

ISSUE BRIEF

# Climate Change Prioritization in Low-Income and Developing Countries

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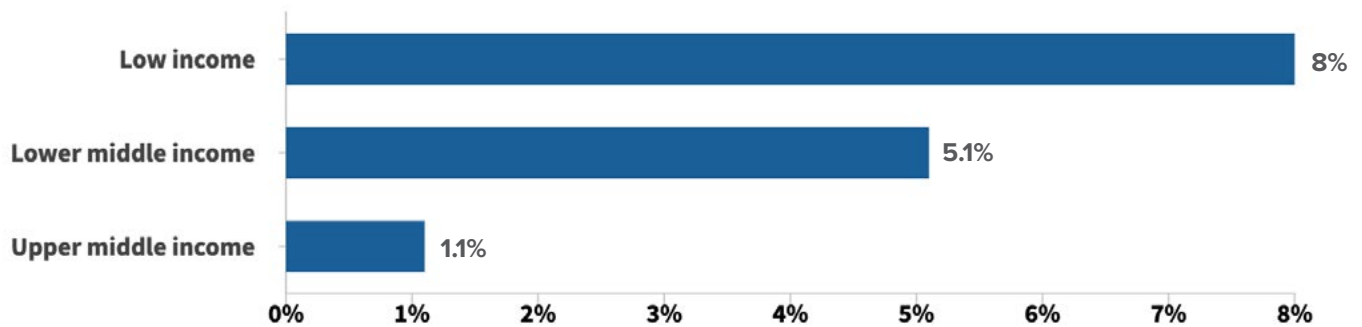
The GeoEconomics Center develops data-driven programs, publications, and thought leadership at the nexus of economics, finance, and foreign policy. The Center aims to bridge the divide between these oft-siloed sectors with the goal of helping shape a more resilient global economy. Our work is built on the idea that the United States must lead with allies or risk becoming a bystander in a reshaped international financial system. The Center is organized around three pillars – the Future of Capitalism, the Future of Money, and the Economic Statecraft Initiative.

## INTRODUCTION

**T**he World Bank’s 2023 document *Evolving the World Bank Group’s Mission, Operations, and Resources: A Roadmap*, otherwise known as the “*evolution roadmap*,” sets a laudable goal to shift more focus and action onto climate change in low-income and developing countries (LIDCs). The language used throughout the report clearly reflects the Bank’s shifting priorities. The word “climate” was mentioned forty times in the evolution roadmap document, “poverty” was mentioned forty-two times, and prosperity was mentioned only twenty-one times. This shows a clear paradigm shift that is expanding from the World Bank’s “Twin Goals” of ending extreme poverty and boosting shared prosperity to also include issues related to climate change and financing.

In the evolution roadmap report, the World Bank Group (WBG) rightly identifies that the world has not only stalled, but regressed in achieving the prosperity and development goals set for this decade. Further, the WBG identifies that LIDCs are not prepared to face the development challenges of the modern world. One of the key development issues the WBG identifies is climate change, which has an outsized impact on LIDCs. In this regard, the WBG has already created frameworks to engage climate issues in

**Figure 1: Investments needed for a resilient and low-carbon pathway, 2022-30, by income group**  
Investment as a share of GDP (%)



Source: World Bank Group

LIDCs. The WBG’s Country Climate and Development Reports (CCDR) offer a comprehensive resource to support development and climate objectives at the country level. These public reports empower governments, private sector investors, and citizens to prioritize resilience and adaptation and reduce emissions without compromising broader development objectives. These goals can be achieved, the WBG estimates, with an investment averaging 1.4 percent of a given country’s gross domestic product (GDP)— though in some low-income countries that number can be between 5 percent and 10 percent (Figure 1).

While the CCDR gives nations the tools to achieve climate objectives without significantly compromising development, it does not bridge the gap between the increasing focus of the WBG and the developed world on climate change and the real priorities of LIDCs.

People in LIDCs do not place climate change among their top development priorities, despite the outsized impact of climate change on LIDCs. This is not to say that LIDCs are not concerned about combatting climate change, or uninterested in adaptation strategies. Rather, citizens of LIDCs typically prioritize other development goals ahead of climate change— particularly when working with multilateral development institutions such as WBG. Across forty-three WBG client countries surveyed, climate emerged as a top development priority for less than 6 percent of the respondents on average. It only ranked among the top

two development priorities in Vietnam. It only broke into the top three priorities for six countries, none of which are [International Development Association \(IDA\) borrowers](#) (Figure 2). Clearly climate change —particularly among the poorest countries— is not a pressing development priority.

