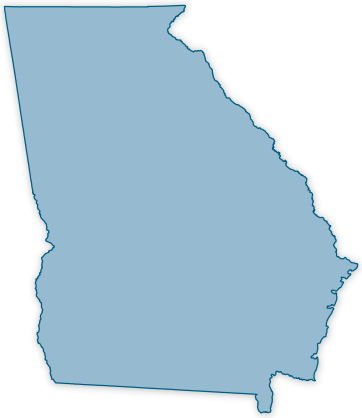
Department of Energy

Recovery Act State Memos

Georgia



For questions about DOE's Recovery Act activities, please contact the DOE Recovery Act Clearinghouse:
1-888-DOE-RCVY (888-363-7289), Monday through Friday, 9 a.m. to 7 p.m. Eastern Time

https://recoveryclearinghouse.energy.gov/contactUs.htm.

All numbers and projects listed as of June 1, 2010

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American Recovery and Reinvestment Act

U.S. DEPARTMENT OF ENERGY • GEORGIA RECOVERY ACT SNAPSHOT

Funding for selected DOE projects: $341.6 million

DOE Recovery Act projects in Georgia: 52

Clean energy tax credits and grants: 15

For total Recovery Act jobs numbers in Georgia go to www.recovery.gov

Georgia has substantial natural resources, including biomass and hydroelectric power. The **American Recovery & Reinvestment Act (ARRA)** is making a meaningful down payment on the nation's energy and environmental future. The Recovery Act investments in Georgia are supporting a broad range of clean energy projects, from energy efficiency and the smart grid to environmental cleanup and alternative fuels and vehicles. Through these investments, Georgia's businesses, universities, non-profits, and local governments are creating quality jobs today and positioning Georgia to play an important role in the new energy economy of the future.

EXAMPLES OF GEORGIA FORMULA GRANTS

Program	State Energy Program	Weatherization Assistance Program	Energy Efficiency Conservation Block Grants	Energy Efficiency Appliance Rebate Program
Award (in millions)	$82.5	$124.8	$67.2	$9.3
	The Georgia Environmental Facilities Authority has received $82.5 million in State Energy Program funds to invest in state-level energy efficiency and renewable energy priorities.	The Georgia Environmental Facilities Authority has received $124.8 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions, and saving money for Georgia's low-income families. Over the course of the Recovery Act, Georgia expects to weatherize nearly 13,900 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce.	Twenty-eight communities in Georgia have received a total of $67.2 million for Energy Efficiency and Conservation Block Grants (EECBG) to develop, promote, implement, and manage local energy efficiency programs.	The Georgia Environmental Facilities Authority has received $9.3 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use and save money for families, while helping the environment and supporting the local economy.

EXAMPLES OF GEORGIA COMPETITIVE GRANTS, TAX CREDITS AND LOANS

Award	$8.33 billion	$16.9 million	$15 million	$12.3 million	$8.7 million
	The Department of Energy offered conditional commitments for a total of **$8.33 billion** in **loan guarantees** for the construction and operation of two new nuclear reactors at a plant in Waynesboro, Georgia. The loan guarantee authority for the project comes from the Energy Policy Act of 2005. The companies estimate the project will create more than 4,000 jobs. Project sponsors include **Georgia Power Company (GPC), Oglethorpe Power Corporation (OPC), the Municipal Electric Authority of Georgia (MEAG),** and the **City of Dalton, Georgia (Dalton).**	**Cobb Electric Membership Corporation** in Marietta was awarded **$16.9 million** to modernize the electrical grid, deploy 190,000 smart meters, and implement communication infrastructure and load control switches.	The **Partnership for Clean Transportation, Inc.** has been awarded **$15 million** to deploy landfill gas to a compressed natural gas fueling facility at the DeKalb County Landfill through the Clean Cities Program.	The **Municipal Electric Authority of Georgia** in Atlanta was awarded **$12.3 million** to install information technology and smart grid upgrades throughout the system.	Georgia received **thirteen 1603 payments for renewable energy generation** totaling **$8.7 million,** which include biomass and solar projects. For example, **Multitrade Rabun Gap, LLC** received **$8.5 million** for a biomass project.

