CLIMATE POLICY INITIATIVE

CLEAN AIR FUND

THE STATE OF GLOBAL AIR QUALITY FUNDING 2025

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Clean Air Fund is a global philanthropic organisation that works with governments, funders, businesses and campaigners to create a future where everyone breathes clean air.

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FOREWORD

Dr Dion George, MP,
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Republic of South Africa
G20 Presidency 2025

Air pollution is the world's largest environmental health crisis, yet it receives neither the attention nor the resources it demands. Each year, eight million people die prematurely from a crisis that is largely preventable.[1] Today, nine in ten of these deaths occur in low- and middle-income countries, where the means to respond are most limited.[2] Without urgent action, this tragic toll will continue to rise.

South Africa knows this reality well. The majority of our people breathe air that does not meet World Health Organization guidelines. Independent analysis suggests that, in 2019, air pollution caused an estimated 25,800 premature deaths, 5-6% of all national fatalities.[3] The economic costs are significant too: a 2025 report suggested air pollution led to an estimated 30 million lost workdays in South Africa.[4]

Yet, in recent years, we have also shown that progress is possible. Through coordinated cross-government action, clear legal frameworks, strengthened monitoring, and strategic investments in cleaner transport and energy, we have begun to turn the tide. These efforts show that action on air quality delivers benefits not only for health but for economic growth, job creation, and the building of a capable and ethical state – central pillars to the Government of National Unity's mandate.

This experience has guided South Africa's approach to the G20 Presidency, under our theme of "Solidarity, Equality, Sustainability". For the first time, air quality has been elevated as a standalone priority in the G20's environment and climate workstream. This is not symbolic. Clean air is central to health, to development, to climate ambition and to justice. It also aligns with our broader mandate: by investing in cleaner energy, sustainable mobility, and robust environmental governance, we can grow the economy, create jobs, and strengthen the ethical and capable institutions our people deserve.

Our approach in the G20 mirrors efforts globally to place air pollution on the agenda. Earlier this year, Member States approved the World Health Organization's updated 2025 Road Map, which includes a voluntary target to halve the health impacts of anthropogenic air pollution by 2040.[5] In parallel, the emerging Africa Clean Air Programme is defining a continent-wide effort to strengthen standards, monitoring, and investment for clean air.

Yet financing remains a major barrier to progress. The evidence in this report is stark. In 2023, outdoor air quality funding fell by a fifth, even as the health burden grew. Over 2019–2023, these projects received only about 1% of international development funding. By comparison, water and sanitation attracted around US$8.5 billion in global ODA alone in 2022 — about 3.1% of total aid,[6] three times the share for outdoor air quality. The distribution is deeply unequal: less than 1% of outdoor air quality funding reached sub-Saharan Africa in 2023.

With aid budgets shrinking and fiscal space tight, each dollar must work harder than ever. Resources must be directed to where they can save the most lives and deliver the greatest benefit. The World Bank has said that targeted action could save more than two million lives annually by 2040 and add up to $2.4 trillion each year to the global economy.[7] The challenge is not only to increase funding but to structure it in a way that attracts new sources of capital. That means scaling innovative finance to bring in private investment alongside public support.

Nowhere is this more urgent than in Africa. Our continent is urbanising faster than any other. By 2050, two-thirds of Africa's population will live in cities.[8] If we allow these cities to grow without planning for cleaner, more sustainable solutions, we risk locking in illness, inequality, and inefficiency for decades. By prioritising cleaner energy where feasible, expanding sustainable mobility, and strengthening regulatory systems, African cities can become engines of a healthier, fairer, and more resilient future — supporting economic growth, creating jobs, and building capable and accountable institutions for generations to come.

Air pollution is not inevitable. It is a problem we know how to solve. The tools exist. The benefits are immediate. What is needed is the commitment to act – and the financing to match ambition with reality.

As South Africa leads the G20 this year, my message is simple: let us ensure clean air becomes not a privilege for some, but a right enjoyed by all.

JEWEL CITY, A MIXED-USE PRECINCT IN JOHANNESBURG, SOUTH AFRICA . IT IS INTENDED TO BE A SAFE, GREEN AND ENERGETIC AREA IN THE HEART OF THE CITY. CREDIT: GULSHAN KHAN / CLIMATE VISUALS

EXECUTIVE SUMMARY

This 7th edition of the State of Global Air Quality Funding is published at a time of great opportunity and great challenge for air quality action.

2025 has seen seismic changes to development funding, with widespread cuts by OECD donors and the shuttering of USAID, the world's largest development donor. However, 2025 has also seen important steps forward on air quality action. At this year's World Health Assembly countries adopted a target which commits them to halving the health impacts of air pollution by 2040.

Concerted action is needed in line with this goal; recent analysis shows that populations at risk from air pollution are set to increase by 2040, with the human and economic cost of dirty air growing significantly. Despite increasing awareness and action on air pollution, on the current trajectory deaths from outdoor air pollution alone will increase from 5.7 million in 2020 to 6.2 million by 2040.[9]

Yet it is both possible and affordable to drastically reduce the impacts of air pollution, according to the latest World Bank research. Integrated air quality and climate policies could cut attributable mortality by up to 35% against the current trajectory, saving more than 2 million lives annually, while increasing global GDP by $1.9-2.4 trillion (1.7-2.1%).[10]

Air quality clearly remains a smart investment for development donors to maximise returns on investments in a constrained funding environment. This year's State of Global Air Quality Funding report sets out the needs and the means to do so.

The report analyses international development funding flows to outdoor air quality-related projects for the five years up to and including 2023 and is based on the latest available data. It also considers how the profound shifts we are seeing in development funding may affect air quality funding in future.

The donors covered in this analysis include bilateral and multilateral Development Finance Institutions (DFIs) and governments that provide international funding. This year, for the first time, the report also draws on the perspectives of experts working in those institutions to explain the underlying reasons for funding trends, and the challenges and opportunities for air quality financing.

KEY FINDINGS

DECREASE IN OUTDOOR AIR QUALITY FUNDING AND AN INCREASE IN FOSSIL FUEL-PROLONGING FUNDING

This year's data presents a challenging picture, with direct funding for outdoor quality action dropping 20%, from $4.7 billion in 2022 to $3.7 billion in 2023.

Outdoor air pollution funding continues to make up just 1% of international development funding, with a total of $16.4 billion in funding from 2019 to 2023.

It also finds an alarming year-on-year increase of 80% in fossil fuel-prolonging funding from $5.3 billion in 2022 to $9.5 billion in 2023, more than two and a half times what outdoor air pollution received in the same year.

Clearly, international development funding should no longer be spent on prolonging fossil fuel use given its significant health and climate harms. Yet, analysis from this report series, covering clean air and fossil fuel-prolonging funding drawing on data dating back to 2015, has consistently shown, with the exception of 2021, that investments in fossil fuel-prolonging projects have exceeded funding for outdoor air quality initiatives. Meanwhile, funding towards targeted air pollution action has remained steady or declined.

This fossil fuel-prolonging funding comes on top of the billions in direct, and trillions in indirect, subsidies that fossil fuels producers receive from government.[11]

Donors must act urgently to address this, with the potential for such funds to be repurposed to promote a meaningful green transition, that includes air pollution action.

GROWTH IN AIR QUALITY CO-BENEFIT FUNDING

One positive note within this year's data is that projects with air quality co-benefits – those that improve air quality without having air quality as an explicit objective - rose by 7% from $27.1 billion to $28.8 billion year-on-year from 2022 to 2023. While this increase is encouraging, this funding could have far greater impact if it explicitly considered air quality co-benefits at the design stage; doing so would allow benefits to be maximised.

This increase in co-benefit funding meant that global figures for total air quality funding (a combination of direct outdoor funding and co-benefit funding) increased modestly from $31.8 billion in 2022 to $32.6 billion in 2023.

FUNDING IS NOT REACHING POPULATIONS WITH THE HIGHEST EXPOSURE

It is also crucial that funding for air quality is targeted where it is most needed. This year's analysis shows that funding is still highly concentrated in just three countries – the Philippines, Bangladesh and China, which together received 65% of global outdoor quality funding between 2019 and 2023.

Funding is not reaching populations with the highest exposure to air pollution. Only two of the 10 countries with the highest PM2.5 concentrations in the world – Bangladesh and India - appear among the top 10 recipients of total air quality funding per person in 2023. Of the remaining countries with high PM2.5 concentrations, five (the Democratic Republic of Congo, Burundi, Rwanda, Equatorial Guinea and Cameroon) are found in sub-Saharan Africa.

Of the 10 countries with the world's highest air pollution levels seven received less than $1 per capita of total air quality financing in 2023.

This regional disparity is getting worse. Most notable in 2023 is a 91% year-on-year drop in outdoor air quality funding to sub-Saharan Africa, from $129 million in 2022 to $12 million in 2023, which is equivalent to less than 1% of global outdoor air quality funding.

With sub-Saharan Africa experiencing the fastest rate of urbanisation in the world, which brings drastically increasing air pollution and greenhouse gas emissions, action on air pollution is much needed. With the launch of the Africa Clean Air Plan in 2025, Africa should become a greater funding priority for development donors.

SUMMARY RECOMMENDATIONS

The opportunities for donors to maximise returns on health, climate and economic growth from action on air pollution are clear. To do so they should:

1. **Integrate clean air as an explicit co-benefit across development and climate projects**
   Development finance institutions should ensure that air quality co-benefits are visible and explicit within project design and implementation to maximise the air quality improvement opportunities. Climate-focused projects, in particular, present an opportunity for the integration of air quality objectives. The **Air Quality Toolkit for Development Finance Institutions** provides a useful tool to upskill staff in this area.

2. **Make air quality an institutional and staff priority**
   Evidence from key institutions demonstrates that recognising the value of clean air and identifying action on air quality as a policy priority provides a strong foundation for accelerated action. International development institutions should look to embed air quality action within their institutional structures, policies and staff training.

3. **Target investments towards funding "deserts", especially in Africa**
   The vast majority of air quality finance goes to a handful of countries, while countries with the highest pollution burden are not accessing air quality funding at all. Donors should work to address challenges on both the demand and the supply side to ensure that funding is spread more equitably, and look to target areas that receive minimal funding, in particular sub-Saharan Africa.

4. **Strengthen cross-donor engagements and collaborate on the way air quality funding is tracked**
   Cross-donor collaboration is key for effective air quality management. International development funders should ensure effective cross-donor communication and collaboration to create opportunities to learn from peers, identify synergies and avoid duplication; take a cross-sectoral, airshed approach to tackling air pollution; and effectively track and report on air quality funding. A vital step to achieving this is to standardise reporting and tracking across donors.

5. **Prioritise efforts to reduce emissions from black carbon-rich sectors**
   Black carbon, a component of particulate matter and a super pollutant, has major climate and health impacts. International development funders are encouraged to consider black carbon in their project development, both in terms of targeting black carbon-rich sectors and integrating black carbon emissions reductions as a co-benefit for projects.

6. **Catalyse private sector participation in air quality projects**
   International development funders have a key role to play to de-risk investments to mobilise private sector resources and support funding at scale. They should use all tools at their disposal to do so, as well as

developing “best buy” air quality approaches that highlight the most effective investment opportunities.

7. **End funding for fossil fuel-prolonging projects**
   Development funders should prioritise a full, fair and fast phase out of funding for fossil fuels as soon as possible, in recognition of their profoundly damaging impacts on air pollution and climate change. Where possible, this funding could be re-directed towards a meaningful green transition, including action on air pollution.

8. **Conclusion**
   More than simply a health or environmental issue, air pollution undermines sustainable development and deepens global inequality. Equitable, targeted and sustained financing is needed to protect the most vulnerable regions and populations. For international donors, this is a chance to secure health, climate and economic gains simultaneously. Air pollution action is both affordable and achievable. By acting now, the international community can ensure cleaner air, healthier societies and stronger economies for decades to come.

CONTENTS

GLOSSARY

Air quality and climate funding: Funding committed to projects that deliver both air quality and climate benefits.

Ambient air pollution: Also known as outdoor air pollution, this refers to the presence of harmful substances and pollutants in the Earth's atmosphere that are primarily generated by human activities such as industrial processes, transportation and energy production. Ambient air pollutants include particulate matter and gases (such as nitrogen dioxide, sulphur dioxide, ozone, carbon monoxide, and volatile organic compounds) and can adversely impact human health and the natural environment.

Bilateral development finance institutions: These are development finance institutions (DFIs) that are owned by a single country and direct financial flows internationally. Bilateral DFIs include both development banks and development agencies that commit development finance on behalf of government departments.

Black carbon: Black carbon is the sooty black material emitted with other air pollutants during incomplete combustion. It is a short-lived climate pollutant and a major component of particulate matter, meaning it impacts both the climate and air quality. Examples of black carbon sources include diesel engines, brick kilns, residential energy, forest fires and other sources that burn fossil fuels, biomass and waste. This report distinguishes between primary black carbon funding and secondary black carbon funding. Primary black carbon funding refers to projects where black carbon is an explicit objective. Secondary black carbon funding refers to funding for projects where black carbon reductions are expected to occur as a co-benefit, although black carbon reduction is not explicitly mentioned in the project description.

Climate adaptation finance: Finance committed to activities that reduce human or environmental vulnerability to the impacts of climate change and climate-related risks by maintaining or increasing adaptive capacity and resilience.

Climate mitigation finance: Finance committed to activities that: (a) reduce or avoid the emission of GHG emissions, including gases regulated by the Montreal Protocol; or (b) maintain or enhance GHG sinks and reservoirs.

Concessional finance: Concessional finance refers to debt or grants that are committed on more favourable terms than the market would offer. Such terms may be financial, such as lower interest rates, or non-financial, such as longer repayment options or the inclusion of guarantees.

Fossil fuel-prolonging funding: Finance committed to projects or interventions that: (a) involve the construction of assets or infrastructure that directly cause air pollution or (b) lead to the creation or promotion of air-polluting activities.

Funding with air quality co-benefits: Finance committed to projects where outdoor air quality improves as a co-benefit of the investment, even though the investment does not explicitly target air quality improvements in the project name or description. This includes projects that target indoor air quality but indirectly bring about improvements to outdoor air quality.

Indoor air pollution: This term refers to the presence of harmful pollutants within enclosed spaces without adequate ventilation, such as homes, workplaces, and

buildings. Sources of indoor air pollution include household cleaning products, mould, tobacco smoke, cooking and building. Prolonged exposure to indoor air pollutants can lead to health issues, including respiratory problems, allergies and other related ailments. Funding towards indoor air quality is included in the funding with air quality co-benefits category.

International development funders: Institutions including multilateral development banks, bilateral development agencies or governments that provide international funding to recipient countries, whether in the form of concessional or non-concessional loans and grants, for a range of development purposes, including air quality.

International development funding: Finance committed by international development funders, as defined above, for development purposes.

Multilateral development finance institutions: DFIs with multiple shareholder countries that direct financial flows internationally.

National development finance institutions: DFIs that are owned by a single country and direct finance flows domestically.

Official development assistance (ODA): Government development finance designed to promote the economic development and welfare of low- and middle-income countries. ODA may be provided bilaterally, from donor to recipient, or channelled through a multilateral development agency such as the United Nations or the World Bank. The Organisation for Economic Development and Co-operation (OECD) maintains a list of low- and middle-income countries. Only development finance directed to these countries counts as ODA.

Other official flows (OOF): Official financial transactions that do not meet ODA criteria. OOFs include: (a) grants to low- and middle-income countries for commercial purposes; (b) official bilateral transactions that aim to promote development but have a grant component of less than 25%; and (c) official bilateral transactions, however large the grant component, that primarily aim to facilitate exports.

Outdoor air quality funding: Finance committed to projects where improvements to outdoor/ ambient air quality are an explicit benefit and objective (usually stated in the project description). Projects can include those relating to the transport, energy and health sectors.

Short-lived climate pollutants (SLCPs): Also known as super pollutants, SLCPs are non-CO2 pollutants that contribute to global warming, cause local environmental degradation and harm human health. Examples include methane (CH4), black carbon, hydrofluorocarbons (HFCs), and tropospheric ozone (O3).

Total air quality funding: The combined term for “outdoor air quality funding” and “funding with air quality co-benefits”.

