



May 24, 2021

Cecilia R. Martinez, PhD  
Senior Director for Environmental Justice  
Council on Environmental Quality (CEQ)

730 Jackson Pl, NW  
Washington, D.C. 20506  
RE: Executive Order 14008 – Justice40 Initiative

Dear Dr. Martinez:

On behalf of the American Thoracic Society (ATS), thank you for the opportunity to provide comments on the Biden Administration's Justice40 Initiative. The ATS is a 16,000-member scientific multi-disciplinary organization focused on the prevention, treatment, and cure of pulmonary, critical care, and sleep-related diseases through research, education, and patient advocacy. We applaud the Administration's commitment to ensuring that 40% of climate and environment-related investment is distributed to disadvantaged communities through the Justice40 Initiative. Our lungs are especially susceptible to the toxic effects of multiple climate-associated pollutants in the air we breathe. Disadvantaged communities (i.e. environmental justice (EJ) communities) are more likely to be exposed to higher levels of air pollutants, more likely to suffer the adverse health impacts of climate change, and less likely to recover from such damages<sup>1,2</sup>. Targeted interventions aimed at reducing air pollution and greenhouse gas emissions while engaging and empowering EJ communities can efficiently reduce emissions, improve equity, and mitigate the harmful health impacts of climate change.

Given the ATS's expertise in environmental, occupational, and population health, we have provided concrete recommendations on how to maximize societal benefits and emissions reductions with this initiative. We have identified three primary focus areas to improve environmental justice in climate mitigation, which are detailed in the subsequent sections below:

- 1. Targeted Reduction of Environmental Health Disparities and Greenhouse Gas Emissions.***
- 2. Community Self-Determination.***
- 3. Environmental Justice Measurement Tools.***

#### ***Focus Area 1 - Targeted Reduction of Environmental Health Disparities and Greenhouse Gas Emissions***

The ATS recommends that the Justice40 Initiative is implemented in a manner that provides EJ communities with the ability to choose where to spend community-directed investments made as part of the Justice40 Initiative. Investments in GHG mitigation efforts that result in reductions in other environmental exposures like air pollution should be prioritized for implementation in EJ communities. Similarly, investments in climate-

resiliency measures should be prioritized for these communities. Interventions should be designed in a manner that follows implementation science methods, which prioritize continuous quality improvements, community engagement, and trans-disciplinary cooperation. The approach we recommend is detailed below:

- A. **Perform formal needs assessments in EJ communities.** Models like PRECEDE-PROCEED<sup>3</sup> provide a structured approach for needs identification and implementation of evidence-based health-promoting interventions. A needs assessment team should include trained methodologists, state environmental protection agency representatives, technical experts for infrastructural assessments, and community stakeholders. To strive towards equal partnership, participatory action research models should be employed, which requires dedicated support to empower community stakeholders with basic research tools and leadership skills. By equipping stakeholders with these skills, we move towards leveling the government-community power dynamic and have a more equitable partnership when moving forward to define and prioritize community needs. This team will engage with community residents with questions regarding where they see their community's greatest needs and how best to implement interventions while ensuring community self-determination. Support for organizations like WE ACT can help to achieve this goal of community stakeholder representation in environmental needs assessments<sup>4</sup>.
- B. **Invest in transportation infrastructure to reduce transportation-associated emissions and air pollution.** Mitigation of mobile pollution sources is critical to reducing harmful exposures to air pollution and GHG emissions<sup>5</sup>. Investments in green public transportation, such as those outlined in the Clean Transit for America Plan<sup>6</sup>, will help minimize exposure to harmful traffic-related pollutants. Existing federal transportation spending should prioritize funding and deployment of clean transportation vehicles to EJ communities. This should include mass transportation and other municipal vehicle fleets, such as municipal waste disposal vehicles. Additional investment in transit and non-motor transportation alternatives through building of biking and walking lanes and trails in EJ communities is also encouraged.
- C. **Invest in community infrastructure to increase climate resiliency and improve air quality.** The ATS supports grey to green infrastructure initiatives based on evidence supporting respiratory health benefits associated with increased community greenness<sup>7,8</sup>. Investments in green infrastructure are critical to establishing climate-resilient communities as green infrastructure can reduce flooding risk and pollution burdens<sup>9</sup>. Investments can be made in green waterways, parks, planting of non-allergenic trees, and community renewable energy projects with built-in electricity bill reduction mechanisms.
- D. **Invest in residential and school infrastructure to increase climate resiliency and energy efficiency.** Investment in programs like the Green & Healthy Homes Initiative<sup>10</sup> will reduce indoor exposures to toxic pollutants, increase residential climate resiliency, and increase energy efficiency through home retrofits. For example, replacement of residential fuel oil heating with electric heating would reduce indoor pollution exposure and GHG emissions. Similar retrofitting needs to occur in schools where indoor air quality improvements would benefit numerous children.
- E. **Invest in environmental hazard monitoring systems to improve monitoring in underrepresented areas.** Increase the density of air quality monitors in EJ communities, modelling this program after California's Community Air Protection Program<sup>11</sup> that actively engages EJ communities to determine placement of such monitors. Investments in additional air quality monitoring applications in rural and minoritized areas with linkage to community-engaged environmental health researchers are also critical.
- F. **Agencies should provide formal breakdowns of where investments are made to ensure adequate allocation to EJ communities.** Breakdowns of investments can be used to ensure that funding is

