 2007 – 2018 |
| Department for Environment Food and Rural Affairs (DEFRA) | United Kingdom | 12 490 | 1979 – 2018 |
| University Grants Committee (UGC) | China | 12 442 | 2006 – 2018 |
| National Center for Advancing Translational Sciences (NCATS) | United States | 12 361 | 1971 – 2018 |
| Centers for Disease Control and Prevention (CDC) | United States | 12 296 | 1974 – 2018 |
| National Eye Institute (NEI) | United States | 10 902 | 1973 – 2018 |
| Academy of Finland (AKA) | Finland | 10 762 | 2001 – 2018 |
| Canada Foundation for Innovation (CFI) | Canada | 10 387 | 1998 – 2018 |
| Ministry of Education, Universities and Research (MIUR) | Italy | 10 304 | 1999 – 2015 |
| National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) | United States | 10 147 | 1973 – 2018 |
| United States Department of Energy (DOE) | United States | 9 677 | 1982 – 2015 |
| National Institute of Environmental Health Sciences (NIEHS) | United States | 9 553 | 1974 – 2018 |
| Fonds de Recherche du Québec – Nature et technologies (FRQNT) | Canada | 9 243 | 2002 – 2017 |
| European Research Council (ERC) | Belgium | 9 226 | 2008 – 2020 |
| Medical Research Council (MRC) | United Kingdom | 9 106 | 1973 – 2018 |
| Environmental Protection Agency (EPA) | United States | 9 005 | 1982 – 2018 |
| Ministry of Education, Science, Research and Sport of the Slovak Republic (MŠVVaŠ SR) | Slovakia | 8 955 | 2000 – 2017 |
| Substance Abuse and Mental Health Services Administration (SAMHSA) | United States | 8 905 | 1974 – 2017 |
| Research Foundation – Flanders (FWO) | Belgium | 8 840 | 1950 – 2013 |
| Ministry of Education Youth and Sports (MSMT) | Czechia | 8 751 | 1991 – 2017 |
| Israel Science Foundation (ISF) | Israel | 8 474 | 2000 – 2018 |
| Zhejiang Provincial Natural Science Foundation (ZJNSF) | China | 8 135 | 2003 – 2015 |
| National Institute of Dental and Craniofacial Research (NIDCR) | United States | 8 015 | 1972 – 2018 |
| Irish Research Council (IRC) | Ireland | 8 005 | 1999 – 2018 |
| National Institute On Alcohol Abuse and Alcoholism (NIAAA) | United States | 7 983 | 1975 – 2019 |
| Natural Environment Research Council (NERC) | United Kingdom | 7 975 | 2006 – 2021 |
| National Institute of Justice (NIJ) | United States | 7 921 | 1992 – 2017 |
| Hungarian Scientific Research Fund (OTKA) | Hungary | 7 721 | 1997 – 2018 |
| Missile Defense Agency (MDA) | United States | 7 668 | 1984 – 2017 |
| Economic and Social Research Council (ESRC) | United Kingdom | 7 533 | 2006 – 2020 |
| Fonds de Recherche du Québec – Société et culture (FRQSC) | Canada | 7 393 | 2000 – 2018 |
| National Institute on Deafness and Other Communication Disorders (NIDCD) | United States | 7 301 | 1974 – 2018 |
| Health Resources and Services Administration (HRSA) | United States | 7 140 | 1974 – 2017 |
| Bill & Melinda Gates Foundation (BMGF) | United States | 6 994 | 1998 – 2018 |
| Slovenian Research Agency (ARRS) | Slovenia | 6 507 | 1994 – 2018 |
| Innovation and Technology Commission (ITC) | China | 6 344 | 1994 – 2018 |
| Arts and Humanities Research Council (AHRC) | United Kingdom | 6 250 | 2006 – 2019 |
| Biological and Environmental Research (BER) | United States | 6 089 | 1982 – 2013 |
