Rising Tides, but Missing the Boat
Do Nationally Determined Contributions Neglect Health, Air Quality and Social Vulnerability?
Climate mitigation approaches have historically focused on measures to reduce carbon emissions to avoid their long-term impacts. However, this narrow focus fails to recognize the immediate benefit of certain other climate actions with short-term benefits, such as improving urban air quality through local emissions reductions from power, waste and transport systems. This limited focus on only long-term impact inadvertently slows global efforts to improve public health, which is especially urgent amidst current environmental conditions and a global pandemic. Health, climate and air quality stakeholders tend to operate in separate silos, which means that policy and advocacy levers connecting air quality, health and climate have been underutilized. Bridging these priorities, through more comprehensive action in every country’s Nationally Determined Contribution has the potential to speed meaningful progress.

Accelerating clean air actions can contribute to progress on many sustainable development goals, leading to measurable short- and long-term benefits. Incorporating a targeted focus on the health and air quality benefits of climate mitigation strategies within Nationally Determine Contributions (NDCs) to address climate change can foster collaboration across sectors, and accelerate design and execution of cost-effective actions for maximum impact.

In 2021, Vital Strategies evaluated the extent of these missed opportunities to address social vulnerability, air pollution and health through climate action. We reviewed all Nationally Determined Contributions (NDCs), or country action plans, submitted to UNFCCC to evaluate the extent to which vulnerability, health and air quality have been considered. We also inventoried specific actions or targets directly focused on air quality or the health sector to assess how countries proposed to measure progress towards these goals. For vulnerability, we evaluated whether NDCs addressed or mentioned women, social or geographic vulnerability, or urban centers. For the inclusion of health, we evaluated whether health was mentioned as an objective, or consequence of emissions and adaptation strategies. For air pollution, we considered whether it was referenced, whether specific health-damaging pollutants were mentioned, and whether air pollution targets were described. We evaluated for each of these three areas whether plans were “comprehensive,” “limited” or whether they were “absent or minimal.”
Global Findings

190 countries have NDCs available for review

45% of NDCs included a comprehensive focus on protecting those most vulnerable to the impacts of air pollution and a changing climate, including women, children and other socially vulnerable groups, and those living in urban or other geographically vulnerable areas

42% of NDCs included detailed information on health, including adaptation needed to promote health

5% of NDCs specifically mentioned air pollution, including health-damaging pollutants and recommended air quality targets and goals

NDCs offered a comprehensive focus on vulnerability, air quality and health
Global Findings

Vulnerability

Health

- **Comprehensive**
- **Limited**
- **Absent**
Global Findings

Air Pollution

- 131: ABSENT
- 48: LIMITED
- 10: COMPREHENSIVE
Regional Results

- African States were the most likely to consider vulnerable populations, with 73% of countries’ NDCs specifically mentioning a focus on children, women, socially or geographically vulnerable groups, and urban populations.
- While health was actively integrated in over 40% of NDCs from the African, Asia-Pacific, Latin American, and Caribbean States, not a single country in the Western European and Other States had a comprehensive focus on health.
- Active efforts to integrate air pollution into NDCs were notably absent across all regions.
- The likelihood of prioritizing these multiple benefits is unrelated to countries’ economic or development status.
Regional Results

Asia-Pacific States

- **Air Pollution**: 60% Comprehensive, 40% Limited
- **Health**: 40% Comprehensive, 60% Limited
- **Vulnerability**: 80% Comprehensive, 20% Limited

African States

- **Air Pollution**: 60% Comprehensive, 40% Limited
- **Health**: 40% Comprehensive, 60% Limited
- **Vulnerability**: 80% Comprehensive, 20% Limited
Regional Results

**Eastern European States**

<table>
<thead>
<tr>
<th>Category</th>
<th>Absent</th>
<th>Limited</th>
<th>Comprehensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Pollution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Latin American and Caribbean States**

<table>
<thead>
<tr>
<th>Category</th>
<th>Absent</th>
<th>Limited</th>
<th>Comprehensive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Pollution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vulnerability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Regional Results

Western European and Other States

- **Air Pollution**: 80% Absent, 20% Limited
- **Health**: 100% Absent
- **Vulnerability**: 80% Absent, 20% Limited
Country-Specific Results

Detailed country-specific results are available at (here). This site provides data on sub-indicators that contributed to the summary evaluation of whether the NDCs’ evaluation of health, air pollution and vulnerability were “comprehensive,” “limited” or “absent/minimal.”

Sustainable Development Goals (SDGs) related to air pollution, climate, and health
Recommendations for Climate Action for Clean Air and Health

**NDCs should:**
Elevate the importance of the air quality and health benefits of climate action.

Raise public awareness about short term air quality and health benefits of climate action.

Acknowledge that climate change’s greatest impact is on the most socially, geographically, and economically vulnerable populations.

- Prioritize actions to protect vulnerable groups who are most likely to face the impact of catastrophic climate events in the near-term, not just the future.
- Effective adaptation plans must consider groups who are likely to bear the greatest burden of impacts.
- Adaptation plans must take into account near-term effects of extreme weather events on the most vulnerable sub-populations.
Target climate actions to improve public health and health systems.

- Actively engage the health sector in air quality and climate action.
- Expand beyond a focus on health systems capacity to address severe climate-related events to consider how climate action can maximize health benefits.
- Include more data on health to speak to the concerns of the greater public, who are more likely to be mobilized to support climate actions when the benefits are more immediate. Account for health when calculating the net costs of climate action—in many cases, cost-effectiveness may be demonstrated on the basis of health savings alone.

Focus on reducing emissions of the most health damaging pollutants.

- Quantify both climate and health impacts of proposed actions—many emission reductions will yield air quality, health, and climate benefits.
- Prioritize emission reductions that yield the greatest reduction in particulate matter for maximum benefit to air quality and health.
- Consider that near-term emission reductions in urban population centers will have the greatest health benefits than actions taken in less densely populated areas when planning for implementation of climate actions.
About Vital Strategies

As a global public health organization, Vital Strategies prioritizes efforts to accelerate health benefits in the short-term through reduction of pollutant emissions for better air quality and climate mitigation. This compelling approach can further motivate public demand, political will, and immediate governmental action to achieve measurable impact over years rather than decades. Our researchers, scientists, analysts, communication and policy experts work closely with civil society, corporate and government partners to promote better health outcomes in urban areas. Vital’s active engagement with the health sector, combined with our unique role in the environmental health field, provides a data-driven, cost-effective approach to promoting clean air as part of a comprehensive strategy to promote measurable benefits to public health while tackling some of the planet’s greatest challenges. For more details, see Vital’s Environmental Health Capacity Statement or contact environmentalhealth@vitalstrategies.org.

Suggested citation: