

Gender and the Climate Crisis: Equitable Solutions for Climate Plans



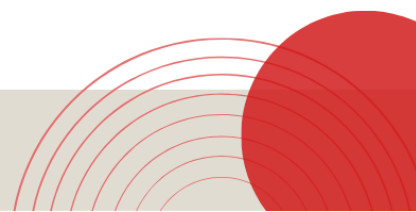
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CENTER *for*
BIOLOGICAL
DIVERSITY

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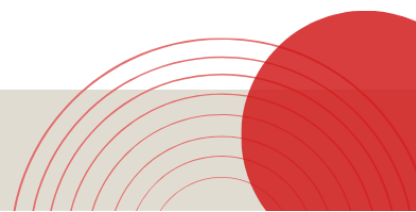
Gender is the behavioral, cultural or psychological traits typically associated with one sex. Gender is viewed along a continuum and includes both binary and non-binary gender identities including LGBTQIA+. We acknowledge that all people are affected by these issues, and gender diverse people often face additional challenges due to the lack of inclusive health care and other systems of oppression. Within this document we use gender-neutral terms when possible, however since the literature to date has largely reported results in a binary way – female or male – we have retained some gendered language to accurately represent the best available research.

Climate Plan Note:

Throughout this report we are using the term “climate plan” to refer to a municipal plan written by a group of stakeholders that work together to inventory current climate risks and create goals to adapt and mitigate those risks. These plans can be called climate action plans, sustainability plans, energy action plans or other various combinations of terminology. However, each often address similar topics such as buildings, energy, food, transportation, waste and water. In the state of California, the term “climate action plan” most commonly refers to comprehensive planning documents that lay out specific activities public agencies will take to reduce greenhouse gas emissions occurring within their jurisdictions. These forms of Climate Action Plans are a part of the statutory framework within California to address the climate crisis and can support compliance with environmental review requirements of the California Environmental Quality Act. None of the “climate plans” or recommendations in this report are intended to apply to California Climate Action Plans.

Center for Biological Diversity’s Perspective on Population Growth:

Population growth should only ever be discussed through a human rights lens, centered on justice and equity. The Center for Biological Diversity’s philosophy is one that empowers people, improves resilience and health outcomes, and reduces pressure on wildlife and the environment. The Center denounces population control, coercion, eco-fascism, genocide, eugenics and the closing of borders. We strive to empower women, girls and families to make informed decisions about their reproductive health, to achieve gender justice and to support the environment.




Executive Summary

The effects of rising greenhouse gas emissions are more harmful to women, gender diverse people, and Black, Indigenous and people of color, although these communities contribute less to climate change. This underscores the need to include gender frameworks and gender diverse voices from communities of color into climate action planning.

The Center for Biological Diversity sought to learn if gender and solutions related to gender were included in municipal climate plans. Twenty-one climate plans from cities across the United States were analyzed for this report, representing approximately 10% of the U.S. population (30,492,353). The plans were reviewed for the frequency of inclusion of each of the following topics: consumption, education, family planning/contraception/reproductive health, gender, human population/population growth/growth, public health/pollutants and vulnerable populations.

The report analyzes gender-based solutions in municipal climate plans and provides practical policy recommendations for stakeholders to enhance their plans with mitigation and adaptation efforts based on gender empowerment and social justice. Gender empowerment initiatives include universal access to voluntary modern family planning methods (e.g. the oral contraceptive pill, long-acting reversible contraception, condoms and emergency contraception); LGBTQIA+ inclusive, culturally responsive and medically accurate comprehensive sexual education; and affordable sexual and reproductive healthcare that allows individuals to have agency and autonomy over their bodies. Additional solutions include supporting educational opportunities, redefining gender roles, creating equitable opportunities for women and LGBTQIA+ individuals, and guaranteeing safety from harassment and violence.



Key Finding: None of the climate plans reviewed mentioned family planning/contraception/reproductive health and only one plan mentioned gender as a solution.

In addition to the 21 plans that were analyzed, seven informal interviews were conducted with sustainability professionals who had worked or are currently working on climate plans at both the international and municipal level to determine why gender equity and empowerment had been left out of climate plans. The following themes were identified:

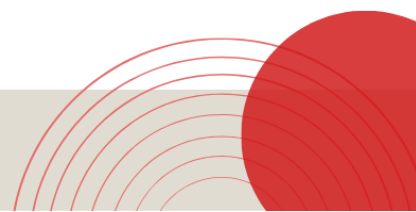
- Gender empowerment solutions can be difficult to measure.
- The need for government approval can be a barrier to including gender empowerment in climate plans.
- It matters who is at the table. Having diverse views represented in the discussion and decision-making throughout the development of climate plans is critical.
- The pandemic may offer an opportunity for more inclusive climate plans.

Key Recommendations:

We recommend the following steps and policies be implemented at the local government level, as well as through state and federal policies that can support local efforts to incorporate gender-based strategies into climate plans:

- Work within existing climate plan structures to address gender inequality as a public health issue.
- Collect relevant data related to gender, race and the climate crisis.
- Educate and train government staff on gender, inclusion and the climate crisis.
- Build gender empowerment programs that include offering comprehensive sex education, supporting contraception access, keeping abortion legal, providing access to period products, funding quality education programs and addressing racial inequality in schools.
- Include gender action plans in climate plans and create gender advisory committees.

By implementing practices noted in this report, policymakers will be better able to create intersectional climate plans that support their communities, wildlife and the planet.




Introduction

Domestic and international climate policy has fallen short of what's needed to avert climate catastrophe. With this lack of federal leadership, some cities in the United States have been at the forefront of combating climate change through climate plans.

