



**CLEAN  
AIR  
FUND**

**PHILANTHROPIC  
FOUNDATION  
FUNDING FOR  
CLEAN AIR**

**ADVANCING CLIMATE ACTION,  
HEALTH AND SOCIAL JUSTICE**



### **ABOUT CLEAN AIR FUND**

Clean Air Fund is a global philanthropic organisation working with governments, funders, businesses and campaigners to create a future where everyone breathes clean air. We fund and partner with organisations across the globe that promote air-quality data, build public demand for clean air and drive action. We also influence and support decision makers to act on air pollution.

### **ABOUT CLIMATEWORKS FOUNDATION**

ClimateWorks Foundation seeks to end the climate crisis by amplifying the power of philanthropy. To that end, it has built a global platform through which philanthropy can support innovations aimed at scaling-up and accelerating the mitigation of and adaptation to climate change. Since 2008, ClimateWorks has granted over \$1.3 billion to more than 600 grantees in over 50 countries.

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# KEY FINDINGS AND RECOMMENDATIONS

## KEY FINDINGS

- **A total of \$330 million of known funding went to air-quality projects between 2015 and 2022.** Since 2015, the level of investment to air-quality projects has more than quadrupled, indicating funders' growing commitment. However, the level of funding from foundations to air quality in 2022, estimated at \$71.3 million, has increased only slightly since 2021, suggesting a slowdown in year-on-year growth.
- **Outdoor air-quality funding continues to account for less than 0.1% of all foundation funding;** this comparative underfunding of air quality is a consistent trend between 2015 and 2022.
- **Newcomers to air-quality funding and an increase in funding channelled to re-granters are spurring growth.** In 2021 and 2022, more than \$30 million of philanthropic foundation funding was invested through re-granters.
- **Foundations focusing on climate, energy and environment (CEE) provide the highest amount of funding to air-quality initiatives,** accounting for 77% of overall funding between 2015 and 2022. Foundations motivated by enhancing social equity, and those focused on health provide the second and third highest funding for tackling air pollution.
- **Some of the regions with the highest air pollution receive the lowest funding,** with Africa and Latin America received only 1% and 2% of the total funding (2015-2022).
- **Compared to other clean-air initiatives, air-quality data projects receive comparably less funding** and the lowest level of the total funding observed in 2022. Air-quality data underpins action on clean air, yet major data gaps exist at both neighbourhood and global scales.

# RECOMMENDATIONS

Air pollution causes 8.3 million deaths each year. Given the size of the problem and the fact that air-quality projects are often overlooked by major philanthropic funders, it is vital to ramp-up the scale and impact of air-quality funding from this sector.

## 1. **Philanthropic foundations, particularly those committed to addressing climate change and social injustice or improving public health, should increase their funding to air-quality projects through their own grant making or via intermediaries. They can do so by:**

- **Creating a brand-new programme** of air-quality funding, as exemplified by the ‘Clean Our Air’ challenge of the Earthshot Prize, or following the ambitious programme set out by another newcomer to the field, the Bezos Earth Fund.
- **Building air-quality funding into existing grants.** For example, a climate funder already supporting greenhouse gas emission-mapping could add air pollution to this work. Similarly, a place-based funder might fund air-quality initiatives that complement existing programmes. For example, they could install air-quality sensors in their buildings or locations, fund a neighbourhood citizen-science project or sponsor a regular asthma clinic to support treatment and increase awareness.
- **Scaling-up solutions** by identifying and supporting innovative projects that have the potential for success and funding their replication. For example, Breathe Cities, which began as an innovative pilot project in London, now supports air-quality actions in cities around the world. At COP28, Bloomberg Philanthropies, the Clean Air Fund and C40 Cities announced a cohort of Breathe Cities<sup>1</sup> to benefit from funding, technical support, air-quality data, community engagement, capacity building and additional assistance as part of a multi-year \$30 million investment.
- **Partnering with specialist intermediaries to fund air quality collaboratively.** This can be done through a pooled fund, such as Global Greengrants Fund, funds managed by relevant and experienced groups that include the Environmental Funders Network, or via a re-granter such as the Clean Air Fund. Working through an intermediary offers several advantages, including enabling greater leverage of capital, experience and expertise to help scale-up proven solutions quickly.

## 2.

**Philanthropic foundations should target underfunded countries, cities and regions. By channelling more funding to places where it is most needed within a particular geography, funders can create the greatest impact. They can do so by:**

- **Focusing their funding on underfunded countries and regions**, specifically Africa, Latin America and parts of Asia where air quality is poor and rapidly getting worse.
- **Investing in areas where the air pollution affects the most people.** Funders can explore how to focus their funding on areas with the highest levels of population density and exposure to air pollution. For example, a foundation might wish to focus on the 46 tropical cities in Africa, the Middle East and Asia that are each forecast to house more than 10 million people by 2100 but which have few facilities for making on-the-ground air-quality measurements, let alone robust policies and infrastructure for mitigating air pollution<sup>2</sup>.
- **Targeting action on reducing super pollutants and sources of pollution.** Depending on their expertise and remit, funders might choose to focus on addressing sources of pollution (e.g. agriculture or waste burning) or types of pollutants. For example, by investing in solutions to cut black carbon emissions close to cryosphere regions, such as the Arctic and the Himalayan mountains, funders can reduce emissions reaching ice caps and glaciers that are being disproportionately affected by climate change (find out more in the Clean Air Fund's briefing report on black carbon)<sup>3</sup>.



### 3. **Philanthropic funders should bring their unique expertise, networks and influence to help tackle air pollution as part of addressing climate change, health and social inequalities. Depending on a philanthropic foundation's strategy, history and expertise, this might include:**

- **Making the case for action on this cross-cutting issue** by drawing attention to relevant evidence and insights on the impact of air pollution; showcasing solutions to their peers, policy makers and wider networks; and using their individual and collective influence to advocate for greater political attention to the problem.
- **Climate, Energy and Environment (CEE) funders exploring synergies** within existing work, including data collection, and acting as convenors to bring together various stakeholders to collaborate on solutions.
- **Social-justice funders looking to highlight the disproportionate impact of air pollution** on certain groups and galvanise action to address this. An example is WE ACT in the USA which used data and evidence in New York City (and elsewhere) to show how low-income communities and people of colour, were forced to live alongside polluting industries<sup>4</sup>. This effort resulted in remedial action, including bus stations being remodelled to reduce emissions, and bus fleets upgraded.
- **Health funders examining how air-pollution affects existing programmes** and priority communities, and investing in identifying, replicating and scaling-up the most effective measures to accelerate and maximise health benefits of clean air. They could also:
  - invest to enhance understanding of the health costs of air pollution and health benefits of clean-air action;
  - seek to capture the health benefits of cleaner air for at-risk communities, pregnant women, babies, children and older people; or
  - support the development of early-warning systems and health-system preparedness for peak air-pollution events.

# 4.

**By investing in air-quality data, among other focus areas, philanthropic funders can create a multiplier effect. Funders can focus on a single aspect of air-quality programming or take a ‘mixed portfolio approach’ and fund a range of areas including: Data, impacts and research, Communications and awareness, Policy and governance, and Infrastructure (see more about these focus areas in Box 6). Such efforts can generate a range of impacts:**

- **Investing in the underfunded area of air-quality data can unlock effective action that delivers clean air for all.** A major barrier to progress on air pollution in many contexts is the lack of solid local data and analysis of air-pollution levels, including the sources of emissions and the localised health impacts of dirty air. This data forms the basis for robust policies and effective mitigation strategies, and is also key to mobilising public pressure for change.
- **For some climate, social-justice and health funders there might be opportunities to integrate air-quality data collection into existing data-collection efforts,** or to invest in infrastructure to enable interconnected issues to be better mapped. For example:
  - Climate funders that are investing in collecting data on greenhouse gas emissions, should consider projects that capture the full suite of climate and air pollutants. Projects assessing the impacts of climate and net-zero policies should also consider the health, equity and economic benefits of improved air pollution. An example might be to support countries to develop integrated emissions inventories and strategies, or to invest in new technologies that leverage satellites and Artificial Intelligence to advance knowledge on the sources of air pollution and greenhouse gases.
  - Social-justice funders should support affected communities to collect and use information on local air pollution. Data gaps continue to be a major barrier to action, since poorer neighbourhoods and communities are often air-quality data ‘deserts’. Community-led monitoring and campaigns, including the use of wearable sensors to tell personal stories of air-pollution exposure, are fundamental for driving equitable progress towards clean air.
  - Health funders should support efforts to understand the health costs of air pollution and health benefits of action and to better understand health-equity impacts on marginalised groups. They can also play a role in synthesising evidence on the interplay between air pollution, climate and health security, including vulnerability to epidemics, resilience of health systems, and negative feedback loops between climate change and air quality – such as wildfires, desertification and heatwaves – which exacerbate health risks.