ABBREVIATIONS

ADB	Asian Development Bank
AfDB	African Development Bank
BII	British International Investment
BMZ	Germany's Federal Ministry for Economic Cooperation and Development
CCAC	Climate and Clean Air Coalition
CO2	Carbon dioxide
COP	Conference of the Parties of the United Nations Framework Convention on Climate Change
COVID-19	Coronavirus disease
DAC	Development Assistance Committee (of the Organisation for Economic Co-operation and Development)
DFI	Development finance institution
DRC	Democratic Republic of Congo
EBRD	European Bank for Reconstruction and Development
EU	European Union
FFP	Fossil fuel-prolonging
G20	Group of 20
GDP	Gross domestic product
GEF	Global Environment Facility
GHG	Greenhouse gas
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Agency for International Development)
HIC	High-income country
IDB	Inter-American Development Bank
IGP-HF	Indo-Gangetic Plain and Himalayan Foothills
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
KfW	German state-owned investment and development bank
LDC	Least developed country
MDB	Multilateral development bank
MIC	Middle-income country

NDC	Nationally Determined Contribution
NGO	Non-governmental organisation
ODA	Official development assistance
OECD	Organisation for Economic Development and Co-operation
OOF	Other Official Flows
OpenAQ	Open Air Quality
PM	Particulate matter
PM2.5	Particulate matter of 2.5 micrometres or less in diameter
SLCP	Short-lived climate pollutant
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
WHO	World Health Organization

HARVESTING LINDEN FLOWERS NEAR THE HEAT PUMP AND PHOTOVOLTAICS ON THE GARAGE ROOF.
CREDIT: DANIEL BALAKOV / ISTOCK

1. INTRODUCTION

Air pollution is one of the gravest environmental threats to human health worldwide,[12] being linked to diseases such as asthma, stroke, heart attack, cancer and dementia. It is especially lethal for babies and children, causing the deaths of nearly 2,000 children under the age of five each day.[13] This burden is not felt equally: about 95% of deaths attributable to air pollution occur in low-and middle-income countries.[14]

In addition to harming people's health, toxic air has a knock-on effect on their earnings and productivity, causing the loss of 1.2 billion work days each year.[15] In the report "Accelerating Access to Clean Air on a Livable Planet", the World Bank estimates that the economic costs of air pollution amount to between 4.7% and 6.5% of global global gross domestic product (GDP).[16]

The damage that air pollution causes to ecosystems and biodiversity can be equally severe. Air pollution can harm plants and trees through various mechanisms, including by creating acid rain and by depositing excess nutrients onto leaves and soils. Pollutants, such as tropospheric ozone, can subsequently reduce crop yields by up to 16%.[17] Rivers, lakes, and other water bodies are also vulnerable to the impacts of air pollution.[18] Wildfires, which are becoming more frequent and intense due to climate change, release lots of air pollutants, further diminishing biodiversity.[19]

Air pollution and climate change are closely intertwined. Up to 85% of all global air pollution comes from burning fossil fuels and biomass, which are also key sectors for greenhouse gas emissions. Some air pollutants are "super pollutants": short-lived climate pollutants (SLCPs) that are responsible for half of global temperature increases.[20] Super pollutants include black carbon, methane (a precursor to tropospheric ozone), and tropospheric ozone itself. By increasing the frequency and intensity of extreme weather events such as flooding, droughts, and heatwaves, super pollutants drive loss of economic, food and water security, whilst harming our health.[21] [22]

1.1. CHANGE IS POSSIBLE

The harmful health, economic and environmental impacts of air pollution can be slowed. In the United States clean air measures have been shown to improve people's health within weeks or months of implementation, through reductions in hospitalisations for asthma, strokes and heart attacks, coupled with fewer premature births.[23] These findings are corroborated by Economist Impact's Health Inclusivity Index, which highlights that meeting the World Health Organization's (WHO) Air Quality Guidelines would save $101 billion per year across the 40 countries studied, due to fewer premature deaths, lower healthcare costs and increased productivity.[24]

In terms of climate benefits, reducing super pollutants could slow the rate of global warming by up to 0.5°C by 2050.[25] Clean air measures also bring an economic dividend: the World Bank estimates that integrated clean air policies could yield up to $2.4 trillion by 2040 from averted mortality.[26]

Recent and anticipated reductions in official development assistance (ODA) could result in lost lives, stalled (and potentially reversed) progress on development,

and deepening inequality. In this context, funders should look to direct remaining funding towards projects that fight climate change while preventing the health and economic impacts of air pollution from worsening.

With minimal additional spending, funders can maximise the co-benefits of existing projects by better integrating air quality considerations at the project design stage. Global institutions such as WHO, the Asian Development Bank (ADB), the World Bank, and others are increasingly advocating for all funders to place air quality at the centre of health and climate strategies, and to adopt measurable targets to track progress.

A GOLDEN OPPORTUNITY FOR ACTION

At the 78th World Health Assembly in May 2025, governments endorsed the World Health Organization's (WHO) updated roadmap to tackle the health impacts of air pollution. A voluntary yet ambitious global target was established to halve premature deaths from anthropogenic air pollution by 2040.[27] The roadmap calls for strengthened cooperation across countries, cities, and regions, with a focus on equity and protecting vulnerable populations.

This political commitment is affordable and will bring substantive economic benefits. The World Bank estimated the global economic costs from ambient air pollution to be between 4.7% and 6.5% of global GDP in 2020. Their 2025 "Accelerating Access to Clean Air on a Livable Planet" report found that integrated policies—such as those that simultaneously promote clean energy, reduce greenhouse gas emissions, and cut air pollution—could generate economic benefits of up to $2.4 trillion by 2040.[28] In a world facing tight fiscal constraints, combining traditional decarbonisation packages with air quality-specific mitigation stands out as a high-impact investment: a way to align public health, climate resilience, and economic growth.

This shift comes at a time when the World Bank and other multilateral development banks (MDBs) are reshaping how global development finance is deployed. In line with calls by the G20 for reform, MDBs are working to boost their financing capacity, enhance joint action on climate change, strengthen country-level collaboration and co-financing, mobilise private sector funds, and improve development effectiveness and impact.[29] In this context, initiatives that pursue the WHO's 2040 target and make progress towards the WHO air quality guidelines would align well with MDBs' renewed focus on impactful financing.

1.2. ABOUT THIS REPORT

This report, The State of Global Air Quality Funding 2025, presents the global landscape of outdoor air quality funding, analyses international development funding flows, conducts a deep dive on black carbon financing, and draws insight from wider trends in development, climate, and fossil fuel finance. It aims to build transparency, evidence, and practical recommendations for donors, policymakers and civil society to support and accelerate progress on outdoor air quality financing making the case for clean air as a cornerstone of sustainable development.

SCOPE OF ANALYSIS

This report is the latest edition in a series of annual reports that began in 2020 to provide an in-depth analysis of the current state of global air quality funding. This year, for the first time, the report includes qualitative insights drawn from interviews with experts in air quality, climate finance and international development finance, to complement the desktop research and quantitative data for the period 2019 to 2023, which was obtained from Climate Policy Initiative (CPI). Together, these perspectives provide a comprehensive view of both the trends and the underlying drivers shaping air quality investment today.

TYPES OF DEVELOPMENT FUNDING ANALYSED

The entities that provided this funding include bilateral and multilateral development finance institutions (DFIs) and governments that provide international funding. The finance flows examined include both concessional or non-concessional loans, grants, and other instruments.[i]

Specifically, the international development funding flows examined included, but were not limited to:

- **Official development assistance**, which is government development finance designed to promote the economic development and welfare of low- and middle-income countries.[ii] ODA may be provided bilaterally, from donor to recipient, or channelled through a multilateral development agency such as the United Nations or the World Bank. The Organisation for Economic Development and Co-operation (OECD) maintains a list of low- and middle-income countries. Only development finance directed to these countries counts as ODA.
- **Other official flows (OOF)**, which are official financial transactions that do not meet ODA criteria.[iii] OOFs include: (a) grants to low- and middle-income countries for commercial purposes; (b) official bilateral transactions that aim to promote development but have a grant component of less than 25%; and (c) official bilateral transactions, however large the grant component, that primarily aim to facilitate exports.

i While the majority of this financing is provided to low- and middle-income economies, some development finance institutions provide funding to both high-income, and low- and middle-income economies.
ii See Net ODA database by the Organisation for Economic Co-operation and Development. Available at: **https://www.oecd.org/en/data/indicators/net-oda.html**
iii See Other financial flows database by the Organisation for Economic Co-operation and Development. Available at: **https://www.oecd.org/en/data/indicators/other-official-flows-oof.html**

- **Flows from other public development funders** that are not members of the Organisation for Economic Co-operation and Development's Development and Assistance Committee (OECD-DAC) or observers, particularly South-South flows (e.g. Islamic Development Bank).

When this report refers to "international development funding", it is referring to all types of funding listed above. When it refers to ODA, it is only examining the ODA portion of this funding.

Due to data limitations, the following funding modalities have been excluded from this report, their importance to air quality efforts notwithstanding:

- Domestic public spending for air quality
- Private sector funding
- Philanthropic funding (which will be covered in a separate Clean Air Fund report)[iv]
- Risk management instruments, due to actual disbursements under these mechanisms being dependent on uncertain future events.

CATEGORISATION OF DEVELOPMENT FUNDING FLOWS BY OBJECTIVE

This report analyses funding flows that have been classified based on the funding's primary objective, as summarised in Table 1.1. Broadly speaking, the funding flows analysed can be divided into funding that improves air quality ("total air quality funding") and funding that prolongs fossil fuels ("fossil fuel-prolonging funding", or FFP). Total air quality funding can, in turn, be divided into air quality funding for projects where outdoor air quality is an explicit objective ("outdoor air quality financing") and funding that results in improvements in outdoor air quality, even if these improvements are not explicit in the project name or description ("funding with air quality co-benefits"). Projects that aim to improve indoor air quality, but end up also improving outdoor air quality, are included in the latter definition of funding.

iv A separate report dedicated to philanthropic funding will be published in late 2025. Philanthropic funding flows are assessed independently because they often differ in scale and focus from institutional donor funding. Clean Air Fund recognises the vital role philanthropy can play in catalysing innovation, and directing funding to sectors or regions that may be overlooked by other donors. A dedicated report ensures these trends are explored in depth.

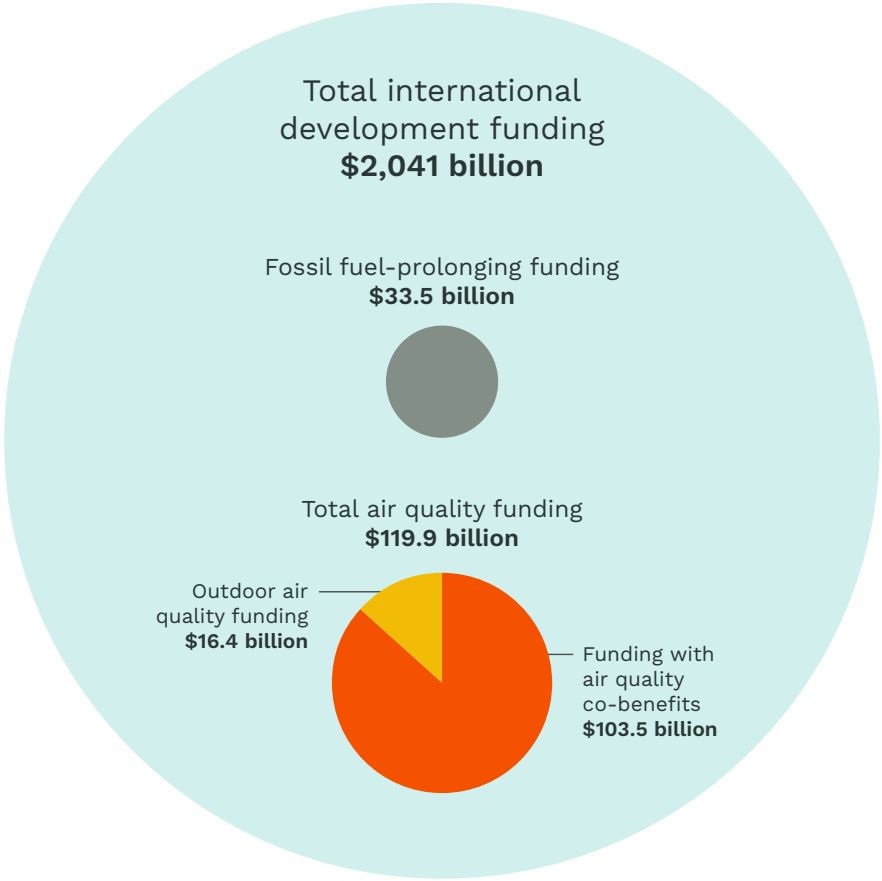
TABLE 1.1: DEFINITIONS OF TYPES OF FUNDING ANALYSED

Type of funding		Definition	Examples of projects
Total air quality funding	**Outdoor air quality funding**	Finance committed to projects where improvements to outdoor (ambient) air quality are an explicit benefit and objective, as mentioned in the project name or description.	• Air pollution prevention programmes, such as a multifaceted project to address air quality in a specific city by improving monitoring, implementing interventions and raising awareness. • Technical assistance to help a country develop an outdoor air pollution strategy.
	Funding with air quality co-benefits	Finance committed to projects where improvements to air quality (indoor or outdoor) are a co-benefit of the investment but are not explicitly mentioned in the project name or description. This also includes indoor air quality projects, which indirectly improve outdoor air quality.	• Electric-vehicle incentive programmes for commercial fleets. • Projects that promote alternative uses for crop residues to prevent agroresidue burning.
Fossil fuel-prolonging funding		Finance committed to projects involving the construction of assets and infrastructure that: (a) directly cause air pollution or (b) lead to the creation or promotion of air polluting activities.	• Development or expansion of a coal-fired power plant. • Airport expansion.

Note: Additional funding flows will also be discussed in this report. These include further sub-sets of 'total air quality funding', such as 'black carbon funding' and 'air quality and climate finance', which cut across both 'outdoor air quality funding' and 'funding with air quality co-benefits'. The report will also use overarching terms such as 'concessional finance'. These have not been included in Table 1.1 for ease of visualising the key definitions.

Projects that are explicitly designed with air quality in mind tend to deliver more sustained and equitable outcomes for air quality.[30] This report aims to develop the case for embedding air quality as a key consideration in funding decisions. It analyses who benefits from current air quality funding, who the main originators of air funding are, and how much development funding is channelled to air quality programming—whether to improve outdoor air quality, or where improvements in outdoor air quality are a co-benefit—versus initiatives that prolong the use of fossil fuels. Figure 1.1 depicts the different flows analysed in this report.

FIGURE 1.1: TOTAL AIR QUALITY FUNDING AND FOSSIL FUEL-PROLONGING FUNDING AS A SHARE OF INTERNATIONAL DEVELOPMENT FINANCE, 2019-2023



DATA SOURCES AND LIMITATIONS

This report analyses international development funding that flowed to projects related to outdoor air quality over the five years from 2019 to 2023 – the latest statistics available, given the lag in data availability.

Challenges involved with building air quality funding datasets include: (a) the difficulties associated with isolating air quality components from wider environmental or public health spending; (b) institutional disparities regarding how funding is reported; and (c) lack of standardised tracking and reporting of air quality finance from international development donors.

The accompanying **Methodology** report sets out the detailed approach taken to sourcing and processing data to manage these challenges, taking a leading approach to identifying and categorising global air quality finance flows. In summary, project data was sourced from development finance and international public climate finance databases. A keyword search was used to identify projects that address air quality (including as a co-benefit of climate mitigation or adaptation actions), and projects that prolong the use of fossil fuels. Due to improvements in the keywords applied and additional manual checks, data may show minor variations on previously published numbers for pre-2023 years.

2. TRENDS IN INTERNATIONAL DEVELOPMENT AND AIR QUALITY FINANCE

KEY FINDINGS

- Total air quality funding increased modestly from $31.8 billion in 2022 to $32.6 billion in 2023. This was driven solely by a rise in the funding with air quality co-benefits, which rose by 7% from $27.1 billion to $28.8 billion year-on-year.
- Outdoor air quality funding – that is, funding for projects with an explicit air quality objective – dropped by 20% from $4.7 billion to $3.7 billion over the same period.
- Outdoor air quality as a percentage of total international development funding has held steady at 1% for the 2019–2023 period.
- Fossil fuel-prolonging funding saw an 80% increase, growing from $5.3 billion in 2022 to $9.5 billion in 2023. As a result FFP funding was 2.5 times larger than outdoor air quality finance in 2023.

This section provides an overview of trends in official development assistance (ODA), total air quality funding, outdoor air quality funding, and funding with air quality co-benefits. It also provides detail on the scale of fossil fuel-prolonging (FFP) funding.

