

Nationally Determined Contributions

Healthy NDCs Scorecard 2026

Supporting Health inclusive National Climate Plans

GLOBAL CLIMATE & HEALTH ALLIANCE

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"Done well, [NDCs] can serve as powerful blueprints, to propel each of your economies and societies forward, and drive more resilience, more opportunity, better human health and higher living standards"

- Simon Stiell, Executive Secretary, UNFCCC -

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KEY FINDINGS

- 100% of NDCs include health or air-quality related considerations
- 79% of NDCs refer to health impacts
- 32% of NDCs quantify these health impacts
- 94% of NDCs include some reference to air pollution
- 80% of NDCs describe mitigation or adaptation actions in the health sector
- 82% of NDCs recognise health co-benefits in other sectors
- 43% of NDCs specifically mention improved air quality as a co-benefit
- 15% of NDCs link health to just transitions
- 15% of NDCs include the Ministry of Health in the creation of NDC
- 43% of NDCs include quantifications of costs, budget, or returns on investment
- 28% of NDCs include specified targets for monitoring or implementation

INTRODUCTION

In 2026 alone, the health costs of climate-related events have included over 1,400 deaths and over 6,600 missing in Nepal alone[1], an additional 8 million children at risk of hunger in Eastern and Southern Africa[2], over 35,000 deaths during heatwaves in Europe[3], and the long-term health impacts of air pollution from over 5,400 wildfires in Canada[4]. As recognised by the COP31 Presidency in its third letter, 'rising temperatures, deteriorating air quality, changing disease patterns and more frequent extreme weather events are placing growing pressure on health systems worldwide'[5]. El Niño climate patterns stand to further exacerbate future hazards with devastating effect. With the world now entering a period of 1.5°C overshoot, efforts must be redoubled to lower the peak warming reached, to limit the risks faced by people, societies, economies and ecosystems, and reduce the probability of crossing irreversible thresholds and adaptation limits[6].

Entrenched dependence on fossil fuels, and reliance on unsustainable industrial agricultural practices continue to drive emissions, air pollution and health impacts. In particular, 'superpollutants' or short-lived climate pollutants (SLCPs) including black carbon (soot) and tropospheric ozone contribute to global warming, cause local environmental degradation, and harm ecosystems, biodiversity and human health. These super pollutants are many times more potent than carbon dioxide per tonne, and many remain in the atmosphere for shorter periods (just 4-12 days for black carbon, compared to hundreds of years for carbon dioxide)[7]. This means that cutting super pollutants can reduce warming four times faster than reducing carbon dioxide alone.

Meanwhile, a dearth of international finance for action to protect climate, health and air quality hampers life-saving action. Climate finance was estimated at US$ 132.8 billion in 2023 and US$ 136.7 billion in 2024 by OECD[8], but as low as US$28–35bn in 2022 according to civil society estimates[9], and stands to be further jeopardised by cuts to international financial support. Meanwhile, the latest State of Global Air Quality Funding report reveals that outdoor air quality funding still received less than 1% of development funding, despite the fact that 5% of global GDP is lost to air pollution through health impacts, lost productivity, and reduced life expectancy[10].

Measures to reduce emissions and build resilience across sectors are vital to protect populations from increasing health threats. In addition to avoiding these health harms, climate mitigation and adaptation can also yield health co-benefits, including cleaner air, healthier diets, reliable and safe energy access, improved water security, and increased physical activity. Air pollution from fuel combustion drives millions of deaths annually[11,12]. Meanwhile, emissions reductions in the energy, food and agriculture, and transport sectors in line with the Paris Agreement could avoid 1.64 million

air-pollution related deaths, 6.43 million diet-related deaths, and 2.09 million deaths attributable to physical inactivity annually by 2040 in just nine countries[13].

Nationally determined contributions, or 'NDCs' are national climate plans, submitted by governments in line with their commitments under the Paris Agreement. In 2025, governments were due to submit updated 'third generation' NDCs, or NDCs 3.0, setting out plans until 2035. By 1st August 2026, 117 NDCs 3.0 had been submitted, representing 132 countries*.

The Global Climate and Health Alliance 2026 Healthy NDC Scorecard assesses the extent to which NDCs 3.0 recognise and respond to the abundant linkages with health and air quality. Previous iterations of the scorecard have separately focused on health (in 2021 and 2023) and clean air (in 2023). The 2026 NDC Scorecard draws both issues together. Each NDC was scored for integration of health and clean air considerations in eight categories: health impacts, air pollution, health sector action, health co-benefits, just transition, integrated governance, economics and finance, and monitoring and implementation. These results were then compared against ratings of climate ambition and national air pollution mortality rates.