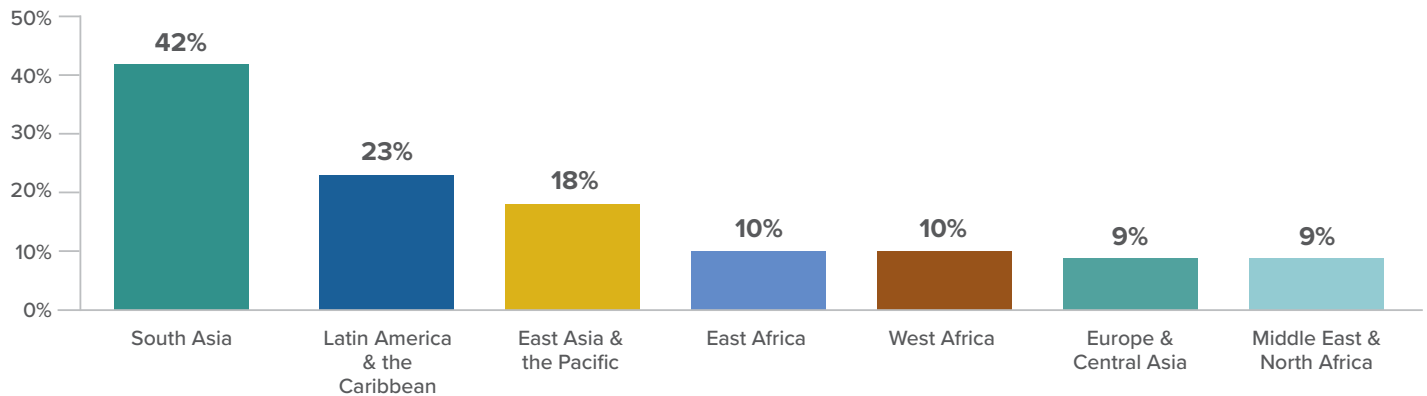
LIDCs are instead more focused on securing funding for development projects with more immediate results. Overwhelmingly, education and health (human capital) are most widely identified as top development priorities. Other areas of focus identified in this survey include:

- Economic growth, agricultural and rural development, job creation and employment, and poverty reduction, which can be broadly categorized as economic development.
- Natural resources, infrastructure and transportation, and energy, which can be broadly categorized as natural and physical capital.
- Security, stability, and governance reform, which can be broadly categorized as governance related issues.

These areas of focus are confirmed by other surveys, such as the 2021 “Listening to Leaders” survey published by Aid Data, where climate change landed in the bottom quartile of [responses](#).

**Figure 2: Percentage of respondents who do not think climate change is one of their countries' top three development priorities**

Responses to the World Bank Country Opinion Surveys



Source: World Bank Group. Most recent data as of 2023. Sampling years vary.

The lack of emphasis on climate change makes sense for LIDCs. Climate change mitigation is a global endeavor, and thus far the richest economies have done little to commit to it despite being the largest per capita contributors to climate change. Given the negligible per-capita contribution of LIDCs to climate change—and the fact that they will not be major contributors in the near future—it makes sense for LIDCs to direct attention elsewhere. Second, development and poverty reduction are excellent resilience strategies for LIDCs. Impoverished communities are much more vulnerable to climate change than richer communities. Under the assumption that climate change will continue regardless of LIDCs' mitigation and adaptation efforts, due to their limited impact; it makes sense for these countries to focus on lifting their populations out of poverty and developing resilient infrastructure, governance, and economies instead of allocating their dwindling resources to fight climate change.

Because environmental concerns are not among the top three priorities for the majority of WBG's clients in LIDCs, the WBG needs to demonstrate the immediate and long-term benefits of climate adaptation and mitigation for these economies. This is especially true if the WBG aims to convince LIDCs to allocate over 5 percent of their GDP toward addressing climate issues while they contribute the least to climate change. Additionally, the WBG must persuade major contributors to climate change to drastically decrease their emissions and assist LIDCs with their direly needed adaptation efforts. Otherwise, LIDCs will

have little to no incentive to reduce their emissions, as they will perceive such measures as having a negligible impact on reversing global warming and climate change.

This policy brief examines the impact of climate change on other development priorities, specifically education and health, that are among the top two in the WBG's 2020-2021 Country Opinion Survey. One or more of these priorities ranks higher than climate change for the governments, aid agencies, media, academics, private sector, and civil societies of the countries in the survey, yet both of these are intrinsically linked to climate change. The remainder of the report goes through each of these priorities outlined by LIDCs in the World Bank survey and highlights the impact of climate change on each one of them.

