HPNC Prescriptive, Engineered and Custom Worksheet Webinar

September 14, 2017

Summary of Changes

- Prescriptive Agribusiness Worksheet
  - Added lighting measures to worksheet
  - Updated non-lighting measures to align with Retrofit
- Engineered Worksheets
  - Updates to align with the building code including changes to ASHRAE 90.1
- Custom Workbook
  - New workbook combines application forms and custom worksheet into one workbook

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Prescriptive Agribusiness Worksheet

Agribusiness Prescriptive Worksheet

- Added lighting measures to worksheet
  - LED Measures
  - Fluorescent Measures
  - Lighting Control Measures
- Dairy Measures Added
  - similar to Retrofit Prescriptive Measures
- Revisions to align with Retrofit
  - Recirculation Ventilation Fans
- Added
  - High Efficiency Ventilation Exhaust Fans
- Removed
  - Greenhouse – Vegetation from Dual and Natural Exhaust Ventilation

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Agribusiness Measures

- Added Dairy Measures:
  - Dairy Plate Cooler
  - Energy Star Water Heater
  - Milk Scroll Compressor
  - Solar Hot Water Collector for Dairy Farms

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Engineered Worksheets

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Engineered Worksheets

- HPNC Engineered Worksheets were updated to reflect the new Demand Savings definition in the IESO EM&V Protocols
- Updates to Engineered Lighting Worksheets (interior and exterior) to align with the Ontario Building Code SB-10 lighting power density requirements.

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Demand Savings Definition

Updated with new Demand Savings definition to align with IESO EM&V Protocols

- **Old Definition (before June 20, 2016)**
  - the maximum reduction in electricity demand between the Base Case and the Energy Efficient Case occurring in the same hour between 11am to 5pm on business days, June through September

Example: Lighting, Compressors

  - For Measures that are weather dependent, Demand Savings shall be considered as occurring at peak design load conditions

Example: Unitary AC and Chillers

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Demand Savings Definition

- **New Definition (June 20, 2016 and after)**
  - the average load reduction in electricity demand between the Base Case and the Energy Efficient Case occurring in between 1 pm to 7 pm on business days, June 1 through August 31

Example: Lighting, Compressors

  - For Measures that are weather dependent, Demand Savings shall be considered as occurring at peak design load conditions

Example: Unitary AC and Chillers

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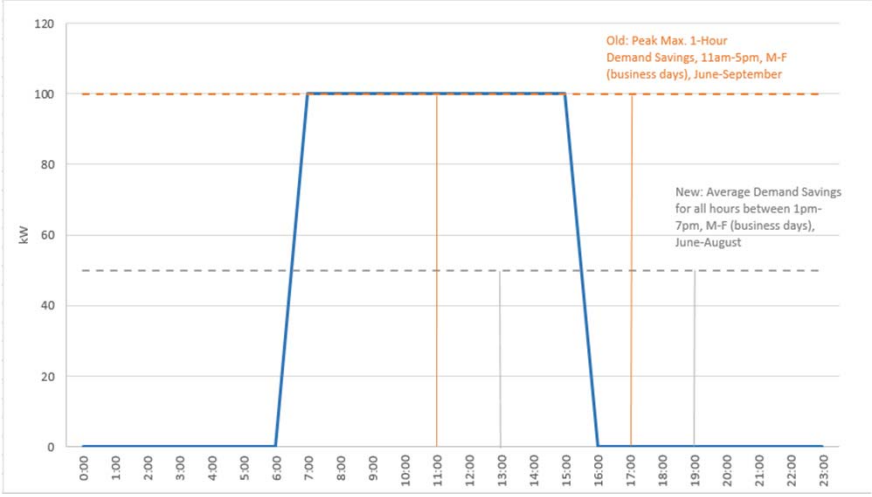
Demand Savings Definition



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Lighting Engineered Worksheet

Why updates to the previous worksheets were required:

- Prior to 2017, the Ontario Building Code's Supplementary Standard SB-10 referenced ASHRAE 90.1 - 2010
- As of January 1, 2017, SB-10 references ASHRAE 90.1 - 2013 and NECB 2015
- This affects allowable lighting energy use, since HPNC workbooks use the ASHRAE 90.1 "space-by-space method" to determine allowable baseline Lighting Power Densities (LPDs) and ultimately, baseline lighting energy use

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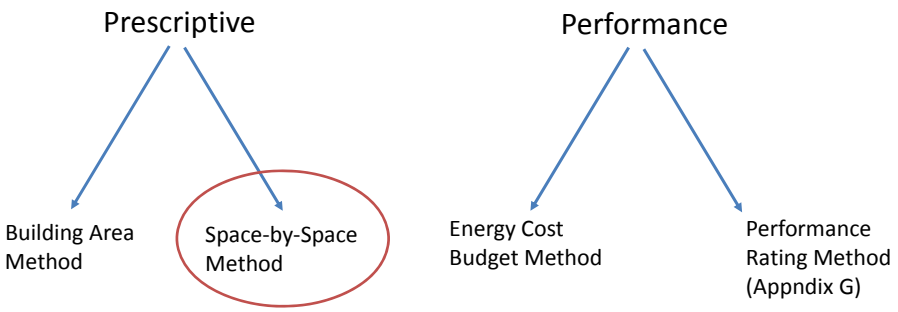
ASHRAE 90.1 Lighting

- 2 Compliance Paths:



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Lighting Engineered Worksheet

What's changed?

- SB-10 includes LPDs for ASHRAE 90.1 space types that supersede the values listed in 90.1-2013 – essentially, we have "Ontario-specific" LPD values for many space types.
- There are less "Additional Control Methods" listed in ASHRAE 90.1 2013 than the 2011 version – things have been simplified.

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Engineered Interior Lighting Worksheet

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Interior Lighting Worksheet

How did these changes affect the worksheets?

- Building space types, LPDs and RCR thresholds were updated
- Updated calculation method for RCR threshold and LPDs
- Simplified the "Additional Control Method" drop-down menu in Section 2

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Interior Lighting Worksheet

- Updated text around eligibility requirements to reflect that ENERGY STAR periodically updates the eligibility requirements for their program
  - "The product is approved and listed on the **most recent** ENERGY STAR Qualified Commercial Lighting List for bulbs or fixtures"

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Examples of changes to ASHRAE 90.1 Table 9.6.1.

Building Type	Previous Worksheet: ASHRAE 90.1 (2010) LPD	New Worksheet: ASHRAE 90.1 (2013) LPD
Bank	1.38	0.86
Warehouse (Medium)	0.58	0.35
Manufacturing Facility (High Bay)	1.23	0.75
Office (Enclosed)	1.11	0.93
Office (Open)	0.98	0.81

No more specific LPD for “Card File and Cataloging”

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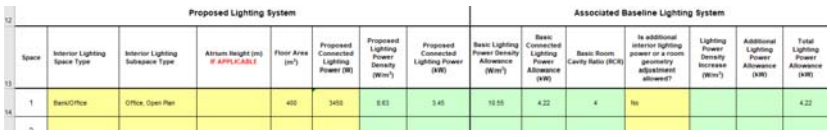
Interior Lighting Worksheet: Changes to Assumed Savings

Example: 20 m x 20 m open-plan office with (575) 6W LED MR16 lamps

Savings according to v6.1 Engineered Lighting Worksheet (up until May 2016):

- Proposed LPD: 8.63 W/m2
- Allowable LPD: 10.55 W/m2
- Total savings assumed (kWh): 2,107 kWh
- Total savings (kW): 0.8
- Total Incentive: $320



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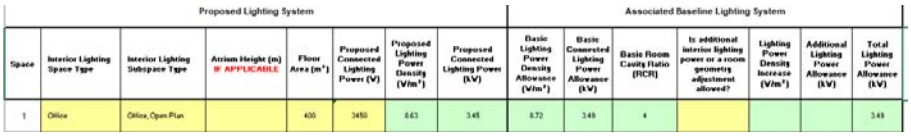
Interior Lighting Worksheet: Changes to Assumed Savings

Example: 20 m x 20 m open-plan office with (575) 6W LED MR16 lamps

Savings according to New v6.2.1 Engineered Lighting Worksheet (Sept 2017):

- Proposed LPD: 8.63 W/m2
- Allowable LPD: 8.72 W/m2
- Total savings assumed: 102 kWh
- Total savings (kW): 0
- Total Incentive: $5



Proposed Lighting System								Associated Baseline Lighting System						
Space	Interior Lighting Space Type	Interior Lighting Subspace Type	Atrium Height (m) IF APPLICABLE	Floor Area (m²)	Proposed Connected Lighting Power (W)	Proposed Lighting Power Density (W/m²)	Proposed Connected Lighting Power (kW)	Basic Lighting Power Density Allowance (W/m²)	Basic Connected Lighting Power Allowance (kW)	Basic Room Cavity Ratio (RCR)	Is additional interior lighting power or a room geometry adjustment allowed?	Lighting Power Density Increase (W/m²)	Additional Lighting Power Allowance (kW)	Total Lighting Power Allowance (kW)
1	Office	Office, Open Plan		400	3450	8.63	3.45	8.72	3.49	4				3.49

Went from incentive of $320 to $5 for the same proposed equipment!

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Additional Examples of old vs. new Interior Lighting Worksheet Incentives

Space Type	Previous Worksheet: ASHRAE 90.1 (2010)			New Worksheet: ASHRAE 90.1 (2013)		
	Savings kW	Savings kWh	Incentive $	Savings kW	Savings kWh	Incentive $
Bank	0.70	2,208	$280	0.30	954	$120
Schedule: 8:00am – 5:00pm M to F, Area: 100 m2, Connected Power: 500W						
Manufacturing Facility (High Bay)	7.00	61,505	$2,800	2.00	17,610	$800
Schedule: 24h/7days a week, Area: 1,000 m2, Connected Power: 6,000W						
Office (Open)	1.00	4,917	$400	0.70	3,295	$280
Schedule: 12:00pm to 9:00pm S, S and 8:00am to 9:00 pm M – F, Area: 200 m2, Connected Power: 1,000 W.						

