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for every child

# The World's Children Need Urgent Action on Climate Change

**The climate crisis is a child rights crisis – jeopardizing every child's fundamental right to a clean, safe and healthy environment.**



The world's children bear the greatest burden of the global climate emergency. UNICEF's landmark Children's Climate Risk Index found that one billion children face extreme risks to their ability to survive, grow and thrive due to exposure to the impacts of climate change.<sup>1</sup>

Climate change is decimating the very foundations of what it means to be a child. The early life of every child should be characterized by untroubled feelings of happiness, hope and a sense of security. But, instead, far too many children who experience climate and environmental shocks or stresses must contend with unimaginable threats – including loss of life; severe malnutrition and disease; water

scarcity; the destruction of their homes, schools and communities; and limited prospects for their futures. These risks imperil development gains for children over the years and deepen the inequities they face around the world.

Despite the stark realities, the fate of the world's children is not preordained. It is completely within the power of world leaders to change the trajectory of children's futures – particularly for the most vulnerable children already facing the profound consequences of poverty and inequality. There are clear, practical solutions that work and incontrovertible evidence of the returns on investment. Global momentum to tackle the climate crisis is growing. Countries are pledging to step up their efforts to combat climate change, technological advances are making green energy solutions more viable and the public's growing demand for climate action is resonating across the globe.

The window to act is narrowing and time is running out. We need to prevent the worst climate change impacts on children and accelerate progress toward achieving the Sustainable Development Goals. Pledges must turn into action. Emissions reductions must vastly accelerate. The tough talk on climate must translate to public policies and budgets that prioritize climate action and adaptation for children. The calls for change from children, young people and the public must be heeded. And political will must magnify tenfold.

Safeguarding the future for children is one of the world's most solemn responsibilities. The best way to protect children is to elevate their needs in every response to the climate crisis. This crucial step will give children the opportunity to grow and thrive in stronger, more resilient communities – and redefine the future and its potential for all countries.

## Children suffer the worst consequences of climate change

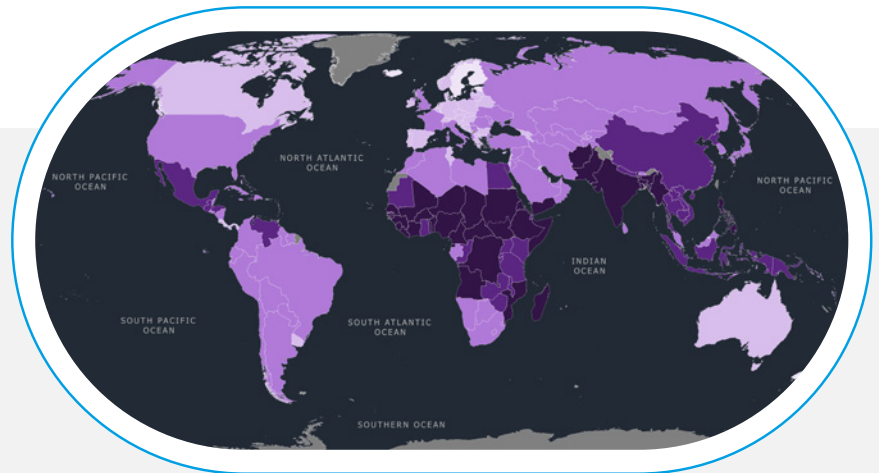


**The climate crisis is not just changing the planet – it is changing children.** From the moment of conception until they grow into adulthood, the health and development of children's brains, lungs, immune systems and other critical functions are affected by their environment.<sup>2</sup>

**Nearly half of the world's 2.2 billion children are at extremely high risk.** These children face a deadly combination of exposure to multiple climate and environmental shocks with a high vulnerability due to inadequate essential services, such as water and sanitation, health care and education.<sup>3</sup>

**1 billion children**  
live in extremely high-risk countries

**99% of all children**  
are exposed to at least one major climate and environmental hazard, shock or stress



● Extremely High    ● High    ● Medium-High    ● Low-Medium    ● Low    ● No data

**2.2 billion children**  
- almost 90 per cent of children globally -  
are exposed to high levels of air pollution

**40 million children**  
are having their education disrupted every  
year because of disasters exacerbated by  
climate change

