



Cascade**Energy**[®]

2025 Midwest Energy Solutions Conference

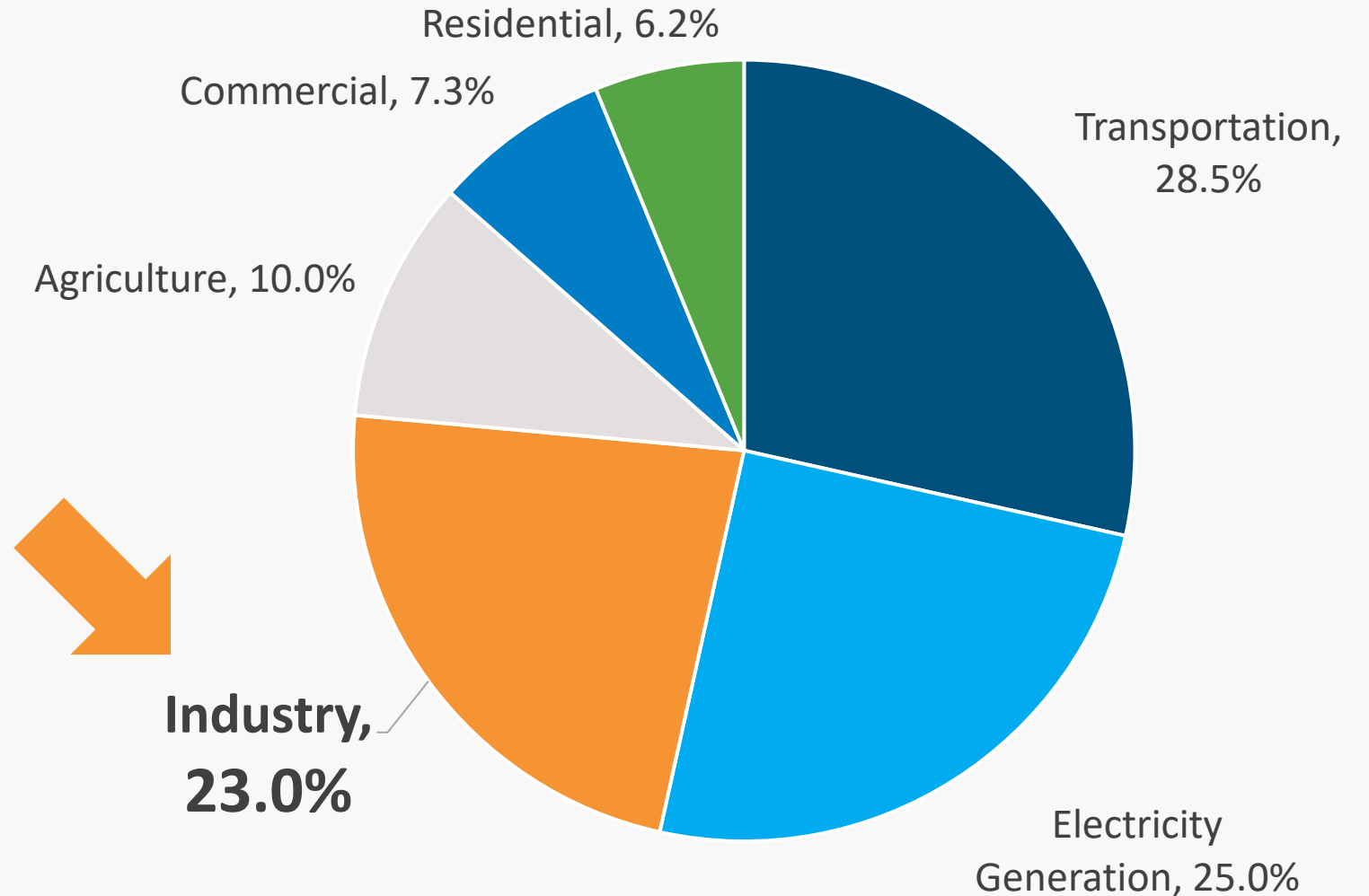
Industrial Energy Efficiency in Action

1/29/25

Josh Bachman, P.E.
Vice President of Customer Engagement

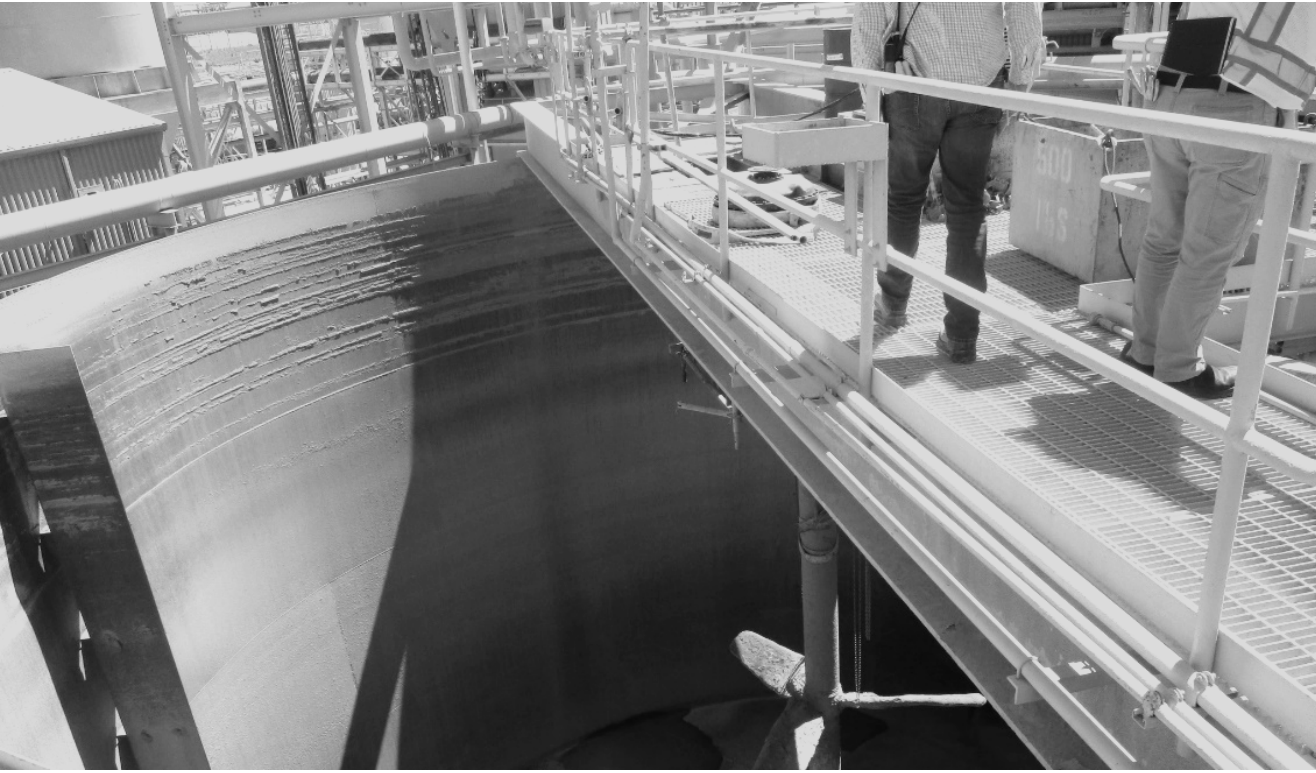
Industrial Sector GHG Emissions are a **BIG DEAL**

US GHG Emissions by Sector - 2022



Environmental Protection Agency, U.S. Greenhouse Gas Inventory
Data Explorer (cfpub.epa.gov/ghgdata/inventoryexplorer/index.html)