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Interior Lighting Worksheet

An example:

Retail Store

- Fitting room (15m x 4m)
- Storage room (8m x 1.5m)
- Sales area (15m x 15m)
- Atrium (4m x 4m)

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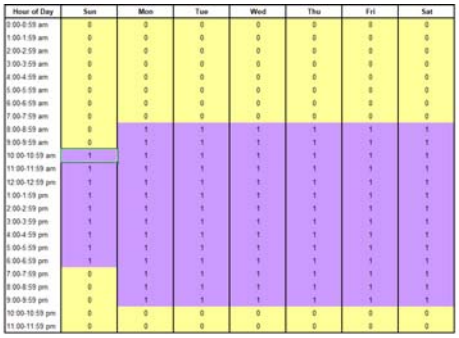
Interior Lighting Worksheet

An example:

Lighting in these spaces is all on same schedule:

- Monday to Saturday: 8:00 am to 10:00 pm
- Sunday: 10:00 am to 7:00 pm



Hour of Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat
0:00-0:59 am	0	0	0	0	0	0	0
1:00-1:59 am	0	0	0	0	0	0	0
2:00-2:59 am	0	0	0	0	0	0	0
3:00-3:59 am	0	0	0	0	0	0	0
4:00-4:59 am	0	0	0	0	0	0	0
5:00-5:59 am	0	0	0	0	0	0	0
6:00-6:59 am	0	0	0	0	0	0	0
7:00-7:59 am	0	0	0	0	0	0	0
8:00-8:59 am	0	1	1	1	1	1	1
9:00-9:59 am	0	1	1	1	1	1	1
10:00-10:59 am	1	1	1	1	1	1	1
11:00-11:59 am	1	1	1	1	1	1	1
12:00-12:59 pm	1	1	1	1	1	1	1
1:00-1:59 pm	1	1	1	1	1	1	1
2:00-2:59 pm	1	1	1	1	1	1	1
3:00-3:59 pm	1	1	1	1	1	1	1
4:00-4:59 pm	1	1	1	1	1	1	1
5:00-5:59 pm	1	1	1	1	1	1	1
6:00-6:59 pm	1	1	1	1	1	1	1
7:00-7:59 pm	0	1	1	1	1	1	1
8:00-8:59 pm	0	1	1	1	1	1	1
9:00-9:59 pm	0	1	1	1	1	1	1
10:00-10:59 pm	0	0	0	0	0	0	0
11:00-11:59 pm	0	0	0	0	0	0	0

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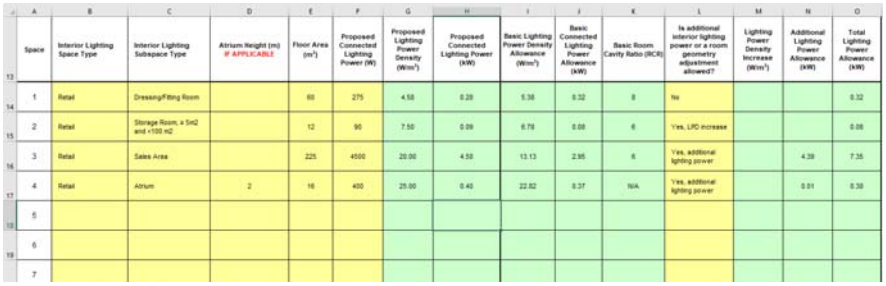
Interior Lighting Worksheet – Sec. 1

Section 1:



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
13	Space	Interior Lighting Space Type	Interior Lighting Subspace Type	Atrium Height (m) IF APPLICABLE	Floor Area (m^2)	Proposed Connected Lighting Power (W)	Proposed Lighting Power Density (W/m^2)	Proposed Connected Lighting Power (kW)	Basic Lighting Power Density Allowance (W/m^2)	Basic Connected Lighting Power Allowance (kW)	Basic Room Cavity Ratio (RCR)	Is additional interior lighting power or a room geometry adjustment allowed?	Lighting Power Density Increase (W/m^2)	Additional Lighting Power Allowance (kW)	Total Lighting Power Allowance (kW)
14	1	Retail	Dressing/Fitting Room		60	275	4.58	0.28	5.38	0.32	8	No			0.32
15	2	Retail	Storage Room, ≥ 5m2 and <100 m2		12	90	7.50	0.09	6.78	0.08	6	Yes, LPD increase			0.08
16	3	Retail	Sales Area		225	4500	20.00	4.50	13.13	2.95	6	Yes, additional lighting power		4.39	7.35
17	4	Retail	Atrium	2	16	400	25.00	0.40	22.82	0.37	N/A	Yes, additional lighting power		0.01	0.38
18	5														
19	6														
	7														

- Fill in the yellow cells, the green cells will be calculated automatically

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Interior Lighting Worksheet

Other characteristics of our example Retail Store:

- In addition to general lighting, there is additional lighting in the Sales Area to highlight the merchandise
- The Atrium has automatic continuous daylight dimming controls

Dealt with in Sec 2 of the Worksheet

- Our Storage Area is of a size such that an RCR adjustment is permitted

Dealt with in Sec 3 of the Worksheet

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Interior Lighting Worksheet – Sec. 2

- 3 cases in which an increase in LPD is permitted (Section 2):
  - **Case 1:** When additional controls are used (under specified circumstances) → *Atrium*
  - **Case 2:** For spaces with additional decorative lighting or for highlighting art or exhibits
  - **Case 3:** For lighting equipment installed in sales areas and specifically designed and directed to highlight merchandise → *Sales Area*

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Interior Lighting Worksheet – Sec. 2

Case 3 – Retail Lighting Calculation

Additional interior lighting power allowance
= 1000 W + (RA 1 x 6.46 W/m²) + (RA 2 x 6.46 W/m²) +
(RA 3 x 15.07 W/m²) + (RA 4 x 26.91 W/m²)

Where:
Retail Area 1: the floor area for all products not listed in Retail Areas 2, 3 or 4
Retail Area 2: the floor area used for the sale of vehicles, sporting goods, and small electronics
Retail Area 3: the floor area used for the sale of furniture, clothing, cosmetics, and artwork
Retail Area 4: the floor area used for the sale of jewelry, crystal, and china.

For our example:
= 1000 W + (15 m x 15 m x 15.07 W/m²) = 4,391 W

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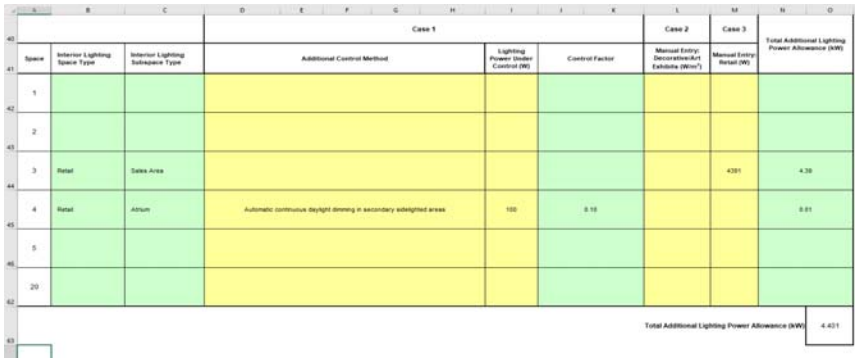
Interior Lighting Worksheet – Sec. 2

Section 2:



Space	Interior Lighting Space Type	Interior Lighting Subspace Type	Case 1: Additional Control Method	Case 1: Lighting Power Under Control (W)	Case 1: Control Factor	Case 2: Manual Entry: Decorative/Art Exhibits (W/m²)	Case 3: Manual Entry: Retail (W)	Total Additional Lighting Power Allowance (kW)
1								
2								
3	Retail	Sales Area					4381	4.38
4	Retail	Atrium	Automatic continuous daylight dimming in secondary sidelighted areas	100	0.10			0.01
5								
20								
							Total Additional Lighting Power Allowance (kW):	4.431

- Once this table in Section 2 is filled out, you'll notice that the table in Section 1 has been updated

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Interior Lighting Worksheet – Sec. 3

Why an RCR adjustment is permitted for our Storage Area:

RCR = 2.5 x Room Cavity Height x Room Perimeter Length / Room Area

2.5 x 4 m x 8 m / 12 m² = ***6.67***

…which is greater than the stipulated value of ***6*** *(Table 9.6.1)*

Space	Interior Lighting Space Type	Interior Lighting Subspace Type	Luminaire mounting height (m)	Workplane (m)	Room Cavity Height (m)	Room perimeter length (m)	Floor Area (m²)	Actual Room Cavity Ratio (RCR)	Corridor Width (m) IF APPLICABLE	Basic Room Cavity Ratio (RCR)	Does Actual RCR Exceed Basic RCR?	LPD Increase (W/m²)
1												
2	Retail	Storage Room, ≤ 5m2 and >100 m2	4	0.2	4	8	12	6.3		6.0	Yes	1.36
3												

Introduction | Applicant and Facility Info | Proposed System Schedule | Proposed System Assumptions | Outputs | LDC Outputs | LDC Equipment

- Again, notice that the table in Section 1 has now been updated with this new information

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Engineered Exterior Lighting Worksheet

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Exterior Lighting Worksheet

How did Building Code changes affect the worksheets?