Ensuring the integration of health and air quality considerations into climate policy protects populations, maximises economic benefits, and can build public backing for ambitious climate policies[14], all of which are so urgently needed - meaning failure to include health in NDCs is a triple missed opportunity which will ultimately cost lives, undermine development, and fail to protect the planet. With COP31 rapidly approaching, governments have an opportunity to consider these intersections in international agreements, and ensure that national implementation of NDCs can be delivered at speed.

This report summarises the methodology and findings of the 2026 Healthy NDC Scorecard. A full academic manuscript is in preparation for 2027.

**The EU submitted a joint NDC, and France submitted a national annexe to the EU NDC.*

METHODS

NDCs submitted up until 1st August 2026 were downloaded from the UNFCCC NDC registry. The most recent NDC for each country was included, provided it was submitted from 2024 onwards and had an end date of 2035 or later. 117 NDCs met these criteria and were included in the analysis.

Analysis was split into two phases: data collection and coding. In the data collection phase, NDCs not written in English were translated using Google Translate. Searches were conducted using Adobe. Full details of the search terms used can be found in appendix 1. Data was anonymised before coding to prevent bias. During the coding phase, each search result was considered, and relevant search results were coded according to the framework in the appendix, followed by scoring. Reliability tests during the coding phase confirmed consistent analysis by the coding team.

The eight categories, with four possible points available for each, leading to a maximum total score of 32 points are:



Health impacts: The health impacts of climate change and air pollution, whether quantified or qualitatively described.



Air pollution: Points are awarded for named air pollutants, general air pollution, and setting air quality targets.



Health sector action: Policies for adaptation in the healthcare sector, to ensure more resilient healthcare provision, with one point available for countries also specifying mitigation in the healthcare sector.



Health co-benefits: Mitigation and adaptation actions in sectors other than the healthcare sector which are recognised in the NDC to offer benefits for health.



Just transition: References to just transitions in relation to health, and mentions of worker health, vulnerable populations, and the healthcare sector in this context.



Integrated governance: Collaboration with the Ministry of health, efforts to mainstream health into climate decision making, or recognition of the human right to health or the right to a clean, healthy and sustainable environment.



Economics and finance: Costs of health-related climate impacts, costs to implement specified actions, budgetary allocations, and returns on investment from health-related actions across sectors.



Monitoring and implementation: Monitoring and implementation of health-related actions within and beyond the health sector, as well as the health outcomes of any such actions.

The scorecards also include a climate ambition from the Climate Action Tracker assessment[15] for the NDC emissions reduction target compared to each country's fair share, as well as data for total air pollution mortality per 100,000 people in 2023 from the State of Global Air[16] and, in the case of Liechtenstein, from the European Environment Agency[17].

Updates from previous iterations

This analysis was distinctly different from previous scorecards and the results from this analysis should not be directly compared with previous versions. Notable differences include additional categories to bring the total number of categories to eight, and an increase in the possible number of points possible per category from three to four to allow for a broader spectrum of results.

Limitations

This analysis was based on the content of the NDC document itself and did not evaluate external policies or sources. As such, it did not evaluate implementation. Some countries opt to include adaptation information in other climate policies rather than in NDCs, which may lead to lower scores. It was not feasible to include the full scope of search terms relevant for the just transitions category, which may lead to lower scores for countries who nonetheless prioritise these issues. The use of Google translate may have led to some search results, or additional search results, being identified compared to analysis in the original language. Finally, Climate Action Tracker does not assess the emissions reduction targets of all NDCs and so is only included for 17 NDCs.

RESULTS & INTERPRETATION

Overview

All NDCs that were analysed refer to health or clean air considerations to some extent, with no NDCs scoring zero points. The average score of all NDCs is 11.8 points. Colombia is the top scorer, with 29 points out of a total of 32 points possible, securing the maximum points available for all categories except one. Besides Colombia, the top ten countries include Nigeria with 25 points and Cambodia with 24 points. Paraguay and Timor-Leste each receive 22 points, Morocco, the Republic of Moldova, Sierra Leone, and Suriname each receive 21 points, and Armenia receives 19 points. Notably, 19 of the top 20 scores are secured by low- and middle-income countries (LMICs).

