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CIPEC

ENERGY MANAGEMENT

Partnering to Improve Energy Efficiency

CASF 2017

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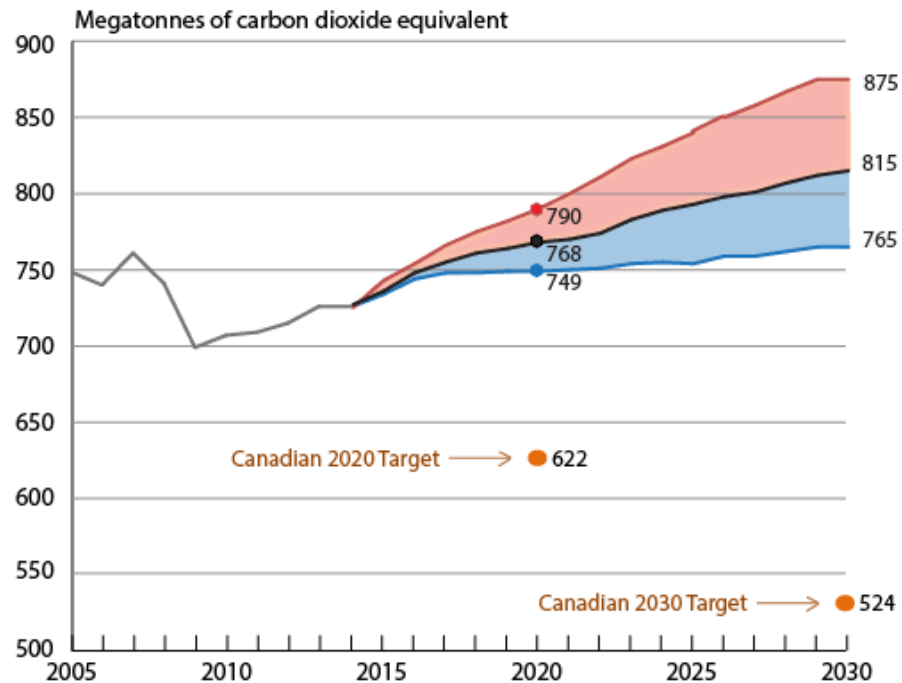


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- Why energy efficiency is a win-win for all of us
- Ways to accelerate energy management
- How industry and government can work together



Paris, 2015

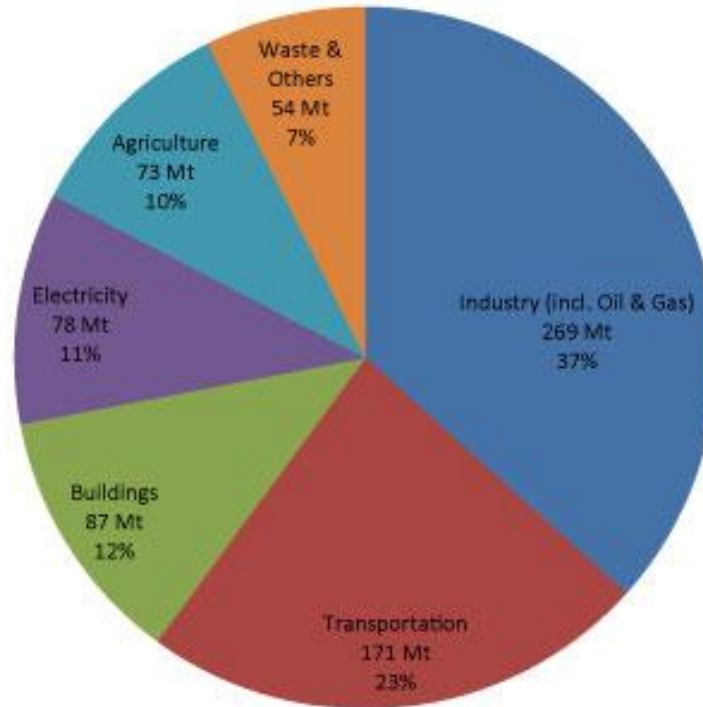


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GHG emissions by sector



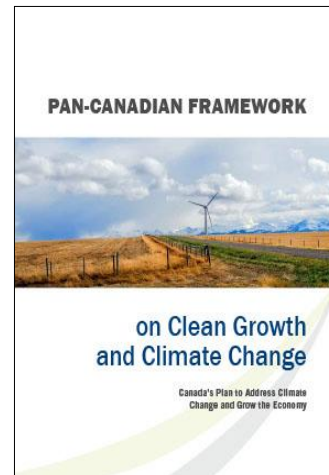
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Pan-Canadian Framework: Looking Ahead