## HUMAN CAPITAL

**W**hile the education sector is not a large contributor to climate change, even in developed economies, warmer weather brought on by climate change can reduce academic outcomes. Recent studies indicate that students perform significantly worse on both high-stakes and low-stakes exams taken on days where temperatures reach 32 degrees Celsius (C), and that an increase of just 2.7 degrees C above optimal conditions reduces the likelihood of graduation by about 5 percent. Even temperatures over 28 degrees C can result in stu-



Teacher Arnoldo Medrano works in a classroom after the educational authorities brought forward the end of the school year for students due to high temperatures, in Ciudad Juarez, Mexico July 10, 2023. Source: REUTERS/Jose Luis Gonzalez TPX IMAGES OF THE DAY

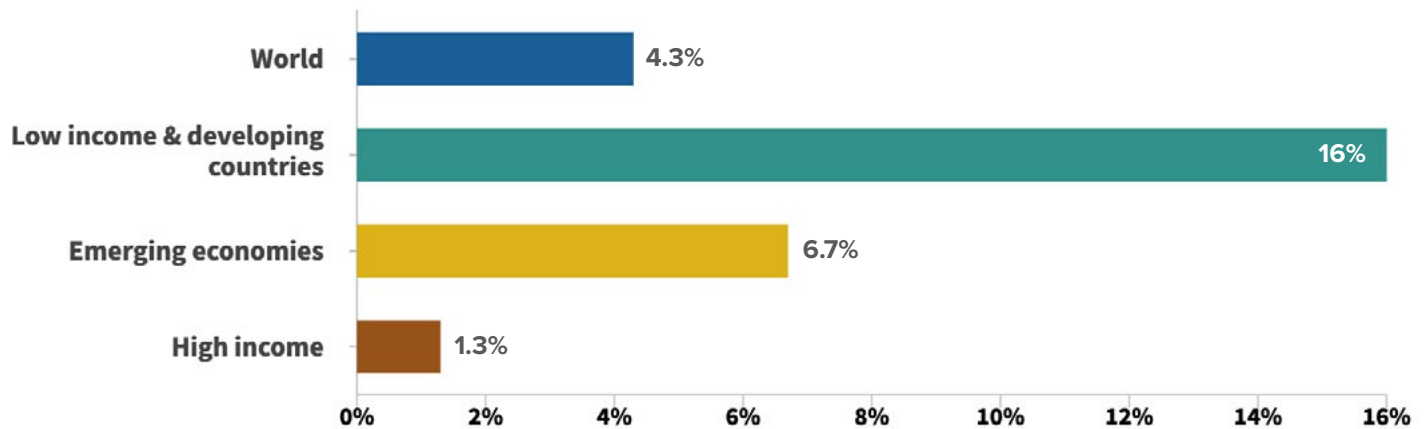
dent performances 6 percent lower than in optimal conditions. The effect of heat on academic outcomes is present in the longer term as well. Students performed worse on exams following a hotter-than-average year, and there is a correlation between a greater number of days above 32 degrees C and poorer exam results. These negative effects are more pronounced in LIDCs without adequate cooling capacities in [classrooms](#).

Beyond direct impacts on academic results, climate change can also damage academic outcomes indirectly. Crop loss and reduced productivity in agricultural professions due to climate change-induced extreme weather events force families to remove their children from school to help cover losses in agricultural output, or due to a lack of income to support the child's tuition. High temperature is also correlated with absenteeism and disciplinary problems in institutions where climate control is not [available](#). Likewise, natural disasters are responsible for a large portion of educational disruptions each year. Natural disasters can destroy the infrastructure that supports education, make educational institutions unsafe for use, displace families, and prevent children from accessing education. Climate change will only increase the severity and frequency of these [disruptions](#).

Education is also one of the greatest tools for fighting climate change. Particularly among young people, education improves a population's ability to adapt to and mitigate climate change. Beyond clarifying the necessity of combatting climate change, education helps individuals contextualize and personally identify the effects of climate change in their community and country. Education also improves cognitive and problem-solving skills and gives poorer populations greater access to information and socio-economic capital. Each of these creates a more resilient and adaptive population with the tools to effectively reduce emissions and mitigate [climate change](#). Therefore, climate change-induced lower educational outcomes in LIDCs will negatively impact the climate mitigation and adaptation capacities in these economies.

