



New Home Construction Programs Overview

2022 PROGRAM YEAR





Agenda

Introductions

2021 Program Highlights

2022 Program Overview and Incentives

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Introductions

DTE Energy

Avrie Dunsmore – New Home Construction Program Manager

Consumers Energy

Amber Hicok – New Home Construction Program Manager

ICF

- Jenni Abraham DTE NHC Program Manager
- Rob Riley DTE Account Manager
- Sheryl Tembe Consumers Energy NHC Program Manager
- Rob Murawski Consumers Energy Account Manager
- Patrick McCafferty Consumers Energy/DTE Account Manager

Ignite Social Media

Brandi Royal Washington – DTE NHC Social Media Marketing







CF Implementation Contractor

Global consulting and technology services company

- Provides a wide range of services for governments and businesses, including strategic planning, management, marketing and analytics
- Michigan ICF team implements New Home Construction programs across both DTE and Consumers Energy, as well as Lighting and Appliances, HVAC, Insulation and Windows, and Home Performance with Energy Star
- 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





2021 Program Highlights





2021 Participation



Participation

19 Raters

100 builders

2,500+ approved homes



Incentives

\$2.8M in total incentives



Annual Savings:

Electric: 3,500 MWh

2,741,533 pounds of coal

burned

Gas: 119,900 MCF

1,429 cars taken off the road



Program Homes Participating Measure Data 2021

Want to see where your builds stack up against program averages? Reach out for a review!



Efficiency Measure (Unit)	Program Average
HERS Score Average	56.56
House Infiltration Rate (ACH50)	2.87
Water Heater Eff (UEF)	0.72
Heating System (AFUE)	96.08
Cooling System (SEER)	13.25
Duct Leak (CFM25)	33.32
Ceiling Insulation (R-Value)	39.95
Wall Insulation (R-Value)	14.75
Window Efficiency (U Value)	0.31



Program Homes Participating Incentive Data 2021

Want to see where your builds stack up against program averages?
Reach out for a review!



Average Incentive by Rebate Type						
DTE Incentives	Combo*	Electric	Gas			
Non-ENERGY STAR	\$1,307	\$551	\$912			
ENERGY STAR	\$1,278	\$861	\$1,234			

^{*}Avg. Non-ENERGY STAR home size is 3,900 sf

^{*}Avg. home of ENERGY STAR home size is 2,700 sf



Program Homes Participating Measure Data 2021

Want to see where your builds stack up against program averages? Reach out for a review!



Efficiency Measure (Unit)	Program Average
HERS Score Average	55.0
House Infiltration Rate (ACH50)	2.70
Water Heater Eff (UEF)	0.74
Heating System (AFUE)	96.11
Cooling System (SEER)	13.28
Duct Leak (CFM25)	36.32
Ceiling Insulation (R-Value)	41.52
Wall Insulation (R-Value)	16.88
Window Efficiency (U Value)	0.31



Program Homes Participating Incentive Data 2021

Want to see where your builds stack up against program averages?
Reach out for a review!



Average Incentive by Rebate TypeRebate PathComboElectricGasHERS Path\$816\$295\$458ENERGY STAR\$1,402\$762\$1,294



2022 Program Overview and Incentives





Program Purpose

To increase the energy efficiency of residential new construction and drive market transformation in Michigan by:

- Partnering with local builders and raters
- Providing builder incentives
- Providing field and technical training, and sales/marketing support
- Conducting comprehensive quality assurance
- Driving increased consumer awareness of and demand for energy-efficient new home construction





Home Eligibility

Homes are eligible for incentives based on fuel type provided by utility

Qualifying structures include:

- Site-built single-family residential homes
- Modular Homes
- Detached condominiums
- Connected townhomes (no limit on number of units in building)
- Connected condos and duplexes (limited to buildings with four units or fewer)
 - Must have individual meters for natural gas and/or electricity, individual heat and domestic hot water equipment, and individual entrances to each unit

Manufactured homes are not eligible





Program Eligibility

Builder must work with a program-approved RESNET Home Energy Rating System® (HERS®) Rater in order to participate in program

Rater must complete two inspections during construction:

- 1. Pre-Drywall/Rough Inspection (visual inspection of insulation and air sealing)
- 2. Final/Post Construction Inspection (includes diagnostic testing duct blaster and blower door)

All homes must meet program prerequisites

- DTE = HERS 60 or less
- Consumers Energy = HERS 56 or less, or ENERGY STAR

Programs are funded through Dec. 31, 2022 or through depletion of funds

All homes must be submitted prior to Dec. 31, 2022

Incentive Structure – Single Family Detached Homes

For homes with a rough HERS inspection on or after Jan 1, 2022.

