IU CLIMATE ACTION PLANNING COMMITTEE VIRTUAL OPEN FORUM

Open to all IU students, faculty & staff

THURSDAY, NOVEMBER 3 2:00 - 3:00 PM

Thank you for joining us today.









SMITHGROUP TEAM



STET SANBORN
PRINCIPAL IN CHARGE



ALICIA ADAMS
PROJECT MANAGER



LING ALMOUBAYYED
RESILIENCE PLANNER



KEVIN KING SENIOR URBAN PLANNER



JAKE CHEVRIER
SUSTAINABILITY STRATEGIST



ALEC BARNES
ENVIRONMENTAL ENGINEER



CAMPUS PLANNER





THE PURPOSE OF TODAY'S MEETING IS TO:

- Get to know you
- Introduce you to the project and process
- Answer your questions
- Share next steps for the plan

WE WANT TO LEARN ABOUT YOU!

QUESTION 1

How important do you think the topic of climate change is to our present and future?

QUESTION 2

How comfortable are you with your knowledge around the topic of climate change?

QUESTION 3

How worried are you about your future with regard to climate change?





TELL US WHAT YOU THINK!

What are some **opportunities** for Indiana University to reduce carbon emissions?

What may be some **challenges** that Indiana University may face when reducing carbon emissions?

COMMITTEE GOAL AND GUIDING PRINCIPLES

PURPOSE OF THE COMMITTEE

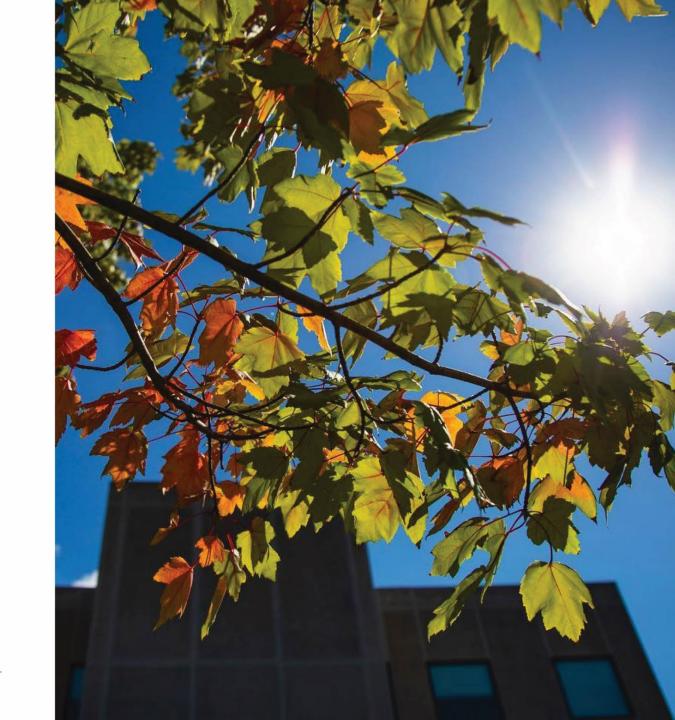
Develop recommendations for short- and long-term opportunities to reduce greenhouse gas emissions on all IU campuses



COMMITTEE GOAL AND GUIDING PRINCIPLES

GUIDING PRINCIPLES

- Complete, comprehensive and scientifically sound
- Immediate implementation where possible
- Financial resources required
- Funding sources and savings identified
- Broad input from students, faculty and staff on all campuses
- Benchmarks, dashboards and transparency of process and progress
- Carbon neutrality by 2040



INDIANA UNIVERSITY

CLIMATE ACTION PLANNING COMMITTEE

COMMITTEE CHAIR

Thomas A. Morrison

Vice President for Capital Planning and Facilities

COMMITTEE MEMBERS

FACULTY

Siân Mooney

Professor and dean of the O'Neill School of Public and Environmental Affairs

James Farmer

Associate professor, O'Neill School of Public and Environmental Affairs at IU Bloomington; director of the IU Food Institute and co-director of IU Campus Farm

