



September 19, 2022

The Honorable Jennifer M. Granholm  
Secretary, Department of Energy  
1000 Independence Avenue, S.W.  
Washington D.C 20585

Dear Secretary Granholm:

The undersigned organizations, which are part of the Environmental Justice Leadership Forum<sup>1</sup>, are pleased by the release of the Justice40 initiative's covered programs list under the Department of Energy and look forward to collaborating in the implementation of those programs. However, we would like to share our concerns regarding what we consider "false solutions"<sup>2</sup> to the problem of climate change: namely, carbon capture utilization and storage, nuclear energy, bioenergy, hydrogen energy, mineral mining, waste to energy, and geothermal energy<sup>3</sup>. We are deeply encouraged by the Justice40 initiative, which ensures disadvantaged communities that are marginalized, underserved, and overburdened by pollution, do not get left out of federal investments going towards programs and policies addressing climate change, clean energy and energy efficiency.<sup>4</sup> Given the work that Shalanda Baker has done, setting a blueprint for centering Environmental Justice, we hope to see that continued and taken to the next level.

In the United States, decades of research and evidence show that low-income communities, communities of color, and Indigenous communities are disproportionately impacted by exposure to toxic chemicals, legacy pollution from contaminated sites, and polluting facilities, leading to adverse health effects such as high rates of cancer, respiratory issues, and learning disabilities<sup>5</sup>, etc. Those frontline communities are in dire need and deserve affordable and clean energy; therefore, it is critical to understand some of the harmful consequences that false solutions perpetuate. Given the current high energy prices<sup>6</sup> and intensifying impacts of

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<sup>1</sup> <https://www.weact.org/campaigns/ejforum/>

<sup>2</sup> [https://climatefalsesolutions.org/wp-content/uploads/HOODWINKED\\_ThirdEdition\\_On-Screen\\_version.pdf](https://climatefalsesolutions.org/wp-content/uploads/HOODWINKED_ThirdEdition_On-Screen_version.pdf)

<sup>3</sup> <https://www.energy.gov/diversity/doe-justice40-covered-programs>

<sup>4</sup> <https://www.whitehouse.gov/environmentaljustice/justice40/>

<sup>5</sup> <https://www.sciencedirect.com/science/article/pii/S0160412016301386>,  
[http://d3n8a8pro7vnmx.cloudfront.net/unitedchurchofchrist/legacy\\_url/13567/toxwrace87.pdf?1418439935](http://d3n8a8pro7vnmx.cloudfront.net/unitedchurchofchrist/legacy_url/13567/toxwrace87.pdf?1418439935)

<sup>6</sup> <https://www.eia.gov/>

climate change,<sup>7</sup> it is crucial to follow the leadership of organizers from frontline communities and implement real climate solutions – a few examples of which we will highlight at the end of this letter.

The concept of “clean” energy has not been well-defined in mainstream discourse and is often used as a marketing ploy for energy sources that are harmful to planetary and human health, but less harmful than typical fossil fuels. Energy sources should not be classified as “clean” if they increase pollution burden, expand fossil fuel reliance or infrastructure, or exacerbate health risks. Therefore, we consider Justice40-covered programs that incorporate carbon capture utilization and storage, nuclear energy, bioenergy, hydrogen, mineral mining, waste to energy, and geothermal energy, to be false climate solutions. Below we highlight the ways in which these false solutions harm the environment and frontline communities:

### Carbon Capture and Storage

Scientific research shows CO<sub>2</sub> loss can occur at every step of the CCUS process.<sup>8</sup> CO<sub>2</sub> leakage underground poses serious environmental and health risks for nearby communities that include the contamination of underground sources of drinking water and breaking down rock formations to release benzene and other toxins.<sup>9</sup> Additionally, the proliferation of CCUS can disincentivize the transition to truly cleaner energy sources as fossil fuel corporations use this technology to justify the prolongation of the fossil fuel era.<sup>10</sup> Some programs under the Justice40 initiative that utilize CCUS technology include programs within the Office of Fossil Energy and Carbon Management (FECM), such as the Carbon Capture Technology Program, Carbon Sequestration, and Carbon Utilization to name a few.<sup>11</sup>

