



Iowa Environmental Council

**SPARKING INNOVATION: UNDERSTANDING ENERGY JUSTICE IN IOWA**

CODY SMITH, DIRECTOR OF CLIMATE INITIATIVES  
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**IOWA ENVIRONMENTAL COUNCIL (IEC)**

- IEC is a statewide nonprofit organization and is the largest environmental coalition in Iowa.
- Our values:
  - Our greatest strength is our relationships
  - Our work is informed by science, data, and stories
  - We are a trusted voice, respected for our integrity and resourcefulness
  - Sometimes we educate and lead; other times, we learn and follow
  - We are inclusive, non-partisan, and we listen to others
- IEC's mission is a just, healthy environment and sustainable future for all Iowans.

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**OUR VISION FOR IOWA'S FUTURE HAS:**

- A healthy climate and habitat
- Diverse use of land
- A variety of economic drivers and opportunities for all Iowans
- Equitable access to land, outdoor recreation, and environmental education
- Equitable access to affordable, reliable, and clean sources of energy and drinking water
- The promise of a livable future for current and future generations
- An engaged public with equitable access to the democratic process




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## Slide 1

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- A0**
1. Use Iowa-specific photos
  2. Add team members
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**TODAY'S AGENDA**

- Understanding Energy Burden
- Defining Energy Justice
- Identifying High-Energy Burden Communities in Iowa
- Reviewing Available IRA Incentives
- Building Partnerships for Sustainable Solutions
- Conclusion and Call to Action



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**DEFINING THE ENERGY BURDEN & ENERGY JUSTICE**



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**ENERGY BURDEN DEFINED**

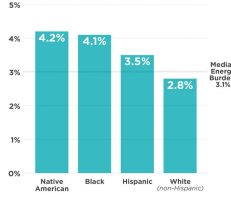


**EPA DEFINITION**

Energy burden is the percentage of a household's income spent on energy bills, including electricity, heating, cooling, and transportation fuels.

**NATIONAL ENERGY BURDENS**

The chart below shows energy burdens by race and ethnicity, compared to the national median energy burden of 3.1%.



**HIGH ENERGY BURDEN CAN IMPACT HEALTH**

When the cost of energy as a share of income gets over 6%, households are considered energy burdened, and people have to make decisions about heating, cooling, and medical care that can severely impact health.

Marshall Co. \$68,818 = \$4,129/yr



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**ENERGY JUSTICE DEFINED**



**EPA DEFINITION**  
Energy justice is the equitable distribution of both the benefits and burdens of energy services.



(Source: Aspen Global Change Institute. Adapted from (McCauley et al., 2013))

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**WHERE DO WE SEE THESE CONCEPTS AT PLAY IN IOWA?**

Think about the customers you serve and how they may grapple with these challenges.



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**ENERGY BURDEN IN IOWA (TOP 10 CENSUS TRACTS)**

Rank	Census Tract ID	County Name	Energy Burden (percentile)
1	19001960200	Adair County	97
2	19005960400	Allamakee County	97
3	19007950500	Appanoose County	97
4	19179960600	Wapello County	97
5	19061000500	Dubuque County	96
6	19127950500	Marshall County	96
7	19043070500	Clayton County	95
8	19047070300	Crawford County	95
9	19111490800	Lee County	95
10	19177950100	Van Buren County	95

Source: Climate and Economic Justice Screening Tool (CEJST)

