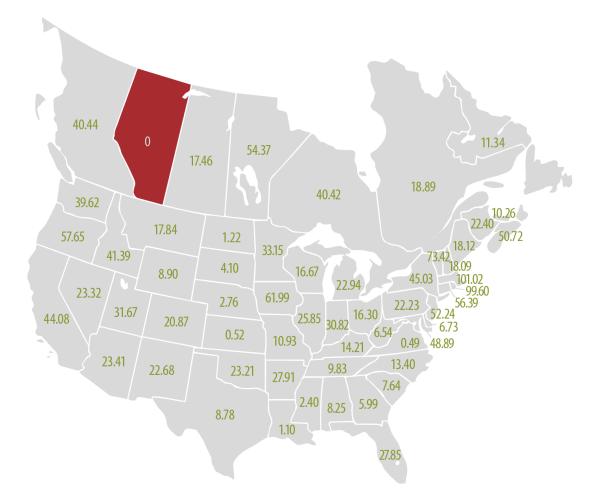


## Jurisdictional Review of Funding for Energy Efficiency Programs in Canada and the United States

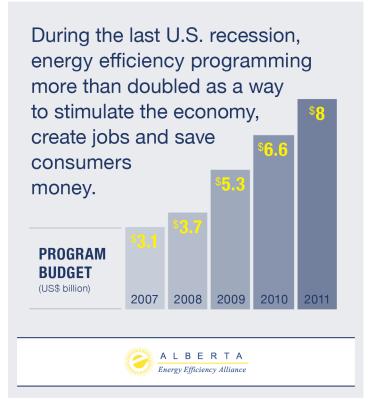
A review of funding for energy efficiency programs in Canada and the U.S. shows Alberta currently remains the only province or state without energy efficiency programs. Per capita spending is shown in Figure 1.

Figure 1: 2014 PER CAPITA ENERGY EFFICIENCY PROGRAM BUDGETS (CAD for provinces, USD for states)<sup>i</sup>



Energy efficiency programs have a proven history of reducing overall costs for consumers, creating jobs and reducing emissions. In fact, energy efficiency programming in the United States more than doubled during its last recession and recovery as a way to stimulate job creation and economic activity while saving consumers money. Funding for energy efficiency programs in the U.S. increased from US\$3.1 billion in 2007 to US\$8 billion in 2011, as shown in Figure 2.

Figure 2: FUNDING FOR ENERGY EFFICIENCY PROGRAMS IN THE U.S. (2007-2012)<sup>ii</sup>



## Multiple benefits of energy efficiency

Energy efficiency is globally recognized as the most cost effective way to reduce GHG emissions. Figure 3 shows that energy efficiency actions not only reduce GHG emissions, but save consumers money at the same time.

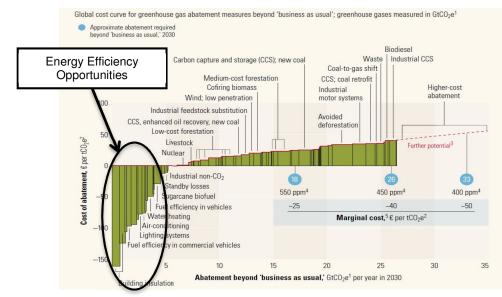


Figure 3: COST OF REDUCING GHG EMISSIONS FOR VARIOUS APPROACHES<sup>iii</sup>

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.<sup>iv</sup>

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). Studies completed for other U.S. states and Canadian provinces show similar consumer benefits for past efficiency programs.<sup>v</sup>

	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 <sup>1</sup>		\$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

## Table 1: CONSUMER BENEFITS OF PAST ENERGY EFFICIENCY PROGRAMS<sup>vi</sup>

A recent study<sup>vii</sup>, based on a Canada-wide report<sup>viii</sup> completed for Natural Resources Canada, estimates the following benefits from an average-sized energy efficiency program<sup>2</sup> in Alberta:

- \$510 million in annual savings,
- \$550 million annual GDP increase,
- 3,000 jobs created, and
- equivalent to 900,000 cars off the road.

<sup>&</sup>lt;sup>1</sup> Includes labour, operation and maintenance benefits when provided.

<sup>&</sup>lt;sup>2</sup> Per capita spending in Canadian provinces (other than Alberta) in 2014 was \$34.

<sup>ii</sup> Consortium for Energy Efficiency. 2013. 2012 State of the Efficiency Program Industry - Appendicies http://library.cee1.org/sites/default/files/library/10535/2012\_AIR\_Tables\_-\_All\_Tables\_FINAL\_-\_\_with\_erratum\_NEW\_VERSION.pdf

<sup>iii</sup> Enkvist, P., T. Naucler, J. Rosander. 2007. *A Cost Curve for Greenhouse Gas Reduction*. The McKinsey Quarterly, 2007, Number 1. http://www.epa.gov/air/caaac/coaltech/2007\_05\_mckinsey.pdf. pp. 38

<sup>iv</sup> Laitner, J., V. McKinney. 2008. *Positive Returns: State Energy Efficiency Analyses Can Inform U.S. Energy Policy Assessments*. http://aceee.org/pubs/e084.pdf?CFID=2125642&CFTOKEN=86126255.

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<sup>v</sup> Synapse Energy Economics Inc. 2012. Energy Efficiency Cost-Effectiveness Screening, 32.

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<sup>vi</sup> National Action Plan for Energy Efficiency. 2008. *Understanding Cost-Effectiveness of Energy Efficiency Programs*. Energy and Environmental Economics, Inc. and Regulatory Assistance Project. http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf

<sup>vii</sup> Dunsky Energy Consulting. 2015. *GHG Savings and Energy Efficiency High-Level Opportunity Analysis in Alberta*. http://www.aeea.ca/pdf/energy-efficiency-scenarios-for-alberta.pdf.

<sup>viii</sup> Acacia Centre. 2014. Energy Efficiency: Engine of Economic Growth in Canada. http://acadiacenter.org/wpcontent/uploads/2014/11/ENEAcadiaCenter\_EnergyEfficiencyEngineofEconomicGrowthinCanada\_EN\_FINAL\_20 14\_1114.pdf.

<sup>&</sup>lt;sup>i</sup> Sources: Consortium for Energy Efficiency. 2015. 2014 State of the Efficiency Program Industry - Appendicies. http://library.cee1.org/sites/default/files/library/12206/CEE\_2014\_AIR\_Tables\_April\_2015.pdf; Deleware Sustainable Energy Utility. 2014. Consolidated Financial Statements and Independent Auditors' Report. https://imageserv11.team-logic.com/mediaLibrary/191/Final\_Financial\_Statements.pdf; Personal communication with Prince Edward Island Office of Energy Efficiency, January 8, 2016.