2.1. FUTURE IMPACTS OF CUTS TO OFFICIAL DEVELOPMENT ASSISTANCE

This report discusses the state of air quality funding between 2019 and 2023, the most recent year that data is available. However, while reading this report, it is important to consider the financial context of 2025, when the OECD projects a decline in ODA of between 9% and 17%[31] as key bilateral donors – including the US, Germany and France[32] – reduce their development budgets. These cuts will have a devastating impact, with the OECD predicting that the least developed countries (LDCs) will see a fall in net ODA of between 13% and 25%. Anticipated cuts to multilateral organisations may also trigger a second wave of funding decreases for vital services in the poorest countries.[33]

REDUCTIONS IN GLOBAL DEVELOPMENT FUNDING

In 2025, three of the top five bilateral donors for outdoor air quality funding in 2023 (namely Germany, the United States and France) announced reductions to their broader development budgets. Next to the United Kingdom, these donors

have traditionally been among the highest contributors to the multilateral system. If their multilateral budget allocations are reduced, this will put air quality funding at additional risk.

The United States' termination of the United States Agency for International Development (USAID) has created a seismic shift in the global development landscape. For decades, USAID has been one of the largest bilateral development agencies, contributing 29% ($64.7 billion) of total ODA in 2023.[34] The sudden withdrawal of resources is reverberating across the broader ecosystem of international development. Other donors are now facing pressure to step in and fill gaps in critical areas such as global health, education, and inclusive development. This recalibration of donor priorities may indirectly affect both climate and air quality finance as limited resources are redirected to more pressing needs.

The United States' funding reductions are extending beyond USAID to include other research funding and institutions such as NASA (the US National Aeronautics and Space Administration) and the National Oceanic and Atmospheric Administration, both of which play a critical role in global air quality monitoring.

As this report shows (see Figure 3.2), multilateral development banks (MDBs) provide the majority of global air quality funding. People interviewed for this report indicated that, although MDBs raise billions of dollars through bond markets, investor confidence relies to a disproportionate degree on United States backing. A United States retreat from concessional funding reserves at other MDBs could make development finance from MDBs more expensive for recipient countries. With such countries struggling to pay debt because of pressure on their export revenues and currencies, their fiscal constraints will worsen.[35] That will limit their ability to fund domestic needs in education, health and social services as well as air quality.

REDUCTIONS IN HEALTH FUNDING

Despite a modest increase in overall ODA, many key sectors already saw substantive reductions in ODA in 2023. Health, in particular, was cut by 47% compared to 2022.[36] Air quality, despite its severe health and economic impacts in low- and middle-income countries, risks being squeezed out even further due to these cuts.

The withdrawal of the US from the World Health Organisation, removing around 18% of the organisation's budget, will likely also constrain the WHO's ability to play a leading role on air quality action.

POSITIVE DEVELOPMENTS IN THE ODA LANDSCAPE

Despite these challenges, there is some positive news from OECD donors. Japan, Korea, Ireland and Spain have increased their ODA budgets. Both Japan and Korea are in the top 10 of air quality funders.

The European Union (EU) is also proposing to deepen its commitment to development funding. In June 2025 it proposed to increase funding for Global Europe (a funding instrument for the EU's external actions) from €92.3 billion ($108.1 billion) to €200 billion ($234.2 billion)[37] for its upcoming 2028–2034 Multiannual Financial Framework. The European Union has set a strong example on air quality within the EU27 and has a significant opportunity to ensure their strong air quality leadership resonates through their international development spending in the next MFF. While the increased volume of funding available under the proposed MFF is welcomed, changes proposed by the European Commission on how funding will be distributed raise concerns about future aid efficiency and effectiveness and need to be resolved.[38]

MORNING COMMUTERS ON THE PLATFORM AT MANGGARAI TRAIN STATION IN JAKARTA, INDONESIA. CREDIT: AJI STYAWAN / CLIMATE VISUALS

2.2. TRENDS IN TOTAL AIR QUALITY FUNDING UP TO 2023

Between 2019 and 2023, before the development funding shocks of 2025, total air quality funding accounted for 5.9% of international development funding, totalling $119.9 billion over the five-year period. Though total air quality funding has increased for three years in a row, the growth has started to slow, with only a slight 3% increase from 2022 to 2023. The higher rates of growth in 2021 and 2022 may be accounted for by recovery from the COVID-19 funding slumps. (Figure 2.1).

FIGURE 2.1: TOTAL AIR QUALITY FUNDING AS A PROPORTION OF INTERNATIONAL DEVELOPMENT FUNDING, 2019–2023

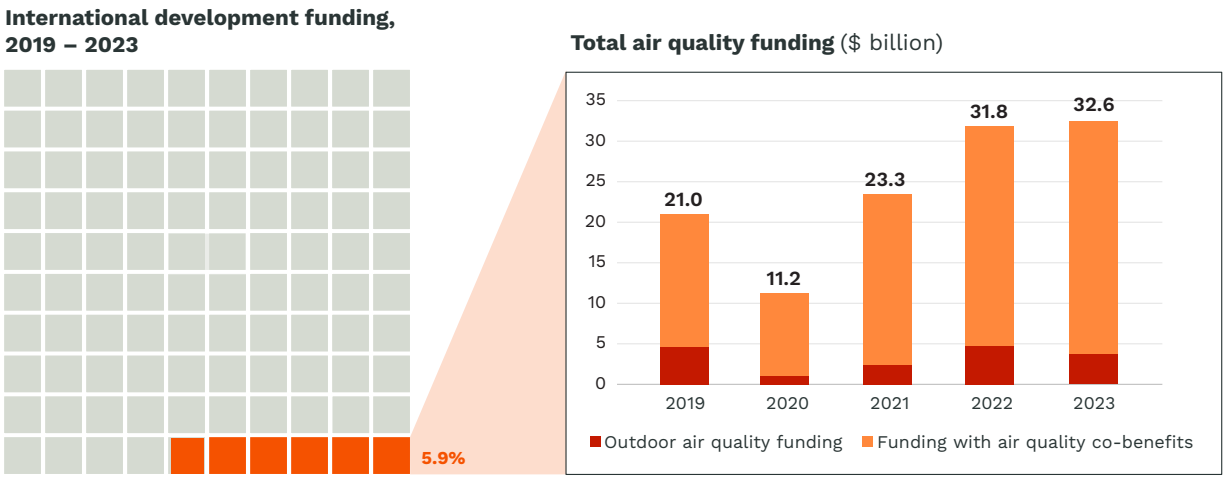


Table 2.1 provides a breakdown of total air quality funding between 2019 and 2023, broken down by funding category (as described in Section 1.2), which the following sections will zoom in on.

TABLE 2.1: TOTAL AIR QUALITY FUNDING, WITH BREAKDOWN BY AIR QUALITY OBJECTIVE, 2019–2023 ($ BILLION)

Funding Category	2019	2020	2021	2022	2023	Total 2019-2023
Outdoor air quality funding	4.6	1.0	2.4	4.7	3.7	16.4
Funding with air quality co-benefits	16.4	10.2	21.0	27.1	28.8	103.5
Total air quality funding	21.0	11.2	23.3	31.8	32.6	119.9

2.3. TRENDS IN OUTDOOR AIR QUALITY FUNDING UP TO 2023

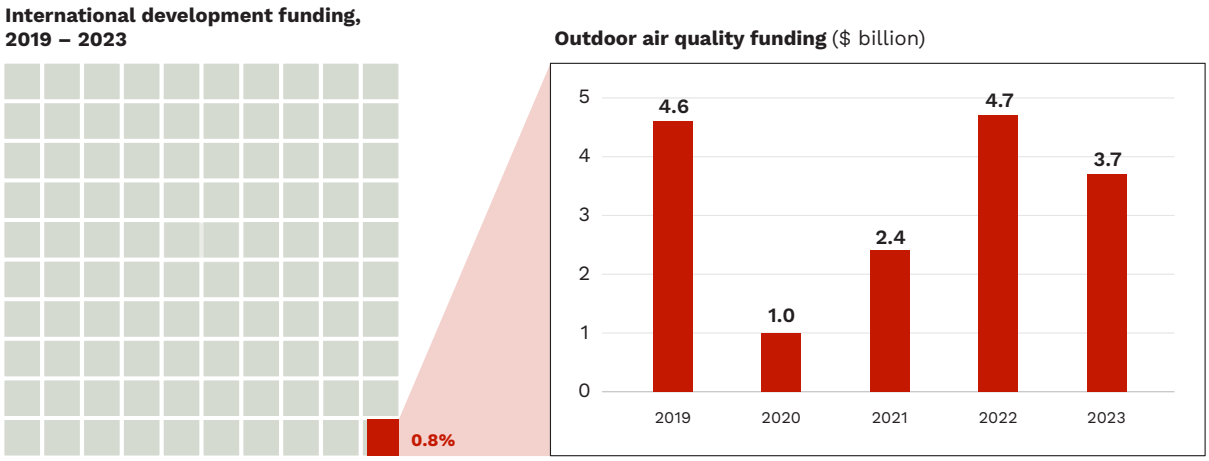
Only 1% ($16.4bn) of international development finance went to outdoor air quality projects between 2019-2023 (see Figure 2.2). While the share of outdoor air quality funding relative to total air quality funding has remained fairly constant since 2020 it is concerning that outdoor air quality funding decreased by 20%, from $4.7 billion to $3.7 billion, between 2022 and 2023 (Figure 2.2).

Overall, funding growth is slowing. Looking at the five-year total, there is only a marginal rise in outdoor air quality funding, which increased by 4%, from $15.8 billion for the 2018 to 2022 period to $16.4 billion for the 2019 to 2023 period.

Importantly, the funding going to outdoor air quality projects is substantially less than the $13.9 billion per year the World Bank estimates will be required by 2040 to halve the global population exposed to outdoor air pollution concentrations of above 25 micrograms per cubic metre (μg/m³).[39v]

v It should be noted that the $13.9 billion covers all sources of finance, including national spending and all economies, including the developed world.

FIGURE 2.2: OUTDOOR AIR QUALITY FUNDING AS A PROPORTION OF INTERNATIONAL DEVELOPMENT FUNDING, 2019–2023



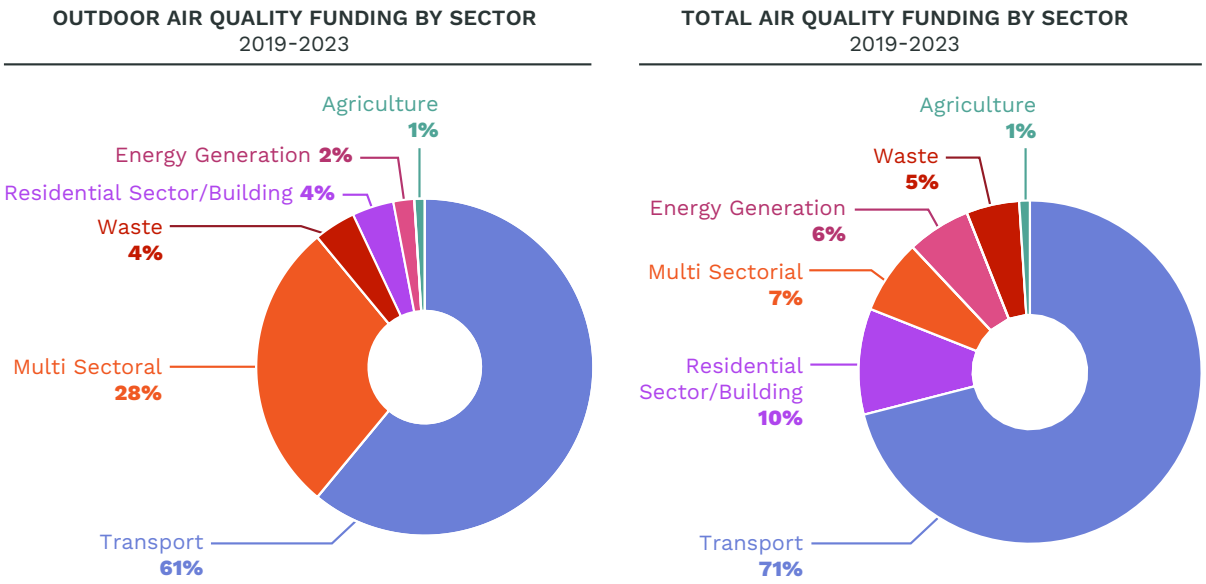
DOMINANT SECTORS IN OUTDOOR AIR QUALITY FUNDING

Between 2019 and 2023, outdoor air quality funding was overwhelmingly associated with transport-sector investments, accounting for 61% of funding, while the next-largest sector, multisectoral projects, received 28%.[vi] Waste projects received 4% of funding, and agriculture only 1%.

While it is encouraging to see significant investment in transport, given its substantial contribution to air pollution, it is important that these investments should not come at the expense of other critical sectors. Tackling all sources of air pollution – including construction; smoke from wildfires, which are exacerbated by climate change; the burning of agricultural and solid waste – will be crucial for improving global air quality. For this reason, the 28% of funding that is for "multisectoral" projects is also of interest to this analysis: outdoor air quality projects that either straddle several sectors or apply to sectors that are beyond those captured in Figure 2.3 provide a positive indication that action is being taken in a distributed manner.

vi "Multisectoral" includes both projects that straddle several sectors and projects that do not clearly belong to any of the sectors analysed.

FIGURE 2.3: TOTAL AND OUTDOOR AIR QUALITY FUNDING BY SECTOR, 2019–2023



2.4. TRENDS IN FUNDING WITH AIR QUALITY AS A CO-BENEFIT UP TO 2023

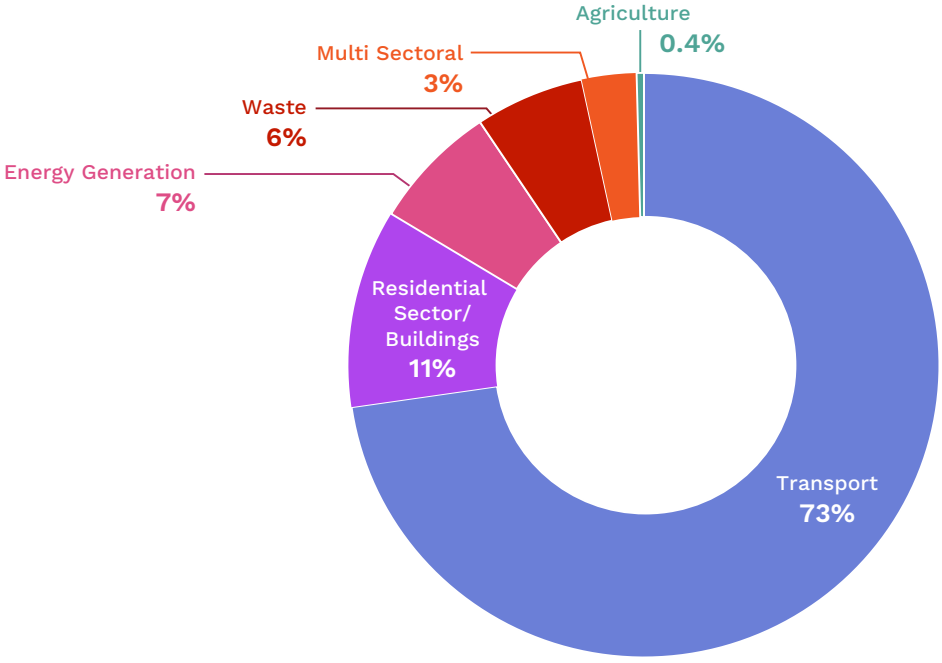
Total air quality funding continues to be dominated by funding for projects with air quality as a co-benefit. Funding for projects delivering air quality as a co-benefit increased by 7% between 2022 and 2023, from $27.1 billion to $28.8 billion (Table 2.1).

Within this category, transport was the sector that attracted the largest portion of funding (73%), followed by the residential/buildings sector (11%) and energy generation (7%) (Figure 2.4). It is worth noting that the residential sector and energy generation sectors were more prominent in the funding profile of projects with air quality as a co-benefit, compared with the profile of dedicated outdoor air quality projects, where transport-focused air quality projects were followed, after a large margin, by multisectoral, waste and residential outdoor air projects.

Some of the international development funders interviewed for this report indicated that their portfolios are evolving to re-define air quality and incorporate it across a wider range of sectors and investments. Moreover, several funders emphasised that they are actively seeking ways to mainstream air quality considerations into other areas of their portfolios, rather than treating it as a standalone issue. The more explicit integration of air quality across sectoral investments could help to improve the quality and impact of funding on air pollution.