## 5. **By collaborating with other philanthropic foundations, as well as governments and businesses, funders have the opportunity to increase the scale, reach and impact of their investments. To do so, funders should:**

- **Explore co-funding opportunities** to harness wider expertise and networks. For example, the McCall MacBain Foundation built on established scholarship programmes when it partnered with the University of Birmingham and the Clean Air Fund to launch the McCall MacBain Clean Air Fellowship focused on developing the next generation of leaders for the clean-air movement<sup>5</sup>. Along similar lines, the Clean Air Fund funded an add-on air-quality module for an existing health research programme spearheaded by the Bill & Melinda Gates Foundation in Ghana. Meanwhile, FIA Foundation, Pisces Foundation and the Clean Air Fund all brought unique expertise and perspectives to the table when they co-funded the International Council on Clean Transportation to undertake modelling to estimate health benefits arising from different global transport emissions-reduction pathways to 2050.
- **Forge strong partnerships with businesses and governments to galvanise support and action.** For example, the United Nations Environment Programme and Environmental Defense Fund announced an ambitious partnership in 2022, aimed at leapfrogging barriers to cleaning-up the air in Latin America and Caribbean (LAC) countries. Working with representatives from government, the private sector, civil society, grassroots organisations, international development agencies and philanthropic organisations, the four-year programme is working across 33 LAC countries to promote action on ‘the air we share’.
- **Consider supporting the development and deployment of a wider toolbox of financial instruments** that could ‘crowd in’ private-sector funding (a range of instruments are outlined in *The State of Global Air Quality Funding 2023*<sup>6</sup>). The emerging field of results-based finance, such as impact bonds, is an example.
- **Continue to align their grant making through exchanging knowledge and supporting mechanisms for greater coordination.** Existing networks across the wider air-quality and philanthropic ecosystems are a good starting point for this information sharing, and advisors and consultants working across the field have a key role to play too. Another priority for consideration, is the creation of a platform to facilitate greater transparency about grant making and help avoid duplication – similar to that developed by human rights funders<sup>7</sup>.

# FUNDING CLEAN AIR FOR CLIMATE, HEALTH AND SOCIAL-JUSTICE BENEFITS

Air pollution is a major challenge of our time, with 99% of us breathing dirty air<sup>8</sup>. Funding efforts to improve outdoor air quality could help mitigate climate change, transform nations' health and enhance social justice. This is because the factories, houses and vehicles that emit harmful air pollutants also pump greenhouse gases into the air – and the damaging impacts of dirty air and climate change are felt most keenly by the poorest and most vulnerable in society. By investing in clean-air projects, funders can contribute to meeting several United Nations Sustainable Development Goals (UN SDGs) at once.

Scientists and policy makers are increasingly recognising the interconnected nature of societal issues, with regards to climate, health and social justice. The World Health Organization has called climate change a fundamental threat to human health<sup>9</sup>, and the World Bank estimates that up to 132 million people will fall into poverty by 2030 due to the direct health impacts of climate change<sup>10</sup>. Last year, over 120 governments signed the COP28 declaration on climate and health, which specifically mentioned air pollution: “We [governments] recognize the urgency of taking action on climate change, and note the benefits for health from deep, rapid, and sustained reductions in greenhouse gas emissions, including from just transitions, lower air pollution, active mobility, and shifts to sustainable healthy diets<sup>11</sup>.” COP28 also launched a new statement of financing principles for climate and health, with the aim to ‘bolster financing’ for issues at the intersection, including air quality<sup>12</sup>.

Despite the cross-cutting gains that can be achieved through taking action on clean air, just 1% of international development funding went to clean air in 2015–2021, and only 2% of international public finance targeted air pollution. Technology and approaches required to address the air-pollution crisis already exist but a number of obstacles stand in the way of utilising these, namely funding challenges, impediments to policy implementation and political issues. Philanthropic foundations, which can be more nimble than other funding bodies and are often able to add value to their giving through innovation, advocacy and influence, are well placed to be catalysts to wider-scale action.

This report, which is part of *The State of Global Air Quality Funding* series, presents data and analysis of the outdoor air-quality philanthropic funding (Box 1), landscape between 2015 and 2022. It identifies funding trends, gaps and opportunities, particularly with regards to the potential for gaining climate, health and social-justice benefits from funding clean-air efforts; showcases examples of where funding air quality has had a significant impact and delivered co-benefits; and provides recommendations for how philanthropic funders can fund clean air for the greatest impact.



## **BOX 1: ABOUT THIS REPORT**

This report provides data and analysis on philanthropic foundation funding to air quality globally. It is a sister publication to *The State of Global Air Quality Funding*, covering funding from international development donors. The analysis focuses on projects where improvements to outdoor or ambient air quality are a primary objective (see the methodology for more information).

### **What do we mean by philanthropic funding?**

In this report we use the term philanthropic foundation funding, or philanthropic funding, to refer to non-profit or charitable organisations that provide grants (including re-grants) across a range of fields, including air quality. These philanthropic foundations are funded by individuals, families, businesses or through public donations, and may be structured, governed and regulated in a variety of ways.



# COUNTING THE COSTS OF AIR POLLUTION

**Air pollution's impacts are far-reaching (Figure 1). It causes 8.3 million deaths every year, of which 5.1 million result from fossil-fuel pollution<sup>13</sup>.** Long-term exposure can cause serious medical conditions, such as cancer, heart attacks, diabetes and strokes<sup>14</sup>. Meanwhile, exposure over hours or days to elevated levels of air pollution can affect lung function, exacerbate asthma and increase hospital admissions related to respiratory and cardiovascular conditions<sup>15</sup>. Exposure to air pollution during pregnancy increases the risk of stillbirth, miscarriage and low birthweight, and babies and young children are particularly vulnerable to the effects of air pollution<sup>16</sup>. As well as affecting people directly, air pollution reduces workforce productivity, and damages overall economic activity<sup>17</sup>.

Air pollution (Box 2) is inextricably linked to climate change<sup>18</sup>, exacerbating its impacts. Recent events underline the transnational dimensions of the climate crisis and air pollution. For example, unprecedented wildfires in Canada in 2023 caused an increase in harmful pollutants, notably PM<sub>2.5</sub>, which reached levels 10 times higher than WHO guidelines, spilled over the border into the USA and even affected Europe<sup>19</sup>. Extreme wildfires, which are increasingly the 'new normal', can be attributed to the combination of strong heat and droughts associated with climate change, and are forecast to increase as the world rapidly approaches the 1.5°C warming level. Air pollution also furthers environmental and economic damage by harming biodiversity and ecosystems, and reducing crop yields.

The impacts of air pollution are felt unequally. While exposure to particulate pollution, on average, reduces life expectancy by 2.2 years globally<sup>20</sup>, nine out of 10 deaths attributable to outdoor air pollution are in low- and middle-income countries (LMICs)<sup>21</sup>. In all countries, marginalised and vulnerable groups including babies, children, older people and those living with chronic diseases, are disproportionately affected. Those who are pregnant, as well as newborns and children, face distinct risks from climate change-related health impacts, due to a host of physiological, clinical, social and behavioural factors<sup>22</sup>. Of children under the age of 15, 93% – 1.8 billion young people – breathe air that is so polluted it risks their health and development<sup>23</sup>. Here, too, there are close links with climate change, where the poorest and most vulnerable people bear the brunt of multiple climate shocks but contribute the least to the crisis<sup>24</sup>.



**FIGURE 1: THE ADVERSE IMPACTS OF AIR POLLUTION GLOBALLY**



**BOX 2: THE MAKE-UP OF AIR POLLUTION**

Air pollution is any substance in the air that harms people, animals, plants or materials. Pollutants come from many sources, both natural and human-made but major contributors are emissions from industry, transport, agriculture and domestic heating. Pollutants include gases, such as sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub> – including nitrogen dioxide [NO<sub>2</sub>]), volatile organic compounds (VOCs), Ozone (O<sub>3</sub>) and carbon monoxide (CO), as well as particulate matter (PM) comprised of solid particles and liquid droplets.

Some gases and particles (such as black carbon from partially burned diesel, coal or biomass) are released directly into the air and are therefore called primary pollutants. Secondary pollutants, both gases and particles, also arise from reactions between chemicals in the air. Ozone, sulphate, nitrate and ammonium nitrate can form in this way, for example<sup>34</sup>. For air-quality purposes, PM is defined by the size of its constituent parts rather than its chemical composition. PM<sub>10</sub> refers to particles up to ten micrometres (µm) across, while PM<sub>2.5</sub><sup>35</sup> describes particles no bigger than 2.5 µm (about 30 times smaller than the width of a human hair).

a This refers to deaths from respiratory infections attributable to both outdoor air pollution and indoor air pollution.

b This refers to the global health cost, in 2019, of mortality and morbidity caused by exposure to PM<sub>2.5</sub> air pollution.

c This is the equivalent to \$8.1 trillion in global health costs (left).

d This refers to global loss of average life expectancy from all air pollution.

e This refers to relative global crop losses specifically caused by ozone, for a range of different crops: soy (6-16%), wheat (7-12%) and maize (3-5%).

