# Consumers Energy All-Electric New Home Construction Pilot Overview

Ross Igoe July 14, 2021



### Agenda

- Introductions
- Program Overview and Incentives
- Participation Process
- Home Registration and Incentive Process
- Program Resources Overview
- Questions

#### Introductions

#### Consumers Energy

- Carrie Harkness Customer Product Manager
- Tom Cox Business Support Advisor

#### ICF

- Ross Igoe Program Manager
- Sheryl Tembe Lead Energy Analyst
- Rob Murawski Account Manager

### **Background on ICF**

ICF's full suite of capabilities offer our clients a seamless end-to-end service experience from design to implementation.

- The largest group of experienced residential, marketing and customer service professionals supporting new home programs.
- Experience gained from 140 energy efficiency programs across the U.S.
- 26 utility sponsored residential new home programs since 2001.
- 70,000+ homes delivered through ICF-managed programs over past two years alone.

### Program Overview and Incentives

#### **Program Purpose**

The Consumers Energy All-Electric New Home Construction Pilot program encourages the residential new construction industry to build homes within the Consumers Energy service territories that meet the following specifications:

- 1. Photovoltaic-Ready or Photovoltaic system installed on-site.
- 2. All-electric home with cold climate heat pump installed.
- 3. Proposed energy modeling completed to verify that the project is designed to meet a Home Energy Rating System<sup>®</sup> (HERS<sup>®</sup>) score of 40 or less prior to PV installation.

### **Eligibility Requirements**

Homes must be located within Consumers Energy electric, and combination (electric and natural gas) service territories as evidenced by city/town, zip code, and ultimately a Consumer Energy electric meter number.

- Qualifying structures must be site-built single-family residential homes, duplexes or townhomes.
- Home must show proof of being PV-ready with completion of DOE's Zero Energy Ready Home PV-Ready Checklist or have PV installed on-site.
- Home must have Consumers Energy electric for the primary heating and water heating fuel type.
- Home must utilize a cold climate heat pump for heating and cooling.
- Proposed energy modeling must implement a highly efficient building envelope to achieve a HERS score of 40 or less.

### **Eligibility Requirements (Continued)**

Homes must be located within Consumers Energy electric, and combination (electric and natural gas) service territories as evidenced by city/town, zip code, and ultimately a Consumer Energy electric meter number.

- Home must be permitted on or after Oct. 1, 2020.
- Home must receive a HERS rating, rough/pre-drywall inspection and final inspection.
- Home construction, PV-Ready Checklist and final HERS rating must be completed by June 30, 2022.
- Incentive application must be updated to include the final HERS rating and be resubmitted to the portal by June 30, 2022.
- Program is funded through June 30, 2022, or through depletion of funds.

#### **Incentive Structure for Market-Rate Homes**

Consumers Energy All-Electric New Homes Rebate Offering	Rebate Amount
PV-Ready, All-Electric New Home	\$10,000
Consumers Energy All-Electric New Homes Bonus Rebates	Rebate Amount
HERS score of 35 or less (before PV is added on-site)	\$2,500
Level 2 Electric Vehicle Charging Station	\$500

**Note:** Builders who do not meet HERS 40 requirement will be subject to a discounted incentive. Final projects submitted with a HERS score of 41–45 will be eligible for 75% of the PV-Ready, All-Electric New Home Incentive. Final projects submitted with a HERS score of 46–50 will be eligible for 50% of the PV-Ready, All-Electric New Home Incentive.

#### **Incentive Structure for Income-Qualified Homes**

Consumers Energy All-Electric New Homes Rebate Offering	Rebate Amount
PV-Ready, All-Electric New Home	\$20,000
Consumers Energy All-Electric New Homes Bonus Rebates	Rebate Amount
HERS score of 35 or less (before PV is added on-site)	\$5,000
Level 2 Electric Vehicle Charging Station	\$500

**Note:** Builders who do not meet HERS 40 requirement will be subject to a discounted incentive. Final projects submitted with a HERS score of 41–45 will be eligible for 75% of the PV-Ready, All-Electric New Home Incentive. Final projects submitted with a HERS score of 46–50 will be eligible for 50% of the PV-Ready, All-Electric New Home Incentive.

#### **Recommended Energy Efficiency Measures**

Below is a list of suggested measures encouraged by the Pilot team to help builders achieve their desired HERS target score. If builders encounter issues achieving a HERS score of 40 prior to PV installation, please reach out to the program team for technical support.

Home Component	Recommended Measure
Air-Source Heat Pump or Mini-Split Heat Pump*	Selected from NEEP's ccASHP Product List
Whole-Home Ventilation	HRV or ERV
Heat Pump Water Heater	UEF 2.00+
Infiltration	1.50 ACH @ 50 Pa. or Less
Insulation	Ceiling/Attic Insulation R-Value: 60+ Wall Insulation R-Value: 30+ Basement or Slab Insulation R-Value: 20+
ENERGY STAR <sup>®</sup> Certified Windows	U-Value: 0.20 or Less
Cooktop	Induction
ENERGY STAR Certified Appliances <sup>+</sup>	CEE Tier II
ENERGY STAR LED	100% LED

\*For Non-Ducted systems: HSPF > 10, For Ducted systems: HSPF > 9, COP @5°F > 1.75 (at maximum capacity operation), SEER > 15

'Tier II – This level signifies energy efficiency at 25% above government mandate

#### **Income Qualified Eligibility Requirements**

Homes may be eligible to participate under the Consumers Energy Income-Qualified All-Electric New Home Construction Pilot program if they meet any of the following requirements:

- 1. Participation in an affordable housing program. Automatic qualification for any property that can provide evidence of participation in a federal, state or local affordable housing program; for example, LIHTC, HUD, USDA, MSHDA, local tax abatement for income-qualified properties.
- 2. Location in an income-qualified census tract. Location within the U.S. Department of Housing and Urban Development's (HUD) annually published "Qualified Census Tracts." More information can be found at <u>huduser.gov/portal/sadda/sadda\_qct.html</u>.