Funding Allocation Table (Figure 1)

Total dollar amounts in this document are accurate as of June 1, 2010. Please note that Recovery Act Programs are ongoing and the dollar amounts are subject to change. Recipient locations are based on project sites rather than recipients' headquarters locations.

Recovery Act Pillar	Flagship Program Names & Funding Type[1]	Number of Selections	Selected Amount (in millions)[2]
Energy Efficiency	*Weatherization Assistance Program (F)*	1	$124.8
	State Energy Program (F)	1	$82.5
	Energy Efficiency and Conservation Block Grant (F)	28	$67.2
	Energy Efficient Appliance Rebate (F)	1	$9.3
	Building Energy Efficiency (CM)	4	$0.005
	Industrial Energy Efficiency (CM)	2	$0.6
	TOTAL Energy Efficiency	37	$284.4
Electric Grid	*Smart Grid Investment and Demonstrations Project (CM)[3]*	4	$36.8
	State and Local Energy Assurance and Regulatory Assistance (F)	3	$2.2
	Smart Grid Workforce Training (CM)	2	$1.3
	TOTAL Electric Grid	9	$40.3
Transportation	*Clean Cities Alternative Fuel and Vehicles Program (CM)*	1	$15.0
	TOTAL Transportation	1	$15.0
Carbon Capture and Storage	*Research and Training (CM)*	3	$1.6
	TOTAL Carbon Capture and Storage	3	$1.6
Science and Innovation	*Small Business Research (SBIR/STTR) (CM)*	2	$0.3
	TOTAL Science and Innovation	2	$0.3
TOTAL - DOE Programs[4]		**52**	**$341.6**
Tax Credits/ Programs[5]	*Payments for Renewable Energy Generation in Lieu of Tax Credits (1603)*	13	$8.7
	Clean Energy Manufacturing Tax Credits (48C)	2	$7.9
	TOTAL Tax Incentives	15	$16.6
TOTAL - DOE/Treasury + DOE		**67**	**$358.2**

[1]F=Formula Grant, CM=Competitive Grant, C=Contract

[2]"Selected" indicates DOE has selected a potential funding recipient, which begins the process of negotiating an agreement. This does not necessarily indicate that a final agreement has been reached.

[3]Projects may cross state boundaries, signifies HQ location.

[4]Total does not include administrative funds.

[5]Jointly administered by DOE and the U.S. Department of Treasury.

ENERGY EFFICIENCY – 37 projects totaling $284.4 million

Helping millions of American families cut utility bills by making homes and appliances more energy efficient, expanding the home efficiency industry in sales and manufacturing. For more information, visit http://www.energy.gov/recovery/energyefficiency.htm.

Award(s): $124.8 million, Weatherization Assistance Program (WAP)
Location: Statewide
The Georgia Environmental Facilities Authority received $124.8 million in Weatherization Assistance Program funds to scale-up existing weatherization efforts in the state, creating jobs, reducing carbon emissions and saving money for Georgia's low-income families. Over the course of the Recovery Act, Georgia expects to weatherize nearly 13,900 homes. The program also includes workforce training and education as part of the state's efforts to develop a green workforce. The Weatherization Assistance Program allows low-income families to reduce their energy bills by making homes more energy-efficient, reducing heating bills by an average of 32 percent and lowering energy bills by hundreds of dollars per year. The Georgia Environmental Facilities Authority, which manages the state's weatherization program, intends to leverage Recovery Act funds in partnership with the Georgia Power Company to weatherize 500 additional homes. The state is giving priority to weatherizing homes occupied by elderly residents and those with disabilities — at least half of all weatherized homes will go to these high-need residents.

Award(s): $82.5 million, State Energy Program (SEP)
Location: Statewide
The Georgia Environmental Facilities Authority received $82.5 million in State Energy Program (SEP) funds to invest in state-level energy efficiency and renewable energy priorities. A large portion of this funding is being use to implement the State Utilities Retrofit Program which is administered by the Georgia Environmental Facilities Authority. Georgia is allocating $65 million of this funding to retrofit state government facilities. Specifically, this process involves conducting energy audits, assessments and capital projects to cover the incremental cost difference between standard and high-efficiency technologies. Proposals for funding are chosen based on the projects' ability to comply with state and federal energy goals, including energy independence, reduction of greenhouse gas emissions and the creation of green jobs.