| Danish Ministry of Higher Education and Science (UFM) | Denmark | 5 957 | 2003 – 2018 |
| Office of Science (DOE SC) | United States | 5 855 | 1985 – 2018 |
| Defense Advanced Research Projects Agency (DARPA) | United States | 5 813 | 1982 – 2019 |
| International Foundation for Science (IFS) | Sweden | 5 528 | 1974 – 2016 |
| Fonds de Recherche du Québec – Santé (FRQS) | Canada | 5 498 | 2000 – 2017 |
| Swedish Research Council for Health Working Life and Welfare (FORTE) | Sweden | 5 078 | 2008 – 2019 |
| Agency for Healthcare Research and Quality (AHRQ) | United States | 5 023 | 1981 – 2018 |
| Cancer Research UK (CRUK) | United Kingdom | 4 885 | 2001 – 2018 |
| Science and Technology Facilities Council (STFC) | United Kingdom | 4 855 | 2003 – 2019 |
| National Institute of Biomedical Imaging and Bioengineering (NIBIB) | United States | 4 824 | 1976 – 2018 |

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| Spencer Foundation (Spencer) | United States | 4 617 | 1984 – 2018 |
| Science Foundation Ireland (SFI) | Ireland | 4 488 | 2001 – 2017 |
| Ministry of Industry and Trade (MPO) | Czechia | 4 414 | 1991 – 2017 |
| Orthopaedic Research and Education Foundation (OREF) | United States | 4 351 | 1956 – 2018 |
| Ministry of Health (MZ) | Czechia | 4 317 | 1991 – 2017 |
| National Institute of Nursing Research (NINR) | United States | 4 213 | 1979 – 2018 |
| Russian Science Foundation (RSF) | Russia | 4 081 | 2014 – 2018 |
| Ministry of Research, Innovation and Science (MRIS) | Canada | 3 922 | 2004 – 2017 |
| Science and Engineering Research Board (SERB) | India | 3 854 | 2015 – 2016 |
| Fogarty International Center (FIC) | United States | 3 749 | 1978 – 2018 |
| British Heart Foundation (BHF) | United Kingdom | 3 724 | 1991 – 2019 |
| Ministry of Business, Innovation and Employment (MBIE) | New Zealand | 3 591 | 2002 – 2018 |
| National Human Genome Research Institute (NHGRI) | United States | 3 522 | 1976 – 2018 |
| United States Department of Veterans Affairs (DVA) | United States | 3 477 | 2008 – 2018 |
| National Centre for Research and Development (NCRD) | Poland | 3 470 | 2007 – 2018 |
| Juvenile Diabetes Research Foundation (JDRF) | United States | 3 282 | 1997 – 2016 |
| Swedish Energy Agency (Swedish Energy Agency) | Sweden | 3 248 | 2007 – 2017 |
| United States Department of Education (DoED) | United States | 3 141 | 1982 – 2018 |
| United States National Library of Medicine (NLM) | United States | 3 137 | 1976 – 2018 |
| Fisheries Research and Development Corporation (FRDC) | Australia | 3 103 | 1971 – 2018 |
| Academy of Sciences of the Czech Republic (ASCR) | Czechia | 3 035 | 1992 – 2009 |
| Estonian Research Council (ETAg) | Estonia | 2 985 | 1996 – 2019 |
| NIHR Evaluation Trials and Studies Coordinating Centre (NETS) | United Kingdom | 2 940 | 1995 – 2018 |
| National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) | United States | 2 878 | 1980 – 2017 |
| Office of the Director (OD) | United States | 2 868 | 1975 – 2018 |
| United States Food and Drug Administration (USFDA) | United States | 2 843 | 1980 – 2018 |
| National Research Fund Luxembourg (FNR) | Luxembourg | 2 840 | 2006 – 2019 |