**330 million children**  
are highly exposed to riverine flooding

**820 million children**  
face high exposure to heatwaves

**240 million children**  
face a high threat of coastal flooding

**815 million children**  
are highly exposed to lead pollution due to  
exposures in contaminated air, water, soil  
and food

**400 million children**  
are living in high-risk cyclone prone areas

**Almost 1 billion children (953 million)**  
are exposed to high or extremely high  
water stress

**600 million children**  
are at high risk of exposure to vector-  
borne diseases

**Children are not little adults; they are uniquely more vulnerable to the effects of extreme weather, droughts, floods and heatwaves.**

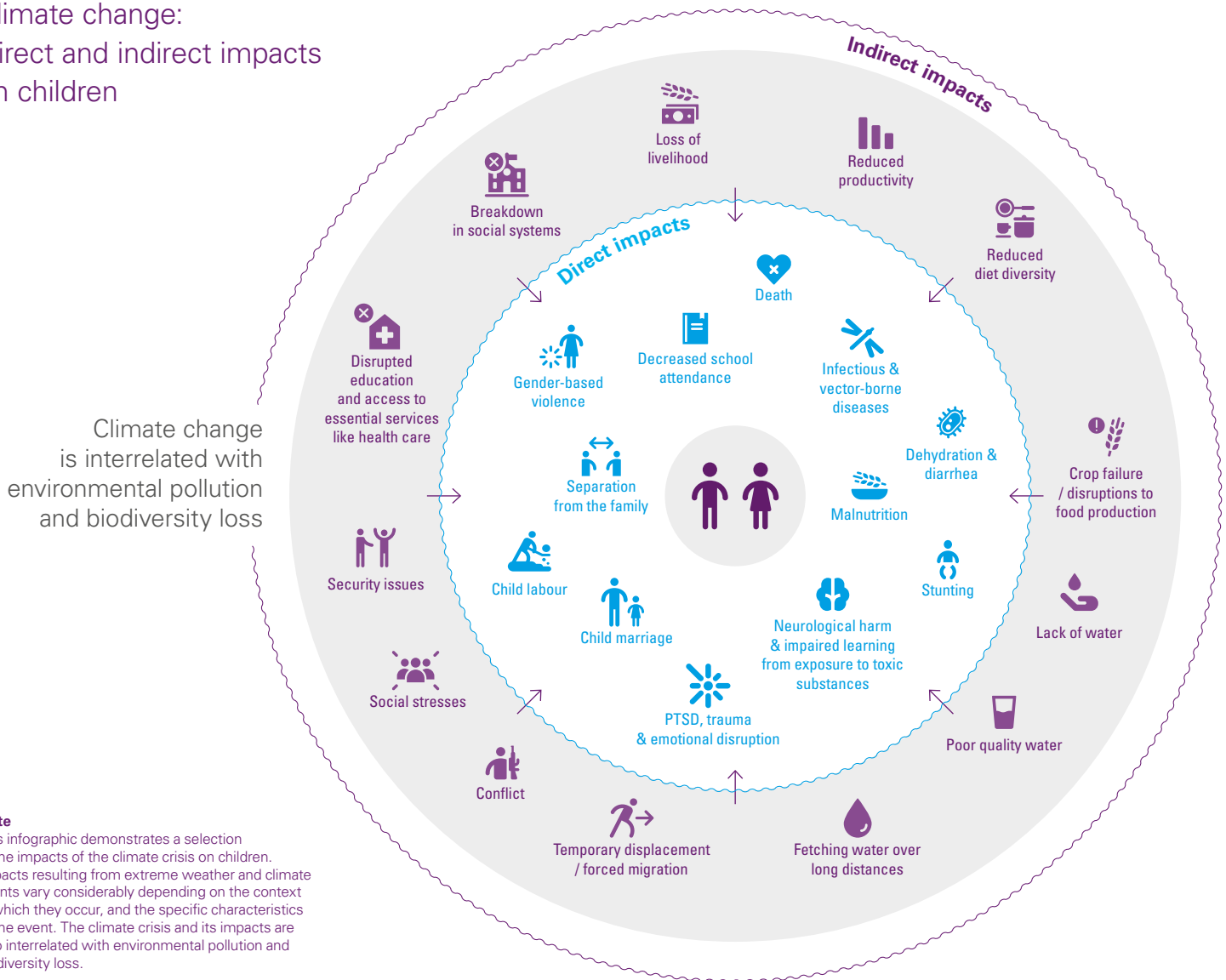
Children are physically more susceptible and less able to withstand and survive shocks. Children require more food and water per unit of body weight than adults. Young children breathe twice as fast compared with adults.<sup>4</sup> As a result, consuming polluted or contaminated air, water or food will have a proportionally greater impact on children's health and well-being.<sup>5</sup>