Climate change and public health are also closely linked. Infectious diseases are increasingly able to proliferate as temperatures rise. While high-income countries may have the health infrastructure and resilience to handle higher levels of disease, LIDCs are much more vulnerable to severe outbreaks. Coupled with reduced access to clean water, climate change makes disease much more common and health outcomes [more deadly](#). Agricultural damage due to

Figure 3: Agriculture, forestry, and fishing, value added (% of GDP)



Source: World Bank Group - World Development Indicators

climate change also damages overall health outcomes, as widespread famine and poorer nutrition reduce the immune function of populations in LIDCs.

Extreme heat also increases the severity of existing health conditions—including cardiovascular, cerebrovascular, and respiratory diseases—resulting in increased mortality and morbidity. Further, extreme heat complicates and endangers pregnancies. High temperatures are linked with placental abruption, gestational hypertension and preeclampsia, gestational diabetes, cardiovascular complications, preterm birth, miscarriage, and stillbirth, among other complications facing [expectant mothers](#). These health complications are particularly exacerbated in LIDCs, where extreme heat is typically more severe, and health infrastructure is lower quality and less easily accessible.

In addition to extreme heat, emissions have also been linked to adverse health effects. An increase in respiratory and allergic disorders is due to increasing chemical pollutants in the air and greater concentrations of aeroallergens.

Mental health is also impacted by both the direct impacts of extreme weather and its associated destruction, as well as the indirect forces of climate concern and general stress on society due to instability and social unrest. LIDCs and poor communities are more vulnerable to a range physical and mental health consequences resulting from climate change and are therefore in need of various [adaptation mechanisms](#).

## ECONOMIC DEVELOPMENT

Ongoing climate change contributes to the increasing severity and regularity of natural disasters worldwide. The agricultural sector is particularly vulnerable to natural disasters, which can lead to reductions in crop yields, livestock output, and forest and fishery production. Natural disasters can destroy both physical agricultural assets such as standing crops, irrigation systems, and livestock shelters, as well as post-production infrastructure such as storage, transportation networks, processing facilities, and agricultural equipment. Agricultural sectors in LIDCs absorb 25 percent of damages from climate-related natural disasters such as floods, cyclones, hurricanes, and droughts. Therefore, there is a real interest in adapting policy designed to reduce and reverse climate change in LIDCs, as reducing the intensity of climate change will reduce agricultural loss due to natural disasters. This point is particularly salient given that agriculture constitutes about 16 percent of LIDCs' GDP while it is only 6.7 percent and 1.3 percent of emerging economies and high-income nations' GDPs, respectively (Figure 3). Hence, the economies of LIDCs stand to suffer significantly more from the negative impact of [climate change on agriculture](#).

Moreover, warmer weather negatively impacts agricultural production by reducing labor and land productivity. While agricultural output increases with higher average temperatures, above a threshold of 34 degrees C, output begins to decrease. While farmers may engage more labor and pur-

chase more land to offset this productivity loss, consistent extreme heat events will prevent farmers from working their land— particularly in LIDCs where farmers cannot purchase mechanical proxies for labor. By addressing climate change, and by extension the associated impacts, LIDCs could reduce the likelihood of long-term agricultural decline and shortage of food for their population, issues which could contribute to social and political instability, conflict, unemployment, and reduced economic growth.

Furthermore, extreme heat and natural disasters, exacerbated by climate change, are directly correlated with unemployment. This is particularly true in LIDCs where agriculture constitutes a **large portion of GDP**. Environment-related hazards caused by climate change are responsible for reduced labor productivity and threaten the numerous professions which rely on the environment in some capacity. For example, three quarters of the world's jobs are dependent on water in a significant capacity which is threatened by **climate change**.

Overall, climate change is a significant source of harm to economies and human capital. Natural disasters, severe weather, and loss of land habitability can individually and collectively plunge communities into poverty and increase poverty rates in **LIDCs**. From 1993 to 2013, LIDCs experienced a 6.7 percent annual income loss on average from anthropogenic extreme heat, against a loss of 1.5 percent in **high-income countries**. The agricultural sector absorbs roughly 25 percent of all damage and loss in LIDCs because of natural hazards brought on by **climate change**. Low yields in agriculturally reliant LIDCs are a particular issue, threatening to push up to 100 million people into severe poverty within the **next decade**.