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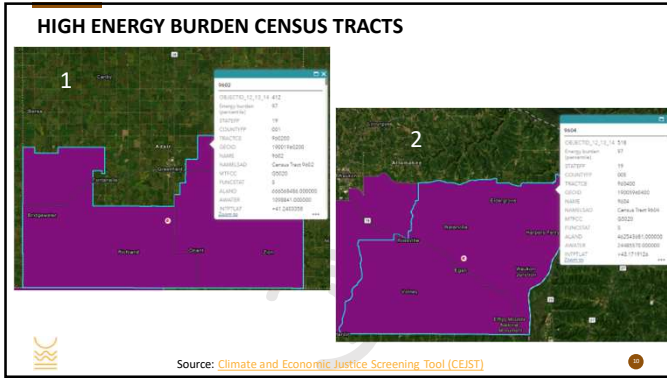
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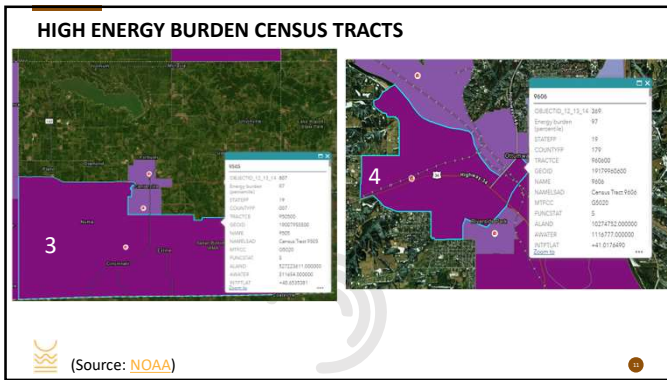
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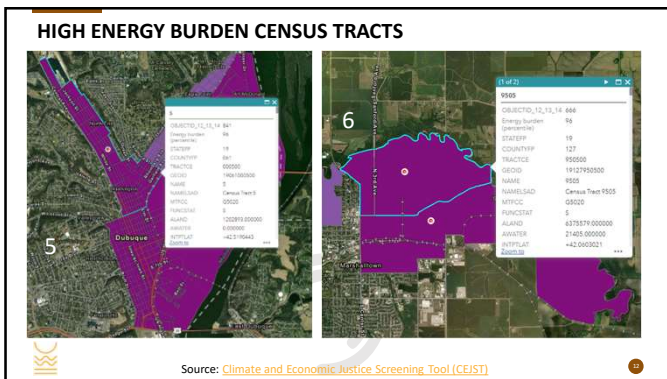
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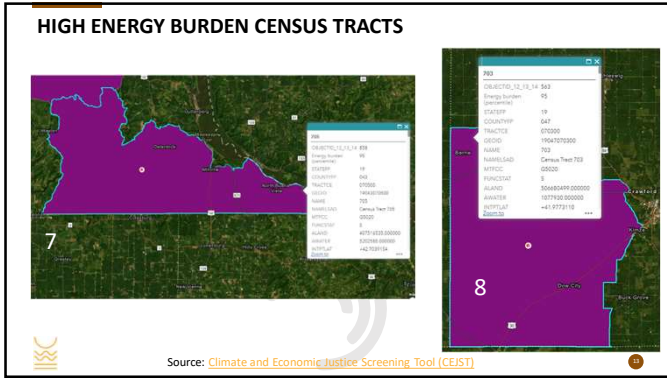
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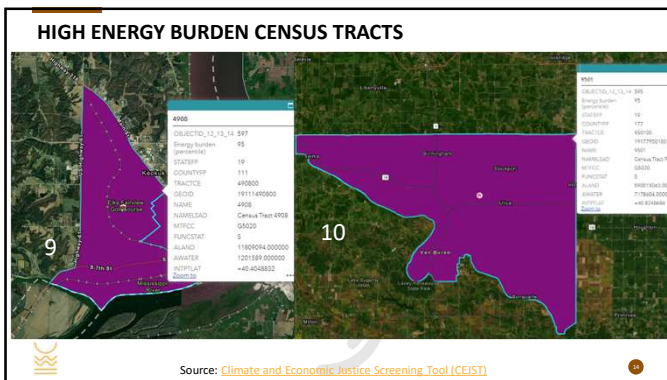
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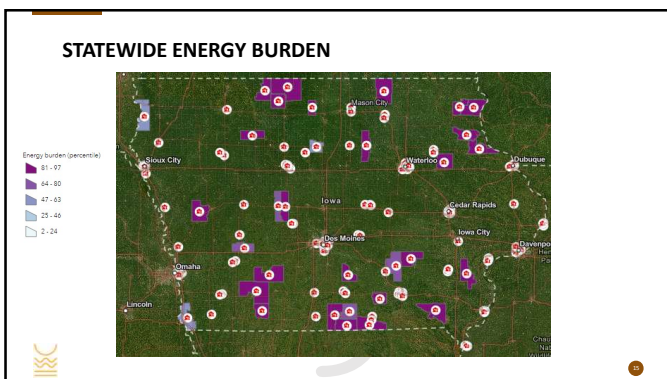
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# WHAT DOES THIS MEAN FOR YOUR CUSTOMERS?