Erin Argyilan

Professor and chair of the Department of Geosciences at IU Northwest

Alisa Clapp-Itnyre

Professor of English at IU East

Todd Grote

Associate professor of geoscience at IU Southeast

Broxton Bird

Associate professor of earth sciences at IUPUI

Sarah Mincey

Clinical associate professor, O'Neill School of Public and Environmental Affairs at IU Bloomington; director, Integrated Program on the Environment; and managing director, Environmental Resilience Institute

Gabriel Filippelli

2023 Indiana University Climate Action Plan

Professor in the School of Science at IUPUI and executive director of the Environmental Resilience Institute

STUDENTS

Hope Stone, IU Northwest

Aspen Grieshaber, IUPUI

Rayden Sia, IUPUI

Alana Maria Davicino, IU Bloomington

STAFF

Kevin Elmore

Executive director of facilities and operations at IU Northwest

Camy Broeker

Vice chancellor for business and finance at IUPUI

Brad Boswell

Executive director of state relations

Jessica Davis

Interim university director of sustainability





OFFICE OF SUSTAINABILITY

...sustainability, stewardship, and accountability for the natural, human, and economic resources and relationships entrusted to IU..."

2014 Indiana University Bicentennial Strategic Plan

12 TAINABILITY-TED RESEARC

SUSTAINABILITY-RELATED RESEARCH CENTERS INSTITUTES

500+
SUSTAINABILITYRELATED COURSES

Bloomington

IUPUC

IUPUI

IU Southeast

IU Kokomo

IU South Bend

IU Northwest

IU East

60+

INTERNS, EXTERNS, AND SCHOLARS MENTORED ANNUALLY

6

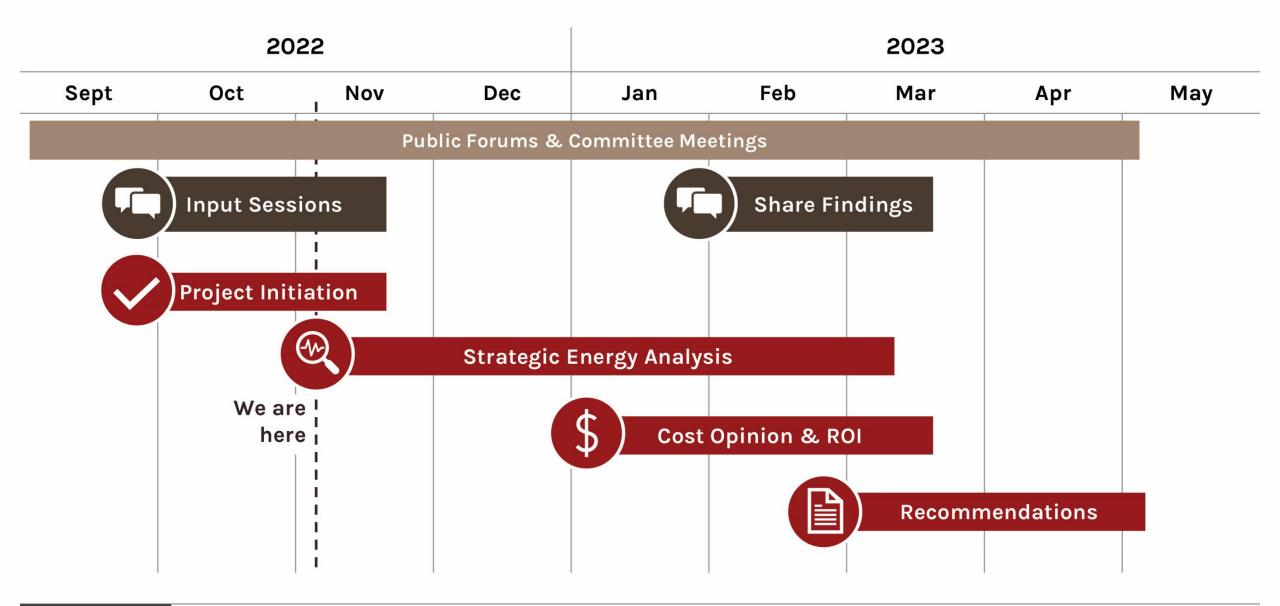
WORKING GROUPS
THAT BRING FACULTY,
STAFF, AND STUDENTS
TOGETHER TO
COLLABORATE ON
SUSTAINABILITY
SOLUTIONS