# HOW REDUCING AIR POLLUTION DRIVES HEALTH GAINS

Action to reduce air pollution can bring about substantial improvements in health at scales from national to local. In the USA, between the introduction of the Clean Air Act in 1970 and 2018, the combined emissions of six common pollutants – PM<sub>2.5</sub> and PM<sub>10</sub>, SO<sub>2</sub>, NOx, VOCs, CO and Lead (Pb) – fell by 74%. This reduction occurred despite increases in GDP (275%), population and vehicle miles travelled over the same time period. As a result of the cleaner air, as many as 370,000 premature deaths and 189,000 hospital admissions for cardiac and respiratory illnesses were avoided. The net economic benefits of these health gains amounted to \$3.8 trillion, with the annual benefits of the Act calculated to be up to 32 times greater than the cost of the regulations<sup>35</sup>.

Action on air quality has also had a considerable impact on health in China. Between 2013 and 2020, following implementation of China's National Air Quality Action Plan, average levels of PM<sub>2.5</sub> nationwide (derived from satellite data) fell by 40%. During this time period, China accounted for more than three-quarters of the population-weighted global decline in particulate pollution<sup>36</sup>. Provided these reductions are sustained, the average person can expect to live two years longer as a result. The reduced air pollution between 2013 and 2017 alone resulted in 14% fewer premature deaths due to long-term exposure and a 61% fall in deaths associated with acute exposure<sup>37</sup>. However, realising the full benefits of clean air will require continued attention and action. For example, extreme wildfires in North America present a rapidly growing health risk, and a recent study indicated that PM<sub>2.5</sub> levels in China rose for the first time in 10 years in 2023<sup>38</sup>.

PM<sub>2.5</sub> is one of the most damaging types of air pollution<sup>39</sup>; breathing it in for just a few hours or days is harmful, and exposure over months or years is particularly dangerous. Lately, it has been implicated in almost half of still births, equating to almost a million still births every year. This was the finding of the first global risk assessment on PM<sub>2.5</sub>-related still births. The researchers used data on still births and air pollution between 1998 and 2016 in 54 LMICs to estimate the number of still births attributable to PM<sub>2.5</sub> exposure across 137 LMICs. They concluded that reducing air pollution to 10µg/m<sup>3</sup> could prevent 710,000 still births a year. At present, efforts to prevent still births tend to focus on improving medical services<sup>40</sup>. Mobilising additional investment into funding air-quality projects could help prevent still births from happening in the first place.

Reducing local air pollution can likewise have an array of positive health benefits. In London, where some 4,000 deaths were attributed to air pollution in 2019, the Ultra Low Emission Zone (ULEZ) and the expanded ULEZ have helped to transform London's air quality by removing older, more polluting, vehicles from roads, and reducing harmful air pollution. The cumulative impacts of these schemes has been to cut NOx emissions by 23% (13,500 tonnes) across London since 2019, compared to what they would have been without the ULEZ<sup>41</sup>. A study by the University of York found that the ULEZ reduced the probability of having longer-term health conditions by 22.5%, anxiety by 6.5%, and sick leave by 18%<sup>42</sup>. The expansion of the ULEZ in August 2023 is reducing the exposure to emissions of a further five million people.

Improvements in health from cleaner air can be significant and rapid. Reducing pollution at source can cut days off sick from school, visits to the doctor, hospitalisations, premature births, cardiovascular illness and death, and all-cause mortality. Within just a few weeks, it can halt respiratory symptoms, such as shortness of breath, cough, phlegm and sore throat<sup>43</sup>. China's restrictions on transport and industrial emissions in the run-up and during the 2008 Summer Olympic Games resulted in a significant reduction in asthma outpatient visits from 12.5 per day before the restrictions to 7.3 during the Games. The work showed that even in a heavily polluted city, decreased concentrations of small particles were associated with some reduction in asthma visits in adults.

# TRENDS IN FUNDING BY PHILANTHROPIC FOUNDATIONS

Since 2015, the level of investment to air-quality projects has more than quadrupled, indicating funders' growing commitment to the issue. A total of \$330 million of known funding was given to air-quality projects between 2015 and 2022, with the highest rate of growth between 2020 and 2021.

However, the level of funding from foundations to air quality in 2022, estimated at \$71.3 million, has increased only slightly since that reported for 2021 at \$67.5 million. This suggests a slowdown in year-on-year growth (see Figure 2). Between 2019 and 2021, the increase averaged \$14.9m, whereas between 2021 and 2022, it was just \$3.8 m<sup>f</sup>.

**\$330 MILLION  
OF KNOWN  
FUNDING WENT  
TO AIR QUALITY  
PROJECTS BETWEEN  
2015 AND 2022**

Outdoor air-quality funding continues to account for less than 0.1% of all foundation funding<sup>g</sup>. Based on overall philanthropic foundation funding figures tracked by ClimateWorks Foundation and partners, this comparative underfunding of air quality is a consistent trend between 2015 and 2022. Similarly, The State of Global Air Quality Funding report 2023<sup>44</sup> shows that air-quality projects are neglected by international development funders, with only 1% of international development funding (\$17.3 billion) and 2% of international public climate finance (\$11.6 billion) going towards tackling air pollution between 2015 and 2021.

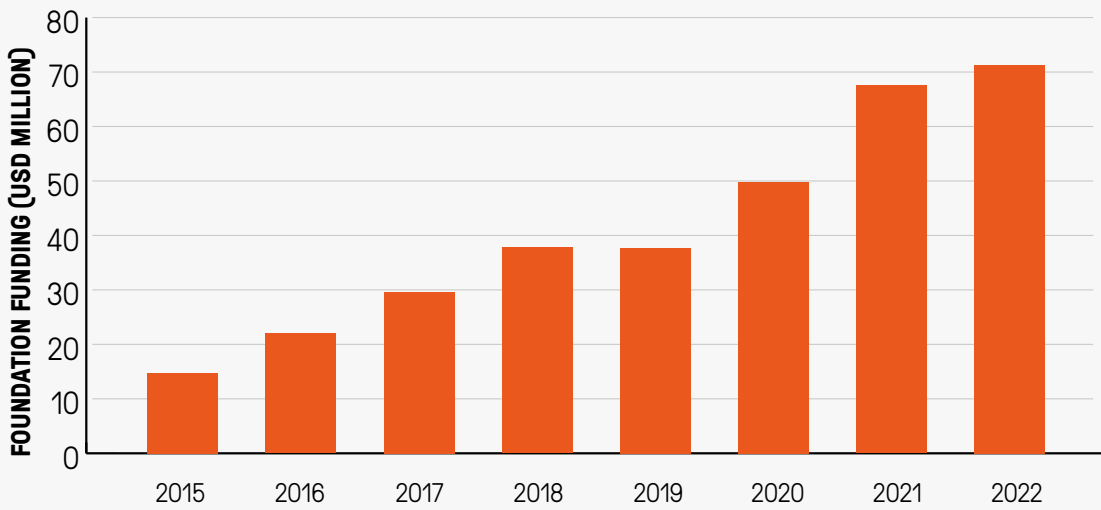
<sup>f</sup> Note: Funding data from the latest years will be subject to small changes as more data becomes available.

<sup>g</sup> Based on funding figures from Barton Consulting and Wealth-X. August 2023. "Climate Change Mitigation: Individual Philanthropy 2022." Report commissioned by ClimateWorks Foundation.



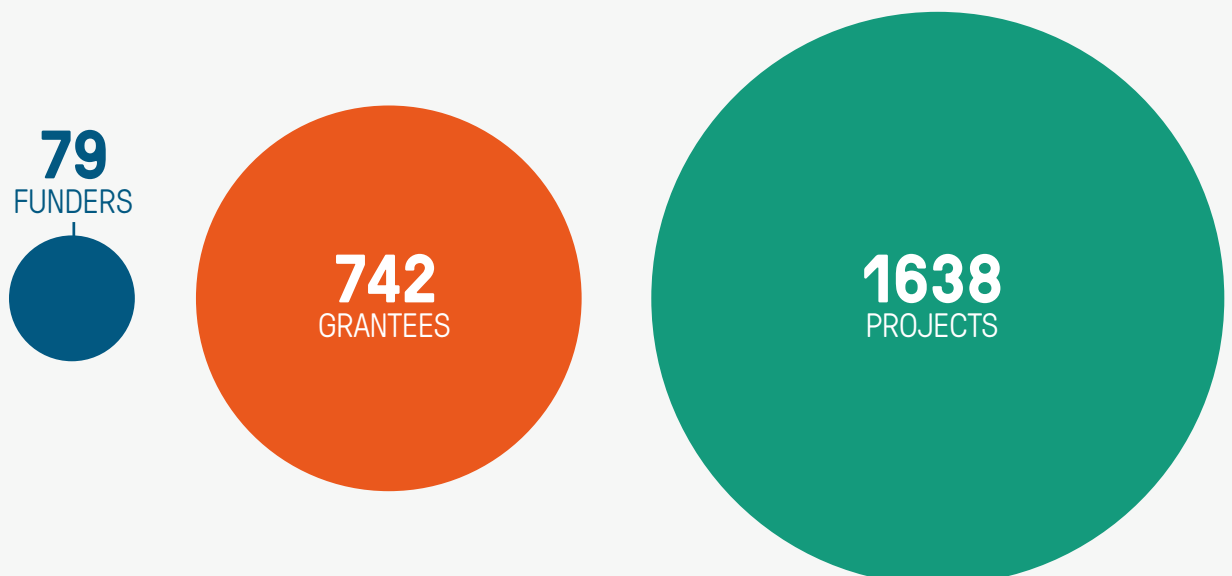
**There has been a recent slowdown in growth of air quality funding**

**FIGURE 2: ANNUAL PHILANTHROPIC FUNDING TO AIR QUALITY, 2015-2022.**



The total number of funders and grantees in the air-quality field has risen consistently since 2015. Our research identified 79 foundations as having provided funding for air-quality initiatives between 2015 and 2022, which was shared by 742 grantees. A total of 1,638 different projects were made, indicating that foundations are either funding the same organisation for multiple independent projects, providing follow-on grants to grantees, or that the same grantees are receiving funding from multiple foundations (Figure 3). This suggests there is significant scope for the air-quality field to expand. The average grant size remained relatively consistent across the period 2015 to 2022. Across these years, the average grant size was \$243,000.