appropriately and efficiently allocated to communities with the highest need. Tools such as a redesigned EJSSCREEN (described in more detail in *Focus Area 3*) can be used to perform quality improvement (QI) analyses to assess the effectiveness of interventions in EJ communities. The QI process should involve community stakeholders to provide qualitative input regarding implemented interventions, and these participants should be compensated for their time and contributions.

### ***Focus Area 2 – Community Self-Determination***

The ATS believes that EJ community stakeholder engagement is essential for the successful planning and implementation of environmental health and climate mitigation interventions. Particular attention is required for low-income communities, communities of color, immigrant communities, and Tribal communities, where disproportionate environmental health burdens reside. Our recommendations align with those outlined in the Center for American Progress and Tishman Environment and Design Center Justice40 Recommendations<sup>12</sup>. The strategy for achieving this vision of community self-determination of climate and environmental health interventions is outlined below:

- A. **Partner with existing community development corporations and other organizations to facilitate stakeholder-directed investments in EJ communities.** We recommend that the Justice40 Initiative community engagement strategies are modeled after successfully implemented programs that enhance community self-determination by generating menus of evidence-based interventions, activities, and outcomes that serve as the backbone for further action. Examples can be found in the California Air Resources Board Community Air Protection Program<sup>11</sup>, the New York Delivery System Reform Incentive Payment (DSRIP) Program<sup>13</sup>, and the National Alliance of Community Economic Development Association (NACEDA). Investments facilitating citizen science initiatives can also benefit EJ communities by increasing awareness of environmental health hazards and providing residents with specific health-promoting actions. Examples include Smell Pittsburgh and Public Lab<sup>14,15</sup>.
- B. **Allow communities to prioritize evidence-based interventions that both reduce GHG emissions and decrease environmental disparities based on local needs and priorities.** Community representatives and community-based organizations should be involved in and compensated for their participation in deciding which interventions to implement in their communities. Information about interventions should include approaches, necessary inputs, community engagement requirements, and follow-up, enabling communities to select strategies addressing areas of greatest need. Types of interventions are provided in *Focus Area 1*.
- C. **Invest in local training of environmental assessors and environmental health professionals with mechanisms for communities to request environmental health assessments and support.** Community environmental health networks, staffed by sanitarians, environmental scientists, health professionals, building assessors, and other experts; should be established in EJ communities in order to perform comprehensive environmental health assessments. A tiered approach to environmental health assessments should be undertaken such that individuals with complex, multiple, or severe environmental exposure-related disease have access to skilled clinicians with expertise in environmental and occupational health. Implementation of these networks should involve allocation of funding to train local community members to work in these roles. EJ communities should have the ability to request environmental health assessments using similar mechanisms to The National Institute for Occupational Safety and Health (NIOSH) Health Hazards Evaluation (HHE)<sup>16</sup>. Funding could be directed through Area Health Education Centers (AHEC)<sup>17</sup>, public health sanitation departments, and local university healthcare-related departments in the form of apprenticeships and scholarships to train environmental health workers. Community environmental health

evaluations and interventions could be modeled after previous successfully implemented programs like the New York State Healthy Neighborhoods Program, which was associated with substantial reductions in asthma-related hospitalizations and cost-savings<sup>18</sup>. By providing investment, professional expertise, and local training opportunities to EJ communities for these programs, we anticipate that there will be substantial cost-savings due to reduced healthcare utilization, improved workplace productivity, and increased economic opportunities for EJ community residents. Grant funding should be allocated to perform implementation research studies and outcomes assessments of the efficacy of community interventions.

- D. **Develop open communication avenues between EJ communities and policymakers.** EJ community representation at local, state, and federal government levels is essential to ensuring equitable policy implementation across the country. This will enable future reductions in environmental health disparities and climate change-related damages in EJ communities. These communication avenues can be developed in conjunction with the Office of Public Participation (OPP) at the Federal Energy Regulatory Commission (FERC), which will allow communities impacted by energy-related infrastructure to participate and potentially intervene in FERC proceedings<sup>19</sup>. Our vision would broaden the scope of the proposed OPP to extend beyond FERC-regulated infrastructure projects, enabling the fair representation of EJ communities against private industrial interests. Examples of this type of program can be found with the Canadian Energy Regulator Participant Funding Program (PPF)<sup>20</sup> and the Pennsylvania State Office of Consumer Advocate<sup>21</sup>.

