

Track 2: Energy Use

Note to presenter: When you advance to the next slide, your presentation will appear.

Track Subtopics

- Increasing community density through land use reform
- Promoting alternatives to driving and “car culture”
- Scaling up residential building energy efficiency
- Scaling up commercial and industrial building energy efficiency
- Advancing beneficial electrification

Track 2: Energy Use

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Context

Increasing efficiency and **reducing energy demand** across sectors will help us meet our emission reduction goals.

Today, we'll focus on **buildings** and **transportation**.

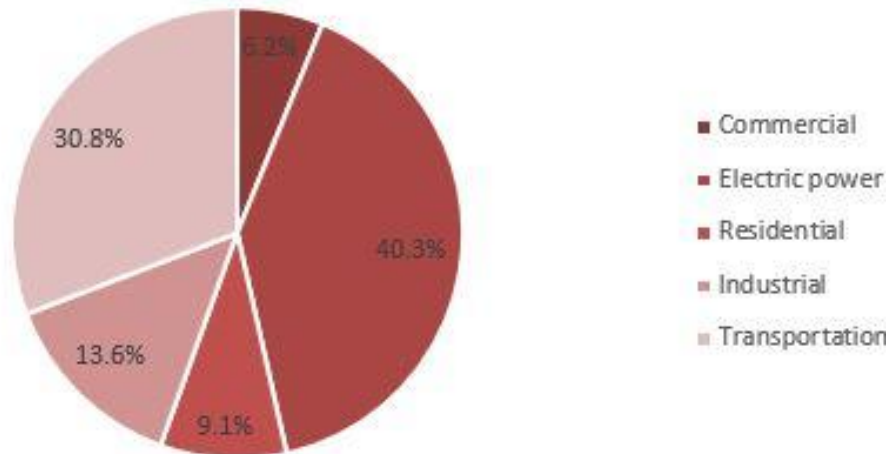
Buildings



Buildings: The Problem

Energy related CO₂
totaled 98.2 million
metrics tons in
Wisconsin in 2017

Wisconsin Emissions by Sector (%)

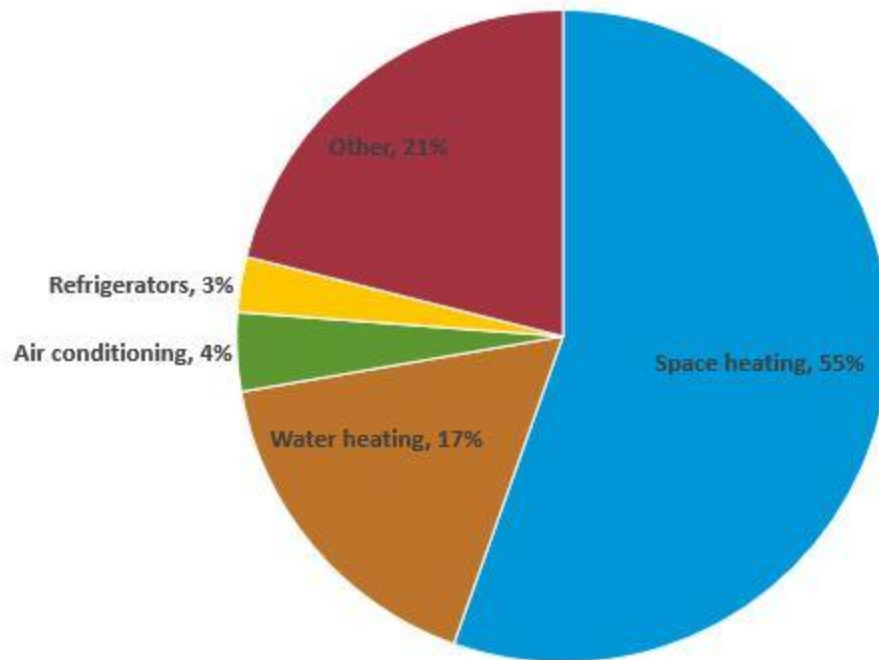


Source: Energy Information Administration, 2016

Buildings: The Problem

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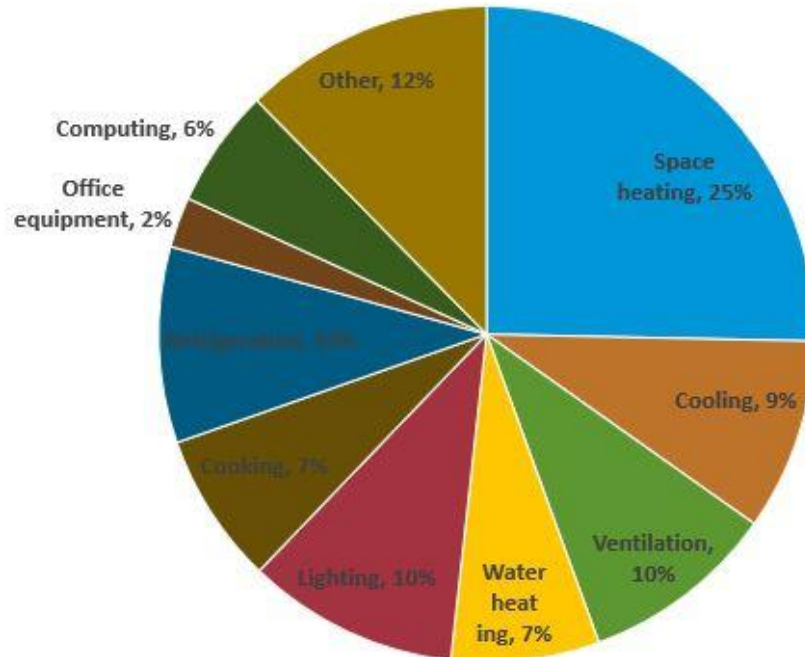
Household End Use Consumption Midwest (2015)
EIA, RECS



