CleanAirNow KC
Environmental Justice Recommendations

KCMO Climate Protection & Resiliency Plan

April 2022

OEQ@kcmo.org

April 11 2022 Kansas City, Missouri

RE: CleanAirNow KC Comments and Policy Recommendations on the Climate Protection and Resiliency Plan

Thank you for the opportunity to provide comment on the *Kansas City, MO Climate Protection and Resiliency Plan* draft. CleanAirNow KC (CANKC) is an environmental justice organization focused on improving the environmental health of those impacted by environmental racism, air pollution and climate change in the Kansas City area. We work closely with overburdened communities to address concerns on toxic releases and other environmental exposures from the many and varied industrial facilities, freight sector, and rail yards in and around Kansas City. Our work is centered around environmental health, environmental justice and climate change and their combined cumulative impacts on Black, Indiginous, and People of Color (BIPOC) and low-income communities oftentimes bearing the brunt while having the lowest contribution to the climate change crisis.

We would like to raise concerns and provide our expertise on the *Kansas City, MO Climate Protection and Resiliency Plan* draft. In general, CANKC would like to emphasize the following concerns with more detailed recommendations to be found below:

1. In every aspect of the plan, health, climate change and the vulnerability of residents must be considered. Overburdened communities are more likely to live in neighborhoods experiencing multiple environmental hazards and are disproportionately vulnerable to the impacts of climate change. Some of which stems from Kansas City's industrial past combined with racially-biased and discriminatory policies and practices such as exclusionary zoning, racial covenants, and redlining. The consequences are increased health burdens observed through indicators such as asthma, cardiovascular disease, and premature death.
2. With an equity and environmental justice lens, CANKC considers certain neighborhoods as overburdened communities. The history and disproportionate impacts of pollution on BIPOC and low-income communities living in Kansas City, MO (KCMO) creates increased risk for health hazards. We recommend that the Office of Environmental Quality improve their outreach to overburdened communities, while being inclusive prior to the initial draft.
3. Public participation is key to democracy and the achievement of equity, which is the outcome of environmental justice. Outreach and engagement with communities should be high-priority. Efforts should be made to ensure that communities are able to engage in public comment periods, public hearings be held when requested and with adequate advance notice. Moving forward, the community must be involved as this plan progresses and evolves.

4. Make public and add transcribed public comments and written comments from community members and organizations as an appendix or addition to the plan .
5. Evaluate and assess the cumulative impacts of the various pollutants and environmental exposures experienced in the overburdened communities in KCMO.
6. Establish measurable goals of reducing pollution with quantifiable emissions reductions targets and invest in zero emission technologies in the communities most impacted by environmental hazards immediately. Retire fossil fuel electricity generation and the dependency on dirty energy to improve the health conditions of overburdened communities.
7. KCMO, local decision makers, and land use planning departments overseeing permitting and zoning of industrial polluting facilities must improve the frequency and quality of public input opportunities, with publicly available meeting notices.
8. Formation of an Environmental Justice Advisory Committee, with residents from overburdened communities including grassroots organizations, such as CANKC.
9. Address land use, zoning, and planning and eliminate racist land use policies, programs and practices. Prioritize reforming land use in overburdened communities that does not cause further displacement and housing insecurity while also aggressively pursuing zero emissions in the heavy-duty and medium-duty (warehouses trucks included) sector.
10. Strategize with CANKC to eliminate pollution burdens from concentrated railyard operations that pose significant health and safety risks, including but not limited to pollution and impacts from the operation of supporting warehouses and railyard maintenance facilities.
11. CANKC is available to discuss strategies and options for involving communities in the planning process around housing, labor, mobility or accessible public transportation amongst many others.
12. Risk Management Plan (RMP) needs to be included in any Climate Action Plan for preparedness of a climate change disaster (i.e.,chemical explosions, industrial facilities, flooding,etc).
13. Instead of relying on false and dubious carbon offsets to achieve carbon neutrality by 2040, take immediate and concrete steps now to reduce ghg and provide measurable targets in how the city will achieve such goals and be transparent about the emissions inventories.
14. Safely and promptly decommission fossil fuel electric generation facilities, including the highest greenhouse gas emitter in Kansas City, the Hawthorn Coal Plant.
15. Include clean energy infrastructure, and zero-emissions investment while prioritizing overburdened communities. These investments should not substitute for emissions standards and strong polluter enforcement. CANKC is opposed to the greenwashing of local governments influenced by industrial polluters and utilities, or other policies that simply shift pollution from one community to another instead of eliminating pollution. Combating systemic racism requires aggressive climate action to address structures, policies, and practices, such as pollution offset programs(carbon neutral, net-zero), that further exacerbate climate change.

The Climate Protection and Resiliency Plan will be insufficient and incomplete without the input of community members and without considering the myriad of cumulative exposures experienced by the overburdened neighborhoods. In order for the Climate Protection and Resiliency Plan to be effective, there must be quantifiable objectives and emission reduction standards. Immigrants, Indiegenos, Black and Brown communities and low-income households have been the most impacted by localized fossil

fuel, chemical and industrial pollution and should be part of decision-making around any new investments in our infrastructure. We need a just transition to clean energy and fenceline communities are the experts. Please see below for our full comment on the KCMO Climate Protection and Resiliency Plan and what needs to be considered for the future wellbeing of the community and the city. The KCMO Climate Resiliency Plan must prioritize **and ensure the most overburdened communities in Kansas City do not continue to be sacrifice zones.** We have also cited relevant and pertinent literature for your review.

Respectfully

Beto Lugo Martinez
betomtz.lugo@cleanairnowkc.org

Atenas Mena
atenas@cleanairnowkc.org

CleanAirNow KC
Co-Executive Directors

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KCMO Climate Protection and Resiliency Plan Recommendation: While we conducted the research for and writing of this report, we took a collaborative approach that included community members voices and organization partners in the design and draft review, to the completion of the report. The following are experts who provided and contributed to this report: Deidre Nelms, Atenas Mena, Elizabeth Friedman, Jayla Atkinson, Elise Gard, Beto Lugo Martinez, Lourdes Vera, Edyta Sitko, James Gignac, CleanAirNow KC, EDGI

Excerpts from our report Environmental Racism in the Heartland

Planning for Healthy Communities

Disclaimer:

This report was not funded or guided by any agency, CleanAirNow does not endorse the U.S. Environmental Protection Agency, or any local, county, state or federal government and/or the fossil fuel industry and utilities.

This report is available in Spanish

Introduction

CleanAirNow KC seeks to inform the Climate Protection and Resiliency Plan with additional context related to environmental justice, community-led solutions, and health equity while challenging the notion for more aggressive deadlines and accountability from greenhouse gas emitters and toxic polluters and demand a real climate action plan. We are concerned that the city touting net zero (carbon offsets) programs is being used to justify utilities' extended reliance on fossil fuels that further exacerbate communities at the frontlines of the climate crisis. Carbon neutrality perpetuates environmental racism and continues to delay necessary action needed to eliminate toxic and climate warming pollutants.

About CleanAirNow KC

CleanAirNow KC (CANKC) is a grassroots environmental justice organization in Kansas City, and was created by community concerns around chemical industrial pollution, diesel emissions, hazardous toxic waste and environmental health inequities at the ”fenceline.” A fenceline community can be identified as low-income and communities of color living near an industrial toxic pollution source that contaminates the air, water and soil. From the start, CANKC has sought to disrupt and dismantle the environmental racism that impacts communities in Kansas City and the surrounding region. We focus on building community power through environmental health education, equitable community-based research projects, and community led solutions in public policy. These overburdened communities are neighborhoods located near pollution sources, chemical and toxin releases, legacy contaminants, or other forms of man-made pollution, including racist land use decisions and racist policies, programs and practices at all levels of government. Through civic engagement and community-led projects, CANKC educates, advocates, and supports the voices of those who have been systematically excluded from the decision-making process.

Kansas City MO Legacy of Environmental Racism

The importance of history, to provide a contextual framework can be invaluable. Looking upstream through a historical lens can help identify why and how the system came to be inequitable and directs those who are interested in problem solving to not only assess remediation of the polluted or contaminated areas, but to potentially identify and target the etiology of these injustices in the first place. It is important to recognize that environmental racism and segregation did not happen without a plan to do so. When creating a plan, such as this climate action plan, you must consider how the things you are planning to do could potentially harm communities instead of helping them.

Kansas City's central location has been its defining feature throughout history. Placed at the meeting of the Kansas and Missouri rivers, it became a key location for trading posts, rail development, and warehouses and industrial development at the turn of the 19th century. Before the expansion of the railroads in Kansas City, most people of color resided in the west bottoms. Many families relocated to the east of Troost avenue because it offered easy transportation and more affordable housing[1]. Communities of white upper class moved west of Troost because they were concerned property values would drop when families of color moved in [2]. They did not want people of color moving over to the

west side. Redlining was created by the Home Owners Loan Corporation, based on race, to help real estate agents decide where to invest money[3]. Redlining in Kansas City, MO led to investments west of Troost instead of east. A plan for racial segregation, redlining, and suburban development in Kansas City has been attributed to the Nichols Corporation and JC Nichols [4]. There is now a park named after him, west of Troost.

Historically redline communities were also placed near polluting facilities(See **Figure 1**) .Many neighborhoods and communities in Kansas City are still dealing with legacy contamination from industrial sites, hazardous facilities that are no longer active but have released toxins into the air, water, and soil for more than a century and are persistent in the environment. Climate inaction will disproportionately harm the health and safety of environmental justice communities, who are least responsible for the climate crisis (USGCRP 2016). Redlining allowed neighborhoods of color to deteriorate and become more susceptible to any nearby pollution, natural disaster, and climate change impacts. It is crucial that we invest in these communities now, to help them prepare for climate change. Kansas City is considered the 5th most economically and racially segregated city in the United States highlighting the need to focus on institutional and systemic racism within our community [5].