Even in the context of vastly reduced development finance, current trends in financing with air quality as a co-benefit indicate that there are meaningful opportunities to advance the air quality agenda by making smarter use of existing funding. Projects explicitly designed with air quality in mind also tend to deliver more sustained and equitable outcomes.[40] By explicitly integrating air quality considerations into the design of projects across sectors, funders can unlock air quality co-benefits without significant additional spending, making existing finance go further.

FIGURE 2.4: FUNDING WITH AIR QUALITY AS A CO-BENEFIT, BY SECTOR, 2019–2023

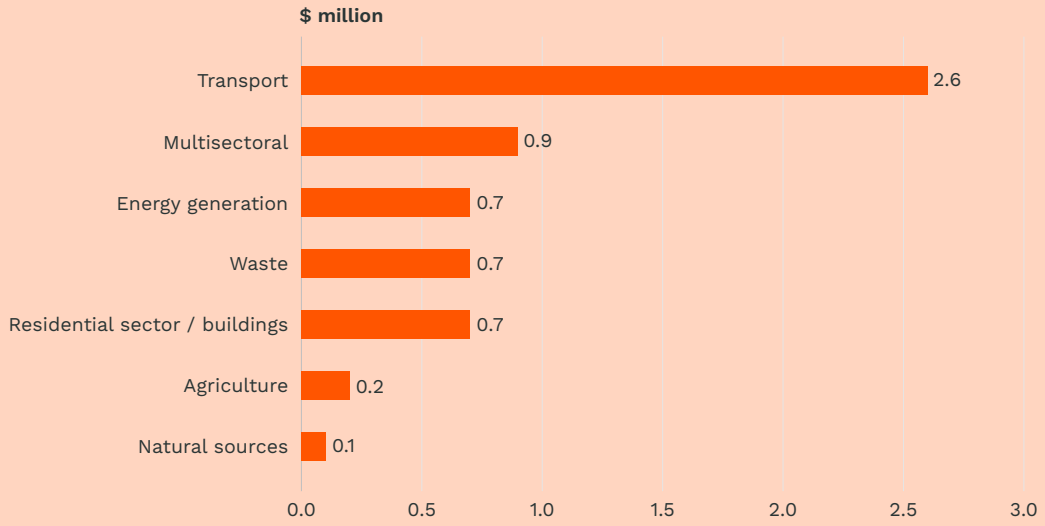


AIR QUALITY SAMPLING STATION AT THE COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH CAMPUS IN PRETORIA, SOUTH AFRICA. CREDIT: GULSHAN KHAN / CLIMATE VISUALS

EXPLAINING THE DOMINANCE OF TRANSPORT PROJECTS

Transport's continued dominance across both funding categories can be explained by the relatively large average project size for the sector, compared with projects in other sectors (see Figure B1). The 25 largest-value projects tracked since the start of The State of Global Air Quality Funding Report analysis of 2015 data were all transport projects with a budget of between $571 million and $4.5 billion. Moreover, transport projects make up 41% of the total number of projects. Combined, these two factors contribute to transport projects attracting more than 70% of both outdoor air quality funding and funding of projects with air quality as a co-benefit.

FIGURE B1: AVERAGE PROJECT SIZE BY SECTOR ACROSS TOTAL AIR QUALITY FUNDING, 2019–2023



AIR QUALITY AS A HEALTH INVESTMENT: SAVING LIVES, REDUCING COSTS AND BOOSTING PRODUCTIVITY

Exposure to polluted air triggers and exacerbates many chronic health conditions, including asthma, heart disease, stroke, chronic obstructive pulmonary disease, type two diabetes, Alzheimer's disease and dementia.[41] The International Agency for Research on Cancer has classified air pollution as a leading cause of cancer.[42] Exposure to polluted air contributes significantly to the global disease burden and poor development outcomes, which – for instance – limits opportunities for young children to attend school, can keep people trapped in poverty due to out-of-pocket healthcare costs and reduces productivity of businesses and economies.[43] Reducing air pollution as recommended in the World Health Organization's (WHO) air quality guidelines could prevent up to 4.5 million deaths annually – a crucial opportunity, given that air pollution contributes to 8.1 million premature deaths every year.[44] The Economist Impact's Health Inclusivity Index highlights that meeting the WHO air quality guidelines could save $101 billion per year across the 40 countries studied due to fewer premature deaths, lower healthcare costs and increased productivity.[45]

In the United States, the Environmental Protection Agency previously estimated that air quality regulations throughout 1990 to 2020 would cost approximately $65 billion but deliver benefits of about $2 trillion, primarily through improved health and worker productivity.[46] It is estimated that immediate action across just six major cities in Africa – which are increasingly impacted by worsening air pollution – could save $19 billion and 109,000 lives by 2040 and reduce their greenhouse gas emissions by up to 18% between 2023–2040.[47] For funders, investing in cleaner air is not just a health necessity – it is an equitable strategy with long-term environmental and economic returns for developing economies.

Globally, the health sector received one of the largest shares of official development assistance in 2023.[48] Given the benefits of cleaner air for health, funders have a valuable opportunity to fund pollution abatement to reduce pressures and costs on health services. In addition, health projects could address air pollution through better design of healthcare infrastructure and treatment and screening programmes.

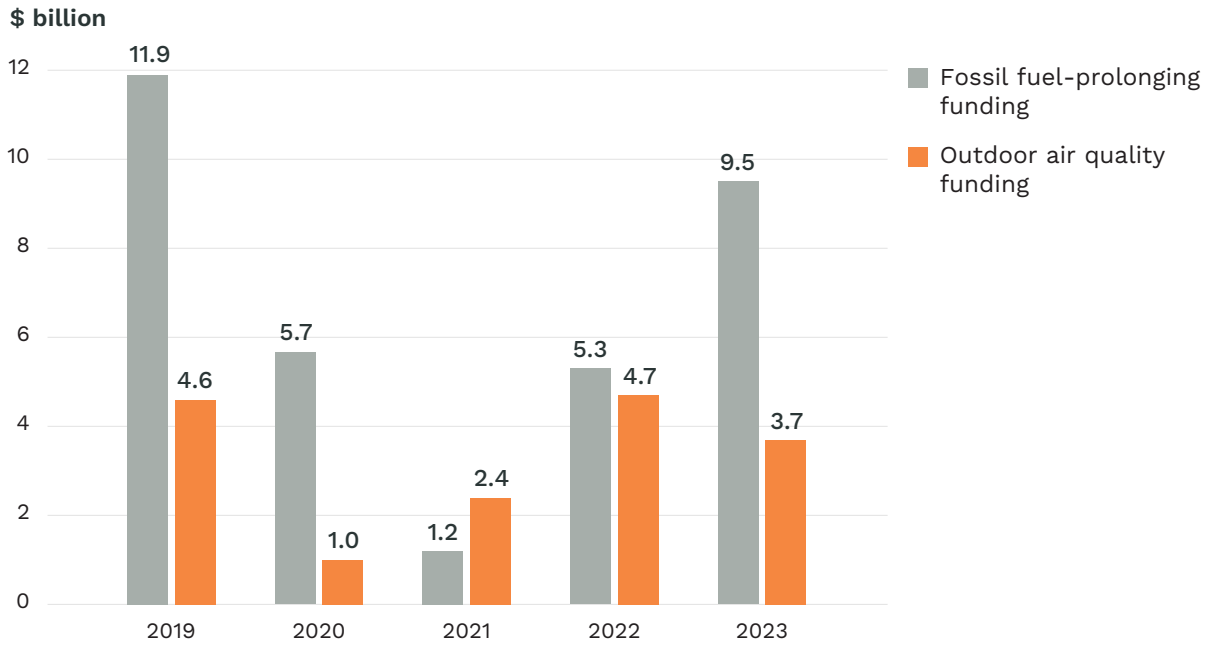
2.5. TRENDS IN FOSSIL FUEL-PROLONGING FUNDING UP TO 2023

About 85% of global air pollution comes from burning fossil fuels or biomass, and fossil fuel emissions are responsible for more than half of the 8.3 million annual deaths caused by outdoor air pollution globally.[49,50,51] Yet our analysis shows that, in 2023, fossil fuel-prolonging (FFP) projects received 2.5 times more international development finance than outdoor air quality projects (Figure 2.5).[vii] FFP funding also increased by 80%, from $5.3 billion in 2022 to $9.5 billion in 2023. This stands in stark comparison to outdoor air quality funding which, as already highlighted, declined by 20%, from $4.7 billion in 2022 to $3.7 billion in 2023 (Figure 2.5).

Many countries with high pollution levels receive more FFP funding than total air quality funding. Notably, in 2023 Bangladesh, the leading recipient of FFP between 2019 and 2023 (Table 2.2), received $1.1 billion more in FFP funding than total air quality funding, despite having the world's highest annual mean concentrations of PM2.5 in 2022.

It seems counterproductive to finance both FFP projects and air quality projects, because any air quality benefits that result will be at least partly counteracted by increased air pollution from fossil fuel sources. However, the data shows this happening with some donors. For example, the Japan International Cooperation Agency (JICA) scores highly as a funder for total air quality funding, but in recent years also been responsible for significant FFP investments, including the "Matarbari Ultra Super Critical Coal-Fired Power Project" in Bangladesh,[52] which represented 56% of Bangladesh's total FFP finance in 2023.

FIGURE 2.5: ANNUAL INTERNATIONAL DEVELOPMENT FUNDING FOR FOSSIL FUEL-PROLONGING PROJECTS VERSUS OUTDOOR AIR QUALITY PROJECTS, 2019–2023



vii The fossil fuel-prolonging sectors included in our analysis are energy systems, transport and industry.

TABLE 2.2: TOP 5 RECIPIENT COUNTRIES OF FOSSIL FUEL-PROLONGING FINANCE, 2019–2023

Rank	Country	Total FFP funding ($ billion)	Share of total FFP funding (%)
1	Bangladesh	6.32	19
2	Pakistan	2.61	8
3	Uzbekistan	2.57	8
4	Egypt	2.56	8
5	Iraq	2.46	7

MAN WITH DISABILITY ON ELECTRIC WHEELCHAIR LOOKING AT TRAIN TIMETABLE, SLOVENIA. CREDIT: 24K-PRODUCTION / ISTOCK

3. MAIN RECIPIENTS OF AIR QUALITY FUNDING

KEY FINDINGS

- Between 2019 and 2023, most outdoor air quality financing was concentrated in just three countries – the Philippines, Bangladesh, and China – which together accounted for 65% of this funding category.
- Seven of the 10 countries with the world's highest air pollution levels received less than $1 per capita of total air quality financing in 2023.
- Only two of the 10 countries with the highest PM2.5 concentrations in the world –Bangladesh and India – were among the world's top 10 recipients of total air quality funding.
- Between 2022 and 2023, there was a 69% year-on-year decline in outdoor air quality funding flowing to Africa.
- Sub-Saharan Africa received less than 1% of outdoor air quality funding in 2023.

This section provides an overview of the top 10 recipients of air quality funding, as well as a qualitative assessment of challenges and opportunities for low- and middle-income countries to access air quality funding.

3.1. TOP RECIPIENTS OF TOTAL AIR QUALITY FUNDING

Total air quality funding exhibited a broader geographic distribution than outdoor air quality funding over the 2019–2023 period. The top 3 recipients – India, the Philippines and Egypt – together captured a third of total flows (Table 3.1), compared with 65% for the top three for outdoor air quality funding (the Philippines, Bangladesh and China) (Table 3.2). Nevertheless, a relatively small number of countries still received a substantial share of total air quality funding. India led the rankings, receiving 16% of total air quality funding, followed by the Philippines with 11%. Bangladesh, which received the third-largest share of total air quality funding in 2018–2022, was inched out by Egypt, which claimed third spot in the 2019–2023 rankings.

TABLE 3.1: TOP 10 COUNTRIES RECEIVING TOTAL AIR QUALITY FUNDING, 2019–2023[viii]

Ranking	2018–2022 ranking	Country	Total air quality funding 2019 – 2023 ($ billion)
1	1	India	19.8
2	2	Philippines	13.7
3	6	Egypt	7.5
4	3	Bangladesh	7.2
5	5	China	4.7
6	7	Turkey	3.8
7	8	Serbia	3.4
8	10	Argentina	2.1
9	13	Costa Rica	2.0
10	9	Brazil	2.0

The funding flows directed to the top recipients were consistently driven by large numbers of projects, suggesting sustained interest across a wide array of individual interventions. India, in particular, attracted funding for 198 projects in 2019–2023, 105 more than any other country. While projects varied widely in funding size and consistency, the number of projects is one potential indicator of a country's stability as a funding priority.

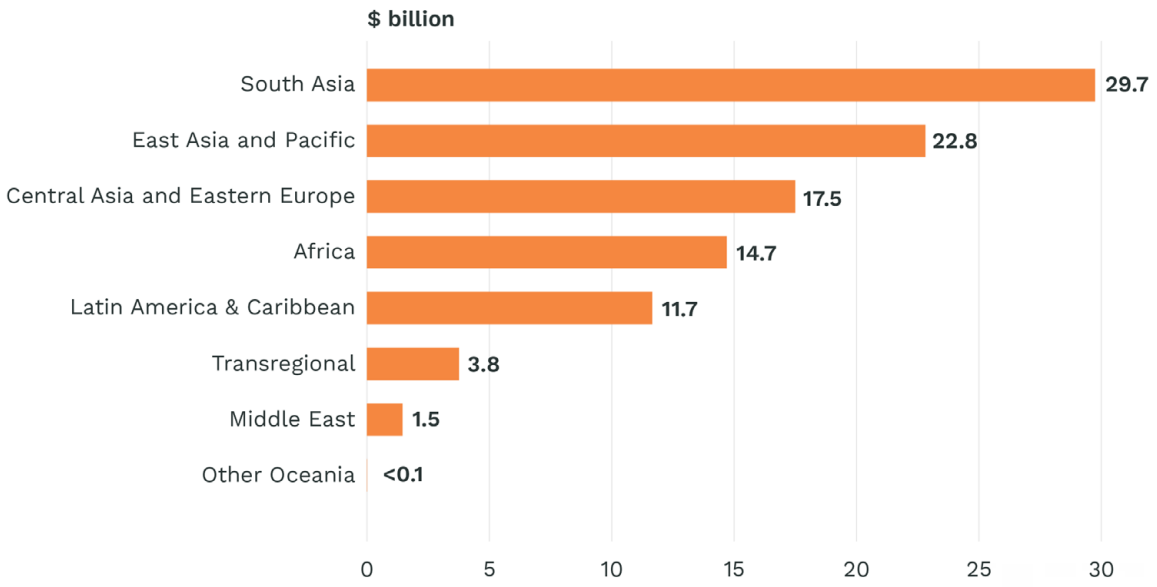
REGIONAL RANKINGS

Asian countries remained the largest recipients of total air quality financing in the 2019–2023 period, with 58% of total air quality funding being committed to South Asia, East Asia and the Pacific, and Central Asia and Eastern Europe (Figure 3.1).[ix] While these Asian regions all remained in the top three in the 2019–2023 period, slight shifts in rankings suggest that donors' geographic focus within Asia could be evolving.

South Asia grew as a donor priority in 2023, while funding committed to East Asia and the Pacific decreased. South Asia gained $4.9 billion from 2022 to 2023, rising to first position and receiving 31% of total air quality funding in 2023. In the same period, funding to East Asia and the Pacific fell by $1.7 billion, bringing the region to third place, in receipt of a 16% share. Increases of flows to South Asia suggests that clean air is a growing and demonstrable priority for international donors in the region. The recent launch of large-scale programmes (see **Case Study: The World Banks regional airshed approach to the Indo-Gangetic Plain and Himalayan Foothills**) is further proof of this.

viii Funding to Western Europe is not considered here to maintain focus on funding flows to emerging and developing countries.
ix See the Methodology report for more information on how the regions are defined. Funding to Western Europe is not considered here to maintain focus on funding flows to emerging and developing countries.

FIGURE 3.1 TOTAL OVERALL AIR QUALITY FUNDING BY REGION, 2019-2023



3.2. TOP RECIPIENTS OF OUTDOOR AIR QUALITY FUNDING

The top 10 recipients of outdoor air quality financing remained the same between 2018–2022 and 2019–2023, with only India and Mongolia swapping places (Table 3.2). This points to a high level of continuity in donors' geographic funding priorities for outdoor air quality funding.