- LPDs for all spaces were updated per ASHRAE 90.1 – 2013
- The text on “Exempt Lighting” under the “Notes” section (Row 10) was updated to reflect changes from ASHRAE 90.1 – 2010 to ASHRAE 90.1 – 2013
- No changes were made to Section 2 and Section 3

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Exterior Lighting Worksheet

3 Main Types of Exterior Lighting:

- Exterior Lighting (Except Roadway) – Section 1
  - Base Allowance: Previously 750W, now 500W
  - Some surfaces can be "traded", some can't
- Roadway and Street Lighting – Section 2
- Highmast Luminaires for Roadway Lighting – Section 3
  - "Highmast" = greater than or equal to 20m (65 ft)

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Exterior Lighting Worksheet

An example:

- 30m x 20m parking lot
- One door (2m in length) with a 3m x 1m canopy
- One 15m (width) x 7m (height) facade

Lighting in these spaces is all on same schedule:

- Monday to Sunday: 6:00 pm to 6:00 am

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Exterior Lighting Worksheet

- There are two "allowances" associated with the doorway (both tradeable):
  - 69 W / linear foot of door (= 207 W in our example)
  - 4.30 W/m2 for entry canopy (= 12.9 W in our example)
- There are two methods to calculate allowance for building facades – users are permitted to use whichever one yields a higher allowance:
  - Wall area method: 1.6 W/m2 (= 168 W in our example)
  - Wall surface length method: 12.3 W/linear m (= 184.5 W in our example)

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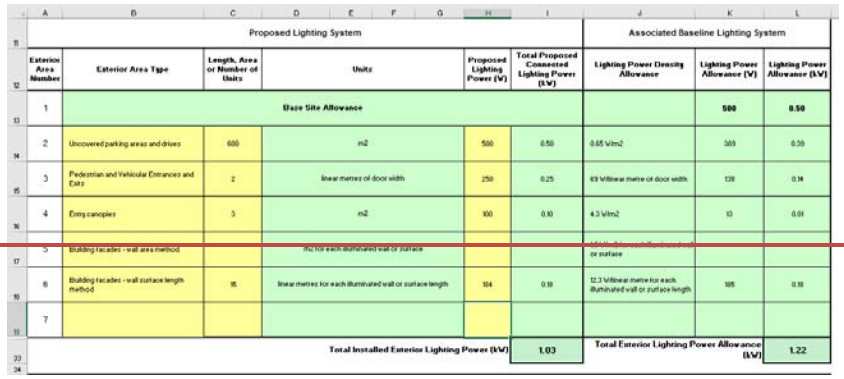
Exterior Lighting Worksheet



	Proposed Lighting System					Associated Baseline Lighting System		
Exterior Area Number	Exterior Area Type	Length, Area or Number of Units	Units	Proposed Lighting Power (W)	Total Proposed Connected Lighting Power (kW)	Lighting Power Density Allowance	Lighting Power Allowance (W)	Lighting Power Allowance (kW)
1	Base Site Allowance						500	0.50
2	Uncovered parking areas and drives	600	m2	500	0.50	0.65 W/m2	369	0.39
3	Pedestrian and Vehicular Entrances and Exits	2	linear metres of door width	250	0.25	69 W/linear metre of door width	138	0.14
4	Entry canopies	3	m2	100	0.10	4.3 W/m2	13	0.01
5	Building facades - wall area method		m2 for each illuminated wall or surface			1.6 W/m2 for each illuminated wall or surface		
6	Building facades - wall surface length method	15	linear metres for each illuminated wall or surface length	184	0.18	12.3 W/linear metre for each illuminated wall or surface length	185	0.18
7								
				Total Installed Exterior Lighting Power (kW)	1.03	Total Exterior Lighting Power Allowance (kW)		1.22

- In practice, the base allowance can be divided any way one so chooses and used for the allowance calculation for any of the space types above.
- The allowance for the building façade can only be used for the façade (non-tradeable surface)

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Engineered Unitary AC Worksheet

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Unitary AC Worksheet

An example: 400 m^2 library in Windsor, where we're planning for a water-cooled 16,000 Btu/hr unit with 14 EER

Choose Reference Facility:

- If not listed, select facility for which Load Duration Curve is most accurate
- We'll select "Community Centre"

For Proposed AC Unit Operating Schedule:

- Worksheet allows you to have a number of different operating schedules depending on what time of year it is (for example, "Season 1" could be from October to March, "Season 2" could be from April to September)

Minimum EER is 12.1 → savings are 330 kWh/year

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Custom Workbook

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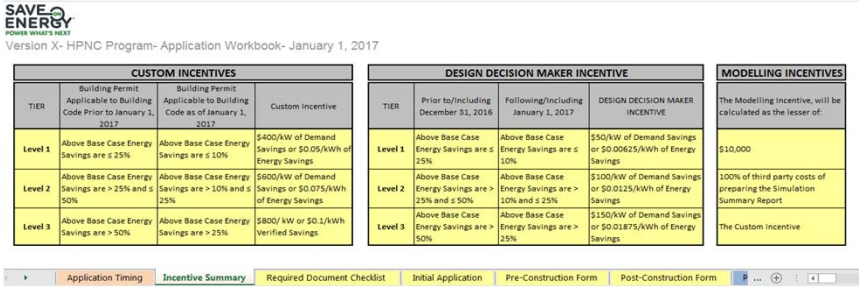
Custom Application Workbook

- New Excel based application workbook with the initial application, pre-construction and post-construction applications and the participant/DDM agreements
- Also includes the energy modelling summary report & custom worksheet



SAVE ENERGY
POWER WHAT'S NEXT

Version X- HPNC Program- Application Workbook- January 1, 2017

CUSTOM INCENTIVES			
TIER	Building Permit Applicable to Building Code Prior to January 1, 2017	Building Permit Applicable to Building Code as of January 1, 2017	Custom Incentive
Level 1	Above Base Case Energy Savings are ≤ 25%	Above Base Case Energy Savings are ≤ 10%	$400/kW of Demand Savings or $0.05/kWh of Energy Savings
Level 2	Above Base Case Energy Savings are > 25% and ≤ 50%	Above Base Case Energy Savings are > 10% and ≤ 25%	$600/kW of Demand Savings or $0.075/kWh of Energy Savings
Level 3	Above Base Case Energy Savings are > 50%	Above Base Case Energy Savings are > 25%	$800/ kW or $0.1/kWh Verified Savings

DESIGN DECISION MAKER INCENTIVE			
TIER	Prior to/Including December 31, 2016	Following/Including January 1, 2017	DESIGN DECISION MAKER INCENTIVE
Level 1	Above Base Case Energy Savings are ≤ 25%	Above Base Case Energy Savings are ≤ 10%	$50/kW of Demand Savings or $0.00625/kWh of Energy Savings
Level 2	Above Base Case Energy Savings are > 25% and ≤ 50%	Above Base Case Energy Savings are > 10% and ≤ 25%	$100/kW of Demand Savings or $0.0125/kWh of Energy Savings
Level 3	Above Base Case Energy Savings are > 50%	Above Base Case Energy Savings are > 25%	$150/kW of Demand Savings or $0.01875/kWh of Energy Savings

MODELLING INCENTIVES
The Modelling Incentive, will be calculated as the lesser of:
$10,000
100% of third party costs of preparing the Simulation Summary Report
The Custom Incentive

Application Timing | Incentive Summary | Required Document Checklist | Initial Application | Pre-Construction Form | Post-Construction Form

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Custom Workbook

- Phases: Initial, Pre and Post
- Energy and Demand Savings Summary:
  - Demand Savings calculation updated
- Linking of info from one form to another for simplified completion
- Condensed 2 forms into 1:
  - combined worksheet and appendix forms A and B into one
- Pre-construction forms – blue tabs
- Post construction forms – orange tabs
- Energy Model Report Guide (template guide to be provided separately – ETA September 2017)

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Custom Application Workbook – Overview 1

SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
APPLICATION WORKBOOK OVERVIEW

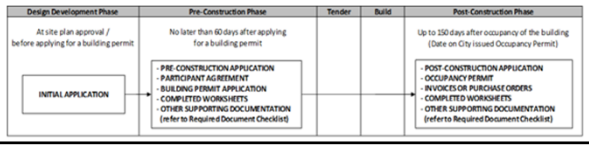
Introduction:
The Custom Application Workbook contains all the application forms, worksheets and agreements required for a High Performance New Construction (HPNC) Custom project.

- Required Document Checklist
- Initial Application
- Pre-Construction Energy and Demand Savings Summary
- Pre-Construction Application
- Post-Construction Energy and Demand Savings Summary
- Post-Construction Application
- Participant Agreement
- Design Decision-Maker Agreement
- Final Evaluation and Incentive Report

All Required Documents should be submitted to the LDC indicated on the Application:
LDC: **Select LDC Initial Application**
LDC E-mail: **LDC TO ADD E-MAIL**

Required Document Checklist:
The Required Document Checklist outlines the submission requirements and deadlines for each phase of the program which is in alignment with the permitting and construction process.

Initial Application:
The Initial Application requires contact information and basic project information. This application will be submitted during design development and no later than 60 days after applying for building permit with the Pre-Construction Application. The intent is to enable participants to register for the program early in design development to maximize energy efficiency without any commitment or energy savings details that would come later in later design and construction phases.



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Custom Application Workbook – Required Document Checklist 1

SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
REQUIRED DOCUMENT CHECKLIST

Design Development Phase

Submit at site plan approval / before applying for a building permit. No later than 60 days after applying for a building permit with the Pre-Construction Application Form.

- ☐ Initial Application Form

Pre-Construction Phase

Submit up to 60 days after applying for a building permit.

Required for Custom projects:

Forms in the Custom Application Workbook (required by the Applicant):

- ☑ Pre-Construction Application Form including Custom Worksheet
- ☑ Pre-Construction Energy and Demand Savings Summary Report
- ☑ Signed Participant Agreement
- ☑ Signed Design Decision-Maker Agreement (required by the Design Decision-Maker)

Other supporting documentation:

- ☑ Building Construction Permit Application
- ☑ Working Energy Models (base case and energy efficient case / proposed building models)
- ☑ Energy Modeling Report (a.k.a.: Simulation Summary Report)
- ☑ Take-off Calculations (Modeler's external calculations to support the model input)
- ☑ Architectural Drawings and Specifications (issued for permit)
- ☑ Mechanical Drawings and Specifications (issued for permit)
- ☑ Electrical Drawings and Specifications (issued for permit)
- ☑ Invoice for Total Modeling Costs (from the modeling company to the applicant)

Note: Additional documentation may be required upon request by the LDC.

