

Moving Towards Carbon Neutrality

Picking the Low Hanging Fruit First

Lillian L. Woolley, PE



Michigan's Healthy Climate Plan



Whitmer sets lofty goal to make Michigan carbon-neutral by 2050

WWJ News · 9/23/2020



(WWJ) Gov. Gretchen Whitmer is taking aggressive action to reduce Michigan's carbon footprint in the coming decades.

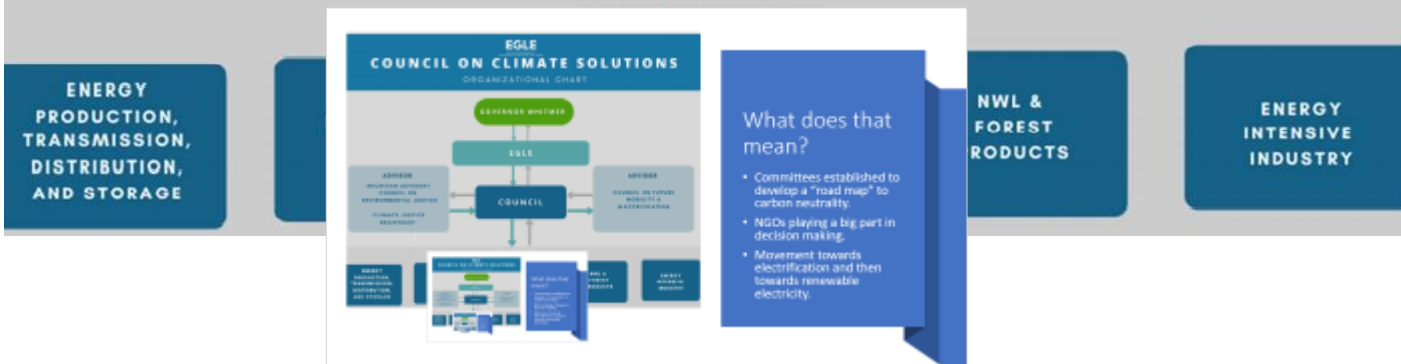
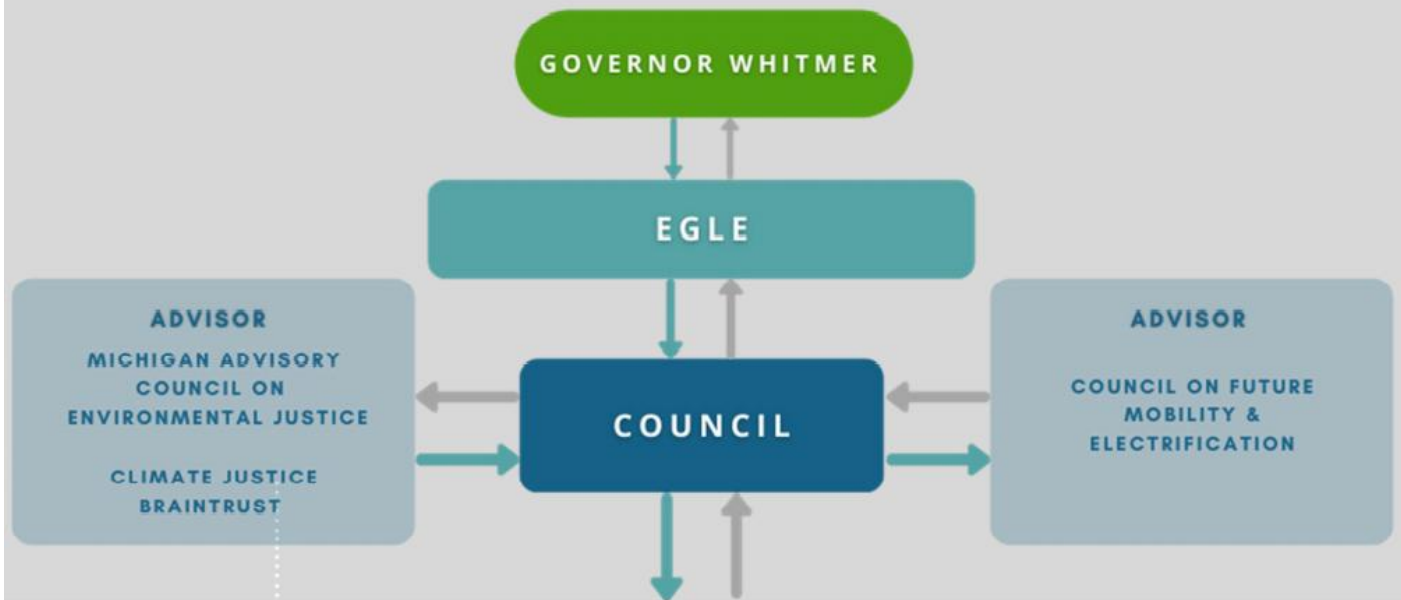
[Executive Order 2020-182](#) and [Executive Directive 2020-10](#) to create the MI Healthy Climate Plan, which Whitmer's office says will protect Michiganders' public health and the environment and help develop new clean energy jobs by putting Michigan on a path towards becoming fully carbon-neutral by 2050 -- a goal the governor set on Wednesday.