TABLE 3.2: TOP 10 RECIPIENT COUNTRIES OF OUTDOOR AIR QUALITY FUNDING, 2019–2023

Ranking	2018–2022 ranking	Country	Outdoor air quality funding 2019 – 2023 ($ billion)
1	1	Philippines	5.2
2	2	Bangladesh	3.0
3	3	China	2.5
4	6	India	1.2
5	5	Egypt	0.9
6	4	Mongolia	0.7
7	7	Pakistan	0.4
8	8	Uzbekistan	0.2
9	9	Kazakhstan	0.2
10	10	Cambodia	0.1

In 2019 to 2023, the majority of outdoor air quality financing was concentrated in just three countries: the Philippines, Bangladesh, and China, which together accounted for 65%. Each held their position as one of the top 3 recipients from 2018 to 2022, highlighting their sustained relative prioritisation by funders.

However, these countries were also subject to annual fluctuations, with all three seeing a decline in outdoor air quality funding from 2022 to 2023.

All the top 10 recipient countries, apart from Egypt, are "developing member countries" of the Asian Development Bank.[53] meaning they are each eligible to receive ADB funding. Given ADB's strong record of funding air quality projects, this shows that a targeted air quality approach by a financial institution can make a significant difference in the funding received by focus countries.

CASE STUDY: ACCESSING INTERNATIONAL FINANCE FOR OUTDOOR AIR QUALITY IN THE PHILIPPINES

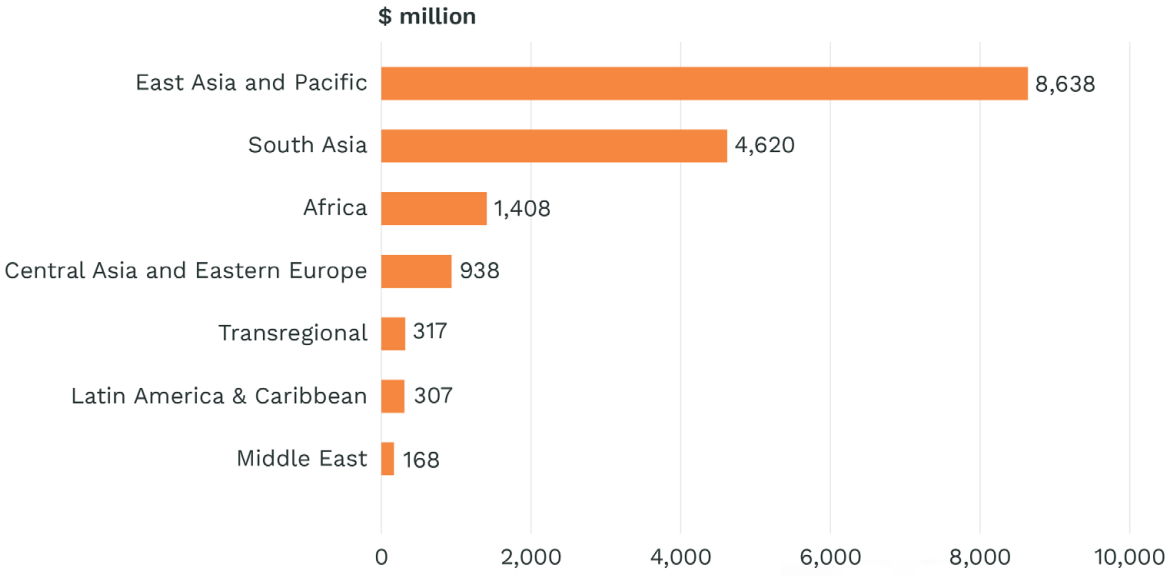
In 2021, air pollution accounted for nearly 11% of all deaths in the Philippines. Outdoor particulate matter (PM2.5) was the country's second leading risk factor for death, with 30% of these deaths occurring in children under five. Key pollution sources include industry (17.1%), residential (16.1%), agriculture (13.6%), energy (9.8%) and anthropogenic dust (3.4%).[54]

Between 2019–2023, the Philippines received 32% ($5.2 billion) of outdoor air quality funding worldwide – $2.2 billion more than Bangladesh, the second-highest recipient. The vast majority of this funding came from the Japan International Cooperation Agency (81%) and the Asian Development Bank (19%). By 2023, the Philippines received 47% ($1.7 billion) of global outdoor air quality funding and were one of the few countries that received primary black carbon funding. This investment reflects air pollution's increasing prominence on the country's political agenda. The Clean Air Act of 1999 established a national air pollution management programme.[55] Building on this, the Department of Environment and Natural Resources developed the Philippine Short-Lived Climate Pollutants National Action Plan and Methane Roadmap through a multi-year project funded by the Climate and Clean Air Coalition and supported by Clean Air Asia and the Institute for Global Environment Strategies.[56] Air quality is also increasingly considered a health and climate priority in the country's National Environmental Health Action Plan, as well as with the Department of Health recently establishing a Climate and Health Office to strengthen coordination and integrate air quality objectives into cross-sector infrastructure strategies.

REGIONAL RANKINGS

The rankings of regional recipients of outdoor air quality mostly held steady between the 2018–2022 and 2019–2023 periods, with the exception of the Middle East and Latin America changing places. The 2019–2023 leaderboard highlights the uneven distribution of outdoor air quality financing across the globe. As in previous years, East Asia and the Pacific received the majority of global outdoor air quality financing (53%) (Figure 3.2).

FIGURE 3.2. OUTDOOR AIR QUALITY FUNDING BY RECIPIENT REGION, 2019–2023



Although the whole of Africa is ranked as third highest recipient of outdoor air quality funding, this picture is skewed by just one country, Egypt, which received 5% of outdoor air quality funding between 2019 and 2023. Looking more closely, the African funding landscape is facing significant challenges. Between 2022 and 2023, outdoor air quality funding to the continent declined by 69% year-on-year, from $519 million to $161 million.

When looking at sub-Saharan Africa alone, the picture is bleak. The sub-region saw a staggering 91% decrease in outdoor air quality funding, from $129 million in 2022 to $12 million in 2023 – equivalent to less than 1% of global outdoor air quality funding. Given the many co-benefits associated with air quality investment, this represents a missed opportunity to align air quality funding with broader development objectives in relation to health, energy and climate. Interviews with funders found that the concerning lack of funding of Africa was, in part, due to other sectoral priorities taking precedent within the region, and Asia being seen as a larger polluter, and therefore prioritised for air pollution funding.

CASE STUDY: ACHIEVING GREATER AIR QUALITY AND A JUST ENERGY TRANSITION THROUGH THE TRANSPORT SECTOR IN SOUTH AFRICA

Air pollution is the second-biggest threat to health in South Africa. In 2019, air pollution caused an estimated 25,800 premature deaths, 5-6% of all national fatalities. The economic cost is striking: pollution-related health issues lead to 30 million work absences and cost the economy $52 billion each year – about 14% of the country's gross domestic product.[57]

The country's commitment to reduce emissions is highlighted in its nationally determined contribution, while efforts to improve air quality are supported through national frameworks and mechanisms such as the Air Quality Act of 2004,[58] the state-mandated Air Quality Advisory Committee and the South African constitution.

The transport sector is South Africa's second-largest emitter of CO2, contributing more than 12% of the country's emissions.[59] Road transport alone accounts for nearly 90% of transport emissions, which could more than double by 2050 if unchecked.[60] The Just Energy Transition strategy focuses on addressing transport emissions, which is essential to achieving both air quality and climate goals. Other major mechanisms the government has introduced to reduce transport emissions include:

a. The Green Transport Strategy in 2018;

b. Carbon taxes introduced by the National Treasury in 2019;

c. The Electric Vehicle White Paper in 2023;[61] and

d. The Just Energy Transition Investment Plan (2023–2027).

A recent $6.3 million project co-financed by the Global Environment Facility (GEF), implemented by the United Nations Industrial Development Organization and executed by the South African National Energy Development Institute (SANEDI) aims to support the electrification of the transport sector. Early results appear promising: by 2023, South Africa's EV sales had increased by 182% since 2019.

The breakdown of financing illustrates how private investment can drive substantial scaling of projects. In this case with targeted investment by the GEF with GEF grant and in-kind expenditures totalling $200,000, the project amassed $4.3 million in private loans and equity investments. The remaining $1.8 million originated from government in-kind expenditures (including the Nelson Mandela University, the Department of Transport, SANEDI, Department of Mineral resources and Energy and the Department of Trade, Industry and Competition).

3.3. CHALLENGES LOW- AND MIDDLE-INCOME COUNTRIES FACE WHEN ACCESSING AIR QUALITY FUNDING

Seven out of the world's 10 most air-polluted countries received less than $1 per person in total air quality financing in 2023. Several of these countries, including Cameroon, the Democratic Republic of Congo (DRC) and Burundi, received almost no air quality funding per person, despite experiencing hazardous levels of pollution. Various interrelated factors contribute to this finding.

HIGH DEBT BURDEN

Debt is a significant barrier to tackling air pollution in the Global South. More than half of low-income countries assessed by the International Monetary Fund (IMF) and World Bank are at high risk of, or already in, debt distress, including 23 of the 50 most climate-vulnerable nations.

Low- and middle-income countries often face borrowing rates that are two to four times higher than the rates given to the US, and six to 12 times higher than Germany.[62] These costs of capital compromise governments' capacity to deliver essential public services, let alone measures to reduce air pollution; 3.3 billion people currently live in countries that spend more on repaying debt than on health or education.[63]

Prohibitively high costs of capital make it more challenging to secure sovereign debt to fund infrastructure and other projects, including those focused on air quality. This challenge is even more acute at the subnational government level in low- and middle-income countries, where there are limited public funds, rising debt levels, restrictive borrowing rules, and strong competition for limited national and donor resources.[64] Such conditions have prompted the United Nations to call for urgent debt relief that is grounded in realistic assessments of climate shock exposure.

Notably, both Burundi and Cameroon are classified by the World Bank as being at high risk of total debt distress, while the DRC is considered at moderate risk.[65] Currently, African countries spend about $130 billion on servicing debt each year, much of it on interest, diverting crucial funds away from essential domestic services and reducing the fiscal space needed to address pressing issues such as climate change and air pollution.[66] The debt burden outstrips incoming funds and widens the African continent's already large financing gap for the Sustainable Development Goals, which includes an annual shortfall of between $130 billion and $170 billion for infrastructure investments.[67]

CLIMATE RISK RATINGS

Seven out of the 10 countries listed in Table 3.3 – Bangladesh, Burundi, Cameroon, the DRC, Nepal, Pakistan and Rwanda – are highly ranked both in terms of financial vulnerability and in terms of climate risk on the Climate Finance Vulnerability Index. The index itself notes that there is an "inherent bias" towards the "incorporation of climate risk and vulnerability, as climate-vulnerable countries are perceived as high risk without an impartial investigation into their ability to repay debt in the future as a result of climate risks". It warns that these continual downgrades will lead to a negative spiral in terms of access to capital, further inhibiting public investments in climate mitigation and adaptation. Considering the share of funding received so far, we see air quality is no exception to this.

TABLE 3.3: TOTAL AIR QUALITY FUNDING FOR COUNTRIES WITH THE HIGHEST MEAN POPULATION-WEIGHTED CONCENTRATION OF PM2.5

Ranking	Country	Annual mean concentration of PM2.5 (2022)[68]	Total air quality funding per person (2023, $)[69]	Share of total air quality funding, (2023, %)
1	Bangladesh	54.17	9.51	5
2	India	41.39	5.55	24
3	Nepal	39.18	11.86	1
4	Qatar	39.16	<0.01	<1
5	Pakistan	38.90	0.73	1
6	DRC	34.71	0.02	<1
7	Burundi	34.04	0.02	<1
8	Rwanda	33.37	0.45	<1
9	Equatorial Guinea	32.87	N/A	N/A
10	Cameroon	32.58	0.01	<1%

Source: **Air Quality Life Index**

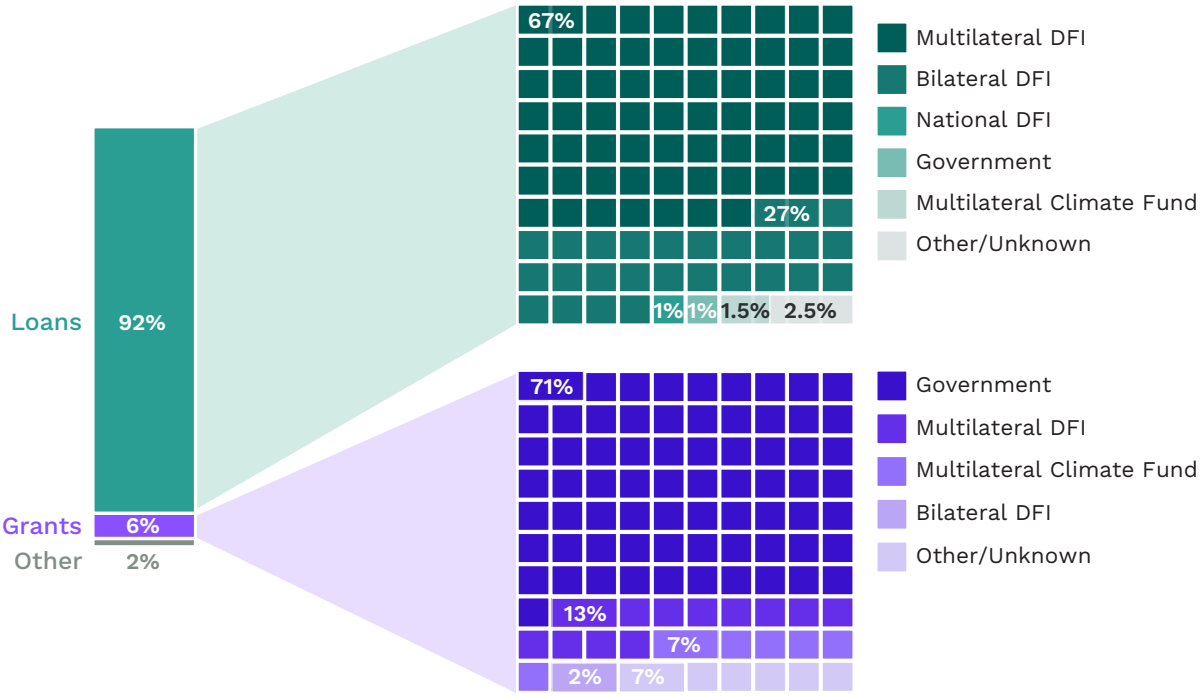
LIMITED ACCESS TO, AND AVAILABILITY OF, GRANTS

Between 2019 and 2023, 92% of total air quality funding took the form of loans, about a third of which were provided at concessional rates (Figure 3.3). 6% of total air quality funding came in the form of grants, which is unchanged from what was documented in the 2024 report.

Concessional finance did, however, see a significant increase, nearly doubling its share of total air quality funding from 32% in 2022 to 57% in 2023. The 2023 figure is, by some margin, the highest proportion of concessional finance seen between 2019 and 2023. Most of the increase in concessional air quality finance during the period was driven by low-cost loans – which are a tentatively positive development – with a few large projects from individual funders playing a role.[x]

x It is possible that this increase is due to year-on-year fluctuations (as opposed to a fundamental shift in the amount of concessional finance being committed for air quality), especially as changes of this magnitude have not been observed in previous years. If similar changes are seen in years following 2023 and a trend emerges, this would provide greater evidence of shifts in donors' concessional air quality funding.

FIGURE 3.3: TOTAL AIR QUALITY FUNDING BY INSTRUMENT AND FUNDER TYPE, 2019 - 2023



INSUFFICIENT TECHNICAL CAPACITY

Officials interviewed for this report mentioned time and technical capacity as two key constraints to accessing grant financing, pointing out that applying for air quality funding was more complex than applying for climate finance or biodiversity conservation grants due to air quality funding being more limited.

Some of the interviewees noted that upper middle-income countries (UMICs) often have larger teams who have experience with preparing bids that focus specifically on tackling air quality. Meanwhile, low- and middle-income countries (LMICs) that seek funding are often hindered by bureaucratic hurdles and the technical nature of such bids, suggesting that sharing technical capacity with in-country officials is crucial. Such technical capacity-sharing could focus on helping countries develop baseline data and evaluate alternative pathways to reduce air pollution.

