Clean Government Reporting Transition Update

- BC Public Sector Symposium -

November 26, 2019

Objectives

- An overview of BC's new Clean Government Reporting Tool (CGRT)
- Outline ENERGY STAR Portfolio Manager
 Program and linkages
- CGRT onboarding summary & future outlook

Key Topics

- A brief history of BC's Carbon Neutral Government program and SMARTTool
- Scope and progress of the CGR transition
- When and how will PSO organizations transition
- Preview of the Clean Government Reporting Tool
- ENERGY STAR Portfolio Manager (E*PM) overview
- Insights to prepare for the CGR transition

SMARTTool: Where we've been...

First car nostalgia...

- Drove initial "Road shows"
- Early enhancements ~2013:
 Self Service and EDX
- A path to the 2018 UN
 Momentum for Change award!

Lots of Data!

- Supported policy, planning, forecasts, etc. etc.
- A strong foundation...

SMARTTool background:

- A custom legacy platform
- Hard to manage and enhance
- Availability of commercial solutions
- Limited fit to support the future



Photo Credit: motor1.com

Clean Government Reporting: Where we're going...

A new vehicle ... SoFi is CGRT.

- Designed to fit BC's Program
- User experience and self service
- Data and management flexibility
- Integration with E*PM, BC
 Hydro & FortisBC (NG)
- Future upgrades available

Standard Features

- √ 2010-2018 data migration
- ✓ 'Automated' transition to E*PM
- ✓ Global GHG, Energy trend analytics
- ✓ Customizable dashboard/analytics
- ✓ Standardized user roles

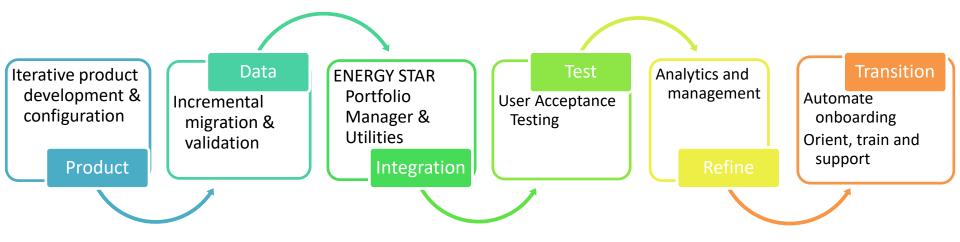


Photo Credit: autoblog.com

Clean Government Reporting: Scope

- a) Implement SoFi as the 'MVP' replacement for SMARTTool
- b) Transition 200 PSO's & Local Governments
- c) Migrate 10 years of historical data (2010-2018)
 - 10,000 buildings, ~2 Million transactions
- d) Transition 87 orgs from EDX to Portfolio Manager
- e) Implement CGR operational/support model
- f) Prepare for the 2019 Reporting Cycle
- g) Establish 1-2 year product & operational roadmap

Clean Government Reporting: Approach



CGRT: Target Timing

Wave 1:

EDX Orgs

Dec-Feb

Health Authorities / School Districts
Local Governments
Universities/Colleges & Crowns

Wave 2:

Non-EDX Orgs

Feb-Mar

Local Governments
Universities/Colleges & Crowns
BC Government

CGRT: Top transition questions?

- 1) What is the current state of SMARTTool/EDX, what will be migrated?
- 2) What are the major changes from SMARTTool?
- 3) What about building updates/changes?
- 4) Utility provider incentives for E*PM?

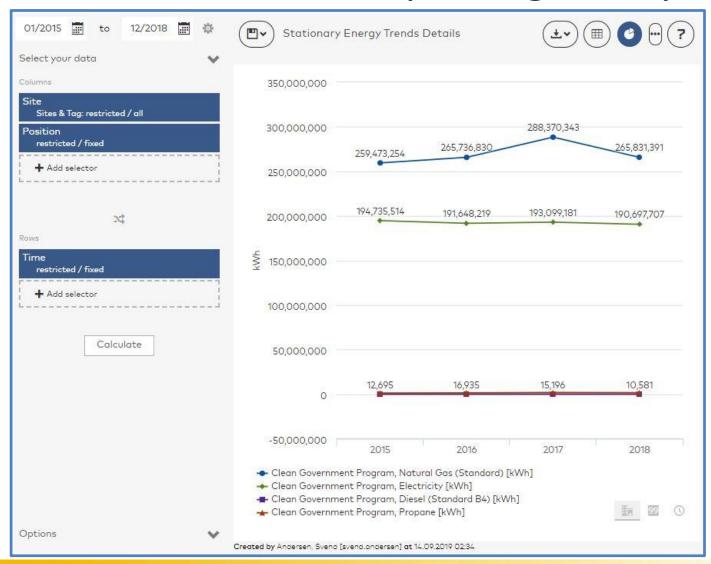
Clean Government Reporting Product Overview