### Nuclear

Nuclear energy is not a truly clean form of energy – nor is it just – since it creates risks along every part of the production chain. Uranium miners have an increased likelihood of lung cancer, pneumoconiosis, tuberculosis, injury, and blood diseases.<sup>12</sup> Toxic waste is hard to dispose of leading to an increase in the amount of waste and increasing the odds of exposure to radioactive material. Hazardous waste facilitates, including nuclear waste facilities, are disproportionately located in low-income communities and communities of color.<sup>13</sup> Some programs under the Justice40 initiative that utilize nuclear energy include programs within the Office of Nuclear Energy (NE).<sup>11</sup>

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<sup>7</sup> <https://www.ipcc.ch/report/ar6/wg2/>

<sup>8</sup> <https://www.frontiersin.org/articles/10.3389/ferg.2018.00040/full>

<sup>9</sup> [https://www3.nd.edu/~kshrader/pubs/final-pdf-ej-nuke-siting-wi-Allred\\_08-0544.pdf](https://www3.nd.edu/~kshrader/pubs/final-pdf-ej-nuke-siting-wi-Allred_08-0544.pdf)

<sup>10</sup> <https://www.sierraclub.org/sierra/2022-2-summer/editor-s-desk/moral-hazards-carbon-dioxide-removal>

<sup>11</sup>

[https://www.whitehouse.gov/wp-content/uploads/2022/07/Justice40-Covered-Programs-List\\_v1.1\\_07-15-2022.pdf](https://www.whitehouse.gov/wp-content/uploads/2022/07/Justice40-Covered-Programs-List_v1.1_07-15-2022.pdf)

<sup>12</sup> <https://www.cdc.gov/niosh/pgms/worknotify/uranium.html#:~:text=Uranium%20Miners%20were%20exposed%20to,to%20the%20U.S.%20general%20public.>

<sup>13</sup> <https://news.umich.edu/targeting-minority-low-income-neighborhoods-for-hazardous-waste-sites/>

## Hydrogen

Hydrogen energy is reliant on other forms of energy such as coal, oil, biomass etc. In fact, in the United States, 95% of hydrogen is produced from natural gas, which is a fossil fuel.<sup>14</sup> Once it's produced hydrogen is put into fuel cells to make electricity and heat, a process which produces large energy losses, making it only advantageous when hydrogen is stored. Storing hydrogen is a challenge on its own as hydrogen must be liquefied or compressed and stored. Then, pipelines transporting hydrogen can leak, often harming Indigenous communities and hydrogen can embrittle steel and weld causing dangerous fire and potential explosions.<sup>15</sup> Some programs under the Justice40 initiative that utilize hydrogen include programs such as the Regional Clean Hydrogen Hubs and the Hydrogen and Fuel Cell Technologies Office.<sup>11</sup>

## Mineral mining

The two primary methods for mining Rare Earth Elements (REE's) leaching ponds and drilling both have harmful environmental impacts. Leaching ponds which are full of toxic chemicals, may leak the chemicals into groundwater when not properly secured and can sometimes affect entire waterways.<sup>16,17</sup> Drilling requires pumping chemicals into the earth, which can lead to water contamination as well as earthquakes.<sup>17,18</sup> Additionally, PVC pipes that are used in the drilling process are sometimes left in areas that are never cleaned up. Both methods produce mountains of toxic waste, with high risk of environmental and health hazards.<sup>19,20</sup> Some programs under the Justice40 initiative that will likely include mineral mining and coal extraction include programs such as the Rare Earth Elements Demonstration Facility and the Rare Earth Security Activities.<sup>11</sup>

Given the harm that these false solutions cause, and the disproportionate burden that environmental justice communities will face, **we recommend that all false solutions within DOE be removed from being listed as covered programs under the Justice40 initiative.**

If these programs continue to be considered under the Justice40 initiative, we recommend:

1. Developing a community engagement plan prior to the creation of any implementation strategies or procedures.
2. Conducting a comprehensive environmental justice analysis prior to funding opportunity announcements/requests for proposals and implementation to understand and minimize

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<sup>14</sup> <https://www.energy.gov/eere/fuelcells/hydrogen-production-natural-gas-reforming>

<sup>15</sup> Romm, J. J. (2004). The hype about hydrogen: Fact and fiction in the race to save the climate. Island Press.