| Bloodwise (Bloodwise) | United Kingdom | 2 731 | 1968 – 2019 |
| Susan G. Komen Breast Cancer Foundation (Komen) | United States | 2 650 | 1982 – 2018 |
| Qatar Foundation (QF) | Qatar | 2 591 | 2007 – 2018 |
| Danish Agency for Science and Higher Education (DASHE) | Denmark | 2 562 | 2013 – 2018 |
| Alberta Innovates (AIHS) | Canada | 2 522 | 2000 – 2018 |
| Crohn's and Colitis Foundation (CCF) | United States | 2 428 | 1966 – 2018 |
| Volkswagen Foundation (VolkswagenStiftung) | Germany | 2 395 | 2004 – 2018 |
| Agricultural Research Service (ARS) | United States | 2 349 | 2003 – 2016 |
| Commonwealth Fund (TCF) | United States | 2 323 | 1995 – 2018 |
| United States Air Force (USAF) | United States | 2 314 | 2014 – 2018 |
| Telethon Foundation (Telethon) | Italy | 2 261 | 1991 – 2017 |
| Canadian Cancer Society (CCS) | Canada | 2 253 | 1994 – 2018 |
| International Human Frontier Science Program Organization (HFSP) | France | 2 118 | 2002 – 2017 |
| British Academy (BA) | United Kingdom | 2 087 | 2011 – 2016 |
| United States-Israel Binational Science Foundation (BSF) | Israel | 2 033 | 2000 – 2017 |
| Slovak Research and Development Agency (APVV) | Slovakia | 1 933 | 2004 – 2016 |
| Technology Agency of the Czech Republic (TACR) | Czechia | 1 925 | 2011 – 2017 |
| National Center for Complementary and Integrative Health (NCCIH) | United States | 1 892 | 1997 – 2018 |
| Arthritis Research UK (ARC) | United Kingdom | 1 863 | 2005 – 2018 |
| Michael Smith Foundation for Health Research (MSFHR) | Canada | 1 849 | 2001 – 2019 |
| Swedish Research Council for Environment Agricultural Sciences and Spatial Planning (FORMAS) | Sweden | 1 810 | 2008 – 2016 |
| United States Department of Defense (DOD) | United States | 1 781 | 1997 – 2018 |
| Office of the Secretary of Defense (OSD) | United States | 1 771 | 1992 – 2018 |
| Ministry of Education and Research (HM) | Estonia | 1 770 | 1997 – 2018 |
| Alfred P. Sloan Foundation | United States | 1 740 | 2008 – 2018 |
| United States Geological Survey (USGS) | United States | 1 657 | 1999 – 2017 |
| Health Research Council of New Zealand (HRC) | New Zealand | 1 572 | 2006 – 2018 |
| Arthritis Foundation (AF) | United States | 1 545 | 1973 – 2018 |
| Ministry of Agriculture (eAGRI) | Czechia | 1 516 | 1991 – 2017 |
| UC Discovery Grants (formerly IUCRP) (IUCRP) | United States | 1 496 | 1997 – 2011 |
| Department of Science and Technology (DST) | India | 1 456 | 2004 – 2018 |
| Royal Society (Royal Society) | United Kingdom | 1 326 | 2003 – 2018 |
| NIHR Central Commissioning Facility (CCF) | United Kingdom | 1 321 | 2000 – 2018 |
| Patient-Centered Outcomes Research Institute (PCORI) | United States | 1 315 | 2012 – 2018 |
| National Institutes of Health Clinical Center (CLC) | United States | 1 265 | 1975 – 2017 |
| Bank of Sweden Tercentenary Foundation (RJ) | Sweden | 1 261 | 2008 – 2019 |
| United States Army (USA) | United States | 1 260 | 2014 – 2018 |
| National Institute On Minority Health and Health Disparities (NIMHD) | United States | 1 258 | 1993 – 2018 |
| St. Baldrick's Foundation (SBF) | United States | 1 224 | 2005 – 2019 |