- ➤ Navigation and Dashboards
- > Performance analytics and trends
- ➤ E*PM Integration
- ➤ Data Entry beyond buildings

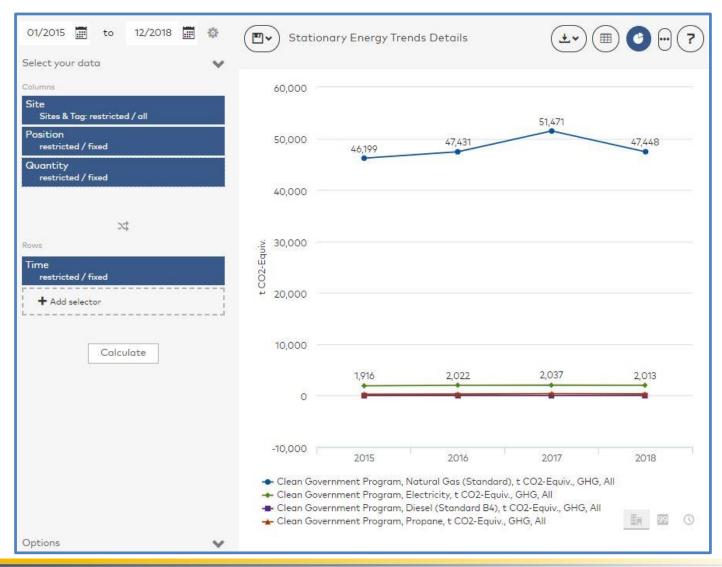
Clean Government Reporting: Dashboards



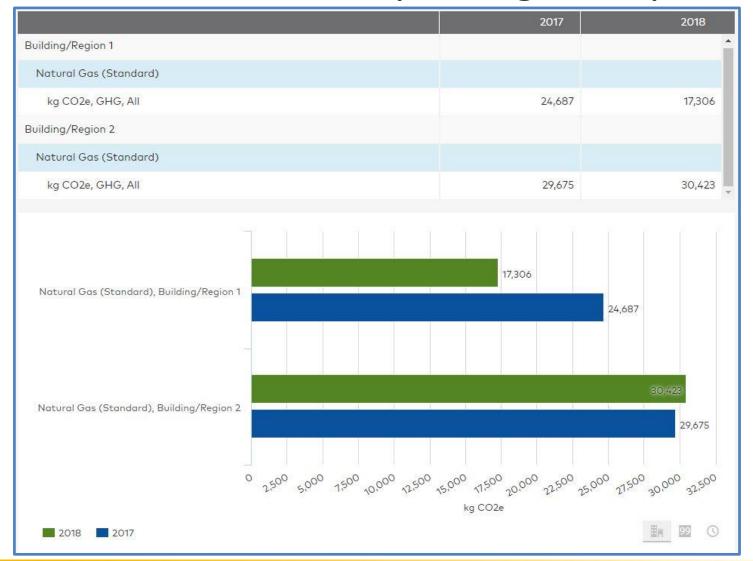
Clean Government Reporting: Analytics



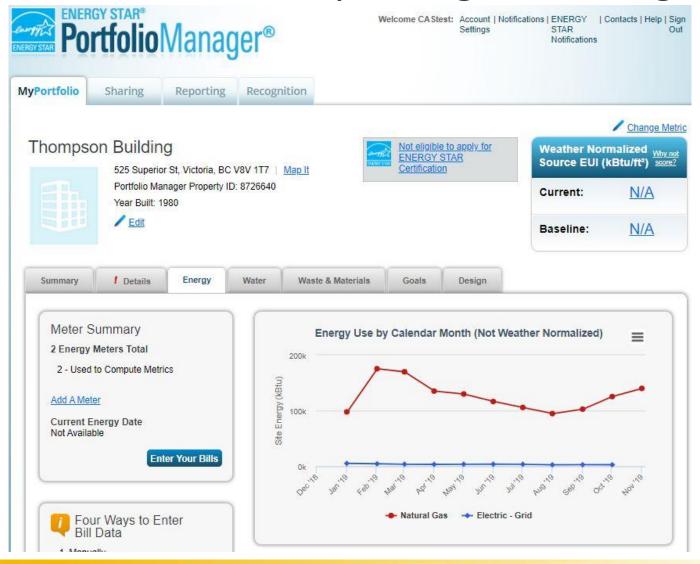
Clean Government Reporting: Energy Trends