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Custom Application Workbook – Required Document Checklist 2

Post-Construction Phase

Submit up to 150 days after project completion / occupancy permit date.

Required for Custom projects:

Forms in the Custom Application Workbook (required by the Applicant):

- ☑ Post-Construction Application Form
- ☑ Post-Construction Energy and Demand Savings Summary Report

Other supporting documentation:
(submit updated as-built documentation if it differs from the pre-construction documentation)

- ☑ Building Permit (issued by municipality)
- ☑ Occupancy Permit (issued by municipality)
- ☑ Working Energy Model (base case and energy efficient case / as-built building models)
- ☑ Energy Modeling Report (a.k.a.: Simulation Summary Report)
- ☑ Take-off Calculations (Modeler's external calculations to support the model input)
- ☑ Architectural Drawings and Specifications (issued for construction/as-built)
- ☑ Mechanical Drawings and Specifications (issued for construction/as-built)
- ☑ Electrical Drawings and Specifications (issued for construction/as-built)
- ☑ Product cut sheet(s) / spec sheet(s) / shop drawings for installed energy efficient measure(s)
- ☑ Invoice(s) or purchase order(s) or other document(s) summarizing the total eligible project costs.

Note: Additional documentation may be required upon request by the LDC.

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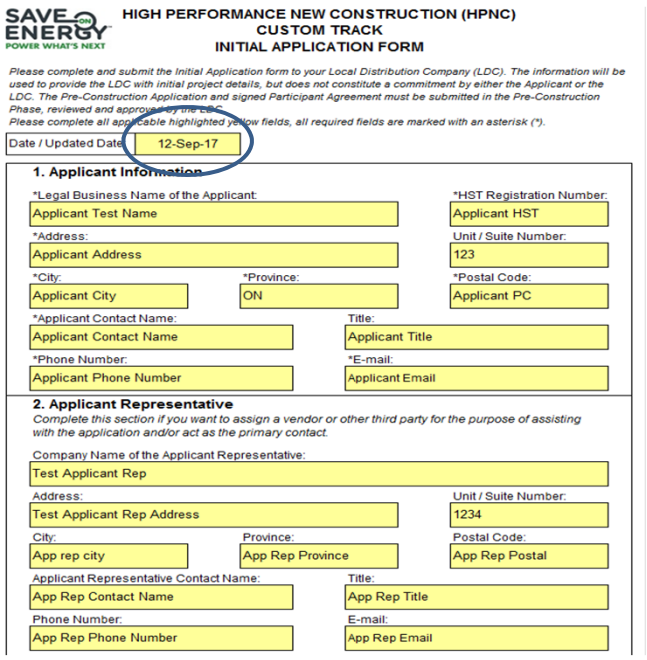
Custom Application Workbook – Initial Application 1



SAVE ON ENERGY
POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
INITIAL APPLICATION FORM

Please complete and submit the Initial Application form to your Local Distribution Company (LDC). The information will be used to provide the LDC with initial project details, but does not constitute a commitment by either the Applicant or the LDC. The Pre-Construction Application and signed Participant Agreement must be submitted in the Pre-Construction Phase, reviewed and approved by the LDC.
Please complete all applicable highlighted yellow fields, all required fields are marked with an asterisk (*).

Date / Updated Date: 12-Sep-17

1. Applicant Information

*Legal Business Name of the Applicant: Applicant Test Name
*HST Registration Number: Applicant HST
*Address: Applicant Address
Unit / Suite Number: 123
*City: Applicant City
*Province: ON
*Postal Code: Applicant PC
*Applicant Contact Name: Applicant Contact Name
Title: Applicant Title
*Phone Number: Applicant Phone Number
*E-mail: Applicant Email

2. Applicant Representative

Complete this section if you want to assign a vendor or other third party for the purpose of assisting with the application and/or act as the primary contact.

Company Name of the Applicant Representative: Test Applicant Rep
Address: Test Applicant Rep Address
Unit / Suite Number: 1234
City: App rep city
Province: App Rep Province
Postal Code: App Rep Postal
Applicant Representative Contact Name: App Rep Contact Name
Title: App Rep Title
Phone Number: App Rep Phone Number
E-mail: App Rep Email

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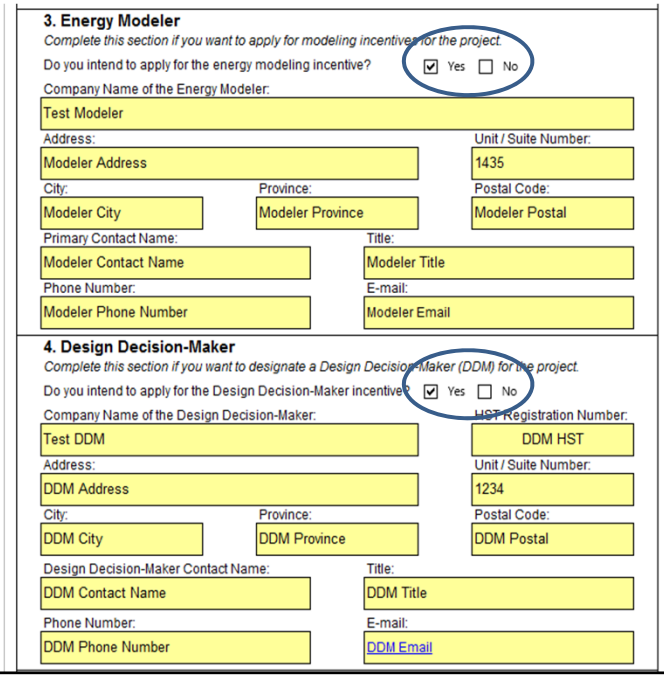
Custom Application Workbook – Initial Application 2



3. Energy Modeler

Complete this section if you want to apply for modeling incentives for the project.

Do you intend to apply for the energy modeling incentive? ☑ Yes ☐ No
Company Name of the Energy Modeler: Test Modeler
Address: Modeler Address
Unit / Suite Number: 1435
City: Modeler City
Province: Modeler Province
Postal Code: Modeler Postal
Primary Contact Name: Modeler Contact Name
Title: Modeler Title
Phone Number: Modeler Phone Number
E-mail: Modeler Email

4. Design Decision-Maker

Complete this section if you want to designate a Design Decision-Maker (DDM) for the project.

Do you intend to apply for the Design Decision-Maker incentive? ☑ Yes ☐ No
Company Name of the Design Decision-Maker: Test DDM
HST Registration Number: DDM HST
Address: DDM Address
Unit / Suite Number: 1234
City: DDM City
Province: DDM Province
Postal Code: DDM Postal
Design Decision-Maker Contact Name: DDM Contact Name
Title: DDM Title
Phone Number: DDM Phone Number
E-mail: DDM Email

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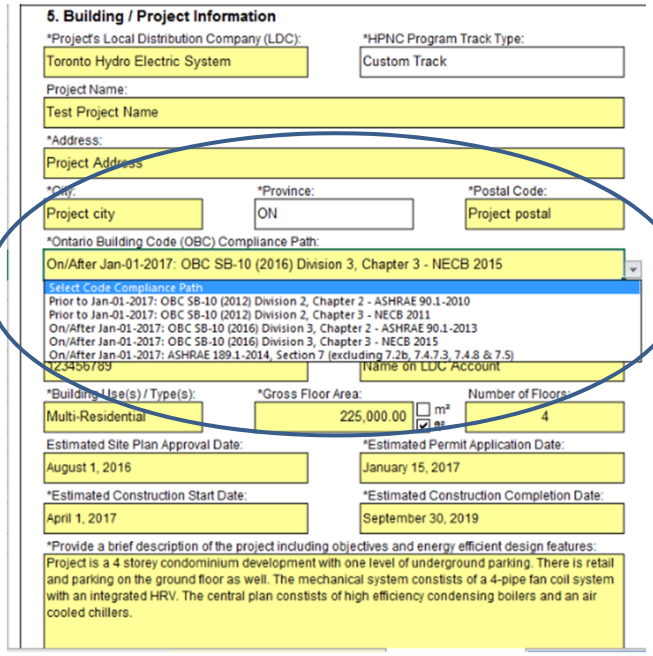
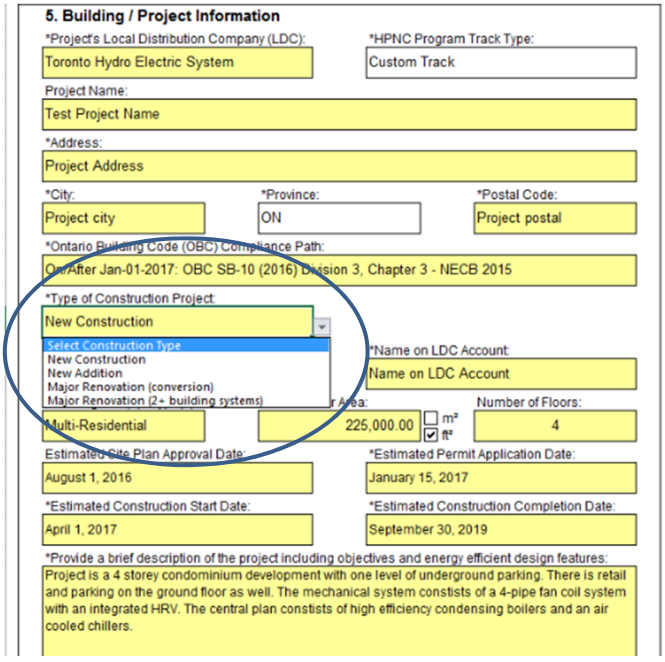
Custom Application Workbook – Initial Application 4



