

Natural Resources Canada's
Office of Energy Efficiency

CIPEC

“A Program for All Reasons”

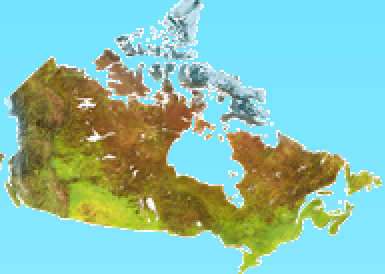
Presentation to
International Association for Impact Assessment
Vancouver, April 27, 2004
Philip B. Jago



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What is CIPEC?

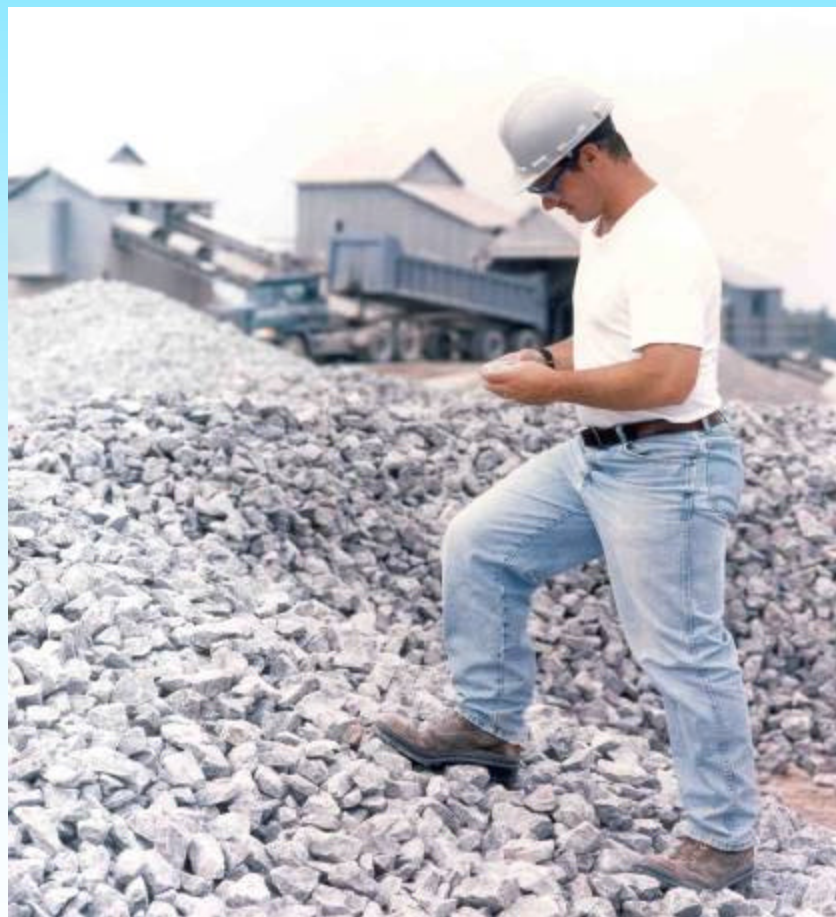
- Canadian Industry Program for Energy Conservation (CIPEC)
- Established 1975 - Unique industry-government partnership sponsored by NRCan
- Target: reduce energy intensity of Canadian industry by 1% annually from 1990 to 2005
- Encourage adoption of energy efficiency as a tool to:
 - cut costs
 - improve productivity
 - reduce GHG emissions