PROJECT SCHEDULE



PUBLIC FORUMS

Trip #1: Gary, Indianapolis, Kokomo

| Date | Campus | Location | Event |
|--------------|--------|--------------|-----------------|
| September 27 | IUN | Gary | Public Forum #1 |
| Contombor 20 | IUPUI | Indianapolis | Public Forum #2 |
| September 28 | IUK | Kokomo | Public Forum #3 |

Trip #2: South Bend

| Date | Campus | Location | Event | |
|------------|--------|------------|-----------------|--|
| October 12 | IUSB | South Bend | Public Forum #4 | |

Trip #3: New Albany

| Date | Campus | Location | Event |
|------------|--------|------------|-----------------|
| October 25 | IUS | New Albany | Public Forum #5 |

Virtual Session

| Date | Campus | Location | Event |
|------------|--------|----------|-----------------------|
| November 3 | All | Zoom | Virtual Forum Session |

Trip #4: Richmond, Bloomington

| Date | Campus | Location | Event |
|-------------|--------|-------------|-----------------|
| November 15 | IUE | Richmond | Public Forum #6 |
| November 16 | IUB | Bloomington | Public Forum #7 |



WHAT WE'VE HEARD

WHAT IS INDIANA UNIVERSITY DOING TO REDUCE CARBON EMISSIONS TODAY?

2023 Indiana University Climate Action Plan

| Scheduling for demand load | Schedu | ling | for | demand | load |
|----------------------------|--------|------|-----|--------|------|
|----------------------------|--------|------|-----|--------|------|

STARS Reporting

LEED Standards for new construction & renovation

Update HVAC equipment

Building community partnerships

Window replacements

Climate change & sustainability courses

Shut-off timers & occupancy sensors for campus, lighting, & equipment

Upgrade boilers

Independent building utility meters

Water conservation (shut-off timers, lowflow toilets)

Riding the bus & expanding bus and shuttle service

EV and E-bike charging stations

Walking and maintaining a walkable campus

Rideshare and carpooling

Biking and embracing bike routes (such as Indianapolis Cultural Trail)

Electrifying University fleet and grounds equipment

Temperature set-points

White roofs on campus buildings

Lighting upgrades (classrooms, parking garages)

Solar panels on academic buildings

Retro-commissioning existing buildings

Signed up for renewable energy programs

Virtual learning

Student Sustainability Council and partnership with Office of Sustainability for initiatives

Expanding recycling & landfill diversion

Reducing amount of meat eaten on campus

Replacing monitors and screens to LED

Centralized purchasing

Honors College Earth Day collaborations

Sustainability clubs

Reducing impervious surfaces

Native prairie plantings & no-mow zones

Tree planting

Rain gardens & reusing water





STARS REPORTING

WHAT IS STARS?

"The Sustainability Tracking, **Assessment & Rating** System (STARS) is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance."







2023 Indiana University Climate Action Plan



Source: About STARS

AN OVERVIEW OF STARS RATING CATEGORIES

| Category | Topics |
|---------------------------|--|
| Academics | Curriculum Research |
| Operations | Air & Climate Buildings Energy Food & Dining Grounds Purchasing Transportation Waste Water |
| Engagement | Campus Engagement Public Engagement |
| Planning & Administration | Coordination & Planning Diversity & Affordability Investment & Finance Wellbeing & Work |
| Innovation & Leadership | Exemplary Practice Innovation |