Colombia's NDC is detailed in its integration of health as a cross-cutting topic. In the integrated governance category, it includes its Ministry of Health in the creation of the NDC and connects it with other sectors on multiple different types of projects. It further brings health into the overall strategy of the NDC by including the imperative to defend and protect life and mentions the right to a healthy environment and the right to health. For health impacts, it describes the climate crisis as a direct threat to life and health, the impact on health services, climate-related illnesses, air pollution related health risks such as cardiovascular and respiratory diseases, and the impact on nutrition and food security. In the health sector action category, it not only mentions health as a priority sector in adaptation and goals to reduce the carbon footprint of their health system but also mentions increasing adaptive capacity and health resilience through increasing capacity of the health system, early surveillance and integrated management. In the air pollutant category, Colombia mentions several including nitrous oxide, HFCs, particulate matter, and SF6, having dedicated targets for HFCS, nitrous oxide, and black carbon, in which it aims to reduce black carbon emissions by 40% by 2030, using 2014 levels as a baseline. Health co-benefits from adaptation and mitigation actions are mentioned, including healthy food, active mobility, and improved air quality. For the monitoring and implementation category, it mentions the goal for a 5.5% increase in the modal share of active transport, actions to reduce cases of climate-sensitive diseases in 100% of the entities of the health sector and other actions to reduce climate-sensitive diseases. With regards to health in a just transition, Colombia mentions the health of vulnerable populations, workers, and health systems. While Colombia does mention a budget allocation for health sector action, costs of health impacts and calculations on the return of investment for health is crucial to build up.

Of all UNFCCC Regions, the highest average score is achieved by Parties from the Latin American and Caribbean region (12.8), whilst the lowest is achieved by Parties from the Western European and other States region (5.8)

Detail on scoring categories

Across individual categories, the health co-benefits category has the highest average score (2.38) closely followed by health sector action (2.35). The rest of the categories are as follows: air pollutants (2.16), health impacts (2.02), integrated governance (1.44), monitoring and implementation (0.59), economics and finance (0.56), and just transition (0.19).



Health impacts

For the health impact category specifically, 79% of NDCs consider some type of health impact. Of those, 32% of NDCs quantify these health impacts in some way and 26% of NDCs mention air pollution specifically as a health impact. Within the NDCs that mention specific or quantified health impacts, food security, malaria, heat, and malnutrition occur most frequently. Only 19 NDCs receive all points possible for this category.



Air pollution

For this analysis, air pollution includes general mentions in the text of "air pollution" and specific air pollutants including carbon monoxide, nitrogen dioxide, tropospheric ozone, particulate matter, and sulphur dioxide. 94% of NDCs secure points in the air pollution category, either from naming specific air pollutants, talking about air pollution or quality in general terms, or mentioning targets for air quality. Of these NDCs, 26% of NDCs include targets or monitoring for air pollution, with black carbon and HFCs being the top air pollutants for these targets. Only 8 NDCs receive all points possible for this category: Azerbaijan, Cambodia, China, Colombia, Côte d'Ivoire, Republic of Moldova, United Arab Emirates, and Zimbabwe.

This analysis tracked short-lived climate pollutants including black carbon, nitrous oxide, and HFCs due to their impacts on health. Sulphur hexafluoride and nitrogen trifluoride were also tracked. Methane and carbon dioxide are widely recognized as driving global warming but were excluded from this analysis following consultation. 26% of NDCs specifically mention the name of "short-lived climate pollutants" in their NDCs and 79% of NDCs mention either black carbon, tropospheric ozone, HFCs, or short-lived climate pollutants. Individually, black carbon is mentioned in 17% of NDCs, tropospheric ozone mentioned in 6% of NDCs, and HFCs mentioned in 73%.

Out of 1382 total specific pollutant mentions*, air pollutants covered in the WHO air quality guidelines comprised 8% of mentions, with nitrogen dioxide mentioned the

"In some contexts, this group of pollutants is also referred to as "criteria air pollutants", with the addition of lead

most (39 times) followed by particulate matter (35 times), sulphur dioxide (21times), tropospheric ozone (7 times), and carbon monoxide (5 times). Volatile organic compounds (VOCs), a precursor to tropospheric ozone, are mentioned 10 times. In cases where sectors are mentioned for these pollutants, industry and transportation are mentioned the most, usually in relation to particulate matter. The top short-lived climate pollutant mentioned (with the exclusion of carbon dioxide and methane as those were not tracked) is nitrous oxide (126 times), followed by HFCs (69 times), and black carbon (45 times). In cases where source sectors are mentioned for different air pollutants, industry is mentioned the most (typically for HFCs and black carbon) followed by agriculture (for nitrous oxide).