Children are also physiologically more vulnerable. Toxic substances, such as lead and other forms of pollution, affect children more than adults. They can impact their cognitive development, decrease intelligence test scores and create a range of mental disabilities.<sup>6</sup>

**Nearly 90 per cent of the global burden of disease associated with climate change, environmental degradation and pollution is borne by children under five.** Children are more susceptible than adults to diseases carried by air, water and insects that proliferate and carry deadly pathogens after extreme weather events. Six hundred million children – approximately 1 in 4 children globally – are currently highly exposed to vector-borne diseases, such as malaria and dengue, among others.<sup>7</sup>

Children who live in communities that heavily rely on agriculture for their food often experience food insecurity, malnutrition or irreversible stunting when crops fail due to weather-related events. These children are more susceptible to disease and infection and poorer developmental outcomes.

**Climate change:  
Direct and indirect impacts  
on children**



**Children who experience climate-related disasters or extreme weather events are vulnerable to mental health effects.** Children's dependence on parents or other adults to care for them and their limited coping skills can make it more difficult for them to deal with traumatic events.<sup>8</sup> Research has found that up to 43 per cent of children exposed to disaster events will develop post-traumatic stress disorder, and suffer depression, anxiety or other mental health issues following climate-fueled disasters.<sup>9</sup> Global research of 10,000 young people shows increased anxiety around climate is associated with perceptions of inadequate by adults and governments, feelings of betrayal, abandonment and moral injury.<sup>10</sup>

**The world's most vulnerable children – those living in poverty, the youngest (under five years of age), displaced children, adolescent girls and children living with disabilities – face the most serious climate consequences.** Many vulnerable children already lack reliable access to essential services like health care, water and education, making them even more susceptible to the consequences of climate-related hazards. The result is a vicious cycle that perpetuates inequality and pushes them into deeper poverty.

The effects of climate-related events on young girls have been well documented. Displacement, migration and livelihood loss by young girls after extreme weather events and disasters can increase rates of gender-based violence and child marriage.<sup>11</sup> For example, in Bangladesh, the number of marriages of girls ages 11 to 14 increased by 50 per cent in years with heatwaves lasting longer than 30 days.<sup>12</sup>

**Children bear the full costs of opportunities lost throughout their lives – including to their education.** Disruptions to education from climate change impacts will negatively affect children's abilities to learn, impacting their future careers and potential. Annually, climate-induced disasters disrupt the education of nearly 40 million children, and this number continues to increase each year.<sup>13</sup> The greater the frequency of disasters and the likelihood of repeated disruptions to education, the greater the chances that a child's education will permanently end.<sup>14</sup>

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## Children must be at the centre of the response to climate change



World leaders and the international community must take critical steps with and for children to protect them from the greatest risks posed by climate change:

**Accelerate the reduction of harmful greenhouse gas emissions to safeguard current and future generations of children.** The only long-term solution to protect children from the climate crisis is to reduce emissions – primarily by ending the burning of fossil fuels and transitioning to clean, secure energy. Developed economies – especially the major emitters – must reach net zero emissions as close to 2040 as possible and support emerging economies. They must support emerging economies with know-how and climate finance to hit their 2050 targets. This will prevent the worsening of the climate crisis for children and young people.

Decarbonization efforts that reduce emissions will greatly increase the chances that children will survive, grow and thrive. The transition to a low-carbon economy also carries the potential for children and young people to develop new skills and gain employment opportunities in a changing labour market defined by clean energy and sustainability.