EGLE
MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

COUNCIL ON CLIMATE SOLUTIONS

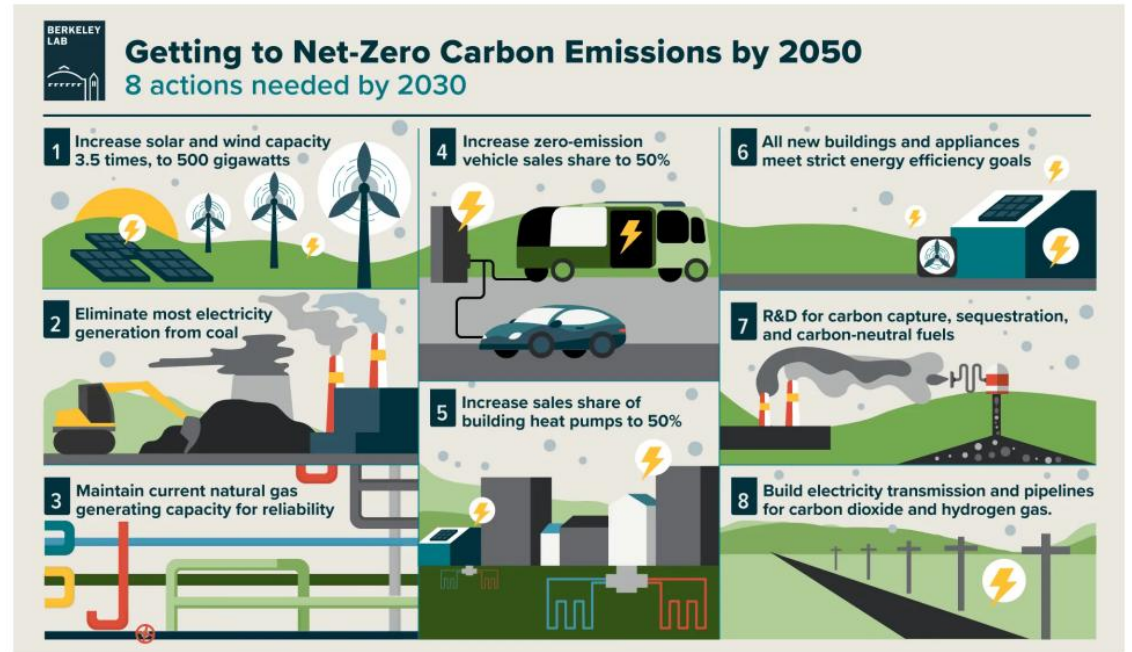
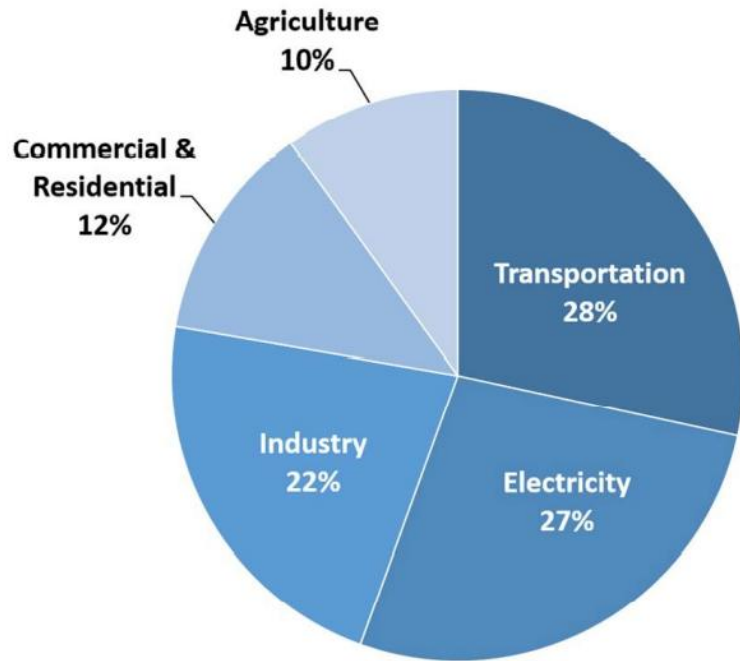
ORGANIZATIONAL CHART