These plans include a range of climate change mitigation (actions to reduce greenhouse gas emissions to slow the amount and speed of climate change) and adaptation (actions to try to adjust to current and future impacts of climate change to reduce vulnerability to harms) strategies for sectors such as energy, housing, and transportation. However, they consistently overlook gender equity and empowerment initiatives — two important climate change solutions noted by Project Drawdown, a nonprofit organization working to help the world reach the point where levels of greenhouse gases stop climbing and begin to steadily decline, thus ending climate change quickly, safely, and equitably.¹

Gender empowerment initiatives include universal access to voluntary modern family planning methods (e.g. the oral contraceptive pill, long-acting reversible contraception, condoms and emergency contraception), LGBTQIA+ inclusive, culturally responsive and medically accurate comprehensive sexual education, and affordable sexual and reproductive healthcare that allows individuals to have agency and autonomy over their bodies. Additional solutions include supporting educational opportunities, redefining gender roles, creating equitable opportunities for women and LGBTQIA+ individuals, and guaranteeing safety from harassment and violence.

Including gender empowerment initiatives in climate plans is not without precedent. The first internationally recognized climate change gender action plan (ccGAP) was adopted at the 23rd UN Framework Convention on Climate Change, Conference of the Parties (COP23) summit in 2017. It emphasized that women face greater risks when it comes to the effects of climate change but also have unique skills that allow them to contribute greatly to mitigation and adaptation efforts at local, national and international levels.² When governments invest in women and girls, communities are healthier, democracies are more stable, economies are stronger, and society and individuals are more resilient to climate change.



Project Drawdown has said that providing access to contraceptives and rights-based reproductive care can “[reduce] maternal and child mortality and [produce] better health outcomes,” as well as “[strengthen] climate change-affected communities’ ability to adapt. With fewer unintended pregnancies, slower population growth reduces pressure on climate-sensitive resources.”³

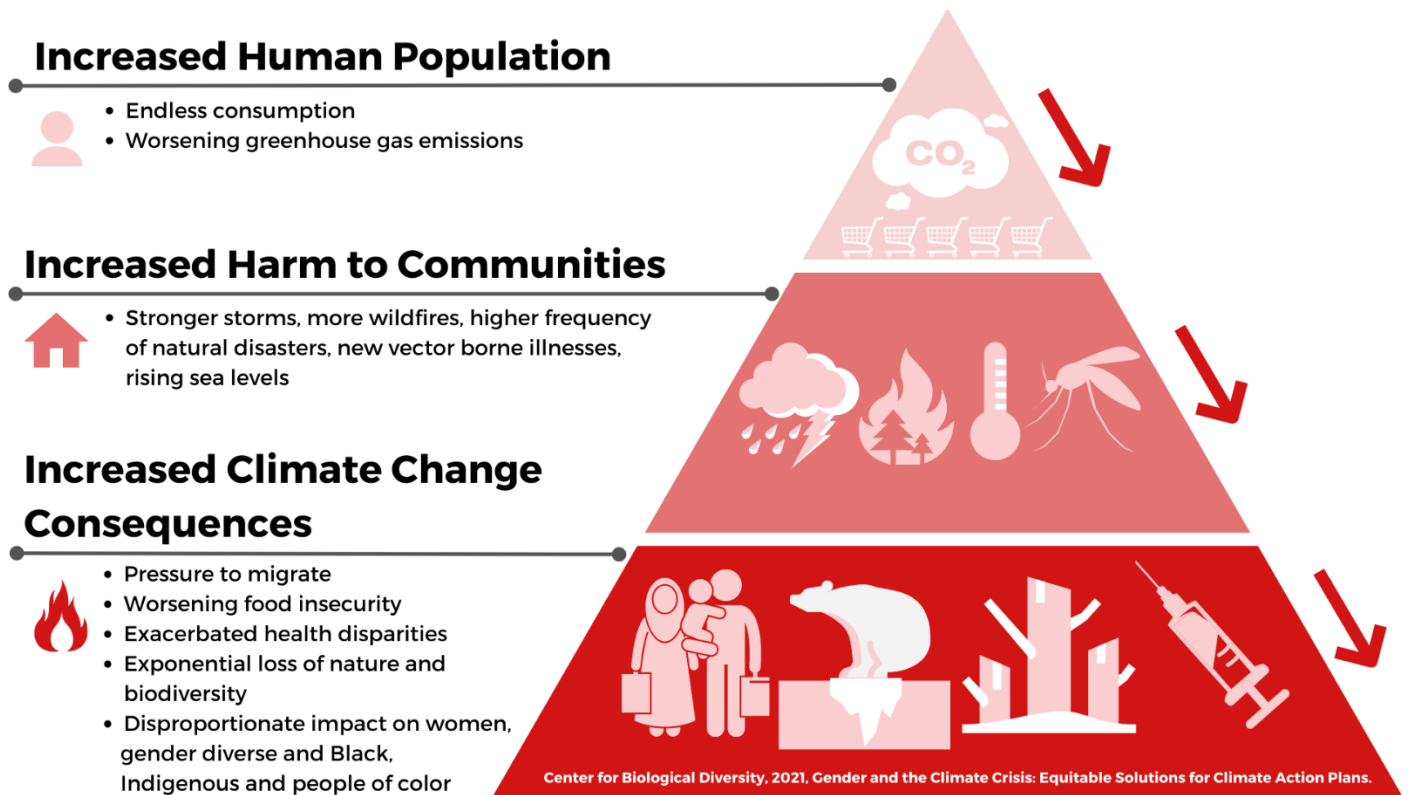
As 45% of pregnancies in the United States are unintended, providing comprehensive reproductive healthcare to individuals allows policymakers to support people and gives them autonomy to decide if and when they have children — which makes the planet a more sustainable place for those already on it.⁴

The pressure of population growth makes it harder to meet emissions-reduction targets while magnifying climate change's detrimental consequences on humans and other species.

While addressing population growth is a long-term mitigation strategy, there are also short-term adaptation benefits, including improved health care, empowerment and other positive social outcomes. These additional benefits will be considered throughout this report.