As climate change moves more people into poverty, it also threatens those already impoverished or on the verge of impoverishment. The increasing frequency and severity of extreme weather and natural disasters stretch the already strained coping mechanisms of the poor. This hinders their ability to escape poverty and stresses an already precarious situation. In many cases, impoverished households must sell assets that might otherwise provide a sustained income such as land or farming equipment in order to overcome short-term hardship, undermining their long-term access to income and **coping mechanisms**. Thus, as climate change threatens poverty reduction efforts worldwide, it regressively falls more heavily upon those in LIDCs and halts **anti-poverty efforts**. Poverty has a myriad of negative effects on communities, compounding other negative outcomes of climate change such as poor health outcomes.

While climate change inflicts near universal economic harm, LIDCs suffer disproportionately when compared to **high-income countries**. While richer countries are able to mitigate the negative effects of climate change through greater resilience and adaptive capacity, LIDCs suffer economically due to a reliance on agriculture, greater exposure to extreme temperatures, and a lack of risk management and adaptation **capacity**. Short periods of extreme heat can reduce GDP in low-income countries by up to 7 percent annually. As mentioned earlier, extreme heat lowers crop production, reduces worker productivity, and increases the mortality rates of workers. Extreme weather events can also damage critical infrastructure reducing the capacity of LIDCs to cope with **climate change**. All of these factors will hamper economic growth in both the short and long run.

While the transition to a low-emissions and climate-conscious economy could initially slow economic growth in all countries, delaying the transition can inflict much larger harm on the overall global economy. Also, the longer LIDCs wait to make that transition, the more expensive and difficult **the transition will be**. Moreover, climate change is responsible for a 25 percent increase in inequality over the **past five decades**. Combatting climate change is key to reversing this increasing trend, adapting and maintaining infrastructure, and preventing further loss of economic output in LIDCs.

## NATURAL AND PHYSICAL CAPITAL

**C**limate change clearly threatens natural resources worldwide, particularly in LIDCs where natural resource management and adaptation strategies are less robust. The greatest threats to natural resources are droughts and the greater moisture-carrying capacity of a warmer atmosphere. These two effects of climate change threaten water supplies worldwide. Depletion of aquifers and other sources of water will in turn harm both natural ecosystems as well as agriculture and other water-reliant industries. The negative impacts of this are numerous, ranging from biodiversity depletion and crop failure to **unemployment, famine, and conflict**. Without careful water preservation policies, and the subsequent preservation of other natural resources, LIDCs will not be able to reach their development goals and resolution of the concerns outlined in this report will become more urgent. This will require LIDC governments to prioritize natural resource management in order to enable development in other areas.

Moreover, infrastructure in LIDCs is especially vulnerable to more frequent and severe extreme weather events brought on by climate change. LIDCs lack effective built-in resilience, struggle to keep pace with the increasing severity of extreme weather and natural disasters, and are largely geographically located in higher-risk zones. LIDCs struggle to recover fully from the extensive damages to critical infrastructure caused by hurricanes, floods, rising sea levels, landslides, and other natural events. Further, LIDC economies are set back by each of these events, [sometimes severely so](#).

Transportation infrastructure, especially in coastal regions, is increasingly damaged by the effects of climate change such as storm surges, rising sea levels, and heat waves. Reliable transportation infrastructure is essential to the economic development of LIDCs. Mitigating the impact of climate change on such infrastructure will pay dividends in the future. At the same time, because the transportation sector is one of the largest contributors to global emissions (25 percent of total greenhouse gas emissions), investments in green and efficient public transport and alternative fuel sources will allow LIDCs to modernize their transportation infrastructures while at the same time reducing carbon emissions in the [transportation industry](#). This is critical because the bulk of the world's population growth in this century is expected to happen in LIDCs. Currently, roughly 52 percent of the world's population lives in LIDCs, but will expand to about 75 percent of the [projected population of 11.2 billion by 2100](#). With this explosive growth, the demand for transportation is projected to grow rapidly in these economies. Large scale, state-sponsored resilient infrastructure development will be essential to managing climate change, and will require effective and honest governance in LIDCs to achieve.

The energy sector and its associated infrastructure is [the single greatest contributor to climate change worldwide](#), but that does not insulate it from the adverse effects of climate change. LIDCs have a particular focus on the energy sector as they move to transition from rural agrarian economies to urban industrial economies. Extreme weather events brought on by climate change threaten the transmission of energy supply by destroying energy infrastructure, while a warming climate and reduced precipitation threaten water supplies upon which most power plants rely for cooling and fuel production. As temperatures trend warmer on average, the demand for energy will also increase, placing a greater strain on energy infrastructure and production capacity. Populations seeking relief from frequent above-average heat will consume more electricity to cool public and private spaces, and while winter energy use might fall due to global warming, it will not offset the increased summer usage. Greater demand for energy will

produce greater emissions, including greenhouse gasses and air pollutants which will only [accelerate climate change](#).