What does that mean?

- Committees established to develop a “road map” to carbon neutrality.
- NGOs playing a big part in decision making.
- Movement towards electrification and then towards renewable electricity.

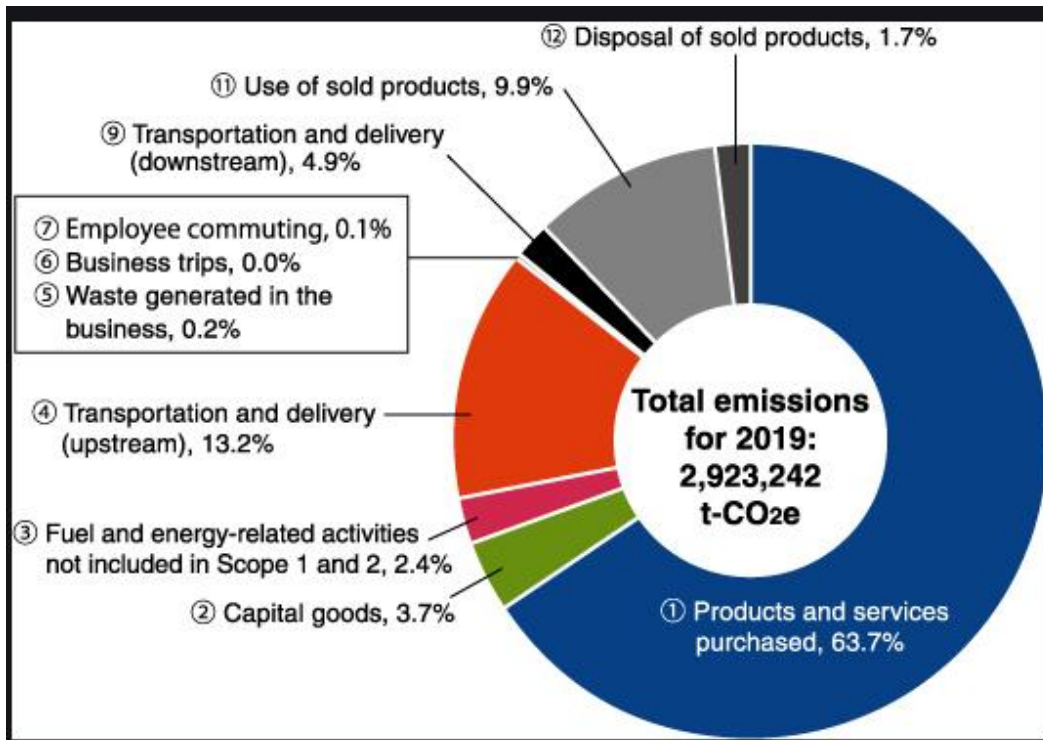
Sources of Greenhouse Gas Emissions in 2018



How does this affect my company?