**FIGURE 3: THE SCALE OF PHILANTHROPIC FOUNDATION FUNDING TO AIR QUALITY BETWEEN 2015 AND 2022**





## NEWCOMERS TO THE FIELD HAVE SPURRED GROWTH

Large funds from newcomers contributed to the jump in funding to clean-air initiatives noted between 2020 and 2021. Among these big spenders in 2020 was the Bezos Earth Fund, which committed \$10 billion to fighting climate change in the decade to 2030 and is disbursing around \$1 billion a year. Initial payments of \$100 million went to some of the largest environmental non-profit organisations in the USA, including Environmental Defense Fund, Natural Resources Defense Council, The Nature Conservancy, World Resources Institute and World Wildlife Fund<sup>45</sup>, some of which support work on clean air.

**NEWCOMERS SUCH AS THE BEZOS EARTH FUND AND EARTHSHOT PRIZE ARE SPURRING GROWTH**

Other foundations that have only recently started funding air quality are diverse in their outlooks and approaches, highlighting the intersectional and global nature of air pollution. They include the Earthshot Prize (Box 3), launched in 2020 by Prince William to seek out and scale-up innovative solutions to the world’s greatest environmental challenges, on themes including ‘Clean our Air’<sup>46</sup>; and Open Philanthropy, which focuses on, among other causes, global health and development and South Asian air quality.

Some of the top air quality funders are named in the report and include Bezos Earth Fund and Impact on Urban Health. In 2022, the Clean Air Fund was the largest philanthropic foundation funder dedicated to tackling air pollution globally<sup>h</sup>.

**COLLECTIVES OF PASSIONATE PEOPLE ARE THE ONLY SOLUTION TO ACHIEVING CLEAN AIR**

### **BOX 3: EARTHSHOT PRIZE IDENTIFIES AIR QUALITY AS AMONG MAJOR CHALLENGES FACING EARTH**

“Prince William and The Royal Foundation established the Earthshot Prize in 2020 to address the world’s biggest environmental problems.

We chose ‘Clean our Air’ as one of the five challenges or Earthshots. The other simple but bold Earthshots we chose are: ‘Protect and Restore Nature’, ‘Revive our Oceans’, ‘Build a Waste-free World’ and Fix our Climate.

By 2030 we want everyone to breathe clean, healthy air that meets or exceeds the World Health Organization’s Air Quality standards. Each year we discover and celebrate the people who are enabling progress to this goal: the innovators creating new jobs in green transport and clean energy, the advocates creating a sea change in policies, and the organisations that find new ways for us all to travel, heat our homes and put food on the table without polluting the air we breathe.

Philanthropy can play a powerful role in sparking the world’s collective imagination and driving the mindset of urgent action and optimism. Our prizes showcase environmental innovators and their solutions, and build a collective movement to repair the planet before irreversible damage occurs. To achieve this, we tap into our diverse networks and rely on the support of global organisations and philanthropists who share our ambitious goal. Collectives of passionate people are the only solution to achieving clean air, and we are delighted to work with the Clean Air Fund in this mission.”

Hannah Jones, CEO, The Earthshot Prize

<sup>h</sup> Data was collected via direct engagement with foundations known to be issuing grants on air pollution, and from online and public sources. This data has been aggregated and anonymised to show trends as opposed to individual grants and projects. See the methodology for more details.

# THE GROWING ROLE OF RE-GRANTERS

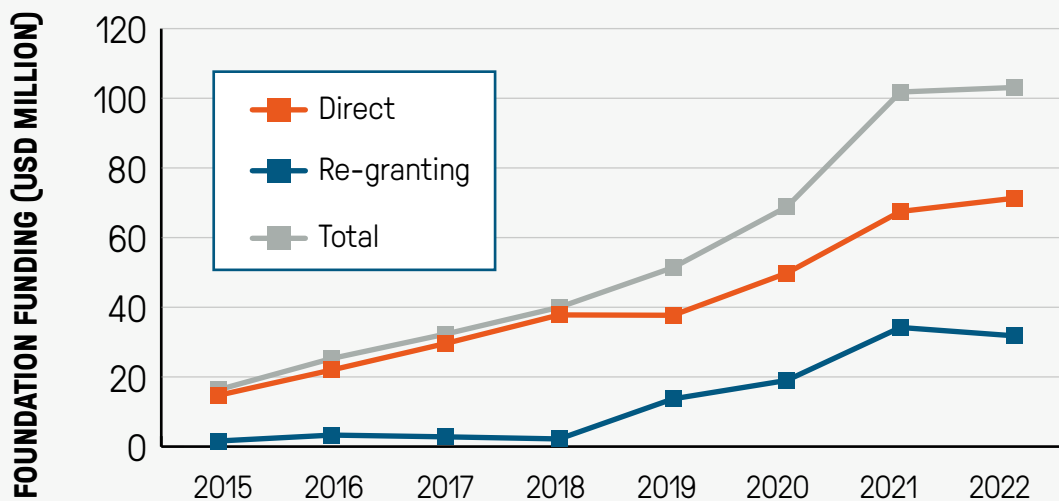
Most funding from philanthropic foundations goes directly to recipients for them to spend on delivering projects but our findings point to an increase in funding being provided via re-granting organisations. Our analysis categorises grants as direct (from a foundation to a grantee) or re-granted (from a foundation to another foundation or re-granting organisation)<sup>i</sup>. Re-granting and the use of pooled funds is a growing trend across philanthropy that offers multiple benefits. It enables greater leveraging of capital, experience and expertise to help scale-up proven solutions quickly.

**MORE THAN \$30 MILLION OF FUNDING TO AIR QUALITY WAS CHANNELLED VIA RE-GRANTERS IN 2021 AND 2022**

Figure 4 shows that, since 2019, re-granters have played a growing role in foundation funding on air quality over the studied time period, with over \$30 million of funding being channelled via re-granting organisations in 2021 and 2022. In 2022, funding flows via re-granters equated to almost half of the total direct funding on outdoor air pollution. For an underfunded and cross-cutting field such as air quality, re-granting presents a way for foundations with multiple relevant but tangential interests to engage without generating explicit new programme areas.

<sup>i</sup> For the majority of the analysis in this report, only direct grants were analysed to avoid double counting of re-granting funds. The only exception is in the analysis of funder focus areas, where it was important to capture the interests of foundations funding both directly and through re-granting.

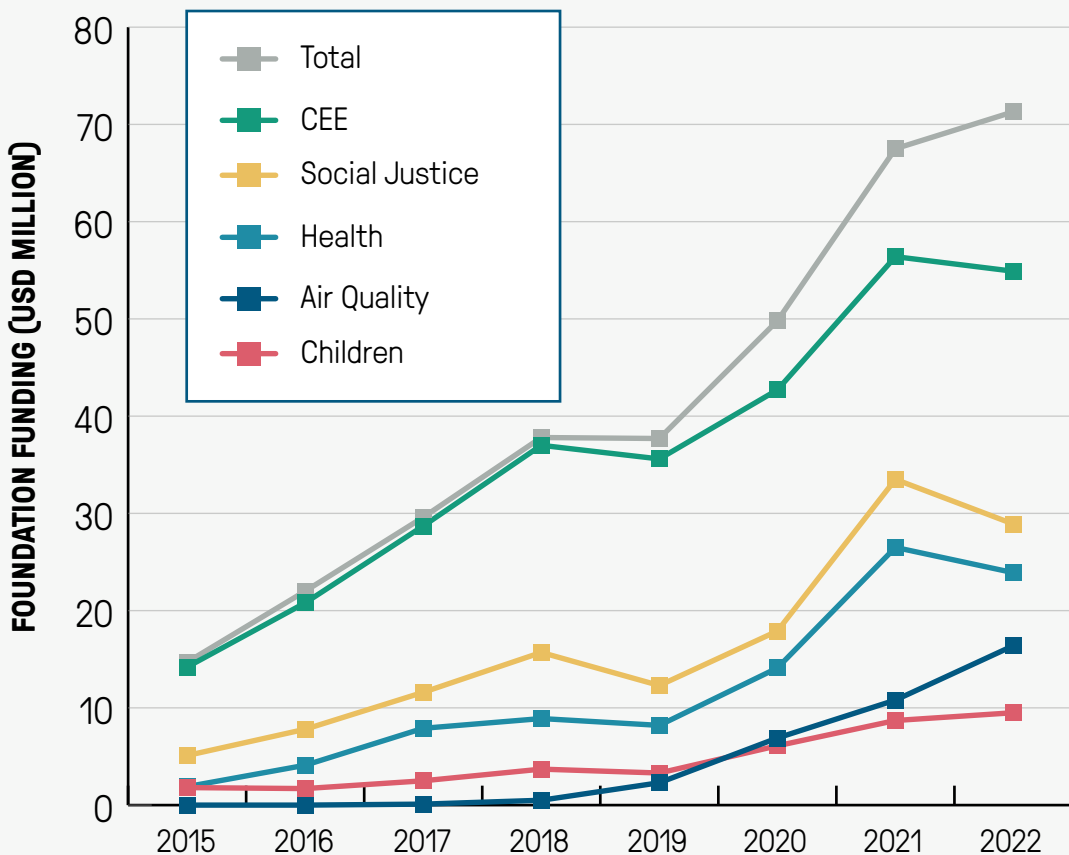
**FIGURE 4: DIRECT AND RE-GRANTING PHILANTHROPIC FOUNDATION FUNDING, 2015-2022**



