

Energy Efficiency in Nova Scotia

Construction Association of Nova Scotia

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WHO WE ARE

- New, independent corporation, dedicated to *saving energy* – and *energy savings* for Nova Scotians
- Taking over electricity efficiency program role from Nova Scotia Power
- Run by Board of Directors, not government
- Regulated by NS Utility & Review Board

WHAT WE PROVIDE

- Programs and financial incentives:
 - For Projects; studies; product purchases
 - For large and small projects/ product purchases to a broad base clients.
- Finance projects additional to the incentives – 0% interest
- We execute these projects fast, flexible and easy.

FAST , FLEXIBLE AND EASY

- **Fast** - Applications are processed in 5 business days
 - Payments for incentives after M&V are within 30 days
- **Flexible** – Program solutions will fit the clients needs; “tell us what you want to achieve”
 - Financing, new technology; staged projects; opportunity identification,
- **Easy** – Turn key retrofits for lighting; simple application forms, straight forward process, support throughout entire project.

WHY ENERGY EFFICIENCY

- Long Term benefit of avoided costs of new power generation
- Efficiency is the lowest cost of energy
- Economic spin off
 - Spend within NS in 2011 – 42 M for efficiency programs plus
- **Environmental** –reduce greenhouse gas emissions
- **Social responsibility** – the right thing to do.
- **Financial** – Excellent business case for investing in Energy Efficiency.

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DSM TARGETS

- 2010 energy savings targets
 - 81 GWh, \$22.5M budget

- 2011 energy saving targets
 - 158.5 GWh, 41.9 M budget

1 GWh is equal to the yearly electrical energy use of ~111 typical NS households

COMMERCIAL AND INDUSTRIAL PROGRAMS

- C&I Custom
- Business Energy Rebates
- Small Business Lighting Solutions
- Smart Lighting Choices
- Power Right - Direct Install
- New Construction
 - *Tell us what you want to achieve, we can help*

SMALL BUSINESS LIGHTING SOLUTIONS

- For those using fluorescent tube lighting
- Free on-site light energy assessment
- Qualified electrical contractors look after all aspects: permits, ordering, installation, removal, recycling
- Covers 80% of cost; client only pays 20%
- 0% interest on-bill financing

Powered Right Direct Install

- For those using mostly twist-in incandescent bulbs and exit lights
- Trained installers replace incandescent light bulbs and exit lights with CFLs and LED exit lights
- No cost to business
- Remove and dispose of old materials

BUSINESS ENERGY REBATES

- Rebates on approved energy efficient products
- Eligible product categories:
 1. Lighting
 2. Refrigeration
 3. Compressed Air
 4. Heating and Cooling (HVAC)
 5. Motors and Drives (VFDs)

BER ELIGIBILITY

- Equipment must be eligible, per ENSC product lists posted at www.energycyns.ca/businessenergyrebates
- Equipment must be new and installed
- ENSC retains right to conduct pre/post-installation inspections for any site

C&I CUSTOM

- Financial incentives for studies, project implementation, and financing for “custom” energy saving projects.
- Directed at the mid-sized to larger commercial and industrial customers
- Intended for projects that will not proceed without an ENSC incentive - no free riders
- Any project funded by this program must save electrical energy

PROJECTS AND ELIGIBILITY

- Typical projects include:
 - lighting, motors, compressed air, industrial processes, refrigeration, HVAC, renewable, etc.
 - Projects that will save at least 20,000 kWh per year
- Not eligible for funding:
 - cogeneration (biomass is eligible)
 - demand-limiting
 - power factor correction
 - fuel-switching (renewable sources are eligible)

- **INCENTIVES**

- \$1,000 for a scoping study
- \$15,000 for a feasibility study
- Implementation: the lower of:
 - \$0.15 per kWh saved in one year
 - \$500,000
 - 50% of eligible customer costs
 - Amount resulting in the customer's required simple payback (1 year minimum)
- Interest-free, on-the-bill financing of eligible costs up to \$500,000

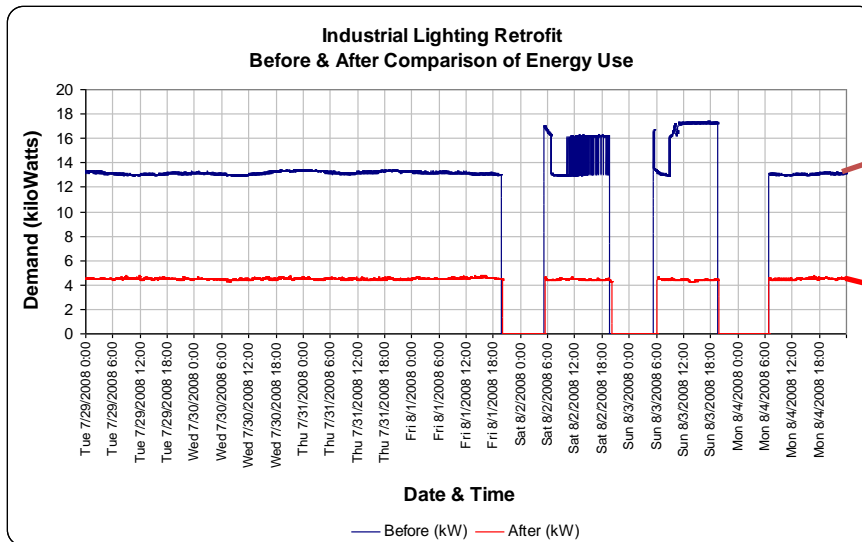
Project Phase	Customer Action	ENSC Assistance
<p>Find the Opportunities</p>	<ul style="list-style-type: none"> • Identify possible measures (customer staff or third party) 	<ul style="list-style-type: none"> • Recommend third party technical assistance • Pay 50% (up to \$1,000) of costs for third party assistance
<p>Feasibility Study</p>	<ul style="list-style-type: none"> • Apply for Study Incentive • Complete study (customer staff or third party) 	<ul style="list-style-type: none"> • Provide test equipment • Pay 100% (up to \$15,000) of feasibility study costs
<p>Implementation</p>	<ul style="list-style-type: none"> • Apply for Project Incentive • Complete project 	<ul style="list-style-type: none"> • Pay project incentive. Could be in phases during implementation.
<p>Close-Out</p>	<ul style="list-style-type: none"> • Basic measurement & verification to confirm savings 	<ul style="list-style-type: none"> • Zero interest, on-bill financing of eligible costs

