Sustainable Horizons: Navigating Climate Challenges for a Greener Tomorrow at Kalamazoo College

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Abstract

In the pursuit of a sustainable future, our world faces an urgent call to action when it comes to the topic of climate change. As we stand at the crossroads of environmental stewardship and the consequences of unchecked consumption, it becomes imperative to explore and implement eco-friendly practices that mitigate our impact on the planet. This paper embarks on a comprehensive journey through key facets of sustainable living, dissecting the realms of recycling, greenspaces, transportation, and off-campus energy usage based around the Kalamazoo College community. Each section of this paper unravels a tapestry of challenges, benefits, and practical solutions, offering a roadmap for everyone to tread the path of responsible and mindful existence.
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1.0: Introduction

In the first leg of our exploration, we delve into the realm of recycling, a fundamental practice that can redefine our relationship with waste. Recycling extends beyond the mere act of tossing materials into designated bins; it is a conscientious decision to repurpose, reduce, and revolutionize our approach to consumption. Unpacking the why and how of recycling, this paper illuminates the profound benefits that ripple across environmental, economic, and societal dimensions. However, the journey towards sustainable waste management is not without hurdles. This section confronts the stark reality that, despite the compelling advantages of recycling, its adoption faces significant challenges. Market failures, low recycling rates, and gaps in public awareness underscore the need for systemic changes. Solutions emerge as we navigate the complexities, urging policymakers to wield incentives and communities to bridge the knowledge gap.

Transitioning to the vibrant tapestry of greenspaces, we uncover the intrinsic connection between urban environments and the lush sanctuaries within them. Beyond their aesthetic appeal, greenspaces emerge as vital contributors to environmental conservation and community well-being. As we traverse the benefits of greenspaces, the narrative extends beyond a mere appreciation for nature. Greenspaces emerge as dynamic catalysts, counteracting urbanization’s adverse effects. From reducing CO2 emissions to enhancing mental well-being and fostering community health, these green havens play a pivotal role in shaping resilient and sustainable urban landscapes. Within the confines of Kalamazoo College, greenspaces are not just a concept but a reality. The Hoophouse, Jolly Garden, and Grove stand as living testaments to the K’s commitment to linking sustainability with community engagement.
Shifting gears, we confront the transportation sector, a juggernaut of carbon emissions that demands transformative solutions. Transportation emerges as a formidable contributor to greenhouse gas emissions, necessitating a paradigm shift. Through statistics and visual representations, the paper underscores the urgency of rethinking our modes of transport. It beckons individuals and policymakers alike to engage in conscious decision-making for a sustainable and eco-friendly future.

As we venture into the realm of off-campus living, the focus shifts to individual agency in curbing energy usage. Practical strategies and insights empower students to actively participate in reducing their carbon footprint. From HVAC systems to smart power strips, this paper unveils the myriad ways through which off-campus dwellers can contribute to a sustainable energy landscape. With a spotlight on energy-intensive HVAC systems, this segment also demystifies the energy consumption maze. From filter changes to mindful temperature settings, students are equipped with actionable insights to make informed decisions that balance comfort with energy efficiency.

This paper primarily serves as a holistic guide to sustainable living, weaving through the intricate tapestry of recycling, greenspaces, transportation, and off-campus energy usage. It invites readers to embark on a journey of conscious choices, urging individuals, communities, and institutions to become architects of a greener, healthier, and more sustainable future.

2.0: Recycling

One way that people can reduce their carbon footprint is to recycle. The standard definition of recycling includes reusing materials instead of throwing them away, throwing away recyclable goods to be sorted and turned into other forms during disposal, and composting. Such
examples include reusing plastic bags, throwing away paper to be recycled into paper products, and composting food as nutrients for the ecosystem. This section will focus on the process of throwing away recyclable materials.