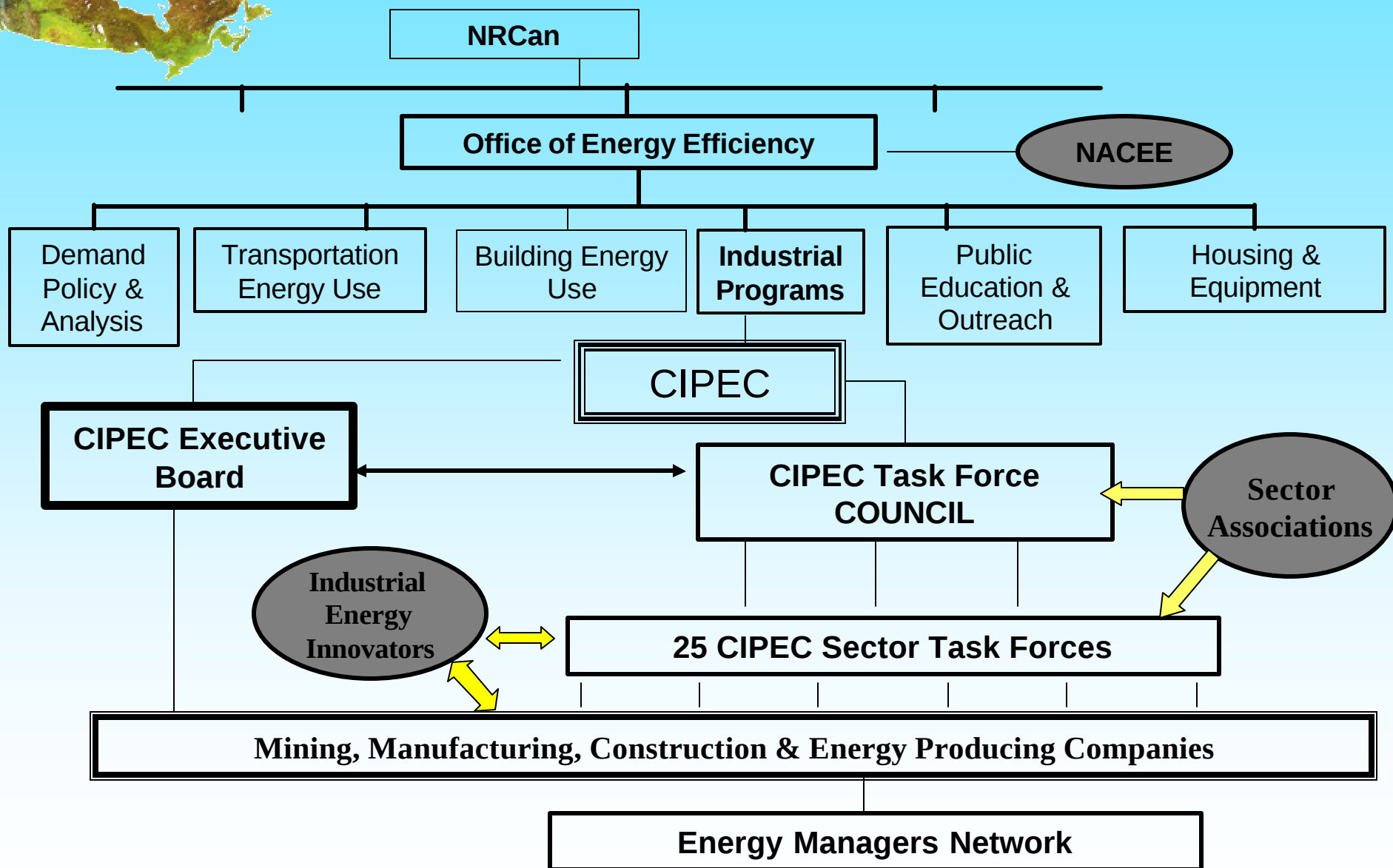


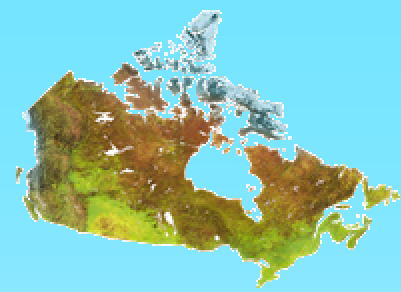
Industrial Energy Innovators (IEI)

- Voluntary company-level commitment, from executive level, to improve energy efficiency and reduce GHG emissions
- To date more than 500 Canadian companies are listed with NRCan as IEIs
- IEI participation is a prerequisite for receiving audit incentive and IBIP funding from NRCan



CIPEC Structure

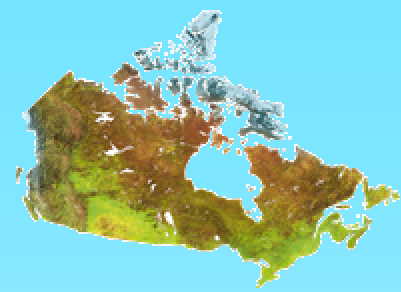




Aggregate Intensity – A Good Indicator of Efficiency?

