

Expanding Economic Growth Opportunities through Clean Energy Financing

1

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NEVADA STATE OFFICE OF ENERGY
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MISSION STATEMENT

2

The State of Nevada works to ensure the wise development of the state's energy resources in harmony with local community economic needs and Nevada's natural resources by leading the nation in renewable energy production, energy efficiency and conservation, and exportation.

CLEAN ENERGY INCENTIVE PROGRAMS

3

STATE POLICY & INCENTIVES
HOME ENERGY FITNESS
GREEN BUILDING TAX ABATEMENT
RENEWABLE ENERGY TAX ABATEMENT
COMMERCIAL BUILDING RETROFIT GRANT
SUNSHOT GRANT
ADOPTION OF THE 2009 IECC
REVOLVING LOAN FUND

Nevada Statutes and Policies

4

- **Renewable Portfolio Standard**
 - 25% Renewables by 2025, currently 15%
 - Minimum 5% in solar (6% after 2016)
- **RE Incentive Programs for schools, public, residential and small business**
 - Solar Energy Systems
 - Solar Thermal Systems
 - Wind Energy Systems (*including agriculture*)
 - Waterpower Energy Systems (*for agriculture & Indian tribes only*)
- **Net Metering under 1MW and 2% cap**
- **“Sure Bet” Energy Efficiency Programs**

Nevada Statutes and Policies

- **Governor Sandoval's Executive Order reanimating New Energy Industry Task Force**
 - Signed November 2011
 - Focus on business case for Nevada's renewable energy industry
 - Active role in transmission planning in region
 - Coordination with local, regional and federal partners on permitting and siting of transmission corridors
 - Report due to Governor by August 2012

Nevada's Economic Development Agenda

6

- **Key target area – Clean Energy**
 - Renewable component manufacturing
 - Export of electricity - planning for regional transmission
 - Advancing geothermal industry
 - Energy efficiency upgrading
 - Potential lithium mining and manufacturing

State Programs

7

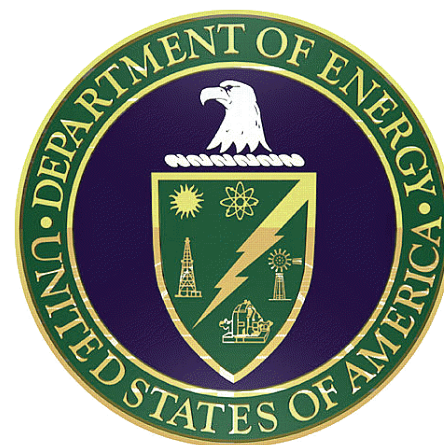
- **Home Energy Fitness** - \$5M DOE grant to retrofit 5% of Nevada homes by 2021, \$1000 rebate, \$220M economic impact
- **Green Building Tax Abatement program** - LEED buildings (silver or better) are eligible for tax abatements, maximum of 35% property tax for 10 years
- **Renewable Energy Tax Abatement program** - partial sales and use tax for 3 years and 55% property tax abatement qualified projects for up to 20 years

County	Company	Type	Size (MW)
Clark	CC Landfill Energy LLC	Biomass	10.6
White Pine	Spring Valley Wind	Wind	150
Pershing	Ormat Technologies (Jersey Valley)	Geothermal	25
Clark	Fotowatio Nevada Solar LLC	PV	12
Clark	Silver State Solar North	PV	50
Lander	Ormat Technologies (McGinness Hills)	Geothermal	43
Elko	Ormat Technologies (Tuscarora)	Geothermal	120 kV transmission line / 16MW
Nye	Tonopah Solar Energy LLC (Crescent Dunes)	Solar Thermal	125
Churchill	Enel Stillwater Solar	PV	24.2

Other State Programs

9

- DOE grant to accelerate commercial building energy retrofits
- DOE SunShot grant to accelerate solar PV installations on rooftops
- Adoption the 2009 International Energy Conservation Code statewide and achieve 90% compliance by 2017 - Effective July 1, 2012



Revolving Loan Fund - Summary

10

- **Over \$12M in low-cost (3%), short-term loans for 15 Renewable Energy projects**
 - Helped attract manufacturers to Nevada
 - DOE recognized “the pace-setting achievements of the NSOE SEP team”
 - Revolving Loan Program was the first in the U.S. to fully loan the money.