Project Drawdown’s health and education solutions may be seen as only applicable to low-income countries, but children born in wealthier countries have a much larger carbon footprint. Universal access to voluntary family planning in the United States, one of the world’s highest consuming countries, could have a substantial environmental impact.

Figure 1. The connections between each of these issues.



This report analyzes gender-based solutions in municipal climate plans and provides practical policy recommendations for stakeholders who wish to enhance their plans with mitigation and adaptation efforts based on gender empowerment and social justice. By implementing practices noted in this report, policymakers will be better able to create intersectional climate plans that support their communities, wildlife and the planet and address overlapping systems of inequality such as gender, race, ethnicity, disability, class and other forms of discrimination.

Oppressive systems that affect climate change

The current global population is 7.77 billion, a number that has doubled in the past 50 years.⁵ The United Nations predicts that there will be 2 billion more people by 2050, and 3.5 billion more by 2100, without efforts to expand reproductive rights and increase women's empowerment.⁶

This massive population expansion has contributed to growth in per capita production and consumption and increased worldwide greenhouse gas (GHG) emissions. The Intergovernmental Panel on Climate Change, or IPCC, says that most of the warming of the past 50 years is attributable to human activities, particularly emissions of GHGs from the extraction and burning of fossil fuels from high-income countries, and has identified population growth as an immediate driver of emissions.⁷ One study found that if family planning and gender empowerment strategies improved globally, annual GHG emissions would be 35% lower by 2100.⁸

The IPCC has asserted that there is less than a decade to cut GHG emissions by more than half to avoid catastrophic climate change. The consequences of climate change — stronger storms, more wildfires, increased frequency of natural disasters, new vector-borne illnesses, and rising sea levels — are harmful to humans and wildlife. Agricultural systems that feed the world's population are becoming increasingly disrupted, affecting the global supply chain of available foods and exacerbating food insecurity.⁹ Species that rely on specific habitat conditions are being forced to migrate or shift their ranges in search of better conditions, which may ultimately lead to their endangerment or extinction.¹⁰

Because population pressure is a major driver of GHG emissions through burning of fossil fuels, increased material extraction, deforestation, pollution from agriculture, and other manufacturing processes, it's important for governments to have policies that help them prepare for a changing climate. While individuals are part of the climate change solution, governments must act now to support systems level solutions such as addressing capitalism and racial and gender inequality, as noted below.

Capitalism

The rapid increase in the number of people on the planet has increased dependence on a global consumption-driven economy, in which goods are being created in increasingly unsustainable ways to meet corporate manufactured demand for things we don't really need. Studies have shown that fossil fuel combustion for energy generation accounted for 74% of total U.S. GHG emissions, adding to the need for systemic infrastructure and policy solutions.¹¹

In a society fueled by capitalism and consumption, a growing population means increased use of extractive systems.



The pollution from these systems disproportionately harms communities of color and low-wealth communities that are least responsible for the emissions.


Solely shifting to a more sustainable consumptive lifestyle will not address the long-term environmental or justice damages of the capitalist system. We must not only change what we consume, but how we consume, by moving toward an economy that rejects exploitation and endless growth and instead centers social justice and environmental protection. Local policymakers can help address these issues by supporting economies built around cooperation, equity, sustainability, social welfare, democracy and creating pathways for comprehensive and meaningful public input in the decision-making process.¹²

Racial Inequality

The climate crisis disproportionately affects Black, Indigenous and people of color and those in low-wealth communities, and racial inequalities increase the challenges for women of color and gender minorities compared to their white counterparts.^{13, 14, 15} These populations also bear the brunt of pollution and have lower rates of healthcare access. Fossil fuel pollution from coal- or oil-fired power plants, which drives the climate crisis, harms people of color, particularly Black Americans, disproportionately. People of color live within 3 miles of toxic fracking wells 12% more often than the national average. As a result of this unequal siting of fossil fuel infrastructure, Black Americans have 1.54 times the exposure to particulate matter compared to the overall population, while populations of color have 1.28 times higher burden than the general population.

While there is a long and ongoing history of oppression against these communities, many of these disparities can be traced back to redlining, an initiative by the federal government in the 1930s to promote housing for white families, in which predominantly Black neighborhoods were outlined in red marker as less desirable for mortgage lenders.¹⁶ To this day, these areas tend to have fewer green spaces and trees that help regulate temperatures. As a result, land surface temperatures in communities exposed to redlining are on average 2.6 degrees Celsius warmer than non-redlined communities, with some as high as 7 degrees Celsius warmer.¹⁷

Excessive heat has been shown to have effects on a range of issues, including access to food due to droughts and learning outcomes in classrooms due to lack of air conditioning.¹⁸ Additionally, due to racist lending practices that have made it difficult for Black, Indigenous and people of color to purchase a home, they have less intergenerational wealth. Today these communities continue to experience economic, educational and health disparities, which only exacerbates their inability to mitigate climate change and build resilient communities. Furthermore, although these communities contribute less to climate change, they disproportionately bear the brunt of climate, air and water pollution from oil and gas refineries, concentrated animal feeding operations, and other industrial facilities that operate in redlined neighborhoods.



These deeply ingrained, multifaceted racial inequalities underscore the need for local policymakers to include gender diverse voices from communities of color into climate action planning to build a just and inclusive future that supports people and the environment.

Gender Inequality

The effects of climate change have proven to be more harmful toward women and gender diverse people.¹⁹ In fact, countries with greater gender inequality based on factors such as income, education and leadership, tend to have lower environmental performance, which includes an increase in carbon dioxide emissions.²⁰ Climate change also presents new health risks to pregnant people and babies in utero. Extreme heat exposure has been linked to preterm labor, stillborn births, low birth weight, infant mortality and developmental delays.

Wildfire smoke increases chances of preterm birth, low birth weight and psychosocial stress that affects fetal development.



