

A Resolution to Support an Update to The Ohio State University's Sustainability Goals Based on Current Climate Change Predictions

Alex Poling (for the Undergraduate Student Government) introduced a resolution to the Council on the Physical Environment on February 1, 2022, where it passed, then to the Senate Steering Committee on March 10, 2022, where it passed, and now to the University Senate.

SYNOPSIS: To put the Ohio State University on the path towards reaching our sustainability goals in a timeline based on the best scientific knowledge of climate change and the environment currently available, this resolution encourages the university to move up the date for carbon neutrality and to create more rigorous university Sustainability Goals.

WHEREAS the Ohio State Sustainability Goals serve as the official goals and milestones for the Ohio State University's practices in all areas pertaining to environmental sustainability,¹ and

WHEREAS the Sustainability Goals state that OSU should "achieve carbon neutrality by 2050",¹ and

WHEREAS there is a scientific consensus that global warming and climate change are real,² and the well-respected scientific organization the Intergovernmental Panel on Climate Change (IPCC) has established that human behaviors are exacerbating the effects of climate change,³ and

WHEREAS greenhouse gases, which are released through the burning of fossil fuels including coal, petroleum, and natural gas (methane), contribute to the greenhouse effect that reduces the amount of heat leaving the atmosphere and warms the planet,⁴ and

WHEREAS a variety of changes can happen with increasing global temperature, including ice melting, severe storm events, sea level rise, and flooding or droughts in different parts of the world,⁵ and

WHEREAS the US Global Change Research Program in the Third and Fourth National Climate Assessment Report states that the Midwest region, including Ohio, is already experiencing and will continue to experience more "extreme heat, heavy downpours and flooding [that] will affect infrastructure, health, agriculture, forestry, transportation, air and water quality, and more,"⁶ and

WHEREAS the National Aeronautics and Space Administration (NASA) predicts regional increases in heat waves and droughts, increases in other regions of precipitation and flooding,

¹ OSU's Sustainability Goals:

<https://si.osu.edu/sites/default/files/Ohio%20State%20Sustainability%20Goals%2020201021%20UPDATE.pdf>

² <https://climate.nasa.gov/scientific-consensus/>

³ IPCC AR5 Synthesis Report: Climate Change 2014: <https://www.ipcc.ch/report/ar5/syr/>

⁴ <https://www.epa.gov/climate-indicators/greenhouse-gases>

<https://www.eia.gov/energyexplained/energy-and-the-environment/greenhouse-gases-and-the-climate.php>

⁵ <https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts>

⁶ Third National Climate Assessment Report: <https://nca2014.globalchange.gov/>, Fourth National Climate Assessment Report: <https://science2017.globalchange.gov/>

increased frequency, intensity, and duration of hurricanes, and overall rising global average temperatures as a result of climate change,⁷ and

WHEREAS the IPCC recommends aiming for a 1.5-degree Celsius increase in global average temperature from pre-industrial levels in order to limit the effects of climate change, in comparison to the earlier 2-degree goal, which our current carbon neutrality goal is based on,⁸ and

WHEREAS the IPCC AR5 Report states that “Limiting climate change would require substantial and sustained reductions in greenhouse gas emissions which, together with adaptation, can limit climate change risks,”⁸ and

WHEREAS the most recent IPCC publication, the Physical Science Basis from Work Group I and the first part of the AR6 Report, concluded that “Each of the last four decades has been successively warmer than any decade that preceded it since 1850. Global surface temperature in the first two decades of the 21st century (2001-2020) was 0.99 [0.84- 1.10] °C higher than 1850-1900,”⁹ and

WHEREAS the same report asserts that “Observed increases in well-mixed greenhouse gas (GHG) concentrations since around 1750 are unequivocally caused by human activities,”⁹ and

WHEREAS President Biden’s Plan for Climate Change and Environmental Justice has a goal to reach carbon neutrality and 100% clean energy for the entire country by 2050,¹⁰ and

WHEREAS OSU President Kristina Johnson was quoted in the fall of 2020 in the Lantern saying “We are in a race to decarbonize as fast as we can. People talk about 2050? That is so 10 years ago when I was Under Secretary of Energy. My view is we’ve got to pull that back. We’ve got to decarbonize by 2040,”¹¹ and

WHEREAS OSU has a responsibility to do its part to reduce greenhouse gas emissions and avoid further damaging our planet and its inhabitants, and

WHEREAS OSU’s Sustainability Goals also include goals such as to “achieve zero waste by 2025 by diverting 90% of waste from landfills” and other goals pertaining to food waste, energy efficiency in buildings, environmentally preferred products, ecosystem services, and the carbon footprint of the university fleet, none of which currently includes goals for past 2025,¹ and

WHEREAS OSU’s Sustainability Goals do not include any specific mention of composting or organic waste recycling, which leaves room for only other waste diversion methods, like recycling, to be overly relied upon to reach our Zero Waste by 2025 goal,¹ and

WHEREAS OSU’s Sustainability Goals do not include any specific mention of reducing waste before it is created,¹ and

⁷ <https://climate.nasa.gov/effects/>

⁸ <https://www.ipcc.ch/sr15/>

⁹ https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM_final.pdf

¹⁰ <https://joebiden.com/climate-plan/>

¹¹ <https://www.thelantern.com/2020/11/johnson-talks-power-plant-plans-for-future-shift-to-renewable-energy/>

WHEREAS the Ohio State Sustainability Goals were first set in 2015,¹² and

WHEREAS based on the timeline of previous goals and the urgency of climate action, the university should be planning new sustainability goals to reach by 2030, and

WHEREAS the Undergraduate Student Government's 53rd General Assembly passed a similar resolution to this one, 53-R-36, in the 2020-2021 academic year, and

WHEREAS the Inter-Professional Council voted to support this resolution on December 5, 2021,¹³ and

WHEREAS having more rigorous Sustainability Goals based on the best available science will help The Ohio State University fulfill its mission as a research and land-grant university, and

WHEREAS the University Senate Steering Committee approved this resolution at its March 10, 2022 meeting and its advance to a Senate vote on March 24, 2022.

NOW THEREFORE LET IT BE RESOLVED that the University Senate encourages The Ohio State University to revise its goal of reaching carbon neutrality to 2040 rather than 2050, and

LET IT FURTHER BE RESOLVED that the University Senate encourages the university to stop burning fossil fuels on OSU campuses and end dependence on fossil fuels as soon as feasibly possible, and

LET IT FURTHER BE RESOLVED that the University Senate encourages the university to create new goals for the carbon footprint of university fleet, waste reduction, local food use, ecosystem services, and building energy efficiency past the current 2025 timeline, and

LET IT FURTHER BE RESOLVED that the University Senate encourages the university to include increased organic waste recycling and reductions to overall waste generation, especially single-use plastics, specifically in its Sustainability Goals.

¹² <https://si.osu.edu/news/sustainability-institute-ohio-state-celebrates-1st-year>

¹³ Appendix A