

CLIMATE CHANGE

Topline Asks

1. Will you support Oakland County creating a sustainability office tasked with lowering and eliminating greenhouse gas emissions, protecting our communities from the impacts of climate change?
2. Will you support Oakland County adopting a target of net-zero carbon emissions and 100% renewable energy usage throughout the county by 2050?
3. Will you support Oakland County adopting a target of net-zero carbon emissions for all county operations, using 100% renewable energy by 2030?

Oakland County can be a leader in fighting climate change, building an economy that works for all communities in the process. Across the nation, counties are stepping up while the federal government and state governments have receded from leadership positions. In the United States, 30 counties have formed the County Climate Coalition. [1] These governments are working to reduce their emissions and become more sustainable across fifteen states. Most of them have completed (or are planning to complete) ‘carbon inventories’ to help them plan for their future. Many also have developed their own sustainability departments, sustainability officers, or sustainability initiatives within a department. These improvements can benefit residents in many ways. In Cook County (Illinois) for example, sustainability efforts have saved over \$33 million for taxpayers and led to a 14% reduction in fuel use since 2012 for the county’s fleet. [2]

Climate Change

- U.S. annual precipitation increased 4% between 1901 and 2015, but the Great Lakes region saw an almost 10% increase over that interval. [3]
- Counties, on average, will experience a 5% decline in potential GDP by 2100. The poorest counties will be the hardest hit. [4] Some counties have measured the impact on their own residents. King County (Washington) has estimated the negative effects of climate change will cost \$1,250 per year per household in 2020. [5]
- The average temperatures of all 83 counties in Michigan are higher today than 30 years ago. Water temperatures of each of the Great Lakes have risen since 1956; Lake Superior is one of the fastest-warming lakes in the world. [6]
- In 2012, Michigan lost 90% of its tart cherry crop due to warm March temperatures and subsequent freezes in April. [7] Warmer temperatures and fluctuations will negatively impact agriculture.
- According to the Natural Resources Defense Council (NRDC), average maximum temperatures in Michigan have already climbed more than 2 degrees Fahrenheit (°F) over the last century. [8]

CLIMATE CHANGE

Benefits

- Fossil fuels create \$523 billion of domestic public health and environmental costs annually and receive over \$500 billion in annual subsidies from our government. [9]
- Michigan currently spends \$24 billion per year importing fuel into the state. 100% of our fuel for coal and nuclear power comes from out-of-state, 99% of our petroleum and 80% of our natural gas as well. Solar, wind and energy efficiency have no fuel costs and don't send our money out of state. [10]
- In 2016 alone, Michigan emergency rooms tended to more than 3,900 patients suffering from heat-related illnesses. [11]
- Michigan's Energy Efficiency program has provided the cheapest source of new power (over 6 times cheaper than coal) by shaving off demand for energy. For every \$1 invested in energy efficiency, customers are saving more than \$3.55. [12]
- Renewable energy costs less than all other forms of energy. While the costs of new coal and nuclear energy in 2015 range from \$108-\$133 per MWh and natural gas averages \$67 per MWh, wind energy costs between \$43-59 per MWh, while energy efficiency costs \$11 per MWh. [13]

Case Studies

- King County has developed an 'Equity Impact Review Tool' that assesses all decisions from the sustainability department through the lens of equity. The US EPA has developed an environmental justice screening tool and researchers at the University of Michigan have developed statewide tools for use in local planning. These should be adopted to help make sure environmental transition benefits all people. [14][15]
- Washtenaw County has created an environmental council which includes citizen-representatives from different constituencies including environmental equity, youth, labor, and agriculture. [16]
- Local governments partnerships on renewables can be a boon to ratepayers. In Santa Clara County, (California) the partnership called Silicon Valley Clean Energy has delivered financial benefits to residents while reducing their emissions. "In 2019 24,900 unincorporated Santa Clara County households and businesses received carbon-free electricity, resulting in \$2,614,000 in electricity savings for unincorporated customers and \$55,600 in cash payments to customers for generating surplus solar energy." [17]
- Johnson County (Iowa) and Cook County (Illinois), along with others, have created bulk purchasing programs which can reduce the barriers to adoption of solar and energy efficiency for their own buildings and residents. In Johnson County, 180 households added 1.12 megawatts of solar to the grid. In Cook County, 69 homeowners installed solar due to [Solarize Chicagoland](#). [18][19]

CLIMATE CHANGE

Reference Links

1. <https://www.sccgov.org/sites/climatecoalition/Pages/climate-coalition.aspx#:~:text=The%20County%20Climate%20Coalition%20is,rally%20around%20combatting%20climate%20change.>
2. <http://blog.cookcountyl.gov/sustainability/>
3. <https://www.freep.com/story/news/local/michigan/2019/06/13/michigan-climate-change-wetter-springs-hotter-summers/1298208001/>
4. <https://www.governing.com/topics/transportation-infrastructure/gov-counties-climate-change-damages-economic-effects-map.html>
5. <https://www.kingcounty.gov/services/environment/climate/our-changing-climate/impacts.aspx>
6. [www.mprnews.org/story/2016/01/14/climate-cast-lake-superior-warming.](http://www.mprnews.org/story/2016/01/14/climate-cast-lake-superior-warming)
7. Ibid.
8. <https://www.nrdc.org/sites/default/files/climate-change-health-impacts-michiganib.pdf>
9. Sierra Club Lobby Program Talking Points
10. Ibid.
11. Ibid.
12. Ibid.
13. Ibid.
14. <https://www.kingcounty.gov/services/environment/climate/actions-strategies/climate-strategies/strategic-climate-action-plan/2020-SCAP-update.aspx>
15. <https://www.epa.gov/ejscreen>
16. <https://www.washtenaw.org/2845/Environmental-Council>
17. [https://www.santaclaraca.gov/our-city/sustainability/climate-action-plan#:~:text=Climate%20Action%20Plan%20\(CAP\)&text=The%20strategies%20outlined%20in%20the,for%20the%20Santa%20Clara%20community.](https://www.santaclaraca.gov/our-city/sustainability/climate-action-plan#:~:text=Climate%20Action%20Plan%20(CAP)&text=The%20strategies%20outlined%20in%20the,for%20the%20Santa%20Clara%20community.)
18. <https://www.growsolar.org/solarize-johnson-county/>
19. <https://www.growsolar.org/chicagoland/>