Establish your Inventory

- Define the emissions included – direct? indirect?
- Define boundaries of the inventories
 - Scope 1
 - Scope 2
 - Scope 3
- Set up a system for monitoring and tracking.
- Evaluate the inventory



Measure What Matters

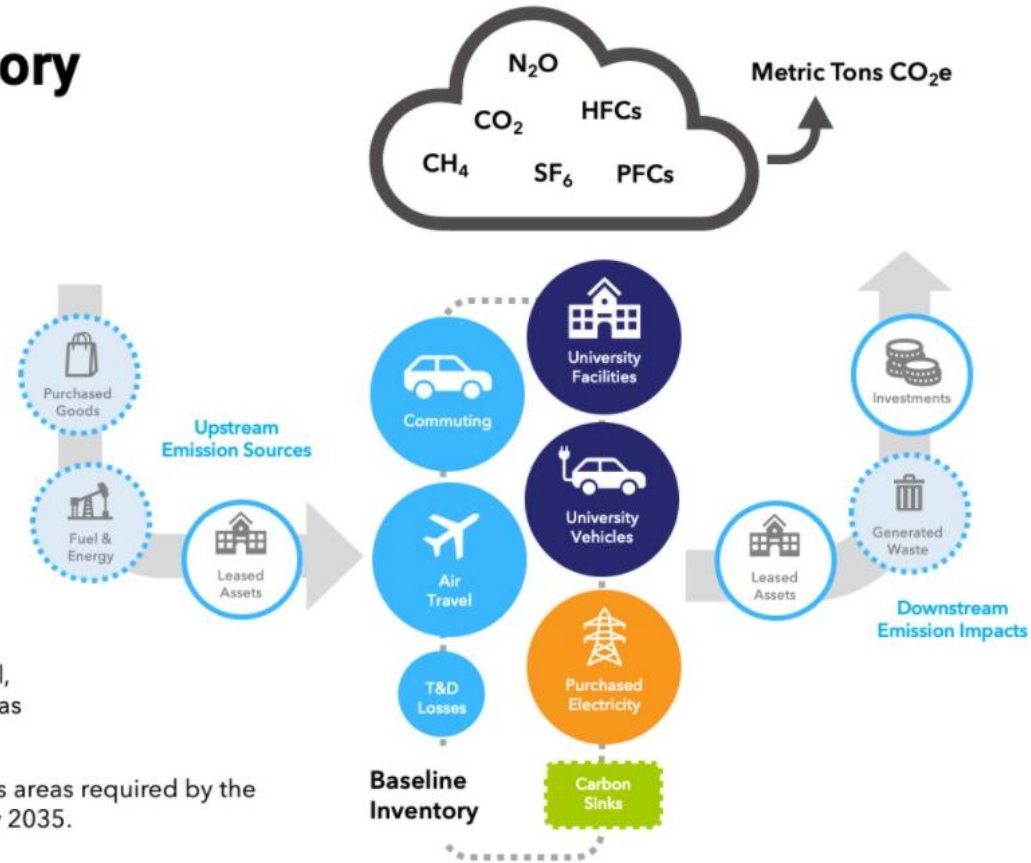
Cornell University Greenhouse Gas Inventory