*Unpublished research (Friedman 2022) has shown that on average, historically redlined communities are located closer to pollution sources, have a higher percentage of low-income individuals and people of color who often face worse health outcomes (See **Figure 1**).* *STRONGTOWNS*

Figure 1: Low income households and TRI proximity

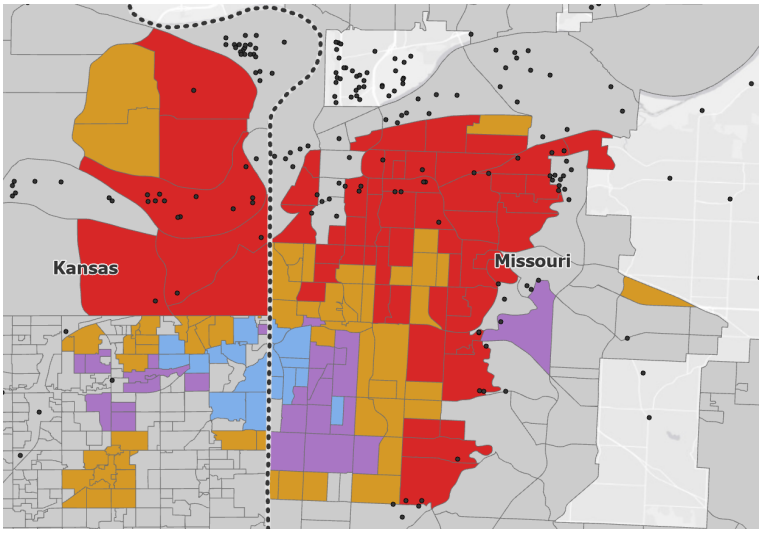


Figure 1 shows the HOLC grades of current KC neighborhoods as assigned by our spatial recalculation. 95% of active Toxics Release Inventory (TRI) sites are located in neighborhoods with a D grade.

Environmental Justice Concerns

The US Environmental Protection Agency (EPA) defines environmental justice as “the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies” [6]. Fair treatment means that no group of people should bear a disproportionate share of the

negative environmental consequences of industrial, governmental, and commercial operations or policies. Yet many immigrant, low-income, and BIPOC communities across the country bear the brunt of multiple stressors at once.

Consequently, Kansas City faces multiple environmental health and safety threats from nearby polluters that together constitute dangerous “cumulative impacts” on the community’s health **[7]**. These stressors

refer to the risks communities face as a result of the interaction between multiple pollutants released by nearby polluting facilities **[8]**.

Industrial facilities such as coal plants and chemical plants are contaminating the land, water, and air; diesel exhaust from truck traffic is raising harmful pollution levels; toxic emissions from one of the nation’s most important rail hubs continue to affect nearby neighborhoods—all in addition to extreme temperatures and flooding due to climate change.

The inequitable distribution of pollution and resources (i.e.,healthcare, public transportation,housing) in overburdened communities is the result of many factors, including:

- inappropriate zoning
- negligent land use planning
- intersecting structural inequalities
- failure to enforce environmental regulations inspections
- deed restrictions and other discriminatory housing and lending practices
- limited political and economic power among certain demographics
- prioritization of economic interests over public health

Combined with a lack of economic resources and unjust policy making, these overburdened communities continue to face significant barriers to their overall health, livelihood, and sustainability. **[9]****[10]****[11]**. It is common for many members of overburdened communities to be employed by the same industries that are poisoning their families.

Community members are put in a precarious situation, where they are forced to choose between economic survival and the health of their families. Additionally, residents in overburdened communities are often unable to relocate. This is because the property value of homes in overburdened communities are oftentimes dramatically lower due to their proximity to industrial pollutants and the City’s lack of investment in local resources. This makes it nearly impossible to sell their homes at a price that will enable them to purchase property elsewhere.

In the fight against such threats, communities across the U.S. have confronted environmental racism and injustice through coordinated campaigns that amplify their voice in the decisions that affect their lives. These efforts have resulted in significant benefits, such as the removal of stationary or mobile sources of pollution; the creation of restrictions or prohibitions on new polluting sources; and investments such as parks, affordable public transportation, and affordable housing. These localized assets highlight another important aspect of environmental justice. While it is important to identify the problems and areas that are unfairly impacted by cumulative burdens, environmental justice is also

about gaining equitable access to environmental benefits, investments, and other resources for low-income communities and communities of color. Such benefits can address the uneven distribution

of amenities along race and class lines that reflect long legacies of racism and discrimination in land use planning and development **[12]**. By looking at the history of Kansas City MO, it becomes clear it has multiple overburdened and environmental justice neighborhoods .

Formal Public Participation and Community Engagement Plan

Formal public participation allows fenceline community members to have a say in decisions that will directly impact the health and well-being of them, their families, and their neighbors. Community engagement is a key environmental justice principle that involves engagement, input, and leadership from communities most impacted by pollution, toxins, and other environmental problems. Such participation brings firsthand knowledge, experiences, information, and ideas from those directly impacted by environmental issues of which governing bodies may not be aware of or anticipate.

When designing a strategy, it is important to keep in mind the "spectrum" of possible engagement processes with stakeholders. The International Association of Public Participation (IAP2)© developed a Public Participation Spectrum©,https://www.iap2.org/mpage/Home which presents the possible types of engagement along a spectrum of increasing public involvement and decision-making, from simply informing to building community power **[13]**. This details the types of engagement along the entire spectrum. When planning for environmental justice, one of the most meaningful forms of community engagement is "building community power," where historically marginalized communities lead and have ownership over the planning process and its outcomes. Engagement at higher levels along the spectrum moves voices of community members to the forefront and is important to the Climate Plan process. Community members have the local knowledge and listening to their issues and recommendations can lead to better and more effective planning decisions.

Two key requirements for implementing such a strategy are to:

1. Allocate sufficient time and opportunities for engagement. To avoid rushing the process and tokenizing community participation, this approach promotes capacity building so that community stakeholders can provide meaningful feedback and decisions.
2. Maintain and prioritize adequate budget for meaningful community engagement to promote equitable access and achieve high-quality public participation **[12]**.

The Climate Protection steering committee has created an ecosystem of engagement for the public leading up to the development of the plan. First, BRENDLE (consulting firm) hired two "climate justice workers" to be involved in community canvassing and making direct calls to stakeholders. These initial outreach activities described were designed to solicit positive feedback about community experiences. Our concern is that the community engagement process utilized did not fully capture the scope of the overburdened community's concerns. Resulting in a plan (and future development projects) that will not

adequately benefit the residents who are bearing the burden of economic, social, environmental and climate injustices.

The failure to create decision making structures that incorporate meaningful participation in overburdened communities is a longstanding problem. To create a more transparent and meaningful form of public participation, we recommend the following:

CleanAirNow KC Public Participation Recommendations

1. Additional details regarding the design method, questions, responses, and information on respondents should be made accessible on the Kansas City MO Climate Protection and Resiliency Plan website. The transcribed public comments and written comments should also be made public, and added as an appendix to the plan.
2. For transparency, a formal process for submitting public comments should have been made available on the KCMO Climate Protection & Resiliency Plan.
3. Community input should be actively solicited at every stage of development. The team may also consider including responses to each comment in the final report.
4. Positive stories solicited on the Climate Protection & Resiliency Plan can be incorporated in the plan, but must be balanced by the inclusion of specific concerns of community members.
5. The creation of a Climate Protection & Resiliency Plan should not be the end of community input on these issues. KCMO should charter an Environmental Justice Advisory Committee to advise the KC government regularly on actions that can be taken to address inequities in the community.

CleanAirNow KC Planning Process Recommendations for Effective Engagement

1. Conduct Introductory Public Meeting(s) and identify overburdened or environmental justice communities to document existing conditions. As is typical with any plan, a local jurisdiction that is embarking upon a planning process would host introductory public meeting(s) to announce the plan, update and provide information about the process, including the various ways in which community members can engage.
2. Identify and evaluate the social determinants of health, cumulative environmental hazards, and health inequities that various communities are facing.
3. Address key issues related to historical inequities due to zoning policies or discriminatory development patterns during the planning process.
4. Document Environmental Justice issues accurately to ensure meaningful related policies are established and would be included in any existing report typically prepared during the planning process.

5. Involve and engage the Community early, proactive, and throughout the whole process. These activities would be conducted before and during the development of environmental justice goals, policies, and objectives.
6. Create a community advisory committee to oversee the development of the plan with people of color that are most impacted by the climate and environmental hazards. A dedicated Environmental Justice representative could also be included in a Climate Action plan advisory

committee. Either of these options creates a formal way to consult with environmental justice experts during the process and can enable better monitoring and implementation.

7. Develop environmental justice Goals, Policies, and Objectives. Using findings from the existing conditions analyses and community and other stakeholder feedback, planners will begin developing policies for addressing local environmental justice issues affecting overburdened communities. Developing policies in partnership with community members with an ongoing community engagement process from start to finish.

For more information on community advisory committees and the principles, strategies, and options for involving communities in the planning process, charters, please contact CANKC.

Air Pollution Concerns, Dated Regulations and Lack of Enforcement

Addressing air pollution concerns is a fundamental part of achieving environmental justice and tackling climate change. Environmental justice communities, like those overburdened in Kansas City, often experience air pollution from multiple sources making community members more susceptible to the associated health risks. Air pollution can cause many serious health risks such as cardiovascular disease **[14]**, cancer **[15]**, as well as neurological and reproductive disorders. The identification of sources, types, and quantities of pollution is necessary to determine appropriate solutions. Although air quality is just one type of pollution exposure, improving air quality through the reduction of specific contaminants is critical to the health and well-being of all people and the environment.

While the EPA requires states to regulate several criteria air pollutants under the Clean Air Act, there are still thousands of unregulated pollutants with severe health implications to overburdened communities. However, not enough people are aware of serious public health hazards **[16]**. It turns out that we're all exposed to a form of toxic air pollution that causes lung cancer, asthma, heart disease and other serious illnesses **[17]**. The air we breathe contains three times more pollution than the World Health Organization says is acceptable **[18]**. Regulators prioritize lax regulations for industry over local public health concerns. The Clean Air Act requires monitoring of six Criteria Air Pollutants: ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide **[19]**. There are currently five EPA monitors in the Kansas City area monitoring Criteria Air Pollutants and two monitoring Hazardous Air Pollutants **[20][21]**. However these monitoring networks have been shown to be insufficient for measuring local and short-term spikes in air pollution **[22]**.