Health sector actions

For health sector actions, 80% of NDCs mention a health sector actions, including health national adaptation plans (HNAPs), resilience and preparedness planning, a vulnerability and adaptation assessment, and prioritizing health in adaptation planning. 51% of NDCs include language on either a vulnerability and adaptation assessment or identify health as a priority in adaptation planning. 36% of NDCs mention actions that would contribute to mitigation in the health sector. A total of 31 NDCs receive all points possible for this category.



Health co-benefits

For health co-benefits, 82% of NDCs mention health co-benefits in some way, including specific instances (such as nutrition, bicycling, etc.), improved air quality, and other general instances. For specific and general mentions of health co-benefits, agriculture and food and transportation are the top two sectors mentioned, with most referring to nutrition, food security, cycling, and walking. 43% of NDCs specifically mention improved air quality as a co-benefit, with transportation and electricity generation being the top two sectors mentioned in conjunction with improved air quality. A total of 40 NDCs receive all points possible for this category.



Just transition

The just transition category focuses on whether health is mentioned in the context of just transitions, either specifically regarding the health of workers, vulnerable populations, and the healthcare sector; or general mentions of health. 18 NDCs mention health in a just transition, and only Colombia receive all points possible for this category.



Integrated governance

For this category, 83% of NDCs include some attention to integrated governance of health in climate policy. Only 17 NDCs explicitly mention the Ministry of Health being consulted in the development of the NDC with an average score of 17.8 points while 31 NDCs mention the Ministry of Health in conjunction with another sector on specific projects or actions. Only five NDCs receive all points possible for this category: Cambodia, Colombia, Paraguay, São Tomé and Príncipe, and Timor-Leste.



Economics and finance

For this category, 43% of NDCs include language regarding the costs, finance, budget, and returns on investment of health impacts and actions. Only 9 NDCs explicitly mention the costs of health impacts: Iraq, Morocco, Nigeria, Oman, Republic of Congo, Serbia, Solomon Islands, Yemen, and Zimbabwe. 24% of NDCs include the costs of health actions and 23% of NDCs mention a budget to be allocated for health actions. Only two NDCs quantify a return on investment from health actions: Nigeria and Timor-Leste. No NDCs receive all points possible for this category, with the highest score awarded being 3 points for Morocco and Nigeria.



Monitoring and implementation

For this category, 28% of NDCs mention language regarding monitoring and implementation of health targets in or outside of the health sector. 17% of NDCs mention targets outside of the health sector and 18% of NDCs mention targets inside the health sector. Only 8 NDCs include monitoring or projection of health outcomes as a result of an action: Angola, Armenia, Cabo Verde, Cameroon, Chile, Colombia, Nigeria, and South Africa. Only 3 countries receive all points possible for this category: Colombia, Nigeria, and South Africa.

Interpretation

While all analysed NDCs include health or air quality considerations, there are still areas where the integration of health can be strengthened even for countries with the highest health scores. There is a mismatch between the focus on health in NDCs and the climate ambition of the Parties: increased recognition of health does not translate to increased climate action. Based on the 17 NDCs that have also been assessed through the Climate Action Tracker assessment on climate ambition, those "insufficient" (2°C - 3°C), "highly insufficient" (3°C - 4°C), and "critically insufficient" (above 4°C) have an average score of 8.3 points, 9.8 points, and 11.5 points respectively. Though this is a small

sample of the total NDCs evaluated in this analysis, it does indicate a lack of correlation between health in NDCs and the level of ambition demonstrated by countries.

The highest average scores coming from the health co-benefits and health sector action categories does show some momentum in reflecting the importance of health in climate planning. This is further evident with these categories having the most NDCs with all four points in the category, with health co-benefits having 40 NDCs and health sector action having 31 NDCs with full points. Countries who mention consulting with their Ministry of Health have a higher average score of 17.8 points compared to the overall average of 11.8 points.

Categories for economics and finance and monitoring and implementation have among the lowest average scores, with an average of 0.56 and 0.59 points respectively, showing additional work is needed to budget necessary financing for implementation, and then to adequately quantify and monitor health impacts of actions. With only nine NDCs explicitly mentioning the cost of health impacts, there is a lack of incorporation of the real costs of climate change impacts.