| Arnold and Mabel Beckman Foundation (Beckman) | United States | 1 216 | 1991 – 2018 |
| Alzheimer's Association (ALZ) | United States | 1 192 | 2005 – 2017 |
| Scottish Government Health and Social Care Directorates (SGHSC) | United Kingdom | 1 137 | 2001 – 2018 |
| Defense Threat Reduction Agency (DTRA) | United States | 1 032 | 1982 – 2019 |
| Craig H Neilsen Foundation (CHN) | United States | 1 021 | 2004 – 2019 |
| United States Department of Transportation (USDOT) | United States | 1 016 | 1982 – 2016 |
| California Institute for Regenerative Medicine (CIRM) | United States | 989 | 2006 – 2017 |
| Saskatchewan Health Research Foundation (SHRF) | Canada | 948 | 2003 – 2019 |
| John Templeton Foundation (Templeton) | United States | 940 | 2011 – 2018 |
| United States Department of Homeland Security (DHS) | United States | 905 | 2003 – 2016 |
| The Icelandic Centre for Research (RANNIS) | Iceland | 891 | 2004 – 2017 |
| Cancer Prevention and Research Institute of Texas (CPRIT) | United States | 862 | 2010 – 2018 |
| Research Manitoba (MHRC) | Canada | 846 | 2010 – 2017 |
| Heart And Stroke Foundation (HSF) | Canada | 841 | 1999 – 2002 |

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|---|----------------|-----|-------------|
| Ministry of Defence (MOCR) | Czechia | 811 | 1993 – 2017 |
| National Research Council (CNR) | Italy | 799 | 2005 – 2015 |
| Advanced Research Projects Agency-Energy (ARPA-E) | United States | 788 | 2009 – 2018 |
| NIHR Trainees Coordinating Centre (TCC) | United Kingdom | 779 | 2004 – 2018 |
| Ministry of Culture (MKČR) | Czechia | 768 | 1990 – 2016 |
| French National Cancer Institute (INCA) | France | 762 | 2007 – 2013 |
| Indian Council of Medical Research (ICMR) | India | 736 | 2000 – 2014 |
| Cancer Australia (CA) | Australia | 683 | 2008 – 2017 |
| Worldwide Cancer Research (AICR) | United Kingdom | 673 | 1998 – 2017 |
| Terry Fox Foundation (TFF) | Canada | 672 | 1994 – 2017 |
| University of California – Cancer Research Coordinating Committee (CRCC) | United States | 664 | 1999 – 2018 |
| Croatian Science Foundation (HRZZ) | Croatia | 656 | 2014 – 2019 |
| Royal Society of New Zealand (RSNZ) | New Zealand | 639 | 2012 – 2017 |
| EEA and Norway Grants (EEA Grants) | Belgium | 633 | 2007 – 2013 |
| Tobacco-Related Disease Research Program (University of California) (TRDRP) | United States | 606 | 2006 – 2018 |
| Autism Speaks (Autism Speaks) | United States | 602 | 2006 – 2017 |
| Nova Scotia Health Research Foundation (NSHRF) | Canada | 592 | 2010 – 2017 |
| Alzheimer's Drug Discovery Foundation (ADDF) | United States | 589 | 1999 – 2018 |
| American Association For Cancer Research (AACR) | United States | 573 | 2006 – 2018 |
| Asthma UK (Asthma UK) | United Kingdom | 564 | 1978 – 2016 |
| Breast Cancer Now (BCN) | United Kingdom | 563 | 1998 – 2017 |
| Ministry of the Environment of the Czech republic (MŽP) | Czechia | 549 | 1985 – 2008 |
| National Energy Technology Laboratory (NETL) | United States | 548 | 1987 – 2017 |
| Damon Runyon Cancer Research Foundation (DRCRF) | United States | 542 | 2006 – 2017 |
| Swedish Foundation for Strategic Research (SSF) | Sweden | 538 | 2008 – 2016 |