2.1: Why Recycling is Good

Few people see landfills in person to understand the impact of throwing away trash and recyclables into landfills. However, just because something is out of sight doesn’t mean the process should be out of mind. According to the Minnesota Office of Environmental Assistance, about 72% of all waste sent to landfills or incinerators consists of materials that could be used better through recycling or composting (Five benefits, 2020). Before throwing away your recyclables into the trash bin, consider giving your items a greater purpose. Recycling will also protect our most precious resources, air and water, from pollution. For example, manufacturers can significantly cut their emissions by using recycled paper. Using recycled materials is also more efficient than mining new resources and creating products from scratch. The likes of aluminum and glass can be recycled infinite times without losing strength, and it hardly takes any natural resources that could lead to emissions to create the recycled forms. Recycling paper saves about 40% energy compared to making paper pulp from trees, recycling glass saves 30% energy, and the pattern goes on for essentially every single recyclable material in existence (As a Matter, 2020). Finally, according to the Carton Council, the recycling industry produces roughly 522,000 jobs annually while providing $34,000,000,000 in wages annually, supporting communities all over the United States (Five Benefits, 2020).

2.2: Challenges to Recycling

Given the statistics about how beneficial recycling is on all fronts, including energy efficiency, economic value, and environmental quality, it can be easy to conclude that everyone
should start recycling immediately, and you would be correct. However, the statistics on actual recycling being done reflect a different reality. Many plastics cannot be recycled, with only 5-6% of total plastics being recycled, and this doesn’t account for plastics that are not kept track of (Kummer, 2022). Even materials that can be recycled, such as drink bottles and aluminum cans, are recycled at a rate of 39% and 50%, respectively (US EPA, 2018). The reason for this is that there is a market failure when it comes to incentivizing recycling to take place within the United States. Recyclers have little incentive to recycle if no buyers are willing to buy the recycled materials to create products (Krosofsky, 2021). To combat this, incentives on the federal level through tax breaks, subsidies, and other financial incentives will need to be utilized to develop the recycling industry further. Additionally, according to a study by the World Economic Forum, only about 35% of people recycle, despite 94% of Americans supporting it and even 74% saying that it should be a top priority (Lattimer, 2022). Cited reasons include the lack of convenient access to immediate recycling in public disposals and the lack of knowledge about how and what to recycle.

### 2.3: Recycling at Kalamazoo College Dorms

Kalamazoo College has had a recycling program for 30 years, involving recycling in every dorm room and all academic and campus buildings (Recycling, 2019). Each dorm room has a blue bin, which allows for the disposal of recyclable materials, which are then thrown away into large disposal bins in dorm parking lots and between dorm buildings. A list of items that can be thrown into these bins to be recycled includes newspapers, paper, cardboard, glass, aluminum cans, tin cans, empty aerosol cans, and plastics 1-5 and 7. These plastic numbers refer to PET or PETE (Polyethylene terephthalate), HDPE (High-density polyethylene), PVC (Polyvinyl chloride), LDPE (Low-density polyethylene), PP (Polypropylene), and others. These plastics
refer to soda/water/oil plastic bottles, cleaning products/milk jugs, toys, plastic bags, other food item plastic containers, and mixed plastics. Nonrecyclables include styrofoam, recyclables with food residue, and e-waste such as batteries and electronics.

2.4: Kalamazoo Off-Campus Recycling

Information about Kalamazoo City recycling regulations can be found on the Kalamazoo City website. All Kalamazoo city residents can take advantage of bi-weekly recycling disposal, where each single and multi-unit residence has access to a large blue recycling bin placed at the curb by collection time and brought back afterward (Recycling. N.d., 2023). Collection day depends on location within Kalamazoo, where pickup time ranges from Monday to Wednesday. Recyclables outside of the college campus and within the city include tin/steel/aluminum cans and lids, clean aluminum foil collected into balls, plastic drink bottles, plastic and glass bottles and jars, plastic tubs, and lids, magazines, newspapers, and envelopes, wrapping paper without glitter or foil, paper with staples or clips and non-refrigerated paperboard or boxboard. The city won’t accept food-related recyclables even if they haven’t been used, such as napkins and refrigerated wax cardboard, alongside plastic bags, receipts, scrap metals, cooking/heat resistant/broken glass, and e-waste. E-waste and other complex materials should be reused, stored, taken to specialized recycling facilities, or used in rebates such as DTE and refrigerators.