Kansas City MO 5th District (Seat held by Emmanuel Cleaver since 2005)

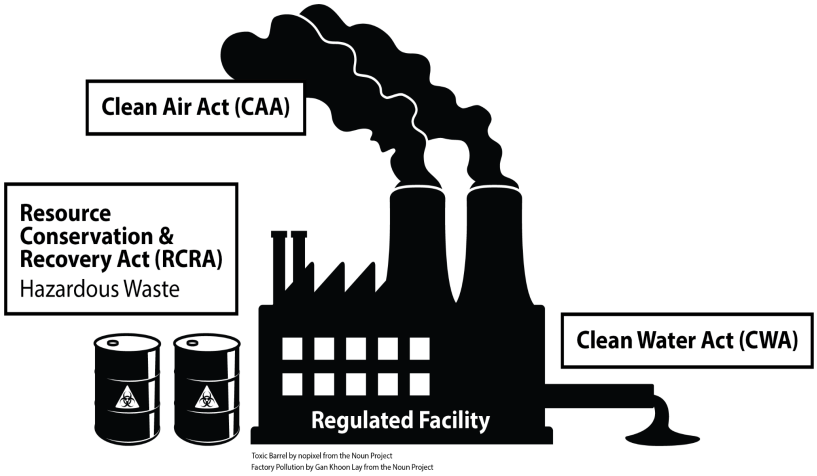
The EPA is charged by Congress to enforce laws that protect people from air pollution, water pollution and hazardous waste. Without effective enforcement, these laws are meaningless. Based on data from EPA's Enforcement and Compliance History Online (ECHO) database this report card reviews violations, inspections and enforcement actions under three laws: Clean Air Act (CAA), Clean Water Act (CWA) and Resource Conservation and Recovery Act (RCRA) for this Congressional District or State since 2001 **[23]**.

This report card was developed and made available by our partners at EDGI's Environmental Enforcement Watch **[24]**. Report cards like this are becoming available on the EEW website for all House Representatives and Senators. The EEW website also has a summary analysis of enforcement trends and data issues for all geographies covered by the House Energy and Commerce and Senate

Environment and Public Works Committees. The report cards contain data from both state environmental agencies and EPA. Local States such as https://dnr.mo.gov/ MDNR have the authority to enforce the above laws. A climate action plan should not be drafted without environmental protections to those most impacted from greenhouse gasses and toxic pollution combined.

The EPA is responsible for ensuring that states are doing their job. Congress must ensure that the EPA is doing its job. And the public must have access to accurate data from states and EPA in order to understand if national environmental laws are being properly enforced.

Figure 2: Regulated Facility



A regulated facility is a facility that reports air or water emissions under the CAA or CWA, or a facility that generates, transports, or disposes of hazardous waste under the RCRA. Regulated facilities can be large-scale e.g. oil refineries, or small-scale e.g. dry cleaners and scrap metal dismantling facilities. **Figure 3** lists the ten facilities in KCMO with the worst history of environmental compliance based on their number of noncompliant quarters in the past 3 years (not necessarily consecutive).

Figure 3: Recent Non-Compliance Facilities

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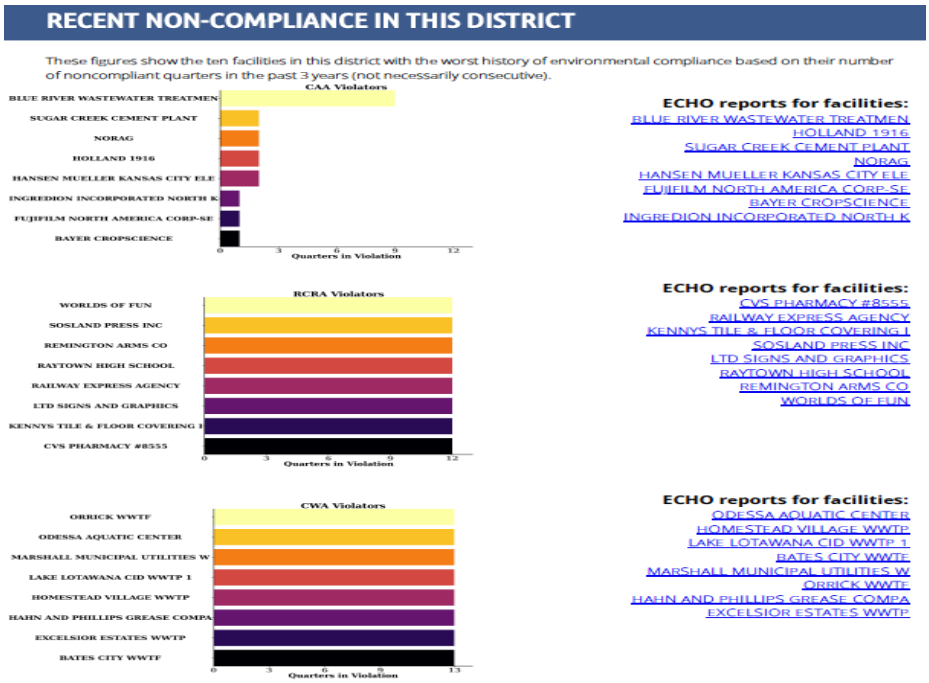


CleanAirNow KC Recommendations

1. Do not permit the building of new, or expansion of existing, industrial facilities that are emitting https://www.epa.gov/haps hazardous air pollutants in Kansas City these hazardous air pollutants are not regulated.
2. Community knowledge and participation in the siting and permitting process must be required for land use zoning and planning for heavy polluting industries in Kansas City.
3. Enforce federal and state air pollution standards at existing facilities,
4. Immediately begin transitioning warehouses and facilities to zero emissions and set a goal immediately ; CANKC can help in setting those goals.

Health Inequities and Cumulative Impacts

The KCMO Climate Protection and Resiliency Plan failed to assess the grave health disparities experienced by overburdened communities and the urgency required to improve health outcomes by aggressively and quickly addressing the multiple environmental health hazards they are facing.

The Lung Association's annual air quality "report card" tracks and grades metropolitan cities' exposure to unhealthy levels of particle pollution (also known as soot) and ozone (smog) over a three-year period, with the most recent report covering 2017-2019. The report indicates that Kansas City's air pollution is negatively impacting the health of communities especially the more vulnerable with lung disease such as asthma and COPD. According to the report, people of color were 61% more likely to live in a county with unhealthy air than white people, and three times more likely to live in a county that failed all three air quality grades. Due to systemic racism, BIPOC communities are experiencing a disproportionate amount of environmental contamination and health impacts.

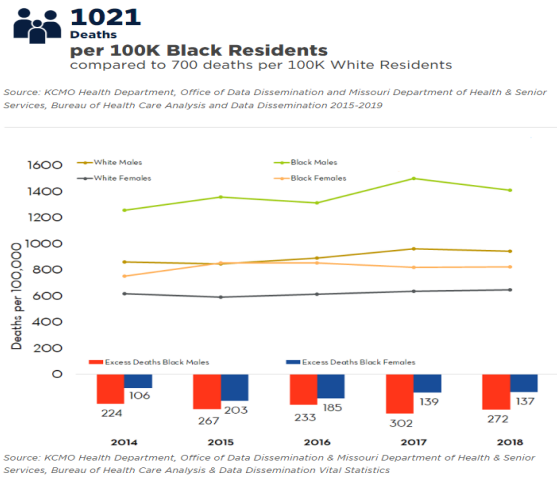
Sarah Prem of the American Lung Association in Kansas and Greater Kansas City acknowledged that although the metro saw some improvement in ozone pollution the metro experienced worse annual particle pollution and short-term particle pollution **[25]**. Air pollution rankings for 2021 remained the same in some indicators and worsened in others. Even with fewer ozone pollution days, the KC metro remained in the same spot as the 2020 report, ranking 48th out of 226 among cities most polluted by ozone. The KC metro ranked 42nd among cities most polluted for annual particle pollution out of 199 metropolitan areas and 57th among cities most polluted for short-term particle pollution out of 216. Both rankings are drastically worse than the 2020 report results **[26]**. Why is this relevant? Both ozone and particle pollution can cause premature death and other serious health effects such as asthma attacks and cardiovascular damage, and are linked to developmental and reproductive harm. Particle pollution can also cause lung cancer. Recent research shows that COVID-19 hospitalizations and deaths are linked with exposure to elevated levels of air pollution which is disproportionately higher in communities of color.

Asthma is not the only concern and discrepancy in Kansas City, life expectancy within Jackson county demonstrates vast differences by race. Life expectancy is highest in ZIP code 64113, which is made up of 93% white residents, who can expect to live 86.3 years. This is an 18.2 year difference, compared to ZIP code 64128 (86% black residents). **Figure 4** illustrates the vast difference in death rate for black males across the years compared to white males that has remained consistently the same.

Table 1. Life Expectancy in Kansas City, MO. KCMO Health Department

High Priority ZIP Code	Life Expectancy (2019)	Difference from Highest Life Expectancy ZIP Code (64113)	Population from Minority Racial/Ethnic Groups
64126	74.1 years	-12.2 years	52.8%
64127	71.3 years	-15.0 years	69.3%
64128	**68.1 years**	**-18.2 years**	**86.1%**
64129	71.6 years	-14.7 years	48.5%
64130	69.4 years	-16.9 years	90.8%
64132	71.3 years	-15.0 years	82.0%
64113	86.3 years		13.7%

Figure 4: Deaths per 100,000 by race



Children's Mercy's (CM) 2019 Community Health Assessment for the Kansas City Region found that across the total service area, including Jackson, Clay, Wyandotte and Johnson counties of Kansas City, Black and Hispanic children are more likely to live with asthma. CM's health assessment also measured a total of 7.9% of 2015-2017 TSA births were low birthweight (less than 2,500 grams or 5 pounds 8 ounces at birth). "While this percent is similar to the Healthy People 2020 target (7.8% or lower), the rate is higher for Jackson (8.9%) and Wyandotte (9.2%) counties." [27] Statistical data from the 2019 KCMO Health Department found similar trends in infant mortality rate where KCMO Black infant mortality rate was over twice the rate as White infants, as illustrated in **Figure 5**.