| North Carolina Biotechnology Center (NCBiotech) | United States | 529 | 2011 – 2016 |
| American Diabetes Association (ADA) | United States | 521 | 2011 – 2018 |
| National Institute for Health Research (NIHR) | United Kingdom | 520 | 2002 – 2018 |
| Swedish National Space Board (SNSB) | Sweden | 517 | 2008 – 2017 |
| James S. McDonnell Foundation (JSMF) | United States | 514 | 1997 – 2017 |
| Office of Nuclear Energy (NE) | United States | 469 | 2008 – 2016 |
| Ministère des Affaires sociales et de la Santé (DGOS) | France | 461 | 2007 – 2013 |
| Academy of Medical Sciences (AMS) | United Kingdom | 447 | 2009 – 2018 |
| Shriners Hospitals for Children – Chicago (SHC) | United States | 439 | 2008 – 2018 |
| Ministry of the Interior (MV) | Czechia | 437 | 1995 – 2017 |
| Genome Canada (Genome Canada) | Canada | 416 | 2001 – 2018 |
| Administration for Children and Families (ACF) | United States | 396 | 2003 – 2017 |
| European Molecular Biology Organization (EMBO) | Germany | 394 | 2001 – 2016 |
| California Breast Cancer Research Program (CBCRP) | United States | 389 | 2006 – 2018 |
| Ministry of Transport (MD) | Czechia | 389 | 1996 – 2009 |
| Cancer Research Society (SRC) | Canada | 377 | 2012 – 2017 |
| Prostate Cancer Canada (PCC) | Canada | 375 | 1996 – 2018 |
| Alzheimer's Society (Alzheimer's Society) | United Kingdom | 362 | 2006 – 2017 |
| Diabetes UK (Diabetes UK) | United Kingdom | 360 | 2003 – 2018 |
| New Brunswick Health Research Foundation (NBHRF) | Canada | 359 | 2008 – 2018 |
| Alzheimer Society of Canada (ASC) | Canada | 356 | 2004 – 2016 |
| Action on Hearing Loss (RNID) | United Kingdom | 332 | 1999 – 2017 |
| Parkinson's UK (Parkinson's UK) | United Kingdom | 331 | 2001 – 2018 |
| California HIV/AIDS Research Program (CHRP) | United States | 329 | 2005 – 2018 |
| Alberta Centre for Child, Family and Community Research (ACCFRC) | Canada | 323 | 2004 – 2015 |
| National Center on Birth Defects and Developmental Disabilities (NCBDD) | United States | 322 | 2007 – 2018 |
| Stroke Association (strokeassociation) | United Kingdom | 319 | 1996 – 2018 |
| Office of Budget, Finance and Award Management (NSF BFA) | United States | 316 | 1965 – 2018 |
| National Centre for the Replacement Refinement and Reduction of Animals in Research (NC3Rs) | United Kingdom | 305 | 2008 – 2018 |
| Ministry of Foreign Affairs (MFA CR) | Czechia | 292 | 1993 – 2010 |
| Ministry of Agriculture and Rural Development (MriRW) | Poland | 288 | 2009 – 2018 |
| Canadian Tobacco Control Research Initiative (CTCRI) | Canada | 285 | 1999 – 2008 |
| Centers for Medicare and Medicaid Services (CMS) | United States | 280 | 1995 – 2017 |
| World Health Organization (WHO) | Switzerland | 277 | 2012 – 2015 |
| Gulf of Mexico Research Initiative (GoMRI) | United States | 267 | 2010 – 2018 |
| Melanoma Research Alliance (MRA) | United States | 264 | 2008 – 2018 |
| Children's Tumor Foundation (CTF) | United States | 259 | 2006 – 2017 |
| NordForsk (NordForsk) | Norway | 255 | 2009 – 2018 |
| Ministry of Labour and Social Affairs (MoLSA) | Czechia | 251 | 1993 – 2011 |
| US Forest Service (USFS) | United States | 247 | 2005 – 2016 |
| Multiple Sclerosis Society (MS) | United Kingdom | 236 | 1999 – 2017 |