The air pollution category, though with an average score of 2.16, also is an area with a considerable missed opportunity. Air pollutants with the largest health impact from fossil fuel combustion, such as particulate matter and nitrogen dioxide, are largely missing from the NDCs analysed. Additionally, health co-benefits of actions in the energy sector are not widely referred to. While a causal link cannot be established from this analysis, this may be due to lack of collaboration with Ministries of Health in NDCs, the undue influence of fossil fuel companies in lobbying, among others.

Finally, the just transition category has the lowest average score (0.19 points) with only 18 NDCs mentioning health in a just transition in some way. While just transitions are addressed through a dedicated work programme in UNFCCC negotiations, and has gained increased attention since the last iteration of NDCs, there is a lack of connection of how health should be integrated in just transitions. This highlights the need for the rationale for health in just transitions to be strengthened and incorporated, both into national plans and the UNFCCC space.

RECOMMENDATIONS

Integrating health in national climate policymaking and implementation



Coordinate climate policy between ministries, including the Ministry of Health

Ministries of climate and energy should establish national multisectoral climate policy coordination mechanisms, including consultation with Ministries of Health and representation from wider health and climate-determining sectors such as energy, agriculture, sanitation, transport, urban planning and finance. These mechanisms will help to ensure that health is mainstreamed in the planning and implementation of NDCs and could additionally support national adaptation plans (NAPs), long term low emission development strategies (LT-LEDS) and biennial transparency reports (BTRs).



Prioritise action on short-lived climate pollutants to minimize overshoot of 1.5°C

All governments, across sectors, should prioritise reduction of short-lived climate pollutants, alongside other CO2 emission reductions, to minimise overshoot of 1.5°C and associated health harms. High historical and present emitting governments should reduce emissions fastest.



Set robust air quality targets in line with WHO Air Quality Guidelines

Ministries of Environment should move towards air quality targets in line with World Health Organization Air Quality Guidelines to protect the health of populations, and invest in air quality monitoring for health-harming pollutants



Conduct health impact assessments as part of sectoral plans

Ministries of Climate, Energy, Agriculture, Transport and others should develop national transition plans for polluting sectors, including health impact assessments of different potential pathways, to support SLCP and wider emissions reductions, as well as improvements in air quality.



Scale-up international financial commitments by developed countries in line with the Paris Agreement

Developed countries should scale up their financial commitments in line with the Paris Agreement, to ensure that the health protective climate actions outlined in NDCs submitted by developing countries can be fully implemented.



Reform taxes and subsides to reflect the true costs of health-harming products

Ministries of Finance should reform tax and subsidy policies that reflect the true costs or 'externalities' of health harming and polluting products, such as fossil fuels, taking care to maintain reliable safe and affordable energy access, thus reducing consumption of these harmful products and liberating funds that can be invested in health-protective climate action.



Integrate health as a core component of just transitions

Governments planning for just transitions across sectors should especially consider current health harms experienced by populations in vulnerable situations, as well as those whose health may be impacted by unjust transitions.



Outline the costs and returns of implementing health related actions to strengthen the case for investment

All governments, and especially those requiring international finance to implement health-related actions outlined in NDCs, should outline costs and returns on investment of implementing health related actions, to strengthen the case both for increased international finance and also domestic budgetary allocation.



Prevent undue influence in decision-making from high-polluting industries

Governments in countries with high-polluting industries should implement measures to avoid undue influence in decision-making where such industries have vested interests, ensuring that necessary measures are fully reflected in NDCs and other national climate plans.