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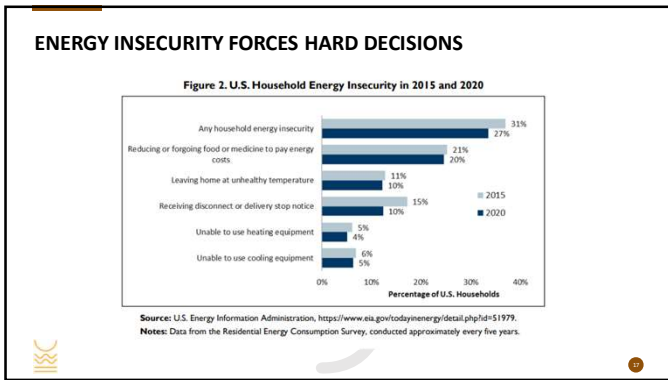
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### NOT EVERYONE IS IMPACTED THE SAME

**Table 2. U.S. Utility Disconnections by Race of Householder, 2021**  
Thousands of housing units

Race	Total Households		Disconnected Households	
	Count	Percent by Race	Count	Percent by Race
White	99,310	77%	429	59%
Hispanic	16,317	12%	109	15%
Non-Hispanic	82,992	65%	320	44%
Black	18,128	14%	252	34%
Native American or Alaska Native	1,589	1%	—	—
Asian	6,948	5%	—	—
Pacific Islander	470	<1%	—	—
Two or More Races	2,658	2%	—	—
Total	128,504	100%	731	100%

**Source:** U.S. Census Bureau American Housing Survey, "2021 National Delinquent Payments and Notices—All Occupied Units" American Housing Survey Table Creator, [https://www.census.gov/programs-surveys/ahs/data/interactive/ahstablecreator.html?\\_lang=en&\\_year=2021&\\_table=TABLES088s\\_bygroup1-9&\\_bygroup2=1&\\_filtergroup=1&\\_filtergroup2=1](https://www.census.gov/programs-surveys/ahs/data/interactive/ahstablecreator.html?_lang=en&_year=2021&_table=TABLES088s_bygroup1-9&_bygroup2=1&_filtergroup=1&_filtergroup2=1).

**Notes:** Blank cells indicates data that did not meet American Housing Survey publication standards or were withheld to avoid disclosure. Thus, disconnected households shown do not sum to totals. Total households may not sum to totals because of rounding. Pacific Islander includes Native Hawaiian and other Pacific Islander. The American Housing Survey considers Hispanic an ethnicity, not a race. Data for Hispanic households of races other than White are not shown.



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## WHAT CAN WE DO?

You know your customers best, so let's work together to alleviate this challenge

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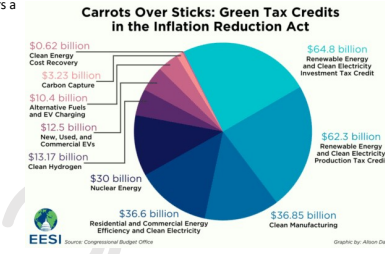
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### LEVERAGING THE INFLATION REDUCTION ACT

Investing in affordable clean energy offers a path forward for Iowa's most energy burdened households.

- Tax credits
- Grant programs
- Loan programs
- Rebates
- Bonuses
- Direct Pay

#### Carrots Over Sticks: Green Tax Credits in the Inflation Reduction Act



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### TAX CREDITS – BUSINESSES, GOVERNMENTS, NON-PROFITS

**Renewable tax credits**

- **Section 48 to 48E** – 30% investment tax credit for solar, small wind, geothermal, fuel cell, microturbine, combined heat and power, waste energy recovery, energy storage technology, and biogas constructed before January 1, 2025. After – 30% technology neutral investment tax credit. Credits start in 2025 and phase out on the later of 2032 or when emission targets are achieved (i.e., the electric power sector emits 75% less carbon than 2022). Taxpayers choose between a PTC (45Y) and an ITC (48E).
- **Section 45 to 45Y** – Production tax credits 1.5 cents/kwh (inflation adjusted to 2.6 cents/kwh) for solar, geothermal, wind, closed- and open-loop biomass, landfill gas, municipal solid waste, hydropower, and marine and hydrokinetic facilities constructed before January 1, 2025. After - technology neutral production tax credit. Credit of 1.5 cents/kwh (inflation adjusted projected at 2.8 cents/kwh) start in 2025 and phase out on the later of 2032 or when emission targets are achieved (i.e., the electric power sector emits 75% less carbon than 2022). Taxpayers choose between a PTC (45Y) and an ITC (48E).

**Clean Vehicle**

- **Section 45W** – available to taxpayers. \$7500 for vehicles < 14,000 GVWR, up to \$40,000 all others.