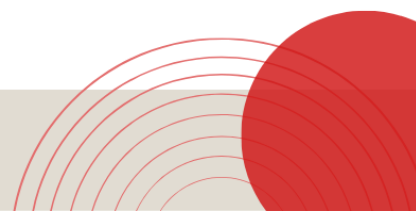
The American College of Obstetricians and Gynecologists has recognized climate change as an urgent women’s health issue.²¹

Both economic and health consequences, such as job loss and increased rates of water and vector-borne disease, are exacerbated by climate change and are higher in women than in their male counterparts. According to one study, women lose their jobs more often than men after natural disasters and, since women generally earn less money than men, they have fewer resources to rely on during times of climate-related crises.²² Women are also more likely to be caregivers, which affords them less flexibility to freely respond to, and protect themselves from, extreme weather events.

A report about Hurricane Maria, one of the worst storms in modern U.S. history, detailed that in the aftermath of the storm, women were likely to face obstacles to obtaining their preferred method of contraception, as well as experience gender-based violence by those who travel to regions to assist in emergency recovery, or even by their own partners.²³

Women and Black people, Indigenous people and people of color are also more likely to contract respiratory diseases such as asthma caused by wildfires or vector-borne diseases such as the Zika virus — both of which are more common with the rise in global temperatures — because they’re less able to mitigate harm through the use of air purifiers, air conditioners or by relocating.²⁴ The Zika virus can have lasting effects on the reproductive health of pregnant people and their children. As the U.S. Centers for Disease Control and Prevention has reported, among women with confirmed Zika virus infection during pregnancy, Zika-associated birth defects occurred in approximately 2 in 20 (10 percent) of babies born to women in the United States.²⁵

The economic and health disparities and the lack of social support experienced by women are typically as bad or worse for gay, lesbian, bisexual, queer, transgender and nonbinary people.²⁶ As described in more detail in the policy recommendations below, local policymakers can address these concerns by supporting gender-empowerment solutions such as voluntary modern family planning, comprehensive sex education, leadership positions and educational opportunities for women and gender minorities.



The Role of Climate Plans

Climate plans are detailed plans developed by cities, states, countries, universities and other institutions to outline steps that have been and will be taken to combat the effects of climate change. Oftentimes they include both mitigation and adaptation efforts. Mitigation efforts seek to lessen the effects of climate change by tackling issues at the source, such as implementing renewable energy or sustainable transportation systems. Adaptation efforts are reactive to climate change, such as disaster preparedness or infrastructure adjustments to help with flooding or drought.

Climate plans are typically written with the help of multiple stakeholders and experts from the community. These experts often include city planners, scientists, private consultants, citizen scientists, and others who are knowledgeable about climate change and the risks that it may pose to the community. These stakeholders set comprehensive goals to accomplish over a specified period (usually about five years).

Most climate plans address only scope 1 and scope 2 emissions. Scope 1 emissions are direct GHG emissions that occur from sources that are controlled by the municipality (e.g., school bus idling or methane gas from a landfill). Scope 2 emissions are indirect GHG emissions associated with the purchase of electricity.²⁷ Scope 3 emissions — those often left out of climate plans — are the result of activities from assets not owned or controlled by the municipality, but that the municipality indirectly impacts through purchased goods, employee commuting or pension fund holdings.



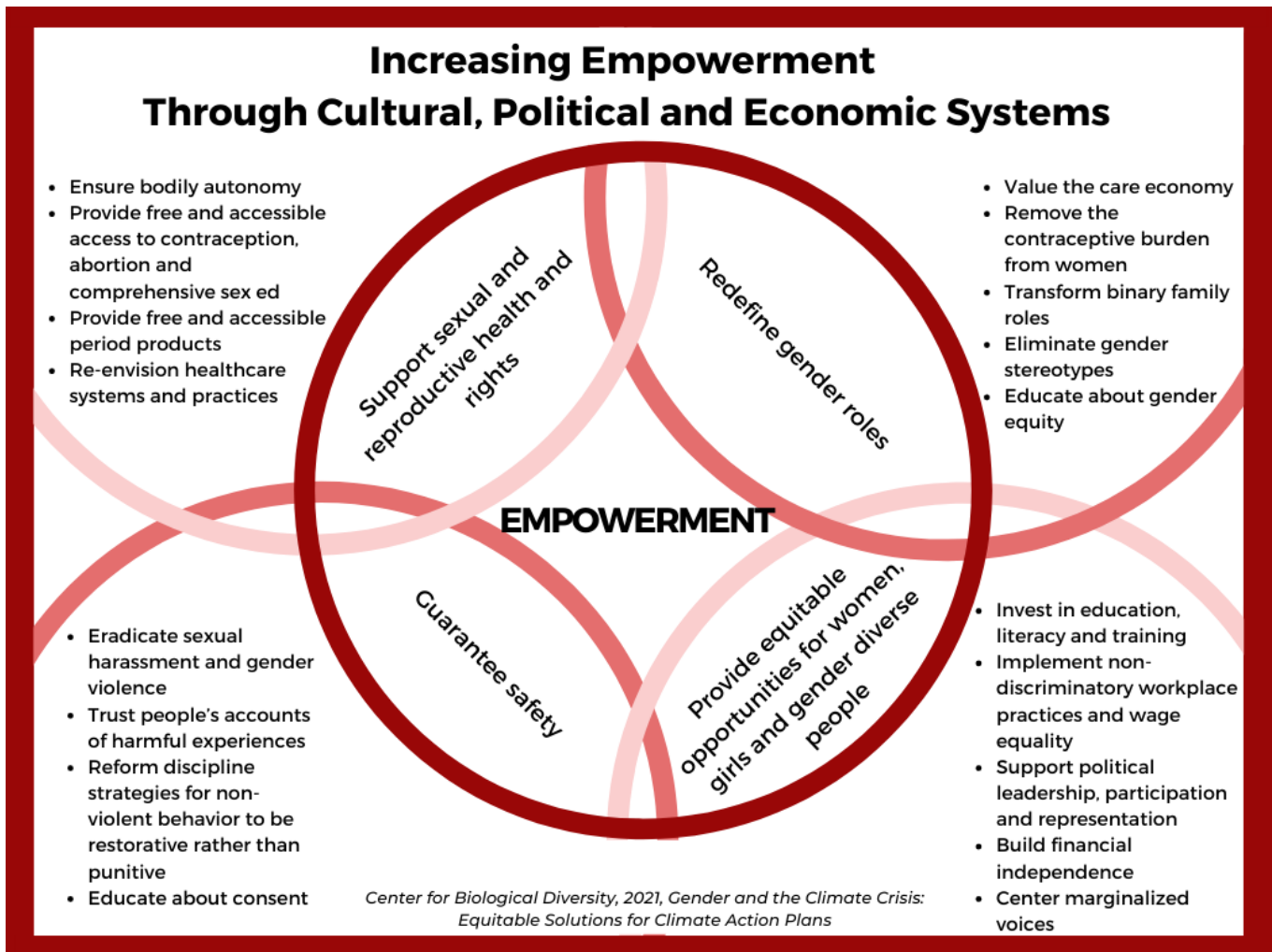
It's important for local and state governments to include scope 3 emissions in their plans as a way to address capitalism, gender inequality and racial inequality.