Clean Government Reporting: Comparison



Clean Government Reporting: PM Integration



Clean Government Reporting: E*PM

- Web Services Transition and Sharing Integration
 - Automated PM account creation and property 'population'
 - PM property/meter selection, configuration and updates:
 - PM primary function, account/POD info, gross floor area, equity share, address information, year built
 - Initial and monthly synchronization of utility data
 - PSO maintenance of accounts/PODs, property info etc.
- Future Considerations
 - Enhanced E*PM integration; e.g. ENERGY STAR scores
 - Additional utility providers; e.g. Fortis Electricity



ENERGY STAR Portfolio Manager presented in collaboration with



Trina Kennedy
Senior Program Officer, Partnership and Outreach
Buildings and Industry Division, Office of Energy Efficiency
Natural Resources Canada









Agenda

- NRCan Office of Energy Efficiency Introduction
- Introduction to ENERGY STAR Portfolio Manager tool
- What is ESPM's Web Service?
- The low hanging fruit for institutional buildings
- Training webinars
- Additional resources
- Questions







Office of Energy Efficiency - Buildings and Industry Division

Our vision: Helping Canada's buildings sector to become a world leader in energy performance

Services for existing commercial and institutional buildings include:

Energy benchmarking, labelling and reporting support for commercial and institutional buildings

- Implementation support
- Financial assistance program (now fully subscribed!)

Canadian Adaptation of ENERGY STAR Portfolio Manager

- Training (Webinars, decks available)
- ENERGY STAR Certification

ISO50001 for commercial and institutional buildings

- Program support
- Financial assistance program (available till 2025)





PCF – Energy Labelling and Disclosure What could this mean for Canada?



Potential GHG reductions by 2030 are estimated at

2.6MT

Energy benchmarking is key to successful implementation of regional energy benchmarking and reporting legislation





Canadian Adaptation of ENERGY STAR Portfolio Manager

- NRCan is the lead in Canada
- Launched in August 2013
- Canadian factors for emissions calculations
- Bilingual interface (French / English)
- Metric and imperial measurements
- 350+ Canadian weather stations (auto mapped to the postal code)
- 87 building types
- Compliments existing energy management programs/initiatives

Portfolio Manager is the only energy benchmarking tool in Canada that can provide metrics and peer to peer comparisons based on statistically valid data





ENERGY STAR® Portfolio Manager – Key Features

Metrics calculations

Normalized EUI site/source

GHG emissions

Waste/water benchmarking

to the national population of buildings (SCIEU)

1-100 ENERGY
STAR scores
(8 building types)

Canadian adaptation of ENERGY STAR Portfolio Manager

- SI/metric units
- Canadian weather stations
- Bilingual interface (English/French)
- Based on Canadian national building survey (SCIEU 2009)

Management functions

consumption and cost data and trends

Web services*

Sharing*

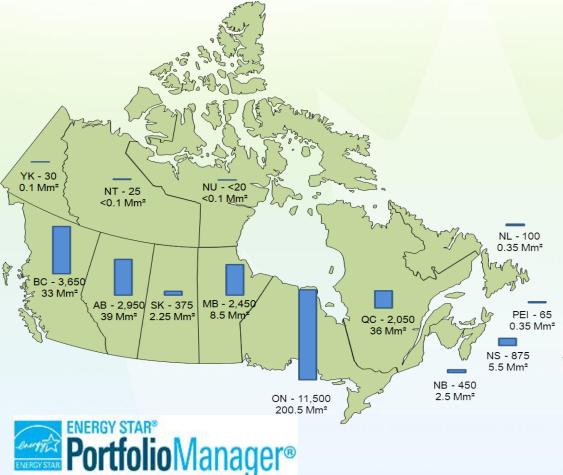
Reporting

Certification*





Canadian Users



- More than 24,000 buildings
- Over 300 million m²

Stakeholder Endorsement and Users























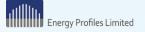




















Portfolio Manager: Energy Data Entries

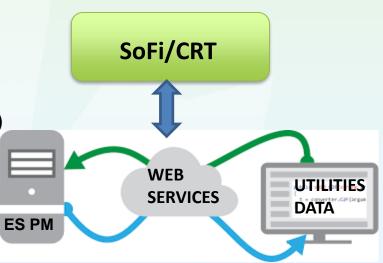
There are three main methods, of getting billing data in Portfolio Manager:

- Web Services *
 - A framework for exchanging data between Portfolio Manager and a third party database system, i.e. a utility customer information system (CIS). In Canada, web services is currently being offered by some utility service providers such as





- Manually (not applicable with CRT)
- Spreadsheet Uploads (not applicable with CRT)