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### DOMESTIC CONTENT BONUS

- A taxpayer certifies to the Secretary of the Treasury that "any steel, iron, or manufactured product was produced in the United States.
- Steel and iron – 100% (structural components)
- Manufactured product – adjusted percentage = 40% to 2025, 55% after 2026
  - A Manufactured Product is considered to be produced in the United States (U.S. Manufactured Product) if:
    - (1) all of the manufacturing processes for the Manufactured Product take place in the United States; and
    - (2) all of the Manufactured Product Components of the Manufactured Product are of U.S. origin. A Manufactured Product Component is considered to be of U.S. origin if it is manufactured in the United States, regardless of the origin of its subcomponents.




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### DOMESTIC CONTENT BONUS

Applicable Project	Applicable Project Component	Categorization
Utility-scale photovoltaic system	Steel photovoltaic module racking	Steel/iron
	Pile or ground screw	Steel/iron
	Steel or iron rebar in foundation (e.g., concrete pad)	Steel/iron
	Photovoltaic tracker	Manufactured Product
	Photovoltaic module (which includes the following Manufactured Product Components, if applicable: photovoltaic cells, mounting frame or backrail, glass, encapsulant, backsheet, junction box (including pigtails and connectors), edge seals, pottants, adhesives, bus ribbons, and bypass diodes)	Manufactured Product
	Inverter	Manufactured Product

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### GOVERNMENT AND TAX EXEMPT ENTITIES DIRECT PAY

- **Eligible Organizations** - Nonprofit organizations, rural electric cooperatives, schools, state and local governments, Native American tribes, and other entities are eligible to receive direct government payment of the following tax credits.
  - **30% investment tax credit** for solar, small wind, geothermal, fuel cell, microturbine, combined heat and power, waste energy recovery, energy storage technology, and biogas constructed before January 1, 2025.
  - **30% technology neutral investment tax credit** replaces Section 48 with an emissions-based investment tax credit that is neutral and flexible between clean electricity technologies.
  - **Production tax credits 1.5 cents/kwh (inflation adjusted to 2.6 cents/kwh)** for solar, geothermal, wind, closed-and open-loop biomass, landfill gas, municipal solid waste, hydropower, and marine and hydrokinetic facilities constructed before January 1, 2025.
  - **Technology neutral production tax credit** replaces Section 45 with an emissions-based production tax credit that is neutral and flexible between clean electricity technologies. Credit of 1.5 cents/kwh (inflation adjusted projected at 2.8 cents/kwh) start in 2025 and phase out on the later of 2032 or when emission targets are achieved.
- **Both PTC and ITC Bonuses**
  - A 10% bonus for projects located in energy communities (defined as brownfield sites or fossil fuel communities).
  - A 10% bonus for meeting domestic manufacturing requirements for steel, iron, or manufactured components.
  - After 2024, a 10% bonus for projects located in low-income communities or on Tribal land; 20% bonus for projects located in low-income residential buildings or part of low-income economic benefit projects.

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**IRA REBATES AND TAX CREDITS - INDIVIDUALS**

**Investment tax credits and Rebates**

- **Section 25D** – An investment tax credit for residential solar, wind, geothermal, battery storage greater than 3 kwh, and biomass fuel. A 30% credit starts in 2022 and goes through 2032, declining to 26% in 2033 and 22% in 2034. (No caps)
- **Section 25C** - A 30% tax credit on energy efficiency home improvements such as insulation, air sealing, installation of energy-efficient doors and windows, and more.
- **Section 50121** - HOME ENERGY PERFORMANCE-BASED WHOLE HOUSE REBATES (HOMES) provides rebates to homeowners and aggregators for whole-house energy saving retrofits.
- **Section 50122** - HIGH-EFFICIENCY ELECTRIC HOME REBATE (HEEHR) provides point-of-sale rebates for eligible electrification equipment and projects. Limited to low income and moderate income households.
- **Section 30D** – New EV tax credit up to \$7500
- **Section 25E** – Used EV tax credit up to \$4000

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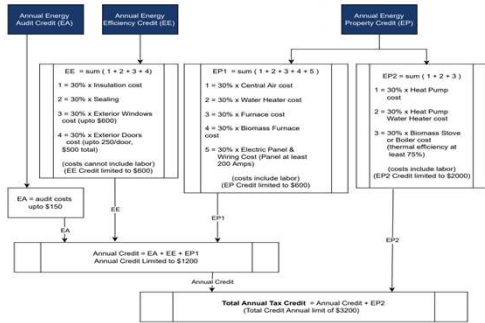
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**ENERGY INFRASTRUCTURE REINVESTMENT (EIR) PROGRAM**

EIR is an incentive for utilities designed to guarantee long-term loans priced just above the yield of US Treasury bonds to projects that:

