

RESOLUTION FOR CLIMATE ACTION PLAN AT IU South Bend

Rationale for putting forward the resolution

1. Whereas the 2015 Paris Agreement on climate change; the International Panel on Climate Change Report, fall 2018; and the Fourth National Climate Assessment Report by the US Global Change Research Program, fall 2018, have all warned of the catastrophic dangers to humans and the earth if climate change is not addressed;¹
2. Whereas Core Value 7 of the IU Bicentennial Strategic Plan commits to “Sustainability, stewardship, and accountability for the natural, human, and economic resources and relationships entrusted to IU” and Action Items of the Strategic Plan include “to solidify IU’s focus on efficient and environmentally conscious campus design and operation;”²
3. Whereas the Mission of the IU South Bend campus includes helping students develop “a global perspective” and “develops engaged citizens prepared to build strong communities”;³
4. Whereas, recognizing that climate concerns and sustainable practices are a high priority for college students now and in the future, as evidenced, for example, by regional middle and high school students working with South Bend and Goshen city councils to pass Climate Action Plans, and the recent international student-led Global Climate Strikes;⁴

Resolution

Therefore, the **IU South Bend Faculty Senate** resolves:

1. to prioritize sustainability and a climate action-plan as major, long-term goals of the IU South Bend campus, in all planning having environmental impact;
2. to create effective synergy between administration, faculty, staff, students, and the Center for a Sustainable Future as we implement and model sustainable best-practices to the IU South Bend campus, student body, and wider community, for the *next* 50 years and beyond;
3. as a campus, to be carbon neutral (i.e., net-zero anthropogenic CO₂ emissions) by 2040, ahead of what is advocated by the IPCC report.

¹ See <https://www.diplomatie.gouv.fr/en/french-foreign-policy/climate/2015-paris-climate-conference-cop21/cop21-the-paris-agreement-in-four-key-points/>; Intergovernmental Panel on Climate Change (IPCC)’s fall 2018 report: <https://www.ipcc.ch/sr15/>; and the Fourth NCA Report at <https://nca2018.globalchange.gov/>. See also NASA’s <https://climate.nasa.gov/> and the National Oceanic and Atmospheric Administration (NOAA)’s reports at <https://www.noaa.gov/climate> and <https://www.ncdc.noaa.gov/monitoring-references/faq/indicators.php>

² <https://strategicplan.iu.edu/mission-values-vision/core-values.html> and <https://strategicplan.iu.edu/> This also includes pursuing the goals for energy efficiency and emissions reductions called for in the *Campus Master Plan* and the *Integrated Energy Master Plan* for the IU Bloomington campus and expanding that analysis to all campuses: specifically “Increasing energy and utility system efficiency while reducing demand and consumption” (p. 42-3).

³ IU South Bend Mission Statement <https://iusb.edu/about/index.html>

⁴ Middle and High school students in South Bend worked with South Bend City Council to develop the South Bend Climate Action Plan, and was passed unanimously by the South Bend City Council in 2019. A similar Climate Action plan was adopted by the Goshen City Council in 2019 (also led by middle and high school students in Goshen, IN).

Examples of articles: <https://www.theguardian.com/environment/2019/mar/01/youth-climate-change-strikers-open-letter-to-world-leaders> and <http://www.wbjournal.com/article/20140414/PRINTEDITION/304119980/colleges-more-prospective-students-checking-schools>

⁵ <https://indianarecycling.org/curb-your-carbon/>

⁶ http://www.indiaenvironmentportal.org.in/files/file/CO2_Emissions_from_Fuel_Combustion_2018_Highlights.pdf

Background information: All IU campuses have been encouraged to review climate resolution plans and University Faculty Council is reviewing a climate resolution plan. The hope is that if all campuses make a commitment to move towards carbon neutrality, then actions taken on individual campuses and at the larger IU level (particularly in terms of energy contracts and purchasing policies) might be able to make progress on this issue.

Steps the IU South Bend campus has already taken to reduce carbon emissions

- 1) Commitment to meeting LEED (Leadership in Energy Efficiency Design) guidelines in all new buildings and major renovation projects. The Student Community Building was awarded LEED silver in 2008 and Education and Arts Building renovation project was awarded LEED silver in 2014. LEED buildings use less energy, less water, fewer toxic materials, and incorporate landscape practices that offset heating and cooling of the building and reduce water runoff.
- 2) In 2012-2013, IU South Bend worked with Chevron to save on campus energy costs. The project included upgrading or replacing central energy systems, conserving water, reducing utility costs and recouping the investment of \$6 million in no more than ten years. As of 2014, the project has reduced the CO₂ emitted by the campus by 5.3 metric tons, which is the equivalent of the amount of carbon sequestered by 87 tree seedlings growing over 10 years. The reduction in the amount of water the campus uses is the equivalent of 7.6 Olympic sized swimming pools and would meet the needs for 39 families a year. So far the campus has saved 29% in natural gas, 44% in electrical, 10% in water and sewer, and 38% in total energy costs (Figure 1). During this project, Chevron used local and state contractors, manufacturers and suppliers with half of the project dollars being spent locally.
- 3) From 2019 – present, work-study students have been working with Krista Bailey, Director for Center for Sustainable Future to collect data and document baseline information on many aspects of campus operations for the Sustainability Tracking, Assessment & Rating System (STARS) Report. This report can be used to identify short-term and long-term goals for the campus in moving towards carbon neutrality.