ENERGY STAR FOR BUILDINGSThe Low Hanging Fruit

ENERGY STAR Score

- High score = High Performance
- Easy 1-100 Performance assessment scale





Score 75+ = ENERGY STAR CERTIFICATION

ENERGY STAR Certification

Built upon superior brand recognition – 82% recognition in Canada – Promote your building's success





ENERGY STAR Portfolio ManagerBenchmarking and Certification Institutional Buildings Success Stories







Why Not You?! Jurisdictions leadership making a difference Institutional buildings success stories:

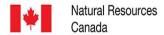
- NRCan providing cost sharing benchmarking and reporting financial assistance to 12 jurisdictions across Canada fully subscribed until 2021
- Government of New Brunswick ENERGY STAR certifies two K-12 schools and a hospital in 2019 in the first year of their program
- Municipality of Mississauga certifies their town hall and an arena
- City of Edmonton implemented a voluntary benchmarking pilot project for commercial and institutional buildings as of 2017
- New Brunswick government to benchmarking and report 850 institutional buildings in E*PM by 2021
- The City of Winnipeg to benchmark and report over 300 commercial and institutional buildings in E*PM by 2021
- BC Municipalities to benchmark and report over 800 C&I buildings in E*PM by 2021





Accessing ENERGY STAR Portfolio Manager

- http://www.nrcan.gc.ca/energy/efficiency/buildings/energybenchmarking/3693
- ENERGY STAR Portfolio Manager Access Page





ENERGY STAR® Portfolio Manager Training Resources

Interested in Portfolio Manager training webinars?

Current list of available webinars

- PM101
- PM201
- PM301
- Licenced Professional ENERGY STAR Certification
- PM: Benchmarking Ice and Curling Rinks

To obtain webinar please email us nrcan.buildings-batiments.rncan@canada.ca





Additional Links

- Heads Up: Building Energy Efficiency Newsletter:
 - http://www.nrcan.gc.ca/energy/efficiency/buildings/capacity-buildingresources/4193

Registry of ENERGY STAR certified buildings in Canada:

https://www.nrcan.gc.ca/energy-efficiency/energy-star-canada/energy-star-buildings/registry-energy-star-certified-buildings-canada/20267

- NRCan Benchmarking Website:
 - www.nrcan.gc.ca/ENERGYSTARPortfolioManager
- Info Services Buildings Division:
 - **1**-877-360-5500
 - nrcan.buildings-batiments.rncan@canada.ca.





BC CGR – NRCAN E*PM Linkages

- ✓ Common models
- ✓ Energy data exchange using Web Services
- ✓ GHG emissions, metrics and reporting
- ✓ Consumption and management functions
- ✓ Future Considerations

CGRT: Onboarding Next Steps

Webinars

- Orientations
- Site Admin Training
 - Site Management, E*PM integration, Analytics
- Data Collector Training
 - Data Loading, Analytics

Materials

- Terminology, FAQs, Best Practices
- Technical Transition guide (this year only) & Tools
- "Steady state" User Guides and Tools
- Tips, tricks and tutorials

Intensity analytics (e.g., energy/floor space) CGR Product Roadmap Weather normalization of energy/emissions Supports additional sustainability metrics (e.g. water, waste) Support for setting GHG targets, tracking progress Support for online completion of CNAR/Surveys Further PM integration/support (ratings, benchmarking) Onboarding non-EDX users to PM, net new users (LGs)

CGRT: Key Program Dates

- Early 2020: Updated reporting materials from CAS
- April 30, 2020: All data due from PSOs
- May 15, 2020: PSO Self-Certification Checklist due
- May 31, 2020: Final Carbon Neutral Action Report (CNAR) or Small Emitters Form due
- June 29, 2020: Post reports and retire offsets (CAS)
- July 31, 2020: Publish Year in Review (CAS)
- Fall 2020: Verify reports (CAS)

CGRT: PSO Takeaways

PSO Actions	Who?	Outcome
Populate SMARTLoad template for non-EDX data	All PSOs	Be ready to manually load as required
Confirm users	All PSOs	Access to SMARTTool/SoFi
Await direction regarding use of E*PM	All PSOs	To avoid delays or complexity
Review your EDX-buildings/Accounts	EDX Only	To prepare buildings/Accounts for E*PM
Identify utility provider accounts/changes made after 2019	EDX Only	To ease the transition/avoid issues
Prepare for any building updates; e.g. square footage/year built etc	EDX Only*	So E*PM is updated during transition
Attend CGRT Webinars	All PSOs	Be prepared for transition and 2019 year end

Questions?

Clean Government Reporting:

Carbon.Neutral@gov.bc.ca

Portfolio Manager:

nrcan.buildings-batiments.rncan@canada.ca

1-877-360-5500

Reminder: Live CGRT Demonstration/Q&A at 4 p.m.