Legend

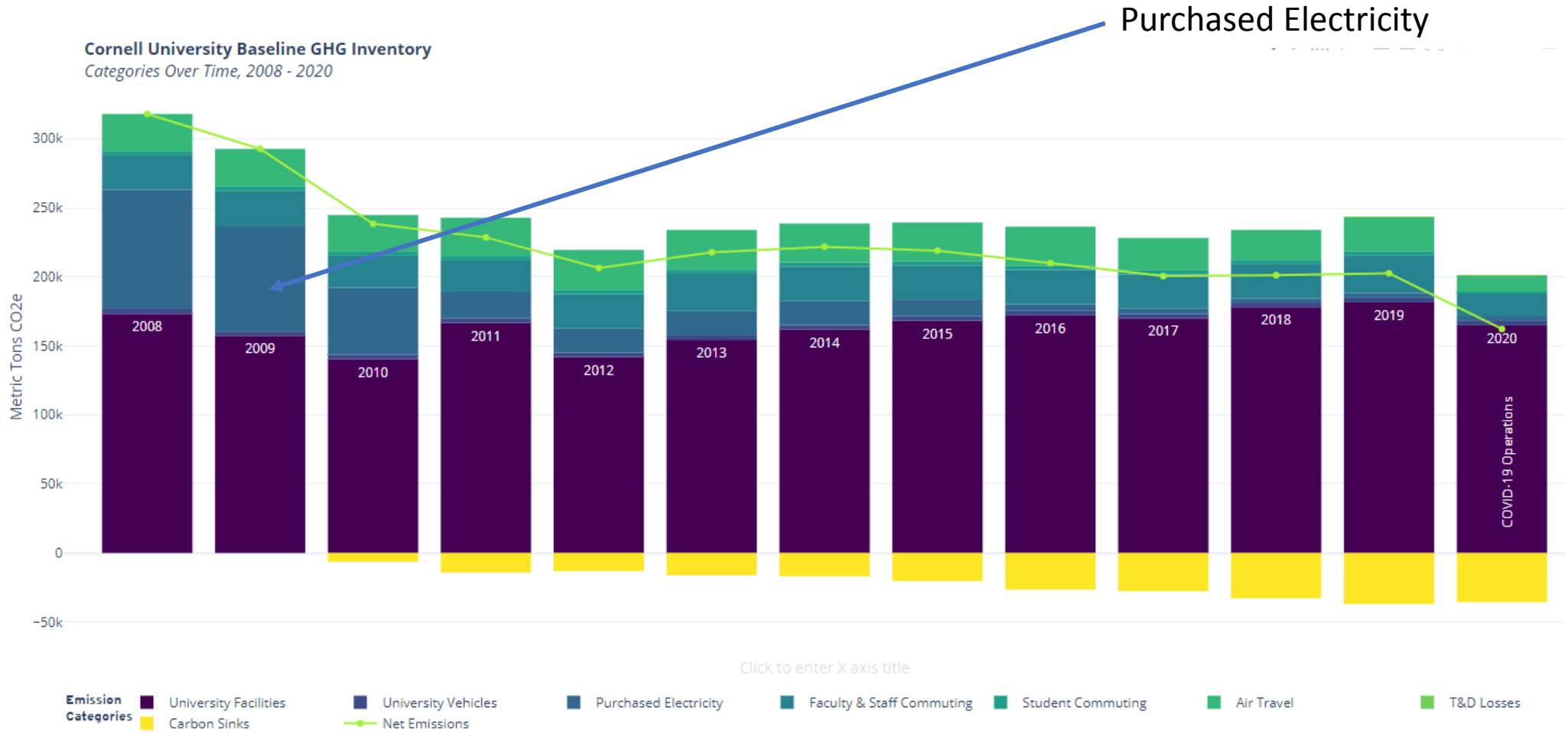
- Measured in Baseline Inventory
- Scope 1 Emissions
- Scope 2 Emissions
- Scope 3 Emissions
- Carbon Sinks
- Additional Scope 3 Inventories
- ⊗ Preliminary Scope 3 analysis completed
- ⊙ Additional Scope 3 sources, not measured

Cornell University measures all Scope 1, Scope 2, and Scope 3 emissions from Commuting, Air Travel, and T&D Losses and reductions from carbon sinks as part of a **Baseline Inventory**.

The baseline inventory began in 2008 and includes areas required by the Carbon Commitment to reach carbon neutrality by 2035.



Track Progress – Look for Opportunities



Important Trends – Energy Efficiency

- Lower Usage
- Use Rebates

Consumers Energy makes first-in-nation goal of "net zero carbon emissions" by 2040

By TRACY SAMILTON • FEB 24, 2020

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Consumers Energy says energy efficiency will be a big part of its plan to reach net zero carbon emissions by 2040.

CREDIT: PIQSELS.COM

One of the nation's largest electric utilities says it will reach net zero carbon emissions by the year 2040.

It's the most ambitious goal yet for a U.S. electricity company. Five electric utilities, including DTE Energy, have committed to reaching net zero by 2050.

Net zero carbon emissions means a combination of eliminating and offsetting carbon dioxide emissions to achieve zero carbon emissions attributable to the company.

Do we really need this?