- What does aggregate energy intensity mean?
 - The total energy consumed by all of the CIPEC industries divided by the total GDP of those industries
- This indicator captures both changes in **energy efficiency** and **structural changes** in the economy.

$\Delta \text{Aggregate Energy Intensity} \sim \Delta \text{Structure} + \Delta \text{Energy Efficiency}$

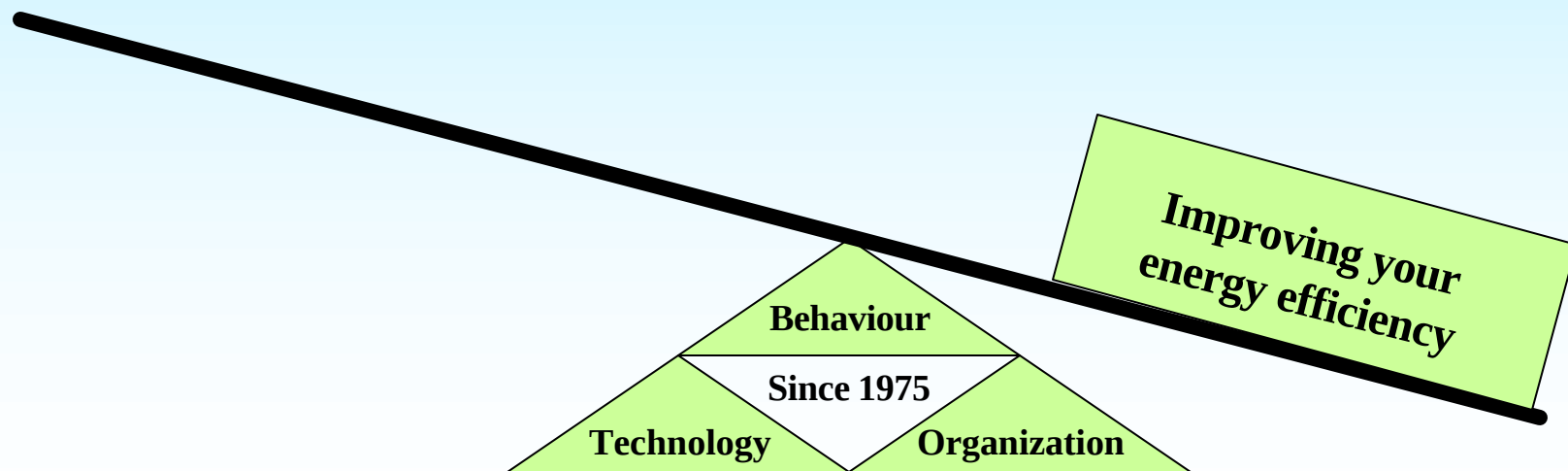


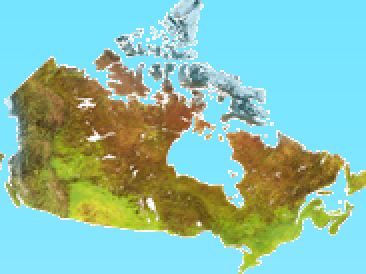
Structure and Efficiency

- Energy Efficiency - the change in energy intensity for a given industry
 - a better measure of effort to reduce energy use per unit of production than aggregate energy intensity
 - still not perfect as it captures other effects such as weather and changes in both the production mix and products
- Structure - how the shares of different industries change in the economy over time...
 - If an energy intensive industry (i.e. Steel) started accounting for a greater share of GDP, the overall economy would be more energy intensive, even though steel's energy intensity didn't change