3.0: Greenspaces

Greenspaces, composed predominantly of vegetation and often devoid of extensive buildings, serve as vital components of urban landscapes. Typically public in nature, these spaces play a crucial role in environmental conservation (Taylor & Hochuli 2017). Urban areas, marked by rampant development, find solace in the existence of greenspaces, which serve as a counterbalance to environmental degradation. When we discuss greenspaces in literature, we
generally refer to areas that establish an ecological connection with humans, encompassing gardens, public parks, and even lush forests. The utilization of greenspaces is imperative not only for environmental well-being but also for the enhancement of our immediate surroundings.

3.1: Benefits of Greenspaces

The advantages derived from greenspaces extend beyond environmental considerations, profoundly impacting the well-being of urban communities. As Taylor & Hochuli (2017) assert, the incorporation of green spaces effectively mitigates the adverse effects of urbanization. In a study conducted by Rakshandehroo et al. 2017, various benefits of green spaces in urban environments are highlighted. Notably, these spaces act as a counterforce to the carbon footprint of cities by reducing CO2 emissions (Rakshandehroo et al. 2017). The proliferation of greenspaces, especially the planting of trees, establishes a natural buffer, resulting in a reduction of noise pollution within urban landscapes (Rakshandehroo et al. 2017). Furthermore, greenspaces contribute to a reduction in overall contamination in cities, offering a sustainable solution for environmental preservation.

An additional gain of greenspaces is their positive impact on community health. Lynch et al. (2020) stress the significance of greenspaces in public health within urban areas. These spaces contribute to mental well-being by providing opportunities for people to escape their routine environments, reducing the reliance on public transportation (Lynch et al. 2020). The research conducted by Porcherie et al. suggests that the increase in greenspaces correlates with a decrease in cancer rates within communities (Porcherie et al. 2021). Moreover, studies examining the relationship between greenspaces and obesity indicate that as greenspaces expand, instances of obesity decrease (Browning & Rigolon 2018). Thus, the multifaceted benefits of greenspaces
extend beyond mere environmental improvements, positively influencing community health and contributing to a robust and sustainable local economy.

**3.2: Greenspaces in Kalamazoo College**

Within the confines of Kalamazoo College, greenspaces play a pivotal role in fostering community spirit and environmental responsibility. Key green spaces on campus, such as the Hoophouse, Jolly Garden, and Grove, exemplify this commitment.

The Hoophouse, a thriving indoor garden, serves as a hub for communal activities, where students gather to cultivate crops, address social justice issues related to food insecurity, and create a sense of community. Meetings at the Hoophouse occur regularly on Mondays, Wednesdays, and Fridays from 4:30 pm to 6 pm.

Similarly, the Jolly Garden not only provides students with an opportunity to fulfill physical education credits but also imparts valuable gardening skills. Students engage in diverse tasks, including planting seeds, maintaining irrigation systems, and participating in composting activities. Meetings are held twice a week, contributing not only to individual skill development but also to environmental sustainability.

The Grove Greenspace, designated as the repository for community compost, actively encourages composting practices among the Kalamazoo College community. With regular meetings on Wednesdays from 3:45 pm to 4:45 pm and Thursdays from 10:45 pm to 11:45 pm, the Grove serves as a focal point for composting efforts and the reduction of food waste.

**3.3: Conclusion on Greenspaces**

In conclusion, the pervasive benefits of greenspaces are evident in their positive impact on both the environment and public health. Rigorous research from various sources underscores the positive transformations brought about by increased green spaces in urban areas. These
spaces, by curbing CO2 emissions, reducing noise pollution and promoting mental and physical well-being, not only enhance the environment but also foster a healthier, more resilient community. Incorporating green spaces into urban planning, therefore, stands as a holistic approach that not only safeguards the environment but also nurtures the well-being of the communities they serve.

