



Final Deliverable:
E2C Expert Match Tama County, IA

**Microlearning modules on residential
energy efficiency- Module 5**

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U.S. DEPARTMENT
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E2C: Technical Assistance Opportunities

EXPERT MATCH

E2C's Expert Match program connects energy experts with local governments, electric utilities, and community-based organizations to provide technical assistance to inform near-term energy decisions.

Expert Match offers:

- **Access to experts from the U.S. Department of Energy's national lab system.**
- **40–60 hours of support over 3 months from the first kickoff call.**
- **Focus on community-driven challenges or goals.**

For more information, visit:
www.nrel.gov/e2c/expertmatch

Scope

ORNL will develop a set of short microlearning modules to help Montour (Tama County) homeowners better understand and manage household energy use. The work focuses on creating clear, practical, and accessible content that guides residents toward cost-effective improvements and available incentives. Activities in this work may include:

- **Content Development:**
ORNL will prepare seven (agreed upon) modules using plain language, relatable examples, and simple step-by-step guidance covering topics on home energy efficiency improvements.
- **Learning Management System on Website:**
ORNL will use a simple WordPress website of learning management system (LMS) to support hosting the above modules and providing instructions for future updates.

Points of Contact

Community POC

Kent Scheid, CEDI-Tama County

Subject Matter Expert

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E2C Team

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Microlearning modules on residential energy efficiency

Module 5. Incentives & Financing for Alternative Energy

A comprehensive guide to available rebates, tax credits, and financing options to help you make energy-efficient upgrades more affordable.

*All the pictures in this presentation slides are generated through various AI tools and are added here for illustrative purpose. The pictures do not represent technical accuracy.



Financial Assistance and Incentives

Energy efficiency improvements can require upfront investment, but numerous programs exist to make these upgrades more affordable:

- Federal Programs
- State and Local Programs
- Utility Programs
- Finding Available Incentives

Financial Assistance and Incentives: Federal and State Programs

Federal Programs

- **Energy Efficient Home Improvement Credit:** 30% of costs up to \$1,200 annually for insulation, windows, doors, and energy audits
- **Residential Clean Energy Credit:** 30% of costs for solar, wind, geothermal, and battery storage
- **Home Energy Rebate Programs:** Up to \$8,000 for whole-house energy efficiency retrofits
- **Energy STAR® Certified Product Rebates:** Varying amounts for qualified appliances and equipment
- **FHA Energy Efficient Mortgage Program:** Finance energy improvements as part of your home purchase or refinance

State and Local Programs

- **Property Assessed Clean Energy (PACE):** Finance improvements through property tax assessments
- **State tax credits:** Many states offer additional tax incentives beyond federal programs
- **Local rebate programs:** City and county governments often provide additional incentives
- **Weatherization Assistance Program:** Free weatherization for income-qualified households

Financial Assistance and Incentives: Utility Programs

Utility Programs

- **Rebate programs:** Cash rebates for energy-efficient equipment purchases
- **Home energy audits:** Free or discounted professional assessments
- **Direct install programs:** Free installation of energy-saving measures
- **On-bill financing:** Pay for improvements through your utility bill
- **Demand response programs:** Earn credits for reducing usage during peak times
- **Income-qualified assistance:** Enhanced rebates for lower-income households

Finding Available Incentives

Use these resources to identify programs in your area:

[Database of State Incentives for Renewables & Efficiency \(DSIREUSA.org\)](https://www.dsireusa.org)

[ENERGY STAR® Rebate Finder](#)

Your utility company's website

State energy office websites



Home Energy Rebates and Tax Credits

The Federal tax credits for energy efficiency and the Weatherization Assistance Program (WAP) offer financial incentives for homeowners to improve energy efficiency.



Federal Tax Credits

Tax credits for energy-efficient home improvements including insulation, windows, heat pumps, and renewable energy systems.

WAP Assistance

Direct assistance for low-income households to improve home energy efficiency and reduce energy bills.

Rebate Programs

Direct rebates for qualifying energy-efficient appliances and home improvements by the State and the utilities.

Incentives and rebate programs keep evolving over time. For the most updated and accurate information, please visit the official program websites*

References:

<https://www.irs.gov/credits-deductions/home-energy-tax-credits?utm>

<https://www.energystar.gov/about/federal-tax-credits?utm>

<https://www.energy.gov/scep/wap/weatherization-assistance-program>

*<https://programs.dsireusa.org/system/program/ia>

Financing Renewable Energy Upgrades

Beyond rebates and tax credits, several financing mechanisms can help make renewable energy improvements more affordable.

Manufacturer Financing

Many solar, HVAC, and appliance companies offer installment payment programs

Green Loans

Low-interest loans offered by Iowa banks and credit unions for energy efficiency and renewable projects.

Utility On-Bill Financing

Some Iowa utilities and rural cooperatives may allow upgrades to be repaid on monthly utility bills.

Check with local lenders and utilities for program availability in your county.

Green Loans and Specialised Financing

1

Green Mortgage Options

Energy-Efficient Mortgages (EEMs) available through FHA and VA programs nationwide, and in some cases supported by Iowa lenders.

2

Home Equity Options

Home equity loans and lines of credit can be used to finance energy improvements, often with tax-deductible interest.

3

Credit Union Programs

Iowa credit unions (e.g., GreenState CU) offer specialized energy efficiency loan products.

4

Manufacturer Financing

Some manufacturers of solar panels, heat pumps, and other equipment offer their own financing programs with competitive terms.

Eg. green loans, like other financing options, have specific terms and requirements that vary by provider.

Utility On-Bill Financing

How It Works

Utility on-bill financing allows customers to pay for energy efficiency improvements through a charge on their regular utility bill.

- No upfront costs required
- Monthly energy savings often offset the financing charge
- Payment is simplified through the utility bill

Utility on-bill financing programs vary by utility company. Contact your local utility provider for specific information about available programs.

Benefits

This approach offers several advantages:
Accessible to those who might not qualify for traditional loans
Often available to both homeowners and renters
Can be structured to ensure monthly payments are less than energy savings
Reduces paperwork and simplifies the process



Key Takeaways



Financing Options in Iowa

PACE is an innovative financing option that helps property owners pay for upfront costs of energy improvements.

- Rebates and tax credits help lower upfront costs.
- Green loans and credit union programs provide flexible financing.
- Manufacturer financing makes solar, HVAC, and appliance upgrades more affordable.
- Utility on-bill financing is a practical option offered by some Iowa utilities.

👉 Not all financing tools are available in Iowa. Households should check with their local bank, credit union, or utility provider for the most up-to-date options.