# CLIMATE, ENERGY AND ENVIRONMENT, SOCIAL JUSTICE AND HEALTH FUNDERS ARE INVESTING IN CLEAN AIR

Foundations focusing on climate, energy and environment (CEE) provide the highest amount of funding to air-quality initiatives. The second-highest level comes from organisations motivated by enhancing social equity, and the third from those focused on health. These three foundation focus areas exhibit similar trends in levels of giving to air quality across the years (Figure 5). The funder focus area refers to philanthropic foundations’ primary areas of interest for investment. In this assessment, the focus areas of foundations were determined through desk-based research based on each organisation’s programmes of work, and by information provided by funders themselves. Each foundation could be allocated to more than one focus area.

**FIGURE 5: ANNUAL PHILANTHROPIC FUNDING BY FOCUS AREA, 2015-2022**



## Climate, energy and environment foundations are top air-quality funders

The level of giving from CEE organisations has risen consistently, from \$14.2 million in 2015 to \$54.9 million in 2022 (Figure 6), although the rate of increase has slowed of late. Foundations with a CEE focus provided a total of \$290.7 million between 2015 and 2022. The average grant size committed by CEE foundations has also been increasing, albeit slowly, since 2015. The average grant size from CEE foundations between 2015 and 2022 was \$234,809. In 2022, 77% of funding on air quality came from foundations with CEE as one of their focus areas.

**CLIMATE, ENERGY AND ENVIRONMENT FUNDING HAS RISEN CONSISTENTLY TO REACH \$54.9 MILLION IN 2022, 77% OF ALL AIR-QUALITY FUNDING**

**FIGURE 6: TOP FOUNDATION FOCUS AREAS PROVIDING AIR QUALITY FUNDING 2022**





## Social-justice foundations are the second-highest funder of clean air

The second-highest level of funding to air quality comes from foundations with a focus on social justice (Box 4). The amount has increased between 2015 and 2022, rising from \$5.1 million in 2015 to \$28.9 million in 2022. In total, social-justice foundations provided \$133.3 million between 2015 and 2022. The average grant size committed by funders with a social justice focus over this time period was \$467,526, with a peak of \$1.34 million in 2020. The significantly higher level of giving in 2020, was driven by a few large (>\$1 million) grants.<sup>j</sup> In 2022, 40.5% of funding on air quality came from foundations with social justice as one of their focus areas.

### BOX 4: CASE STUDY - IMPACT ON URBAN HEALTH

#### Redressing the social injustice of poor health from air pollution

**“AS PART OF OUR MISSION WE WANT TO MAKE SURE THAT EVERYONE CAN LIVE IN A PLACE THAT IS FREE FROM AIR POLLUTION AND THE POOR HEALTH THAT IT CAUSES.”** MATT TOWNER, IMPACT ON URBAN HEALTH

Air pollution has an unequal impact across society. The people affected most tend to be those who are marginalised and often under-represented politically. Encompassing children, older people, individuals with health conditions, as well as people living in areas of deprivation, and Black people and other minoritised communities, they often do little themselves to cause poor air quality. It is this social injustice that motivates South London-based Impact on Urban Health to fund projects that amplify the voices of under-represented people who are striving for clean air – and better health – in their neighbourhoods.

“As part of our mission we want to make sure that everyone can live in a place that is free from air pollution and the poor health that it causes,” explains Matt Towner, Programme Director of the Health Effects of Air Pollution programme, one of Impact on Urban Health’s four programmes that aim to achieve health equity in urban areas.

“That means we’re focused on improving air quality in cities and doing so in the most equitable way. We want to make sure that our projects support the people who are most affected by air pollution. And we want to work with those people to inform how we work.”

One recent recipient of the programme’s funding is the Ella Roberta Foundation. Following the death of nine-year-old Ella Roberta Adoo Kissi Debrah from asthma, the Foundation was established by her mother, Rosamund. Ella was the first person in the UK to have air pollution listed as a cause of death; the Ella Roberta Foundation is now campaigning for ‘Ella’s Law’, the Clean Air (Human Rights) Bill to be passed by the UK parliament. Benefitting both health and climate change, the Bill would enshrine the human right to clean air in law, reduce air pollution and greenhouse gases, and establish a pathway to comply with the World Health Organization’s (WHO’s) latest air-quality guidelines.

The Health Effects of Air Pollution programme is also supporting the *We Live + Breathe* campaign, a community of local artists, activists, influencers, community groups and creatives in South London, who come together to ‘make noise for clean air’. Air pollution in London is constantly higher than the WHO’s recommended limits, and Lambeth and Southwark have some of the worst levels in the city. The group’s campaigning has included holding the *We Live + Breathe* 2022 event in Southwark Park, aimed at igniting a passion for change on both air pollution and climate change in the local community. “A large part of the success of such events is in starting to build energy that provides the foundation for thinking about how we can work together with communities to try and shape a different air pollution environmental sector, where their voice grows and they have input into policies,” says Towner.

<sup>j</sup> Note: Each funder could be attributed to more than one focus area, so the total funding figure is greater than \$330 million and the total number of grants is greater than 1638

## Health foundations' funding is not matching the scale of the challenge

Health funders contributed \$95.9 million to air quality between 2015 and 2022. Our findings show that the amount of air-quality funding from foundations focusing on health grew consistently between 2015 and 2022 – rising from \$1.9 million in 2015 to \$23.9 million in 2022, with the fastest rate of growth between 2019 and 2021.



**HEALTH  
FUNDERS HAVE  
CONTRIBUTED \$95.9  
MILLION TO AIR  
QUALITY BETWEEN  
2015 AND 2022**

Considering the demonstrable potential to save millions of lives and prevent diseases by reducing air pollution, this level of funding is very low and represents only 34% of philanthropic spending on air quality (2022 data). It indicates that the growing interest of health funders in climate is not yet translating into investment in clean air as a means to both rapidly improve health and mitigate climate change.

A total of 245 grants were made by health foundations between 2015 and 2022, an average of 31 per year. The most grants were committed in 2021. The average grant size committed by health funders between 2015 and 2022 was \$441,543; health foundations seem to be giving fewer grants but of a higher value in comparison to CEE funders<sup>k</sup>.

There are examples of good practice within the health sector, including engagement with healthcare professionals and institutions such as hospitals, which could be adapted and replicated elsewhere. For example, in India, the Doctors for Clean Air initiative, led by a local not-for-profit organisation Lung Care Foundation and international non-governmental organisation Health Care Without Harm, is working to mobilise heads of national medical associations – representing hundreds of thousands of health professionals – to build their members' capacity to educate patients about health risks from air-pollution and ways to mitigate this harm, as well as to participate in local and national policy dialogues on clean air<sup>47</sup>.

Around the world, some 236,000 newborns die within the first month of life from exposure to air pollution. Another model project is Latin America's first air-quality network for early childhood, Aires Nuevos para la Primara Infancia. Established in 2020, and covering 48 cities in eight countries, the project seeks to measure air quality in the places where young children play and learn. By shipping air-quality monitors to cities during the pandemic, it doubled monitoring coverage in South America<sup>48</sup>.