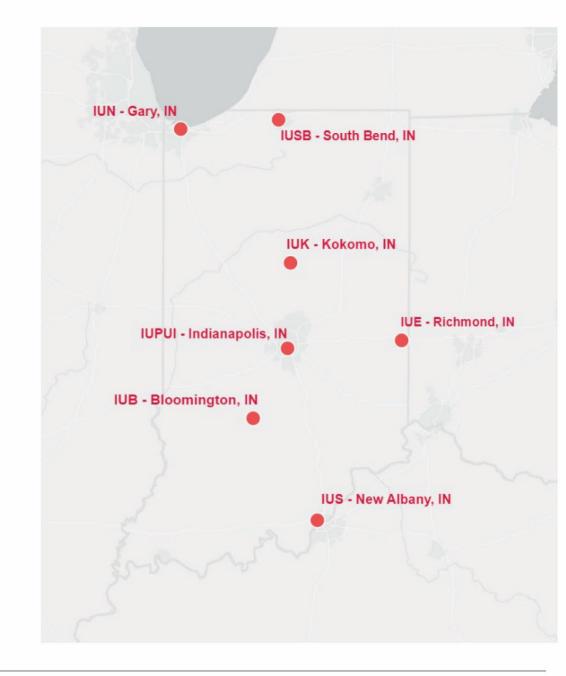




STARS REPORTING

Indiana University STARS Reporting

| IU CAMPUS | RATING |
|----------------------|---------------------------|
| IU Bloomington | Gold |
| IU South Bend | Bronze |
| IUPUI | Gold |
| | |
| IU Southeast | Silver |
| IU Southeast IU East | Silver Not yet reporting |
| | |



2023 Indiana University Climate Action Plan

WHAT DO WE MEAN BY "CARBON NEUTRALITY"?

Indiana University
has set a target for
carbon neutrality by
2040.

But what does this mean?

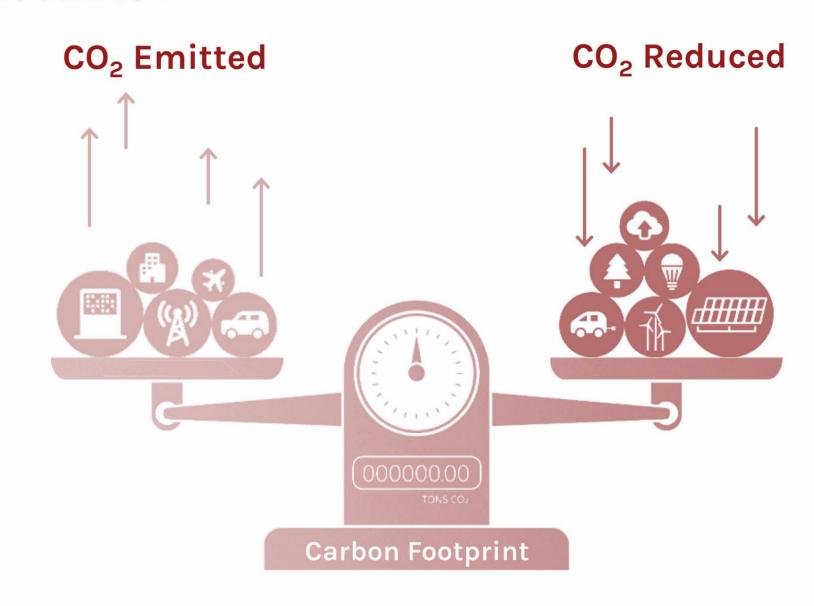
| | CARBON NEUTRALITY |
|---------------------|---|
| Definition | Reduces carbon emissions and balances remaining emissions |
| Emission Types | Scopes 1 & 2 (Scope 3 is optional) |
| Typical Application | Institution, company, or product |



WHAT WILL WE BE MEASURING?

Based on historic trends, current state, and future projections, we will be measuring:

- Energy Use
- Energy Use Intensity (EUI)
- Greenhouse Gas (GHG) emissions



UNDERSTANDING GHG **EMISSIONS**

SCOPE 1 EMISSIONS

Direct emissions that IU makes directly – for example while running its boilers and vehicles.

