



Energy Equity in Michigan

The M-LEEaD Center's Community Engagement Core (CEC) increases awareness and understanding of environmental impacts on human health.

Stakeholder Advocacy Board members include:

- Community Health and Social Services
- Detroit Health Department
- Detroit Hispanic Development Corporation
- Detroiters Working for Environmental Justice
- Eastside Community Network
- Ecology Center
- Henry Ford Health System
- Michigan Environmental Justice Coalition
- We the People of Detroit

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What is Energy Equity?

Energy Equity means the benefits of energy, as well as the costs and pollution created by our energy system, are distributed equitably. In practice, this means that low income, Black, Indigenous, People of Color (BIPOC) communities who have historically been overburdened by the costs and pollution from our energy system have access to clean energy, are provided access to climate action and clean energy programs, and that the health harms they have experienced from energy production from fossil fuels are addressed.^{1 7-10}

Why is Energy Equity Important?

Easy and affordable access to clean energy helps us all to live safe and comfortable lives. Yet the ways energy has been produced in the United States have harmed the environment and our health. Currently, most energy in Michigan comes from fossil fuels, including coal, petroleum (gasoline) and fracked gas.² Pollutants released in the process of creating energy from these fossil fuels are harmful to the environment and people's health. Communities that are located near power plants and storage facilities are exposed to higher levels of these pollutants and experience worse health outcomes as a result. Those same communities pay a larger proportion of their income to cover their energy expenses (See page 2 for more detail).^{3 11 12} Energy Equity assures that pollutants and costs of energy production do not disproportionately fall on those who benefit the least from the energy produced.

How do we move toward Energy Equity?

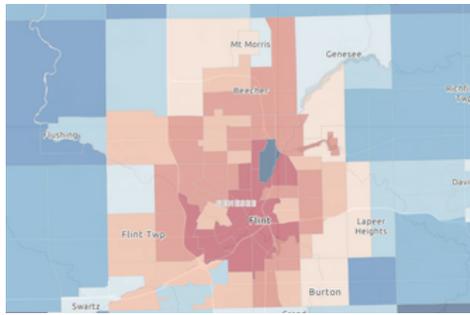
Utility companies are expanding to meet the needs of a growing population. In Michigan, utility companies must submit an integrated resource plan (IRP) outlining their energy production plans to the Michigan Public Service Commission (MPSC) for approval. IRPs are not currently required to include an assessment of health impacts of the proposed IRP. One way to reduce the negative health outcomes associated with energy production is to require utility companies to include a health impact assessment (HIA) as part of the IRP. Doing so would help the MPSC make more informed decisions about the impacts of utility plans on health, and help protect overburdened communities from additional health risks.³



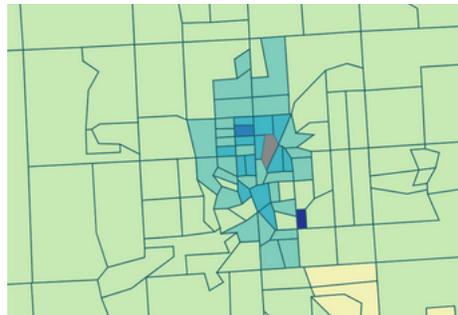


Additional steps toward Energy Equity include: ³

- Require energy producers to use cleaner, safer forms of energy production (e.g. solar) that do not create environmental and health harms.
- Require energy companies to assess health costs associated with pollutants emitted through energy production, and include those costs in the assessment of energy costs.
- Assure that historically overburdened BIPOC communities have a real voice in decisions about energy production.
- Assure that lower income and BIPOC communities that experience the highest health and economic burden from our current energy practices have access to clean, safe, affordable energy.
- Require power companies to develop a plan with clear benchmarks and accountability to address assure more equitable distribution of burdens and benefits.



Cumulative Risk in Flint, MI. Census tracts within and immediately surrounding the city have higher cumulative risk. ¹⁴



Energy Burden in Flint, MI. Census tracts within the city have a higher energy burden than the surrounding area. ¹³

Pollutants from Fossil Fuels & Health Effects

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|--|---|
| <p>Pollutants</p> <p>Coal</p> | <p>Mercury, lead, sulfur dioxide, nitrogen oxides, particulates, and various other heavy metals. ⁴</p> <p>Skin, cardiovascular, brain, blood and lung diseases, and different cancers. ¹⁵</p> <p>Health Effects</p> |
| <p>Pollutants</p> <p>Natural Gas</p> | <p>Methane, carbon monoxide, nitrogen oxides, formaldehyde, ammonia, and fine particulate matter. ⁵</p> <p>Irritation of throat, eyes, skin, and lungs; cough, asthma, lung fibrosis, heart attack, stroke. ^{16 17}</p> <p>Health Effects</p> |
| <p>Pollutants</p> <p>Petroleum</p> | <p>Carbon monoxide, nitrogen oxides, particulate matter, unburned hydrocarbons, and carbon dioxide. ⁶</p> <p>Respiratory issues (e.g. asthma, bronchitis), skin irritations, nausea, eye problems, headaches, birth defects, and cancer. ^{17 18}</p> <p>Health Effects</p> |

What Does This Mean for Me and My Community?

Energy Equity means the benefits and burdens of energy production are distributed equitably across racial and economic groups, and that those burdens should be reduced as much as possible. Some ways we can achieve this goal:

- Require energy producers to assess the health impacts of proposed energy production and the distribution of those impacts;
- Consider health impacts as part of the assessment of safety in the IRP
- Assess impacts of energy production on climate change as part of “affordability” and “safety” in the proposed IRP;
- Reduce health impacts by using cleaner, safer forms of energy production (e.g. solar & wind).
- Assure that disproportionately impacted communities wield power in the decision-making process.

Please see http://mleead.umich.edu/Coec_Fact_Sheets.php for the citations included in this factsheet.

The University of Michigan Lifestage Environmental Exposures and Disease Center (M-LEEaD) Community Engagement Core (CEC) promotes collaboration among UM environmental health researchers and communities to advance knowledge of environmental health issues that affect community members in Detroit and Southeast Michigan. Support for this research was provided by grant P30ES017885 from the National Institute of Environmental Health Sciences, National Institutes of Health. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.