The obvious solution is transitioning towards renewables in all economies, including in LIDCs. Immediate and substantial investment in renewable energy will not only protect existing energy infrastructure and water supplies, but it will also create new jobs and [foster sustainable economic development](#). On average, a \$1 million investment in renewables generates 7.72 full-time equivalent (FTE) jobs while the same amount of investment in fossil fuels [creates 2.65 FTE jobs](#). This means a \$1 million investment in renewables generates more than five net FTE jobs. This is especially important for most LIDCs that are facing high unemployment rates, especially among their educated youth.

## GOVERNANCE

**C**limate change can also negatively impact the security and stability of LIDCs. While richer and developed nations are the ideal destinations for people displaced by climate change and related events, the majority of climate migration will occur internally within LIDCs. Increasing incidences of extreme weather, the failure of agrarian economies, loss of access to clean water, and other climate impacts are expected to drive up to 216 million people to move within their own countries by 2050. Such internal mass migrations will upset existing social and economic structures, strain infrastructure that cannot support new population distribution, and [deplete natural resources in migration hotspots](#).

LIDCs are also particularly vulnerable to social unrest and instability resulting from climate change. The Pentagon describes climate change as a threat multiplier and stimulus for conflict. Extremism and terrorism are linked to population displacement because of climate change, which in turn could fuel further displacement and instability in LIDCs. With estimates predicting the displacement of 216 million people by 2050, and up to 20 percent of the planet rendered inhospitable due to extreme heat, mass migrations of climate refugees will only foment instability, conflict, and violence as refugees grow increasingly desperate and extremist groups work to exploit those with no other options.

Beyond internal stability and security issues, climate change can also lead to conflict by exacerbating the preconditions of conflict such as resource shortage, loss of livelihood, and low faith in existing institutions. By tipping the most vulnerable into even more precarious positions and exposing flaws in a given government's ability to effectively



A view shows solar panels of the 192 megawatt peak (MWp) floating solar power plant built on Cirata dam, that was developed by PLN Nusantara Power, a unit of Indonesia's state utility company Perusahaan Listrik Negara (PLN) and United Arab Emirates renewable energy company Masdar, a unit of Mubadala Investment Company, in Purwakarta, West Java province, Indonesia, November 9, 2023. Source: REUTERS/Willy Kurniawan

safeguard its citizens and meet its social obligations, climate change [accelerates the formation of violent non-state actors](#). Hence, by addressing climate change, LIDCs could reduce the likelihood, or in some cases avoid, the pre-conditions for violent conflict.

Governance reform—encapsulating public sector reform, judiciary reform, anti-corruption, and government effectiveness and transparency—is slightly harder to directly link with climate change. However, the above-mentioned social and economic volatilities caused by extreme weather might weaken the effectiveness of government institutions in LIDCs. Moreover, governance reform can be aligned with climate change mitigation and adaptation efforts. One obvious example is reforming fossil fuel subsidies.

In the past decade, governments around the world spent more than \$5 trillion to subsidize the production and consumption of fossil fuels. When also taking into account the implicit costs

of such subsidies (opportunity cost and environmental costs), global fossil fuel subsidies are costing the global economy [around 8 percent of its GDP annually](#). While governments can successfully shield consumers from financial hardship during times of crisis by increasing subsidies, they also disincentivize a switch to clean and renewable energy sources as [a solution to fossil fuel energy crises](#). Simultaneously, public funds that could be put toward other development goals—including climate change—are drained to support fossil fuel subsidies. Continued fossil fuel subsidies also hamper economic growth, harm natural resources and air quality, and are detrimental to public health. Thus, while actively contributing to climate change, the continued reliance on fossil fuel subsidies also hampers many of the development goals of LIDCs. While offsetting rising energy costs through subsidies is attractive in the short term, fossil fuel subsidies remain an inefficient and irresponsible use of public funds that could be better spent [combatting climate change and other development priorities](#).