Award(s): 28 totaling $67.2 million, Energy Efficiency and Conservation Block Grant Program (EECBG)
Locations: Statewide
Recipients: Georgia State Energy Office, Gwinnett County, DeKalb County, Atlanta, Cobb County, Clayton County, Consolidated Government of Augusta-Richmond, Columbus, Cherokee County, Savannah City, Unified Government of Athens-Clarke, Macon, Sandy Springs, Roswell, Fulton County, Marietta City, Albany, Hall County, Henry County, Forsyth County, Johns Creek, Warner Robins, Paulding County, Alpharetta, Valdosta, Smyrna, East Point, Rome

Twenty-eight communities in Georgia received a total of $67.2 million for the Energy Efficiency and Conservation Block Grants Program (EECBG) to develop, promote, implement and manage local energy efficiency programs.

Georgia is supporting energy audits and energy efficiency retrofits in residential and commercial buildings, the development and implementation of advanced building codes and inspections and the creation of financial incentive programs for energy-efficiency improvements. One program funds energy utilities in Georgia, which in turn, create or expand on-bill financing options for their residential customers. The purpose of this program is to provide residents the upfront cost of energy-efficient equipment and in-home services, while recovering that cost through a monthly charge on the customers' regular utility bills. An additional program allocates funds to energy efficiency retrofits or renewable energy projects on public facilities.

Award(s): $9.3 million from DOE, Energy Efficient Appliance Rebate Programs
Location: Statewide
The Georgia Environmental Facilities Authority received $9.3 million for the Energy Efficient Appliance Rebate Program, which offers consumer rebates for purchasing certain ENERGY STAR® appliances. These energy efficient appliances reduce energy use and save money for families, while supporting the local economy. Georgia's Residential Energy-Efficient Appliance Rebate Program is offering rebates for select Energy Star appliances installed in households in Georgia. This program is administered by the Georgia Environmental Facilities Authority. These rebates are available for ENERGY STAR® refrigerators, freezers, washers, dishwashers, heating and cooling equipment and various types of water heaters, including solar water heaters. These appliances must replace an existing appliance.

Award(s): 2 totaling $605,000, Industrial Assessment Centers and Plant Best Practices
Location: Atlanta

- **Georgia Environmental Facilities Authority, Atlanta - $500,000**
  The Georgia Environmental Facilities Authority received $500,000 to provide an array of energy efficiency activities to benefit local industry including energy assessments; an American National Standards Institute accredited plant certification pilot program and local training centers.

- **Georgia Institute of Technology, Atlanta - $105,000**
  Georgia Institute of Technology received $105,000 to provide eligible small and medium-sized manufacturers with no-cost energy assessments and serve as a training ground for the next generation of energy-savvy engineers.

Award(s): 4 totaling $5,000, Building and Appliance Market Transformation
Location: Atlanta
Home Depot U.S.A., Inc., in Atlanta received four grants totaling $5,000. The Buildings and Appliance Market Transformation project expands building codes, accelerates the pace of Appliance Standard test procedure development and improves the efficiency of commercial buildings' operations by training building operators and commissioning agents.

RENEWABLE ENERGY – 15 projects totaling $16.6 million

Developing clean, renewable resources in order to double our supply of renewable energy and boost domestic renewable manufacturing capacity. For more information, visit http://www.energy.gov/recovery/renewableenergy.htm.

Award(s): 13 payments totaling $8.7 million from DOE / Treasury, 1603 Payments for Renewable Energy Generation
Location: Statewide
* For current number of 1603 awards, see the weekly update at http://www.treas.gov/recovery/1603.shtml

- **Multitrade Rabun Gap, LLC, Rabun Gap - $8.5 million**
  Multitrade Rabun Gap, LLC, in Rabun Gap received $8.5 million for a biomass project.

- **Tri-State Property Management and Development, Inc, Hiawassee - $118,000**
  Tri-State Property Management and Development, Inc., in Hiawassee received $118,000 for a solar electricity project.

- **CMM, LLC, Atlanta - $39,000**
  CMM, LLC, in Atlanta received $39,000 for a solar electricity project.

- **Solar Sun World, LLC, Madison - $15,000**
  Solar Sun World, LLC, in Madison received $15,000 for a solar electricity project.