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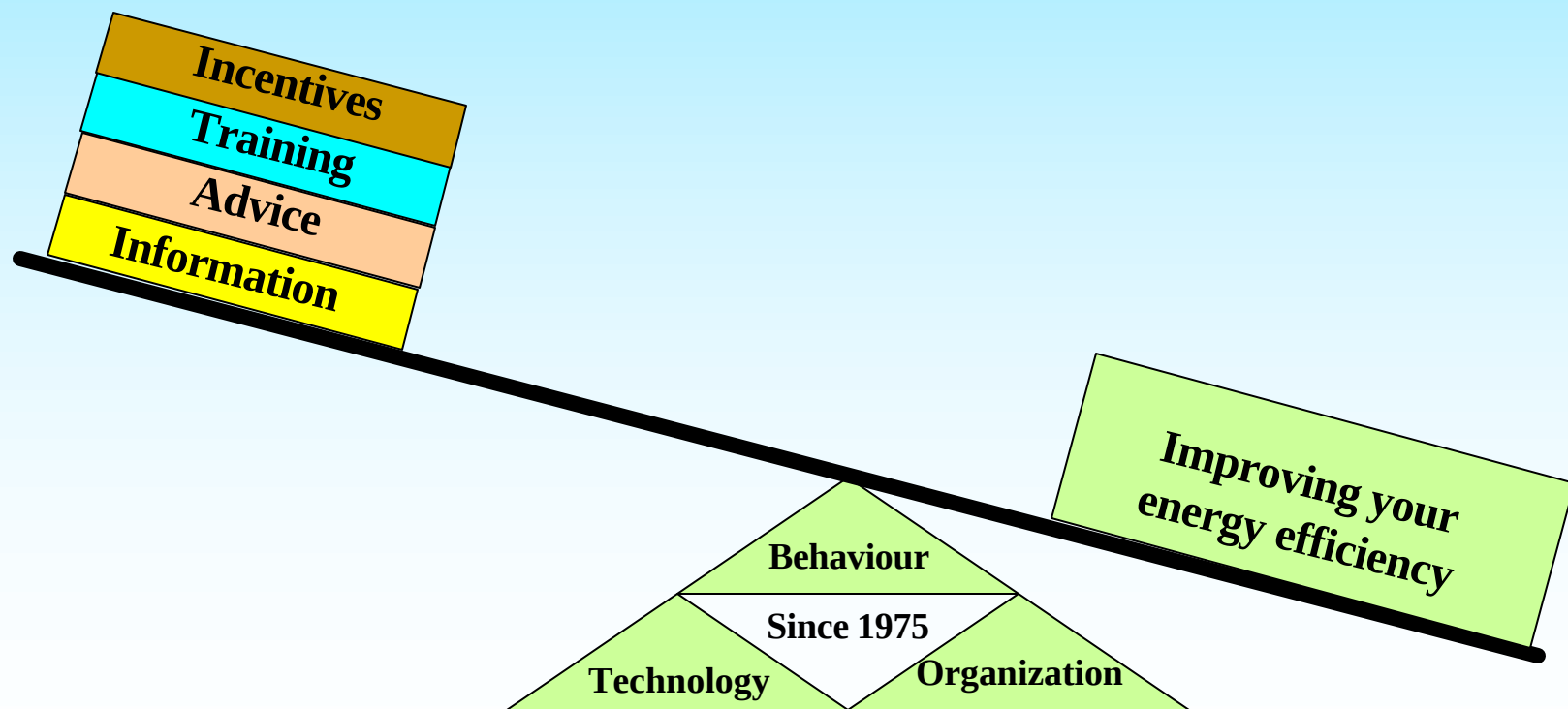




Canadian Industry Program for Energy Conservation (CIPEC)