Examples of pathways to carbon neutrality

- 1) Increase commitment to energy efficiency (turn off lights, fix leaking pipes, continue shift to LED lights where feasible). This has minimal up front costs, and increases cost savings in the utility and water budget. These cost savings could be dedicated to investing in pilot renewable energy projects.
- 2) Continue commitment to reduce waste (reduce food waste, increase recycling, increase composting on campus). Reducing use of disposable products can lower our carbon footprint. The Indiana Recycling Coalition states that “over forty percent of US greenhouse gas (GHG) emissions are directly tied to making, moving, and disposing of all the *things* we use – and throw away – every day.”⁵
- 3) Increase use of vendors that have a commitment to lowering carbon footprint. This requires input from Vendor review board, campus purchasing department, and IU purchasing policies.
- 4) Include faculty, student, and staff representatives who are willing to research alternatives on Purchasing/vendor board, Strategic planning, Budget committee, Facilities committee so that energy considerations are included in the planning process.
- 5) Increase use of renewable energy as budget allows.
- 6) Based on 2016 data, the transportation sector is responsible for 26% of global greenhouse gas emissions.⁶ We have partnered with Transpo to provide free bus passes for students. Additional steps such as increasing car pool options, bike service stations, covered places to store bikes, and increasing walkability of campus would help reduce GHG emissions.

⁵ <https://indianarecycling.org/curb-your-carbon/>

⁶ http://www.indiaenvironmentportal.org.in/files/file/CO2_Emissions_from_Fuel_Combustion_2018_Highlights.pdf

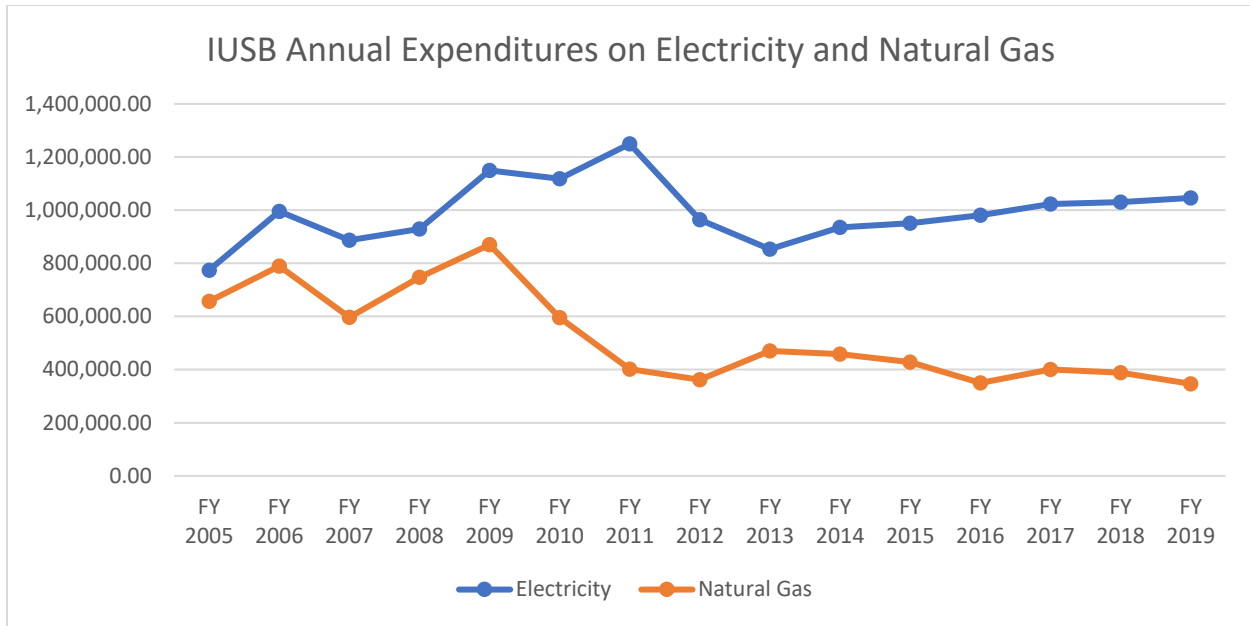


Figure 1. Annual costs for electricity and natural gas at IU South Bend from 2005-2019. The decrease in electricity and natural gas costs between 2011-2013 is primarily due to the Chevron energy project. Note that electricity costs have been increasing since 2005, whereas natural gas prices have fluctuated, but not shown a consistent rise in cost.² Indiana has historically relied on coal as the source of energy to generate electricity (e.g., in 2014, 85% of electricity in Indiana was generated from coal)¹. As Indiana has diversified its sources of energy used to generate electricity, the cost of electricity has increased 58% from 2005 to 2018 (commercial Indiana rate 6.57 – 10.36 cents per kwh)². A benefit of moving away from using coal has been substantial emission decreases in carbon dioxide, mercury, particulate matter, sulfur dioxide and nitrous oxide.²

¹<https://www.ibrc.indiana.edu/ibr/2015/outlook/longview.html>

²<https://indianaenergy.org/why-are-electric-costs-increasing-electricity-prices/>

⁵ <https://indianarecycling.org/curb-your-carbon/>

⁶http://www.indiaenvironmentportal.org.in/files/file/CO2_Emissions_from_Fuel_Combustion_2018_Highlights.pdf