REFERENCES

1. *Climate change had major role in triggering Nepal floods, scientists say | Climate Crisis News | Al Jazeera*. (n.d.). Retrieved October 13, 2026, from https://www.aljazeera.com/news/2026/9/17/climate-change-had-major-role-in-triggering-nepal-floods-scientists-say
2. *Super El Niño threatens to push 8 million children into acute hunger across East and Southern Africa by early 2027 – Save the Children*. (2026, September 22). Save the Children International. https://www.savethechildren.net/news/super-el-nino-threatens-push-8-million-children-acute-hunger-across-east-and-southern-africa
3. Henley, J. (2026, August 25). At least 35,000 excess deaths recorded in Europe's back-to-back heatwaves. *The Guardian*. https://www.theguardian.com/environment/2026/aug/25/at-least-35000-excess-deaths-europe-back-to-back-heatwaves
4. Government of Canada. (n.d.). *National wildland fire summary* [Dataset]. Retrieved October 13, 2026, from https://cwfis.cfs.nrcan.gc.ca/en/summary
5. COP31 President. (2026). *COP31 Presidency's 3rd letter to the Parties* [Letter]. https://unfccc.int/sites/default/files/resource/cop31_3rd_presidency_letter.pdf
6. UN Environment Programme (2026). *Limiting Overshoot: Navigating exceedance of 1.5°C and pathways towards return*. https://doi.org/10.59117/20.500.11822/49857
7. Burston, J. (2025, February). Why reducing super pollutants isn't just good for the climate. *Clean Air Fund*. https://www.cleanairfund.org/news-item/reducing-super-pollutants/
8. OECD. (2026). Climate Finance Provided and Mobilised by Developed Countries in 2013-2024. *Climate Finance and the USD 100 Billion Goal*. https://doi.org/10.1787/ab5eb9ad-en
9. Climate Finance Shadow Report 2025: Analysing progress on climate finance under the Paris Agreement. (n.d.). *Oxfam Policy & Practice*. Retrieved October 13, 2026, from https://policy-practice.oxfam.org/resources/climate-finance-shadow-report-2025-analysing-progress-on-climate-finance-under-621735/
10. Clean Air Fund (2026). The State of Global Air Quality Funding 2026. London: Clean Air Fund
11. Romanello, M., Walawender, M., Hsu, S.-C., Moskeland, A., Palmeiro-Silva, Y., Scamman, D., Smallcombe, J. W., Abdullah, S., Ades, M., Al-Maruf, A., Ameli, N., Angelova, D., Ayeb-Karlsson, S., Ballester, J., Basagaña, X., Bechara, H., Beggs, P. J., Cai, W., Campbell-Lendrum, D., … Costello, A. (2025). The 2025 report of the Lancet Countdown on health and climate change: Climate change action offers a lifeline. *The Lancet*, *406*(10521), 2804–2857. https://doi.org/10.1016/S0140-6736(25)01919-1
12. Lelieveld, J., Haines, A., Burnett, R., Tonne, C., Klingmüller, K., Münzel, T., & Pozzer, A. (2023). Air pollution deaths attributable to fossil fuels: Observational and modelling study. *BMJ (Clinical Research Ed.)*, *383*, e077784. https://doi.org/10.1136/bmj-2023-077784
13. Hamilton, I., Kennard, H., McGushin, A., Höglund-Isaksson, L., Kiesewetter, G., Lott, M., Milner, J., Purohit, P., Rafaj, P., Sharma, R., Springmann, M., Woodcock, J., & Watts, N. (2021). The public health implications of the Paris Agreement: A modelling study. *The Lancet. Planetary Health*, *5*(2), e74–e83. https://doi.org/10.1016/S2542-5196(20)30249-7
14. *Climate-Health Messages Build Support for climate Action*. (2026). Wellcome, CORE. https://climateopinion.org/wp-content/uploads/2026/04/CLIMATE-HEALTH-MESSAGES-BUILD-SUPPORT-FOR-CLIMATE-ACTION.pdf
15. Climate Action Tracker, 2026. Countries. https://climateactiontracker.org/countries/
16. Health Effects Institute. 2025. State of Global Air 2025. Available: www.stateofglobalair.org [accessed 11 August 2026]. Data source: Global Burden of Disease Study 2023. IHME, 2025
17. European Environment Agency, 2025. https://www.eea.europa.eu/en/analysis/indicators/health-impacts-of-exposure-to/premature-deaths-normalized-by-population