### ***Focus Area 3 - Environmental Justice Measurement Tools***

The ATS recognizes that the successful implementation of the Justice40 Initiative depends on the accurate identification of EJ communities and appropriate metrics to evaluate progress. This will require the development of a comprehensive tool that incorporates demographic, socioeconomic, environmental, health, and other indicators. Such a tool should be developed with a thorough understanding of the strengths and weaknesses of previously developed EJ screening tools. The approach to developing this comprehensive tool is outlined below:

- A. **Establish a committee of experts and community representatives to critique the strengths and drawbacks of current tools.** This committee would be tasked with critiquing existing EJ and neighborhood disadvantage tools and developing a new version of the EJSCREEN tool. Tools to evaluate include the current version of the EJSCREEN<sup>22</sup>, the CalEnviroScreen<sup>23</sup>, the Area Deprivation Index (ADI)<sup>24</sup>, and the CDC/ATSDR Social Vulnerability Index (SVI)<sup>25</sup>. Tools from other countries can also be evaluated and used as models for development. Specific attention should focus on evaluating different approaches for defining geographic boundaries of communities as units of analysis (i.e., by neighborhood, census tract, or county-level). Critical analysis of the validity and reliability of various operational definitions, screening, and confirmation tools for determining what constitutes a “disadvantaged” or EJ community is required.
- B. **Develop a multi-faceted EJSCREEN tool that can be used in different scenarios.** A comprehensive EJ screening tool is essential to the successful implementation of the Justice40 Initiative as it will enable identification of communities with the highest level of need and clear metrics for evaluating the success of implemented interventions. Indicators that can be considered when developing this new tool are outlined in **Table 1**. The tool that is developed should have multiple facets that allow for the specific evaluation of demographic, socioeconomic, environmental, and health contributors to EJ scores. This will enable targeted quality improvement of interventions implemented under the Justice40 Initiative.
- C. **Conduct real-world scientific evaluations of the predictive performance of this tool.** The tool should be evaluated for its ability to identify communities that experience the greatest burden of environmental

disparities. Such a tool needs to be able to capture the diversity of exposures and experiences that exist across the country. It is imperative that this tool be assessed in a range of different communities, including low-income, minoritized, high-immigrant populations, and Tribal communities.

**Table 1:** Current indicators in EJSCREEN and recommendations for indicators to include in future iterations.

Current Indicators		Recommended Indicators to Consider	
Demographic & Socioeconomic	Environmental	Demographic & Socioeconomic	Environmental
<ul style="list-style-type: none"> <li>•% people of color</li> <li>•% less than high school education</li> <li>•Linguistic isolation</li> <li>•% &lt;5 years old</li> <li>•% &gt;65 years old</li> <li>•% low income</li> <li>•% with less than high school education</li> </ul>	<ul style="list-style-type: none"> <li>• National Scale Air Toxics Assessment Air Toxics Cancer Risk; Respiratory Hazard Index; and Diesel PM (DPM)</li> <li>• PM<sub>2.5</sub> and ozone levels</li> <li>• Lead paint indicator</li> <li>• Traffic proximity and volume</li> <li>• Proximity to risk management plan sites</li> <li>• Proximity to waste treatment storage and disposal facilities</li> <li>• Proximity to national priorities list sites</li> <li>• Wastewater discharge indicator</li> </ul>	<ul style="list-style-type: none"> <li>• Sensitive population indicators based on community prevalence of global and national environment- and climate-attributed diseases<sup>26</sup></li> <li>• % immigrants</li> <li>• % home ownership vs rentals vs owned units with leased land (mobile homes)</li> <li>• % employment</li> <li>• % with low assets or savings</li> <li>• % with income worry</li> <li>• % experiencing residential crowding</li> <li>• % dependents (&lt;16 or &gt;65 years of age)</li> <li>• Metrics to evaluate the impact of structural racism on communities → Dissimilarity Index<sup>27</sup>, GINI Index<sup>28</sup>, Redlining Maps<sup>29</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Other airborne pollutants (nitrates, carbon monoxide, sulfur dioxide, ultrafine particulate matter)</li> <li>• Proximity to large industrial polluters</li> <li>• % green space (Normalized difference vegetation index/ NDVI)</li> <li>• Regional pesticide use</li> <li>• % home fuel oil heating sources</li> <li>• % with exposure to radiation or heavy metals in public water supply</li> <li>• Exposure to allergy-inducing infestations (cockroaches, mites, rodents, etc)</li> <li>• Proximity to legacy waste disposal sites</li> <li>• Considered as “fence-line” communities and others affected by local area sources of pollution</li> </ul>

**Conclusions:**

Environmental health disparities contribute to inequitably increased health burdens in EJ communities while also leading to large, poorly recognized contributions to GHG emissions and climate change. Targeted, community-directed interventions aimed at reducing environmental health hazards offer a powerful and efficient opportunity to both improve health and mitigate the harmful impacts of climate change.

Sincerely,

Members of the ATS Environmental Health Policy Committee  
 Members of the ATS Health Equality and Diversity Committee

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