Eligible connected housing will receive a 25% discounted rebate on equipment and ENERGY STAR bonuses.



Builder Incentives	Silver	Gold	Platinum		
Furnace	\$200 96% AFUE	\$250 97% AFUE			
Air Source Heat pump (forced air and ductless mini-split)		\$750 18 SEER+; 9+ HSPF	\$850 19 SEER+; 10+ HSPF		
Ground Source Heat Pump		\$800 17 EER+; 9+ HSPF	\$900 19 EER+; 10+ HSPF		
Infiltration	\$125 3.25-2.76 ACH50	\$200 2.75-2.26 ACH50	\$275 2.25 or less ACH50		
Water Heater (Gas)	\$75 0.66 UEF+ (tanked)	\$100 0.82 UEF+ (tankless)			
Heat Pump Water Heater (Electric)		\$750 3.0 UEF+	\$850 3.5 UEF+		
Windows (up to 10 units)		\$100 per Window .24 or less U value	\$150 per Window .20 or less U value		
Ceiling Insulation		\$500 R 49-59	\$600 R60+		
Wall Insulation			\$700 R 26+		
Slab Insulation			\$700 R 15+		
Lighting			\$100 100% LED		
Pay for performance	\$10/MCF of natural gas saved \$0.25/kWh of electricity saved				
ENERGY STAR bonus	\$350 per house (natural gas and combo homes) \$300 per house (electric only homes)				

Max Rebates – Single Family Homes and Connected Housing

For homes with a rough HERS inspection on or after Jan 1, 2022.



The maximum level of incentives allowed for detached housing are as follows:						
(HERS 60 or less)				less, and a cold-climate the primary heating/coo		
	Standard	ENERGY STAR®		Standard	ENERGY STAR	
Electric	\$1,500	\$1,800	Electric*	\$3,500	\$3,800	
Combo	\$2,100	\$2,450	Combo	\$3,500	\$3,850	
Gas	\$1,300	\$1,650	*If home's only energy \$350 ENERGY STAR b	provider is DTE, then DTE wil ponus	l honor	

The maximum level of incentives allowed for <u>attached housing</u> are as follows:							
(HERS 60 or less)		(HERS 45 or be used as	less, and a cold-climate the primary heating/coo	heat pump must ling equipment)			
	Standard ENERGY STAR®			Standard	ENERGY STAR		
Electric	\$1,125	\$1,350	Electric*	\$3,500	\$3,800		
Combo	\$1,575	\$1,840	Combo	\$3,500	\$3,850		
Gas	\$975	\$1,240	"If home's only energy provider is DTE, then DTE will honor \$350 ENERGY STAR bonus				



Incentive Structure – Single Family Homes

	ENERGY ST	HERS Rebate	
Consumers Energy Service	Single Family HERS 57 or more	Single Family HERS 56 or less	Single Family HERS 56 or less
Combo	\$1,000	\$2,000	\$1,000
Gas-Only	\$700	\$1,400	\$700
Electric-Only	\$300	\$600	\$300
Exceptions*			
*Combo without A/C	\$700	\$1,400	\$700
*Electric-Only Geothermal/Heat Pump	\$1,000	\$2,000	\$1,000



Incentive Structure – Connected Housing

	Connected Housing					
CE Service	ENERGY STAR OR HERS 56 or less	Townhome/Duplex Savings Bonuses				
Combo	\$700	Savings of 30 MCF AND 1,000 KWH or Greater \$300				
Gas-Only	\$550	Savings of 30 MCF or Greater \$150				
Electric-Only	\$150	Savings of 1,000 KWH or Greater \$150				
Exceptions*						
*Combo without A/C	\$550					
*Electric-Only Geothermal/Heat Pump	\$850					





Participation Process





Program Participation Process

Complete program enrollment

- No new builder enrollment needed if you participated in 2021
- Raters are required to sign 2022 Program Terms and Conditions

2022 participation

- Provide any updated contact information
- Provide 2022 projected home details by end of February

Support QA/QC efforts

Builder must work with rater, who will submit home applications on behalf of Builder





Facilitation of QA/QC

Each program participant will be required to participate in program QA/QC (above what RESNET requires)

QA/QC team is comprised of ICF staff

ICF is an accredited, non-competing HERS Training Provider

Communication between builders/raters/program staff is required to ensure coordination and minimize rebate delays

Up to 5% of total program participating homes will be randomly selected

- Non-intrusive, will not select a home that is move-in ready
- A PDF of home plans may be requested





Home Registration and Incentive Process





2021 Submissions

Submit 2021 builds by end of February.