### Income Qualified Eligibility Requirements (Continued)

Homes may be eligible to participate under the Consumers Energy Income-Qualified All-Electric New Home Construction Pilot program if they meet any of the following requirements:

- 3. Rent roll documentation. Submission of rent rolls documenting the average rents charged by a particular property are affordable to households meeting HUD's definition of income qualified. Properties with average rental rates at or below 80% of local "Fair Market Rent," as published annually by HUD, will be eligible to participate in the income-qualified incentives.
- 4. **Resident income information.** Submission of resident income information showing that at least 50% of apartment units are rented to households meeting one of the following criteria:
  - At or below 200% of the federal poverty level
  - At or below 80% of area median income

## **Participation Process**

#### **Program Participation Process**

To participate in this program, builders must follow these steps:

- 1. Submit a Trade Ally Participation Agreement.
- 2. Work with a local HERS rater, who will submit rebate applications on behalf of the participating builder.
- 3. HERS rater submits proposed home design(s) through Ekotrope program portal.
- 4. Consumers Energy pilots team will review application and proposed design to ensure all requirements are met.
- 5. If approved, incentives will be reserved. Note: Consumers Energy has right to withhold or discount incentives if requirements are not met on final application.
- 6. Participating builder completes construction of homes per proposed design.
- 7. Builder registers home with RESNET<sup>®</sup> and submits final HERS rating through program portal, including a completed DOE ZERH PV-Ready checklist.
- 8. If all requirements are met, reserved incentive will be paid to builder based on the project's final HERS rating.

#### Facilitation of QA/QC

- Program participants will be required to participate in program QA/QC during predrywall and final stages of construction.
- QA/QC team comprised of ICF staff, who will collect data points and oversee or conduct diagnostic testing to compare with final application and HERS rating.
- Solid and consistent communication between builders/raters/program staff is required to ensure coordination and minimize rebate delays.

## Home Registration and Incentive Process

#### Submissions – Proposed Model

- Ekotrope users: Complete proposed energy model and fill out Consumers tab within 'Project Info', marking project as 'Under Construction'.
- REM/Rate users: Upload proposed ۰ model via XML and fill out Consumers tab within 'Project Info', marking project as 'Under Construction'.
- Submit project using the 'Submit • Project' dropdown and selecting Consumers Energy.

Site Info Rating Info Utility	Rates Consumers			
Submission Status	Under Construction		-	
Enrolled Builder		```	•	
Expected Start Date	Monday November 1, 2021			
Rough Inspection Date 🛛 🕢	Wednesday December 15, 2	2021		
Expected Completion Date	Thursday March 31, 2022			
Electric Meter Number Gas Meter Number				
Electric Utility	Consumers Energy		•	
Gas Utility		ekotrope Projects Shaw Residence 2	i (	My Project
	A	Upload your Photo malyze Submit Proje	Clark Law, M 4924 Clark Law, M 4924 Anoson Cany, Ones Ans a Project Info Registry (D Unregistered Registry (D Unregistered	Project Notes
	2	Buildi Share with Pro- Share Renders Consumers E DTE Energy	ovider QA Decryy Zy	Component Walis Walis Windows Door
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#### Incentive Reservation & Online Data Entry

For incentive reservation, Home design/Incentive Application must be registered in the portal and be pre-approved by the program. Upon approval, allocations will be reserved for the home(s). Any modifications to the home design may result in a gain or loss of allocation.

Upon registration, it will be required in the Incentive Application to provide the proposed home design set of basic home data, including:

- Lot number
- Street Address
- City
- Zip Code
- County
- Permit Date
- Expected Start Date

- Expected Completion Date
- Expected Close-In Date
- House Type
- House Plan/Name
- Project, Community, Building Name
- Square Footage
- Consumers Energy Electric Meter Number

#### Submissions – Final Model

- Ekotrope users: Complete proposed energy model and fill out Consumers tab within 'Project Info', marking project as 'Final Submission'.
- REM/Rate users: Upload proposed model via XML and fill out Consumers tab within 'Project Info', marking project as 'Final Submission'.
- Submit project using the 'Submit Project' dropdown and selecting Consumers Energy.



#### **Incentive Review**

Completed incentive applications will be processed by the program on a twicemonthly basis. If there is a construction delay greater than 30 days that affects the completion date of a registered home, the expected completion date must be updated in the builder's Incentive Application in the portal.

For online Incentive Applications to be considered complete, the rater must upload the following supporting documentation:

- Completed PV-Ready checklist or verification of PV installation on-site.
- An Ekotrope or REM/Rate file for each registered home.
- A PDF of registered home plans, upon request.

#### **Incentive Review**

- Upon completion, the builder's requested incentive will be verified using the confirmed HERS rater reports.
  - Final HERS score will be determined in accordance with the confirmed Ekotrope HERS rating.
- The HERS rater and Consumers Energy will validate the fuel service(s) provided at the premises. Additionally, the builder must allow access to third-party (ICF) field quality assurance/quality control, upon request.

### Program Resources Overview

#### Marketing & Technical Resources

All-Electric New Home Construction Trade Ally site

Customer Bifold Brochure

All-Electric New Homes and Utility Incentives in Michigan

Technical Bulletins via New Home Construction program

Upcoming: Measure recommendation report via Ekotrope



#### **Questions?**

Consumers Energy

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- Tom Cox <u>Thomas.R.Cox1@cmsenergy.com</u>

ICF

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