4.0 Transportation

Transportation is one of the main sectors that cause carbon and greenhouse gas emissions. Specifically, gasoline-powered vehicles like cars, SUVs, trucks, and buses are used as the main source of transportation for people and these vehicles are large polluters to our environment. In this section, we will be discussing some statistics about transportation’s carbon emissions, what individuals can do to reduce their transportation emissions, the impact of the Inflation Reduction Act on transportation, and transportation at Kalamazoo College.

4.1 Transportation Emissions

According to the United States Environmental Protection Agency, transportation accounts for the largest amount of GHG emissions by sector in the United States (Figure. 1). Transportation is the largest sector with 29% of GHG emissions being emitted in the U.S. with electricity and industry being the second and third largest sectors. (US EPA). Also, the U.S. EPA
breaks down the transportation sector into different types of gas-powered vehicles and

**2021 U.S. GHG Emissions by Sector**

![2021 U.S. GHG Emissions by Sector](image)

*Figure 1: Percentage of the 2021 U.S. GHG Emissions by Sector*

shows their emissions by source (Figure. 2). The largest GHG emitted by source is light-duty vehicles with about 58% of the total GHG emissions emitted, while medium and heavy-duty trucks are the second largest with 23% of the total GHG emissions for the U.S. in 2021. The EPA categorizes both light-duty and medium/heavy-duty vehicles under “On Road Vehicles” meaning that on-road vehicles make up about 81% of the total GHG emissions of the transportation sector in the United States in 2021. Also, the “On Road Vehicles” category includes passenger cars, buses, and motorcycles.
The main greenhouse gas that is emitted by transportation is carbon which takes up about 97% of the total GHG by gas. On-Road Vehicles produce about 83% of the total carbon emissions the U.S. transportation sector produced in 2021. From a single gallon of gasoline, about 8,887 grams of carbon dioxide is produced, and for a single gallon of diesel about 10,180 grams of carbon dioxide is produced.

**4.2 Reducing Transportation Emissions**

The most effective way to reduce an individual’s transportation emissions is by switching to an electric vehicle that is powered by clean electricity. This is the best-case scenario for individuals because they emit zero carbon emissions from transportation and they still have an efficient way to travel. But for many individuals, this scenario is relatively difficult to achieve. Instead, individuals can partake in bicycling, walking, skateboarding, scootering, use of public transportation, carpooling, buying the right car, avoiding idling in the car, and checking average flight emissions for airlines to reduce their carbon emissions. Walking and bicycling are the least production of carbon emissions because they do not involve the use of fossil fuels. The same
thing applies to skateboards and scooters, but there are manufacturing emissions from the production of bicycles, skateboards, and scooters, but it still produces less emissions than driving a car all year long. The use of public transportation can reduce up to 2.2 tons of carbon emissions and carpooling can reduce up to 1.0 tons of carbon emissions per individual. Also, going car-free can reduce an individual's carbon emission by 3.6 tons (Nations). If an individual needs a car, purchasing the right car can reduce their carbon emissions. An electric vehicle reduces carbon emissions the most, but fuel-efficient vehicles also reduce carbon emissions. A fuel efficient vehicle uses less gasoline meaning that there is not as much fossil fuels being burned and converted into carbon. Americans can save about 1.5 million barrels of fuel a day if fuel efficiency was improved by 5 miles per gallon (U.S. National Park Service), and individuals can save money when they switch to a fuel efficient car. For example, a car that has a 50 MPG an individual can save about $1000 in a year (U.S. EPA). Individuals should avoid being idle in their cars because it uses more fuel than turning off and on the engine, plus individuals can check the average emissions a flight produces based on the flight distance and airline, and can decide to choose flights that produce less carbon emissions.