UNCERTAINTY IN THE AIR QUALITY FINANCING SECTOR

Lack of awareness about where to source dedicated air quality funding and broader uncertainty in the funding sector discourages countries from committing to air quality targets or pledges, according to one interviewee. This highlights the need for international funders to create a supportive environment for countries who show interest to act on air pollution, through both direct funding and through highlighting the potential to embed air quality outcomes into broader development and climate funding bids.

WHY NATIONALLY DETERMINED CONTRIBUTIONS ARE CRITICAL TO SUPPORT COUNTRIES TO ATTRACT FINANCING FOR AIR QUALITY AND SUPER POLLUTANT ACTION

Under the Paris Agreement, countries need to submit an updated national climate action plan, or nationally determined contribution (NDC), every five years. The third round of NDCs (NDC 3.0) were due in September 2025, although some countries are expected to submit later. Governments are increasingly aiming to produce 'investable' NDCs, and using these to highlight priorities for climate finance and investment, such as through country platforms.

Integrating air quality and black carbon, alongside other super pollutants, into NDCs can help governments to demonstrate political commitment and demand for finance for projects that tackle air quality and super pollutants. Moreover, articulating the health co-benefits of reduced air pollution, and resultant economic savings, can help to make the case for investment in projects stemming from NDCs.

In the previous round of NDCs (in 2022), 164 of the 170 NDCs refer to air quality to some extent,[70] but only 16% of the NDCs submitted included standalone targets, measures or policies to reduce air pollution. Ghana's NDC 1.0 illustrates a joined-up approach to air quality and climate change. Countries such as Colombia, Côte d'Ivoire and Mexico have integrated standalone black carbon reduction targets into their NDC 2.0. In the latest round of NDCs, countries such as Cambodia and Nepal have newly or further integrated air quality and black carbon considerations.

To address super pollutants, countries can integrate methane emissions reductions by setting an economy-wide greenhouse gas emissions reduction target while setting an ambitious standalone target for black carbon. These should complement existing efforts, be quantified as much as possible, and include details for implementation, to support with financing arrangements. For instance, NDCs can be made more comprehensive through targets and plans for different high-emitting sectors. For air pollution and black carbon, this might include phasing out high-emitting diesel vehicles and introducing electric vehicles or supporting the shift from kerosene to cleaner fuels in households.[71]

NDCs offer countries an opportunity to commit to integrated action on air pollution and climate change, and attract finance for projects with air quality and health co-benefits.

3.4. OPPORTUNITIES FOR LOW- AND MIDDLE-INCOME COUNTRIES TO ACCESS AIR QUALITY FUNDING

ADVOCATE FOR A MORE EQUITABLE SPREAD OF AIR QUALITY FUNDING

Countries suffering some of the worst air pollution levels are often those least well positioned to access funding for air quality solutions. As already noted, many low- and middle-income countries are navigating increasingly complicated fiscal environments due to declining levels of ODA and persistent sovereign debt in the context of climate vulnerability. Poor air quality further exacerbates these challenges by undermining health and economic productivity, constraining the mobilisation of domestic revenue. Sub-Saharan Africa, for example, suffers from some of the world's most severe air pollution but receives disproportionately low (and declining) levels of funding. In 2019, toxic air caused 1.1 million deaths across Africa, claiming more lives than tobacco, alcohol, motor vehicle accidents and unsafe water combined.[72] With the continent experiencing annual average urban growth rates of 2.5% between 2000 and 2015[73,74,75] – the fastest rate of urbanisation in the world, which brings with it an increase in traffic congestion and higher electricity demand – these challenges will likely intensify.[76]

SET CLEAR DOMESTIC PRIORITIES

Countries that have established national policies and practices to improve air quality are better able to attract air quality financing (see **Case Study: Accessing international finance for outdoor air quality in the Philippines**). This includes having clear laws and regulations that set air quality standards, mechanisms to develop bankable projects, and a strong domestic investment case. A holistic approach that integrates governance, technical capacity, and strategic planning demonstrates readiness and credibility to potential funders, making it easier to secure support for impactful air quality initiatives.

CASE STUDY: THE WORLD BANK'S REGIONAL AIRSHED APPROACH TO THE INDO-GANGETIC PLAIN AND HIMALAYAN FOOTHILLS

Air pollution is an acute regional challenge in South Asia. In many major cities, more than 50% of air pollution comes from transboundary sources, carried by prevailing wind patterns.[77] This is particularly prominent in the Indo-Gangetic Plain and Himalayan Foothills (IGP-HF), where air pollution originates from a variety of sectors that fall under different ministries and departments across the five IGP-HF countries (India, Nepal, Bangladesh, Pakistan and Bhutan).[78] These sectors are also major sources of black carbon emissions, which directly impact ice loss and glacier melt across the Himalayas and Tibetan Plateau (among several other vulnerable cryosphere regions).[79] With almost one billion people depending on glacier-fed rivers in South Asia, reducing black carbon emissions is a major, but underutilised, opportunity for climate and health gains.[80]

To address this, the World Bank is providing catalytic financing focused on the institutional capabilities and systems to address air quality by working with governments and various stakeholders. Other donors include: the UK Foreign, Commonwealth and Development Office through the Resilient Asia Program (RAP);[81] the Swiss Development Cooperation – also through RAP, including recipient-executed grants for Nepal and India (Haryana); and the International Bank for Reconstruction and Development (IBRD).[82] Priority actions include:

- Assisting IGP-HF states and countries to design and finance foundational air quality management programmes;
- Mobilising concessional finance for public good benefits through incremental donor funds and direct co-financing from other bilateral or multilateral development finance institutions; and
- Providing technical advisory support for evidence-based airshed management and IGP-HF airshed cooperation.

Initial progress includes the approval of the Uttar Pradesh Clean Air Management Authority, a special purpose vehicle established to execute the Uttar Pradesh Clean Air Management Project (UPCAMP). Within UPCAMP, the government of Uttar Pradesh has established its own clean air plan, making it the first Indian state to do so.[83] An equivalent program has also been set up in Haryana.[84] This programme is an example of how multi-donor, cross-sectoral and regional approaches can reduce air pollution, particularly where the problem is transboundary. The World Bank's flagship report Strive for Clean Air: Air Pollution and Public Health in South Asia found that coordinated regional action can be 45% less expensive than uncoordinated, ad hoc measures.[85]

The World Bank South Asia Region and the International Centre for Integrated Mountain Development are hosting a series of key science policy dialogues to promote regional collaboration on air quality planning across the wider airshed of the IGP-HF region. Convening government representatives, scientists and development and financing partners, the dialogues have recognised the need for an approach based on scientific targets, common methodologies and regional coordination of policy assessment. These sentiments are supported by the Thimphu Outcome reached at the most recent dialogue, which aims to establish technical committees and working groups, share scientific knowledge and information, leverage funding in key sectors to reduce pollution, and continue to share capacity with relevant air quality agencies in the region.[86]

COUNTRY PLATFORMS

Experts interviewed emphasised the growing importance of country platforms, innovative finance mechanisms intended to mobilise institutional and private financial resources around a country-led climate and development agenda.[87]

At least 10 countries are in the process of setting up country platforms, with others expected to follow.[88] When established, they can improve coordination and accelerate the delivery of finance to development objectives from a range of sources. The inclusion of air quality objectives within existing and emerging platforms would help to drive national and international finance.

IMPROVING AVAILABILITY OF DATA

Countries seeking funding for air quality improvements will be in a stronger position if they have air quality data and a clear understanding of the main pollution sources (see **Case study: Tackling air pollution in Bishkek – a road map to cleaner air**). Data on pollution sources enables countries and donors to direct resources where they will have the greatest impact. This readiness not only strengthens funding applications but also ensures that interventions are targeted, evidence-based, and aligned with public health priorities.

A TRAIN OF THE NEW LIGHT RAIL SYSTEM PULLS INTO THE LOVE PIER STATION, KAOHSIUNG, TAIWAN. CREDIT: SHIH WEI / ISTOCK

CASE STUDY: TACKLING AIR POLLUTION IN BISHKEK – A ROAD MAP TO CLEANER AIR

Air pollution is the single largest environmental risk factor for premature death and ill-health in Kyrgyzstan, with its capital, Bishkek, among the most polluted cities in the world.[89] Average PM2.5 concentrations in Bishkek reach 30 micrograms per cubic meter air (µg/m3) – six times the World Health Organization guidelines – and often exceed 80 µg/m3 during the winter months.[90] About 75% of the city's PM2.5 emissions are from coal-fuelled residential heating, vehicle emissions and windblown dust from surrounding areas.[91] With air pollution causing an estimated $20 million in annual economic losses, Bishkek adopted a Plan of Comprehensive Measures for 2021–2022,[92] which includes 43 targeted actions focused on urban planning, expanding green spaces, improving waste management, upgrading heating systems, enhancing public transport and urban mobility, and strengthening air quality monitoring and enforcement in Bishkek and surrounding districts.[93]

There are several factors that support efforts to tackle air pollution in Bishkek:

- **Comprehensive air quality data exists, with key monitoring stations in the city:** one managed by Kyrgyzhydromet (the government's hydrometeorology agency); and the former United States Embassy monitor, which provided comprehensive air quality data until March 2025[94].
- **Main pollution sources have already been identified**, enabling donors to channel funding where most needed and effective, such as the leading sources of air pollution: residential coal heating and road transport. A UNICEF report noted that PM2.5 concentrations are highest in neighbourhoods most reliant on coal for heating[95]
- **Climate finance can be utilised for air quality projects**, including efficient interventions aimed at combustion sources that not only reduce pollutants but also lower CO2 emissions, supporting the Kyrgyz Republic's climate commitments and global climate goals[96].

From 2019 to 2023, Kyrgyzstan received $100.9 million in outdoor air quality funding and $246 million in funding for air quality co-benefits. Their top outdoor air quality funders are the World Bank Group (50%) and the Asian Development Bank (49%).

The recent Kyrgyz Republic Air Quality Improvement Project (2024–2031), financed through $50 million in credit from the World Bank's International Development Association and $2.4 million in counterpart funding, aims to strengthen national capacity for air quality management, cutting 10.520 metric tons of PM2.5 emissions by 2030, and eliminating 2.72 million metric tons of greenhouse gas emissions in Bishkek.[97] Led by the Ministry of Natural Resources and the Ministry of Finance, along with municipal and national stakeholders, the project focuses on developing a robust, modernised air quality management system, which includes installing 11 new reference-grade automated monitoring stations, upgrading existing infrastructure, and improving laboratory testing, emissions inventories and atmospheric modelling tools.

Complementary interventions include promoting the adoption of clean heating solutions, particularly for low-income households, through $34.2 million concessional sub-loans to households to support adoption of clean heating,[98] and developing a long-term Sustainable Heating Roadmap to guide national energy transition. The project also supports urban greening through the creation of a pilot green belt in Bishkek and upgrades to the city's irrigation network. An environmental and social management framework ensures compliance with national laws and World Bank safeguards.[99] As the project remains in its early phases, impacts have not yet been reported.

4. KEY AIR QUALITY FUNDERS

KEY FINDINGS

- Two donors, Japan International Cooperation Agency (JICA) and the Asian Development Bank (ADB), provide two-thirds of global outdoor air quality funding from 2019-2023.
- JICA was the largest donor of outdoor air quality funding between 2019 and 2023. ADB was the largest outdoor air quality donor by far in 2023, providing nearly half of outdoor air quality funding in that year.

This section provides an overview of the top air quality funders. It also provides insights from qualitative interviews on the key challenges funders experience in relation to air quality funding, particularly in the context of existing and planned cuts to ODA.

4.1. TOP FUNDERS OF TOTAL AIR QUALITY FUNDING

The top four funders of total air quality finance remained the same between 2019–2023 and 2018–2022. However, within this, the Japan International Cooperation Agency (JICA) overtook the Asian Development Bank (ADB) to move from second to first place (Table 4.1).

TABLE 4.1: TOP 10 DONORS OF TOTAL AIR QUALITY FUNDING, 2019–2023

Ranking	2018-2022 ranking	Name	Type	Value ($ billion)	Share of total (%)
1	2	Japan International Cooperation Agency	Bilateral DFI	20.7	17
2	1	Asian Development Bank	Multilateral DFI	20.5	17
3	3	World Bank Group	Multilateral DFI	5.0	4
4	4	Asian Infrastructure Investment Bank	Multilateral DFI	4.8	4
5	7	European Bank for Reconstruction and Development	Multilateral DFI	4.7	4
6	8	Agence Française de Développement / Proparco (France)	Bilateral DFI	4.7	4
7	10	KfW Group (Germany)	Bilateral DFI	3.8	3
8	6	Inter-American Development Bank Group	Multilateral DFI	2.5	2
9	12	Export-Import Bank of Korea (Korea Eximbank)	Export Credit Agency (ECA)	2.3	2
10	9	Green Climate Fund	Multilateral Climate Funds	2.2	2

JICA's total air quality funding has more than doubled, from $4.2 billion in 2022 to $10.5 billion in 2023, accounting for nearly a third of the global total air quality funding in 2023. This growth was largely driven by a sharp increase in JICA's funding for projects with air quality co-benefits, which increased from $0.8 billion in 2022 to $9.7 billion in 2023. At the same time, JICA's outdoor air quality financing dropped by 78% from $3.4 billion to $0.8 billion between 2022 and 2023. These shifts indicate that, while many of the projects that JICA funds improve air quality, there is significant scope for the donor to capture even greater improvements by explicitly targeting outdoor air quality improvements. It could integrate overt air quality objectives across its funding portfolio, especially in the projects that are already improving air quality as a co-benefit.

As noted in Section 2.5, JICA has in recent years funded significant fossil fuel-prolonging projects. Working to end these investments would of course maximise the positive air quality impacts that JICA is having.

The Green Climate Fund, the only climate fund appearing in the air quality donor charts in this report, saw a significant drop in its total air quality funding contributions in 2023, with the fund only narrowly remaining in the top 10.

The Export-Import Bank of Korea was the only new entrant, having increased its contribution to total air quality by 50% in 2019-2023 compared to 2018-2022. It is encouraging to see this donor stepping up its air quality funding.

4.2. TOP FUNDERS OF OUTDOOR AIR QUALITY FUNDING

The top 10 funders of outdoor air quality finance from the 2018–2022 analysis continued to be leading donors in the 2019–2023 period (Table 4.2). As with total air quality funding, JICA and ADB dominated the landscape, providing two-thirds of all outdoor air quality finance during the most recent period analysed.

TABLE 4.2: TOP 10 DONORS OF OUTDOOR AIR QUALITY FUNDING, 2019–2023

Ranking	Name	Type	Value ($ million)	Share of total (%)	2018–2022 ranking
1	Japan International Cooperation Agency	Bilateral DFI	7,218	44%	1
2	Asian Development Bank	Multilateral DFI	3,858	23%	2
3	KfW Group (Germany)	Bilateral DFI	1,090	7%	8
4	Export-Import Bank of Korea (Korea Eximbank)	Export Credit Agency (ECA)	695	4%	4
5	World Bank Group	Multilateral DFI	691	4%	5
6	Government of Canada	Government	585	4%	3
7	European Bank for Reconstruction and Development	Multilateral DFI	497	3%	6
8	Asian Infrastructure Investment Bank	Multilateral DFI	380	2%	7
9	Government of Germany	Government	204	1%	9
10	Agence Française de Développement / Proparco (France)	Bilateral DFI	171	1%	10

The most significant change in these rankings saw KfW Group (the German state-owned investment and development bank), climb from eighth position over the period 2018 - 2022 to third position in 2019-2023. This was due to KfW's funding for outdoor air quality more than doubling in recent years, from $344 million in 2022 to $746 million in 2023, increasing their five-year total. This increase was mainly due to a handful of large projects being committed, with 72% of the 2023 project value concentrated on three urban mobility projects in India.

Although JICA remained the largest funder over the 2019–2023 period, ADB was the leading provider of outdoor air quality finance in 2023 (compared to its ninth position in 2022). This led to ADB's outdoor air quality funding increasing as a proportion of its own total air quality financing, from less than 1% in 2022 to 53% in 2023. This growth reflects a strategic shift in ADB's institutional priorities, as outlined in its 'Scaling Up Clean Air Actions for Better Health and Resilience: Technical Assistance Report'. In that report, ADB sets out plans to scale up financing for air quality improvement through projects with air quality as a primary objective and as a secondary objective or explicit co-benefit. This indicates a growing institutional recognition of the opportunities that can flow from investment in air quality as a cross-cutting issue linked to health, resilience, and sustainable development.[100] This approach is one that could be emulated by other donors.

