

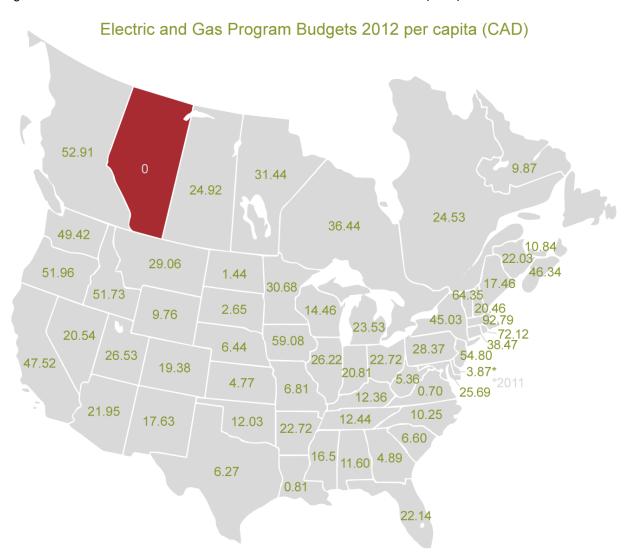
Jurisdictional Review of Funding for Energy Efficiency Programs in Canada and the United States

Backgrounder

Summary

A review of funding for energy efficiency programs in Canada and the U.S. shows Alberta is the <u>only</u> province or state that does not currently have energy efficiency programs for non-industrial (i.e., residential and commercial) sectors as shown in Figure 1.

Figure 1: ELECTRIC AND GAS PROGRAM BUDGETS 2012 PER CAPITA (CAD)



As over \$398 million has been collected within the Climate Change and Emissions Management Fund (CCEMF) for greenhouse gas (GHG) emissions reduction effortsⁱ and only \$213 million has been committed so farⁱⁱ, there is an excellent opportunity for the Alberta government to start funding energy efficiency programs as all other provinces and states currently do.

Past energy efficiency programs (both within Alberta and globally) have not only reduced GHG emissions, but have saved households and businesses more money than the overall costs of the energy efficiency upgrades.

Recent pollingⁱⁱⁱ also shows that 77% of Albertans either support or strongly support the government using a portion of the CCEMF for energy efficiency programs in the residential and commercial sectors. Only 7% of respondents are either opposed or strongly opposed to using the funds in this way, with 16% of respondents indicating they didn't know or were unsure whether they support or oppose this approach.

With the clear level of support for using a portion of the CCEMF for funding energy efficiency programs in the province, the Alberta Energy Efficiency Alliance is calling on the Government of Alberta to announce funding for new energy efficiency programs as soon as possible.

Multiple benefits of energy efficiency

Energy efficiency is globally recognized as the most cost effective way to reduce GHG emissions. Figure 2 shows that energy efficiency actions not only reduce GHG emissions, but save consumers money at the same time.

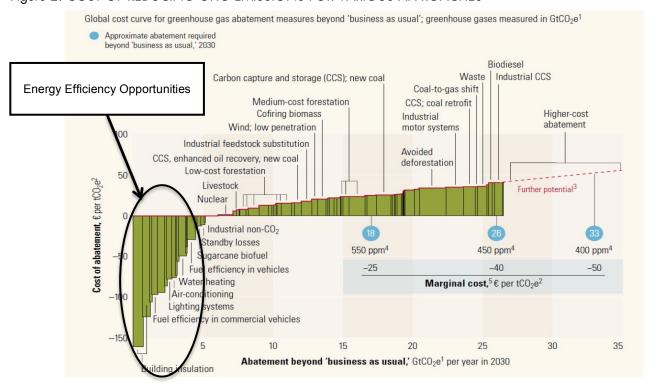


Figure 2: COST OF REDUCING GHG EMISSIONS FOR VARIOUS APPROACHESiv

Energy efficiency is also recognized as less expensive and easier to deploy than developing new energy supplies, and provides greater job creation and economic development potential.

Data available on past energy efficiency programs in the U.S. (Table 1) shows that consumers saved more than twice as much money as was spent (including all costs).

