Net Zero Energy Building Program
Providing financial support for clean energy projects in Illinois for over 15 years.

The Illinois Clean Energy Community Foundation was established in December 1999 as an independent foundation with a $225 million endowment provided by Commonwealth Edison. Our mission is to improve energy efficiency, advance the development and use of renewable energy resources, and protect natural areas and wildlife habitat in communities all across Illinois.
ICECF Net Zero Energy Building Program

• The Foundation’s **Net Zero Energy Building Program** awards grants to new construction or retrofit projects that achieve site net zero energy performance, or better, over the course of a year.

• These are very energy efficient buildings that offset all of (or more than) their annual energy consumption with on-site generation from renewable resources.

First applications accepted in July 2016
Net Zero Energy Buildings

Number of ZNE Projects


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Net Zero Energy Buildings

ZNE and Ultra-Low Energy Building Types

- Education: 38%
- Office: 23%
- Other: 21%
- Multifamily: 11%
- Public Assembly: 7%

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Net Zero Energy Buildings

ZNE Building Ownership Type

- Private - For-profit: 30%
- Public - County: 22%
- Private - Multifamily: 12%
- Public - City: 12%
- Public - State: 10%
- Private - Non-profit: 9%
- Public - Federal: 5%
The University of Illinois ECE building is a 230,000 sq. ft. educational building located in Urbana, IL. The building was completed in October 2014 and is the largest net zero energy building in the country. The building uses a combination of displacement ventilation and chilled beams as the primary heating/cooling system. The building is currently targeting LEED Platinum certification.

- **Renewable Energy:** 1500 kW PV (planned)
- **Total Cost:** $90.5 million
- **Cost over Conventional:** 5-8%
The Richardsville Elementary School is a 77,466 sq. ft. building located in Richardsville, Kentucky. The project, completed in September 2010, was the first net zero school in the United States. The building design included a glass “geothermal hallway” where students can observe and monitor the performance of the system. There is also a real-time solar power battery charging station that shows the transfer of energy from the panels to the building.

- EUI: 18.2 kBtu/sf/yr
- Renewable Energy: 348 kW PV
- Total Cost: $12.1 million
Stevens Library at Sacred Hearts Schools

- EUI: 16 kBtu/sf/yr
- Renewable Energy: 42.5 kW PV
- Annual Electricity Generation: 53,188 kWh/yr
- Total Cost: $2.4 million

The Stevens Library is a 6,800 sq. ft. building located in Atherton, California. The library serves K-8 students from the Sacred Hearts Lower and Middle Schools. The Stevens library was the first net zero library in the United States. The performance of the building has exceeded all simulated expectations and is producing excess electricity of 26,500 kWh/yr. The library has also received ILFI Net Zero Energy Building Certification.
The Bullitt Center office building is a 52,000 sq. ft. facility located in Seattle, Washington. The net zero project was completed in April 2013 and performed much better than expected. The actual performance of the building produces extra electricity in excess of 90,000 kWh/yr. The heating/cooling system utilizes a closed loop geothermal system and radiant floor heating.
The IDeAs Design Facility, owned and operated by Integral Group, is a 6,560 sq. ft. facility located in San Jose, California. The project, completed in August 2007, was a deep retrofit of a 1960s bank to become net zero. The building features an under slab radiant heating/cooling pipe to maintain comfortable temperatures year round. The East side of the building utilizes 83.3 sq. ft. of electrochromic glass costing $150/sq.ft.

- EUI: 18.7 kBtu/sf/yr
- Renewable Energy: 30 kW PV
- Annual Electricity Generation: 56,500 kWh/yr
- Construction Cost over Conventional: 9%
ICECF Net Zero Energy Building Program (NZEBP)

**WANTED**

Net Zero Energy Buildings

- Grants for new construction or retrofit projects that achieve site net zero energy performance or better.
- Buildings must offset all their energy consumption with onsite generation from renewable resources.
- Grants will be paid incrementally, with full payment contingent on actual net zero energy performance.
ICECF NZEBP: Eligibility & Funding

Eligible Applicants
• 501 (c) 3 nonprofit organizations
• Local government entities
• Colleges and universities

Projects
• Site net zero energy performance or better
• Third party project certification through:
  – Passive House Institute US (PHIUS) and/or
  – The Living Building Challenge
• Education about net zero energy building integral part of the project
• Monitor/make available on public website “real time” load specific building performance
ICECF NZEBP: Eligibility & Funding

Criteria

• Building must be located in Illinois
• May not have started construction
• Provide public access to completed building
• Showcase NZE building elements through permanent displays and highly visible signage
• Wholly owned by eligible applicant
ICECF NZEBP: Eligibility & Funding

Funding

• Up to $1,000,000 or 60% of project costs, whichever is less paid as follows:
  – Up to 30% of total grant amount after start of construction
  – Up to 30% once building is occupied
  – Up to 40% after certification and 12 consecutive months of site net zero energy performance

• Specific expenses to be covered by grant funding will be determined on a case-by-case basis.
  – The Foundation will steer support to project costs and building components that maximize energy efficiency and self generation
  – 5% of grant allocated to permanent displays and signage
ICECF NZEBP: Deadlines

Three step application process

1) Request for Ideas (RFI) accepted on rolling review basis

2) Letter of Interest (LOI) Applications are by invitation for January and July grant cycles. Must have completed schematic design phase to submit LOI.

3) Full Proposal (FP) Applications are by invitation on rolling review basis. Must have completed design development phase.

NZEBP review process can take as little as 4 months from LOI Application submission. However, it may take longer depending on project design development phase.
Questions?

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