**Dramatically increase investments in the adaptation and resilience of social services that children depend on for their health and well-being.** Even under the most optimistic scenarios, emissions reductions will take decades to take hold. Children cannot wait for the world to reach net zero carbon emissions. That is why emissions reductions must be accompanied by efforts to equip communities to adapt to the impacts of climate change and strengthen their resilience. This enables them to anticipate, cope

with and recover from multiple threats, hazards, shocks and stresses. The return on investment is clear: Studies show that one dollar invested in adaptation can yield US\$10 in net economic gains.<sup>15</sup>

There is a strong correlation between the provision of essential social services that children depend on for survival and development outcomes. That is why it is so important that essentials of life – like health, food, education, and water and sanitation services – are provided in a way that is climate resilient – or climate smart.

Social services must be transformed to be climate smart – greener and more resilient – to set the world on a stronger path to address climate change at every level. When done right, climate adaptation and resilience planning are proven to reduce child climate risk, build resilience to climate shocks and deliver economic benefits. Ambitious adaptation programmes could decrease the number of people in need of humanitarian assistance from climate disasters by 90 per cent by 2050.<sup>16</sup>

Prioritizing sustainable energy for essential services is a critical example of the type of climate-smart services needed for a just and equitable transition. This includes implementing clean energy solutions; developing public-private partnerships for delivery in facilities (e.g., at health-care centres, schools and water facilities); and integrating sustainable energy into government social service policies and budgets.

Building resilient social services can also build resilient children. A system that delivers key social services for children and continues to function well, regardless of the severity and frequency of climate-related shocks, will greatly reduce the overall risk that those children face.

**Prepare countries to protect children before, during and after disasters.** There is a powerful opportunity to leverage investments in protecting children by systematically integrating climate change adaptation measures into disaster risk reduction, recovery and humanitarian responses.

Aligning development and humanitarian approaches leads to better results for children. It is a cost-effective way to strengthen the ability of vulnerable communities to withstand shocks over time. This work requires an emphasis on early warning

systems, rapid response and financing mechanisms that provide quick resources when and where they are needed most. It also requires building schools and health-care centres to be climate and disaster resilient as standard practice before a disaster and prioritizing low-carbon and environmentally sustainable approaches during recovery. These approaches must rely on data systems and policies that work with governments and communities across development and disaster management to identify and prioritize the most vulnerable children and the services they need.

**Empower children and young people to lead the call for change and equip them with the tools to help lead the way to a just and equitable transition.** Children and young people are both critical stakeholders and essential voices in the public debate on climate action. Foundational for long-term change is educating children and young people throughout their lives on climate threats, providing them opportunities to craft solutions to change course, giving them a stake in plans and policy outcomes, and empowering them to take action.

Investments must include a commitment to educate children and young people on climate change, sustainability and disaster risk reduction inside and outside the classroom. Early involvement in environmental education can help young people understand the urgency of the issues, the consequences of inaction and their power to use their voices to change outcomes. A recent study of 100 countries found that only 53 per cent of national curriculum frameworks make reference to climate change.<sup>17</sup>

Another study found that if only 16 per cent of high school pupils in high- and middle-income nations received climate change education, carbon dioxide emissions would be reduced by approximately 19 gigatons by 2050.<sup>18</sup> These education programmes must also include the acquisition and deployment of green skills that will help young people participate in and lead the green transition. By providing all children with green education, skills and knowledge, countries are better positioned to reduce emissions and transform entire societies and economies. Green skills offer endless possibilities for improving both the global scale of adaptation and the trajectory of emissions reduction.



Children and young people must be empowered to take action to tackle climate change. Every day, they are demonstrating their ability to make meaningful change. Their long-term commitment often takes root when they engage in concrete actions that allow them to see the positive impacts of their contributions – whether it is through volunteerism, coordinated peer action, online education or mobilization campaigns.

Children and young people must also have a seat at the table with political leaders and other decision makers who are deciding their futures. The United Nations Convention on the Rights of the Child (CRC) states that every person under the age of 18 has the right to participate in the decision-making processes that impact them.<sup>19</sup> This includes in public forums to express their views, and with support.