Update 'Expected Completion Date' as necessary.

Resubmit project to program using the 'Submit Project' drop down and selecting the appropriate utility.

Any homes with Final inspection completed in 2021 and submitted after 2/28/2022 may require builder and rater clarification before processing.

Unpaid homes from the end of 2021 are being processed and will be paid throughout February.

Site Info Rating Info Utility	Rates Consumers DTE
Submission Status	Under Construction 🕶
Enrolled Builder	Plo Below V
Expected Start Date	Wednesday June 3, 2020
Rough Inspection Date 🚱	Thursday August 13, 2020
Expected Completion Date	Tuesday December 15, 2020
Electric Meter Number	232
Gas Meter Number	232
Electric Utility	Consumers Energy
Gas Utility	Consumers Energy 🕶
	★ Cancel Save
Upload your Photo Sar Prote Submit Pr	
Buildi Share with	Component
Consumer DTE E	Walls Windows
	Roof Frame Floor
	3





Who Will Submit Program Incentive Applications

Rater must submit incentive applications, via Ekotrope, on behalf of builder

- ed home
- A Confirmed Ekotrope or REM/Rate file is required for each registered home
- Use up-to-date Ekotrope Version in accordance with RESNET requirements.



Action	Reason	Timing	Status
Register Homes	Reserve incentives	As soon as you have home lot/address	"Under Construction"
Submit Final Ratings	Expedite builder incentives	Within two weeks of completion	"Final Submission"
Cancel Ineligible Homes	Avoid confusion for anticipated incentives	Upon learning HERS score does not qualify or home does not meet code	"Canceled"









How Do Raters Know The Estimated Rebate Amount

		ek	otrope" N	My Projects		dte	e-rebate-program Di	E Energy Effici	iency Program	Sett
General Info	\$299 Envelope	\$218 Fenestration	\$916 Mechanica	al Water	< >	_	Compliance Areas	Energy	Notes	
(Include Wa	I Floor Area [ft²] olume [ft³] Type	DJB52143 1 3 7 3,308 7 29,912 Single family of	detach∈ ∨		? Help		HERS®: Annual Energy Bill HERS Michigan 2015 Perf Michigan 2015 Pres		Change 5 0	
Total Units i Uncondition garage?							Consumers Energy TE Rebate Progra Rebate Total rebate: \$1,0 Furnace - Silver Infiltration - Gole Water Heater (ts \$75.00 Gas rebate: \$63 (Maximum allowe \$1,000.00 + \$350 STAR bonus)	00.00 \$200.00 !: \$200.00 !: \$200.00 nnk) - Silver: 7.26 d rebate:	A 0	





How Often Will Program Incentives Be Paid?

Unpaid homes from the end of 2021 are being processed and will be paid throughout February.

DTE and Consumers Energy mail incentive checks directly to Builders on a weekly basis

All homes approved within the same week will be paid in the form of a single incentive check (per energy provider)

In order to process incentive, home must have an active residential account

 Projects submitted with Commercial and Industrial accounts will be updated at the beginning of the next month and processed in the first week





Home Submission Summary

An email will be sent to Builders and Raters every Friday, automatically, detailing home submission status.

 If builder or rater need an update at any other time, please contact account manager or email: <u>CENewHomes@icf.com</u> / <u>DTENewHomes@icf.com</u>

Builders will receive an incentive check in the mail for approved homes

HERS Rater submits home via Ekotrope for processing

ICF verifies and approves home

Builder receives incentive check (weekly)



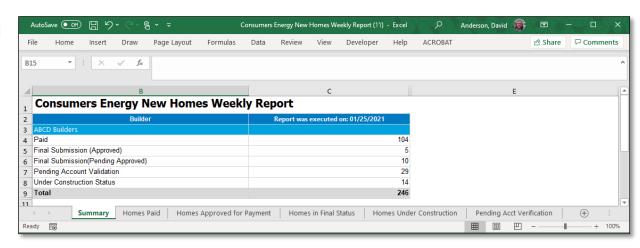
Program Resources





Friday Morning Builders/Raters Report automated email with excel file

- Report goes to one designated email per builder/rater
 - Reach out if email recipient needs to be updated or changed
- Emailed from: SightlineReporting@icf.com
 - Tip: check junk mail, add email as 'safe sender'
- Reports also available upon request







Summary Tab

- Paid: Incentive check previously received or currently in mail
- *Final Submission (Approved):* Project approved, check to be sent ~2 weeks
- Final Submission (Pending Approved): Project has been received, but has not been reviewed
- Pending Account Validation: Project held awaiting residential account validation/other information
- Under Construction: Project in system awaiting final testing