- Grow economy and meet GHG reduction targets
- Industrial energy efficiency one of the three key areas of focus
 - Commitment from all levels of government to work together with industry to support the adoption of energy management systems
 - Energy management systems - including ISO 50001 - identified as a solution
 - NRCan programs and CIPEC Network are an important part of delivering on the Pan-Canadian framework
 - *Last federal budget approved funding for NRCan programs 2018 – 2022*



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Canadian Industry Partnership for Energy Conservation:

An Industry-government partnership that promotes voluntary actions to reduce industrial energy intensity.

- Focus on identifying energy retrofits management solutions
- Interest in benchmarking and energy management systems
- Online energy management tools, case studies, webinars
- Financial assistance for energy projects
- Partnerships and networking opportunities
- Energy Star for Industry launch
- Leadership awards to celebrate success
- Energy Summit 2018

The CIPEC Approach

1. Raise Awareness

- Heads Up CIPEC electronic newsletter
- Case study videos and articles
- Outreach and communications activities

2. Build Knowledge

- Energy management workshops
- Technical guides, tools and support
- Networking opportunities and technical sessions
- Biennial energy conferences

3. Take Action

- Financial support for energy management projects
- Directory of Canada's programs & services
- In-house expertise and guidance
- Program co-delivery through regional partners

4. Reap Rewards

- Improved energy management practices
- Lower operational costs and lower GHG emissions
- CIPEC Leadership Awards Program and recognition



Energy Star for Industry



1. **Challenge** – your facility achieves a 10% reduction in energy intensity within five years (ENERGY STAR Achiever)
2. **Certification** – your facility is recognized as a top energy efficiency performer in your industry (ENERGY STAR Certified)

ENERGYSTAR-Industry@canada.ca



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Energy Management Information System (EMIS)

Sets the foundation for monitoring, documenting and reporting on energy performance.

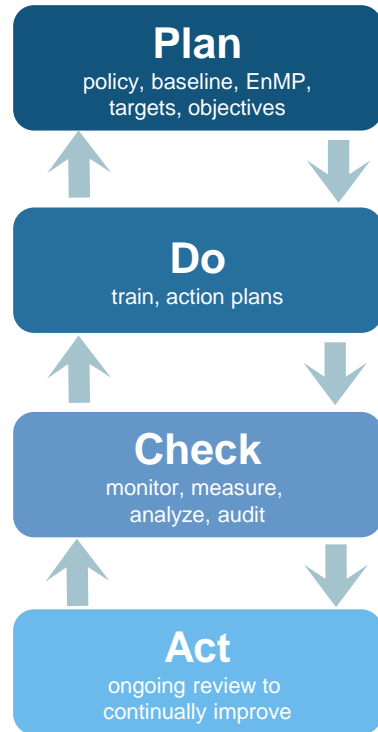
- Evaluate progress
- Create and implement plan
- Set goals
- Baseline energy performance

ISO 50001

Provides a systematic approach to achieve continual improvement of energy performance.