| Office of Information and Resource Management (NSF OIRM) | United States | 227 | 1970 – 2018 |
| Dunhill Medical Trust (DMT) | United Kingdom | 217 | 2006 – 2019 |
| Foundation for Polish Science (FNP) | Poland | 210 | 2008 – 2017 |
| Center for Information Technology (CIT) | United States | 207 | 1980 – 2016 |
| National Psoriasis Foundation (NPF) | United States | 191 | 2008 – 2018 |
| Polish Academy of Sciences (PAN) | Poland | 185 | 2007 – 2017 |
| National Institutes of Health (NIH) | United States | 182 | 1998 – 2016 |
| Motor Neurone Disease Association (MND) | United Kingdom | 170 | 2003 – 2018 |
| Auckland Medical Research Foundation (AMRF) | New Zealand | 169 | 2010 – 2017 |
| United States Nuclear Regulatory Commission (NRC) | United States | 168 | 1982 – 1995 |
| Prostate Cancer UK (Prostate Cancer UK) | United Kingdom | 167 | 2007 – 2018 |
| Cure Alzheimer's Fund (CAF) | United States | 166 | 2004 – 2017 |
| Internationale Stichting Alzheimer Onderzoek (ISAO) | Netherlands | 158 | 1995 – 2014 |
| Defense Logistics Agency (DLA) | United States | 157 | 2006 – 2017 |

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| Ragnar Söderberg Foundation (Söderberg) | Sweden | 157 | 2011 – 2016 |
| Arcadia Fund (Arcadia) | United Kingdom | 157 | 2002 – 2018 |
| National Center for Emerging and Zoonotic Infectious Diseases (NCEZID) | United States | 155 | 2010 – 2018 |
| French Institute of Health and Medical Research (INSERM) | France | 151 | 2011 – 2013 |
| Foundation for Baltic and East European Studies | Sweden | 149 | 2008 – 2017 |
| Pancreatic Cancer Action Network (PCAN) | United States | 142 | 2003 – 2016 |
| UC Lab Fees Research Program (UCLRP) | United States | 140 | 2008 – 2018 |
| Financial Markets Foundation for Children (FMFFC) | Australia | 139 | 2001 – 2017 |
| Uniformed Services University of the Health Sciences (USUHS) | United States | 135 | 2015 – 2018 |
| Alzheimer's Research UK (ARUK) | United Kingdom | 133 | 2009 – 2018 |
| Center for Scientific Review (CSR) | United States | 131 | 1982 – 2004 |
| Center for Neuroscience and Regenerative Medicine (CNRM) | United States | 127 | 2009 – 2017 |
| Citizens United for Research in Epilepsy (CURE) | United States | 120 | 2010 – 2017 |
| Defense and Veterans Brain Injury Center (DVBIC) | United States | 107 | 1995 – 2016 |
| Mesothelioma Applied Research Foundation (MARF) | United States | 104 | 2001 – 2018 |
| National Security Authority (NBÚ) | Czechia | 100 | 2000 – 2009 |
| Office of Public Health Preparedness and Response (OPHPR) | United States | 99 | 2008 – 2018 |
| Ministry of Economy (MH) | Czechia | 98 | 1991 – 1997 |
| Templeton World Charity Foundation (TWCF) | Bahamas | 95 | 2011 – 2018 |
| Ministry of Regional Development (MMR) | Czechia | 92 | 2004 – 2007 |
| Tuberous Sclerosis Alliance (TS Alliance) | United States | 91 | 2013 – 2018 |
| Arthritis Society (Arthritis Society) | Canada | 89 | 1998 – 2002 |
| University of California Research Initiatives (UCRI) | United States | 82 | 2009 – 2017 |
| Yorkshire Cancer Research (YCR) | United Kingdom | 80 | 1990 – 2017 |
| American Epilepsy Society (AES) | United States | 77 | 2015 – 2018 |