- **White Columns Funeral Chapels, Inc., Mableton - $15,000**
  White Columns Funeral Chapels, Inc., in Mableton received $15,000 for a solar electricity project.

- **Firehall 4 Animal Hospital, Athens - $14,000**
  Firehall 4 Animal Hospital in Athens received $14,000 for a solar electricity project.

- **Gerdes Consulting, LLC, Dunwoody - $10,000**
  Gerdes Consulting, LLC, in Dunwoody received $10,000 for a solar electricity project.

- **Solar Options, LLC, Blue Ridge - $10,000**
  Solar Options, LLC, in Blue Ridge received $10,000 for a solar electricity project.

- **Arbor Salon & Day Spa, Athens - $7,000**
  Arbor Salon & Day Spa in Athens received $7,000 for a solar electricity project.

- **Destiny Alpacas, Inc., Young Harris - $6,000**
  Destiny Alpacas, Inc., in Young Harris received $6,000 for a solar electricity project.

- **Arbor Spa & Salon, Athens - $3,000**
  Arbor Spa & Salon in Athens received $3,000 for a solar thermal project.

- **Firehall 4 Animal Hospital, Inc., Athens - $3,000**

Firehall 4 Animal Hospital, Inc., in Athens received $3,000 for a solar thermal project.

- **Beacon Blue, LLC, Augusta - $3,000**
  Beacon Blue, LLC, in Augusta received $3,000 for a solar thermal project.

Award(s): 2 totaling $7.9 million from DOE / Treasury, Clean Energy Manufacturing Tax Credit (48C)
Location: Norcross, Carrollton

- **Suniva, Inc., Norcross - $5.7 million**
  Suniva ,Inc., in Norcross received $5.7 million to manufacture monocrystalline silicone-based solar cells. The company's solar modules will be combined with high-tech batteries on a 30 kW solar plant at GS Battery's headquarters in Roswell. A third Georgia-based Company, First Century Energy, is the designer of the solar array involved. This program aids the domestic solar power industry.

- **Southwire, Carrollton - $2.2 million**
  Southwire in Carrollton received $2.2 million to re-equip its facility with new manufacturing lines to produce optimized cables for wind and solar applications. The cables will extend the grid, allowing for the collection of power within renewable energy systems. The results of this project will improve Smart Grid capacity.

Award(s): $8.3 billion from DOE / Treasury, Loan Guarantee Program
Location: Statewide
The Department of Energy supplied conditional commitments for a total of $8.3 billion in loan guarantees for the construction and operation of two new nuclear reactors at a plant in Waynesboro, Georgia. The Energy Policy Act of 2005 is the loan guarantee authority for the project. The companies estimate the project will create more than 4,000 jobs. Project sponsors include Georgia Power Company (GPC), Oglethorpe Power Corporation (OPC), the Municipal Electric Authority of Georgia (MEAG) and the City of Dalton, Georgia (Dalton).

MODERNIZING THE ELECTRIC GRID – 9 projects totaling $40.3 million

Harnessing clean energy sources and integrating them onto a modernized electric grid, while giving consumers better choices and more control over their energy use. For more information, visit http://www.energy.gov/recovery/smartgrid.htm.

Award(s): 2 totaling $1.2 million, Enhancing State and Local Governments' Energy Assurance
Location: Atlanta, Roswell

This project focuses on building regional energy assurance capability by enhancing inter- and intra-state coordination and cooperation during energy emergencies. The project funds states to update or develop State Energy Assurance Plans incorporating new energy portfolios such as wind, renewables and biofuels. The project also funds cities to update or develop Local Energy Assurance Plans. The two sets of funding are used to hire or retrain staff to build in-house expertise in dealing with Smart Grid technologies, critical energy infrastructure interdependencies and cyber-security.

- **Georgia Environmental Facilities Authority, Atlanta - $1.1 million**
  The Georgia Environmental Facilities Authority received $1.1 million for State Energy Assurance Planning.

- **City of Roswell - $130,000**
  The City of Roswell received $130,000 for the Local Energy Assurance Planning (LEAP) Initiative.