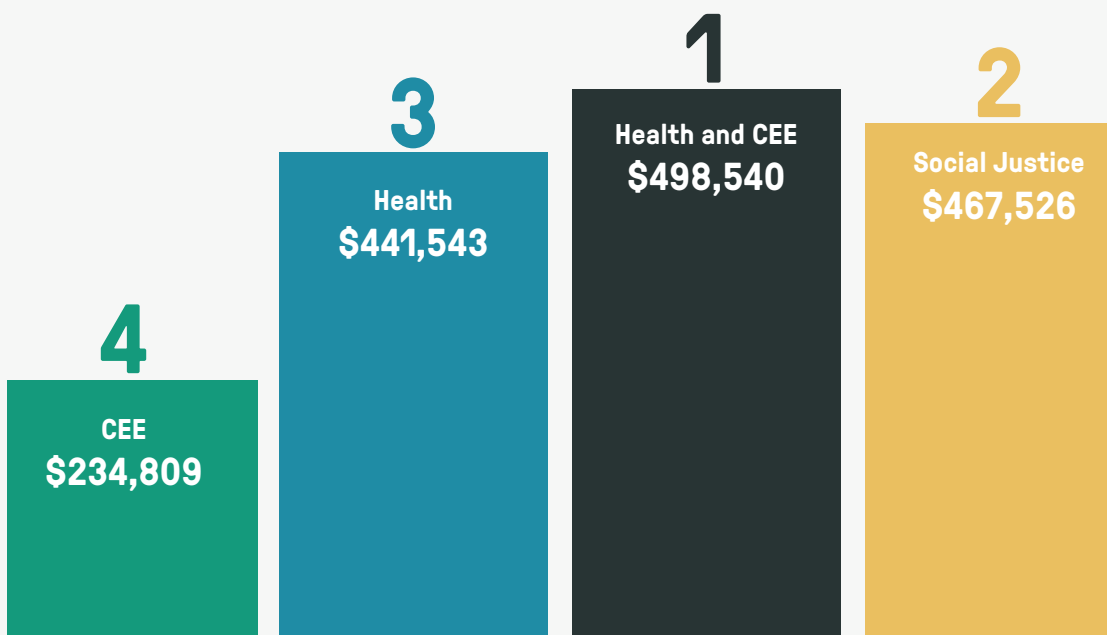
<sup>k</sup> Note: Each funder could be attributed to more than one focus area, so the total funding figure is greater than \$330 million and the total number of grants is greater than 1638

## Air pollution funding is increasingly recognised as effective for addressing health and climate goals simultaneously

Among foundations funding clean air, there appears to be a growing shift towards focusing on CEE and health together, and, in some cases incorporating social justice too. While in 2015, there were five grants for air quality funded by organisations with a focus on both CEE and health, by 2022 this had increased to 35 grants. Altogether, during these years, 191 grants came from foundations with focus areas of both CEE and health. The level of funding to air quality from foundations with a joint focus on CEE and health increased between 2015 and 2022, rising from \$2 million in 2015 to \$19 million in 2022. The average grant size committed by funders with both a health and CEE focus between 2015 and 2022 was \$498,540. This average is larger than that of grants provided by either CEE or health foundations individually, suggesting funders with a combined interest in health and CEE are committing to larger-scale projects (Figure 7).

**JOINT FUNDING ENABLES FOUNDATIONS TO COMBINE EXPERTISE, CONTACTS AND CAPITAL**

**FIGURE 7: AVERAGE GRANT SIZE, BY FUNDER FOCUS AREA, 2015-2022**



Funding provided for joint CEE and health initiatives has supported efforts at scales from grassroots to global. An example of the former is Kresge Foundation's funding of Air Alliance Houston's Texas Healthy Ports Communities Coalition, a network of non-profit, community-driven organisations seeking to make Houston healthier by empowering residents to identify local issues and advocate for their communities<sup>49</sup>. At the wider end of the scale is Wellcome Trust's funding of the Partnership on Sustainable Low Carbon Transport (SLoCaT). A collaboration of more than 90 organisations, supported by the SLoCaT foundation, it promotes the integration of sustainable transport in global policies on sustainable development and climate change, and the leveraging of action towards implementing those policies<sup>50</sup>.

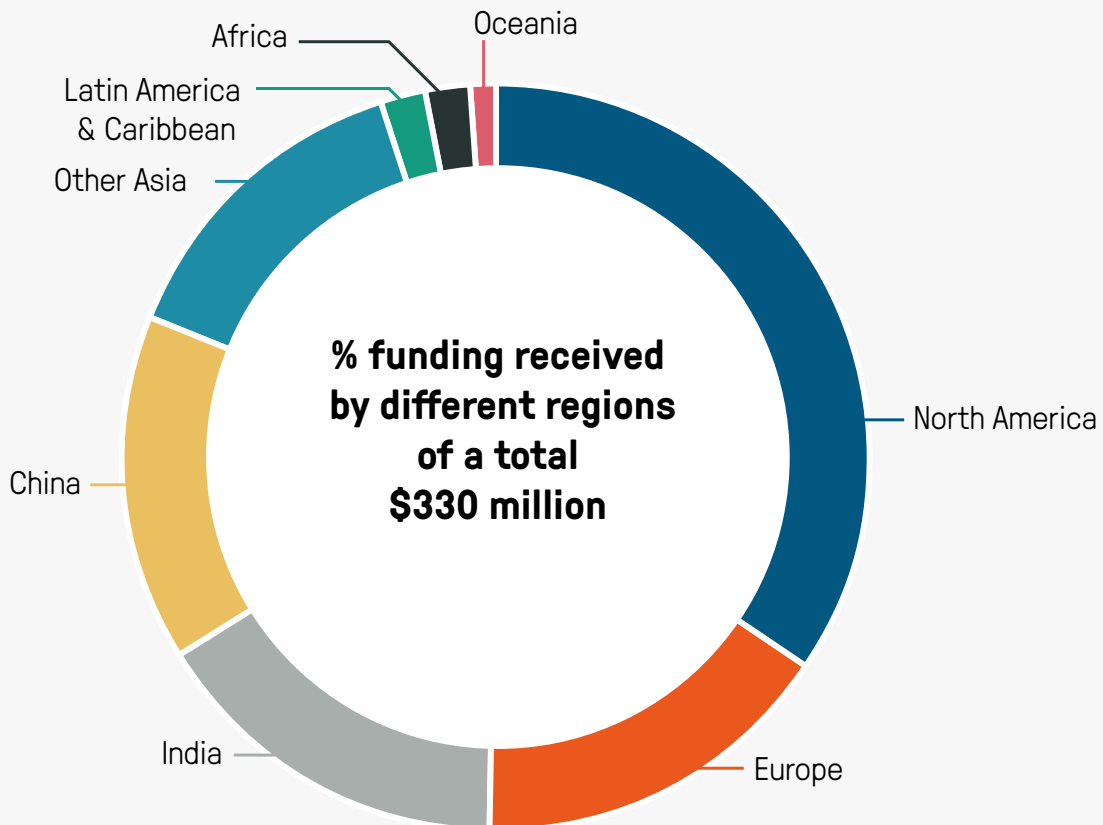
Initiatives funded have had wide-ranging aims, encompassing: researching the contribution of electric vehicles to air-quality, health and climate co-benefits; deploying electric school buses; implementing healthy air zones; reforming the regulation of air-pollution; and taking action to reduce methane emissions. In addition to global projects, areas covered span the USA, Asia, Latin America and Africa. Social justice aspects are also incorporated in some programmes, such as the Women's Earth and Climate Action Network (WE CAN) which is funded by a range of foundations and seeks to remedy the fossil fuel industry's health and safety impacts on Black, Indigenous and Latina women, and their families and communities. These collaborations suggest a growing awareness of the cross-cutting nature of air pollution and its viability as an entry point for tackling health, climate and social-justice issues simultaneously.

## SOME OF THE REGIONS WITH THE HIGHEST AIR POLLUTION RECEIVE THE LOWEST FUNDING

Funding is particularly low for Africa, Latin America and parts of Asia (excluding China and India) (Figure 8). Funding channelled to air-quality projects in Africa amounts to \$1.3 million in 2022, compared with \$0.2 million in 2020 and \$0.3 million in 2021. Funding to projects in Africa represents less than 1% (\$1.9 million) of all funding for outdoor air quality between 2015 and 2022. Latin America is also regionally underfunded receiving 2% of the total funding (\$5.7 million) (Figure 9). The majority of this funding does not come from global funders, but foundations based in Latin America, primarily Brazil and Mexico. Funding to Latin America represents less than 2% of total philanthropic funding to air quality between 2015 and 2022.

