

IGEN Aggregation Program for Exterior Lighting

IGEN Retreat – Heartland Community College
Tuesday – January 29, 2015



Illinois
Department of Commerce
& Economic Opportunity

Pat Quinn, Governor

IGEN 
Illinois Green Economy Network
A Community College Partnership

Funding Source

IGEN Aggregation Program
for Exterior Lighting

Grant from:

Illinois Department of Commerce and Economic Opportunity, Public Sector Energy Efficiency Key Account/Aggregation Program



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Overview

IGEN Aggregation Program for Exterior Lighting

(IGEN) is partnering with Sitton Energy Solutions to implement energy efficiency projects on IL community college campuses, specifically focused on:

- ✓ exterior lighting
- ✓ in the Ameren utility territory.



parking lot, roadway, exterior building, courtyard, pathway



Program Managers

IGEN Aggregation Program
for Exterior Lighting



Tim Gibson - IGEN Aggregation Program Manager,
Director of Buildings and Grounds - John A. Logan College



Katie Davis – IGEN Senior Program Coordinator,
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IGEN Aggregation Program
for Exterior Lighting



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Benefits

IGEN Aggregation Program
for Exterior Lighting

For Participating Colleges Include:

- ✓ Assistance with identifying exterior lighting needs;
- ✓ Increased value resulting from aggregation purchasing;
- ✓ Simplified rebate process with DCEO; and
- ✓ Increased kWh savings and lower utility costs!

PROGRAM GOAL: Total energy savings of **1,250,000 kWh**

Case Studies

IGEN Aggregation Program for Exterior Lighting

1 – typical parking lot light:

Existing 400w MH shoebox -
Convert to Cree XSP 101w LED

DCEO incentive: \$468
Annual energy savings: \$157.68ea
Installed Cost: \$625ea
1 year payback
20+ year life – 10 year warranty



Case Studies

IGEN Aggregation Program
for Exterior Lighting

2 – typical parking lot light:

Existing 1,000w MH shoebox -
Convert to Cree Edge High Output @ 400w LED

DCEO incentive: \$854.10
Annual energy savings: \$287.77ea
Installed Cost: \$1,470ea
2.15 year payback
20+ year life – 10 year warranty



Case Studies

IGEN Aggregation Program
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3 – wall pack

Existing 175w MH wall pack -
Convert to Cree XSPW 25w LED

DCEO incentive: \$75.00

Annual energy savings: \$73.59ea

Installed Cost: \$300ea

3 year payback

20+ year life – 10 year warranty



Case Studies

IGEN Aggregation Program
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4 – John A. Logan College – Fall 2013

Installed 132 Parking Lot and Roadway LED lights -

Existing 400w shoebox's converted to Cree XSP 101w and existing 400w shoebox's converted to Cree High Output 400w LED fixtures (10 year warranty – 100,000 hour lamplife)

Materials = \$72,362.00 + Installation = \$21,525.00 = \$93,887.00 total cost

DCEO incentive: \$77,456.78

NET "out of pocket" = **\$16,430.22**

Payback = 2.5 years

Program Structure

- ✓ Lighting needs determined (surveys, technical assistance, options)
- ✓ Bids solicited for “consortium pricing” on lighting fixtures (offering multiple options)
- ✓ Colleges may solicit bids from local vendors and will be responsible for installation
- ✓ Program managers provide incentive and payback estimates and complete DCEO incentive applications
- ✓ Colleges may draw funds against expected incentives prior to project completion

Program Goals

IGEN Aggregation Program for Exterior Lighting

GOAL: Total energy savings of 1,250,000 kWh

	<u>Fixtures</u>	<u>Estimated kWh Savings</u>	<u>DCEO Incentives</u>	<u>Cost Savings</u>
CSC	121	79,453	\$23,582	\$7,945
DACC	184	287,310	\$85,275	\$20,112
IVCC	221	231,917	\$68,834	\$23,192
JALC	320	174,429	\$38,676	\$14,826
KC	10	11,248	\$3,338	\$1,125
LC	169	187,574	\$57,470	\$15,006
SWIC	341	410,686	\$121,893	\$24,641
Totals:	1,366	1,382,617	\$399,068	\$106,847

NOTE: Incentives may increase by up to 15%

Program Timeline

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DATE	TASK
January 27th, 2015	Consortium pricing proposals due
Jan - February – 2015	Colleges obtain labor and/or fixture bids
Feb 13th – 2015	Updated incentive/payback estimates provided to colleges
February BOT meetings	Colleges receive approval to proceed
March 6th – 2015	Colleges issue PO to vendors
April 17th – 2015	Latest date for fixture delivery per RFP
May 15th – 2015	Latest date for all fixtures installed and
*May 20th – 2015	All completion verification paperwork due

*subject to DCEO approval

Challenges

1 – Completion of purchase and installation of fixtures by mid-May 2015

- ✓ Program began December 2014 by identifying eligible colleges and surveying lighting needs
- ✓ Developed RFP for consortium fixture pricing
- ✓ Colleges to determine labor costs
- ✓ Complete board approval process
- ✓ Timeframe must allow for delivery
- ✓ Fixtures installed by May 1, 2015

Contact Information

IGEN Aggregation Program
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Questions?

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