Gender Specific Climate Change Solutions

Individuals who identify as female and gender minorities are disproportionately affected by climate change, but they are also important stakeholders in altering its effects. While it is critical to transition from fossil fuels to a just renewable energy economy and transform our food system, efforts focused on empowerment, education and reproductive justice are also important climate mitigation and adaptation strategies. Reproductive justice, as defined by the organization SisterSong, is “the human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities.”²⁸

Advocating for and implementing policies that support gender empowerment and reproductive freedom helps ensure that all people can decide if and when to become parents — making it easier for them to care for their families in the face of ecological crises. These actions also help address population pressures that threaten biodiversity and the environment. See Figure 2 below for examples of gender empowerment.

Figure 2. Cultural, Political and Economic Systems Related to Gender Empowerment.




Even though population growth is an underlying driver of emissions that cause climate change, increasing resources to support family planning programs is rarely suggested as a mitigation or adaptation tactic.²⁹ One study that reviewed 41 National Adaptation Programs of Action found that while 37 make the link between population growth and climate change, only six stated that slowing population growth or funding reproductive health and family planning should be a priority.³⁰

Decreasing population pressure by providing affordable and convenient voluntary modern family planning options and removing abortion restrictions are proven tactics to mitigate the long-term effects of climate change, bolster conservation, and support wage equality among genders.

A recent report outlines how removing barriers to abortion access would benefit individual state economies such that annual earnings for working women aged 15 to 44 would increase by \$101.8 billion nationally.³¹


This incentive for widespread financial stability and wellbeing, accompanied by increased environmental protection, shows that policymakers may want to consider incorporating reproductive justice strategies into climate plans to correct financial gender inequality.

Another top climate change solution that addresses population pressure is improving access to educational opportunities for women, which empowers them to make decisions about if and when they want to have children. Women with higher levels of education typically have fewer children and have them later in life, prioritizing economic stability before expanding their families.³² This has been especially true with U.S. birth rates for 15-to 19-year-olds, which have fallen to their lowest levels in recorded history.³³



Through the opportunity to pursue an education, as well as increased access to contraception, the median age in the United States in which individuals are having children has risen from 23 to 26 in the past decade.³⁴

While improving access to contraception and education is a climate change mitigation and adaptation approach that has been discussed among demographers, conservationists, health professionals and scientists for decades, none of the 21 U.S. climate plans that were analyzed for this report contained specific solutions related to voluntary family planning and only one mentioned gender empowerment in conjunction with environmental protection. Incorporating these strategies into climate plans will encourage an intersectional approach to saving the planet and supporting people.



More than 11,000 scientists from across the globe have endorsed policies designed to empower individuals, like improved education and healthcare access, as important climate solutions with the potential to mitigate 85 billion tons CO₂-eq over the next 30 years.³⁵

Through empowerment strategies like gender justice, reproductive freedom, education and equity, women become more engaged in climate solutions. A study on gender equality conducted across 130 countries found that women in government positions were more likely than men to sign on to international treaties to reduce global warming.³⁶ Research shows that including women in forest and fishery management results in better conservation outcomes.³⁷ The status of women is linked to the health of our environment and climate.

Organizational scan methodology and findings

The Center for Biological Diversity sought to learn if gender and associated solutions related to gender were being included in municipal climate plans. For this organizational scan of municipal climate plans, the following keywords and topics were reviewed as indicators of whether issues related to gender inequality — which are often reflected in economic, education and health disparities — were being addressed:

- Consumption
- Education
- Family Planning/Contraception/Reproductive Health
- Gender
- Human Population/Population Growth/Growth
- Public Health/Pollutants
- Vulnerable Populations

Scan results

Twenty-one climate plans from cities across the United States were analyzed for this report, representing approximately 10% of the U.S. population (30,492,353).³⁸ The cities represented regions across the country, from Atlanta, Georgia in the Southeast to Portland, Oregon in the Northwest. Nine of the cities are in C40, a climate leadership group focused on reducing greenhouse gas emissions while increasing the health and well-being of their communities. See appendix for a list of communities reviewed.

The following summarizes the climate plan scan results in relationship to gender, public health, population, consumption and climate solutions like family planning and education.

- **Consumption:**

Nineteen of the 21 plans included consumption.

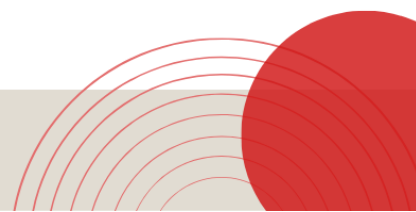
Consumption is the extraction, use and waste of any finite natural resource such as fossil fuels, water or food and is often measured in GHG emissions. At excessive rates, consumption puts a strain on the natural environment and systems necessary to sustain humans and wildlife.