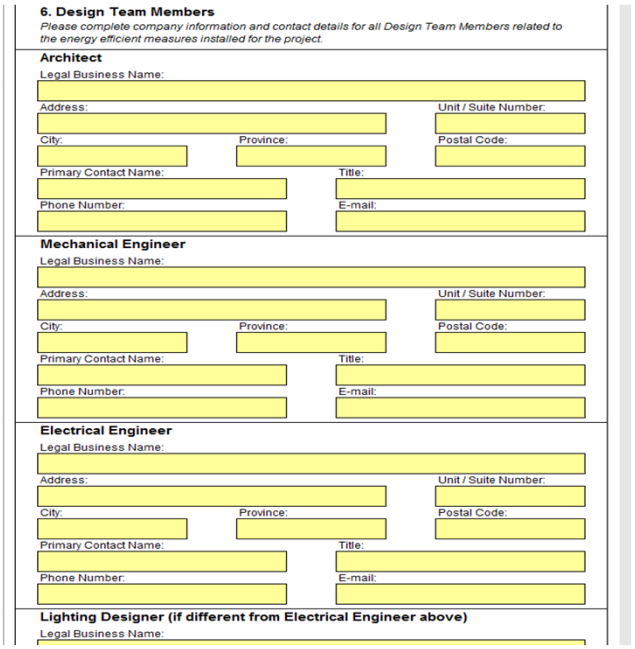
45

Custom Application Workbook – Initial Application 5



46

Custom Application Workbook – Initial Application 6



6. Design Team Members

Please complete company information and contact details for all Design Team Members related to the energy efficient measures installed for the project.

Architect

Legal Business Name:

Address: | Unit / Suite Number:

City: | Province: | Postal Code:

Primary Contact Name: | Title:

Phone Number: | E-mail:

Mechanical Engineer

Legal Business Name:

Address: | Unit / Suite Number:

City: | Province: | Postal Code:

Primary Contact Name: | Title:

Phone Number: | E-mail:

Electrical Engineer

Legal Business Name:

Address: | Unit / Suite Number:

City: | Province: | Postal Code:

Primary Contact Name: | Title:

Phone Number: | E-mail:

Lighting Designer (if different from Electrical Engineer above)

Legal Business Name:

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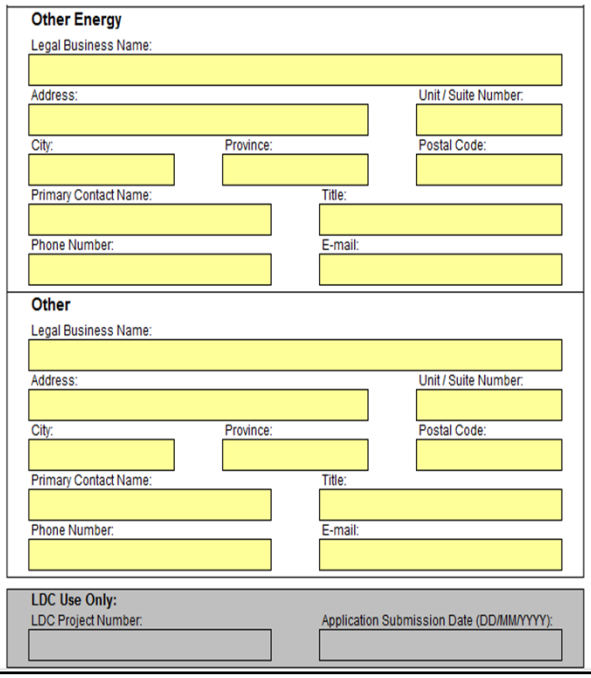
Custom Application Workbook – Initial Application 7



Other Energy

Legal Business Name:

Address: | Unit / Suite Number:

City: | Province: | Postal Code:

Primary Contact Name: | Title:

Phone Number: | E-mail:

Other

Legal Business Name:

Address: | Unit / Suite Number:

City: | Province: | Postal Code:

Primary Contact Name: | Title:

Phone Number: | E-mail:

LDC Use Only:

LDC Project Number: | Application Submission Date (DD/MM/YYYY):

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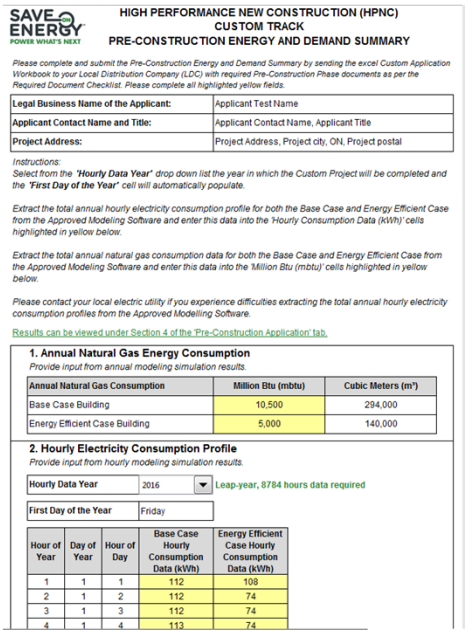
Custom Application Workbook – Pre-Construction Energy & Demand Savings Summary



SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
PRE-CONSTRUCTION ENERGY AND DEMAND SUMMARY

Please complete and submit the Pre-Construction Energy and Demand Summary by sending the excel Custom Application Workbook to your Local Distribution Company (LDC) with required Pre-Construction Phase documents as per the Required Document Checklist. Please complete all highlighted yellow fields.

Legal Business Name of the Applicant:	Applicant Test Name
Applicant Contact Name and Title:	Applicant Contact Name, Applicant Title
Project Address:	Project Address, Project city, ON, Project postal

Instructions:
*Select from the **'Hourly Data Year'** drop down list the year in which the Custom Project will be completed and the **'First Day of the Year'** cell will automatically populate.*

Extract the total annual hourly electricity consumption profile for both the Base Case and Energy Efficient Case from the Approved Modeling Software and enter this data into the 'Hourly Consumption Data (kWh)' cells highlighted in yellow below.

Extract the total annual natural gas consumption data for both the Base Case and Energy Efficient Case from the Approved Modeling Software and enter this data into the 'Million Btu (mbtu)' cells highlighted in yellow below.

Please contact your local electric utility if you experience difficulties extracting the total annual hourly electricity consumption profiles from the Approved Modelling Software.

Results can be viewed under Section 4 of the 'Pre-Construction Application' tab.

1. Annual Natural Gas Energy Consumption
Provide input from annual modeling simulation results.

Annual Natural Gas Consumption	Million Btu (mbtu)	Cubic Meters (m³)
Base Case Building	10,500	294,000
Energy Efficient Case Building	5,000	140,000

2. Hourly Electricity Consumption Profile
Provide input from hourly modeling simulation results.

Hourly Data Year	2016 — Leap-year, 8784 hours data required
First Day of the Year	Friday

Hour of Year	Day of Year	Hour of Day	Base Case Hourly Consumption Data (kWh)	Energy Efficient Case Hourly Consumption Data (kWh)
1	1	1	112	108
2	1	2	112	74
3	1	3	112	74
4	1	4	113	74

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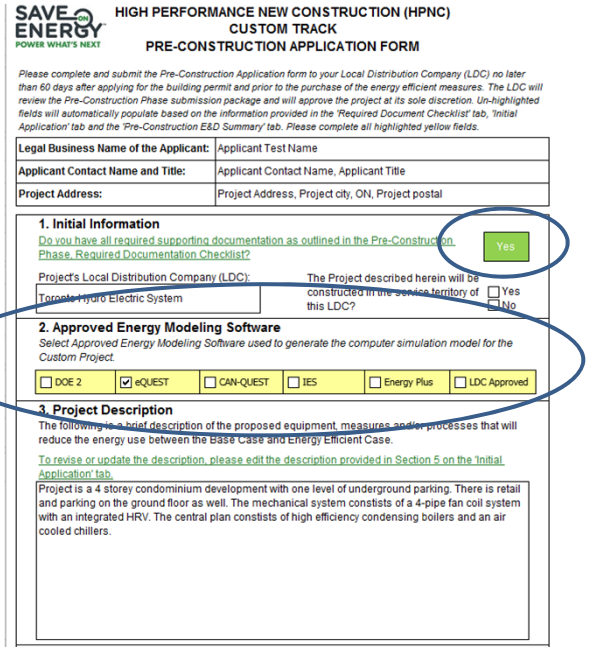
Custom Application Workbook – Pre-Construction Application Form 1



SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
PRE-CONSTRUCTION APPLICATION FORM

Please complete and submit the Pre-Construction Application form to your Local Distribution Company (LDC) no later than 60 days after applying for the building permit and prior to the purchase of the energy efficient measures. The LDC will review the Pre-Construction Phase submission package and will approve the project at its sole discretion. Un-highlighted fields will automatically populate based on the information provided in the 'Required Document Checklist' tab, 'Initial Application' tab and the 'Pre-Construction E&D Summary' tab. Please complete all highlighted yellow fields.

Legal Business Name of the Applicant:	Applicant Test Name
Applicant Contact Name and Title:	Applicant Contact Name, Applicant Title
Project Address:	Project Address, Project city, ON, Project postal

1. Initial Information

Do you have all required supporting documentation as outlined in the Pre-Construction Phase, Required Documentation Checklist? Yes

Project's Local Distribution Company (LDC): Toronto Hydro Electric System

The Project described herein will be constructed in the service territory of this LDC? ☐ Yes ☐ No

2. Approved Energy Modeling Software

Select Approved Energy Modeling Software used to generate the computer simulation model for the Custom Project.

☐ DOE 2 ☑ eQUEST ☐ CAN-QUEST ☐ IES ☐ Energy Plus ☐ LDC Approved

3. Project Description

The following is a brief description of the proposed equipment, measures and/or processes that will reduce the energy use between the Base Case and Energy Efficient Case.