Award(s): 4 totaling $36.8 million, Smart Grid Investment Grant Program (EISA 1306)
Location: Statewide

- **Cobb Electric Membership Corporation, Marietta - $16.9 million**
  Cobb Electric Membership Corporation received $16.9 million to deploy 190,000 smart meters, covering 100 percent of the utility's customer base. The project is also implementing communication infrastructure and load control switches, using state-of-the-art interoperable systems, servers and data management technologies.

- **Municipal Electric Authority of Georgia, Atlanta - $12.3 million**
  Municipal Electric Authority of Georgia in Atlanta received $12.3 million to install information technology and Smart Grid upgrades throughout the system, including on substations, routers and network terminal units, to reduce peak demand and to cover system maintenance costs.

- **Georgia System Operations Corporation, Inc., Tucker - $6.5 million**
  Georgia System Operations Corporation, Inc., in Tucker received $6.5 million for computer systems upgrades. These updates include automatic communications regarding disruptions or changes in flow, enhanced reliability and security and the digital control of electricity supply.

- **Tri State Electric Membership Corporation, McCaysville - $1.1 million**
  Tri State Electric Membership Corporation in McCaysville received $1.1 million to install more than 15,000 smart meters that enable consumers to make use of dynamic pricing options. The project also expands line monitoring for improved outage detection across the service area.

Award(s): $647,000, Smart Grid Workforce Training
Location: Statewide
Georgia Tech Research Corporation received $647,000 to develop training for line crews and engineers in order to enhance skillsets in connector selection and installation. As a result, newly trained crews will be qualified to design, install and maintain high reliability next generation networks.

Award(s): $997,000, State Assistance on Electricity Policies
Location: Atlanta
The Georgia Public Service Commission in Atlanta received $997,000 for the State Public Utility Commissions to assist in addressing its Recovery Act electricity workload by hiring staff trained to facilitate the review of time-sensitive requests approving electric utility expenditures.

TRANSPORTATION – 1 project totaling $15 million

Investing in a new generation of advanced fuels and vehicles to reduce our dependence on foreign oil and revitalize domestic manufacturing. For more information, visit http://www.energy.gov/recovery/vehicles.htm.

Award(s): $15 million, Clean Cities Alternative Fuel and Vehicles (AFV) Grant Program
Location: Decatur
Partnership for Clean Transportation, Inc., in Decatur received $15 million to route landfill gas to a compressed natural gas fueling facility at Dekalb County landfill, four new compressed natural gas fueling stations, 191 alternative fuel and advanced technology vehicles.

CARBON CAPTURE & STORAGE – 3 projects totaling $1.6 million

Developing clean coal technologies so we can utilize America's coal resources sustainably. For more information, visit http://www.energy.gov/recovery/ccs.htm.

Award(s): 3 totaling $1.6 million, Geologic Sequestration Training and Research Grant Program
Location: Atlanta, Norcross

The projects funded under this program serve to accelerate US standing as world leader in climate change and near-zero emissions technology that significantly reduce carbon dioxide emissions from power plants. The training activities focus on the applied engineering and science of carbon capture and storage for site developers, geologists, engineers and technicians, providing a technology transfer platform for carbon dioxide sequestration.

- **Southern States Energy Board, Norcross - $994,000**
  Southern States Energy Board in Norcross received $994,000 for The Southeast Regional Carbon Dioxide Sequestration Technology Training Program to develop short courses on carbon capture and sequestration technologies, participate in regional training and other activities through outreach and networking. The Energy Board is also performing internet-based and electronic regional / basin technology transfer services. The training addresses the most promising sequestration options in the Southeast Region, sources of carbon dioxide, regional transportation infrastructure and legal, regulatory and institutional frameworks.

- **Georgia Tech Research Corporation, Atlanta - $300,000**
  Georgia Tech Research Corporation in Atlanta received $300,000 for research to explore the geomechanical consequences of hydro-chemo-thermo-mechanical coupled processes on the reliable geological storage of carbon dioxide. The purpose of this research is to identify emergent phenomena and bound the parameter-domain for efficient injection and safe long-term geological storage of carbon dioxide.

- **Georgia Tech Research Corporation, Atlanta - $300,000**
  Georgia Tech Research Corporation in Atlanta received $300,000 to perform a combined experimental and modeling study of air carbon dioxide capture using low-cost, high capacity sorbents. Topics being considered on this project are absorption / desorption cycles optimized for energy inputs from solar thermal sources, the viability of using air capture for generating

both sequestration-ready carbon dioxide and the potential uses of carbon dioxide for algae-biofuel processes.