SCOPE 2 EMISSIONS

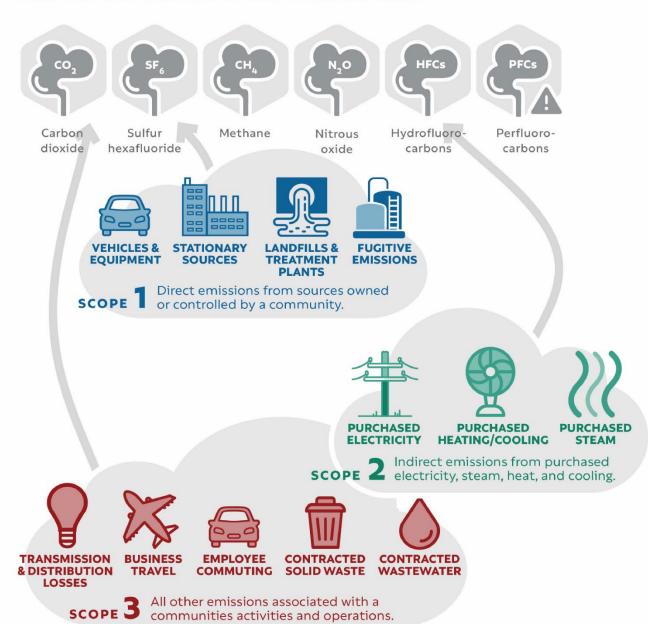
Indirect emissions from purchased electricity, steam, heat, and cooling.

SCOPE 3 EMISSIONS

All other indirect emissions the result of activities from assets not owned or controlled BY Indiana University.

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WHAT ARE CONTRIBUTING TO OUR EMISSIONS NOW?



Source: Diagram based on Greenhouse Gases Diagram from EPA



IU GREENHOUSE GAS EMISSIONS DASHBOARD

TRACKING EMISSIONS

Greenhouse Gas Emissions Dashboard

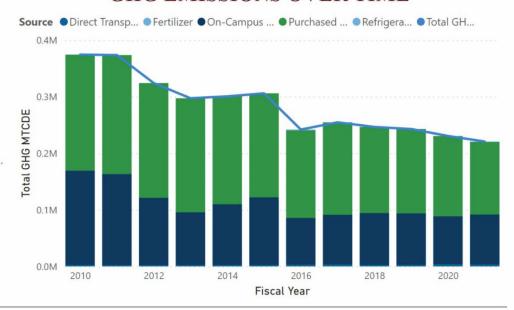
INDIANA UNIVERSITY



GHG EMISSIONS BY SOURCE

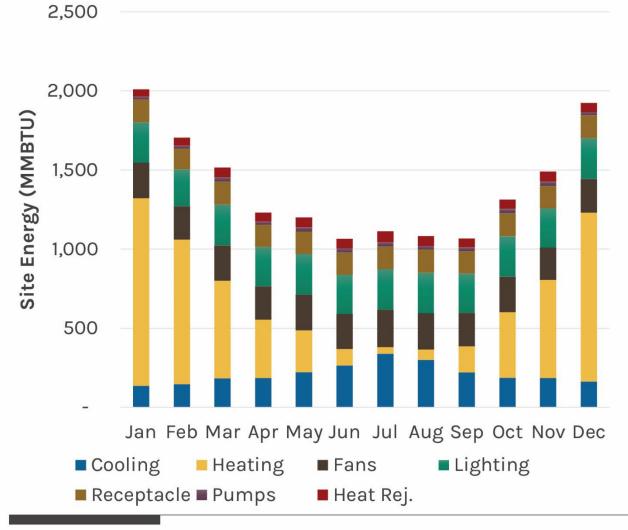
GHG Emission Sources 0.03M (0.97%) -1.29M (37.82%) **Direct Transportation Sources** Source Fertilizer Purchased Electricity - In... On-campus Stationary On-Campus Stationary Direct Transportation Sou... Purchased Electricity - Indirect Refrigerants & Chemicals Fertilizer Refrigerants & Chemicals Total GHG MTCDE __ 2.09M (61.11%) Source: go.iu.edu/climate