To revise or update the description, please edit the description provided in Section 5 on the 'Initial Application' tab.

Project is a 4 storey condominium development with one level of underground parking. There is retail and parking on the ground floor as well. The mechanical system constists of a 4-pipe fan coil system with an integrated HRV. The central plan constists of high efficiency condensing boilers and an air cooled chillers.

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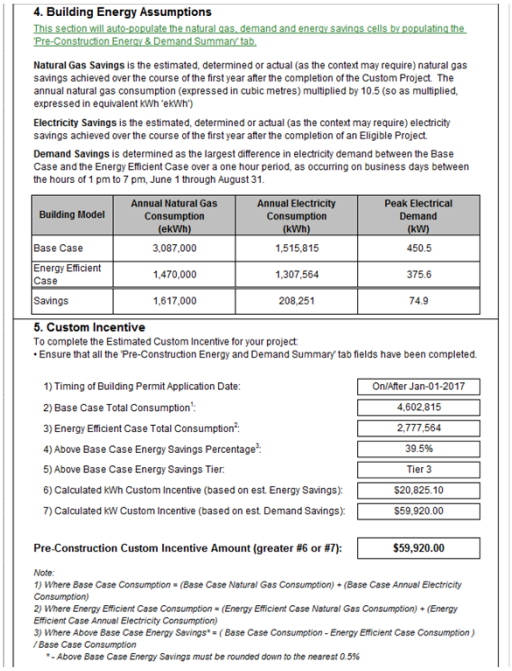
Custom Application Workbook – Pre-Construction Application Form 2



4. Building Energy Assumptions

This section will auto-populate the natural gas, demand and energy savings cells by populating the 'Pre-Construction Energy & Demand Summary' tab.

Natural Gas Savings is the estimated, determined or actual (as the context may require) natural gas savings achieved over the course of the first year after the completion of the Custom Project. The annual natural gas consumption (expressed in cubic metres) multiplied by 10.5 (so as multiplied, expressed in equivalent kWh 'ekWh')

Electricity Savings is the estimated, determined or actual (as the context may require) electricity savings achieved over the course of the first year after the completion of an Eligible Project.

Demand Savings is determined as the largest difference in electricity demand between the Base Case and the Energy Efficient Case over a one hour period, as occurring on business days between the hours of 1 pm to 7 pm, June 1 through August 31.

Building Model	Annual Natural Gas Consumption (ekWh)	Annual Electricity Consumption (kWh)	Peak Electrical Demand (kW)
Base Case	3,087,000	1,515,815	450.5
Energy Efficient Case	1,470,000	1,307,564	375.6
Savings	1,617,000	208,251	74.9

5. Custom Incentive

To complete the Estimated Custom Incentive for your project:
• Ensure that all the 'Pre-Construction Energy and Demand Summary' tab fields have been completed.

1) Timing of Building Permit Application Date:	On/After Jan-01-2017
2) Base Case Total Consumption[1]:	4,602,815
3) Energy Efficient Case Total Consumption[2]:	2,777,564
4) Above Base Case Energy Savings Percentage[3]:	39.5%
5) Above Base Case Energy Savings Tier:	Tier 3
6) Calculated kWh Custom Incentive (based on est. Energy Savings):	$20,825.10
7) Calculated kW Custom Incentive (based on est. Demand Savings):	$59,920.00
Pre-Construction Custom Incentive Amount (greater #6 or #7):	**$59,920.00**

Note:
1) Where Base Case Consumption = (Base Case Natural Gas Consumption) + (Base Case Annual Electricity Consumption)
2) Where Energy Efficient Case Consumption = (Energy Efficient Case Natural Gas Consumption) + (Energy Efficient Case Annual Electricity Consumption)
3) Where Above Base Case Energy Savings = (Base Case Consumption - Energy Efficient Case Consumption) / Base Case Consumption*
** - Above Base Case Energy Savings must be rounded down to the nearest 0.5%*

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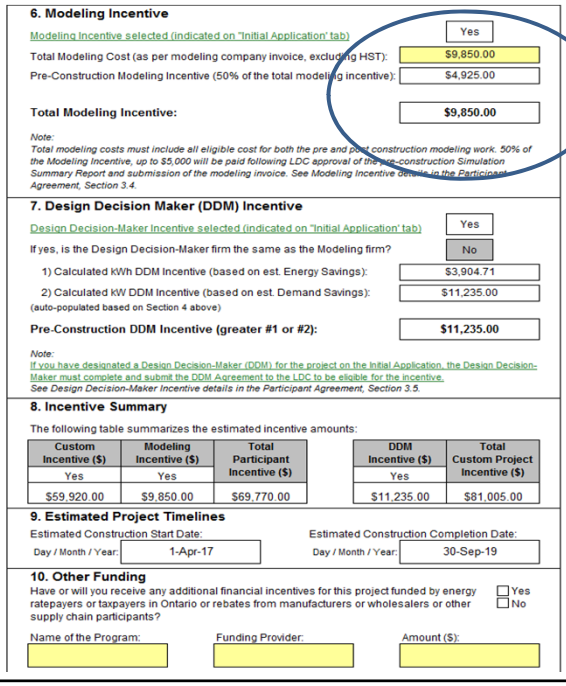
Custom Application Workbook – Pre-Construction Application Form 3



6. Modeling Incentive

Modeling Incentive selected (indicated on 'Initial Application' tab)	Yes
Total Modeling Cost (as per modeling company invoice, excluding HST):	$9,850.00
Pre-Construction Modeling Incentive (50% of the total modeling incentive):	$4,925.00
Total Modeling Incentive:	**$9,850.00**

Note:
Total modeling costs must include all eligible cost for both the pre and post construction modeling work. 50% of the Modeling Incentive, up to $5,000 will be paid following LDC approval of the pre-construction Simulation Summary Report and submission of the modeling invoice. See Modeling Incentive details in the Participant Agreement, Section 3.4.

7. Design Decision Maker (DDM) Incentive

Design Decision-Maker Incentive selected (indicated on 'Initial Application' tab)	Yes
If yes, is the Design Decision-Maker firm the same as the Modeling firm?	No
1) Calculated kWh DDM Incentive (based on est. Energy Savings):	$3,904.71
2) Calculated kW DDM Incentive (based on est. Demand Savings): (auto-populated based on Section 4 above)	$11,235.00
Pre-Construction DDM Incentive (greater #1 or #2):	**$11,235.00**

Note:
If you have designated a Design Decision-Maker (DDM) for the project on the Initial Application, the Design Decision-Maker must complete and submit the DDM Agreement to the LDC to be eligible for the incentive.
See Design Decision-Maker Incentive details in the Participant Agreement, Section 3.5.

8. Incentive Summary

The following table summarizes the estimated incentive amounts:

Custom Incentive ($)	Modeling Incentive ($)	Total Participant Incentive ($)	DDM Incentive ($)	Total Custom Project Incentive ($)
Yes	Yes		Yes	
$59,920.00	$9,850.00	$69,770.00	$11,235.00	$81,005.00

9. Estimated Project Timelines

Estimated Construction Start Date:		Estimated Construction Completion Date:	
Day / Month / Year:	1-Apr-17	Day / Month / Year:	30-Sep-19

10. Other Funding

Have or will you receive any additional financial incentives for this project funded by energy ratepayers or taxpayers in Ontario or rebates from manufacturers or wholesalers or other supply chain participants? ☐ Yes ☐ No

Name of the Program:	Funding Provider:	Amount ($):

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Custom Application Workbook – Pre-Construction Application Form 4

8. Incentive Summary

The following table summarizes the estimated incentive amounts:

Custom Incentive ($)	Modeling Incentive ($)	Total Participant Incentive ($)	DDM Incentive ($)	Total Custom Project Incentive ($)
Yes	Yes		Yes	
$59,920.00	$9,850.00	$69,770.00	$11,235.00	$81,005.00

9. Estimated Project Timelines

Estimated Construction Start Date: Day / Month / Year: 1-Apr-17

Estimated Construction Completion Date: Day / Month / Year: 30-Sep-19

10. Other Funding

Have or will you receive any additional financial incentives for this project funded by energy ratepayers or taxpayers in Ontario or rebates from manufacturers or wholesalers or other supply chain participants? ☐ Yes ☐ No

Name of the Program: | Funding Provider: | Amount ($):

11. Applicant Declaration

By signing below, I certify the information provided is complete and accurate.

Full Name (please print): Applicant Signatory Name

Title of Authorized Signatory: Applicant Signatory Title

Signed on behalf of the Applicant

Date (DD/MM/YYYY): 1-Mar-17

LDC Use Only:

LDC Project Number:

Application Submission Date (DD/MM/YYYY):

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Custom Application Workbook – Participant Agreement

SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION PROGAM (HPNC)
PARTICIPANT AGREEMENT

This Participant Agreement is between the Participant (being the "Applicant" in the Application) and the LDC identified in the Application and contains terms and conditions that govern the Save On Energy High Performance New Construction Program ("HPNC" or the "Program").

The Participant has submitted an Application to the LDC to participate in the Program and it outlines a proposed Project that would qualify for the Program and Participant Incentives. If your Application is approved by the LDC, it shall form part of this agreement.

The HPNC Program is funded by the Independent Electricity System Operator ("**IESO**").

All capitalized terms not herein defined will have the meanings given in Schedule 1.

Key Program Details:

1. PARTICIPATION:
The HPNC Program encourages designers and builders to incorporate energy-efficient Measures to reduce electricity consumption in newly constructed or renovated Facilities. Participants are owners of new (in construction) or major renovation projects of commercial, institutional and multi-family residential buildings.