History

11

- Official start - January 2010
- Launched RFP - March 2010
- Loaned 100% initial funds by September 2011
- \$8,224,097 originally available for Loans
- 3% interest rate set by legislature
- 15-year maximum loan term
- Renewable Energy Projects only

Concurrent Start-up Activities

12

- Hearings to pass regulations
- Developed loan evaluation criteria and released RFP for applications
- Released RFP for Title Company contract
- Finalized loan agreements



Approved Project Loans

13

Applicant	Project	Location	Est. Jobs	Total Project Cost
Young Brothers Ranch	Hydro Plant	Kingston	3.13	\$448,000
Truckee River Ranch	Hydro Plant	Nye County	3.13	\$619,600
Sean R. Madole	Wind Turbine	Washoe Valley	.193	\$45,497
ATB Enterprises	Wind Turbine	Reno	.193	\$42,930
Earl & Rhonda Knox	2 Wind Turbines	Washoe Valley	.193	\$44,268
Avatar Energy Nevada	Anaerobic Digester	Lyon County	15	\$1,500,000
Sunburst Energy Solutions	6 Photovoltaic	Clark & Washoe	2.79	\$2,100,000
Desert Hills Dairy	Anaerobic Digester	Yerington	15	\$2,040,662
Hillside Dairy	Anaerobic Digester	Fallon	15	\$2,347,000
		Total Jobs	54.629	\$9,187,957

Avatar Biodigesters

14

- Applicant received three loans totaling \$5,887,662
- 45+ total jobs from all three projects
- Revolving loan freed up private sector capital for up to two manufacturing plants
- 200-400 jobs expected over next three years from manufacturing plants



Strategies

15

Outreach Strategy

- Used every opportunity to get the word out about the program
- Partnered with Economic Development community's clients
- Guide applicants through steps and process

Ranking Strategy

- Higher ranking to:
 - applicants with shorter repayment timeframes
 - applicants with multiple projects or greater economic impact
 - applicants working toward moving to NV or opening manufacturing plant

Approval Processes

16

State Approval

- Applications ranked by Energy Office
- Ranked list submitted to legislature
- Separate approval to expend funds
- 90-day minimum turnaround time

NEPA Approval

- 43% projects were under Categorical Exclusion limits
- 57% were submitted for NEPA approval
- Sought simultaneous approval from legislature while waiting for NEPA approval

Problem: Not funding some projects due to NEPA or time constraints

Project Stats

17

Sectors

- 1% Residential
- 59% Agricultural
- 12% Private Schools
- 28% Commercial
- *100% to private sector. No Public buildings*



Technologies

- 1% Residential Wind (3)
- 11% Small Hydro (3)
- 14% Geothermal (1)
- 25% Photovoltaic (4)
- 49% Biodigesters (3)
- *Over 63% of funds to projects with higher economic development potential*

Fund Expansion

19

- Applications exceeded available funds
- December 2010: Moved \$1,620,000 in excess administrative funds into RLF
- June 2011: Legislative approval to expand use of Fund
- April 2011: Moved \$1,588,958 in underperforming market title to RLF
- December 2011: Moved another \$900,000 in excess administrative funds into RLF

2011 Legislative Approval

20

- Energy Efficiency and Conservation Projects
- Renewable Manufacturing Projects
- Ability to enter into third-party agreements
- Ability to utilize interest for administration
- *\$290,000 of the anticipated \$390,000 in annual interest will go to support 3 FTE's*
- 100% of title & escrow fees and closing cost to be paid by applicant
- Applicants must disclose all sources of other incentives project may receive
- Larger Energy Efficiency and Conservation projects must receive funding preference

Funded Project Status

21

- 3 residential wind turbines installed
- 3 small hydro projects operational
- 4 shaded parking structures installed on private schools
- 1 Biodigester completed this Spring and 2 more this summer upon completion at new manufacturing plant in Reno
- \$12,212,458 loaned to-date
- 42-month average repayment schedule

Pending Projects

22

- **Three projects pending funding:**
 - **800 kW Wind Generation Farm in Austin**
 - ✦ \$750,000 loan
 - ✦ Still in NEPA determination
 - **Clan Alpine 75 kW Hydro Generation Plant in Fallon**
 - ✦ \$212,000 loan
 - ✦ Funded after wind farm (same contractor)
 - **H2**
 - ✦ First Hydrogen Vehicle Fuel Station in Carson City
 - ✦ just received NEPA approval
 - ✦ \$1.3M loan by end of Feb 2012



Next Steps

23

- **Release RFP for financial institutions, or otherwise partner, with banks on leveraging funds.**
- **Utilize portion of funds to help finance rooftop solar under SunShot grant**
- **Continuing to partner with utilities and Economic Development programs**

CONTACT



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