**Global initiatives, investments on climate action and national plans, and budgets must prioritize and differentiate children's heightened vulnerabilities.** Parties to the Paris Agreement have agreed that States should, when taking climate action, respect, promote and consider the rights of children, as well as intergenerational equity.<sup>20</sup> However, this commitment has yet to translate into significant, child-responsive policy initiatives or investments at the global level.

The General Comment No. 26 on Children's Rights and the Environment with a Special Focus on Climate Change affirms children's rights to a clean, healthy and sustainable environment and interprets States' obligations under the CRC. It invites countries to prioritize climate justice, equity and meaningful child participation in environmental decision-making processes.

Reports and proposed decisions in global frameworks like the Global Goal on Adaptation,<sup>21</sup> the Global Stocktake<sup>22</sup> and rules for Loss and Damage<sup>23</sup> either completely omit or pay minimal attention to the needs of children. These frameworks must be adapted to adequately incorporate child rights and intergenerational equity in the technical details that will determine climate action. The Global Goal on Adaptation framework must include child-responsive metrics and incorporate thematic, sector-based targets. These targets are essential for engaging relevant line ministries and adaptation practitioners whose involvement will be critical at every stage of the adaptation policy cycle.

The Loss and Damage Fund must include specific targets for children. Child rights must be embedded in the fund's governance and decision-making processes, including accountability mechanisms. This requires finance commitments that provides immediate relief and build long-term resilience for children. The fund must address economic and non-economic losses and damages for children and provide significant resources for child-critical social services. It must also establish a dedicated funding window for local communities that can facilitate more effective climate finance for child-specific priorities.

Less than half of Nationally Determined Contributions (countries' self-defined national pledges under the Paris Agreement) specifically address children's unique needs and vulnerabilities.<sup>24</sup> In addition to addressing policy issues specific to children, governments must include funds for initiatives and services that emphasize child needs related to climate change, environmental pollution, biodiversity loss, and disaster preparedness and response. Governments must also meaningfully engage the most vulnerable children and their families and communities. This ensures solutions are tailored to local circumstances and risks, and can address child needs unique to the area.

**Follow through on climate financing comments that are equal to the global goals and aspirations.** Climate financing is drastically inadequate and fails to prioritize children who will endure the most severe climate change impacts. Financing for climate adaptation hovers below US\$30 billion annually, while overall needs sit around US\$300 billion.<sup>25</sup> Only 2.4 per cent of climate funds explicitly target children.<sup>26</sup> Climate financing mechanisms also lack child focus and accountability.



**Only 2.4 per cent  
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The world needs an international finance system that is fitting for the 21st century. That is, one that equips all countries with the resources they require to meet today's challenges. It must embody an approach to global economic governance that reflects the modern world that children are born into today and in the future.

Pledges to double climate finance must be honored, and then increased. Funding for adaptation must be drastically scaled-up to at least US\$100 billion annually, with clear mandates to prioritize strengthening child-focused social

services. These mandates must be accompanied by monitoring systems that connect financial flows with results for children. And progress to provide funds to countries already experiencing irrevocable loss and damage from climate change must be accelerated.

Climate finance must add to existing levels of overseas development assistance and finance – not replace this funding. Progress on climate goals and social and development goals are inextricably linked. We cannot achieve one without the other.

## The future is not yet written



Over the next 30 years, 4.2 billion children will be born.<sup>27</sup> This generation has the power to change the world in the coming years. Decisions made today by United Nations agencies, political leaders, the private sector, philanthropy, civil society and individuals will determine whether climate change defines childhood, or whether children grow up in a dramatically improved world where they can define their own future.

The challenges vulnerable children face are formidable. The solutions require more than any one individual, organization, government or business can provide. They require unprecedented

global partnerships that leverage the unique strengths of each actor to achieve a level of impact that no one can achieve alone. Children cannot wait for change.

UNICEF's [Sustainability and Climate Change Action Plan](#) seeks to galvanize worldwide efforts to protect, support and empower children.<sup>28</sup> We call on all partners to join us in a global movement to confront the worst impacts of the climate crisis on children. Together, we can ensure society's most valuable resources – its children – are at the centre of a global response.