Bill Gates, Trustee and Co-Chair of the Global Commission on Adaptation, speaks as World Bank Group President David R. Malpass (L), Amazon-based indigenous leader Tuntiak Katan and Bangladesh's Prime Minister Sheikh Hasina (R) look on during the 2019 United Nations Climate Action Summit at U.N. headquarters in New York City, New York, U.S., September 23, 2019. Source: REUTERS/Lucas Jackson

## CONCLUSION AND POLICY RECOMMENDATIONS

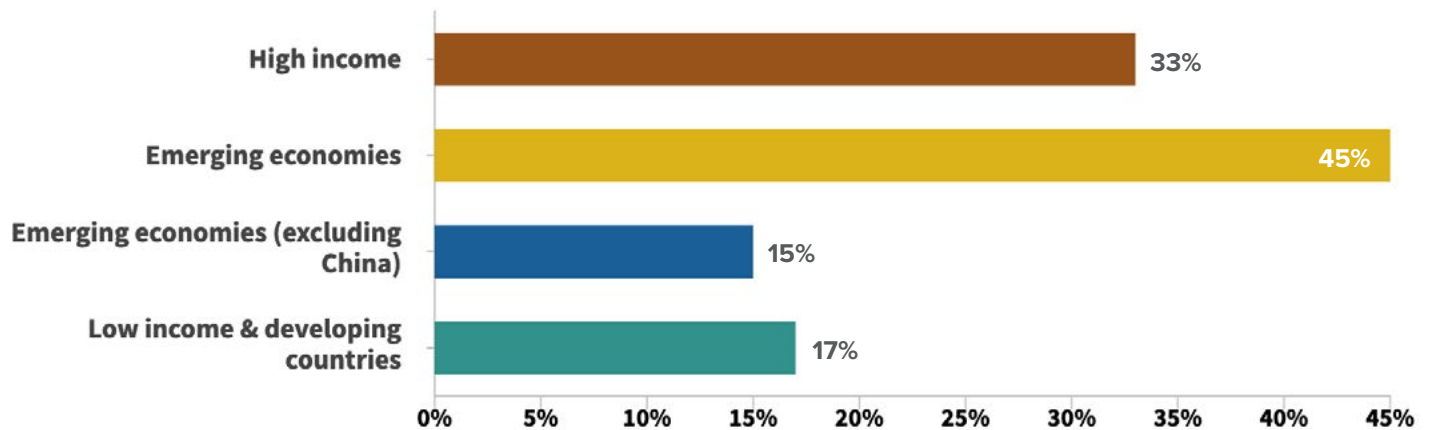
**T**he most significant—and likely most critical—step the WBG can take to align the priorities of LIDCs with its climate agenda is to outline a clear plan through which high-income countries will do their share to fight climate change. As seen in Figure 4, high-income countries are responsible for more than 35 percent of global CO<sub>2</sub> emissions, while only 16 percent of the world's population resides in these economies. In other words, as shown in Figure 5, on average, a person residing in high-income economies emits 6.4 times more carbon dioxide than a citizen in an LIDC. Hence, when compared to the world's high-income economies, LIDCs are consistently disproportionately small contributors to climate change.

There is real value in observing the future potential of LIDCs to become large emitters following periods of rapid population growth, industrialization, and urbanization. Estimates predict LIDCs will account for over half of the world CO<sub>2</sub> emissions by 2050. However, the most immediate impacts in the fight against climate change will be felt by focusing interventions on the greatest emitters and contributors. Not only will this have the largest practical effect, but it will also free the high-income economies and the WBG from claims of hypocrisy or blame-shifting, and convince LIDCs of the genuine in-

tent of the WBG in reducing emissions and addressing climate change in a just, efficient, and effective manner. However, the WBG may find it extremely difficult to persuade major contributors to climate change to drastically reduce their emissions and aid LIDCs in this effort. This is because the countries with strong political power on the WBG board are the major emitters themselves, and it may be difficult to believe that they would self-regulate. To this end, other members of the WBG should focus on information campaigns and raising global public awareness to create pressure on the WBG and its high-income members to do their part in reducing global emissions.