2. ELIGIBILITY CRITERIA:
2.1 Participant Eligibility: To be eligible to participate in the Program, a Participant must:
(a) be a Non-Residential Distribution Customer or Recognized Farm Operation
(b) that have not previously entered into a binding commitment to acquire the Measure or services required to install the Measures. Notwithstanding the foregoing, the LDC may waive the eligibility requirement, in its sole and absolute discretion, where the Participant demonstrates, to the satisfaction of the LDC, acting reasonably, that the Participant intended to apply to the Program.
(c) have all required rights and authority to have the eligible Measure(s) installed;
(d) be an owner of a new construction or major renovation that represents a Project. Where there is more than one owner, the Participant means all owners and the owners must appoint one owner to represent them.
(e) if applicable, enter into a Design Decision-Maker Agreement with the Design Decision-Maker.

2.2 Facility Eligibility: To be eligible to participate in the Program, the Facility must be one of the following:
- a new Facility;
- a new addition to an existing Facility;
- a major renovation that converts the Facility to an alternative use; or
- a major renovation that replaces two or more building systems and renders the Facility unfit for occupation for more than 30 days;

The Facility must, when completed, be connected to, or behind the meter of another electricity consumer connected to the LDC's Distribution System, and be the subject of an account that is not classified as a residential account, or if the Facility is the subject of a residential account, it must also be part of a Recognized Farm Operation. In addition, when completed, the Facility must conform to Part 3 of the Ontario Building Code.

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Custom Application Workbook – Design Decision Maker Agreement

SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION PROGAM (HPNC)
DESIGN DECISION-MAKER APPLICATION & AGREEMENT

Please complete and submit the Design Decision-Maker Application and signed Agreement to the Local Distribution Company (LDC) for the project no later than 60 days after applying for the building permit.
Please complete all highlighted yellow fields.

Legal Business Name of the Applicant:	Applicant Test Name
Applicant Contact Name and Title:	Applicant Contact Name, Applicant Title
Project Address:	Project Address, Project city, ON, Project postal

Design Decision-Maker (DDM) Applicant Information

*Legal Business Name of the DDM Applicant:	Test DDM
*HST Registration Number:	DDM HST
*Address:	DDM Address
Unit / Suite Number:	1234
*City:	DDM City
*Province:	DDM Province
*Postal Code:	DDM Postal
*Applicant Contact Name:	DDM Contact Name
Title:	DDM Title
*Phone Number:	DDM Phone Number
*E-mail:	DDM Email
Project's Local Distribution Company (LDC):	Toronto Hydro Electric System

Design Decision-Maker Agreement

This Design Decision-Maker (the "DDM") has applied for, among other things, the Design Decision-Maker Incentive pursuant to the Application submitted to the Local Distribution Company (the "LDC") under the High Performance New Construction Program (hereinafter, the "HPNC Program" or the "Program"). This Agreement is entered into between the DDM and the LDC.

The HPNC Program is funded by the Independent Electricity System Operator ("**IESO**").

All capitalized terms not herein defined will have the meanings given in Schedule 1.

Key Program Details:

1. PARTICIPATION:
The HPNC Program encourages designers and builders to incorporate energy-efficient Measures to reduce electricity consumption in newly constructed or renovated Facilities. Participants are owners of new (in construction) or major renovation projects of commercial, institutional and multi-family residential buildings.

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Custom Application Workbook – Post-Construction Energy & Demand Savings Summary

SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
POST-CONSTRUCTION ENERGY AND DEMAND SUMMARY

Please complete and submit the Post-Construction Energy and Demand Summary by sending the excel Custom Application Workbook to your Local Distribution Company (LDC) with required Post-Construction Phase documents as per the Required Document Checklist. Please complete all highlighted yellow fields.

Legal Business Name of the Applicant:	Applicant Test Name
Applicant Contact Name and Title:	Applicant Contact Name, Applicant Title
Project Address:	Project Address, Project city, ON, Project postal

Instructions:
Select from the 'Hourly Data Year' drop down list the year in which the Custom Project will be completed and the 'First Day of the Year' cell will automatically populate.

Extract the total annual hourly electricity consumption profile for both the Base Case and Energy Efficient Case from the Approved Modeling Software and enter this data into the 'Hourly Consumption Data (kWh)' cells highlighted in yellow below.

Extract the total annual natural gas consumption data for both the Base Case and Energy Efficient Case from the Approved Modeling Software and enter this data into the 'Million Btu (mbtu)' cells highlighted in yellow below.

Please contact your local electric utility if you experience difficulties extracting the total annual hourly electricity consumption profiles from the Approved Modelling Software.

Results can be viewed under Section 4 of the 'Post-Construction Application' tab.

1. Annual Natural Gas Energy Consumption
Provide input from annual modeling simulation results.

Annual Natural Gas Consumption	Million Btu (mbtu)	Cubic Meters (m³)
Base Case Building	10,500	294,000
Energy Efficient Case Building	5,000	140,000

2. Hourly Electricity Consumption Profile
Provide input from hourly modeling simulation results.

Hourly Data Year	2016	Leap-year, 8784 hours data required
First Day of the Year	Friday	

Hour of Year	Day of Year	Hour of Day	Base Case Hourly Consumption Data (kWh)	Energy Efficient Case Hourly Consumption Data (kWh)
1	1	1	112	108
2	1	2	112	74
3	1	3	112	74
4	1	4	113	74

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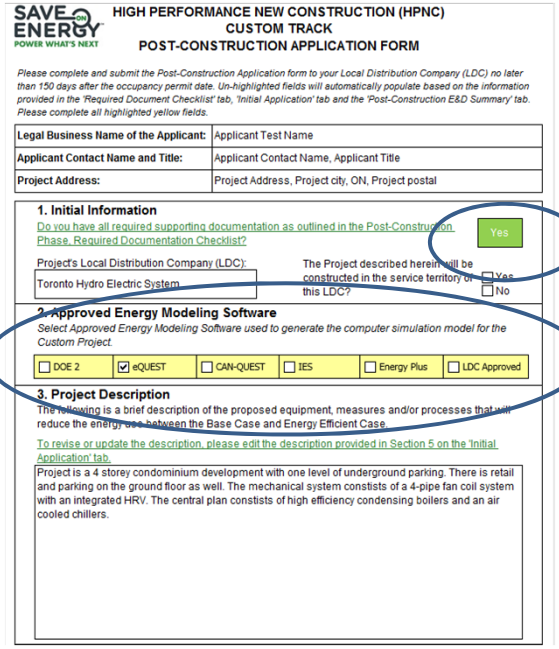
Custom Application Workbook – Post-Construction Application Form 1



SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
POST-CONSTRUCTION APPLICATION FORM

Please complete and submit the Post-Construction Application form to your Local Distribution Company (LDC) no later than 150 days after the occupancy permit date. Un-highlighted fields will automatically populate based on the information provided in the 'Required Document Checklist' tab, 'Initial Application' tab and the 'Post-Construction E&D Summary' tab. Please complete all highlighted yellow fields.

Legal Business Name of the Applicant:	Applicant Test Name
Applicant Contact Name and Title:	Applicant Contact Name, Applicant Title
Project Address:	Project Address, Project city, ON, Project postal

1. Initial Information

Do you have all required supporting documentation as outlined in the Post-Construction Phase, Required Documentation Checklist? Yes

Project's Local Distribution Company (LDC): Toronto Hydro Electric System

The Project described herein will be constructed in the service territory of this LDC? ☐ Yes ☐ No

2. Approved Energy Modeling Software

Select Approved Energy Modeling Software used to generate the computer simulation model for the Custom Project.

☐ DOE 2 ☑ eQUEST ☐ CAN-QUEST ☐ IES ☐ Energy Plus ☐ LDC Approved

3. Project Description

The following is a brief description of the proposed equipment, measures and/or processes that will reduce the energy use between the Base Case and Energy Efficient Case.

To revise or update the description, please edit the description provided in Section 5 on the 'Initial Application' tab.

Project is a 4 storey condominium development with one level of underground parking. There is retail and parking on the ground floor as well. The mechanical system constists of a 4-pipe fan coil system with an integrated HRV. The central plan constists of high efficiency condensing boilers and an air cooled chillers.

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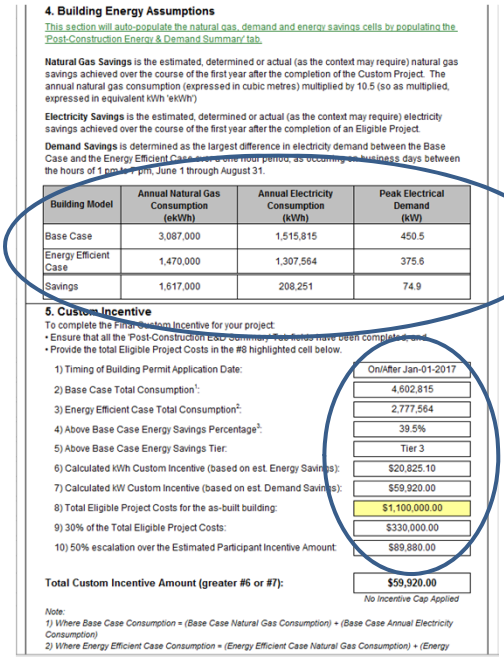
Custom Application Workbook – Post-Construction Application Form 2



4. Building Energy Assumptions

This section will auto-populate the natural gas, demand and energy savings cells by populating the 'Post-Construction Energy & Demand Summary' tab.

Natural Gas Savings is the estimated, determined or actual (as the context may require) natural gas savings achieved over the course of the first year after the completion of the Custom Project. The annual natural gas consumption (expressed in cubic metres) multiplied by 10.5 (so as multiplied, expressed in equivalent kWh 'ekWh')

Electricity Savings is the estimated, determined or actual (as the context may require) electricity savings achieved over the course of the first year after the completion of an Eligible Project.

Demand Savings is determined as the largest difference in electricity demand between the Base Case and the Energy Efficient Case over a one hour period, as occurring on business days between the hours of 1 pm to 7 pm, June 1 through August 31.