- Retool, repower, repurpose, or replace energy infrastructure that has ceased operations; or
- Enable operating energy infrastructure to avoid, reduce, utilize, or sequester air pollutants or anthropogenic emissions of greenhouse gases.
- EIR has the potential to revitalize local communities historically dependent on fossil fuel infrastructure while saving electricity ratepayers money and building new clean energy resources — a triple win for communities, customers, and the climate.
- With an **application approval deadline set for the end of September 2026** and a disbursement deadline at the close of 2031, Iowa utilities have a critical opportunity to refinance their retiring coal plants, build new clean energy, and increase their earnings, all while reducing costs to ratepayers.

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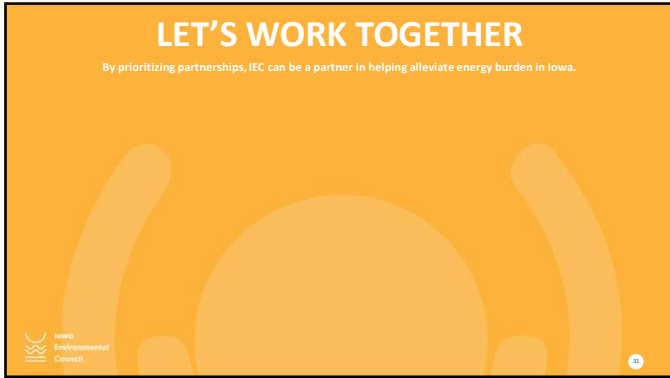
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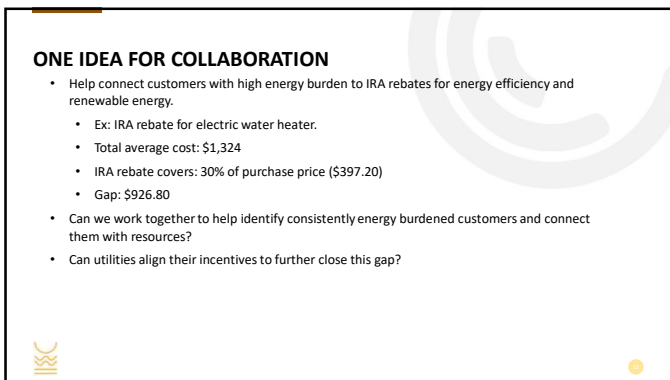
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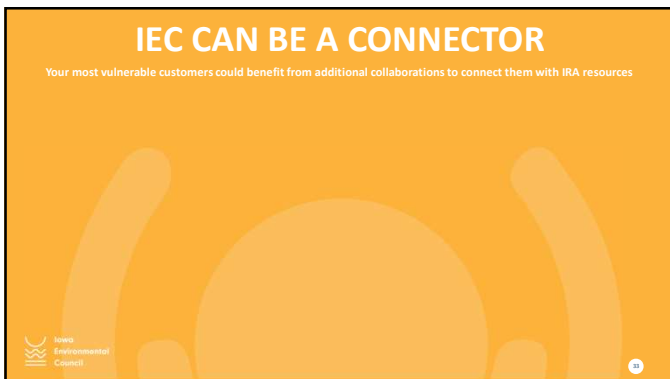
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**EPA THRIVING COMMUNITIES TECHNICAL ASSISTANCE CENTERS (TCTAC)**

- **Goal:**
  - Connect disadvantaged communities with federal funding and provide technical assistance
- **Milestones:**
  - Develop target communities
  - Establish federal funding resources
  - Deliver funds to target communities
- **Key Partner:**
  - Heartland Environmental Justice Center at Wichita State University


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**IOWA FEDERAL FUNDING HUB WEBSITE**

- Connect Iowans with information about key federal programs related to energy, water, environmental justice, and other funding opportunities.
- Serve as an up-to-date resource regarding deadlines and application information for federal climate programs.
- URL: [IAFederalFunding.org](http://IAFederalFunding.org)





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**LET'S MOVE IOWA FORWARD TOGETHER**



**RELIABLE, AFFORDABLE ENERGY**

**HEALTHY, THRIVING COMMUNITIES**





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**JOIN IEC'S LIST AND FOLLOW US ON SOCIAL MEDIA**



@IAEnvironmentalCouncil      @Iowa\_Env      linkedin.com/iowa-environmental-council

@IowaEnvironmentalCouncil      @iaenvironmentalcouncil      <https://www.iaenvironment.org/get-involved/>

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**THANK YOU!**

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