

# Real-Time Energy Insights Create Lasting Change in Wisconsin

Alliant Energy customers reduce energy use by 4% with Sense

#### Summary

In 2024, Sense wrapped a multi-year program with Alliant Energy to explore how real-time home energy insights could help Wisconsin households use less energy— and spend less doing it.



Unlike other programs that typically target either reducing energy consumption or demand, Sense, in partnership with Cadmus Group, sought to understand how these two goals connect. The result: real savings, deeper engagement, and a stronger relationship between people and the grid.

<u>Analysis of the study</u>, conducted by Cadmus Group and filed with the Public Service Commission of Wisconsin, found that the Sense mobile app led to at least four years of persistent savings that tended to increase with each year of participation, as well as measurable demand reductions during peak events. By providing users with real-time device-level insights, Sense empowered homeowners to take meaningful actions.

> Achieving a 4% reduction in electric consumption as well as gas savings of 2.5%

These savings added up to significantly lower bills for participants. Additionally, the program achieved.

Up to 10% peak demand reduction during summer events.

### Approach

Launched in 2019, the Home Energy Monitoring Program used a multiphased approach to recruit and deploy Sense's technology to over 900 participants.

Drawing from a cross-section of customer segments, including rural and low-to-moderate income households, the program's key objectives were:

- Measuring energy savings from greater awareness of device-level consumption
- Evaluating how real-time feedback deepens customer engagement
- Assessing the effectiveness of Sense's energy insights in demand response events

After installing the Sense Home Energy Monitor, participants connect to the Sense mobile app, giving them immediate access to real-time, device level insights.

They could see which appliances were using the most power, get alerts about unusual usage and spot energy hogs that might need maintenance or replacement.

Armed with this information, participants could adjust their behaviors, shifting usage away from peak times and optimizing efficiency.



Beginning with Phase III, Sense developed personalized email messages to encourage ongoing engagement with the Sense app and to help participants explore deeper application features such as understanding the impact of Always-On usage.

Starting with Phase V, participants were invited to join 15 demand response events, spanning both summer and winter periods. Ahead of each event, they received reminders through texts, Sense app notifications and emails. Participants were encouraged to use Sense for instant feedback on what devices could be curtailed during the event. After each event, they received a clear summary of the impact they made, helping them prepare for the next one.





You used less energy than you've typically used on similar days, so you qualify to earn rewards. You earned 4 prize drawing entries because you saved 4 kWh. After September 31st, your entries will be included in a drawing for a chance to win prizes that include a pair of tickets to a Green Bay Packers game or one of three \$200 visa cards.

#### High Demand Devices

During the event, the following devices used the most energy:



During future events, check your Sense monitor to see which devices are using the most electricity and power down unnecessary items to earn rewards.

**Real-Time Insights Drive Better Outcomes.** 

Sense's device-level insights provided users with near-instant feedback, helping them understand the tangible impact of their actions—something missing from traditional demand response programs.

#### Impact

## 518 kWh

#### **Energy Savings**

On average, participants reduced their electricity use by 4% annually. Even more impressive, savings not only persisted but increased year over year, reaching up to 518 kWh per person by the third year.

### 10 %

#### **Demand Reduction**

During summer events, participants achieved peak demand reductions averaging 10%, outperforming typical results from standard behavioral demand response programs.





#### Engagement

Most participants said the Sense app helped them build better energy habits and 85% reported they intended to maintain those habits long term.



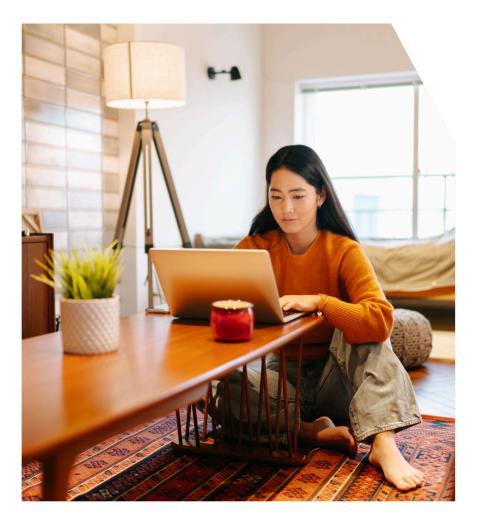
\$135

#### **Cost Savings**

With better energy awareness came lower bills—an average of \$135 saved per participant, per year.

#### Research

Cadmus Group routinely surveyed participants over all phases of the program to understand their satisfaction with the program, including the Sense app, as well as any non-energy saving impacts:



#### 79%

Said they'd join future demand response events.

#### 35%

Changed their energy-saving behaviors after participating in the program.

#### 54%

Felt more positively about Alliant Energy since participating in the program.

#### 97%

Sought out additional energy saving opportunities, including appliance updates and replacements.

I used to participate in a demand response program that controlled my AC, but I never knew what I was actually saving. With Sense, I could see it immediately, and that kept me engaged.

#### What's Next?

For Alliant Energy, the results of this pilot are just the beginning. As they look to modernize their grid and deepen customer relationships, Sense provides a clear path forward.

Rather than continuing with individual hardware installs, Alliant Energy can now take advantage of Sense software embedded in AMI 2.0 smart meters—already adopted by leading meter manufacturers. As their first-generation meters near end-of-life, this transition creates a natural opportunity to scale personalized insights across their entire service area.

Customers will be able to connect to Sense using the devices they already have-no new installs, no extra friction. That means faster adoption, greater cost efficiency, and a stronger foundation for demand flexibility, decarbonization, and grid resilience.

The technology is ready. The meters are coming. And the opportunity to drive smarter energy use-at scale-is right here. To view the full report from Alliant Energy to the Public Service Commission of Wisconsin:



Learn more about how Sense helps drive demand flexibility:



https://sense.com/utilities/

utilities@sense.com