Building Model	Annual Natural Gas Consumption (ekWh)	Annual Electricity Consumption (kWh)	Peak Electrical Demand (kW)
Base Case	3,087,000	1,515,815	450.5
Energy Efficient Case	1,470,000	1,307,564	375.6
Savings	1,617,000	208,251	74.9

5. Custom Incentive

To complete the Final Design Incentive for your project:
• Ensure that all the 'Post-Construction E&D Summary' Post-Action Items have been completed; and
• Provide the total Eligible Project Costs in the #8 highlighted cell below.

1) Timing of Building Permit Application Date:	On/After Jan-01-2017
2) Base Case Total Consumption[1]:	4,602,815
3) Energy Efficient Case Total Consumption[2]:	2,777,564
4) Above Base Case Energy Savings Percentage[3]:	39.5%
5) Above Base Case Energy Savings Tier:	Tier 3
6) Calculated kWh Custom Incentive (based on est. Energy Savings):	$20,825.10
7) Calculated kW Custom Incentive (based on est. Demand Savings):	$59,920.00
8) Total Eligible Project Costs for the as-built building:	$1,100,000.00
9) 30% of the Total Eligible Project Costs:	$330,000.00
10) 50% escalation over the Estimated Participant Incentive Amount:	$89,880.00
Total Custom Incentive Amount (greater #6 or #7):	**$59,920.00**

No Incentive Cap Applied

Note:
1) Where Base Case Consumption = (Base Case Natural Gas Consumption) + (Base Case Annual Electricity Consumption)
2) Where Energy Efficient Case Consumption = (Energy Efficient Case Natural Gas Consumption) + (Energy

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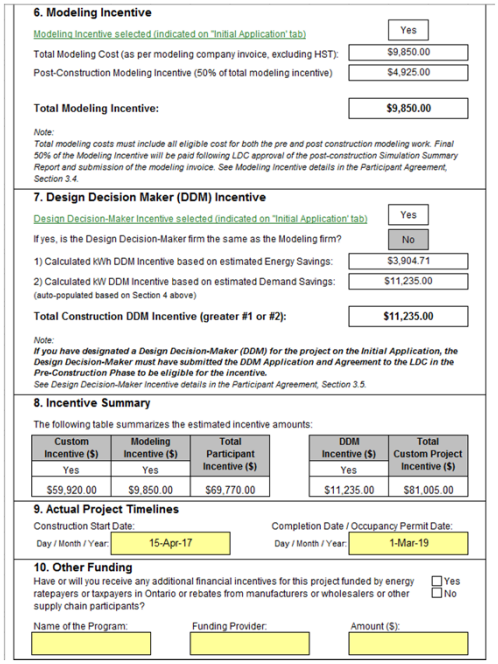
Custom Application Workbook – Post-Construction Application Form 3



6. Modeling Incentive

Modeling Incentive selected (indicated on "Initial Application' tab)	Yes
Total Modeling Cost (as per modeling company invoice, excluding HST):	$9,850.00
Post-Construction Modeling Incentive (50% of total modeling incentive)	$4,925.00
Total Modeling Incentive:	**$9,850.00**

Note:
Total modeling costs must include all eligible cost for both the pre and post construction modeling work. Final 50% of the Modeling Incentive will be paid following LDC approval of the post-construction Simulation Summary Report and submission of the modeling invoice. See Modeling Incentive details in the Participant Agreement, Section 3.4.

7. Design Decision Maker (DDM) Incentive

Design Decision-Maker Incentive selected (indicated on "Initial Application' tab)	Yes
If yes, is the Design Decision-Maker firm the same as the Modeling firm?	No
1) Calculated kWh DDM Incentive based on estimated Energy Savings:	$3,904.71
2) Calculated kW DDM Incentive based on estimated Demand Savings: (auto-populated based on Section 4 above)	$11,235.00
Total Construction DDM Incentive (greater #1 or #2):	**$11,235.00**

Note:
If you have designated a Design Decision-Maker (DDM) for the project on the Initial Application, the Design Decision-Maker must have submitted the DDM Application and Agreement to the LDC in the Pre-Construction Phase to be eligible for the incentive.
See Design Decision-Maker Incentive details in the Participant Agreement, Section 3.5.

8. Incentive Summary

The following table summarizes the estimated incentive amounts:

Custom Incentive ($)	Modeling Incentive ($)	Total Participant Incentive ($)	DDM Incentive ($)	Total Custom Project Incentive ($)
Yes	Yes		Yes	
$59,920.00	$9,850.00	$69,770.00	$11,235.00	$81,005.00

9. Actual Project Timelines

Construction Start Date: Day / Month / Year: 15-Apr-17

Completion Date / Occupancy Permit Date: Day / Month / Year: 1-Mar-19

10. Other Funding

Have or will you receive any additional financial incentives for this project funded by energy ratepayers or taxpayers in Ontario or rebates from manufacturers or wholesalers or other supply chain participants? ☐ Yes ☐ No

Name of the Program: | Funding Provider: | Amount ($):

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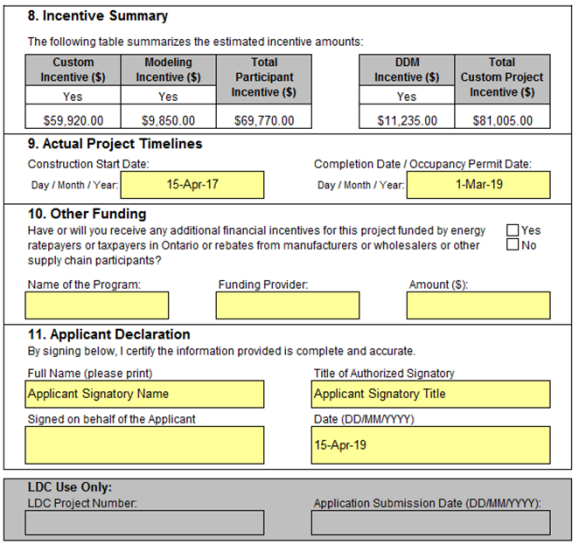
Custom Application Workbook – Post-Construction Application Form 4



8. Incentive Summary

The following table summarizes the estimated incentive amounts:

Custom Incentive ($)	Modeling Incentive ($)	Total Participant Incentive ($)	DDM Incentive ($)	Total Custom Project Incentive ($)
Yes	Yes		Yes	
$59,920.00	$9,850.00	$69,770.00	$11,235.00	$81,005.00

9. Actual Project Timelines

Construction Start Date: Day / Month / Year: 15-Apr-17

Completion Date / Occupancy Permit Date: Day / Month / Year: 1-Mar-19

10. Other Funding

Have or will you receive any additional financial incentives for this project funded by energy ratepayers or taxpayers in Ontario or rebates from manufacturers or wholesalers or other supply chain participants? ☐ Yes ☐ No

Name of the Program: | Funding Provider: | Amount ($):

11. Applicant Declaration

By signing below, I certify the information provided is complete and accurate.

Full Name (please print): Applicant Signatory Name

Title of Authorized Signatory: Applicant Signatory Title

Signed on behalf of the Applicant:

Date (DD/MM/YYYY): 15-Apr-19

LDC Use Only:

LDC Project Number: | Application Submission Date (DD/MM/YYYY):

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Custom Application Workbook – FEIR 1

SAVE ON ENERGY POWER WHAT'S NEXT

HIGH PERFORMANCE NEW CONSTRUCTION (HPNC)
CUSTOM TRACK
FINAL EVALUATION & INCENTIVE REPORT

Legal Business Name of the Applicant:	Applicant Test Name
Applicant Contact Name and Title:	Applicant Contact Name, Applicant Title
Project Address:	Project Address, Project city, ON, Project postal

1. Project Information

Project Identifier: LDC Project Identifier
Project Occupancy Date (DD/MM/YYYY):
Date of Evaluator's Site Visit (DD/MM/YYYY):
Date of Final Evaluation (DD/MM/YYYY):

2. Project Evaluation

Energy & Demand Savings Table

#	Measure	Incentive Metric (kW/ kWh)	M&V Procedure	Base Case		Energy Efficient Case		Estimated Savings	
				Electricity Demand (kW)	Annual Consumption (kWh)	Electricity Demand (kW)	Annual Consumption (kWh)	Demand Savings (kW)	Energy Savings (kWh)
		kW	IPMVP Option D: Calibrated Models					0.0	0
		kW						0.0	0
		kW						0.0	0
		kW						0.0	0
Gross Totals:				0.0	0	0.0	0	0.0	0
Eligible Totals: *(adjusted per the M&V Procedures if applicable)*									

List of attached documents:

Project Evaluator Comments:

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Custom Application Workbook – FEIR 2

3. Participant's Declaration

Applicant Sign-off:
I have reviewed the Project Measurement and Verification Procedures for this Custom Project with the Project Evaluator, and I accept the figures presented in the table above. I acknowledge that these figures, as approved and amended by the LDC, shall provide the basis for any Participant Incentive payments to which I may be entitled to pursuant to the saveONenergy HPNC Participation Agreement.

Full Name (please print) | Title of Authorized Signatory
Signed on behalf of the Applicant | Date (DD/MM/YYYY)

4. Project Evaluator

Evaluator Sign-off:
We have completed a Post-Construction Audit of the project in accordance with the terms of the Save On Energy HPNC Program Measurement and Verification Procedure for Custom Projects:

Full Name (please print) | Title of Authorized Signatory
Signed on behalf of the Evaluator | Date (DD/MM/YYYY)

LDC Use Only:
LDC Project Number: | Application Submission Date (DD/MM/YYYY):

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Questions

Want some understanding about why we did what we did?

- Steve Mooney – Mooney Solutions
- Gillian Lind – Hydro One
- Jon Houle – Toronto Hydro
- Bruce Bibby – Hydro Ottawa

For more specific questions about Program Rules, etc… contact:

- LDC.Support@ieso.ca

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