CASE STUDY: SUPPORTING NATIONAL AMBITIONS ON AIR QUALITY THROUGH CO-FINANCING IN THE GREATER BEIJING-TIANJIN-HEBEI REGION

The Greater Beijing-Tianjin-Hebei Region, which includes the Beijing and Tianjin municipalities; the provinces of Hebei, Henan, Liaoning, Shandong, and Shanxi provinces; and the Inner Mongolia Autonomous Region, is home to 110 million people and has historically faced severe air pollution challenges. In 2012, Hebei had an average ambient PM2.5 concentration of 112.9 micrograms per cubic meter air – the highest in the country.[101]

From 2017 to 2019, the central government and Hebei provincial government committed $2 billion to implement over 200 specific measures across all sectors under the Hebei Province Air Quality Action Plan.

This domestic investment was amplified by multilateral and bilateral partners through co-financing, which included:

- A World Bank-approved loan of $500 million in 2016 to support air pollution reduction measures through the Program-for-Results tool, which links loan disbursements to tangible results. The programme supported local institutions in planning, monitoring and implementing air pollution control measures and laid the foundation for Hebei's next-phase Air Quality action plan (2021–2025).
- Two technical assistance grants, including $2.9 million in funding from the Pollution Management and Environmental Health trust fund supported by Germany's Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety and Norway's Ministry of Foreign Affairs, and $3.4 million in funding from the Global Environment Facility.[102]
- A $300 million policy loan from the ADB with parallel financing from KfW, of €150 million ($175 million)[103]

ADB's intervention exemplified how diverse financing instruments can be deployed in synergy, including policy-based loans, financial intermediation loans, results-based loans and regular project loans.

The region's annual average concentration of PM2.5 has since fallen by 44.2% from the 2015 baseline, reaching 42 micrograms per cubic meter by 2030. There has also been a rise in proportion of good air quality days by 10.7% to 63.1%. The entire programme is estimated to have avoided approximately 36.08 million tons of CO2 equivalent in greenhouse gas emissions upon its completion annually compared to baseline scenarios and is expected to generate $1,978.32 million in climate finance solely from ADB loan proceeds.[104]

4.3. WHY FUNDERS STRUGGLE TO PRIORITISE AIR QUALITY

Funders face several barriers to prioritising air quality within their wider funding portfolios, including: (i) air quality not being a central organisational objective, (ii) siloed thinking about climate and development agendas, (iii) lack of awareness about the impacts of air quality, (iv) lack of air quality data and monitoring, as well as challenges with identifying the sources of air pollution, and (v) resource constraints.

AIR QUALITY IS NOT A CENTRAL OBJECTIVE

Most of the funder representatives interviewed highlighted this barrier, which is also visible in the data. MDBs often require projects to be aligned with the Paris Agreement and measure GHG reductions, but there is no similar requirement for air quality. A perceived lack of demand from low- and middle-income countries for air quality financing may also fuel this de-prioritisation. However, this lack of demand may be affected by the complexity of the development challenges that these countries face, coupled with limited capacity or technical expertise to embed air quality into projects focusing on sectors that are related to air quality but receive more funding, such as health.

SILOED APPROACH TO CLIMATE AND DEVELOPMENT AGENDAS

Air pollution is often overlooked when funders take a siloed approach to sustainable development and climate action within sectors such as industry, agriculture and waste. There is significant opportunity to introduce air quality as a co-benefit of sector-focused projects that primarily target climate mitigation or adaptation. To this end, the Clean Air Fund supported the development of the **Air Quality Toolkit for Development Finance Institutions**, which provides concrete steps that financing institutions can take to integrate air quality as a co-benefit of projects supported by bilateral and multilateral contributions. The toolkit has been endorsed by ADB, the Inter-American Development Bank (IDB), AfDB, JICA, GIZ and Expertise France.

THE AIR QUALITY TOOLKIT FOR DEVELOPMENT FINANCE INSTITUTIONS

In April 2025, the ADB, the IDB and Clean Air Fund launched a new **Air Quality Toolkit for Development Finance Institutions**. The toolkit provides practical guidance in understanding air pollution, integrating air quality improvements into development projects across different sectors, and tracking air quality outcomes for project officers.[105]

The first part of the toolkit provides critical information on air quality, explaining why it is important, how it can be better understood and what actions can be taken to improve it. The second part is a practical guide for Project Officers, discussing each stage of the project development lifecycle, with the aim of maximising air quality benefits at each step: from screening projects for pollution risks and co-benefits and assessing local air quality and pollutants in the city where the project is taking place, to monitoring outcomes with clear indicators.

The toolkit aims to support DFIs in unlocking greater finance for air quality.

LACK OF AWARENESS OF THE IMPACTS OF AIR QUALITY

Understanding of the human and biodiversity impacts of air quality varies from country to country, and donor agency to donor agency. This is especially true when considering super pollutants such as black carbon. Increasing public and funder awareness of the risks of both air pollution and super pollutants are foundational for increasing public support and demand for air quality action.

LACK OF RELIABLE, CURRENT AIR QUALITY DATA AND MONITORING

Air quality data and monitoring, both on the funder's side and in recipient countries, needs to be strengthened. As many as 39% of governments do not measure their country's air quality, which is an important step towards establishing baseline readings of air pollution levels.[106] This observation is corroborated by the Africa Centres for Disease Control and Prevention, which notes in its Climate Change and Health Strategic Framework for 2025 technical capacity limitations and insufficient scientific evidence as key constraints to progress.[107] The Climate and Clean Air Coalition's joint assessment on Africa also identified a need for increased air quality monitoring networks, data collection and management, especially on the health impacts of poor air quality.[108] Moreover, reliable source and emissions data are needed to identify which sectors contribute the most to air pollution so that effective, efficient pollution-reduction strategies can be developed.

The decision in March 2025 by the US to stop sharing air quality data from sensors stationed at embassies worldwide, giving scientists and local populations access to their city's air quality levels, will further hamper countries' ability to gather the necessary data.[109] By some estimates, the monitors contributed to reductions in PM2.5 that have saved $465 million and avoided 895 premature deaths in cities with US embassies (assuming benefits were conferred to the entire city).[110] While the full impact of losing this programme is yet to be understood, it is evident that without this important information source, some countries will be unable to make the case for the air quality funding they need.

FINANCE AND TECHNICAL RESOURCE CONSTRAINTS

Interviews highlighted financial and technical resources are limited, especially for MDBs and development agencies tasked with allocating dedicated funding to enhance or scale up air quality projects. Prospective recipient countries face the same challenge, with interviewees stating that as there usually is no one single ministry that is responsible for air pollution matters, there tends to be no centralised budget either.

5. WHERE FUNDERS CAN MAKE A DIFFERENCE

KEY FINDINGS

- Explicitly considering air quality across projects that currently improve air quality as a co-benefit could see additional gains for health and climate.
- Between 2019 and 2023, 86% of total air quality funding ($103.5 billion) was directed towards projects that also addressed climate change.
- Total black carbon funding more than doubled, going from $325 million in 2022 to $824 million in 2023, but has not exceeded the level achieved in 2019, of $975 million.
- International Development Funders, especially DFIs, have an important role in catalysing private sector funding for air quality.
- Donors must phase out fossil fuel-prolonging funding and subsidies, promoting a just transition and reallocating funding to efforts to tackle climate change and improve air quality.

5.1. EXPLICITLY CONSIDER AIR QUALITY CO-BENEFITS WHEN MAKING SECTORAL INVESTMENTS

There is growing recognition of the value of ensuring air quality is explicitly considered as a co-benefit to sectoral investments. This approach enables funders to maximise positive outcomes while preventing potential unintended harms.

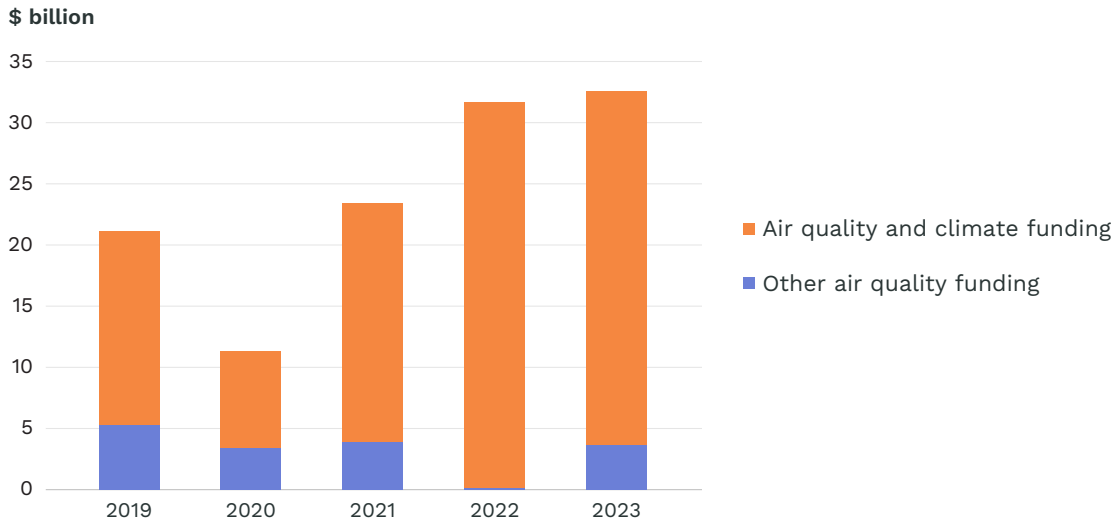
In the infrastructure and energy sectors, this includes supporting projects that reduce fossil fuel use through cleaner technologies and energy-efficient appliances. These interventions not only cut air pollutant and greenhouse gas emissions but also enhance climate resilience and reduce household energy costs. Similarly, investments in renewable energy generation and efficient transmission systems can deliver cleaner air while advancing energy access and sustainability goals.[111]

In transport, agriculture, and waste management, funders have an opportunity to integrate air quality in projects that reduce emissions through system-wide improvements. This includes promoting public and active transport, upgrading vehicle fleets, and reducing congestion. In agriculture, supporting sustainable agricultural residue practices, chemical fertiliser reduction, and agro-ecological practices can play a role in cutting emissions and improving air quality simultaneously. Waste sector investments that expand collection, improve recycling, and reduce open burning also offer clear air quality benefits. By recognising these co-benefits, funders can design integrated, high-impact investments that align with both development and environmental objectives.

5.2. ENSURE THAT CLIMATE FUNDING ALSO CONSIDERS AIR QUALITY BENEFITS

Between 2019 and 2023, 86% of total air quality funding ($103.5 billion) was directed towards projects that also addressed climate change (Figure 5.1).

FIGURE 5.1: AIR QUALITY AND CLIMATE FUNDING, 2019–2023[xi]



Air pollution and climate change are inextricably linked. Many high emitting sectors such as energy, waste, transport and agriculture, are responsible for both air pollution and emission of GHGs and therefore require aligned solutions. Addressing air quality and climate together also ensures that actions taken to mitigate one do not inadvertently worsen the other. Without an integrated approach, there is a real risk that projects that aim to reduce GHG emissions unintentionally increase the emission of harmful air pollutants, and vice versa. Examples of interventions with unacceptable trade-offs include shifting households from burning traditional biomass (such as wood, charcoal or dung) to burning kerosene, which reduces air pollution but increases both GHGs and short-lived climate pollutants (SLCPs). Similarly, waste-to-energy incineration plants, which capture energy from waste instead of methane-emitting landfills, lower total GHGs but, without stringent controls, emit air pollutants such as PM2.5, nitric oxide and sulphur dioxide.

5.3. INCREASE FUNDING TOWARDS CLIMATE PROJECTS THAT TARGET SUPER POLLUTANTS

Climate change and air pollution often have shared sources. Black carbon, a component of PM2.5, and tropospheric ozone are two short-lived climate pollutants (SLCPs, or super pollutants). Together, they have already contributed 0.32°C to global temperatures.[112]

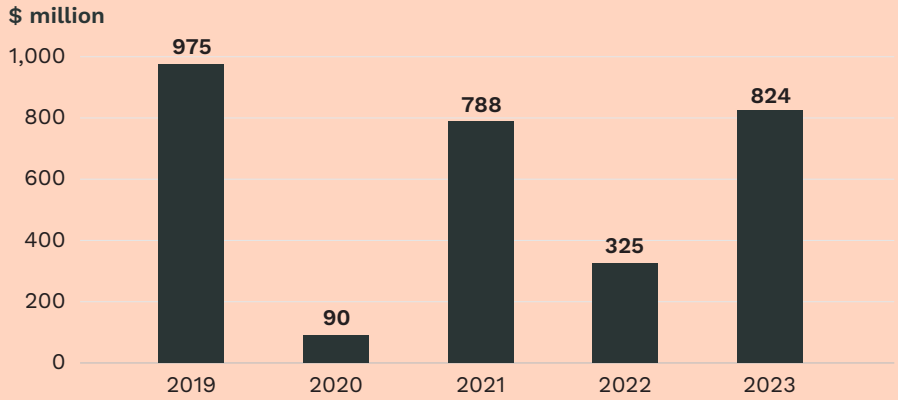
xi The figures for 2018 to 2022 air quality and climate funding differ slightly from the figures presented in The State of Global Air Quality Funding Report 2024 due to changes in keywords and rules used to “clean” this year’s dataset.

Black carbon is unique in the way it impacts both climate and health. Reducing black carbon and other super pollutants is the fastest, most effective way to achieve near-immediate climate gains while improving air quality, public health, and economies. A business-as-usual approach to black carbon is forecast to deliver just a 3% global emissions reduction by 2030 (compared with 2020 levels), but proven solutions to accelerate this already exist in the form of switching to cleaner fuels; stopping the open burning of waste and agricultural residue; reducing the emission of dirty smoke from industry; and better management of forest fires. Together, the maximum technically feasible mitigation pathway could deliver a 70% reduction in black carbon alone by 2030 (against 2010 levels).[113]

THE STATE OF FUNDING TO COMBAT BLACK CARBON POLLUTION

Total black carbon funding fluctuated over the review period. After decreasing dramatically between 2021 and 2022, it more than doubled, going from $325 million in 2022 to $824 million in 2023. However, it has not exceeded the level achieved in 2019, of $975 million (Figure B2).

FIGURE B2: TOTAL BLACK CARBON FUNDING, 2019–2023



The increase of total black carbon funding between 2022 and 2023 was driven almost entirely by an increase in secondary black carbon funding, which refers to funding for projects where black carbon reductions are expected to occur as a co-benefit (although black carbon reduction is not explicitly mentioned in the project description). Meanwhile, primary black carbon funding (projects where black carbon is an explicit objective) decreased, from $8 million in 2022 to less than $1 million in 2023.

Total black carbon finance is heavily affected by a small number of projects, making it difficult to determine whether the increase between 2022 and 2023 signals a shift in funding priorities. A consistent approach over the years is essential to fully achieve the climate and health benefits of black carbon mitigation.

About 40% of the total black carbon funding for the 2019–2023 period came from the ADB. The European Bank for Reconstruction and Development is the only other funder that provided more than 10% of the total for 2019–2023, accounting for 14%.

5.4. ATTRACT PRIVATE SECTOR CAPITAL BY DE-RISKING INVESTMENTS

As discussed in Section 2, ODA is constrained and will likely become more so in the coming years. This underlines the need for increased private finance – and better use of innovative public sector financing tools – to fill the growing gap in public sector funding of air quality projects. The World Bank's "Accelerating Access to Clean Air for a Livable Planet" report points out that "[a] combination of public and private financing will be needed to accelerate access to clean air. Current financing for air pollution measures is insufficient, particularly in low and low-middle-income countries, where resources are already stretched thin".[114]

Beyond increasing their own funding for air quality projects, funders can play an important role in mobilising private sector resources by helping to de-risk investments and supporting funding at scale. To support financing for air quality projects from private sources, funders – particularly DFIs – can:

- **Create an enabling environment for financing.** To unlock private capital, DFIs could work with countries to establish an enabling legislative and regulatory environment, for example, by setting clear standards for air quality, monitoring air quality levels, creating the financial incentives to invest where appropriate and making procurement processes clear and intuitive.
- **Develop a pipeline of investment-ready air quality projects.** Funders could support the identification and development of viable air quality initiatives including by providing (or supporting the provision of) technical assistance and training, together with early-stage finance, to develop these projects to the point of being investment-ready. Such actions would help to build the investment case for air pollution projects and projects with air pollution co-benefits.
- **Explore blended finance and options to de-risk and scale investments.** Development funders could provide concessional finance using instruments such as guarantees or first-loss financing, so reducing the risk associated with air pollution projects. Blended finance mechanisms could also be deployed. International solidarity-based mechanisms, such as climate-related levies or supranational funds, could be designed to channel finance to high-impact areas including air quality management.[115]
- **Build consensus and set standards.** Air quality financing would benefit from funders and recipients sharing a clear understanding of how air quality elements should be priced into programmes. This would enable funders to identify and promote air quality projects that offer high returns on their investments, support collaborative work between and within airsheds that might cross national boundaries, and ultimately improve funding and efficiency over time.

