An update of incentives for energy efficiency and renewable energy

NAVIGATING THROUGH THE FOG

By Milton Geiger

With ever-shifting tax policies and government programs, understanding what incentives are available for energy efficiency (EE) improvements and renewable energy (RE) systems is an ongoing effort. Gone are two popular incentives:

Federal residential energy efficiency tax credit – Congress allowed the personal tax credit for such things as high-efficiency furnaces, air conditioners, windows, and insulation to expire at the end of 2011. Previously, this incentive offered a credit of up to $1,500.

State sales tax exemption for renewable energy systems – As of June 30, 2012, the Wyoming Legislature allowed the expiration of the sales tax exemption for hydroelectric, solar, and wind energy systems. All installations are now subject to both state and county sales taxes.

Still, good news remains if considering a renewable energy system or making energy efficiency improvements to a home, farm, ranch, or business. Understanding available financial incentives is vital to making projects viable and cost-effective.

In Wyoming, incentives primarily come from three sources – federal government, state government, and utility companies. Each entity has different reasons for providing incentives, from fostering the growth of energy independence and environmental responsibility (federal) to reducing individual energy costs and demand (state and utility), but all believe that RE and EE merit financial support.

Incentives are typically targeted at certain sectors, so different incentives exist for residences, businesses, and agricultural producers. The tables below detail the most important incentives for Wyoming homes and businesses.

Table 1 – Residential Incentives for Small-scale Renewable Energy Projects

Name	Description	Eligible Technologies	Expiration Date
Residential Renewable Energy Tax Credit	30% tax credit (no limit)	Solar (electric and thermal), small wind, geothermal heat pumps	12/31/2016
Wyoming Net Metering	Allows many RE systems to receive the full retail rate for production up to total consumption and pays avoided cost for excess production	All renewable energy technologies that generate electricity	N/A
Utility programs	Rebates	Varies, but often a strong focus on geothermal heat pumps	Varies

Table 2 – Residential Incentives for Energy Efficiency Improvements

Name	Description	Eligible Technologies	Expiration Date
Residential Energy Conservation Subsidy Exclusion (Personal)	Makes subsidies paid by public utilities for EE improvements tax exempt (no limit)	Most EE improvements	N/A
Utility programs	Varying rebates	Many EE Improvements	Varies

Table 3 – Business and Agriculture Incentives for Small-scale Renewable Energy Projects

Name	Description	Eligible Technologies	Expiration Date
Business Investment Tax Credit	30% or 10% tax credit (no limit)	Solar (electric and thermal), small wind (30%) Combined heat/power and geothermal heat pumps (10%)	12/31/2016
Modified Accelerated Cost-Recovery System (MACRS)	5-year depreciation schedule	Solar (thermal and electric), geothermal heat pumps, and wind	None
Wyoming Net Metering	Allows many RE systems to receive the full retail rate for production up to total consumption and pays avoided cost for excess production	All renewable energy technologies that generate electricity	N/A
USDA - Rural Energy for America Program (REAP) Grants	25% grant ($500,000 maximum grant) available only to small, rural businesses (currently all areas except Cheyenne); loan guarantees also available	All renewable energy sources	N/A – Program funding is variable
USDA – Environmental Quality Incentive Program	Grant program for agricultural producers; amounts vary	Renewable energy and energy efficiency	N/A – Program funding is variable

Table 4 - Business Incentives for Energy Efficiency Improvements

Name	Description	Eligible Technologies	Expiration Date
USDA - Rural Energy for America Program (REAP) Grants	25% grant ($250,000 maximum) available only to small, rural businesses (currently all areas except Cheyenne); loan guarantees also available	EE improvements to existing buildings	N/A – Program funding is variable
Energy-Efficient Commercial Buildings Tax Deduction	$0.30-1.80-per square foot for renovations and new construction	Many EE enhancements, such as insulation, doors/ windows, HVAC, lighting, etc.	12/31/2013
Utility Programs	Varying rebates	Many EE Improvements	Varies
USDA – Environmental Quality Incentive Program	Grant program for agricultural producers; amounts vary	Renewable energy and energy efficiency	N/A – Program funding is variable

The above tables may seem daunting but taking the time to understand the incentives is certainly worthwhile. It is useful to examine a few incentives in detail, particularly the Residential Renewable Energy Tax Credit, Business Investment Tax Credit, USDA Rural Development's Rural Energy for America Program, and examples of utility incentive programs.

Residential Renewable Energy Tax Credit –

This significant (30 percent) tax credit covers the equipment and installation of solar (electric and thermal), wind, and geothermal heat pumps for both primary and secondary residences. If the tax credit cannot be fully utilized in the year of installation, the credit may be carried forward until 2016. Remember, tax credits are different than deductions, as tax credits offset tax liability dollar for dollar!

Business Investment Tax Credit –

Similar to the residential renewable energy tax credit, the BITC provides a significant tax credit for businesses. The tax credit is 30 percent for solar and wind energy but only 10 percent for geothermal heat pumps. The credit can also be used for biomass and combined heat and power.

USDA Rural Development's Rural Energy for America Program –

This grant and loan program is targeted at small rural businesses and agricultural producers. The program provides a 25-percent grant and the option for up to an additional 50-percent loan guarantee. Grants are capped at $500,000 (minimum $2,500) for RE and $250,000 (minimum $1,500) for EE projects. The grants can be received in addition to the BITC. The program accepts applications on a continuous basis.

Utility Programs –

It may initially appear counterintuitive utilities will pay people to use less energy, but the reduction in demand reduces the need for expensive new generation and transmission. Most investor-owned utilities, such as Rocky Mountain Power or Source Gas, rural electric cooperatives, such as Carbon Light and Power or Powder River Energy Corporation, and some municipal utilities, such as the city of Gillette, offer different incentives. Contact your local utility for specific information.

In closing, a brief example emphasizes the importance of fully accounting for incentives. A rancher wants to install a $40,000 solar electric system on her barn. She receives a USDA grant, utilizes the Business Investment Tax Credit, and takes the Modified Accelerated Cost Recovery System. In addition, the system qualifies for net metering. The total cost of the project would be reduced to $8,000-$16,000 depending upon tax structure.To learn more about the confusing world of renewable energy and energy efficiency incentives, please visit http://renewables.uwyo.edu or call extension energy coordinator Milton Geiger at (307) 766-3002.

Note: As with any financial matter, you are encouraged to consult your tax accountant to determine eligibility for tax incentives and grants.