APPENDIX 1

Search terms

List of keywords

accident active aedes AirQ+ aflatoxin allerg ammonia anaesthe anaemia anemia anesthe anxi asthma bacteria bicycle bike biomass black blood birth breath bronchi borne burn campylobacter cancer carbohydrates CarbonH carcin cardio care casualt cerebrovascular Chagas Chikungunya chlorocarbon cholera chronic ciguatera clinic cobenefit co-benefit cold communicable corona coronary covid cramp cyan dead death dengue depress diabet diardia diarrh diagnos died diet disease disorder displace doctor drink drought drown ebola eczema emergenc emotion encephalitis endemic enteric epidemic epidemiolog exercise exhaustion exposure fatal fatigue fats fever filariasis floro fluor gastro gestation haemorrhage handwash health heat heat-wave heart hemorrhage hospital hung humidity hygiene hypertension hyperthermia illness immune infect influenza inhal injur ischemic kerosene kidney leishmaniasis leptospirosis lethal life lighting lived lung Lyme malaria malnour maternal measles medic micro-nutrient micronutrient miscarriage monoxide morbid mortal mosquito nitro noncommunicable non-communicable nourish nurse nutri obes oligohydramnios onchocerciasis overweight over-weight ozone paediatric pandemic patient pathogen particulate pediatric placenta pneumonia poison pollen pollut potable pre-eclampsia preeclampsia pregnan preterm pre-term protein protozoa psycho pulm rash renal renovascular reproduce respiratory rhinitis safe salmonella sanita sedentary sepsis sex skin shigella smog smoke starv stress stroke stunt suicide sulfur sulphur surge surviv syndrome symptom tick toxi trauma typhoid underweight under-weight vector vibrio violen vitamin viral virus volatile vulnerabl walk wasting waterborne wellbeing well-being wheezing Zika zoon

List of 'whole words only' keywords

AIDS BC CHD CLIMAQ COPD DALY HFC HIV LPG MoH ncd NH3 NO2 N2O NOx O3 PM PM1 PM2 PTSD SARS SDG SF6 SLCP SO2 SO4 SOx SRHR STI UHC VOCs WASH YLL kill kills live lives mental cycle cycling

List of short phrases

Active transport; Air quality; Benefits of Action to Reduce Household Air Pollution tool; Black carbon; Clean air; Cooling center; Cooling centre; Food s; Fresh air; GreenUr tool; Health Economic Assessment Tool; Integrated Sustainable Transport and Health Assessment Tool; Just Energy Transition; Just Transition; Loss of Life; Loss of Lives; Of air; Of the air; Of atmos; Of the atmos; Physical activity; Physically active; Safe air; Sustainable Development Goal; West Nile

APPENDIX 2

Scoring framework

Health impacts

This category focuses on explicit health connections to climate change impacts such as for drowning, but not for flooding.

1 point	Mention of general health impacts (on either people or health services [impact, not action]). For general health services, if it mentions "impacts on health systems" or general vulnerability of the health sector or the need for adaptation in the health sector, it counts in this category.
1 point	Mention of specific health impacts, such as a single named condition (on either people or health services). Examples: drowning, nutrition, diet, respiratory diseases, heat exhaustion. Health should be clearly recognised as a result of climate change, such as "climate change threatens nutrition security", but not "nutrition is a development priority." If there is a mention of a specific "Vulnerability and Adaptation assessment", then the point should be awarded under "health sector action"
1 point	Mention of air pollution specifically as a health impact. If there is a specific health condition listed because of air pollution as an impact, that would count under this category.
1 point	Quantification or research of health impacts in the country, or quantification of burden of climate-sensitive diseases at a given point in time (past, present, or future - but not from ongoing monitoring)

Air pollutants

This category evaluates whether specific air pollutants (listed in the sub-category) are mentioned in the NDC as well as what the source sector of the air pollutants are.

1 point for each air pollutant (up to 2 points)	Named air pollutants and air quality/pollutant monitoring. This includes short-lived climate pollutant (SLCP), short-lived climate forcer, black carbon (BC), ozone (O3), hydrofluorocarbons (HFCs), particulate matter (PM, PM2.5, PM10), nitrogen oxide/nitrogen dioxide (NO, NO2, NOx), nitrous oxide (N2O), carbon monoxide (CO), sulphur/sulfur dioxide/trioxide (SO2, SO3, SOx), and volatile organic compounds (VOCs). Sectoral sources of actions to address air pollution are tracked but not required. Sectors include agriculture, electricity generation, forestry and land use, health, household (energy or ventilation), industry, natural, transport, urban planning, waste.
1 point	General mentions of air pollution and air quality (negative)
1 point	Targets or monitoring for air quality

Health sector action

This category focuses specifically on the health sector (hospitals, doctors, nurses, public health entities, etc.) and their mention within the context of climate change and climate action. It includes the health sector in adaptation, mitigation, and the intersection of the two.