Cascade Energy – Industrial Decarbonization is What We Do



30

230

1,500

Our Target Markets

Utilities



Corporate



Government



Sysco Case Study

42%

\$200M

4 yrs



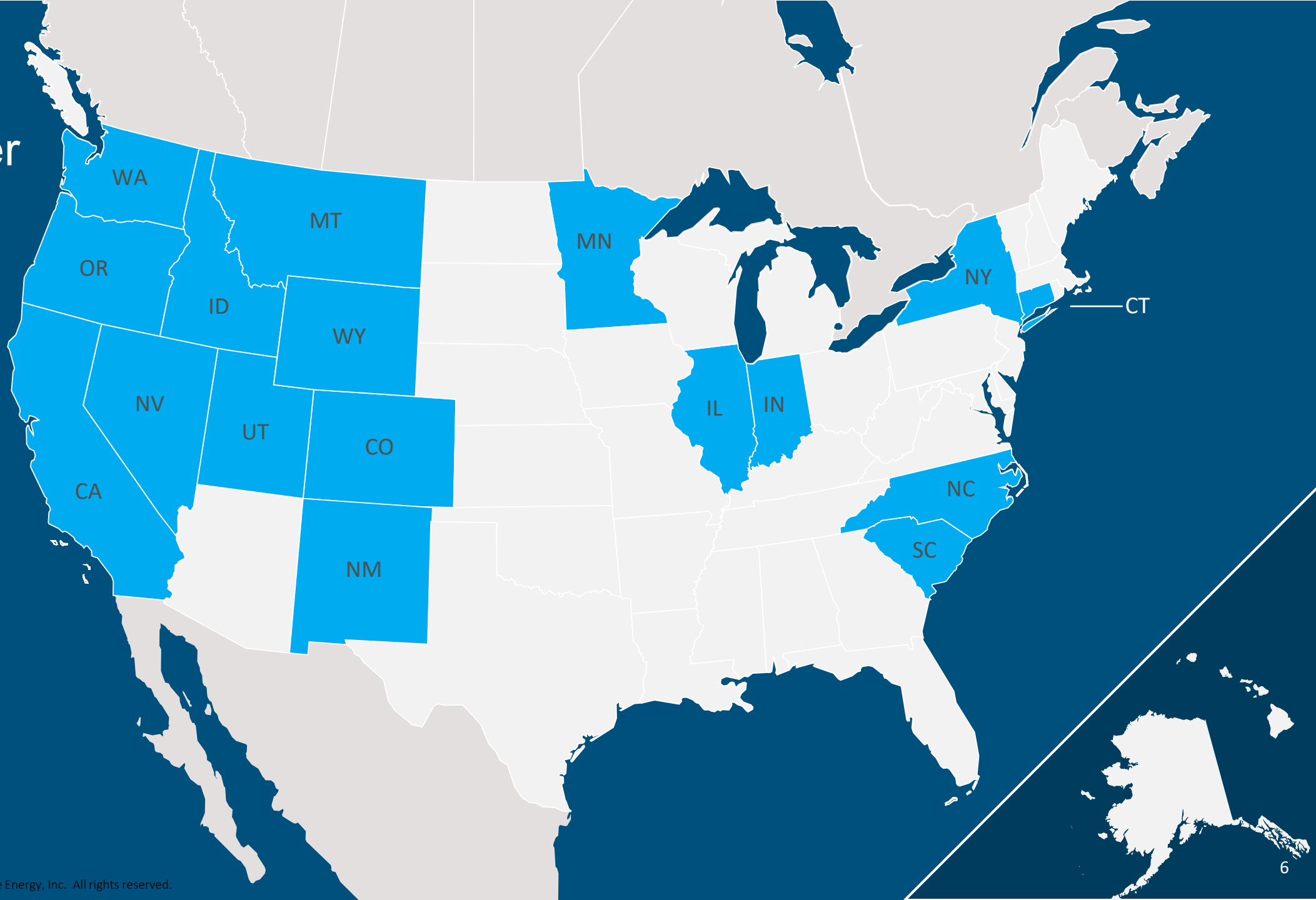
HOME / OPERATING SUSTAINABLY / WAREHOUSE & DISTRIBUTION CENTERS

Warehouse & Distribution Centers

- **Complete 60 on-site facility commissioning events by the end of FY2018 which aim to identify savings and training opportunities.** In FY2016, 23 facility commissions were completed and 19 are scheduled to be completed in FY2017. An example of the results of one facility's commissioning event: its energy use prior to the commissioning event had been trending 5 percent higher than the prior year. Afterward, it experienced 10 percent+ energy savings;
- **Create and administer Sysco-specific energy efficiency training events and certification exam for facility personnel that focus on refrigeration and warehouse efficiency best practices.** Five, one-day training sessions were held in FY2016 and were attended by associates from 95 different operating locations. Two additional training events will be held in FY2017;
- **Create and implement a three-tiered technical support plan for facilities that are not achieving monthly energy reduction goals.** All facilities in the EM program have installed energy monitoring hardware to track real-time energy use. A baseline energy model establishes site-specific benchmarking that is monitored on an ongoing basis. If a facility shows evidence of negative efficiency trends, Energy Champions at the facility are notified, system checks are performed and if necessary, an action plan is created to return to baseline performance, or better.

As a result of our increased efforts, in FY2016 we reduced our energy intensity by 3.9 percent, exceeding our goals for both savings and energy use. At the end of FY2016, 108 facilities were included in the program and our EMP initiatives had generated cumulative energy savings of 42 percent since our baseline year of 2006, achieving more than \$200 million in total avoided energy costs.

Where We Deliver Utility Programs Today



NEW PLANT SAVES MILLIONS

Old Processes Swapped for Energy Efficient New Construction

Project Overview



New RFP Drum Pulper

The new drum pulper allows [redacted] to expand operations to recycle wastepaper from across Washington and Oregon and save it from going into the landfill. [redacted] is now able to produce all packaging paper grades with 100% recycled paper by using the new equipment and it is made with a higher yield, less water, and less electricity. This will support more than 500 direct jobs. With this new equipment [redacted] continues its commitment to cutting edge environmental efforts and supporting the regional economy.

Annual Results



58,300,000 kWh
First Year Savings



\$2,330,000
Annual Avoided Energy Cost



5.2K Avg. Pacific
NW Homes
Powered by Energy Saved

Industrials are...



**Lack staff and
continuity**



**Struggling to
communicate
value of efficiency**



**Lacking
energy
expertise**



**Long on
priorities**



**Focused on
product & staying
competitive**

Thank You



Josh Bachman

Cascade Energy

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