CUSTOMER BENEFITS

- Fast incentive approval and payment with minimal red tape
- Can “stack” ENSC incentives with those from other incentive programs.
- Customer “owns the project ” selects the consultants, contractors, equipment vendors or can use in-house engineering and installation.
- Test equipment loaned at “no charge” or ENSC pays up to 50% for rental of specialized test equipment

CASE STUDIES

- **Industry:** Warehousing/Distribution
- **Project Details:** Lighting Retrofits
- **Energy Savings:** 243,160 kWh/yr
or \$17,581/yr



CASE STUDIES



- Industry: **Manufacturing**
- Project Description **Lighting Retrofit & Air Compressor Upgrade**
- Energy Savings **678,269 kWh (lighting retrofit)**
- Energy Savings **359,478 kWh (compressor upgrade)**

NEW CONSTRUCTION PROGRAM

- Helps customers design and build more efficient buildings
- Incentives (up to \$500k) to exceed codes
- Could see code-level energy use improved by 25%-35%



NEW CONSTRUCTION

- The foundation of the program is the *Core Performance Guide*, a multi-path, flexible program to achieve significant, predictable energy savings in new commercial buildings.
- The *Core Performance Guide* defines high performance criteria for building envelope, lighting, HVAC and controls.

New Construction Core Performance Path (NCCP)

- Applicable to buildings that are 900 to 6,500 square metres (10,000 to 70,000 sq. ft.)
- \$1.00/SF of building space for full implementation of a prescribed package of measures
- Building types include:
 - Office
 - School
 - Public Assembly
 - Warehouse
 - Others

Whole Building Path (NCWB)

This path is suited for projects:

- That do not meet the size or building type requirements outlined in the previous path,
- More complex in design, or
- Require more energy modeling for another reason.

C&I PROGRAMS RECAP

- C&I Custom / New Construction (incentives/financing/advice)
- Business Energy Rebates (product rebates)
- Small Business Lighting Solutions (80/20 low cost/financing)
- Powered Right Direct Install (no cost)
- Smart Lighting Choices (supplier incentives/discounts)

CUSTOMER BARRIERS

- Technology – costs will come down if I wait;
- Real Saving Claims?
- Higher priorities and projects
- Time and Resources
- Red Tape – bad experience with other programs
- Clients Payback requirements not met
- Expectation that Efficiency projects are costly.
- Change – easier to “do what has always been done”

TRADE ALLIES

- Significant uptake by Distributors/ Suppliers / Contractors for sales of products/services through ENSC programs.
 - Second look at “stalled “projects too expensive
 - Add value to clients projects with the overall “best cost solution”
 - Avoid “the missed opportunity” for clients.
 - Promote new technologies
 - Sell more and increase client satisfaction

MOVING FORWARD

- Qualified vendors program
- Expanded Products offering – Prescriptive
- Qualified products lists expanded
- Market Segment Promotion “customized /bundled offerings”
- Enhanced Client support activities, technical support, training and promotion for energy efficiency.

SUMMARY

Fast

- Response Time
 - 5 business days
- Incentive payments for your projects.
- Continuous Improvement
 - Fast track applications

Flexible and Easy

- Combine programs
 - Prescriptive, Custom, NC
- Project phases
 - Installment incentives
- Simple application process
- Tell us what you require

C&I PROGRAMS

SOMETHING FOR EVERYONE

- Small and large projects
 - equipment upgrades, retrofits, renovations and new construction
- Integrated programs – blend programs by project and customer requirements taking advantage of all program incentives.
- Call us – you have a project, we have a solution.

HOW TO START –NEXT STEPS

- Visit our website
- Complete a energy audit /scoping study
- Call us to discuss your projects and business requirements for energy saving initiatives.
- We will create a energy saving solution for you !!

Program information/applications

- **Business Energy Rebates**

businessenergyrebates@efficiencyns.ca

www.efficiencyns.ca/businessenergyrebates

- **Small Business Lighting Solutions**

businessenergyrebates@efficiencyns.ca

www.efficiencyns.ca/businessenergyrebates

Program information/applications

- C&I Custom Program

cicustom@efficiencyns.ca

www.efficiencyns.ca/cicustom

- C&I New Construction

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