

DTE & Consumers Energy x ICF x Ekotrope Case Study



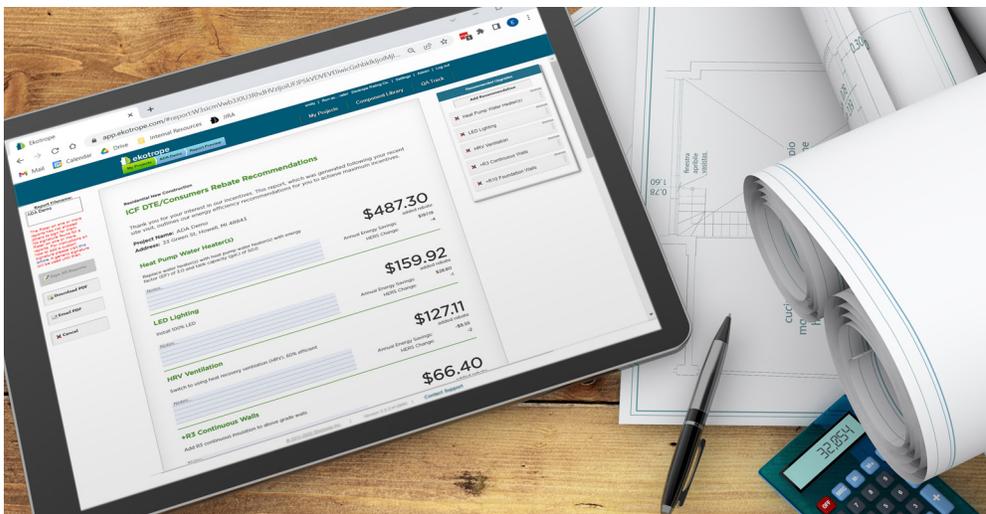
Executive Summary

The ICF team is the implementation contractor for Michigan's two largest energy providers, managing the collaborative New Home Construction Program for Consumers Energy since 2020 and for DTE's separate program since its launch in 2019. Combined, roughly 70% of newly constructed HERS rated homes in Michigan participate in the DTE or Consumers Energy programs.

In order to streamline processes and maximize each program's impact, ICF partnered with Ekotrope upon implementation to utilize Ekotrope's Utility Program Solutions, including the: Online Intake Tool, Custom Quality Assurance Checks, Peak Demand Calculation and Automated Design Assistance.

By utilizing Ekotrope's tools ICF, on behalf of their clients, is able to:

- Enjoy a more streamlined, accurate, and cost-effective submission process that requires less time dedicated to quality control efforts.
- Process a much larger volume of applications through the program.
- Easily share projects, reports, and other data using Ekotrope's API.
- Reduce the amount of documentation needed for each project.
- Provide custom program recommendations to raters as they're modeling a home.



“We are very grateful to use Ekotrope’s software tools since ICF began managing the DTE and Consumers Energy programs. The combination of these tools have all saved us a lot of labor and enabled us to spend more time on other key initiatives as the programs grow in scale and complexity. All of this combined with the API connectivity makes the process more streamlined, more organized, and allows for continued growth of the programs.”

JENNIFER ABRAHAM
Program Manager | ICF

A Better Solution

A variety of documents are needed by new homes programs in order to verify that a home has met requirements. Energy providers and implementers, like Consumers Energy, relied on traditional practices for collecting and organizing rebate documents - a tedious task. Because of its relatively recent entry in the market, the DTE New Home Construction program was able to adopt Ekotrope's Online Intake Tool solution from the start.



By comparison, prior to working with Ekotrope for an IT solution, Consumers Energy's previous process involved collecting submissions, HERS reports, and certificates from builders via email. Integrating Ekotrope's Online Intake Tool has eliminated this manual, labor intensive process, improving the HERS rater experience, reducing barriers for builder participation rebates and enabling the program to streamline the application process. **The increased efficiency has saved at least two days for each home submission.**



Additionally, once the builder's documentation was received, the previous process included reviewing documents and manually entering data into a spreadsheet. The integration of Ekotrope's **API not only improved data accuracy, but also saved 3-5 days of batch entry time** required for each home submission.



Since 2020, the Consumers Energy and DTE programs have processed over 10,000 program applications combined. Each of these unique residential new construction projects receive financial incentives administered by the Consumers Energy and DTE programs for meeting above-code energy saving requirements, including ENERGY STAR®. **Ekotrope modeling quantifies the energy savings associated with each home, proving the effectiveness of the programs to save customers on energy costs and reduce greenhouse gas emissions** over the lifetime of their home. To date, Consumers Energy and DTE have distributed nearly \$7 million in incentives to builders committed to building high-efficiency and ENERGY STAR® homes.

As a result of implementing Ekotrope's tools, the DTE and Consumers Energy programs have a more streamlined submission process with increased submission accuracy, enhancing their quality control efforts. This has made the energy providers' programs not only easier to manage and subsequently grow, but also more cost effective.

Ekotrope is proud to have enabled process improvements that support the expansion and growth of these programs.

“ADA is a really great tool as it offers up some equipment and insulation scenarios as well as reports on how to meet criteria for a builder. It's a unique way for the utility companies to give recommendations to the raters and builders. We feel it will become increasingly impactful as time goes on. In a situation where we would need some quick recommendations, I do think this helps get some fast, easy reports to send the builders with options without having to put much thought into it on the design side.”

DAN BRUNS HERS Rater | Energy Diagnostics



Online Intake Tool

With our Online Intake Tool, ICF's program managers can save hours during their application processing time. The tool has eradicated the need for manual inputs and greatly reduced the number of documents necessary to process each project, saving the raters and the program managers both time and money while allowing them to process a larger volume of applications.

Custom Quality Assurance

Ekotrope has embedded quality assurance (QA) checks that notify users of suspected errors and prevent submissions with obvious inaccuracies. These checks have helped ICF and their energy provider program managers provide a better rater and builder experience that is more streamlined while ensuring they aren't spending time reviewing submissions with errors. By adding verification automation to Ekotrope, the program has been able to grow and encourage builder participation while delivering program incentives quickly.

Peak Demand Calculation

Using the energy modeling algorithm, Ekotrope has provided ICF with a peak demand calculation for qualifying projects submitted to the Consumers Energy and DTE programs. We have built out a state specific calculation for the Michigan programs so that the energy providers and their evaluators have the right data when they need it. By using this custom calculation, energy providers can understand the expected savings for each home, as well as expected consumption for both on and off peak times.

Automated Design Assistance

Ekotrope implemented our Automated Design Assistance (ADA) feature in July 2021 in order to help the DTE and Consumers Energy program managers promote their program incentives to raters during the modeling of a home. Recommendations along with the available incentive amounts are surfaced within Ekotrope's HERS Rating tool, Ekotrope RATER, at the most critical point of the home design process.

Since the implementation, the ICF team has seen more builders utilize the recommendations due to consistent exposure to program recommendations. By making raters and builders more aware of available incentives, ADA aids in steadily increasing program participation and reducing overall energy consumption.