SCIENCE AND INNOVATION – 2 projects totaling $300,000

Renewing our commitment to science and innovation to ensure global competitiveness in the future. For more information, visit http://www.energy.gov/recovery/innovation.htm.

Award(s): 2 totaling $291,000, Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) Round 1
Locations: Atlanta, Roswell
Georgia's Argos Intelligence, LLC, and Ngimat Company received $291,000 as part of the DOE's SBIR grant program. The major difference is that STTR projects must involve substantial (at least 30 percent) cooperative research collaboration between the small business and a non-profit research institution. DOE's SBIR / STTR program was created to help ensure that small businesses are able to compete in the clean energy economy, creating jobs and developing new technologies to help decrease carbon pollution and increase energy efficiency.

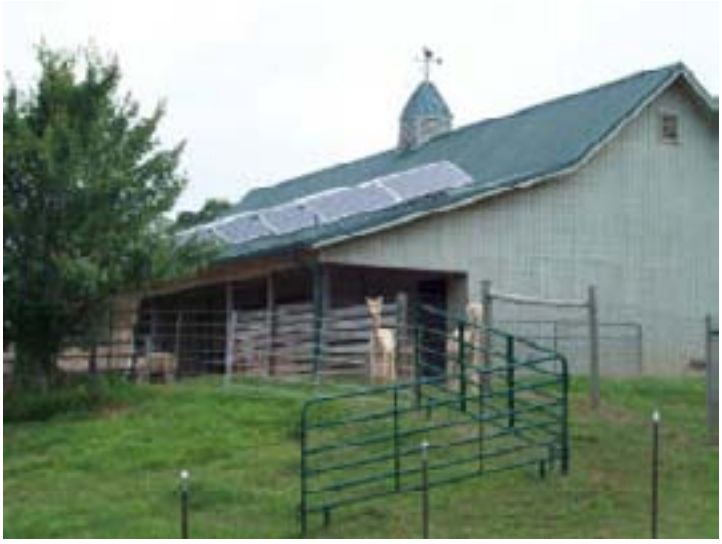
- **Ngimat Company, Atlanta - $150,000**
  Ngimat Company in Atlanta received $150,000 for advanced solar technologies to expedite a versatile nano-materials fabrication process to enable high-volume materials manufacturing for energy-storage and energy conversion. Nano-materials enabled by this process will reduce dependence on foreign energy sources, decrease harmful greenhouse gas emissions and forge a resurgence of the U.S. manufacturing sector.

- **Argos Intelligence, LLC, Roswell - $141,000**
  Argos Intelligence in Roswell received $141,000 under the *Sensors, Controls and Wireless Networks* topic to develop the Advanced Remote Combustion Efficiency Monitoring System. This system remotely measures combustion efficiency and identifies and quantifies emission by-products. The ARCEM system combines image processing and models to monitor combustion efficiencies and resulting gas emissions in real-time.

ENERGYEMPOWERS.GOV

Recovery Act Success Stories

Energy Empowers is a U.S. Department of Energy clean energy information service. Our team produces stories featuring the people and businesses that are fueling the energy transformation and economic recovery in America.
For more stories from your state, go to energyempowers.gov/Georgia



Alpacas stand outside a solar powered barn on the property of Larry and Cathi Dietsch

YOUNG HARRIS

Alpaca farmers shearing energy costs with solar

It takes a lot of work – and energy – to keep a herd of alpacas, known for their lustrous, long wool coats, happy and healthy. But, by harnessing the sun to power their 12-acre farm a Georgia couple has shown they are up to the task.

Larry and Cathi Dietsch, owners of Destiny Alpacas in Young Harris, are reaping the benefits of the 2.4 kilowatt solar power system they installed on top of their barn last year, earning cash from the extra energy produced.

"We are actually making more money than what we are paying into it," says Larry. The system produces 250 to 350 kwh of energy per month, more than enough to power all of the farm's needs.