Consumers Energy New Homes Weekly Report

Builder	Report was executed on: 01/25/2021
ABCD Builders	
Paid	104
Final Submission (Approved)	5
Final Submission(Pending Approved)	10
Pending Account Validation	29
Under Construction Status	14
Total	246

Total





Homes Paid Tab

Rater Submitted Information

Project Name, Project Community Name, Lot/Unit #, City, Utility

Home Data

HERS Index, energy savings, equipment info

Check Date and Project Number can help to associate projects to check

- DTE Report includes Check # in report
- Consumers Energy reach out for check details as needed

Check stub example

YOUR CONSUMERS ENERGY REBATE CHECK IS ATTACHED. You've taken a big step towards making your home and Michigan more energy efficient, cleaner and safer! For more information on other rebates and energy saving tips, visit ConsumersEnergy.com/myhome. Thank you for participating!

CONHPS1545768200, CONHPS15457682000, CONHPS15460194000 CONHPS15460194000





Homes Under Construction Tab

Project Number	Builder	Project Name	Project Community Name	Lot/Unit#	City	State	Zip	Gas Utility Company(Provided by Rater)	Electric Utility Company(Provided by Rater)	Customer Type (Validated)	Expected Completion Date
CONHPS1544922555	ABCD Builders	RCW010	ABC	10	FOWLERVILLE	МІ	48836	Consumers Energy	Other	—	08/02/2020
CONHPS1544927555	ABCD Builders	OCH005	123	5	SPRINGFIELD	MI	49037	Other	Consumers Energy		08/14/2020
CONHPS1544927125	ABCD Builders	OGM059	ABC	59	HOWELL	MI	48855	Consumers Energy	Other		08/12/2020
CONHPS1544927124	ABCD Builders	STG078	123	078	BYRON CENTER	MI	49315	Other	Consumers Energy		08/10/2020
CONHPS1546339123	ABCD Builders	JJF50349	ABC	56	FOWLERVILLE	MI	48836	Consumers Energy	Other		10/09/2020

HERS rater may submit projects that are under construction. Projects with past expected completion dates will be highlighted in red.

Rater Action Required:

- · Submit backlogged final ratings, or
- Update expected completion date

Builder Action Required:

- Ask rater if additional information is needed for rating to be submitted, or
- Provide HERS rater with updated expected completion date





Technical Bulletins

Program participants receive technical and program bulletins, the first Tuesday of every month

Topics Include:

- Air Sealing Checklists
- Duct Quality Installation
- Ventilation Best Practices
- Construction Safety
- Insulation Improvements
- Window Selection

Let us know if you have a request for a specific topic!





TECHNICAL BULLETIN: INSULATION AND TOP PLATE GASKET ISSUES

Insulation installation and canned foam top plate gaskets have the potential for large impacts on energy savings and comfort in the home. This technical bulletin covers some frequently overlooked items that builders and raters should check when inspecting insulation and canned foam top plate gasket installation.

Common insulation problem areas:

- Electrical wires, Termite Systems, and 2x4 obstructions: Areas approximately 1'
 from the bottom plate tend to have termite systems or 2x4 obstructions. In addition,
 electrical wires can easily be found by looking for metal plates on studs. Insulation
 should be cut to fit around these obstructions to comply with RESNET's grade! a
 definition. For a video description on RESNET's grading definitions, follow this link.
- Rolled or tucked batts: Inspect the top and bottom of wall cavities. Often, insulators roll or fold insulation into the bottom or top of wall cavities instead of trimming insulation to fit cavities properly.
- Overfilled cavities: To save time, insulators will place small pieces of batts behind wires and place a full batt over top of the wire. This does not constitute grade I installation and causes compressions and overfilling.



An example of termite systems and a 2x4 obstruction



An example of an overfilled cavity with a plate highlighting the wire location



An example of batts not cut to fit wall cavities with plates showing wire locations





TECHNICAL BULLETIN: WINDOW SELECTION

w homes, windows represent just 7% of the envelope area, but can represent so the total envelope heat loss. The typical ~R3 (0.33 U-value) code compliant STAR[®] window in Michigan is double glazed, and this has not changed y over the last 20 years. A shift from double to triple glazing, or a more efficient U-Value), would greatly reduce window heat loss and improve comfort.

rigate the window selection process, the Efficient Windows Collaborative (EWC) ed with the National Fenestration Rating Council (NFRC) to create a variety of neuduling design guidance, window installation guidance, and window selection

v Selection Tool takes you through a series of design conditions pertaining to a and location. It is a step-by-step decision-making tool to help determine the y-efficient window for your build and helps to locate manufacturers who offer us saylights within the cateograpes shown.





ections visit w.efficientwindows.org/new-prod

sources on

ystem - Rated Components

abel can be found on all ENERGY STAR certified windows, doors, and skylights and provides performance ratings in five categories:





Energy Efficiency Learning Center

ICF's Energy Efficiency Learning Center allows program participants to complete e-learning trainings.