### 4.3 Inflation Reduction Act on Transportation

The Inflation Reduction Act is the first major bill that takes action against climate change. Within the act, the government is issuing rebates as an incentive for individuals to transition from gas-powered cars to electric vehicles (EVs). Individuals can qualify up to $7,500 in credit for purchasing electric vehicles in 2023. For EVs that were placed in-service between January 1 - April 17, 2023, there is a credit base amount of $2,500, plus $417 for a vehicle with at least kWh of battery capacity and for each kWh of battery capacity beyond 5 kWh. For EVs in-service on April 18, 2023 and after (up to 2032) qualify for credit of $3,750 if the vehicle meets the critical
minerals requirement and/or the battery components requirement, if it meets both an individual will get credited with $7,500 (IRS). New electric vehicles that were purchased in 2022 or before, used EVs, and commercial EVs can also be credited, as long as it meets the requirements listed on the Internal Revenue Service (IRS) website.

4.4 Transportation at Kalamazoo College

For many Kalamazoo College students, gas-powered cars are their main source of transportation. Kalamazoo College has promoted and encouraged students to reduce their carbon emissions by finding “A Better Way to K”, which is a dedicated day for students to use a different source of transportation other than a car. The College has stated that their goal is to reduce GHG emissions to achieve carbon neutrality by 2050 in their 5 Year Climate Action Plan. But in the College’s recent campus master plan, they are planning on increasing parking spots around campus to accommodate for the increase of students they plan on living on campus. The College is planning on re-working the Trowbridge parking lot, and they have proposed two options: Option 1 is to extend the current Trowbridge parking lot and building a new parking lot where the Grove stands currently, and Option 2 is extending the Trowbridge parking lot by re-constructing the dorm hall differently (Parking Study). Option 1 is highly concerning because not only will the college have more gas-powered vehicles, but they would destroy the Grove which is a Greenspace and the home of the Composting Crew. The master plan does not mention any potential accommodation for the loss of a greenspace, the Grove, nor what would happen to the Composting Crew that works on campus. Plus, the college does not mention any of the parking spaces having EV charging stations which is concerning since the college currently only has 3 EV chargers on campus. Also, the master plan has proposed a few new bike/shared paths
that students would be able to use along Main St., Lovell St., and a part of Stadium Dr. (Parking Study).

5.0: Off-Campus Energy Usage

For students attending Kalamazoo College that live off campus, specifically upperclassmen, they have a lot more control on the energy they use during their day-to-day lives. Off campus students pay for the amount of energy they are using per month, which is one of the reasons why it’s important to monitor your consumption of energy. The biggest energy use categories for a typical home are: air conditioning and heating at 46%, water heating at 14%, appliances at 13%, lighting at 9%, and TV and media equipment at 4% (“What Uses the Most Electricity in My Home?”, n.d.). Unlike homeowners, Kalamazoo College students that are renting have to answer to a landlord, which limits the options available to reduce energy usage. However, students can still implement energy reduction techniques into their daily schedules that reduce their carbon footprint as well as their energy bills.

5.1: Air Conditioning and Heating

Heating, ventilation, and air conditioning (HVAC) systems use the most energy per average household in America, at 46% (“What Uses the Most Electricity in My Home?”, n.d.). On average, a central HVAC system uses about 3500 watts of electricity and runs about 2 to 3 times per hour for about 10 to 15 minutes (“What Uses the Most Electricity in My Home?”), n.d.). In a 24 hour cycle, that means that around 23-68 kilowatts per hour of energy is being used; per month, that’s about 850-1950 kilowatts per hour of energy. For renters, this number can be daunting and stress inducing, but there are different methods in order to reduce the amount of energy spent per month. Something that students would be able to do would be to check their HVAC system filters to see if they need to be changed. An HVAC that is being used year round
should have its filter changed every three months (Gromicko & Tarasenko, n.d.). While changing the filter by themselves may not be allowed via the agreements made with particular landlords, it is possible to bring the subject up to the landlord since it is their job to keep up with maintenance around the living space. Keeping all air vents and radiators clear is another thing that can reduce the energy consumption of an HVAC system. This means that if there is any furniture covering air vents, the HVAC system would be working overtime to heat or cool the home (Schenck, 2023). Uncovering air vents and radiators within the home will help the HVAC system run more efficiently. If students wish to decrease the amount of time their HVAC system is running, something as simple as opening and shutting curtains or blinds, or even using fans, can reduce the amount of energy consumption being used (Schenck, 2023). Lastly, when the AC is on, what would be the best optimal temperature to set it to? Students could set their thermostat to 68 degrees Fahrenheit while at home and then turn it off when they leave for the day. The Department of Energy also found that consumers could save between 5% and 15% a year on heating bills if consumers were to lower the heat by 10 to 15 degrees when leaving their houses for 8 hour time spans (“Save Energy by Adjusting your Thermostat”, 2013). Because many students have jobs outside of class as well as extracurricular activities, this is a step that can be implemented into their daily schedule.

