

INDUSTRIAL WATER, WASTE AND SEWAGE GROUP CHICAGO
APRIL 16, 2025

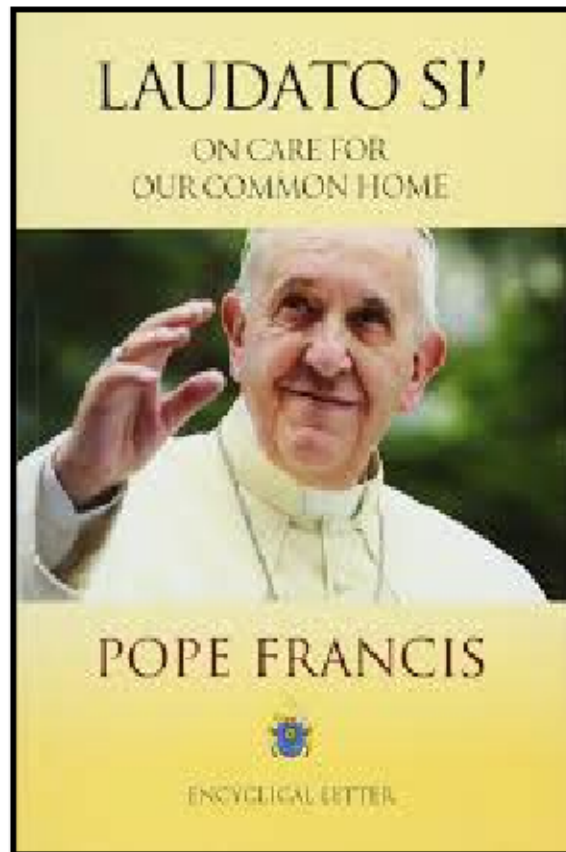
ACHIEVING CARBON NEUTRALITY: TRANSITIONING TO
AN ENVIRONMENTALLY SUSTAINABLE CAMPUS AT
LOYOLA UNIVERSITY CHICAGO

*Presented by:
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CALL FOR ACTION FROM TOP LEADERSHIP:

Pope Francis and the Jesuits



Jesuit Strategic Priorities

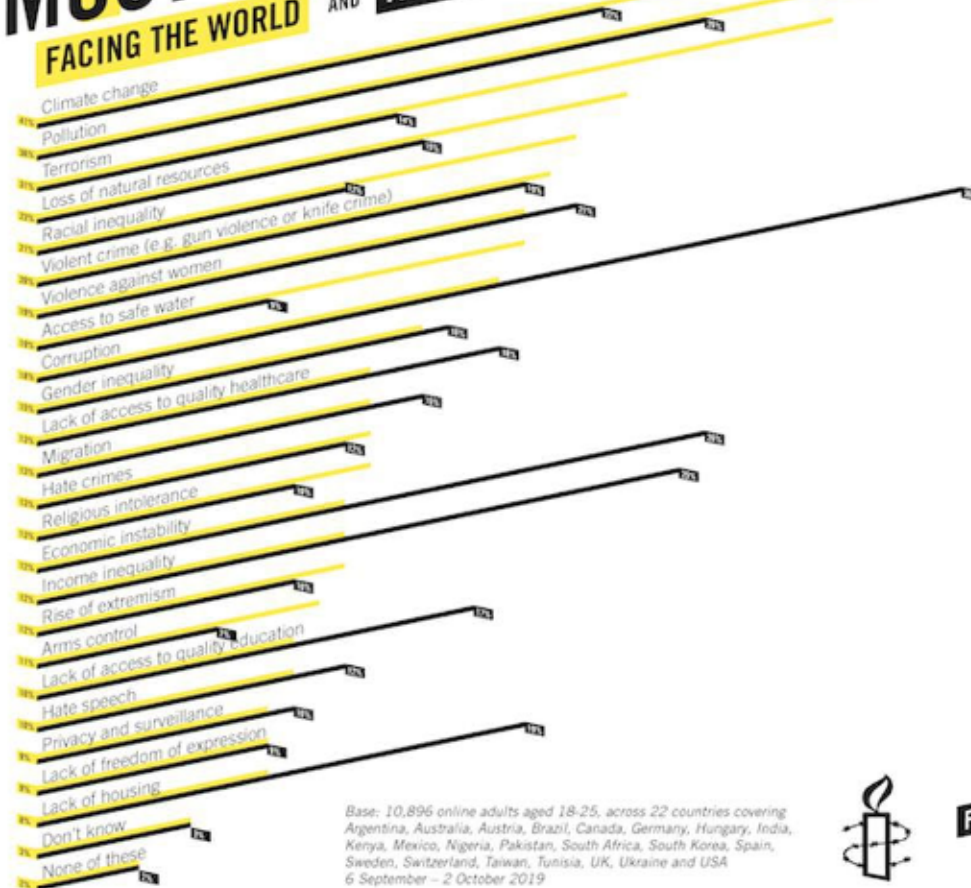


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CALL FOR ACTION FROM STUDENTS