| Administration for Community Living (ACL) | United States | 77 | 1994 – 2016 |
| Indian Health Service (GOVERNMENT) | United States | 75 | 1994 – 2007 |
| Canadian Prostate Cancer Research Initiative (CPCRI) | Canada | 74 | 2001 – 2005 |
| State Office for Nuclear Safety (SÚJB) | Czechia | 74 | 1996 – 2009 |
| Institute for Evaluation of Labour Market and Education Policy (IFAU) | Sweden | 71 | 2005 – 2018 |
| Fondation Vaincre Alzheimer (LECMMA) | France | 64 | 2005 – 2018 |
| National Geospatial-Intelligence Agency (NIMA) | United States | 58 | 1997 – 2017 |
| Marie Curie (MC) | United Kingdom | 57 | 2010 – 2016 |
| Office of Inspector General (OIG) | United States | 56 | 1982 – 2018 |
| Irish Cancer Society (Irish Cancer Society) | Ireland | 51 | 2009 – 2016 |
| State Mining Administration (ČBÚ) | Czechia | 51 | 1999 – 2010 |
| The Neurofibromatosis Therapy Acceleration Program at Johns Hopkins (NTAP) | United States | 47 | 2013 – 2018 |
| UC Proof of Concept Grant (UCPOC) | United States | 43 | 2012 – 2014 |
| Karlovy Vary Region (KKV) | Czechia | 43 | 2012 – 2015 |
| Liberec Region (KLI) | Czechia | 41 | 2012 – 2016 |
| Pancreatic Cancer UK (Pancreatic Cancer UK) | United Kingdom | 41 | 2010 – 2016 |
| Bladder Cancer Advocacy Network (BCAN) | United States | 41 | 2013 – 2018 |
| Pulmonary Fibrosis Foundation (PFF) | United States | 39 | 2012 – 2018 |
| Autistica (Autistica) | United Kingdom | 37 | 2006 – 2017 |
| Global Lyme Alliance (GLA) | United States | 35 | 2008 – 2016 |
| Batten Disease Support and Research Association (BDSRA) | United States | 32 | 2013 – 2016 |
| National Security Agency (NSA) | United States | 30 | 2015 – 2018 |
| Security Information Service (BIS) | Czechia | 29 | 1998 – 2009 |
| Einstein Healthcare Network (AEHN) | United States | 28 | 2015 – 2018 |
| MQ: Transforming Mental Health (MQ) | United Kingdom | 24 | 2014 – 2017 |
| Combat Casualty Care Research Program (CCCRP) | United States | 23 | 2010 – 2016 |
| Ministry of Informatics (MI) | Czechia | 21 | 2001 – 2006 |
| National Science Board (NSF NSB) | United States | 21 | 1991 – 2016 |
| Canada-California Strategic Innovation Partnership (CCSIP) | United States | 19 | 2009 – 2011 |
| Macular Society (MacularSociety) | United Kingdom | 17 | 2013 – 2017 |
| Autism Science Foundation (ASF) | United States | 16 | 2014 – 2016 |
| Myrovlytis Trust (Myrovlytis Trust) | United Kingdom | 16 | 2007 – 2011 |
| Czech Office for Surveying, Mapping and Cadastre (ČÚZK) | Czechia | 13 | 1992 – 2004 |
| Hradec Králové Region (KHK) | Czechia | 11 | 2010 – 2011 |
| United States Department of the Interior (DOI) | United States | 7 | 1982 – 1984 |
| The city of Prague (KHP) | Czechia | 6 | 2013 – 2017 |
| United States Army Corps of Engineers (CoE) | United States | 6 | 2015 – 2015 |
| Ministry of Justice (MS) | Czechia | 5 | 1996 – 2009 |
| Ústecký Region (KUL) | Czechia | 2 | 2008 – 2009 |
| Institute of Education Sciences (IES) | United States | 2 | 2016 – 2017 |
| United States Marine Corps (USMC) | United States | 2 | 2015 – 2018 |
| Office of the Government (ÚřVI ČR) | Czechia | 1 | 2004 – 2004 |

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