Leveraging the strength of a team to tackle *your* energy challenges

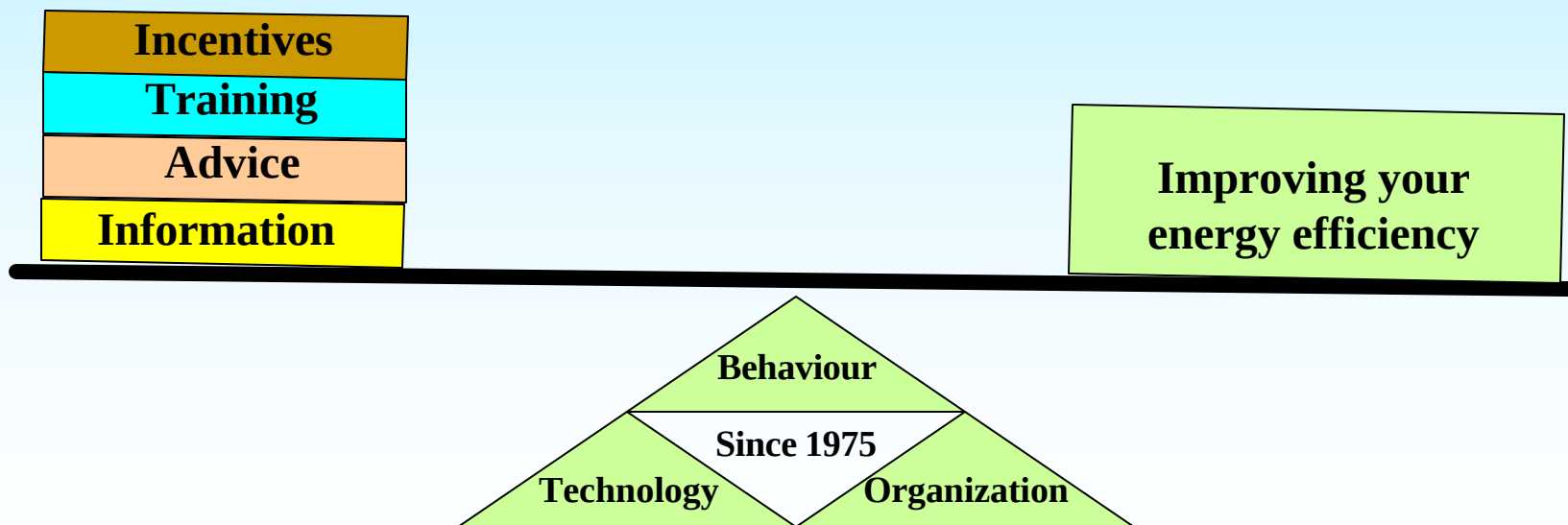




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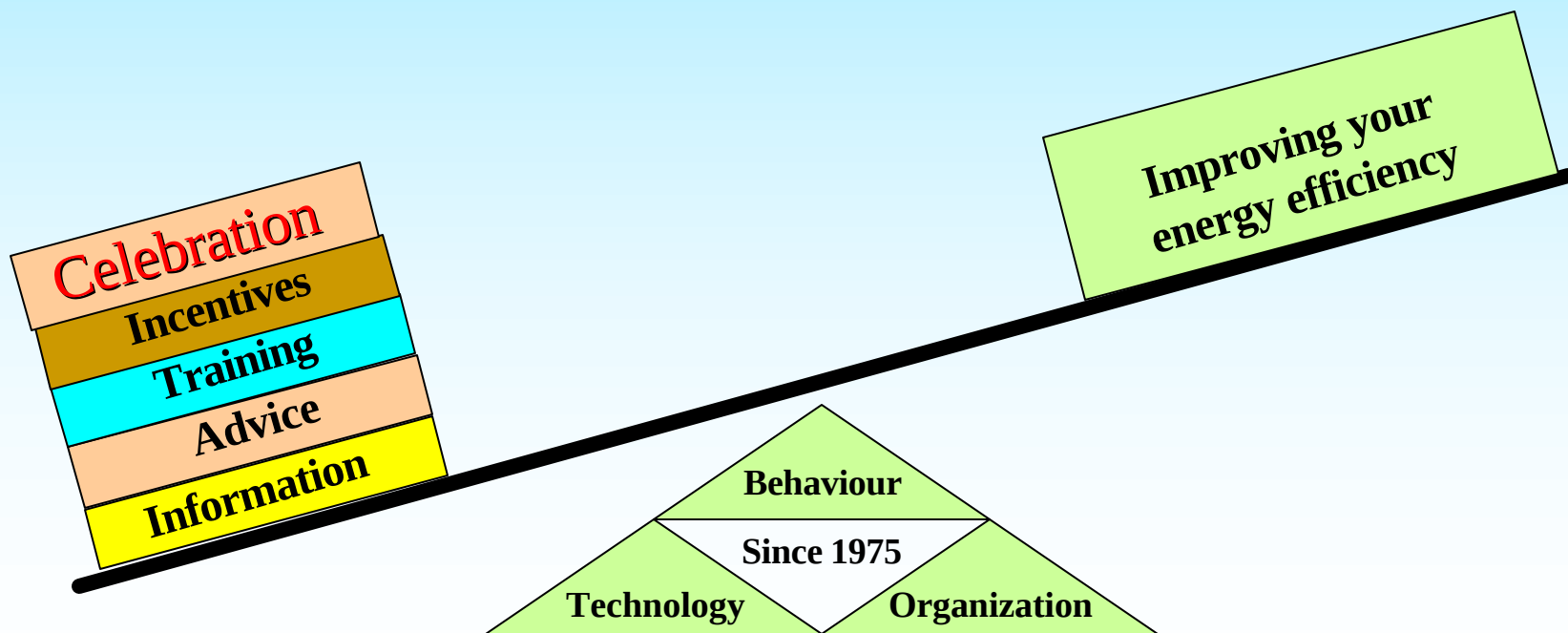