GHG EMISSIONS OVER TIME



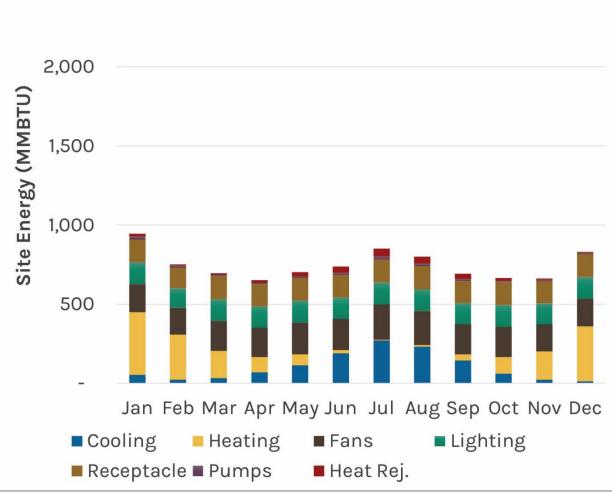
ENERGY MODELING

Energy usage <u>before</u> reduction strategies

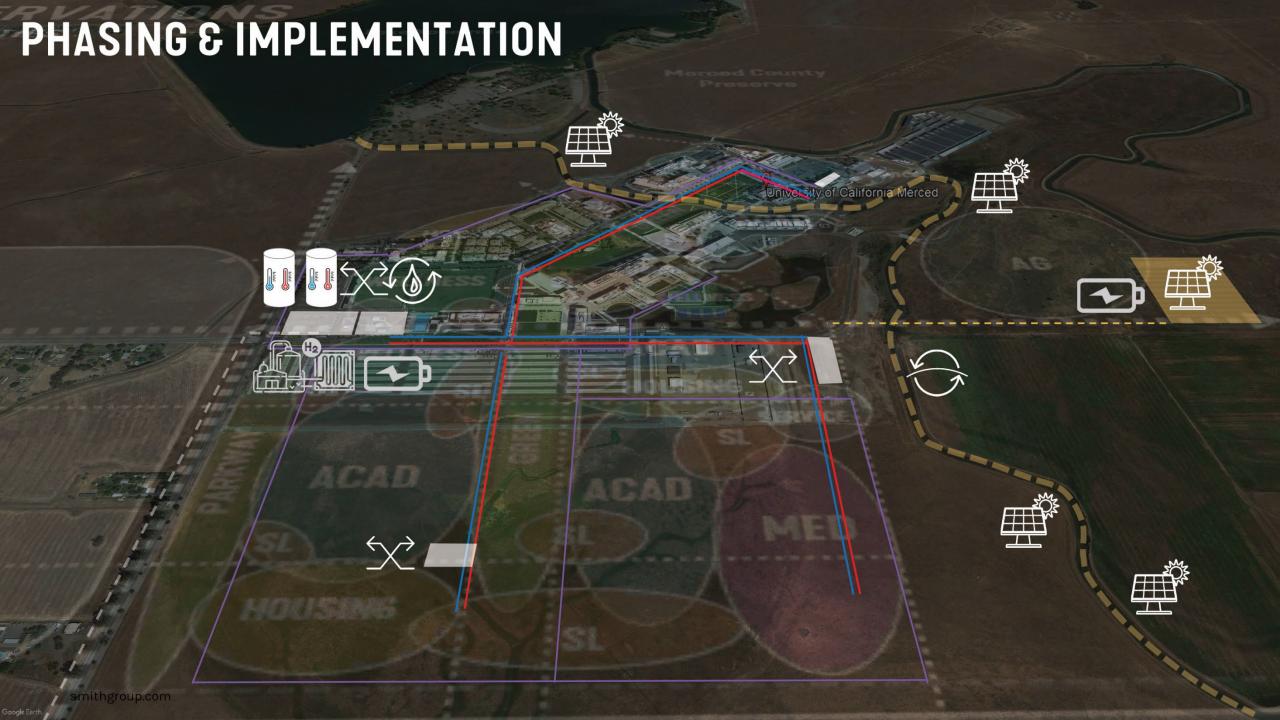


Energy usage <u>after</u> reduction strategies

2,500









THANK YOU For joining us today and for sharing your thoughts and comments!

PLEASE STAY INVOLVED

QUESTIONS & COMMENTS

Email questions and comments to: climactn@iu.edu

STAY INVOLVED

Follow the website: go.iu.edu/climate

HELP US SPREAD THE WORD

Tell your friends, classmates, and colleagues about this process and join us for upcoming sessions!

(check out the website for more information)

Image Source: Indiana University