The main consumption concerns addressed in the plans focused on energy consumption, specifically transitioning infrastructure from fossil fuels to renewable energy. There was little mention of the overconsumption and sometimes unequal consumption of consumer products as a contributor to GHGs, even though each step of the process that brings a product to the consumer — from material extraction to shipping to disposal — creates harmful GHGs.

- **Education:**

Eighteen of the 21 plans specifically mentioned education.

In most of the plans, education was related to the implementation of policies and programs that assist in mitigation and adaptation efforts like energy conservation, alternative transportation, waste reduction and transitioning to a system less dependent on non-renewable resources. However, none of the plans discussed gender-empowering education like comprehensive sex education, female



leadership/mentorship opportunities or just energy transition technical training for women such as becoming wind or solar technicians.

- **Family Planning/Contraception/Reproductive Health:**

None of the 21 plans mentioned solutions like voluntary family planning as a mitigation and adaptation measure, including access to all forms of modern contraception and universal reproductive healthcare including abortion.

- **Gender:**

Only one of the 21 plans mentioned specific gender-based strategies to combat climate change and to improve mitigation and adaptation efforts.

Gender was chosen as a review term to identify how municipalities are responding to the disproportionate impacts of climate change on women and others on the gender spectrum, as well as how the strengths of women were noted in plans to help combat and mitigate the effects of climate change. The City of Boston Climate Action Plan specifically mentioned expanding biking classes to women and gender-nonconforming individuals to improve and expand active transportation infrastructure, a great example of a climate solution that falls at the intersection of public health and public transportation.³⁹

- **Human Population/Population Growth/Growth:**

Fifteen of the 21 plans mentioned population growth as a concern, both in terms of housing development and building new infrastructure to support the expanding population. Recognition of this connection in climate plans is important, as the unsustainable growth in population leads to more GHGs, which continues to exacerbate effects of climate change for both human and wildlife populations.

- **Public Health/Pollutants:**

Twenty of the 21 plans mentioned public health and the implications that climate change will have on the wellbeing of people and the planet. Climate change impacts public health by increasing heat, pollution, and vector-borne related deaths, all of which disproportionately affect women and gender minorities. Almost all the plans reviewed included these public health concerns but none of them made gender-specific mentions of climate-related adaptation or mitigation efforts.

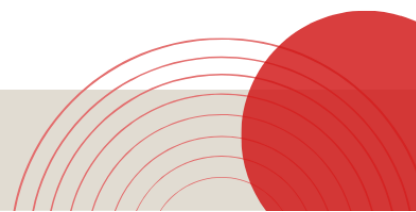
- **Vulnerable populations:**

Fifteen of the 21 plans mentioned vulnerable populations as defined by the community. Vulnerable populations are groups of individuals who are more at risk from climate change than others in their communities. Women are typically included in this group as they face harsher climate-related consequences economically and socially than their male counterparts. However, the two climate plans that mention women as part of the vulnerable population don't mention gender-specific solutions.

Perceptions on Gender Empowerment in Climate Plans

In addition to the 21 plans that were analyzed, seven informal interviews were conducted via a snowball sample with knowledgeable sustainability professionals who had worked or were currently working on climate plans at both the international and municipal level. The following themes were identified from the interviewee's comments:

- **Gender empowerment solutions can be difficult to measure.**
Based on feedback from those interviewed, gender has not been included in climate plans because it's difficult for policymakers to draw a direct connection between increased gender empowerment and mitigating climate change. This could be because the focus of climate plans has historically been on setting goals that are more quantifiable, like tracking goals directly related to emissions, transportation or waste. Since these sectors are typically oriented around data collection, they're often the focus of climate plans.
- **The need for government approval can be a barrier to including gender empowerment.**
Another factor is that all climate plans must be approved by a governing body like a city council, county commission, or state elected board. Some governing bodies may be unwilling to include topics such as reproductive health, rights and justice, considering them unrelated or taboo. Many interviewees admitted that gender was just not at the top of their minds during the climate plan writing process, although they understood that women are disproportionately impacted by climate change.
- **It matters who is at the table. Having diverse views represented in the discussion and decision-making throughout the development of climate plans is critical.**
A common theme among interviewees was ensuring that there are a variety of stakeholders present when climate plans are written. Bringing as many interested parties as possible to the table helps ensure plans will benefit people and the planet. An example shared by an interviewee revealed that their plan had a large focus on public health and the wellbeing of citizens because a knowledgeable expert from the local health department was a part of the committee. The same could be done for gender-based empowerment measures, such as access to comprehensive healthcare, quality educational opportunities and female leadership possibilities.
- **The pandemic may offer an opportunity for more inclusive climate plans.**
Interviewees pointed out that there was a lack of public health content in climate plans written before the Covid-19 pandemic. Now many stakeholders see a post-pandemic world as an opportunity to create infrastructure that is not only more resilient to natural disasters, but also supports health and wellbeing. Policy officials are working to incorporate initiatives related to water, sanitation, and hygiene, access to immunization, and potentially even access to contraceptives in the wake of the pandemic.



Policy and Program Recommendations

Climate change amplifies the injustices that are already rampant throughout society, including socioeconomic and health disparities. These disparities are more prevalent in people who identify as female, gender diverse individuals and Black, Indigenous and people of color who already face difficulties accessing quality healthcare options and are more likely to live in communities severely affected by climate change. However, based on our climate plan analysis and expert interviews, we found that empowerment initiatives have been disregarded as a climate change mitigation and adaptation strategy.

Below are steps and policies that can be implemented at the local level, as well as through state and federal policies that can support local efforts to incorporate gender-based strategies into climate plans.

Work within existing climate plan structures to address gender inequality as a public health issue.

Rights-based family planning solutions could be included in the public health components of climate plans. In 20 of the 21 municipal plans that were analyzed, improved public health and the well-being of community members was mentioned as a priority for cities. Including reproductive justice in climate plans allows policymakers to make strides toward a more equitable and sustainable society. By providing resources related to gender as noted earlier in this report, communities could improve women's quality of life and create a more sustainable world.