Figure 5: Infant Mortality Rate by Race

Source: KCMO Health Department, Office of Data Dissemination & Missouri Department of Health & Senior Services, Bureau of Health Care Analysis & Data Dissemination, Vital Statistics, 2019

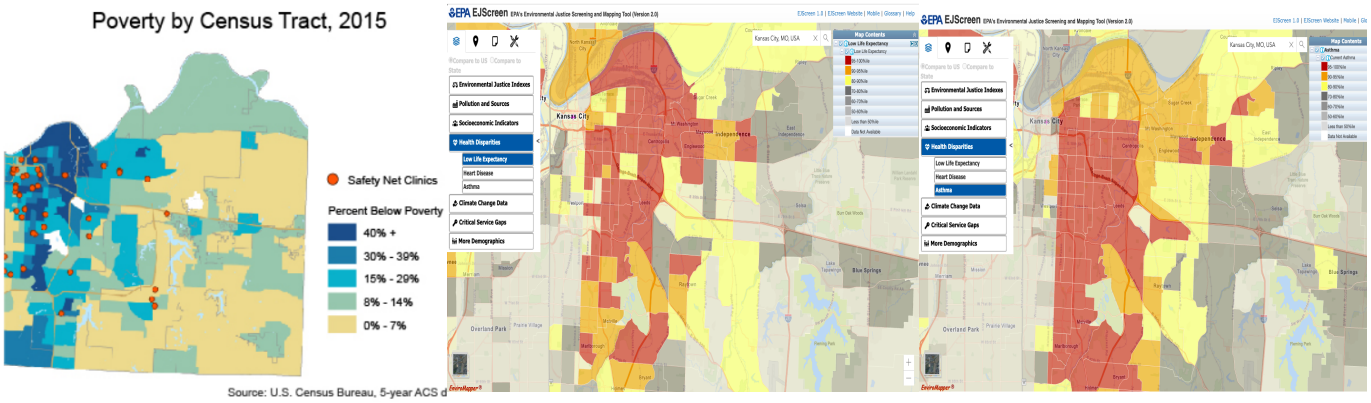
Overburdened communities are oftentimes communities of color and low income communities that live in redlined neighborhoods and have been disregarded with the amount of environmental exposures that they must face on a day to day basis increasing their risk for health diseases and decreasing their life expectancy. There is responsibility and oversight required by government to prevent and persecute further discrimination in overburdened communities. The EPA is responsible for setting environmental regulations to set limits for individual pollutants in air, water, soil, food, and other environmental sources. Although this approach has been effective in controlling some exposures, it lacks in accounting for multiple pollutants coming from multiple sources and any additional stressors and health vulnerabilities the communities impacted experience [28].

CleanAirNow KC Cumulative Impacts Concepts must be considered

1. Social and environmental factors can influence health disparities for many diseases;
2. Exposures to environmental hazards is significantly unequally distributed;

3. Intrinsic biological and physiological factors can be altered by environmental factors
4. External social vulnerability factors can be impacted by environmental hazards

Figure 6: Poverty by Census Tract 2015 ***Figure 7: EJScreen Life Expectancy*** ***Figure 8: EJScreen Asthma Rates***



The concepts for cumulative impacts have complex interrelationships, for example a person with asthma may be more sensitive to the increased air pollution causing increased risk for asthma attacks and with a lower socioeconomic status, medications may be more difficult to get and resulting in even more risk for asthma attacks. The KCMO Climate Protection and Resiliency Plan did not consider measuring cumulative effects on communities and how it could guide the strategies developed in prioritizing the most impacted. There is a correlation with socioeconomic status, demographics, and health inequities that all correlate and impact one another.

CleanAirNow KC Cumulative Impacts Recommendations

1. Thoughtfully and strategically include the community experience and perception on health outcomes related to climate change and environmental hazards
2. A climate action plan requires an environmental justice lens with health equity as a measurable outcome for strategies and plans being put in place
3. Conduct a thorough cumulative impact analysis by including context (consequences of proposal or activity and identifying overburdened communities), stressors (chemical, biological, social, and physical), and vulnerabilities (intrinsic and extrinsic) and communicate to the community and plan how strategies are guided by results.
4. Set clear and measurable outcomes that reduce major health concerns such as asthma, lung disease, cancer or even the gap in life expectancy between ZIP codes
5. Integrate health equity based programs and projects that will improve access to care, reduce social burdens, and eliminate environmental hazards
6. Develop and implement environmental justice policies to prioritize health outcomes for overburdened communities
7. Dismantle racist systemic practices and policies that continue to disproportionately impact the livelihood of overburdened communities
8. Utilize mapping tools that can visually demonstrate the social indicators and stressors the community is facing and identify any potential environmental factors exacerbating negative health outcomes.

Heavy Duty/Medium Duty Freight (Diesel Trucks, Good Movements) in overburdened communities

Transitioning the Heavy Duty and Medium Duty Freight Sector to Zero Emission Trucks implementation must center community, local workers, and the environment. Living and working closely to heavy duty freight corridors, and warehouses where goods movements and distribution centers are located has shown to have adverse health effects on individuals including cardiovascular disease **[29]**, respiratory disease **[30]**, and premature death **[31]**. A study done in 2014 found that the mobile source pollutants emitted at these sites such as black carbon and nitrogen oxides may not return to background levels until approximately between 200 - 300m from their emission source**[38][62]**. The concentration of pollution from diesel emitting trucks is also a great threat in overburdened communities. Switching to zero emission technologies is an essential action to ensure that overburdened communities are protected from the expanding polluting industries **[32]**. While it only takes low levels of ozone to cause irreversible damage to the body including the lungs, heart, and reproductive system, these communities are exposed to disproportionately high amounts of a myriad of environmental toxins that lead to increased deaths, illness, visits to doctors or hospital, and missed work and school days **[33]**. To invest in zero emissions technologies is to also invest in our overburdened communities and to reduce the constant burdens of pollution sources.

Kansas City must support local workers as we invest in zero emissions. As the technologies change, so too can equity in the workplace. Supporting zero emissions technology will not only improve the health of workers, but it brings about an opportunity to encourage a 'Just Transition' to zero emissions through quality training, benefits, fair wages, and job security in a sector built for the future rather than stuck in the past **[33]**.

Trucks contribute a baffling 90% of nitrogen oxide and diesel vehicle emissions in frontline communities. Racist interstate planning makes Black and Brown people most vulnerable to this pollution, elevating cancer risk and lowering life expectancy **[34]**. We must protect and uplift the working class of Black and brown communities while putting a meaningful dent in our climate pollution emissions.

CleanAirNow KC Recommendations

1. Create specific truck routes that avoid residential areas. By creating new trafficways in needed areas, trucks can easily avoid passing through neighborhood streets with sensitive receptors.
2. Prohibit trucks from idling.
3. Require zero emissions trucks, both locally and community wide.
4. Center Equity and Environmental Justice and prioritize overburdened communities
5. Begin working now towards zero emissions facilities in Kansas City Missouri. Facilities operating in Kansas City should be required to produce no new emissions and pollutants.
6. Prioritize zero emission fleet vehicles, medium & heavy duty trucks, equipment and supporting infrastructure at goods movement hubs, warehouses and along freight corridors.
7. Electrify new and existing warehouses to operate zero emission yard trucks, forklifts etc.

Land Use Policies, Zoning and Permitting

Because of mixed land use throughout the city, industries of all types operate near residential areas making these neighborhoods disproportionately impacted with increased risks of adverse health consequences. Before renewing a permit, issuing a permit, or allowing a new industry to build, there should be a robust public hearing process in place. For transparency, accountability and equitable

reasons, Kansas City must allow for easily accessible and meaningful community participation in the development of plans and programs.

There are many tools available that allow for robust public participation such as Environmental Impact Assessment, Environmental Impact Assessments Review, and National Environmental Protection Act among others. The following tools can be used to take into account the multiple sources of pollution and cumulative health exposures while also referencing local public health data, community expertise, community data and indicator tools (**Enviro Mapper EJ Screen ECHO Facility Level GHG Tool Climate and Economic Justice Screening Tool**).

Although auto dismantler facilities do not have any 'tracked data,' they are another environmental justice concern that have a history of polluting the environment **[35]**. The EPA Facility Search tool can be used to identify when compliance or enforcement was conducted or not.

(photo courtesy of google earth) scrap metal dismantling crushing facility)

Metal emissions can be generated during outdoor operations in most scrap yards, including gas torch cutting and mechanical cutting methods that help to downsize scrap metal for eventual consumption by end users [2]. Metal torch cutting is concerning because it has the potential to generate inhalable particles containing toxic heavy metals. However, little information is available about the impact on metal emissions or torch cutting outdoor air quality and associated health outcomes of residents in the downwind communities. More is known though about exposures from metal welding and torch cutting from data obtained in the occupational arena [2]. These facilities emit lead and arsenic dust into the air therefore impacting communities of color at the fenceline to these facilities Kansas City Missouri has no formal zoning code **[36].** Kansas City residents have expressed concerns about smoke, odor, particulate matter, dust, as well as explosions, truck traffic, and noise.

Scrap metal originates from end-of-life-products, structures, construction and demolition debris, or out-of-specification metal products that are recycled to recover their metal content. Scrap metal recycling facilities include feeder yards, dismantlers, and facilities with a metal crusher, baler, or shredder. Scrap metal can be sourced from discarded appliances, vehicles, electronic waste (e-waste),

metal pieces generated from machining operations, and other metal-containing wastes. Regardless of whether it is being recycled, scrap metal should be managed in a way that does not cause a release of its hazardous constituents to the air, soil, or water.

Metal recycling facilities with shredders process scrap materials including automobiles and large appliances. Materials are run through a shredder that breaks them into a size suitable for further processing. Recovered scrap metals are sold to end users, such as manufacturers and foundries.

Volatile Organic Compounds (VOC) emissions from shredding facilities are regulated under the CAA because, among other reasons, VOCs can contribute to violations of the National Ambient Air Quality Standards ("NAAQS") for ozone. Uncontrolled VOC emission rates vary with the size of the shredder and the scrap materials processed. EPA reports that typical shredding operations emit VOCs at rates between 20 and 200 pounds per hour. Shredders with enclosures and controls such as a scrubber or cyclone generally have lower emissions.

Installation of Reasonably Available Control Technology ("RACT") states that failure to comply with any of these requirements is a violation of the CAA, which could result in an enforcement action ultimately requiring payment of substantial penalties and installation of emission controls.

Examples: Images of a local facility (water, soil, air and public health impacts)

EPA Recommendations

To help minimize VOC emissions and achieve compliance, EPA recommends that owners and operators of scrap metal shredders take steps to:

1. *Depollute*: Depolluting scrap materials before they enter the shredder not only reduces VOC emissions but also helps prevent fires and explosions at scrap metal recycling and auto dismantler facilities. The types of materials that should be depolluted include: liquids such as gasoline, oil, antifreeze, and brake fluid; batteries; air bags; switches and light ballasts containing mercury; and refrigerants.
2. *Accurately estimate VOC emissions*. Sources should use appropriate test data from similar facilities when estimating VOC emissions. EPA recommends that if estimated VOC emissions are below but near regulatory thresholds, sources should consider conducting a performance test to measure actual VOC emissions and to develop a facility-specific emission factor.
3. *Reach out to local air permitting officials*: If estimated emissions are over the RACT or NSR thresholds, sources should contact their local permitting agency to discuss a path forward.