Canadian Industry Program for Energy Conservation (CIPEC)



Leveraging the strength of a team to tackle *your* energy challenges



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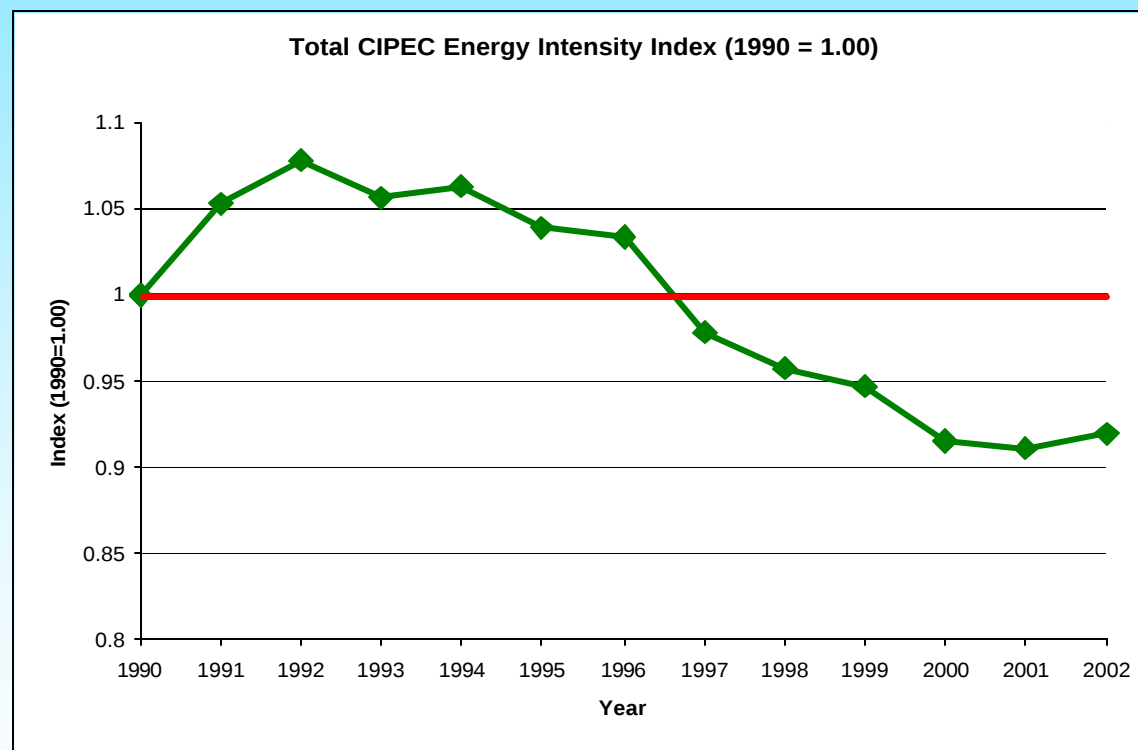
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CIPEC Energy Intensity Index 1990-2002