Buildings: The Problem

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Commercial Consumption by End Use (2012)
EIA, CBECS



Buildings: The Solution

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- Scale up energy efficiency in buildings, equipment, process, and behavior
- Integrate with transportation, demand flexibility, control technology, updated rate design, beneficial electrification

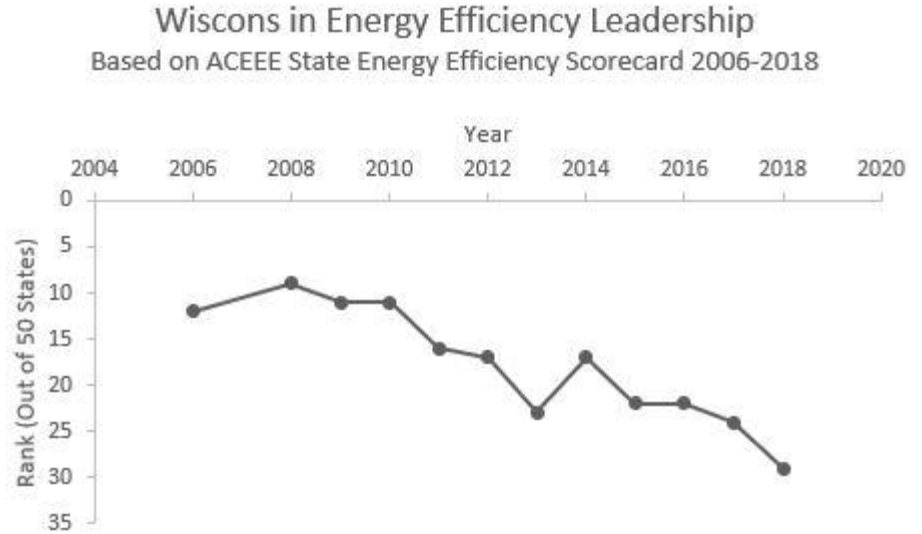
Policy Priorities

- Enact decarbonization legislation with Science Based Targets for Wisconsin
- Create a state energy plan that includes scaled up energy efficiency
- Codify fuel switching policies and procedures that encourage GHG emission reduction with EE measures
- Modernize utility rate design to optimize grid management, clean generation, and demand flexibility
- Unlock private capital to support clean energy investment
- Strengthen federal EE standards
- Commit to engaging the public about energy use
- Update metrics to value emission reduction

Barriers to Reform

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- Informational/behavioral
- Market
- Technological
- Economic investment in the status quo
- Lost leadership and momentum



Transportation



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Image credit: Lorenz Markus Flickr, CC BY 2.0

Transportation: The Problem

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The transportation sector is the **largest source of greenhouse gas emissions in the U.S.**, and the second-largest in Wisconsin.

Our car-centered transportation system and infrastructure also exacerbate **societal inequities**, contribute to **adverse public health outcomes**, and generally **degrade quality of life** in our communities.

Transportation: The Solution

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We need a **comprehensive strategy** to cut emissions from transportation.

On the one hand, this means **electrifying** cars, buses, and other modes.

But just as important: Reducing energy use by **making it easier and more enjoyable for people to get around without needing to drive.**

A comprehensive strategy will be more effective, more resilient and more equitable than just relying on electrification.

What does a comprehensive strategy look like?

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1. Electrify everything

2. Less driving through:

- Compact communities
- More transit
- More walking and biking
- Smart pricing

Image credit: David Wilson, CC BY 2.0; Chicago Bicycle Program, CC BY-2.0; CC0; Eric Wheeler, Metro Transit, CC BY-NC-ND 2.0; jonnyfixedgear, CC BY-NC-SA 2.0

Policy Priorities

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- Prioritize **Smart Growth**.
- Increase **public transit** service to double ridership by 2030.
- Double the number of **active transportation** trips by 2030 by building out walking and biking infrastructure.
- Expand **shared mobility** (bike-share, car-share etc.).
- Implement **smart pricing** to assess the true cost of driving (e.g. through tolling, demand-based road pricing, congestion pricing, parking reform etc.)

Barriers to Reform

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- Economic investment in the status quo
- Longevity of our built infrastructure
- Special interest influence (fossil fuel industries, automakers, ...)
- Negative perceptions of public transit
- “Car culture”



Image credit: Michael Theis, Flickr, CC BY-ND 2.0

Question & Answer

Contact Information

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