THE POTENTIAL OF BLENDED FINANCE

Blended finance (the strategic use of public capital to attract additional private investment) is promising but underused in the air quality space. It holds great catalytic potential for air quality projects because it de-risks investment and crowds in funding in low- and middle-income countries.[116] It is especially effective for infrastructure-heavy interventions like clean transport and renewable energy, which deliver major air quality and climate benefits.

MDBs can develop and deploy innovative capital structures that blend concessional and commercial finance. Guarantees, insurance products and blended finance structures can mitigate the risks of air quality projects and attract private sector actors. Instruments such as the World Bank's Development Policy Financing, guarantees from the International Finance Corporation, and risk insurance from the Multilateral Investment Guarantee Agency could be further adapted by other DFIs to accelerate air quality outcomes.

MDBs are mandated to advance development projects and address complex challenges in an integrated and holistic manner and are therefore well placed to scale up financing for air quality. Grants can play a catalytic role in de-risking projects and attracting private capital. Blended funds like the South-East Asia Clean Energy Fund II (SEACEF II), which is supported by the UK's DFI British International Investment (BII), are designed to provide early-stage high-risk capital to support promising businesses within the realms of renewable energy generation, energy efficiency, electric mobility and electrical grid sectors.[117]

There are missed opportunities to unlock underutilised capacity. Many public and private financiers have reported surplus capital but lack bankable, sustainable projects to invest in.

BRITISH INTERNATIONAL INVESTMENT'S USE OF BLENDED FINANCE IN AYANA RENEWABLE POWER

Development finance institutions can use their own capital as a catalyst to encourage greater investment through blended finance mechanisms. An example of blended finance for successful air quality action is the launch and growth of Ayana Renewable Power in India. Founded as a 100% subsidiary of BII in 2018, Ayana began with an initial equity investment of $100 million.[118] This early-stage, concessionary capital played a critical role in anchoring the platform and helped attract other investors by lowering perceived risks and signalling project viability.

Within two years, Ayana had secured nearly 500 megawatts of renewable energy capacity, surpassing initial targets.[119] Subsequent rounds of funding amounting to more than $721 million in total equity were raised from high-profile investors, including National Investment and Infrastructure Fund and Eversource.[120] By the time of BII's exit, Ayana was valued at approximately $2.3 billion, with a diversified portfolio of wind and solar assets exceeding 4 gigawatts.[121] Thus, the blended finance model enabled Ayana to migrate from a high-risk, development-stage venture to long-term, commercially viable operations and spotlit a replicable pathway for air quality finance.

5.5. FOSSIL FUEL-PROLONGING FUNDING CONTRADICTS EFFORTS TO CLEAN OUR AIR

Limiting global warming to 1.5°C requires halting new fossil fuel developments and accelerating the phase-out of existing coal, oil, and gas infrastructure.[122] As shown earlier in this report (see Section 2.5), fossil fuel-prolonging funding from international development funders grew by 80% from 2022 to 2023, despite pledges by donors to phase out fossil fuel use. External shocks, like the 2022 energy crisis, have further delayed progress.

This continuing funding hinders progress on air pollution by locking in polluting infrastructure, diverting resources from clean energy solutions, and supporting projects that undermine environmental regulation. It is maintaining systems that emit harmful pollutants and delaying the transition to integrated climate and air quality policies. Redirecting fossil fuel-prolonging funds to climate and energy initiatives aimed at a just transition could accelerate adoption of cleaner technologies.

For many low- and middle-income countries, especially in Africa, this transition is challenging due to heavy reliance on fossil fuels and widespread energy poverty.[123] Despite abundant renewable resources, Africa received only 2% of global renewable energy investment between 2000 and 2020.[124]

Evidently more needs to be done to finance renewable energy projects to support a just energy transition. An example is Mission 300, an initiative led by the World Bank and the African Development Bank to connect 300 million people in Sub-Saharan Africa to electricity by 2030. It aims to halve the region's energy access gap by combining on-grid and off-grid solutions, including mini-grids and solar systems. The programme supports the phase-out of fossil fuels by prioritising renewable energy, modernising infrastructure, and promoting regional power integration.[125]

5.6. REPURPOSING FOSSIL FUEL SUBSIDIES TO ENSURE A JUST ENERGY TRANSITION

Most fossil fuel subsidies are delivered within domestic budgets, rather than international development budgets, and therefore fall outside of the scope of this report and are not addressed in detail.

Fossil fuel subsidies and private sector investments in fossil fuels still far exceed funding for clean energy. In 2022, fossil fuel subsidies made up 7.1% of global GDP and governments spent approximately $577 billion annually on fossil fuel subsidies.[126] These subsidies, which involve government contributions that distort market prices, act as a negative carbon tax, encouraging fuel consumption and delaying the transition to cleaner alternatives.[127] Repurposing of fossil fuel subsidies would bring substantial benefit to air quality improving efforts, by removing financial incentives that sustain polluting industries.

CASE STUDY: HOW INDONESIA AND MOROCCO PHASED OUT FOSSIL FUEL SUBSIDIES WHILE LIMITING SOCIAL IMPACTS

Fossil fuel combustion is a major source of PM2.5 pollution, which disproportionately affects low- and lower-middle income countries, where average PM2.5 concentration is 2.5 times higher than in high-income countries. As such, there is no room for fossil fuel subsidies in achieving a just energy transition, and targeted interventions to improve air quality would benefit the health and wellbeing of the most disadvantaged populations worldwide.

Protecting the livelihoods of the most marginalised communities is the central tenet of a just transition, particularly as countries move away from fossil fuel-led growth models. The goal is not to deny development, but to enable leapfrogging to cleaner, more inclusive economic pathways.

Some countries, such as Indonesia and Morocco, have begun to implement targeted cash transfers and other support mechanisms to ease the social impacts of subsidy reform. In 2014, Indonesia significantly reduced fossil fuel subsidies on gasoline and diesel and redirected some of the savings towards human and economic development and social welfare programmes, including direct cash transfers to help vulnerable populations.[128]

Morocco, meanwhile, phased out most fossil fuel subsidies between 2012 and 2015. The government cushioned the impact through targeted social spending on health, education and rural development, and communication strategies to build public support.[129]

BLACK SOOT IN SURABAYA CITY, INDONESIA. CREDIT: CLEAN AIR FUND

6. CONCLUSION AND RECOMMENDATIONS

This year's State of Global Air Quality Funding report highlights a deeply concerning trajectory for international development funding for air quality. Despite clear and growing evidence of the devastating health, climate and economic impacts of air pollution, funding for projects that explicitly aim to improve outdoor air quality fell by 20% between 2022 and 2023. Most regions experienced sharp declines in such funding, with sub-Saharan Africa's outdoor air quality funding dropping below 1% of the global share of outdoor air quality funding. Meanwhile, only two of the 10 countries with the highest PM2.5 concentrations globally (Bangladesh and India) appear among the top recipients of air quality funding, revealing stark inequities in how funds are distributed.

At the same time, funding for fossil fuel-prolonging activities has surged dramatically, growing by 80% year-on-year to reach $9.5 billion in 2023. This is 1.5 times higher than funding going to outdoor air quality projects and includes investments in coal power plants, which directly undermine both climate commitments and public health. Such spending is counterproductive and undermines the commitments made by countries to phase out the use of fossil fuels. Funds that entrench fossil fuel dependence and negatively impact climate and health should instead be redirected to deliver integrated air quality and decarbonisation benefits.

There are, however, some encouraging signals. Funding for projects with air quality co-benefits rose by 7% from 2022 to 2023, showing that opportunities exist to leverage broader development investments for cleaner air; without explicitly incorporating air quality into project design, much of this potential impact will remain unrealised. In today's climate of constrained development finance, maximising co-benefits is not optional, it is essential.

The case for urgent action is clear. On the current trajectory, global mortality from outdoor air pollution is projected to rise from 5.7 million deaths in 2020 to 6.2 million by 2040. According to World Bank research, reducing this toll is both possible and affordable. Integrated strategies that align climate policies with conventional air pollution controls could cut attributable mortality by up to 35%, saving more than 2 million lives annually, while boosting global GDP by between $1.9 trillion and $2.4 trillion.

Air pollution is not just an environmental or health issue, but a fundamental development challenge. It demands equitable, targeted and sustained financing that prioritises the regions and populations that are most at risk. For international donors, this represents a unique opportunity to secure maximum returns on investment that simultaneously advance health, climate and economic objectives.

Without decisive change, the cost of dirty air will increase unchecked, deepening global inequalities and undermining progress towards the Sustainable Development Goals. However, with targeted and integrated air quality finance the international community can turn the tide, delivering cleaner air, healthier societies and stronger economies for decades to come.

International development funders are pivotal to achieving this, by ensuring that funding and actions are directed towards protecting people and the planet, today and in future, from the harms of air pollution.

They should work to:

1. INTEGRATE CLEAN AIR AS AN EXPLICIT CO-BENEFIT ACROSS DEVELOPMENT AND CLIMATE PROJECTS

Improved air quality is a co-benefit of many sectoral and cross-sectoral projects. Development finance institutions should ensure that these co-benefits are visible and explicit within project design and implementation, to maximise the overall gains from climate- and development-focused projects.

To achieve the World Bank's targets to reduce mortality and boost GDP, funders should develop integrated strategies that deploy air quality management tools alongside efforts to reduce GHG emissions or reduce energy dependence. Climate- and energy-focused projects, in particular, are an opportunity to integrate air quality objectives. Doing so would ensure that both air quality and climate benefits are captured and aligned in project design, while also removing the risk that benefits in one sphere will come at the cost of another.

To achieve air quality co-benefit integration, funders are encouraged to use tools such as the **Air Quality Toolkit for Development Finance Institutions**,[130] which provides practical guidance on integrating air quality into projects, especially those that target multiple sectors. The toolkit covers each stage of the project development lifecycle and aims to maximise air quality benefits at each step while improving the tracking and reporting of air quality impacts.

2. MAKE AIR QUALITY AN INSTITUTIONAL AND STAFF PRIORITY

Evidence from major institutions demonstrates that recognising the value of clean air – and identifying air quality as a policy priority – provides a strong foundation for accelerated action. International development institutions are therefore encouraged to embed air quality within their institutional structures and policies. They could, for example:

- **Integrate air quality into core strategies and projects**, as advised by the World Bank.
- **Ringfence a small percentage of funding for air quality** within projects that will deliver air quality as a co-benefit.
- **Build awareness among staff about the harms of air pollution** and the co-benefits that integrating air quality across portfolios can bring for sustainable development.
- **Incentivise staff members to integrate air quality into projects.** This could mean integrating air quality benchmarks into staff KPIs and performance reviews.

3. TARGET INVESTMENTS TOWARDS FUNDING "DESERTS", ESPECIALLY IN AFRICA

The vast majority of air quality finance goes to a handful of countries, while many countries with very high pollution burdens are not accessing air quality funding at all. Challenges on both the demand and the supply side of such transactions need to be met to ensure that funding is spread more equitably. International development funders should:

- **Review their portfolio of investment in air quality projects** to examine the regional and country allocations, the availability of concessional finance and whether air quality funding is reaching countries with the highest pollution burden. Where there are gaps, funders could proactively engage prospective recipient countries to identify the need and opportunities for air quality action.
- **Ensure that air quality considerations are incorporated in the design of projects** in high-pollution countries and regions that are currently underfunded.
- **Work with prospective recipient countries to identify gaps in air pollutant data** to develop the case for air quality funding. The withdrawal of US funding for air quality data and monitoring activities adds to the challenge countries face to make the case for air quality funding. Funders should support such countries by investing in open data and monitoring tools to track pollution levels and identify the key sources of emissions. Having current data on these metrics would enable communities, scientists and policymakers to better understand and address air pollution within their countries – and across borders.
- **Assess the barriers that countries face in accessing funding**, including their fiscal capacity (or lack thereof) to take on loans; ring-fence grant funding for countries with the highest pollution burden that also face significant barriers to accessing loans.
- **Identify opportunities to invest in the newly launched Africa Clean Air Programme**, supported by the Climate and Clean Air Coalition, which aims to drive concerted and co-ordinated action and regional cooperation across the continent

4. STRENGTHEN CROSS-DONOR ENGAGEMENTS AND COLLABORATE ON THE WAY AIR QUALITY FUNDING IS TRACKED

Cross-donor collaboration is key for effective air quality management, helping donors share learnings, develop solutions and protect air quality from slipping between institutional cracks. To this end, international development funders should:

- **Ensure effective cross-donor communication and collaboration** to create opportunities to learn from peers, identify synergies and avoid duplication. This can include, among other things, collaborating in regional and global forums to identify and address some of the gaps in air quality funding.

- **Take a cross-sectoral, airshed approach to tackling air pollution.** Air pollution does not observe country borders. Donor agencies could usefully collaborate to identify which airsheds they wish to target and divide roles and responsibilities to make sure that what limited air quality funding there is, is used to its full potential.
- **Effectively track and report on air quality funding** to ensure that funding is used efficiently, efforts are not accidentally duplicated, and that donors and prospective recipients can more easily identify gaps in the funding landscape. A vital step to achieving this is to standardise reporting and tracking across donors, which will require collaboration across donor institutions. Working with the OECD-DAC on improving and expanding the mechanisms it uses to track funding is one such way.

5. PRIORITISE EFFORTS TO REDUCE EMISSIONS OF BLACK CARBON, A CRITICAL SUPER POLLUTANT

Only a small number of international development funders invest in projects designed to explicitly target black carbon emissions – even though this pollutant has significant climate, public health and environmental impacts, especially in key cryosphere regions such as the Arctic, Andes and Himalayas.

International development funders are therefore encouraged to:

- **Increase awareness and understanding of the health and climate impacts of black carbon** within their institutions. This includes highlighting both the key sectors that drive black carbon emissions and the many proven solutions that are available to reduce them.
- **Review investment portfolios to identify opportunities** to increase funding for black carbon research and emission reduction projects, prioritising projects likely to deliver the greatest co-benefits in sectors such as energy, transport, waste burning, and industrial combustion.
- **Ensure that the potential to reduce black carbon emissions** is integrated into project design across funding portfolios
- **Look to showcase the economic value** of black carbon reduction measures in terms of avoided impacts on health and climate to enhance the attractiveness to investors in projects.

6. CATALYSE PRIVATE SECTOR PARTICIPATION IN AIR QUALITY PROJECTS

Funders have a key role to play to de-risk investments and mobilise private sector resources that support funding at scale. To enable this, international development funders should:

- **Engage countries to implement reforms** and develop initiatives that unlock private capital funding.
- **Support the identification and development of viable air quality projects** by providing technical assistance, capacity-sharing, monitoring tools and early-stage finance.
- **De-risk the blended financing of air quality-related projects** by providing concessional instruments such as guarantees and first-loss finance.
- **Support the development of "best buy" air quality approaches** that provide a clear signal to the private sector where investments could be most effective.

7. END FUNDING FOR FOSSIL FUEL-PROLONGING PROJECTS

Development funders should prioritise phasing out funding for fossil fuels as soon as possible, in recognition of their profoundly damaging impacts on air pollution and climate change. This should include:

- **Publishing roadmaps** detailing how individual institutions will meet commitments to reduce funding for fossil fuel-prolonging projects. Make just transition a central pillar of funding commitments and investments, recognising that it is critical for achieving economic development and climate protection in tandem, particularly for vulnerable communities.
- **Ensure transparency** and publish evidenced reasoning for any fossil fuel-prolonging projects that are taken forward.
- **Prioritise climate-positive development** through their investments, using their successes as evidence that fossil fuels need not be the default engine of economic development.
- **Re-direct fossil fuel subsidies**, in recognition of the fact that there is no room for fossil fuel subsidies in achieving a just energy transition. Funding for fossil fuel subsidies should, as a matter of urgency, be redirected towards clean air solutions that benefit low-income and vulnerable communities.

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