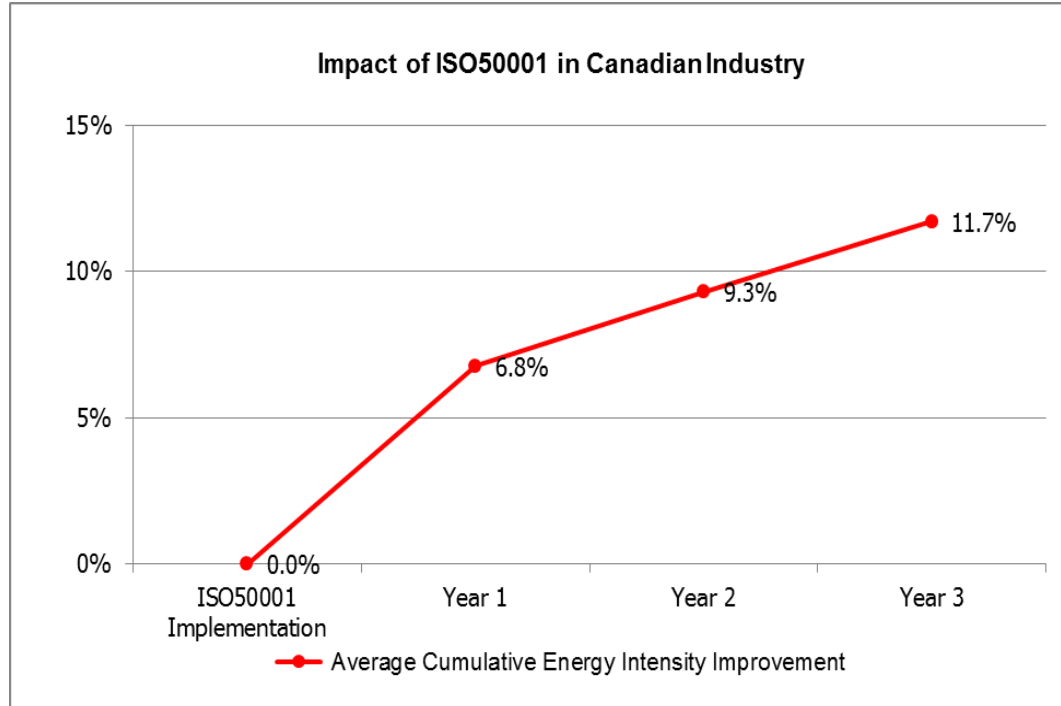
- ISO 50001 Certification
- Management review
- Internal audit
- Formally documented EnMS

**** Coming Soon: ISO 50001 Standard incentive program for commercial and institutional buildings (2018)**



Enables organizations to establish systems and processes necessary to take a **systematic** approach to achieve **continual** improvement of energy performance (energy efficiency, use, consumption and intensity).

ISO 50001: Continued



■ ISO 50001: New Gold - New Afton



Gold mine near Kamloops BC commissioned in 2012

- Total energy use in 2014: (Mwhe) = 243,967
- Total emissions in 2014: (TCO₂e) = 15,639
- Company had a history of identifying energy reductions

Why ISO 50001?

- Build energy management into systems and culture
- Credible, internationally recognized, externally verified
- Energy 2nd biggest expense after labour
- Aligns well with MAC TSM Energy and GHG protocols



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■ ISO 50001: New Gold - New Afton

Energy Performance Improvement (%)	11.4%
Annual energy cost savings (Canadian Dollars)	2014 – \$643,000 2015 – \$444,000
Cost to implement (including utility rebate incentives) (Canadian Dollars)	2014 – \$690,000 2015 – \$259,000
Payback period (years)	2014 – 1.1 2015 – 0.6

Source: http://www.cleanenergyministerial.org/Portals/2/pdfs/New%20Gold_Canada.pdf



Energy Management System: Implementation and support

- 50% the cost up to \$40,000
- Expertise and technical support for applicants and consultants
- Available for most energy management systems
- The final deliverable will include a report with:
 - Implementation audit results for ISO 50001
 - Final report for EMIS
 - Projected results from the implementation



ISO 50001: Implementation support eligibility

Criteria

- Open to industrial, commercial and institutional sectors
- Industrial facility must be registered as a CIPEC leader
- Company must have:
 - Senior management support and commitment
 - Some experience in energy management standards (ISO, ANSI or others)
 - Commitment to monitor and report on results for a specified period of time

Eligible Costs

- Development of energy baseline
- Energy use assessment
- Energy performance monitoring
- Professional fees
- Salaries
- Training



energySUMMIT2018

Maximize Profitability through Energy Performance

May 30-31, 2018

Universal Eventspace, Vaughan, ON



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Contact Information

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CIPEC

For information on ENERGY STAR for Industry:

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For energy management project applications or templates:

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Thank you

Questions?



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