Forbes 2020 Gen Z Survey

WHICH, IF ANY,
OF THE FOLLOWING DO YOU SEE AS THE
MOST IMPORTANT ISSUES
FACING THE WORLD AND FACING YOUR COUNTRY



Base: 10,896 online adults aged 18-25, across 22 countries covering Argentina, Australia, Austria, Brazil, Canada, Germany, Hungary, India, Kenya, Mexico, Nigeria, Pakistan, South Africa, South Korea, Spain, Sweden, Switzerland, Taiwan, Tunisia, UK, Ukraine and USA
6 September – 2 October 2019



**FUTURE
OF HUMANITY
SURVEY**

Top 4 Gen Z issues:

- 1) Climate Change
- 2) Pollution
- 3) Terrorism
- 4) Loss of Natural Resources



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LOYOLA UNIVERSITY CHICAGO'S RESPONSE TO THE GLOBAL ENVIRONMENTAL CRISIS

23 Years of Facilities & Academic Affairs Partnership

Facilities

Campus Environmental Footprint



Academic Affairs

Education



CLIMATE ACTION PLAN 20152025

Three Primary Goals:

- Educate all students, regardless of their majors, on the basic environmental challenges of this century
- Launch a School of Environmental Sustainability
- Achieve Carbon Neutrality on all 3 Chicago Campuses

We Deliver Environmental Literacy to Students Through the University Core

- ❑ All non-science majors are required to take Tier I **ENVS 101 The Scientific Basis of Environmental Issues**
- ❑ Universities are important agents of social change – these are the most impactful courses that SES teaches.