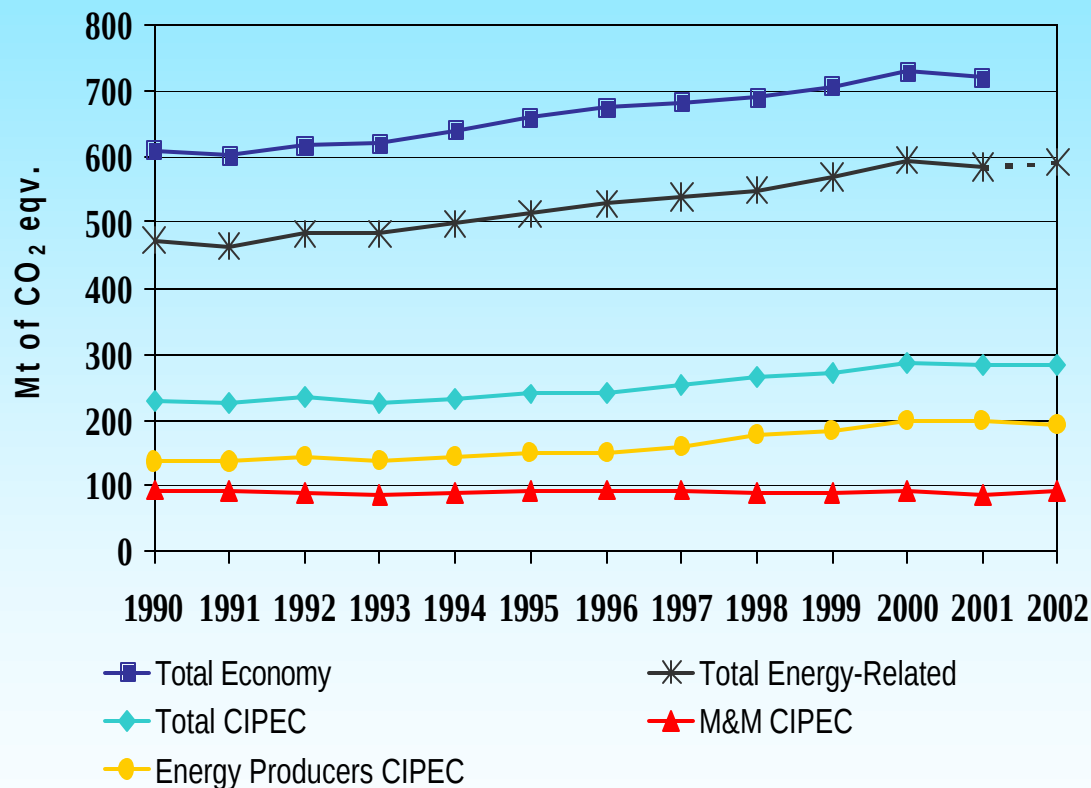
- Improved energy intensity of 8.1% overall or 0.7% per year
- Energy savings of \$3.4 billion, equivalent to providing energy to 3 out of 4 homes in Ontario for a year.

