



# Maximizing PV Project Return on Investment

## Alternate Energy Revolving Loan Program (AERLP)

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# Solar Energy Incentives

## ■ Federal Investment Tax Credit

- 30% of eligible costs; no limit
- Solar energy phase out: 2021 (26%) 2022 (22%); after 2022 (10%)

## ■ Iowa Solar Energy Income Tax Credit

- 50% of federal income tax credit (15% of eligible costs)
- \$5,000 limit for households, \$20,000 limit for businesses
- Annual State allocation (\$5 million for FY16)
  - Must apply for the credit through IA Dept. of Revenue
  - SSB-3080 would increase allocation to \$7.5 million in FY17
- Sunset at end of 2016 for households
- Converts to 50% of federal after 2016 for business

## ■ Accelerated Depreciation for business

## ■ USDA – Rural Energy for America Program (REAP)

## ■ Alternate Energy Revolving Loan Program

## ■ Database of State Incentives for Renewables & Efficiency

- [www.dsireusa.org](http://www.dsireusa.org)

# ALTERNATE ENERGY REVOLVING LOAN PROGRAM (AERLP)

**Encouraging the Development of Alternate Energy  
Production Facilities in Iowa**



# AERLP Program Background

## ■ Created by Iowa legislature in May 1996

- 1997 Iowa Code, Section 476.46
- Amendment to the 1990 Iowa Energy Efficiency Act

## ■ Funded via

- Iowa's investor-owned utilities through 3-year special assessment on gross intrastate revenues
- 0.085% of gross electric and gas intrastate operating revenues during 1995-1997
- \$5.9 million base funding

## ■ Legislatively amended

- in 2002 to permit up to half of the accrued interest income to be spent for program administration & promotion
- in 2008 to increase the maximum loan amount to \$1 million
- in 2009 to allow municipal utilities and REC eligibility
- in 2009 to supplement base funding by \$10 million (\$5 million in 2009 & 2010)

# AERLP Program Highlights

## ■ AERLP Funds

- up to 50% of the financed project cost
- \$1 million maximum,  
● \$500,000 for Muni's & REC's
- 0% interest rate
- 20 year maximum term
- negotiated repayment schedule
- repayments revolved back into fund for further loans

## ■ Lender Funds

- matching funds not less than AERLP
- market rate interest rate
- loan term not less than AERLP term
- repayment collection & distribution to AERLP

# Program Eligibility

- **All individuals and groups who want to build alternate energy production facilities in Iowa**

# AERLP Eligible Technologies

## ■ Hydroelectric

## ■ Wind

## ■ Solar

- Photovoltaic
- Hot water

## ■ Biomass

- Waste or refuse to fuels
- Agricultural crops to fuels
- Biomass feedstocks to fuels
- Landfill gas recovery

## ■ Ineligible Technologies

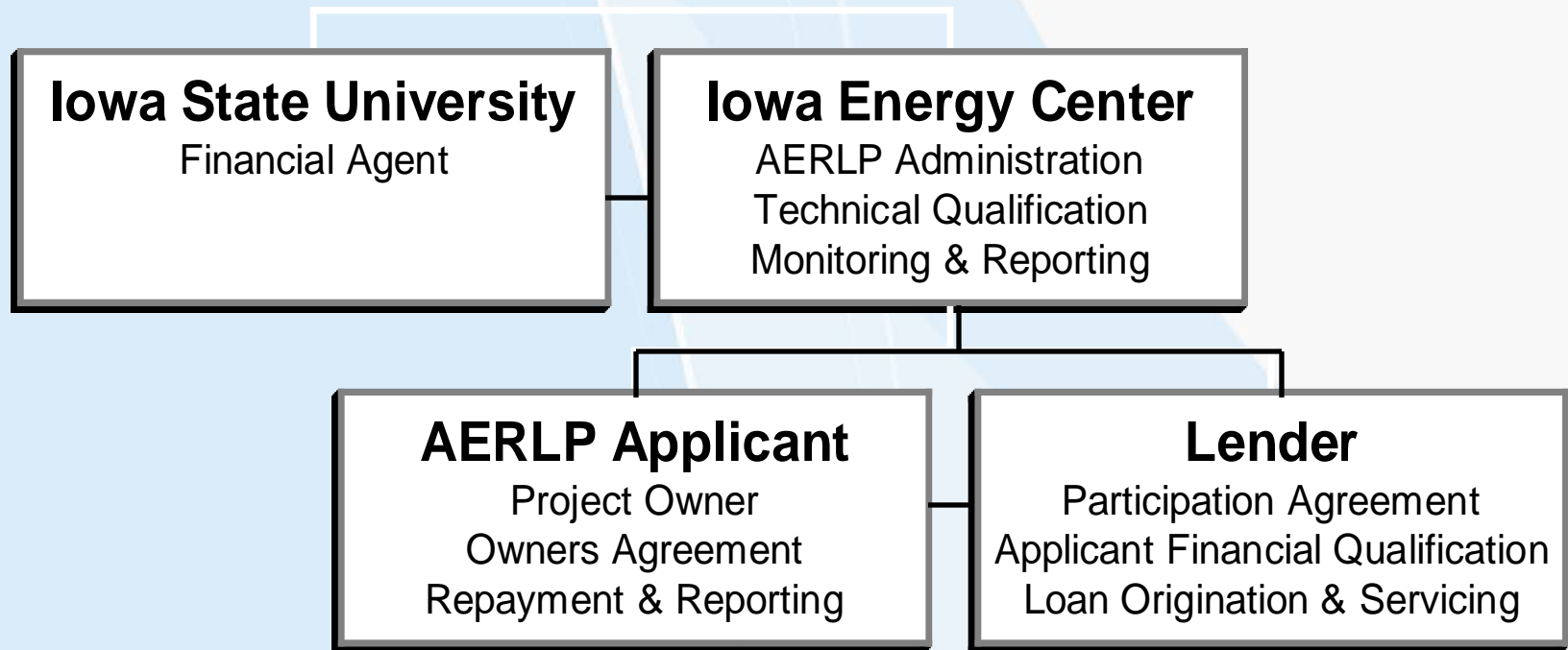
- Passive solar
- Geothermal systems (ie. ground source heat pumps)
- Heat pumps