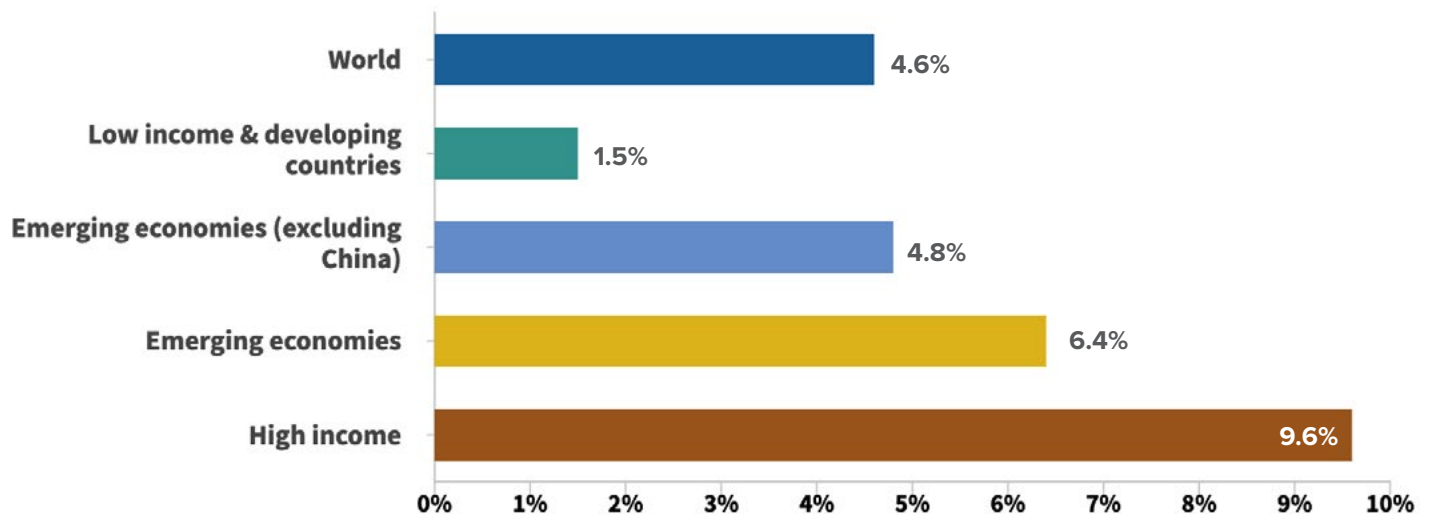
The WBG and higher-income countries can also invest significantly in leapfrogging technology, education, and infrastructure in LIDCs to avoid the negative impacts of industrialization and urbanization. In pursuit of economic development, LIDCs will likely gravitate toward the least expensive and most effective methods of emission-intensive industrialization, just as many of the current richest nations did during their various stages of development. This is particularly true as governments around the world continue to subsidize fossil fuels. Such industrialization cannot occur again if the WBG hopes to meet any climate goal on its agenda. By subsidizing renewable energy, green infrastructure development, and sharing best practices, the developed world can make it feasible for LIDCs

Figure 4: CO2 Emissions (% share of the world)



Source: World Bank Group - World Development Indicators

Figure 5: CO2 Emissions per Capita (metric tons per capita)



Source: World Bank Group - World Development Indicators

to bypass the mass emissions of their rapidly growing and industrializing economies. Successful examples already exist in places like Kenya, Nicaragua, and Morocco, where renewable energy is already a significant share of [each energy mix](#). Investments from the WBG in leapfrogging can help LIDCs reduce emissions without sacrificing their development goals.

Education and public information campaigns are crucial tools in the promotion of climate action and will be essential in

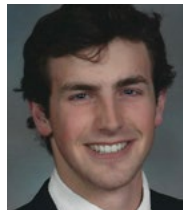
convincing LIDCs that climate change should be seen as a higher priority. This will allow the populations of LIDCs to see the benefit of the WBG pursuing climate-focused policy, and that such policy can still be aligned with their other development goals that top priorities as highlighted above. Moreover, climate education helps individuals understand how climate change affects them directly and indirectly — thus creating popular support and changing policy in democratic countries. It will also provide populations with the knowledge and skills [necessary to combat climate change](#).

Finally, the WBG should ensure that funding for climate development projects complements ongoing development projects currently ranking higher among LIDC priorities, instead of creating competition for resources. While this report has demonstrated that investments in climate mitigation and adaptation strategies will benefit the development priorities of LIDCs, it should not be misunderstood to suggest that climate-focused investment will fully address them. Climate financing must be offered as an addition to traditional development funding, and without overtly restrictive conditions. LIDCs cannot be expected to fix a problem created mainly by the high-income and upper-middle economies at the cost of their own development. If made to choose, it would be unreasonable to assume that LIDCs would abandon their development priorities in favor of reducing their own small contributions to global emissions and climate change. This is particularly so because development is the best way to reduce global emissions in the medium to long run and build climate resilience.

## ABOUT THE AUTHORS



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*List as of July 5, 2023*



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