2 points	Health adaptation plan (Automatic 2 points if) mention of dedicated health adaptation plan beyond one specific kind of emergency (e.g. heatwave) i.e. health national adaptation plan (HNAP) or health sectoral adaptation plan (health SAP), or if the NDC mentions that health is specifically included in a cross-sectoral adaptation plan (i.e NAP). If adaptation to a health risk is made that is not referred to in impacts, in the context of it being under threat, it would be included under this sub-category. OR 1 or 2 of the following for resilience and preparedness planning (up to 2 points): Strengthening the capacity of the workforce; Strengthening infrastructure (either actual health facilities or e.g. cooling centres); Preparedness plan for a particular event (e.g for pandemic or heatwave other emergency); Compliance with International Health Regulations; General mention of integrating climate into health adaptation planning; Early Warning System for health; Disease surveillance
1 point	Any measure which would contribute to mitigation in the health sector, or mention of emissions reductions in the health sector. This includes any measure which would contribute to mitigation in the health sector, even if the benefits for mitigation are not acknowledged.
1 point	Vulnerability and adaptation assessment or prioritisation of health as a sector to address in adaptation

Health co-benefits

This category includes the explicit health co-benefits for mitigation, adaptation, or cross-cutting of both across sectors.

1 point for each specific co-benefit mentioned (up to 2 points)	Specific mentions of health co-benefits for mitigation (e.g., cleaner air, healthier diets, increased physical activity as a result of mitigation in the energy, food and agriculture sectors) and adaptation measures (e.g., for safe housing or sanitation). This also includes measures that cut across both adaptation and mitigation, such as the mental health benefits of nature-based solutions. If there is only mention of the action and not the health co-benefit, then it is included (e.g., walking or cycling without the explicit mention of health gains from them). Sectors of health co-benefits include agriculture/food, buildings/housing (actual structure), cities/urban planning, dedicated climate infrastructure, energy (both power generation and household), nature-based solutions and green infrastructure, transport, waste
1 point	General mention of health co-benefits of both mitigation and adaptation
1 point	Specific mention of air quality as a health co-benefit for mitigation and adaptation measures.

Just transition

This category focuses on how well the NDC focuses on a just transition or just energy transition in relation to health. This can include mentions of worker health and vulnerable populations.

1 point for each specific health consideration (up to 3 points)	Mention of the need to consider health for a just transition, a point for each of the following mention: Worker health; Health of vulnerable populations (women, children, marginalized communities, Indigenous, etc.); Healthcare systems
1 point	Mention of the need for health in a just transition or health in just transitions in general.

Integrated governance

This category assesses the coordination between government departments and holistic approaches to health and climate change in the NDC. (from 2023 methodology).

1 point	Health Ministry consulted in the development of the NDC
1 point	Health ministry or sector mentioned as part of planning or development or monitoring of a policy with/in a non-health sector, or cross sectoral mechanism; Mention of a cross-sectoral coordination mechanism
1 point	Mentions of "mainstreaming" health into climate policy (or vice versa). Health as a key / priority sector or "axis" considered in the development of the NDC; Recognising healthy populations or UHC as being key for overall resilience; Raising public awareness of the links between health and climate change; Other language that suggests intrinsic links between health and planet / climate
1 point	Language that refers to the right to a safe and / or healthy environment; Healthy recovery from Covid 19, specifically health (not just economic)

Economics and finance

This category analyses NDCs both international and domestic financing for health and climate change. It also evaluates whether the NDC mentions the specific cost or budget of health impacts or actions.

1 point	Economic cost (specific amount) of health impacts of climate change or savings due to interventions, even if not specific to a given disease
1 point	Cost calculation for health sector adaptation actions / application to GCF or comparable ("This will cost $x")
1 point	Budget allocation for health sector adaptation actions / application to GCF or comparable ("We will allocate $X to this" or "We allocate financial resources to this")
1 point	Calculation of (or commitment to calculate) returns on investment for co-benefits due to improved health

Monitoring and implementation

This category focuses on how health impacts and actions are monitored within the NDC. It also includes any mention of how implementation of actions with health may occur.

2 points	Quantifying, monitoring, and/or evaluating (or a commitment to do so) of a specified target regarding implementation of a project outside the health sector which is noted to yield health co-benefits. Health effects do not need to be measured to be included so long as health co-benefits of the action are mentioned in close proximity in the NDC.
1 point	Quantifying, monitoring, and/or evaluating (or commitment to do so) of a specified target regarding action in the health sector
1 point	Monitoring/projecting health outcomes as a result of efforts in mitigation or adaptation in any sector



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