EPA's targeting of shredding facilities is ostensibly consistent with the Biden administration's focus on environmental justice and EPA's current National Compliance Initiatives ("NCIs"). According to EPA's alert, the more than 250 shredding facilities in the United States "are often located in densely populated areas," such that "noncompliant shredders can have an impact on overburdened communities." **[37]** The alert is also consistent with the NCI for "Creating Cleaner Air for Communities by Reducing Excess Emissions of Harmful Pollutants from Stationary Sources," which focuses on reducing emissions of both VOCs and hazardous air pollutants that threaten vulnerable populations or attainment of the NAAQS **[39]**. Shredding facilities should also evaluate whether they wish to take advantage of EPA's Audit Policy, which can offer substantial penalty reduction benefits for self-disclosed violations.

For information about the effects caused by airborne lead emissions, visit the Missouri Department of Health & Senior Services Lead Emissions: https://dnr.mo.gov/monitoring/lead-missouri/waste-recycling.

CleanAirNow KC Recommendations

No crushing, smashing, baling or reduction of metal shall be conducted on the premises unless it is conducted without producing substantial amounts of air pollution. Noise emanating there from, as measured from any point on adjacent property, shall be no more audible than the noise emanating from ordinary street traffic and from other commercial or industrial uses measured at the same point on the said adjacent property. Any property used for automobile dismantling yards, junk yards, scrap metal processing yards or open air storage of used materials, used equipment and used machinery shall not cause a release of its hazardous constituents to air, soil, or surface or groundwater and ensure that their treatment of the waste from these facilities is adequately protective of human health and the environment. Lead emissions in our air, water or soil present a threat to human health and the environment. High levels of lead are harmful to humans when ingested or inhaled and to community members living fenceline to these dangerous toxic polluting facilities **[40]**.

1. Review Motor Vehicle Salvage | Missouri Department of Natural Resources for compliance and land use designations, prior to the completion permitting of any city plan. (climate action plan, general plan, land use plan)
2. Enact new local city ordinance and/or state legislation
3. Identify facilities not registered or in compliance with any regulatory agency, not operating on expired permits, conditional use permits, etc.
4. Enclose such facilities or add protective barriers,consider a land use zoning plan and clean up areas with a distance more than 500 meters from a residential dwelling.
5. Reject any new recycling facilities from operating in KCMO
6. Fenceline Monitoring in overburdened communities

CleanAirNow KC Land Use Recommendations for Existing and New Facilities

Develop science-based protections to safeguard people from chemical risks and cumulative impacts of pollution exposure and climate change.

1. The EPA, MDNR, KCMO should require polluting facilities to conduct more comprehensive reporting, post-incident analysis, and preventive measures, including evacuation plans; enhance

community outreach and education; and increase public access to information on site-specific industrial chemical risks, including by providing multilingual alert systems to notify communities in advance of potential incidents.

2. The Environmental Enforcement authorities should require continuous, real-time, publicly available fenceline air monitoring near facilities emitting toxic air pollutants. Monitors must capture levels of pollutants traditionally excluded from the regulatory framework, and communities should play a significant role in deciding where monitors are located.
3. Air monitoring should also be conducted along rail lines near places with vulnerable populations, such as public housing, daycare centers, senior centers, and parks.
4. KCMO, MDNR, Federal and state agencies should develop the tools needed to measure and incorporate cumulative impact of chemical exposure for fenceline communities into environmental decision making processes.
5. KCMO, MDNR, Federal and state agencies and local decision makers should not approve the construction of new or expanded chemical facilities near homes, schools, or daycare centers or the construction of new homes, schools, or daycare centers near hazardous facilities.
6. KCMO, MDNR, Federal and state agencies should adopt and enforce strict emissions standards and limit heavy-duty truck traffic and idling in residential areas.
7. Kansas City should plan for a rapid transition toward zero emissions for railyards/locomotives/trains, trucks, and industrial facilities, prioritizing the public health of fenceline communities **[33]**. This transition could include the following actions:
8. Require development of a truck inventory that creates a baseline for the age of the trucks currently on the road. Use this baseline to track the influence of policies and laws in order to create zero-emissions truck fleets. Co Benefits to health and the climate.
9. These systems should not substitute standards or laws and strong polluter enforcement.
10. A new facility would produce no emissions zero emissions The assessment would also have to demonstrate how reductions in pollution would be measured and monitored in already existing operations.
11. The assessment for a permit renewal applicant would have to demonstrate that its operations or actions would result in a decrease in pollution in the community.
12. A facility could establish this by showing that it would produce less pollution or that it would take actions to reduce emissions, eliminate emissions.

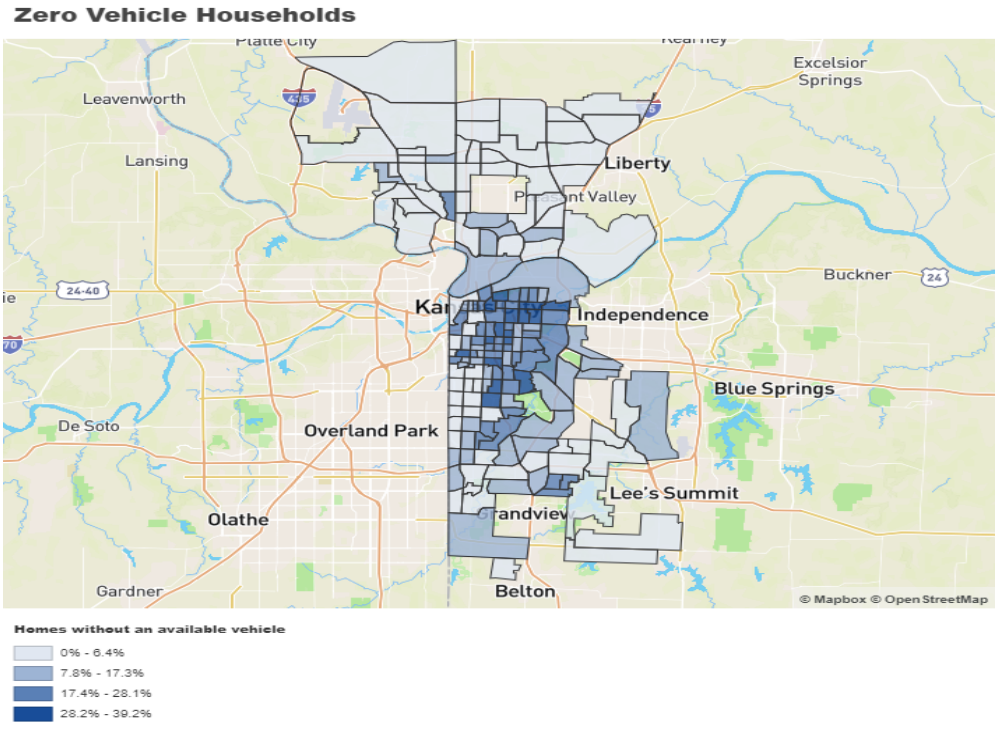
Housing and Mobility

Centering community expertise has resulted in significant benefits, such as the removal of stationary or mobile sources of pollution; the creation of restrictions or prohibitions on new polluting sources; and investments such as parks, affordable public transportation, and affordable housing. These localized assets highlight another important aspect of environmental justice: while it is important to identify the problems and areas that are unfairly impacted by cumulative burdens, environmental justice is also about gaining equitable access to environmental benefits, investments, and other resources for low-income communities and communities of color. Such benefits can address the uneven distribution of amenities along race and class lines that reflect long legacies of racism and discrimination in land use planning and development.

Policies to ensure healthy and safe housing, such as addressing the presence of lead-based building materials and asbestos; and policies to increase access to housing, including affordable housing, by eliminating barriers to fair housing and instituting measures to prevent the displacement of low income and vulnerable residents and families **[12]**.

Applying a public health perspective can be useful in identifying “unique and compounded health risks.” Some hazards such as toxins or traffic hazards may be dangerous enough to harm human health in isolation, or one at a time. However, some hazards may not be so dangerous that they are harmful to health by themselves, but can pose a cumulative risk. Today, people are often exposed to multiple health risks, such as ozone and particulate matter, while concurrently living in unhealthy housing conditions and/or experiencing poverty and other socioeconomic stressors that are associated with negative health outcomes.

Figure 9: Zero Vehicle Households



Sources: US Census Bureau ACS 5-year 2016-2020

These conditions are experienced more often by overburdened disadvantaged communities.
In addition, low-income residents may have few resources to prepare for hazard events or effectively recover after an event occurs. In places where there are limited public transportation systems or where there are many residents without a car, see **Figure 9**, there may be challenges to evacuating during a storm event. There may also be language barriers that prevent someone from accessing all of the information they need about services or changing conditions, and services or disaster response may not be provided in languages most commonly spoken in an area. Low-income residents may lack the needed insurance to recover from the impacts of climate change, storms, flooding, increased heat or may lack the resources to move if their property is threatened by sea level rise or flooding. As a result

of these factors and others, residents in overburdened or disadvantaged communities may be at increased risk of property damage, severe injury, or death due to climate-related hazards.

While renewable energy is expanding in KCMO as a response to climate change, many overburdened communities have yet to benefit. Renewable energy is often prohibitively expensive for low-income residents, and most renewable energy projects are not located in overburdened communities.

CleanAirNow KC Recommendations

An environmental justice approach to planning for climate change includes the following main strategies/recommendations

1. Immediate developing plans and setting targets to reduce greenhouse gas emissions.
2. Expanding access to renewable energy, increasing energy efficiency and promoting resilient design in the built environment.
3. Addressing “climate vulnerability,” or the risks in a community from climate change related natural hazards, including preparation of extreme heat adaptation plans and promoting flood-resistant development and retrofits.
4. Many types of climate-related hazards can harm public transportation infrastructure.
5. Efforts to provide access to public transportation in overburdened communities with zero vehicle households (as shown above figure), which is particularly critical for persons with mobility challenges or limited access to a vehicle. Strategies should recommendation include:
6. Work with local transit providers to identify alternative routes and stops if a hazard event prevents normal operation.
7. Emphasize providing access to key commercial districts and medical facilities.
8. Develop an evacuation plan for persons with limited mobility, including how to obtain vehicles and drivers in an emergency situation.

Urban Greenery

Greening should promote physical activity through the beautification of existing surface infrastructure and through new infrastructure, such as community gardens, including permeable pavement allowing stormwater to percolate through the pavement and infiltrate the underlying soils thereby reducing runoff from a site to reduce flooding. Separate from traditional recreational facilities, urban green spaces allow areas for informal and formal recreation. Urban greening also has environmental benefits: it can help reduce impacts of climate change by mitigating heat waves, improving stormwater management, and reducing exposure to air contaminants. Climate Action Plans policies to support urban greening can include: identifying specific green infrastructure projects located in Kansas City, promoting collaboration with community-based organizations in developing and maintaining programming, and identifying vacant lots and underutilized public land that can be turned into neighborhood-run community gardens. Another great way to increase urban greening is to reduce mowed areas, and plant cover crops that sequester more carbon than grass and reduce emissions from lawn mowers.