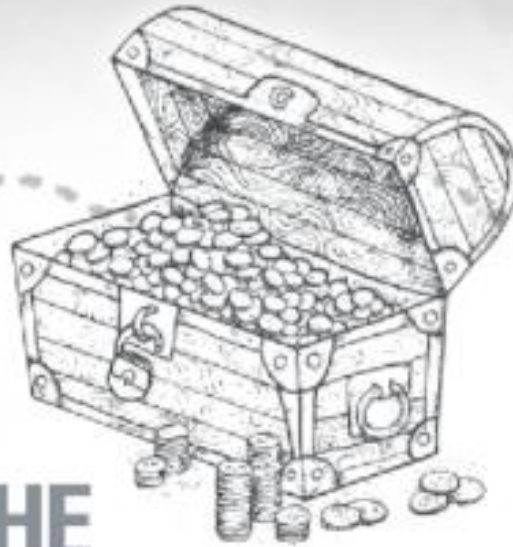
- Unique opportunity with COVID – going back to the same way we did things before?
- Is equipment sized correctly?
- Is it working correctly?
- Is it maintained properly?
- Is its fuel use/electricity use as you would expect?
- Idle equipment – including vehicles?
- Testing equipment – always necessary?



Common Energy Efficiency Projects

- Steam trap audits
- Maintenance and tune-ups
- Fix leaks of all kinds!
- LED Lights
- Air compressors
- Appliances
- Use of timers





FIND THE
TREASURE 
IN YOUR FACILITY

Employee Engagement

- Communicating Goals
- Employees Identify Additional Opportunities
 - GE sponsors “treasure hunts” inviting employees to participate in facility studies that have identified more than \$150 million in savings over the last ten years!



Energy Management

Maybe its not who, what and where energy is used – but when too?

- With the advent of smart meters, it might soon be possible to save money in scheduling electricity usage
- A link might be needed between the employees securing electricity and making budgets for energy use and those managers working to reduce consumption and improve efficiency

Benchmarking

Comparing Energy Use

- One hospitality and entertainment company uses a quarterly energy scorecard to compare properties.
- The sites that are lagging can learn from the leaders to improve performance.

Developing Enterprise-wide Energy Use



Evanston officials, hoping to join Chicago in requiring owners of large buildings to report their energy usage, plan to make owners of proportionately several times as many buildings file such reports.

Program Details

- Set an Aggressive Goal
- Energy Tracking
- Road Map
- Commitment to 28% by 2025
- Use Rebates
- Employee Participation

Express Applications

Steam Trap Express

Replacing failed steam traps extends the life of equipment, saves time and enhances comfort and safety. Get a complimentary steam trap audit to detect leaks that can cost a business up to \$500 per failed trap, annually. Find out more and download the express application at ConsumersEnergy.com/steamtrapexpress.

Natural Gas Tune-up/Maintenance

The quickest way to receive up to \$3,000 in natural gas incentives and replace inefficient equipment with new energy efficient technologies. Find out more and download the express application at ConsumersEnergy.com/hvacrebates.

Business Instant Discount Program

Instant savings, no application required! Simply purchase the measures from participating distributors to receive the instant discount, look at page 44 and 45 for a list of all the eligible measures. The incentive is a discount at the point of purchase from participating distributors. For full details, visit ConsumersEnergy.com/instantdiscount.

Changing behaviors

- Publicize information on your inventory, goals and projects
- Ask people to get engaged!
- Change employee mindset
- Everybody can do their part
- Look for energy vampires

5 easy tips to save energy on campus

- 1 Turn off the lights
- 2 Leave space around radiators and vents
- 3 Set your thermostat between 68°F – 76°F
- 4 Close the windows when you leave
- 5 Shut the sash on fume hoods when not in use



Michigan Saves™

Residential Homes

Commercial Buildings

Co

Energy financing to

Financing Options

- Low-Cost Loans
- Requires an Energy Assessment
- Loan payback is through monthly bills

Offsets

Do offsets “count”?

Together, We Can Reduce Our Environmental Impact

Natural Gas Balance helps reduce the average household carbon emissions footprint through a combination of Carbon Offsets and Renewable Natural Gas.

- ✓ [Offset up to 100%](#) of emissions from average natural gas usage in water heaters, heating and other home uses
- ✓ Help preserve Michigan forests
- ✓ Support the use of Renewable Natural Gas to reduce methane gas emissions



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VERIFICATION





Questions?

Thank you!

llwoolley@fishbeck.com