Since the system is tied to the grid, the Dietsches' power company - Blue Ridge Mountain Electric- gives the couple 12 cents for every unused kilowatt. As a result, Larry and Cathy receive more than $100 per year that can go toward raising alpacas and paying for the cost of installing the solar panels. "We are buying at night and selling during the day," Larry says.

The barn where the solar paneling is installed is the heart of the Dietsches' business. "That's the showcase where everybody sees the alpacas," Larry says. The 25 alpacas, members of the camel family and indigenous to South America, stay warm in the winter and cool in the summer thanks to the energy provided by the system.

"It takes care of everything from heat to fans," says Larry.

The Dietsches sheer the animals once a year in the barn and make eco-friendly products from alpaca fleece. "Both my wife and I knit. I make hats and she makes scarves," Larry says.

The solar panels also power an electric golf cart that the Dietsches drive around the property.

Larry, a former engineer who worked on biowaste projects before becoming an alpaca farmer 10 years ago, says both he and his wife value the environment so the decision to install the solar panels made sense. "It fits with our lifestyle with being environmentally friendly," he says.

Financing small-scale solar for business

The switch to solar was even easier, Larry says, due to federal and state aid. "With all the grants that came out, it just made a whole lot of sense." A $5,831 1603 grant — offered by the Treasury Department and funded through the American Recovery and Reinvestment Act — slashed the $20,000 installation cost.

Grants from the state of Georgia helped defray the cost of the solar panels as well, which will be fully financed soon. "It will be paid off in a year," Larry says.

The Dietsches are enjoying their investment in renewable energy. The system is "exciting" and "keeps working," Larry says. "There's no maintenance, no moving parts."

Larry says he is spreading the word about solar energy to his neighbors. "It's such a good deal. I don't know why more people aren't doing it."

About 1603 grants

Under Section 1603 of the Recovery Act, the Treasury Department can award grants to property owners who invest in renewable energy for business reasons. Applicants who accept 1603 grants forego tax credits for energy property. The goal of the program is to provide incentives for renewable energy that tax credits may not offer.

NORCROSS

Sensible solar fueling energy revolution in Ga.

During his recent commencement address at the Georgia Institute of Technology, Energy Secretary Steven Chu hailed the ingenuity of the engineers responsible for the Industrial Revolution. He noted, however, that the carbon emissions from that pivotal era have caused the world's climate to change drastically.

"More frequent heat waves and increased water stress in many areas of the world are predicted," he said. "Rising sea levels and the severity of hurricanes and cyclones will threaten low-lying coastal areas. The climate will change so rapidly that many species, including many people, will have a hard time adapting."

Chu also described a second industrial revolution that is building America's clean energy economy. Part of this revolution is powered by a company born right at Georgia Tech —Suniva. The company's goal is to manufacture solar technology with low-cost techniques that make solar-generated electricity cost-competitive with fossil fuels. Or, as Suniva says in its slogan, it's "the brilliance of solar made sensible." With enough carbon-free technologies deployed and powering the country, we may not have to witness the dire situations Chu described.

Suniva was founded by Dr. Ajeet Rohatgi, and the company evolved from the University Center of Excellence in Photovoltaics at GT, which has become a premier site for silicon PV research in the U.S. The center has received longstanding support from the U.S. Department of Energy and has become a real American success story.

"We've expanded production more than 200 percent, resulting in hundreds of direct and indirect jobs in the U.S.," Bryan Ashley, chief marketing officer at Suniva, says.

Suniva is the only manufacturer of high-efficiency solar cells and modules that hires American workers and uses American technology. "We are actually making the cells in the U.S. and not offshore," Bryan says.

The company has created more than 150 clean energy jobs. Fifty of those jobs are the direct result of a clean energy tax credit that was part of the Recovery Act. Bryan says the future of American energy lies in greater usage of renewables.

"Solar PV has no emissions of any kind, doesn't use water, doesn't create noise, has no waste and has flexibility in its size, along with a free source of energy from the sun," he says. "It provides the most power when it is needed the most and can strengthen the grid."

America pioneered solar PV technology, and, as recently as the mid-1990s, had about 45 percent of the world market share — that has since slipped away to about 5 percent.

"The U.S. needs to jump back into the clean energy race and play to win," Chu wrote in a recent White House blog post, just before delivering GT's commencement address. "That is the work we have started with investments like the Recovery Act and companies like Suniva."