Trainings are made available for free to participants, courses cover:

- Technical Building Science Topics (HVAC, Heat Pumps, Manual J, etc.)
- Marketing and Sales
- Programmatic Topics
- Technical Bulletins Archive (video demo →)
- COVID-19 Resources

If you, or any employee are interested in signing up for the EELC please email us!

- Consumersenergy.learnupon.com
- <u>Dte.learnupon.com</u>





On-site Training

Builders may be encouraged to participate in training provided under the Program

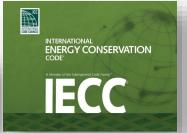
Technical/Field Training

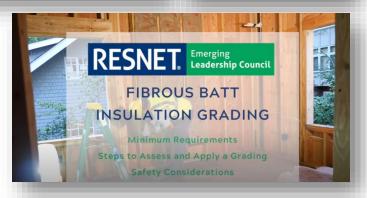
- Code compliance
- ENERGY STAR compliance
- Envelope air sealing
- Duct air sealing
- Insulation improvements

Equipment Loaning

 ICF Field Staff has equipment that can be loaned to raters while your equipment is being repaired or calibrated









DTE

Marketing Resources

DTE Builder/Rater Portal

michiganrebates.com/newhomes

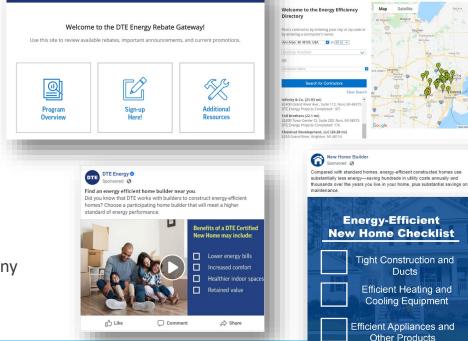
- Customer Brochure for Builders
- Builder Recruitment Flyer for Raters

Find a Builder/Contractor Site for Customers

http://dteenergy.com/eed

Social Media Marketing

- Social Media Toolkit to market your company
 - 2 examples of content pictured
- Facebook Campaign Ad to generate leads



DTE



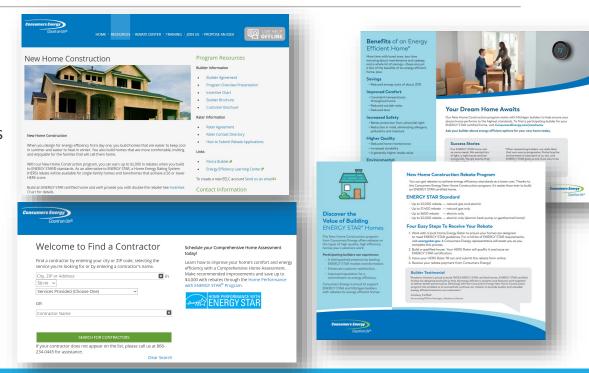
Marketing Resources

Consumers Energy Builder/Rater Portal https://consumersenergytradeally.com/

- Customer Brochure for Builders
- Builder Recruitment Brochure for Raters

Find a Builder/Contractor Site for Customers

https://consumersenergyeed.com/







Upcoming in 2022

HVAC Contractor and Rater ENERGY STAR Training Scholarship Pilot

 Increase the number of ENERGY STAR certified trades to support ENRGY STAR homebuilding

Automated Design Assistance Tool (Ekotrope Add-on)

- Piloted in 2021, determined to be successful/useful tool
- Embedded Savings Recommendations
- Rebate opportunities are automatically calculated and shown to the rater

Single rebate form/tab in Ekotrope for Raters

DTE and Consumers Energy merge

2022 Excellence and Energy Efficiency Banquets

Award winners and top performers will be invited











Resource Links

Consumers Energy Builder/Rater Portal Rater Contact Directory

DTE Energy Builder/Rater Portal Energy Star Certification Benefits

<u>DTE Energy - EELC</u> <u>Federal Tax Credits</u>

<u>Consumers Energy - EELC</u> <u>2021 IECC</u> (MI is still on 2015 code)





DTE Energy

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- Rob Murawski (Consumers Energy) Rob.Murawski@icf.com
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Ignite Social Media

Brandi Royal Washington – <u>Brandi.Washington@ignitesocialmedia.com</u>

Contact Us





Questions?





Thank you!