The SES Facility

Opened September, 2013 as IES
Promoted to School Status in 2020



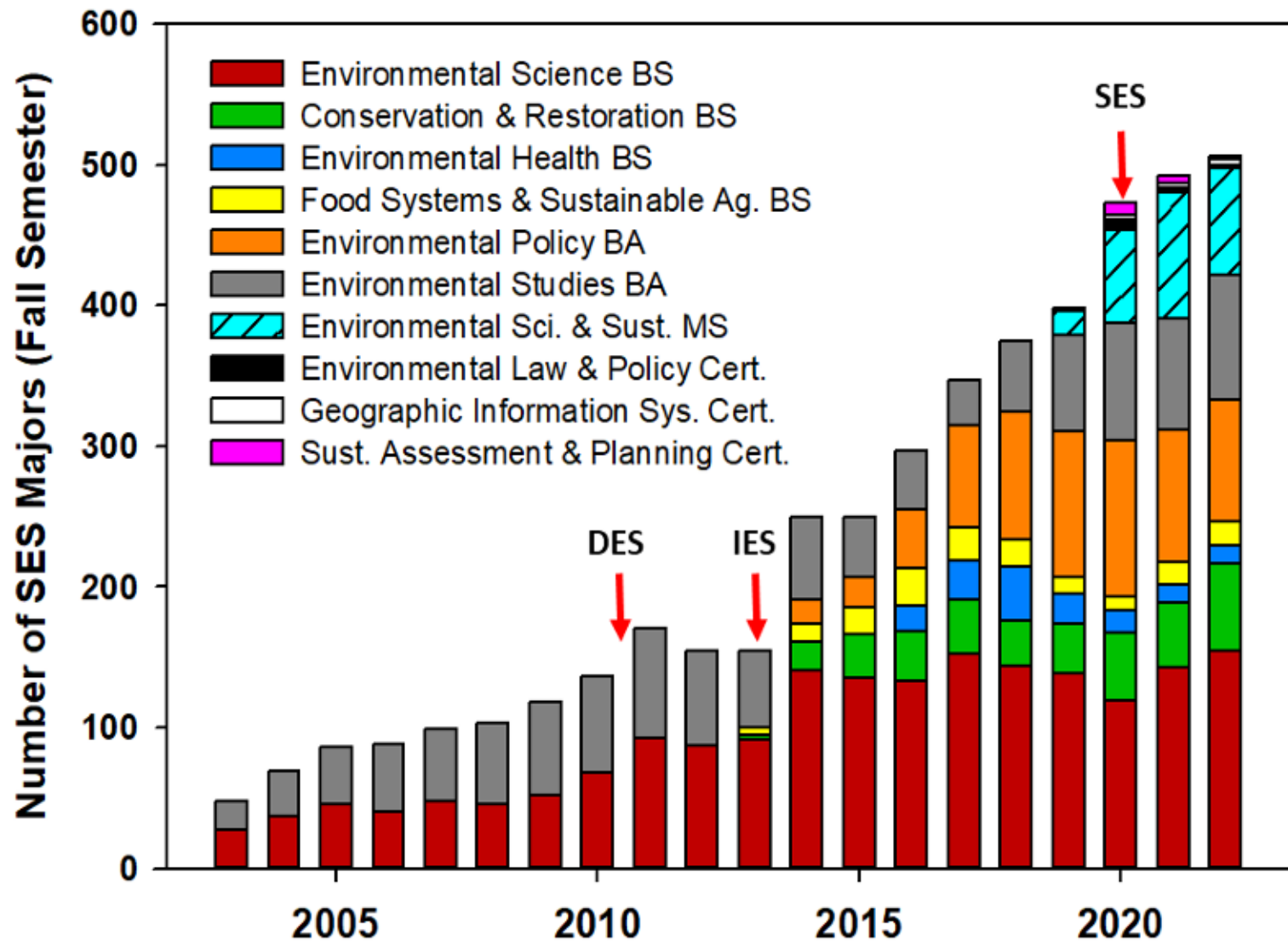
SCHOOL OF ENVIRONMENTAL SUSTAINABILITY

FOCUS AREAS

Addressing five of this century's most complex and vexing environmental problems:

- The Loss of Biodiversity
- Social Sustainability
- Sustainable Food Systems
- Environmental Health & Toxicology
- Climate & Energy

Environmental Academic Program Enrollments



CURRICULAR ENRICHMENT THROUGH HANDS-ON, SOLUTION-BASED LEARNING

Food Systems & Sustainable Agriculture



INTEGRATING HIGH IMPACT LEARNING INTO CAMPUS SUSTAINABILITY PRACTICES

Zero Waste Programs

*Partnerships with Facilities, Purchasing,
Residence Life, Athletics, ARAMARK*



INTEGRATING CAMPUS SUSTAINABLE INFRASTRUCTURE WITH ACADEMIC PROGRAMMING

Composting Program

*Partnerships with Facilities,
ARAMARK, and waste hauler*



STUDENTS DEVELOPING SOLUTIONS TO ENVIRONMENTAL PROBLEMS

Waste-To-Energy Program

Using cafeteria waste vegetable oil to produce biodiesel and biosoap



INTEGRATING CAMPUS SUSTAINABLE INFRASTRUCTURE WITH ACADEMIC PROGRAMMING

Energy Planning

Room-level audits and data collection for decarbonization master plan



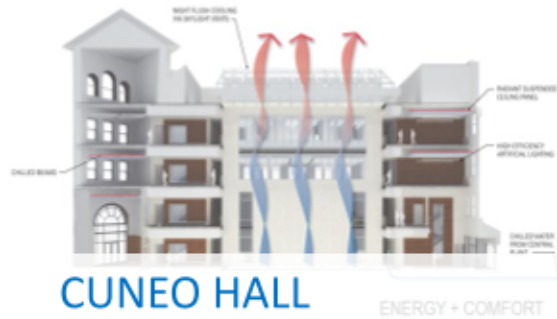
CLIMATE ACTION PLAN 2015-2025

- **Steps Taken to Achieve Carbon Neutrality**

Carbon neutrality is achieved when an entity that produces carbon emissions removes the same volume of carbon emissions from the Earth's atmosphere. Marked against the 2008 baseline fossil fuel consumption and GHG emissions on our campuses, LUC has achieved carbon neutrality by:

- 45% reduction from building energy efficient buildings, 3 geothermal systems, high efficiency heating/chilling plant
- 40% reduction PPA with Double Black Diamond for 100% solar electricity
- 15% carbon offsets through *Tradewater* destruction of CFCs

13 LEED CERTIFIED BUILDINGS INCREASES EFFICIENCY THEREBY LOWERING OUR FOSSIL FUEL CONSUMPTION



GEOHERMAL SYSTEMS REDUCE FOSSIL FUEL USE

SES 91 wells, 2013



Piper Hall 22 wells, 2024



DOUBLE BLACK DIAMOND SOLAR FARM SANGAMON COUNTY, IL

- Largest solar farm east of the Mississippi River 1.6M panels
- LUC has a 2-year contract (Jan. 1, 2025 – Dec. 31, 2037)
- Domestic content materials, Workforce and Labor
- 593 MW, \$779 M project


100% of LUC's electricity comes from our PPA with this solar farm
This reduced our 2008 baseline fossil fuel consumption by another 40%



WE PAYTRADEWATERO OFFSET THE REMAINING 15%

Tradewater is a B Corp that permanently prevents the world's most potent greenhouse gases from releasing into the atmosphere. CFC Refrigerants are over 10,000X more potent molecule-for-molecule than CO₂.