Collect relevant data related to gender, race and the climate crisis.

One area where gender inclusivity and empowerment improvements can be made is data collection and/or aggregation at the local level. As mentioned, all climate plans include relevant data collection related to energy, emissions or waste. However, even though quantitative data is available to assess social issues like disruption in reproductive healthcare during an extreme weather event or participation of women or gender minorities in climate leadership, none of the 21 climate plans included any gender-based data.

Collecting this gender-disaggregated data highlights which genders are currently affected by climate change and what policies can be implemented to help. Ensuring that the disproportionate impacts on women and gender minorities are highlighted in new and revised climate plans — alongside gender-based solutions that specifically cater to those most at risk — can help ensure that programs are appropriately funded and are providing maximum return to the community.

Gender-specific data also allows for climate plans' policies and goals to be more concrete and accurate, lending clear direction to stakeholders and governments. Using both qualitative and quantitative mixed methods data is important to make sure input is received from everyone within the community — especially those from vulnerable populations — and to build a more accurate, diverse and equitable assessment. Data collected by health departments or educational systems may be useful to those responsible for establishing and meeting goals related to gender, health and climate change.

Educate and train government staff on gender, inclusion and the climate crisis.

Gender empowerment is not only important in climate planning, but in all aspects of government planning and development. There may be a lack of awareness about the intersection of these issues, leading to fewer policies in climate plans or other government plans. Instilling these ideas and values with staff before, during

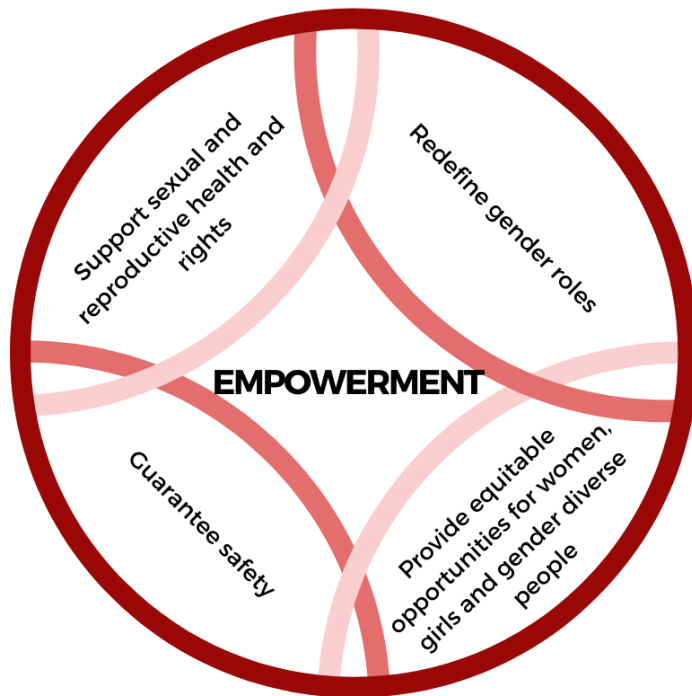
and after the creation of climate plans will positively impact other areas of community planning.

Organizations like the United Nations are already creating training programs that incorporate education about gender and inclusion, and separate policies related to how environmental programs and science are important in decisions surrounding urban planning, financing and economic development.⁴⁰ Similar training can be conducted in partnership with subject matter experts that allow government staff to engage in climate and gender issues and learn how to incorporate these strategies into climate plans.

Build Gender Empowerment Programs

Gender empowerment includes supporting sexual and reproductive health and rights, education, and providing equitable opportunities to women and gender minorities.

Figure 3. Components of Gender Empowerment



This allows people to improve their employment situation, participate in the political system, and increase their economic status, all of which help individuals become more resilient in the face of climate change.

- **Offer comprehensive sex education.**

Providing culturally responsive, LGBTQIA+ comprehensive sex education and resources at the local level empowers youth. A 2018 study showed that providing comprehensive sex education in the United States reduces teen pregnancy rates by as much as 50%, giving young adults the chance to pursue other opportunities such as

education and vocational training.⁴¹ Comprehensive sex education has also been shown to prevent child sex abuse, increase healthy relationships and media literacy, and dismantle social and racial justice barriers by promoting equity and inclusion in school.⁴²

- **Support access to contraception.**

Nineteen million people in the United States need publicly funded contraception, and 95% of them live in contraceptive deserts where they lack access to a health center that offers the full range of modern contraceptive methods.⁴³ Making birth control available over the counter is one way to provide universal contraceptive access. In some states, pharmacists can now prescribe birth control in the same way in which they now provide flu shots.⁴⁴ Other states allow access to family planning services under Medicaid — but nearly half of states don't provide these services.⁴⁵

- **Keep abortion legal.**

Everyone should have autonomy over their bodies, health and well-being, and decisions about whether

— and when — to have children. When abortion is restricted, it limits people’s ability to receive comprehensive reproductive healthcare.⁴⁶

- **Provide access to period products.**

Inability to access hygienic products may keep school-aged girls and teens from obtaining a quality education. A 2018 study showed that 1 in 5 U.S. girls have left school early or missed school completely because they didn’t have access to period products such as pads or tampons.⁴⁷ Frequently known as “period poverty,” missing school or extracurricular activities can cause girls to lose confidence in their academic performance. Working with local organizations, school districts, and school employees to provide access to period products can help empower individuals to attend school.

- **Fund quality education programs.**

The longer women remain in school the more likely they are to delay having children or forgo having children altogether, allowing them to pursue professional opportunities and achieve financial security. Data shows that U.S. women with a 12th grade education or less would be expected to have 2.8 births on average over their lifetimes, or more than one additional birth compared with 1.3 births on average for women with an associate’s or bachelor’s degree.⁴⁸ Funding quality education programs that support early childhood development, STEM, afterschool programs and higher education empower women more broadly.