5.2: Water Heating and Appliance Usage

Water heating and appliances use up 14% and 13% of energy (“What Uses the Most Electricity in My Home?”, n.d.) for a typical household, and there are a few things that off-campus students can do in order to lower the amount of energy usage. Many appliances, including refrigerators and freezers can have their temperatures adjusted. The most optimal temperatures to set a refrigerator and freezer at are 36 to 38 degrees Fahrenheit and 0 degrees
Fahrenheit (Schenck, 2023). When an appliance is working at an optimal level, it is using up a smaller amount of energy, and therefore will help students save more on their energy bills, as well as decrease the amount of energy being used. For a water heater, the most optimal temperature is at 120 degrees Fahrenheit, but depending on the type of home students are renting, they might not have access to changing the temperature. In this case, keeping an open dialogue with the landlord and making sure the temperature is set at the optimal level is something students can do (Schenck, 2023). Lastly, washing clothes can take up a lot of energy and hot water, but many washers have the ability to clean clothes using a cold cycle, meaning the washer will use cold water rather than warm. This will also decrease the amount of energy being used while still working optimally.

5.3: Unplugging Devices and Smart Power Strips

While there are many appliances that students are unable to unplug, like refrigerators and water heaters, plugged in devices and other miscellaneous objects still use energy, even when they’re turned off. Households, on average, have dozens of items and electronics plugged into outlets at any given time, and 75% of the electricity these items consume while on is still being used (“What’s Phantom Power and How Can You Track it?”, 2023). The energy that is being used by these devices while turned off is called phantom power, and it can add up to 10% of home energy costs (“What’s Phantom Power and How Can You Track it?”, 2023). While unplugging all of these devices is one way to reduce this use of energy, another way is to invest in a smart power strip. Smart power strips are similar to a normal power strip, but they work by cutting power off when a device or product is not in use, while a normal power strip does not (Minos, 2019). There are many different types, ranging in costs, but overall provide the same results, the cheapest ranging from $10-$20 (“Saving Energy Through Advanced Power Strips,
n.d.). This is an affordable option for many Kalamazoo College students, and it is an easy addition in their lifestyles and home life.

6.0: Collective Action and Accountability

One of the most prominent questions in discussions about climate change is the following: What can ordinary people do to help? There are so many passionate, driven people who care about the environment and are trying to do everything in their power to slow the rate at which we are approaching critical warming. It would be undeniably good for the planet if individuals managed to reduce their emissions to zero, lessening the negative effect that consumers have on global emissions. However, there seems to be a fixation in our culture on the things that individuals can do to reduce the carbon that we emit, rather than pointing our fingers towards the companies and governments who are largely responsible for the crisis we find ourselves in. Scrolling through one’s news feed, it is common for articles to profess about new ways readers can lower their carbon footprint, but it is rare for these sources to provide the information needed to better petition and protest the people and organizations who have the greatest power to be a force of positive change.

Companies benefit greatly when blame for climate change is shifted to consumers. Groups like Keep America Beautiful, funded by firms like the American Can Company and the Owens-Illinois Glass Company who produce small, single-use disposable containers, are famous for releasing propaganda that pushes the responsibility onto regular citizens to fix climate change. The most infamous example is the “Crying Indian” ad, which casts people who litter as the villains destroying the environment and neglecting the fact that packaging companies produce the garbage we see strewn across our landscapes. It is advantageous for companies to convince us that we should do more in our everyday lives, a form of victim blaming that pushes
the responsibility for solving climate change onto the ones using the final products rather than
the people damaging the world. Even the term “carbon footprint” was coined by BP in a 2005
advertisement. This is all while 70 percent of global emissions can be attributed to just 100
companies according to a report by the Climate Disclosure Project.