A group of students are participating in a cleanup activity on a campus lawn. In the center, a female student wearing a maroon Loyola University Chicago t-shirt and gloves is holding a long-handled tool, possibly a rake or brush, and a drink. To her left, a male student in a blue t-shirt with a red star logo is holding a white plastic bag. To the right, another student in a maroon Loyola t-shirt is visible. The background shows lush green trees and a building under a bright sky. The entire image has a semi-transparent dark overlay at the bottom where the text is placed.

PRESS RELEASES

Loyola University Chicago Achieves Carbon Neutrality on its Campuses

The University becomes the first in the Chicago area to achieve net-zero emissions.

December 3, 2024

WATER CONSERVATION AND SUPPORTING BIODIVERSITY 56,000 ft² green rooftops



**72,000,000 liters of rainwater diverted from
Chicago's sewers every year**



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Environment Leadership and Recognitions

SUSTAINABILITY AT LOYOLA

Leadership Points of Distinction:

- Award-winning Climate Action Plan
- Largest geothermal system in Chicago
- 1st School of sustainability among AJCU institutions
- Model for sustainable stormwater management and protection of Great Lakes
- Student leadership drives sustainability policies and engaged learning
- Over 1,800 courses (20%) each year address sustainability learning objectives
- Sustainable Investment Policy has driven down portfolio emissions
- 88% of academic units are involved in sustainability-related research

Other Recognitions:

- Gold Rating – Association for the Advancement of Sustainability in Higher Education's Sustainability Tracking, Assessment and Rating System (STARS)
- Green Hero Award – Chicago Climate Museum (2024)
- Green Ribbon Award – Post-secondary Institution – US Department of Education (2019)
- Laudato Si' Champion – Catholic Climate Covenant (2023)
- Sustainability Award – National Association of Collegiate Directors of Athletics (2019)
- Climate Leader – Association of Catholic Colleges and Universities and Solution Generation (2017)
- Climate Leadership Award – US Green Building Council and Second Nature
- Consistently listed as leader in sustainability:
 - Sierra Club Green Schools
 - Princeton Review's Green Colleges (2010-24) #12 in 2024
 - Green Electronics Council's Purchasing Award (2015 - 2023)



LUC CLIMATE ACTION PLAN 2.0 (IN DEVELOPMENT)