- **Address racial inequality in schools.**

Racial inequality within K-12 school systems must also be confronted and addressed, including policies that make Black girls more likely than white girls to face corporal punishment, suspension and arrests that can affect graduation and college attendance and create long-term economic inequality.⁴⁹ When all women are given the opportunity to pursue quality secondary and post-secondary education, they have greater opportunities for success throughout their lives.

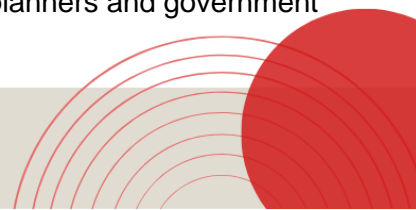
Include Gender Action Plans in Climate Plans and Create Gender Advisory Committees

Gender Action Plans (GAPs) identify ways that gender inclusivity can be added into all aspects of a project, institution or business. These plans are relatively new — most have been written following the implementation of the UN Sustainable Development Goals in 2015.⁵⁰ The 17 global goals are designed to be a blueprint to achieve a better and more sustainable future for all. Gender equality (Goal 5) and climate action (Goal 13) are two of the most discussed goals. Individual countries, cities and states can include gender action plans into climate plans to hold themselves accountable for measurable indicators related to gender equality such as women in leadership positions, access to healthcare and equal pay.

GAPs build on a country’s national development and climate change policy or strategy and identify gender-specific issues in each priority sector. The participatory, multi-stakeholder methodology includes creating action plans to enhance mitigation and resilience for people throughout the country.⁵¹ GAPs can be written at the municipal or state level to cater to the needs of constituents. They often include goals such as providing

culturally responsive, rights-based reproductive healthcare to women and girls and gender-diverse people, expanding opportunities for all genders to participate at all levels of policy creation and implementation, and supporting everyone’s public education.

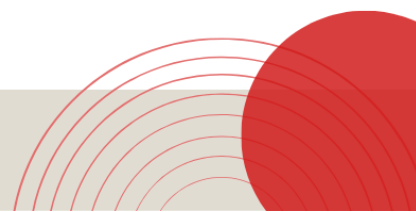
Gender Advisory Committees (GACs) are non-permanent groups that work to advise planners and government



staff on how to incorporate gender into local, state and national policies and initiatives. These committees can advise on policies spanning from public health to economic recovery and ensure that women and gender minorities are represented at tables in which their needs may not have previously been considered or prioritized.

These policies have inherent benefits for climate plans. A 2019 study of the parliamentary makeup of 91 countries showed that countries with higher female representation had more stringent environmental and climate-related policies and lower GHG emissions.⁵² Research has also shown that women tend to be more concerned about the environmental impacts of climate change than their male counterparts and are better able to assess the risks and potential health effects that climate change will have on their local communities.⁵³

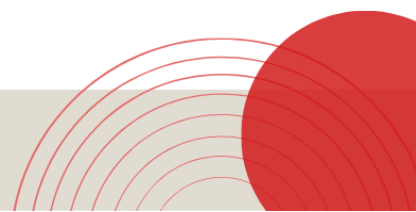
Empowering women and giving them a place at the negotiating table allows for a more diverse and inclusive understanding of climate change and the steps that can be taken to combat it. By creating GAPs specific to climate change, policymakers can emphasize how their actions support women and other genders.



Conclusion

Climate change presents an urgent threat to public health, security, food, infrastructure and ecosystems. Implementing aggressive strategies for climate change mitigation and adaptation should be a priority for policymakers from the local to the global level.

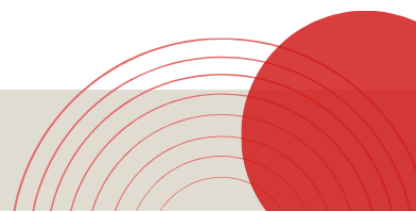
Climate plans are an opportunity for governments to outline priorities and set goals to ensure they are doing their part to combat the climate crisis. While many cities are prioritizing vulnerable populations in their climate plans, gender equity has been left out of the discussion. Including gender-based strategies and solutions in climate plans will provide long-term benefits to people, wildlife and the planet.



Appendix:

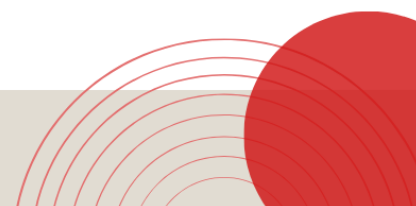
List of municipal plans reviewed

MUNICIPALITY	POPULATION	YEAR WRITTEN
ALBUQUERQUE, NM	559,374	2021
ATLANTA, GA	488,800	2015
AUSTIN, TX	950,807	2015
BOSTON, MA	684,379	2019
CHARLOTTE, NC	857,425	2018
CHICAGO, IL	2,710,000	2008
COLUMBUS, OH	878,553	2020 (draft)
DENVER, CO	605,576	2018
DISTRICT OF COLUMBIA	692,683	2020
HOUSTON, TX	2,310,000	2017
KANSAS CITY, MO	486,404	2008
LINCOLN, NE	283,839	2021
LOS ANGELES, CA	3,967,000	2019
MINNEAPOLIS, MN	420,324	2013
NEW YORK, NY	8,419,000	2017
NEWTON, MA	88,593	2019
PHILADELPHIA, PA	1,579,000	2018
PHOENIX, AZ	1,633,000	2016
PORTLAND, OR	645,291	2015
SAN ANTONIO, TX	1,508,000	2019
SEATTLE, WA	724,305	2018

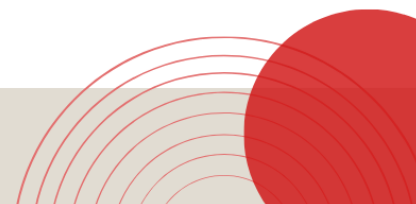


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