Image taken in a KCMO (Green Spaces should not be placed near industrial pollution)

Many of the public spaces in overburdened communities are coupled with industrial and mobile source pollution. We need to enforce environmental protection laws of polluting industries, rulemakings and regulatory oversight of mobile sources near sensitive receptors. It is recommended to use zoning and planning to create “green zones” that redirect heavy duty truck traffic away and green zones not created near industrial pollution or heavy duty traffic in already overburdened communities. To ensure that these zones are effective, build accountability structures to support zone enforcement, such as “no truck route” ordinance.

While we support creating more green space it is important that it complements more serious actions to address community needs. It should also not be used as the primary means of creating change through an environmental justice lens **[12]**. These systems should not substitute standards or laws and strong polluter enforcement.

Important Climate Change Risks and Cumulative Impacts not Considered

In this section, we note limitations in the way that the Climate Protection and Resiliency Plan *identifies climate risks, introduce new federal tools available to better identify overburdened communities in Kansas City, and urge future community-engagement efforts to adopt a more fine-grain approach, seeking out and prioritizing input from the most burdened neighborhoods in the city, rather than simply dividing the city into “North, Central and South” zones.*

Although efforts were made to ensure that residents in North, Central and South Kansas City were consulted in the creation of the Climate Protection and Resiliency Plan, it is important to consider that cumulative exposure to pollutants faced by residents can vary neighborhood by neighborhood. Similarly, the climate risks faced by individual neighborhoods can vary depending on their proximity to

hazardous facilities regulated under the EPA's Risk Management Program (RMP), under the Clean Air Act.

There are many publicly accessible tools available to adopt a finer-grained approach, to better identify overburdened communities. For example, the beta version of the Climate and Economic Justice Screening tool can be used to help identify individual census tracts (a unit of about 4000 people in a geographic area) that face specific health and environmental burdens, such as proximity to hazardous waste facilities, high asthma rates, low life expectancy, high energy costs, and toxic concentrations of toxic chemicals in wastewater discharge **[41]**. Taken together, these indicators provide a more detailed assessment of the Kansas City areas in need of the most pollution and climate change mitigation support. And the tool can also be used to assess some of the cumulative burdens that residents near fossil fuel facilities face.

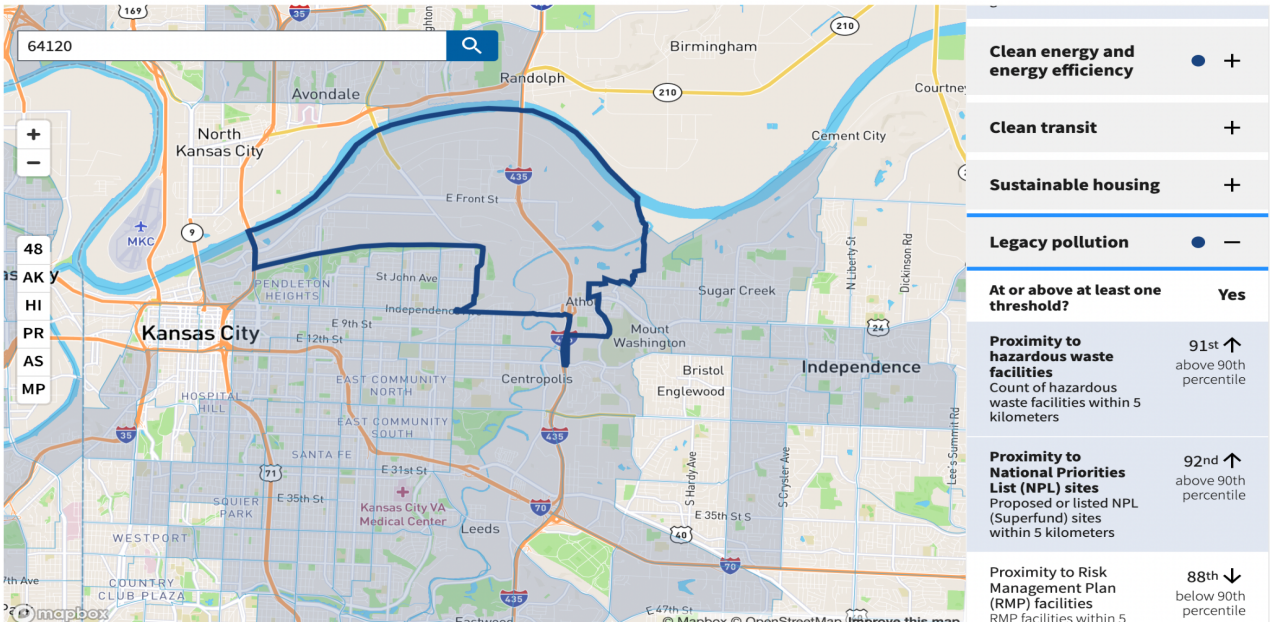
Figure 10 provides a picture of the fenceline community that lives nearest to the Hawthorn coal plant, in addition to the hazardous Bayer CropScience facility. This community ranks in the 91st percentile for proximity to hazardous waste facilities in the US, and the 86th percentile of areas in the US where residents have an income less than or equivalent to twice the federal poverty level. These two indicators together qualify the census tract as a "disadvantaged" neighborhood by the standards of the Council on Economic Quality, qualifying it for federal benefits under the Executive Branch's Justice40 Initiative.

Additionally, this census tract ranks:

- In the 82nd percentile for toxic concentrations of chemicals in wastewater stream segments within 500 meters;
- In the 92nd percentile for proximity to Superfund sites;
- In the 90th percentile for asthma;
- In the 89th percentile for heart disease, and the 86th percentile for diabetes;
- In the 99th percentile for low life expectancy;

Tools like these give a clear picture of the impacts of living near coal plants, and should motivate immediate action to decommission fossil fuel infrastructure and facilities in Kansas City.

Figure 10: Climate and Economic Screening Toolkit- Proximity to Hazardous Waste and NPL



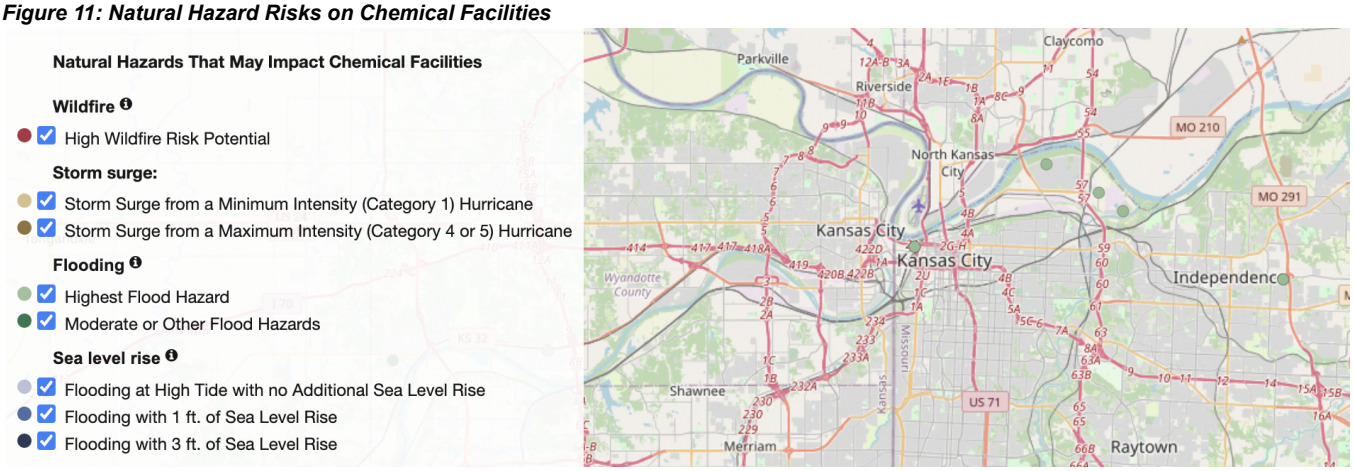
Because the Kansas City Climate Protection and Resiliency Plan plan does not consider risks posed to residents in closest proximity to hazardous facilities, it also significantly underestimates the climate risks posed to communities like these in our city. It also fails to consider the risks associated with transporting coal, natural gas, fertilizer and other hazardous chemicals via rail and trucking.

Flooding, high winds and other climate change events already pose significant risks and economic burdens to residents on their own, many of whom cannot afford to trim large trees, install sump pumps or make other updates to their buildings to protect against extreme weather.

But for residents who live within 3 miles of a regulated facility, like the Hawthorn coal plant and Bayer CropScience facility, these risks are much more severe.

A 2022 Government Accountability Office report also identifies the above census tract (see figure below) as a high flood risk due to its proximity to the Missouri River. It warns that 31% of facilities regulated under the EPA's Risk Management Program (RMP) rule are located in areas with certain natural hazards—like wildfires and storm surges—that may be worsened by climate change, and noted that EPA doesn't consistently assess how these facilities are managing risks from natural hazards and climate change **[42]**.