<sup>16</sup> <https://www.theguardian.com/commentisfree/2011/sep/26/rare-earth-metals-technology-boom>

<sup>17</sup> <https://earth.org/rare-earth-mining-has-devastated-chinas-environment/>

<sup>18</sup> <https://pubs.er.usgs.gov/publication/70204423>

<sup>19</sup> <https://web.mit.edu/12.000/www/m2016/finalwebsite/problems/environment.html>

<sup>20</sup> <https://hir.harvard.edu/not-so-green-technology-the-complicated-legacy-of-rare-earth-mining/>

any adverse social, economic, health and environmental impacts the project or program may have on areas of low-income, communities of color, and Indigenous communities.

3. For projects required to do an environmental impacts statement under the National Environmental Policy Act, ensuring adequate time for public comment, technical support and the inclusion of environmental justice analysis.
4. Utilization of a community benefits agreement to ensure communities realize the full scope of investments and opportunities such as job creation and are legally protected in the case of adverse impacts arising from the project/program.
5. Third-party monitoring to carefully track pipeline leakage, escaped emissions, and real time air quality monitoring so residents living nearby know and can seek recourse for the potential harms to their health.
6. Post implementation community engagement and education with reports on the programs, including air quality and public health implications, and listening sessions to learn of the actual community impacts with the goal of actionable remediation of concerns.
7. For Hydrogen, prioritizing projects that utilize truly clean, renewable energy sources.
8. For CCUS, prioritizing projects that:
  - a. Have the least amount of potential risk to human health, water quality and air quality.
  - b. Lead to a net decrease in criteria air pollutants, such as pre-combustion and oxy-combustion carbon capture and sequestration.<sup>21</sup>
  - c. Are paired with controls to reduce criteria pollutants and increase the overall efficacy of post- combustion CCS.<sup>22</sup>

The Justice40 initiative is a long overdue response to the environmental injustices that have harmed communities of color, low-income communities, and Indigenous communities. We urge the Department of Energy to work with us in correcting these injustices and addressing this legacy of harm by ensuring that false solutions are not incorporated in the Justice40 Initiative. In situations where false solutions have already been funded, we hope to work with the Department of Energy to ensure that minimal harm is done to our communities. We also urge the Department of Energy to work with the environmental justice community in advocating against further programming of false solutions.

Sincerely,

Clean Air Now – Kansas City, KS

Coalition of Community Organizations - Houston, TX

Connecticut Coalition for Economic and Environmental Justice - Hartford, CT

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<sup>21</sup> <https://www.eea.europa.eu/publications/carbon-capture-and-storage>

<sup>22</sup> [www.nyserda.ny.gov/-/media/Project/Nyserda/files/EDPPP/Energy-Prices/Energy-Statistics/Co-Pollutant-Impacts-of-Low-Carbon-Fuels-and-Technologies.pdf](https://www.nyserda.ny.gov/-/media/Project/Nyserda/files/EDPPP/Energy-Prices/Energy-Statistics/Co-Pollutant-Impacts-of-Low-Carbon-Fuels-and-Technologies.pdf)

Energy Justice Network - Maryland  
Fair Housing and Neighborhood Rights - Houston, TX  
Fatherhood Mentoring Foundation - Houston, TX  
OPAL Environmental Justice Oregon – Portland, OR  
People in Defense of Earth and her Resources (PODER) - Austin, TX  
S.A.F.E Diversity Communities - Houston, TX  
South Bronx Unite - New York, NY  
The Imani Group - Aiken, SC  
WE ACT for Environmental Justice - New York, NY  
Wisconsin Green Muslims — Milwaukee, WI