## Endnotes

- 1 United Nations Children's Fund, *The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index*, UNICEF, New York, 2021, <https://www.unicef.org/reports/climate-crisis-child-rights-crisis>.
- 2 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*, UNICEF, New York, 2023, <https://www.unicef.org/reports/climate-changed-child>.
- 3 United Nations Children's Fund, *The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index*.
- 4 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*.
- 5 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*.
- 6 United Nations Children's Fund & Pure Earth, *The Toxic Truth: Children's Exposure to Lead Pollution Undermines a Generation of Future Potential*, New York, 2020, <https://www.unicef.org/media/73246/file/The-toxic-truth-children%E2%80%99s-exposure-to-lead-pollution-2020.pdf>; United Nations Children's Fund, *Danger in the air: How air pollution can affect brain development in young children*, UNICEF, New York, 2017, [https://www.unicef.org/sites/default/files/press-releases/glo-media-Danger\\_in\\_the\\_Air.pdf](https://www.unicef.org/sites/default/files/press-releases/glo-media-Danger_in_the_Air.pdf).
- 7 United Nations Children's Fund, *The climate crisis is a child rights crisis: Introducing the Children's Climate Risk Index*.
- 8 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*.
- 9 Kar, N., "Psychological Impact of Disasters on Children: Review of Assessment and Interventions," *World Journal of Pediatrics* 5, no. 1 (2009): 5–11.
- 10 Hickman, C., et al., "Climate anxiety in children and young people and their beliefs about government responses to climate change: a global survey," *The Lancet. Planetary health* 5, no. 12 (2021): e863–e873.
- 11 United Nations Children's Fund, *Is an End to Child Marriage within Reach? Latest trends and future prospects*, UNICEF, New York, 2023.
- 12 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*.
- 13 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*.
- 14 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*.
- 15 United Nations Children's Fund & Global Center on Adaptation, *A call to action on climate and children*, UNICEF, 2022, <https://www.unicef.org/media/126601/file/Protect,%20Prepare,%20Prioritize.pdf>.
- 16 United Nations Children's Fund & Global Center on Adaptation, *A call to action on climate and children*.
- 17 United Nations Educational, Scientific and Cultural Organization, *Getting every school climate-ready: How countries are integrating climate change issues in education*, UNESCO, Paris, 2021, <https://doi.org/10.54675/NBHC8523>.
- 18 Cordero, C., Centeno, D., & Todd, A. M., "The role of climate change education on individual lifetime carbon emissions," *PLoS ONE* 15, no. 2 (2020): e0206266. <https://doi.org/10.1371/journal.pone.0206266>
- 19 <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>
- 20 Decision 1/CP.1 (Paris Agreement)
- 21 <https://unfccc.int/topics/adaptation-and-resilience/workstreams/glasgow-sharm-el-sheikh-WP-GGGA>
- 22 <https://unfccc.int/topics/global-stocktake>
- 23 <https://unfccc.int/topics/adaptation-and-resilience/workstreams/approaches-to-address-loss-and-damage-associated-with-climate-change-impacts-in-developing-countries>
- 24 United Nations Children's Fund, "NDCs for every child Data Platform," accessed 2 November 2023, <https://ndcsforeverychild.unicef.org/>.
- 25 United Nations Environment Programme, *Adaptation Gap Report 2023: Underfinanced. Underprepared. Inadequate investment and planning on climate adaptation leaves world exposed*, Nairobi, 2023, <https://doi.org/10.59117/20.500.11822/43796>.
- 26 Children's Environmental Rights Initiative (CERI) coalition, *Falling short: Addressing the climate finance gap for children*, 2023, <https://www.unicef.org/reports/addressing-climate-finance-gap-children>.
- 27 United Nations Children's Fund, *The climate-changed child: A Children's Climate Risk Index supplement*.
- 28 See: <https://www.unicef.org/documents/sustainability-climate-change-action-plan>.



## For every child

Whoever she is.

Wherever he lives.

Every child deserves a childhood.

A future.

A fair chance.

That's why UNICEF is there.

For each and every child.

Working day in and day out.

In more than 190 countries and territories.

Reaching the hardest to reach.

The furthest from help.

The most excluded.

It's why we stay to the end.

And never give up.



for every child

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