Figure 11: Natural Hazard Risks on Chemical Facilities



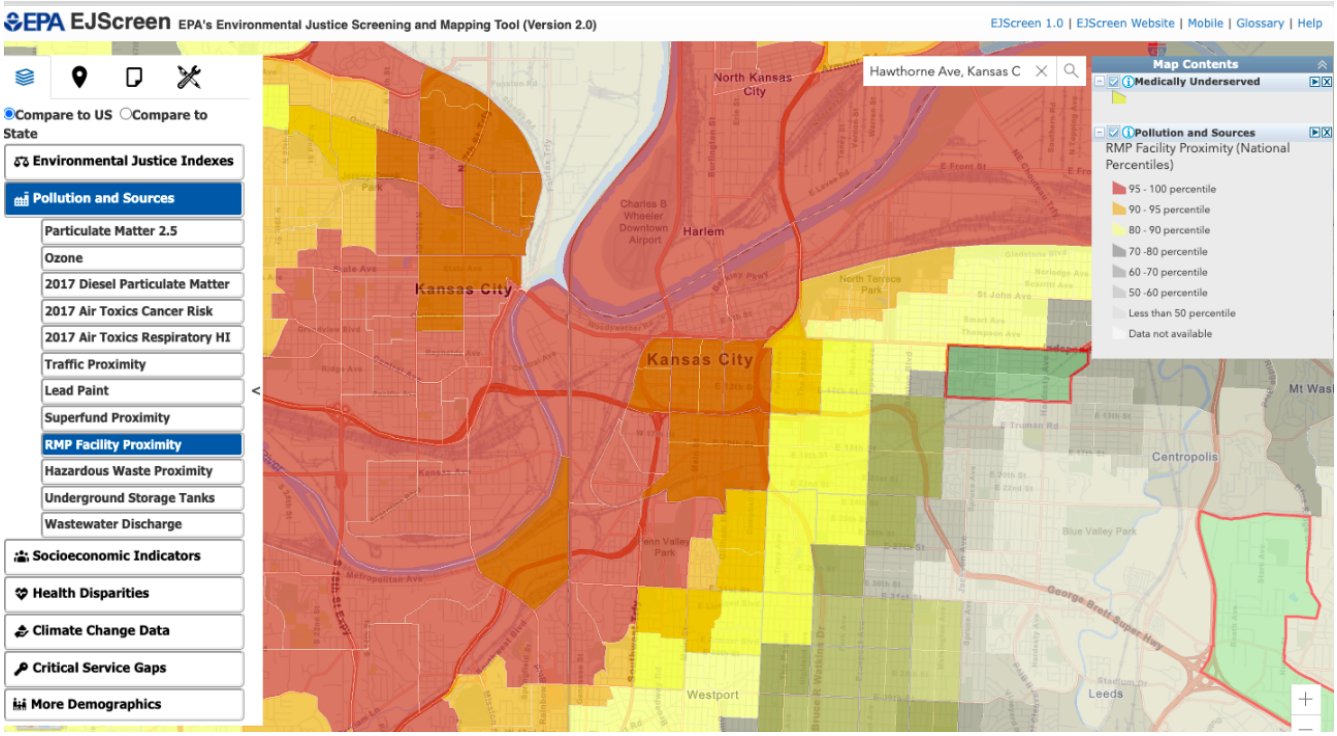
A complete Climate Action Plan should include plans to prepare communities and workers for the risks posed to these facilities from flooding.

Union of Concerned Scientists, Earthjustice, and the Center for Progressive Reform [“Preventing Double Disasters”] **Recommendations**

- Providing communities near chemical facilities, as well as first responders, workers, and their representatives, with information about chemicals and hazards at facilities near their homes and workplaces and where an emergency response may be needed. Workers and community members have the right to know which facilities near them pose risks of leaks and spills,
- Implementing advanced community notification systems in English and Spanish that include RMP facility notification to help ensure people most in need of lifesaving information can get it before an incident occurs.
- Requiring hazardous facilities to conduct real-time fenceline monitoring, share data with the public, and provide timely community alerts at hazardous facilities **[43]**.

Local governments and planners can measure climate vulnerability for local communities, including Vulnerable or EJ Communities, through a process called a vulnerability assessment. By doing this it can determine the climate-related hazards in the community (under both current and future conditions), and how these hazards may change over time. Federal resources, such as the U.S. Climate Resilience Toolkit **[44]**, can help with this process. There may also be local and regional resources available. A vulnerability assessment can help to select the specific populations present in the community that may be harmed by these hazards, including different populations that are considered vulnerable populations **[44]**. It considers age, physical and mental health, employment, citizenship status, and other socioeconomic factors. Finally, this assessment should lead to an analysis of potential impacts. Using scientific research, relevant reports and studies, and discussions with community members, it should assess how severe each climate change effect will be for different demographics of the population.

Figure 12: Environmental Justice (EJ) Screening Tool:EJ needs in central KCMO due to chemical disaster risk



Emergency planning, including education of at-risk communities, is critical to reduce the public health impacts of a chemical emergency. Preparedness must include both evacuation and shelter-in-place plans for communities that might be impacted.

Greenhouse Gas Emitters in KCMO (Not taken into account in the GHG Inventory Maintenance Standard Operating Procedure)

**The search results are based upon the facilities that are visible within the map above. To refine your search to a more targeted area of interest, please visit the GHG Search Form. To search Envirofacts via an interactive map, please view your results in EnviroMapper for Envirofacts*

Table 2: GHG and Toxic Pollution Emitting Facilities in Jackson County

Facility Name	Street Address	City Name	County	State	Zip Code
Bayer Cropscience	8400 Hawthorn Rd.	Kansas City	Jackson	MO	64120
Blue Valley	21500 E. Truman Rd.	Independence	Jackson	MO	64056
Courtney Ridge Landfill	2001 N. Courtney Rd.	Sugar Creek	Jackson	MO	64058
Central Plains Cement Company LLC	2200 N. Courtney Rd.	Sugar Creek	Jackson	MO	64050
Hawthorn	8700 E. Front St.	Kansas City	Jackson	MO	64120
Hawthorn Generating Station	8700 E. Front St.	Kansas City	Jackson	MO	64120

Independence Power & Light - Sub J	14102 E. Truman Rd.	Independence	Jackson	MO	64050
Independence Power & Light - Sub H	16501 E. Salisbury	Independence	Jackson	MO	64056
Independence Power & Light - Sub I	4380 S. Kiger	Independence	Jackson	MO	64055
KCP&L T&D	1200 Main St.	Kansas City	Jackson	MO	64105
Missouri Gas Energy	7500 E. 35th Terrace	Kansas City	Jackson	MO	64129
Rumble Landfill #2	2031 N. Courtney Rd.	Sugar Creek	Jackso	MO	64050
Southeast Landfill	8301 Indiana	Kansas City	Jackson	MO	64132
Spire Missouri West	7500 E. 35th Terrace	Kansas City	Jackson	MO	64129
United States Department of Energy	2000 E. 95th St.	Kansas City	Jackson	MO	64131
Veolia Energy Kansas City	115 Grand Ave.	Kansas City	Jackson	MO	64106

GHG Emissions Inventory, Climate Change, Energy Demand and Energy Supply

The emissions inventory utilized by the city are misleading and without targets on reducing greenhouse gasses now. In Evergys rationale for this inventory, electricity use data was identified for both government operations and the entire Kansas City community. “Data was not normalized for weather, as weather does not typically have a significant impact on electricity consumption **[61]**.” This reasoning is misleading, because in February 2021, with the anomalously cold temperatures not seen in more than a generation, impacts were tremendous on households. Energy consumption was unusually high and reflected in consumer's home heating bills **[45]**.

Increases in temperature will increase our energy demand, as well as change our ability to produce electricity and deliver it reliably. In a warmer climate, Americans will use more electricity for air conditioning and less natural gas, oil, and wood for heating. If the nation's climate warms by 1.8°F, the demand for energy used for cooling is expected to increase by about 5-20%, while the demand for energy used for heating is expected to decrease by about 3-15% **[46]**.

Emissions from electricity consumption were calculated using factors for CO2, CH4, and N2O provided by Evergy. However, emissions from greenhouse gas emitters are reported separately from the community, noting that all GHG emissions are only being aggregated from buildings and homes and not from the largest Greenhouse gas emitters, in the area including the Hawthorn facility and the South Harper Peaking Facility emissions. This plan must drastically reduce its greenhouse gas emissions through absolute reductions now with metrics and quantifiable data.

Image Taken of the Hawthorn Plant Largest GHG Emitter and Toxic Pollution Combined in Missouri

Table 3: Power Plant and Mineral Facilities in MO

	Facility	City (Missouri)	2020 GHG Quantity (Metric Tons CO2e)	Sector
1	Labadie	Labadie	15,710,653	Power Plants
2	Rush Island	Festus	6,874,470	Power Plants
3	Thomas Hill Energy Center	Clifton Hill	6,729,549	Power Plants
4	Iatan Generating Station	Weston	6,284,235	Power Plants
5	New Madrid Power Plan	New Madrid	5,651,739	Power Plants
6	Holcim (US) Inc. Ste Genevieve Plant	Bloomsdale	3,102,198	Minerals
7	Sioux	West Alton	2,897,754	Power Plants
8	Mississippi Lime Company	Ste. Genevieve	2,376,497	Minerals
9	Hawthorn Generating Station	Kansas City	2,064,952	Power Plants
10	River Cement Company (dba Buzzi Unicem USA)	Festus	1,882,231	Minerals

Hawthorne Coal Plant

Generating energy from burning fossil fuels has long polluted our air and lungs with toxic airborne compounds, poisoned our water, and caused health impacts in our communities. The Hawthorn plant emitted over 2 million metric tons of heat-trapping gases in 2020. It was the largest emitter of greenhouse gas emissions in the Kansas City metro area and the 9th largest in Missouri **[47].** Air pollution from Evergy coal plants are directly associated and responsible for premature deaths and asthma attacks every year in our region. More than 35,000 people live within 3 miles of the plant and almost 750,000 live within 12 miles. The population of people of color is 44% within 3 miles of the plant and 38% within 12 miles compared to statewide average of 18%. Throughout the Midwest, “black and

low-income people face the highest risk for death from power plants' fine particulate pollution [48]."

As environmental regulations begin to tighten, emissions control equipment at coal plants continue to drive and increase rates. While the benefits of renewable energy generation grows, Evergy continues to operate its costly coal fired power plants while passing on the expenses to the ratepayers. Currently, electricity prices in Kansas City are considered one of the highest in the region and Evergy has still not announced a plan to close its remaining coal plants despite having some of the most affordable opportunities for solar and wind energy in the country [49]. These high energy prices have resulted in nearly 25% of households forgoing basic household needs in order to pay the electric bill [50][51].

The United States has finally reached the "**coal cost crossover**", meaning that existing coal is more expensive than renewable energy [52]. It is time to meet basic climate target goals, Evergy must commit to shutting down Hawthorne immediately and all remaining coal plants as soon as possible. Shutting down the Hawthorne coal plant immediately is a step forward in the right direction for Kansas City to become a real climate leader and a commitment to creating an equitable and sustainable environment.