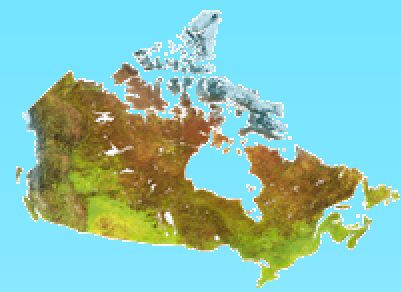




GHG Emissions, 1990 to 2002: CIPEC vs. Total Economy

- Avoid GHG emissions of 25.2 Mt since 1990 thanks to effective energy management

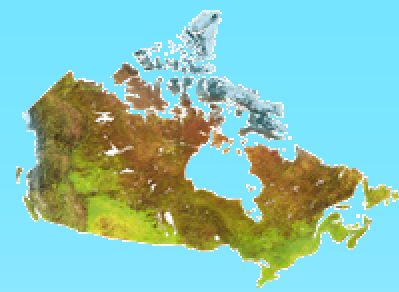




Key Program Elements

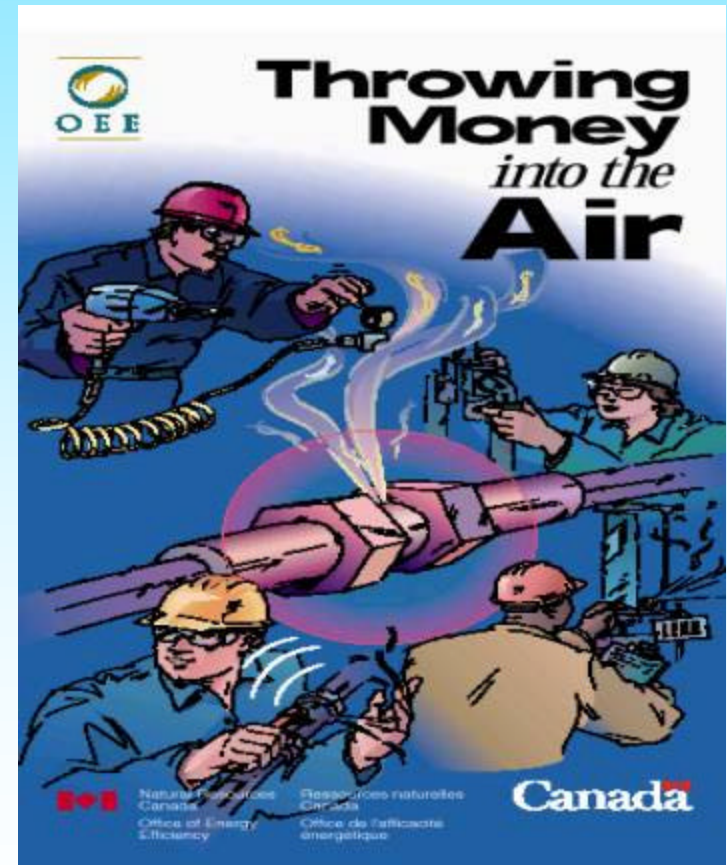
- Task Force meetings and conferences
- Benchmarking Studies
<http://strategis.ic.gc.ca/epic/internet/inggeb-aceges.nsf/vwGeneratedInterE/home>
- Audit funding (IEI only)
- Employee Awareness Kit and support for employee awareness activities (IEI only)
- Energy Management Workshops





Key Program Elements (cont'd)

- Technical Information
- Energy Opportunity Guidebooks (many downloadable from the internet)
- Success Stories & Case studies
- Innovative Financing Kit (including case studies)
- Bi-weekly electronic *Heads Up CIPEC* newsletter

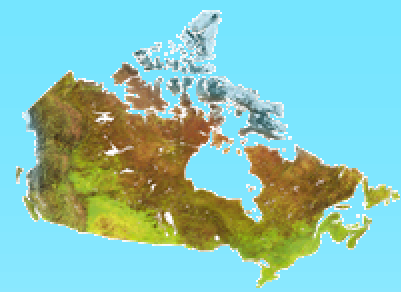




Conclusion

- **CIPEC companies get results!**
- Energy savings related to effective energy management practices totalled more than \$3.4 billion in 2002
- Avoid GHG emissions of 25Mt
- Over the past 5 years, the increase in energy consumption among non-CIPEC participants was more than double that of CIPEC participants.





Contact Information

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- Energy Management Services Dir. oee.nrcan.gc.ca/providers
- Dollars to \$ense Workshops oee.nrcan.gc.ca/workshops





Thank You/Merci



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