Table 1: CONSUMER BENEFITS OF PAST ENERGY EFFICIENCY PROGRAMSVI

	Southern California Edison	Avista Utilities (Pacific Northwest)	Puget Sound Energy	MassSAVE (Massachusetts)
Program Overhead	\$3,493,619	\$2,564,894	\$2,745,048	\$1,191,029
Incentives	\$15,457,880	\$4,721,881	\$9,914,463	\$3,507,691
Consumer costs for EE upgrades	\$41,102,993	\$16,478,257	\$25,103,588	\$2,452,985
Total costs	\$56,560,873	\$21,200,138	\$35,018,051	\$5,960,676
Total savings on energy bills	\$187,904,906	\$30,457,665	\$53,040,873	\$12,384,048
Non-energy benefits ¹		\$12,595,276		\$155,601
Total benefits	\$187,904,906	\$43,052,941	\$53,040,873	\$12,539,649
Net benefits	\$131,344,033	\$21,852,803	\$18,022,822	\$6,423,372
Benefit : cost ratio	3.3	2.0	1.5	2.1

Studies completed for other U.S. states and Candian provinces show similar consumer benefits for past efficiency programs.vii

Recent polling viii shows 77% of Albertans either support or strongly support the Government of Alberta using a portion of the Climate Change and Emissions Management Fund² for residential and commercial energy efficiency programs. Only 7% of respondents either opposed or strongly opposed using the funds this way, with 16% of respondents indicating they didn't know or were unsure whether they support or oppose this approach.

¹ Includes labour, operation and maintenance benefits when provided.

² The CCEMF is a fund paid into by large industrial facilities in the province when they fail to meet their emission reduction targets. Since 2007, industrial facilities in Alberta have paid \$398 million into the fund with \$213 million of the fund committed to date. The fund is currently used to support the development of new technologies to reduce greenhouse gas emissions and has already funded several energy efficiency projects at industrial facilities.

Funding for energy efficiency programs in Canada and the U.S.

Through various sources, the following map shows the per capita budgets for consumer electricity and natural gas energy efficiency programs in Canadian provinces and the continental U.S.

Electric and Gas Program Budgets 2012 per capita (CAD) 52.91 9.87 31.44 24.92 24.53 36.44 49.42 10.84 29.06 51.96 1.44 30.68 51.73 64.35 14.46 2.65 9.76 45.03 23.53 20.54 59.08 6.44 28.37 26.53 54.80 26.22 47.52 19.38 3.87 20.81 5.36 4.77 6.81 25.69 0.70 12.36 21.95 10.25 12.44 17.63 12.03 6.60 11.60 4.89 6.27 0.81 22.14

Figure 3: ELECTRIC AND GAS PROGRAM BUDGETS 2012 PER CAPITA (CAD)

The majority of the data was obtained from Consortium for Energy Efficiency in the U.S., with supplemental data sources used for New Brunswick, Prince Edward Island, Alaska and Delaware.

In Alberta, funding is currently available through the Climate Change and Emissions Management Corporation for energy efficiency <u>projects</u> in Alberta that advance new GHG reduction technologies, but this type of funding is not the same as the energy efficiency <u>program</u> funding found in other jurisdictions. One main difference is energy efficiency programs typically fund many relatively small energy efficiency upgrades in many different buildings and facilities, so they are designed to be accessible for the vast majority of the marketplace and relatively easy to participate in. CCEMC-funded energy efficiency projects, on the other hand, have historically involved a small number of very large projects within large

industrial companies. These require more significant investment and have a higher funding uncertainty than a typical energy efficiency program. As was demonstrated in the AEEA's Energy Efficiency Potential in Alberta, there is significant potential for energy savings and GHG reductions in all sectors; therefore it is important to fund both energy efficiency projects and programs to best take advantage of the economic and environmental potential for energy efficiency in the province.

As energy efficiency programs are typically funded every year in jurisdictions where programs already exist, and historically have increased over time as Figure 4 shows, it is reasonable to conclude that energy efficiency programs remain present in all provinces and states in Canada and the U.S. except for Alberta.

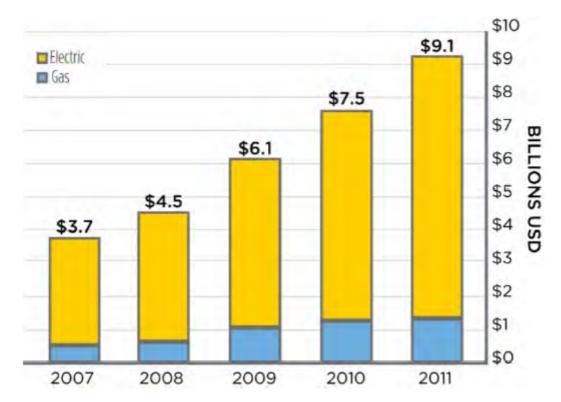


FIGURE 4: CANADIAN AND U.S. ELECTRIC AND GAS PROGRAM BUDGETS, 2007-2011x1

Conclusion

The Government of Alberta has a clear opportunity to help Albertans and Alberta businesses save money and reduce GHG emissions at the same time through funding of energy efficiency programs. There is also clear support from the public for funding of these programs. The unused funds currently in the CCEMF present a golden opportunity for the province to take action at a time when Albertans are looking for the provincial government to launch new initiatives in the effort to reduce carbon emissions.

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