Figure 13: Places, Sites, Facilities and Environmental Concerns within 3 miles from the Hawthorn Plant

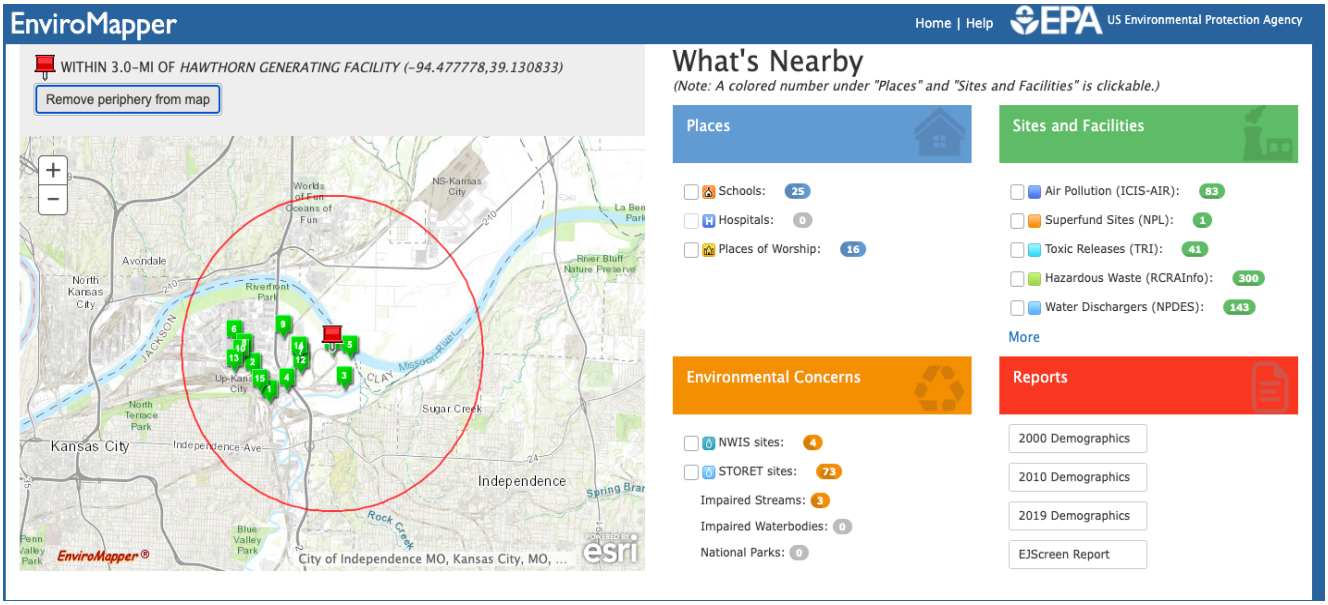


Image of Coal Transport through KCMO- Photo Credit KCUR Story/Images

Coal Transport and Its Impacts to Health

Airborne PM 2.5 are more abundant when coal storage facilities receive more deliveries. A 10% increase in the number of deliveries results in a 0.12% increase in average airborne PM 2.5 concentrations.This concentration is “highly localized” – unlike emissions released into the atmosphere by burning coal, these are largely blown around at ground level and affect people living within 25 miles of coal-fired power plants or coal-transfer facilities.. A 10% increase in PM 2.5 leads to a 1.1%increase in adult deaths and a 6.6% increase in infant deaths. Applying the “value of a statistical life” (VSL) – a measurement commonly used in academic and government studies (where a human life is worth a little under $10 million) – the authors find the environmental cost of one ton of coal delivered at about $203 **[53]**. Translation: $10 million divided by $203 suggests that about 49,261 tons of coal delivered would kill one person. The U.S. consumed about 800 million tons of coal in 2015, according to government statistics **[54]**. At export terminals, the authors estimate local environmental costs of $325 per ton of coal stored – this is higher because they are generally in urban areas where more people are impacted.“Our air pollution cost estimates are sizable given that the average U.S. coal-fired power plant pays roughly $48 per ton for coal, stockpiles 212,781.6 tons of coal and has 106,235 tons of coal delivered to it each month.” The Hawthorn plant sources its coal from the Powder River Basin in Wyoming. It is delivered by rail car. A 2015 study by University of Washington researchers found that open-topped coal trains emit an average of twice the concentration of tiny particles of pollution compared to freight trains. The study examined emissions of diesel particulate matter and coal dust from freight trains and coal trains in the Columbia River Gorge **[55]**.

Net-Zero, Off-Sets, and False Solutions

CleanAirNow is concerned that Kansas City's plan to achieve carbon neutrality by 2040 relies on carbon offsets and carbon sequestration. We support composting and urban tree planting programs but this should not be in place of environmental enforcement of toxic/greenhouse gas industrial polluters. The investment in these programs does nothing to counterbalance the real harms to our communities caused by the continued operation of greenhouse gas emissions, or other carbon-intensive facilities. And we worry that the city touting net zero (offsets, carbon offsets) programs is being used to justify utilities' extended reliance on fossil fuels.

Most international carbon offset programs have an extremely poor track record **[56]**. Forested or reforested areas that are claimed as carbon offsets often fail to benefit local communities, or stay protected from logging or agricultural use in the long-term. Researchers at Lancaster University have recently estimated that global reliance on offsetting schemes and other carbon-removal approaches, could lead to an additional 1.4°C of global heating **[57]**.

"Net-Zero" is a Dangerous Distraction
As the climate crisis worsens and demand grows for governments and companies to increase climate ambition, Big Oil, Big Agriculture, Big Banks, other polluting corporations, and governments have lined up to proclaim one "net-zero by 2050" pledge after another. This is a dangerous greenwashing gimmick. It is the latest scheme by polluters — and their financial and political backers — to promote a facade of talking about climate action while actually exacerbating the crisis to protect their profits and power. "Net-zero" is premised on unjust offsetting schemes and removals of massive quantities of carbon from the atmosphere through unproven technologies, large-scale land grabs, and/or interference in the Earth's climate system via geoengineering. "Net-zero emissions" is not the same as "zero emissions," and 2040 is too little, too late.

Net-zero-by-2040 pledges by corporations and governments are:

- **Ineffective and dangerous**. Echoing scientists who wrote 'Climate scientists: concept of net zero' is a dangerous trap — "*The idea of net zero has licensed a recklessly cavalier 'burn now, pay later' approach which has seen carbon emissions continue to soar. It has also hastened the destruction of the natural world by increasing deforestation today, and greatly increases the risk of further devastation in the future.*"**[58]**

- **Unjust.** Net-zero schemes perpetuate environmental racism and injustice, including maintenance of pollution hotspots in BIPOC and low-income communities.

- **Inequitable.** As the largest historical carbon polluter and among the world's wealthiest countries, the U.S. must decarbonize much sooner than 2050. The U.S. must do its fair share of the global effort to limit global temperature rise to 1.5°C through drastic domestic emissions reductions without offsets and robust provision of international finance for developing countries.

- **Greenwashing.** Polluting corporations, their political acolytes, and their financial backers continue business as usual, doing little-to-nothing to actually reduce their own climate pollution, while touting industry scams like carbon offsets, ineffective or even non-existent negative emissions technologies like carbon capture and storage or direct air capture, and geoengineering.

We call on local state and federal policymakers at all levels — from the Biden Administration to Congress to state and local governments — to say no to the "net." The United States must drastically reduce its greenhouse gas emissions by 2030 through absolute reductions. Laws and regulations must keep fossil fuels in the ground; eliminate sources of non-fossil-based climate pollution, including but not limited to false renewable practices such as industrial wood biomass, incinerators, methane capture for biogas, natural gas, and emissions intensive agricultural practices like factory farming; and facilitate a Just Transition **[60]**.

CleanAirNow KC Additional Concerns

A concern about this plan is that it utilized the Climate Action KC/ Mid American Regional Council (MARC) proposed plan. KCMO must have designed and drafted the initial plan with communities most impacted instead of using an already approved plan by the MARC https://kcmetroclimateplan.org/ to steer community in using this plan as the template for the KCMO

The MARC is a nonprofit association created in 1972, They are led by county governments and the Metropolitan Planning Organization (MPO) for the greater Kansas City region across state lines. It is governed by a board made up of elected officials from some but not all of the municipalities in its catchment area and receives nearly 60% of its funding from federal and state governments. As a planning and funding organization, it has decision making power in the region. MARC's role for its "healthy environment" performance measure is to "develop policies, processes and projects that help keep the region's air and water clean, reduce the amount of waste sent to landfills, protect and conserve green infrastructure, and advance climate resilience" **[60]**. MARC has established various advisory committees on which community members may be invited and asked to serve, however, without clear pathways for committee recommendations to be included in government decisions, committee service does not appear to constitute meaningful community engagement. Ultimately, the decision making authority rests with the MARC board which represents individual jurisdictions and constituents which could mean there are inherent conflicts of interest as they make local planning and funding decisions that benefit particular locations, businesses, and people in line with the unclear distribution of decision making power. The distribution of polluting industries residing heavily in and around some residential areas and not in others lends itself to questions about both permits for development and pollution as well as regulation and enforcement of polluting industries.

Thank you for allowing CleanAirNow KC to provide this comprehensive policy document recommendations for implementation in the Kansas City Climate Protection and Resiliency Plan

Please add as an appendix to the Climate Protection and Resiliency Plan

Take a look at this for guidance:
https://www.wycokck.org/files/assets/public/planning-amp-urban-design/documents/master-plans/armourdale-draft-master-plan-report_spreads-reduced.pdfinclude CleanAirNow EJ Policy Recommendations

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**The Environmental Racism in the Heartland report, released by UCS and CleanAirNow, was used frequently in writing this comment letter.

DEFINITIONS

Overburdened or Environmental Justice communities or Disadvantaged Communities

*Disadvantaged communities are defined as 90th percentile scoring areas with high amounts of pollution, communities of color and low-income communities.

Communities at or above the 90th percentile for proximity to hazardous waste facilities OR proximity to National Priorities List (NPL) sites OR proximity to Risk Management Plan (RMP) facilities and fenceline to cumulative pollution and environmental hazards at or above the 90th percentile for diesel particulate matter exposure or traffic proximity and volume and other environmental hazard indicators where t*he census tract is above the threshold for the socioeconomic indicators.*

Fenceline Community
A fenceline community or frontline community is a neighborhood that is immediately adjacent to a chemical plant, industrial facility or distribution center and is directly affected by the noise, odors, chemical emissions, heavy duty diesel emissions, and operations of the company.

Frontline communities are those that experience “first and worst” the consequences of climate change.

In informing this report we utilized multiple screening tools to identify overburdened communities, disadvantaged communities and/or environmental justice communities. We have done our best in providing the correct terminology for the reader, as these may be terms not traditionally used by Kansas City MO governments land use plans, zoning (Climate Action Plans, General Plans, Master Plans) or in agencies policies programs, processes or practices. We utilized the following tools:

Enviro Mapper EJ Screen ECHO Facility Level GHG Tool Climate and Economic Justice Screening Tool