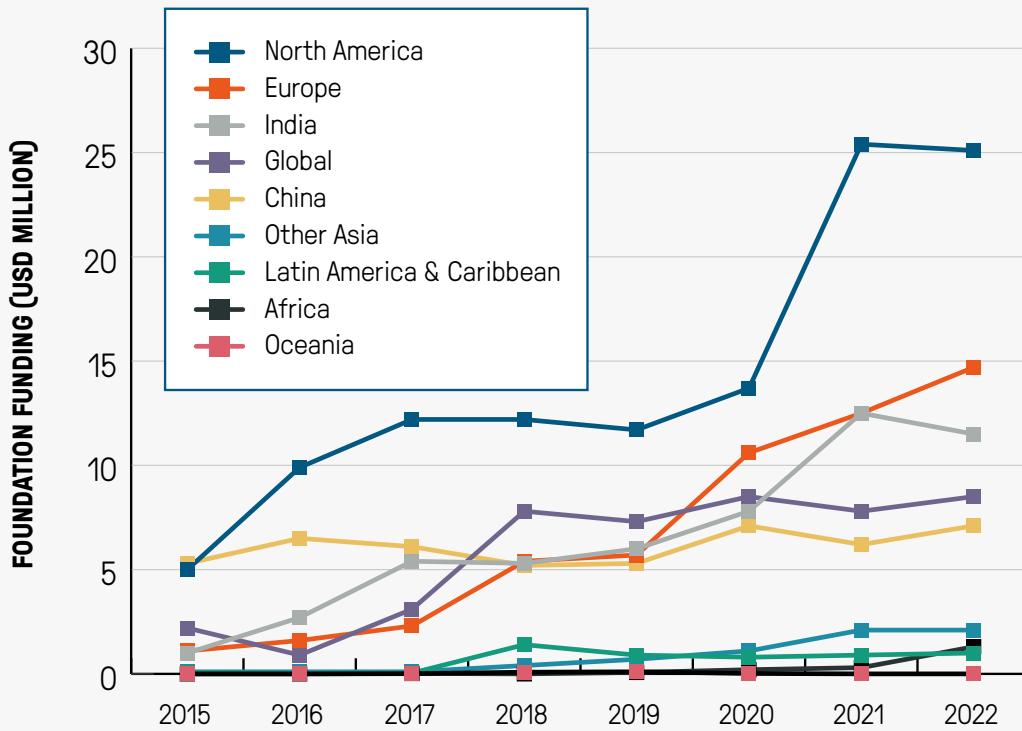
**AFRICA AND LATIN AMERICA RECEIVED ONLY 1% AND 2% OF THE TOTAL FUNDING (2015-2022)**

**FIGURE 8: GEOGRAPHIC BREAKDOWN OF RECIPIENTS OF PHILANTHROPIC FOUNDATION FUNDING, 2015-2022**





**FIGURE 9: ANNUAL PROVISION OF PHILANTHROPIC FUNDING BY REGION, 2015–2022**



Our findings represent considerable opportunities for funders seeking to make a difference in the clean-air sector. Take Africa, for example. According to the Health Effects Institute’s State of Global Air research, the continent experiences some of the world’s worst air pollution and most severe health consequences; in 2019, air pollution was the second leading risk factor for death in Africa, responsible for 1.1 million deaths. And for PM<sub>2.5</sub>, five of the world’s 10 most heavily polluted countries are in Africa<sup>51</sup>. Meanwhile, the political environment in sub-Saharan Africa is becoming more favourable for philanthropy, with the 2022 Global Philanthropy Environment Index reporting that, in general, the governments in the region are improving their relationship with civil society and that in those countries where the political environment for philanthropy has improved, there have been noticeable improvements in the legal governing structure of philanthropic organisations<sup>52</sup>.

## Maximising impact through collaboration

Forging partnerships with governments, businesses and research organisations, and accessing established financial mechanisms through international collaboration, can ease the way for external philanthropic funders wishing to fund clean-air efforts in Africa and beyond. A Clean Air Fund initiative that is adding air-pollution measurements to a birth-cohort study being funded by the Bill and Melinda Gates Foundation in Ghana provides an example. The Kintampo Health Research Centre, a Government of Ghana (Ghana Health Service) research institution, is carrying out air-pollution measurements in addition to the cohort research, while Columbia University and Mount Sinai School of Medicine will provide technical and analytical support. Adding the air-pollution aspect will enable scientists to address evidence gaps that are currently a barrier to policy action, on the influence of exposure to air-pollution in early life on noncommunicable disease risk from gestation throughout a person's lifecycle.

Similarly, the United Nations Environment Programme and Environmental Defense Fund formed a partnership in 2022, aimed at leapfrogging barriers to cleaning up the air in Latin America and Caribbean (LAC) countries. Currently, more than 500 million people in the LAC region breathe air that exceeds the WHO guidelines for pollutants including NO<sub>2</sub>, PM<sub>2.5</sub> and ground-level ozone<sup>53</sup>. The four-year programme, working in 33 LAC countries, aims to: increase understanding and awareness of air-pollution levels, sources and impacts on health; enhance air-quality management practices and tools; strengthen regional cooperation across cities and countries; and secure additional funding to facilitate action to maximise benefits to both public health and climate. Additional partners include representatives from government, the private sector, civil society, grassroots organisations, international development agencies and philanthropic organisations<sup>54</sup>.

## FUNDERS FOCUS ON AWARENESS, IMPACTS AND POLICY PROJECTS

Effective action on air pollution requires funding across an array of project types (Box 5), encompassing: data gathering (Box 6), research and assessment of impacts, communications and awareness-raising, policy and governance, infrastructure and technology, and other aspects, such as administration. Our findings show that the most funded type of clean-air initiative is projects focussed on communications and awareness, with 30% of the total funding between 2015 and 2022 supporting these kinds of projects. The allocation of funding to all types of initiatives has grown between 2015 and 2022, with the rate of growth highest for projects focussed on impacts and research (Figure 10).

**AIR-  
QUALITY  
DATA PROJECTS  
ARE UNDERFUNDED  
RELATIVE TO OTHER  
TYPES OF CLEAN-  
AIR PROJECTS**

Data projects receive comparably less funding, with the lowest level – 12% of the total funding – observed in 2022. Air-quality data underpins action on clean air, yet major data gaps exist at both global and neighbourhood scales. Only half of the world's governments publicly share air-quality data<sup>55</sup>. Analysis from the Energy Policy Institute at the University of Chicago highlights that an investment of \$4-8 million per year towards air-quality data programs would create high opportunity for reducing pollution for nearly 1 billion people<sup>56</sup>. Investments in sustained air-quality monitoring, open data and community engagement can have a national-level impact and present major opportunities for philanthropy to catalyse change. Funding to data projects was dominated by foundations with an explicit focus on air quality in 2022, with relatively lower contributions to data projects from foundations with focus areas of CEE and Health.

Ensuring all types of projects receive adequate funding requires a broad spectrum of foundations to fund work on air quality. Projects to implement infrastructure have received a low level of funding across the period 2015 to 2022, though there has been notable growth in funding to these kinds of projects since 2020.

### **BOX 5: PROJECT TYPES REQUIRED FOR EFFECTIVE ACTION ON AIR POLLUTION (AS IDENTIFIED IN OUR ANALYSIS)**

- **Data:** to improve the quality, quantity or transparency of, or access to, information
- **Impacts and research:** to increase research into and enhance understanding of the impacts of air pollution on health, the environment and the economy
- **Communications and awareness:** to raise awareness of air pollution, including through campaigning, communications and events
- **Policy and governance:** to develop, promote and transform public policies on air quality
- **Infrastructure:** to invest in implementing infrastructure and technology aimed at improving air quality
- **Multiple/undefined:** incorporating supporting the core costs of an organisation focused on air quality, situations where multiple strategies were supported or where it was not possible to assign an activity type.

## **BOX 6: CASE STUDY - FIA FOUNDATION**

### **TRUE emissions data supports clean-air policies around the world**

Vehicle emissions measured by third parties, together with data from remote-sensing observations, are providing an accurate picture to inform policy and improve urban air quality. This is thanks to The Real Urban Emissions (TRUE) initiative, a partnership of the international charity FIA Foundation and the International Council on Clean Transportation. TRUE is helping cities to remove the dirtiest vehicles from their roads, promote electrification of fleets and support the introduction of low-emission zones, with work in 38 cities and municipalities worldwide so far.

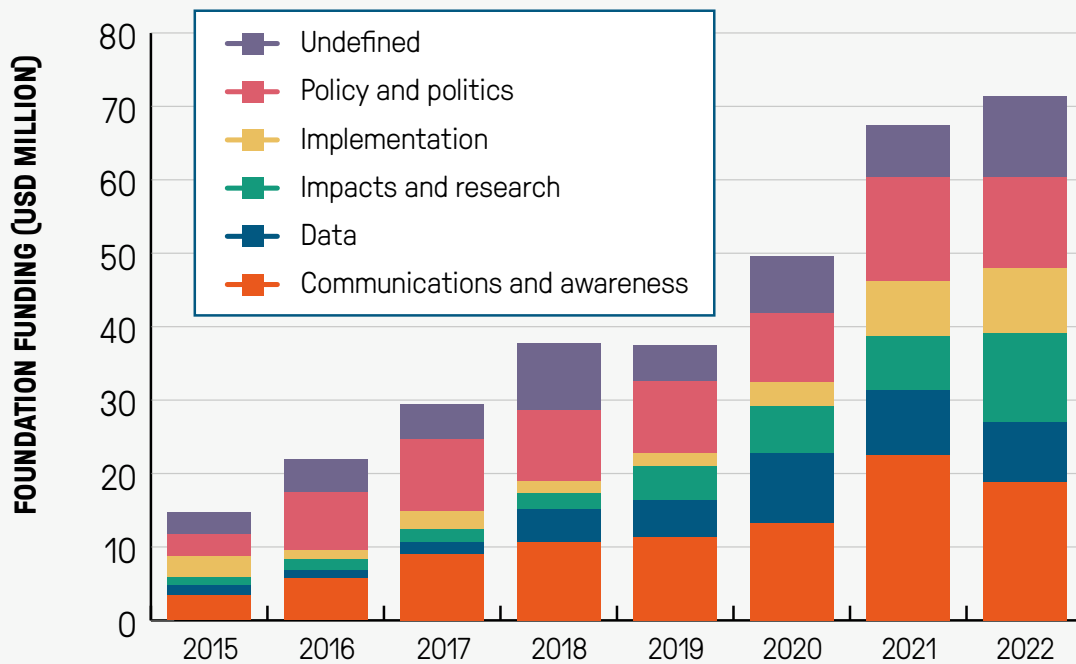
TRUE measures and analyses exhaust emissions from individual motorised vehicles, including cars, motorcycles, trucks and buses, in real time as they are being driven on city roads. At the same time, it records vehicle speed, acceleration and the registration number – plus environmental data such as temperature and humidity. The data from many vehicles collectively reveals patterns in emissions of specific pollutants, including NO<sub>x</sub>, as well as showing up particularly polluting makes and models of cars. By showing where and when pollution is occurring, and the vehicles that are contributing the most to dirty air, the data is invaluable for informing action to improve air quality.