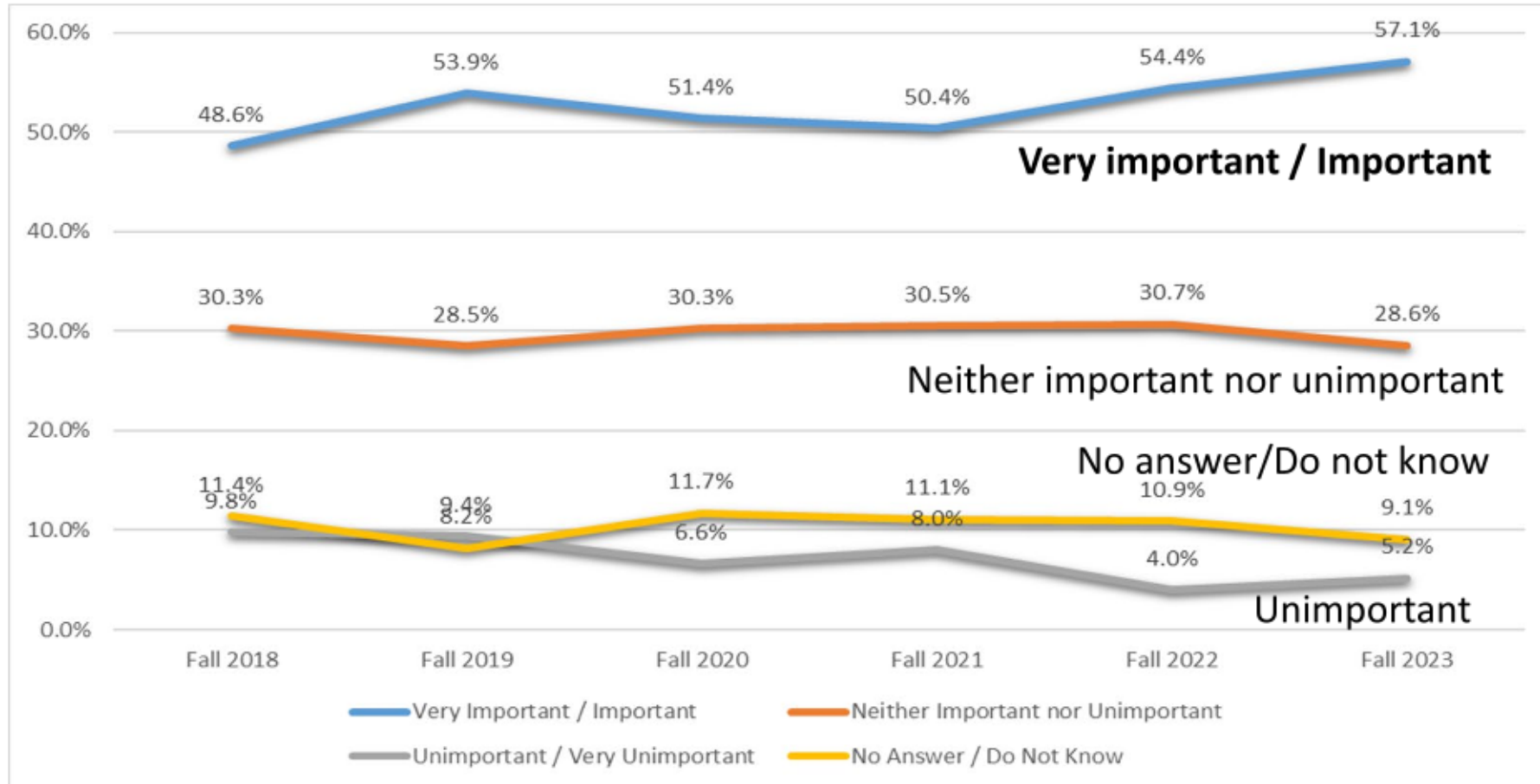


- Decarbonize LUC campuses by converting the last 15% of natural gas-fueled infrastructure to electricity
- Earn STARS Platinum rating by 2026
- Achieve zero waste goals and reduce scope 3 emissions

AJCU and IAJU are setting the goal for all ~180 Jesuit Higher Ed institutions to lead on environmental sustainability!

INCOMING LUC FRESHMEN SURVEY RESULTS

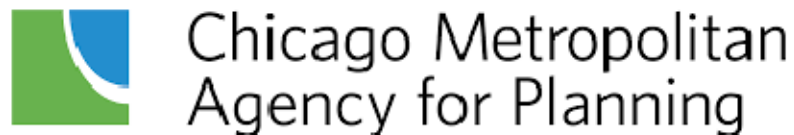
How important is LUC's Commitment to Sustainability in your decision to attend Loyola University Chicago?



OTHER “WINS” CITY OF CHICAGO

- Chicago's CAPDecarbonization Plan for all Buildings
- Reducing pollution in BIPOC communities
- Water, air, natural resources and energy
- Waste & Recycling
- Transportation
- Smart Grid

CHICAGO
SUSTAINABILITY
TASK FORCE



BOLD CLIMATE ACTION BY THE STATE OF ILLINOIS

- Gov JB Pritzker passed the **Climate and Equitable Jobs Act (CEJA)** the most equitable bill for clean energy in the nation.
 - Launched in 2021 CEJA promotes a just transition to a clean energy economy.
 - Requires all oil and coal-fired power plants to close by 2030.
 - Decarbonizes all Illinois electricity by 2045.
 - 100% renewable energy for the state by 2050.
- **Illinois Clean Jobs Coalition (ICJC)** is a bundle of legislation that ensures Illinois accelerates climate progress even when federal winds shift on climate.

AMERICA IS ALL IN

- Largest coalition of climate leaders in U.S. >5,000 organizational members doubling down on their commitment to the Paris Agreement.
- Includes cities, states, tribal nations, businesses, universities, faith groups, cultural institutions, health care organizations, and investors.
- Represents 50 states, 63% of the US Population and 75% of US GDP.
- Working to cut US emissions 50% by 2030 reaching net zero by 2050 to meet the Paris Agreement obligations.



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