# AERLP Description

- **Revolving fund structure**
- **Competitive application process**
- **Funds are leveraged against matching funds**
- **Managed partnership with the banking community**
  - **Technical Qualification by the IEC**
  - **Financial Qualification by the lender**
  - **Lender originates and services a single AERLP loan**
  - **Participation Agreement**
- **Owner reporting requirements**
  - **Owners Agreement**



# AERLP Organization



# Participation Agreement

- **Contracting document between the Energy Center and the lender**
- **Single promissory note**
  - Combines interest bearing and non-interest bearing instruments
- **Defines terms and conditions**
  - Repayment schedule
  - Collateral
  - Default position

# AERLP Owner Agreement

## ■ Owner responsibilities

- **Develop, install and operate alternate energy production facility (AEPF)**
- **Start-up Report**
  - equipment specifications
  - actual project costs
  - reasons for installing and expectations
  - construction difficulties
- **Annual Report**
  - energy production attributable to AEPF
  - operational and maintenance costs
  - general assessment of project
- **Privacy waiver regarding AEPF information**

# Application Process

## ■ Download from Energy Center website

- Guidelines
- Technical application & instructions
- Lender resources

## ■ Deadlines

- Small projects ( $\leq \$25,000$ ) – continuous
- Large Projects ( $> \$25,000$ ) – quarterly
  - Jan 31, April 30, July 31, Oct 31

## ■ Competitive ranking criteria

- Technical application
- Loan term requested
- Simple payback calculation less incentives

# Iowa Energy Center Home Series

## Book 5 - Solar PV Energy Guide

### ■ How to booklet for residential/small commercial solar PV

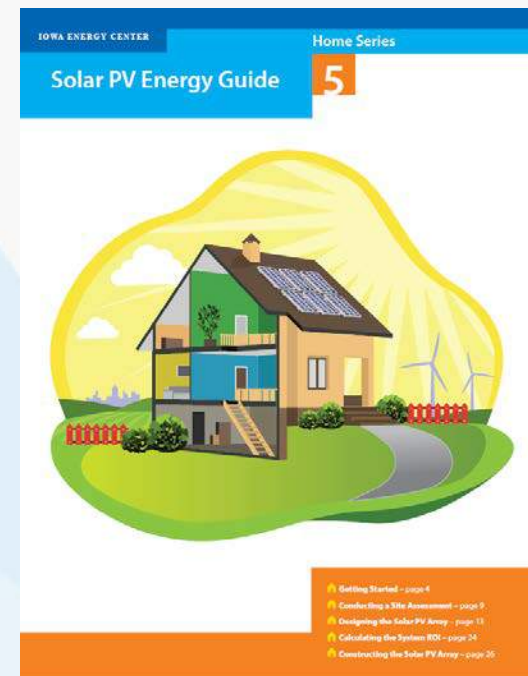
- 32 pages

### ■ Collaborative Effort and Authors

- Alliant Energy
- Iowa Association of Electric Cooperatives
- Iowa Association of Municipal Utilities
- Iowa Energy Center
- Iowa Utilities Board
- MidAmerican Energy Co.
- Office of Consumer Advocate

### ■ Available on the Iowa Energy Center website

- Learning Institute



# For More Information

- **Iowa Energy Center's Web site**

<http://www.iowaenergycenter.org>

- **Contact Energy Center**

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