The TRUE initiative was established in 2016 in response to the ‘Dieselgate’ scandal in the USA and beyond, in which Volkswagen was found to have violated the Clean Air Act by installing ‘defeat devices’ – illegal software that concealed the true level of vehicle emissions – in its vehicles. To date, TRUE has built up a database of 75 million records. Amongst the revelations to emerge from the data, in 2023, TRUE revealed that 13 million vehicles across five European countries, including the UK, likely had defeat devices installed.

In cities, TRUE data is underpinning action to enhance air quality. For example, it helped to show that emissions of NO<sub>x</sub> from London’s black cabs were seven times over legal limits. Armed with this evidence, mayor Sadiq Khan introduced an accelerated program for electrifying the iconic taxis. And in Warsaw, Poland, mayor Rafał Trzaskowski announced plans for a low-emission zone after TRUE data showed that limiting use of the most polluting vehicles could reduce NO<sub>x</sub> emissions by 30% and particulate matter by 57%.

“We think the work undertaken by the TRUE initiative is important, and the way that the work is done is effective and impactful,” said Sheila Watson, Deputy Director of the FIA Foundation. “We remain very committed to the need to address air quality – specifically the contribution that mobility makes to air quality. We celebrated our 20th anniversary as a foundation last year and at that point committed €2 million to the next three years of TRUE.”

**FIGURE 10: ANNUAL PHILANTHROPIC FUNDING BY PROJECT TYPE, 2015-2022**



## FILLING IN FUNDING GAPS

Foundations play a critical role in supporting a variety of project types that fall beyond the scope and mandate of other funding streams. The significant impact that such funding can have is demonstrated by the example of ClientEarth, established in 2008 and supported with around \$2.5 million from McIntosh Foundation (Winsome McIntosh). ClientEarth seeks to harness the power of the law to protect the planet and people who live on it. Its successes within its first 12 years include bringing the first clean-air case before the UK courts and ultimately winning it, forcing the government to take action on poor air quality including by introducing Clean Air Zones<sup>57</sup>. ClientEarth went on to bring legal cases on air pollution in Germany, Belgium, Italy, Poland and France<sup>58</sup>.



# THE TIME IS RIPE FOR PHILANTHROPY TO EMBRACE CLEAN AIR AS A ROUTE TO BETTER HEALTH, CLIMATE AND SOCIAL JUSTICE

This report shows that there is an opportunity for more philanthropic foundations to make a positive difference to the world by investing in tackling air pollution, given its devastating and inequitable impacts on health, and critical connection with climate change. The consistent rise in funding given since 2015, the increasing number and size of grants, and the appearance of newcomers to clean-air philanthropy are encouraging but it is clear that much more could be done. This represents a huge opportunity for philanthropic foundations: with organisations motivated by clean air currently absorbing more funding year on year, they stand poised to deliver transformational results with sufficient investment.

Among international organisations and institutions, there is evidence of increasing awareness of the need to tackle issues of air pollution, health, climate change and social justice together but it is early days. The World Bank, for example, has called for air pollution and climate change to be tackled jointly ‘with a focus on protecting peoples’ health – particularly in low- and middle-income countries – to strengthen human capital and reduce poverty’<sup>59</sup>. A number of major health institutions and philanthropies, including the Clean Air Fund, endorsed a set of 10 climate and health financing principles at COP28, intended to bolster resources to tackle climate change while maximising health protection.

Nonetheless, philanthropic funding towards cleaning up the air and protecting people’s health, as well as mitigating the worst impacts of climate change, is meagre compared to the vast size of the challenge. This mirrors international development funding; only 1% of this spend went to clean air in 2015–2021, and only 2% of international public finance targeted air pollution<sup>60</sup>. However, encouragingly, in 2021, for the first time, international development funding for outdoor air-quality projects (\$2.3 billion) exceeded funding for fossil-fuel-prolonging projects (\$1.5 billion)<sup>61</sup>. Proposed low-carbon pathways have the potential to both significantly increase air quality, with associated health benefits, while keeping the rise in Earth’s temperature within 1.5–2°C and strengthening social justice. But achieving the required substantial cuts in greenhouse gases by 2030, and reaching net-zero emissions by 2050, calls for concerted action and ambitious long-term investment.

Alongside governments, businesses and investors, philanthropists are critical to addressing these key challenges of our day and achieving the UN Sustainable Development Goals. Philanthropic foundations can direct funds to locations, societal sectors and technology where support is most needed; be nimble, responsive and risk-tolerant; give access to a range of funding mechanisms outside the reach of other donors; and provide seed funding that can leverage monies from other sources. Our recommendations laid out at the start of this report, embedded in the findings of our analysis, provide guidance to drive the much-needed expansion of clean-air philanthropy and bring about significant health, climate and social justice co-benefits in the next years.

**PHILANTHROPIC FUNDING TOWARDS CLEANING UP THE AIR AND PROTECTING PEOPLE’S HEALTH, AS WELL AS MITIGATING THE WORST IMPACTS OF CLIMATE CHANGE, IS MEAGRE COMPARED TO THE VAST SIZE OF THE CHALLENGE**

# METHODOLOGY

## NOTES ON PHILANTHROPIC FUNDING DATA

- Data was collected via direct engagement with foundations known to be issuing grants on air pollution, and from online and public sources. ClimateWorks Foundation's Global Intelligence department shared data from its in-house tracking of philanthropic funding for climate change and adjacent topics. In addition to this, information gathered from Candid's database was also used.
- Projects were manually checked to confirm they matched the criteria for outdoor air-quality funding as defined in detail in the State of Global Air Quality Funding 2023 methodology<sup>62</sup>. Only projects matching these criteria were included in the analysis.
- Analysis of philanthropic funding focuses on commitments (total grant budgets) rather than disbursements (individual grant payments). Grants that span multiple years were assumed to be disbursed evenly over the grant period. This was to prevent very large grants awarded in a single year but granted across multiple years skewing the philanthropic funding data. This approach is consistent with other comparable analyses of foundation-funding data.
- To capture philanthropic funding flows and avoid double counting in total values, grants were categorised as either direct or re-granted. Where funding flowed from an endowed foundation to a project via a re-granter, or where a foundation supported core or programmatic costs for another foundation, this funding was categorised as re-granted. An example of this would be where a grant was made by an endowed foundation to the Clean Air Fund, a re-granter. Where funding flowed directly from an endowed foundation or a re-granter to a grantee, this funding was categorised as direct. Direct grants were used for all totals (therefore avoiding double counting) apart from for some of the analysis of funder focus areas, where both direct and re-granted grants were considered.
- The focus areas of foundations were determined through desk-based research based on foundations' programmes of work, and by information provided by funders themselves. A keyword search was applied to programme names to ensure consistent categorisation. For example, if a foundation had 'climate' and 'children' focus areas, all grant making from that foundation would be counted under both 'climate, energy and environment (CEE)' and 'children' in the analysis.
- Given foundations could have one or more focus area, analysis of these numbers was undertaken as a percentage of the total amount and through direct comparisons. It was not, for example, possible to add up the CEE- and Health-foundation totals, as some of this funding came from foundations with focus areas spanning both CEE and Health.
- In the case of very large grants (>\$5 million) where it was evident that not all funding within the grant was being used to combat ambient air pollution, a weighting was applied to reduce the total grant amount to the proportion used for activities relating to ambient air pollution. This weighting was determined in consultation with the relevant funder and/or grantee.
- Unless otherwise stated, all calculated averages are means.
- All figures are best estimates based on available data and will be updated annually as new data becomes available. The data is therefore subject to change, particularly for the most recent years for which some data was not available at the time the analysis was undertaken.
- Geographical categorisations are defined by the location of the work undertaken in the project:
  - Europe includes pan-European grants and grants made in the UK and Turkey.
  - Other Asia includes all grants made in Asia excluding: India and China.
  - North America includes grants made in the United States of America and Canada.
  - Latin America & Caribbean includes grants made to Southern and Central American countries, Caribbean countries and Mexico.
  - Funding channelled across more than one region is categorised as global funding.

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# CLEAN AIR FUND

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