The truth of our situation is that focusing solely on what one can personally do will never
result in the necessary reforms needed to truly become globally sustainable. Depending on
choices like buying an electric car to solve an issue that is rooted in systemic flaws only upholds
the harmful system we have in place and is rooted in the neoliberal ideologies that have led us to
this moment. It is true that individual actions are important and have a positive effect, but
devotion to reducing every citizen’s carbon footprint prevents us from asking what we can do
collectively to change the world for the better.

It was said by Mary Annaise Heglar in an article by Vox that “We need to broaden our
definition of personal action beyond what we buy or use. Start by changing your lightbulb but
don’t stop there.” This powerful quote perfectly represents the philosophy to use when
approaching the climate crisis. Changing our consumption patterns to favor green products does
have a positive impact on the environment, but using more energy-efficient, sustainably sourced
goods is not a strategy that will lead to a net-zero future. From the perspective of markets, it is
currently cheaper for companies to produce goods that will be polluting than using sustainable
production practices. This negative externality is a market failure that cannot be corrected
without intervention. Polluting companies will always be able to undercut their green
competitors in terms of price, often forcing them out of the market. And in a system that forces
us to vote with our wallets, only the wealthiest members of society will be able to shape the
future.
In an interview by Channel 4 News, Naomi Klein said “If you can’t be an activist unless you’ve already somehow purged your whole life of fossil fuels, then you’ll have a movement of three people, which is great for fossil fuel companies.” It is important that we steer away from attaching moral superiority to individual actions of harm reduction. It is not helpful to shame people for being born into a fossil fuel reliant system, especially given how difficult it can be for different demographics of people to limit their consumption of high-emission goods. An example of this is food deserts in the United States, where people living in isolated communities have no choice but to get their necessary goods from Wal-Mart or Meijer. Asking people like these to change their habits is not realistic, and we should be focusing instead on the companies contributing to climate change by producing the goods we have no choice but to consume.

The next question to ask when fighting climate change is how can collective action be used to halt warming? There are three goals to have in mind when organizing a movement to address global emissions: demand that companies act more responsibly, hold governments accountable for their negligence, and combat polluting forces in our communities. There are many ways that we can work to accomplish these goals. Some examples include protesting in front of government buildings, blocking construction of polluting infrastructure, and joining existing movements. Basically, we must do what we can individually without stopping at that. We can hold those responsible for climate change accountable and create a better world together.

**Conclusion**

As we navigate the diverse landscapes of recycling, greenspaces, transportation, and off-campus energy usage, a tapestry of sustainable living unfolds. Each section, woven with
facts, challenges, and potential solutions, contributes to a broader narrative of conscientious choices and transformative actions.

To foster a sustainable tomorrow, a multifaceted approach is essential, intertwining individual actions, governmental policies, and community engagement. Educational campaigns must permeate schools, workplaces, and communities, bridging the knowledge gap and empowering individuals to make informed choices. Governments should introduce and enhance incentives for recycling industries, green infrastructure projects, and sustainable transportation initiatives. Tax breaks, subsidies, and grants can stimulate innovation and investment in eco-friendly practices. Community engagement plays a pivotal role, fostering a sense of collective responsibility through initiatives like neighborhood cleanup campaigns and community gardens. Policy advocacy is crucial—individuals, NGOs, and businesses should actively engage in discussions and push for legislative measures aligned with a greener agenda. Technological innovation is a linchpin, necessitating investment in research and development of eco-friendly technologies, from energy-efficient appliances to sustainable transportation solutions. Collaborative partnerships between educational institutions, businesses, and local governments create a network of sustainable practices, amplifying the impact of individual initiatives and contributing to a more significant, collective change. Embracing these suggestions, we pave the way for a future where sustainability is not merely a choice but an inherent part of our collective ethos, propelling us toward a greener, healthier, and more sustainable world.
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