Input on National Strategy for an Electrified Economy

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Introduction

The federal government released "A National Strategy for an Electrified Economy" in May 2026 and invited feedback. The following are comments prepared by policy researchers at Efficiency Canada, an energy efficiency policy research and advocacy organization based at Carleton University.

Our comments focus on improving the published strategy by using energy efficiency and demand-side solutions to create a stronger, more productive and more affordable Canadian economy.

Summary of recommendations

Strengthening energy affordability

- Deliver simple and trusted finance to middle- and upper-income Canadians by establishing a Home Energy Performance Fund to provide low-cost and patient capital to home energy platform specialists.
- Reduce energy poverty by increasing support for the Canada Greener Homes Affordability Program.
- Minimize electricity rate impacts and reduce long-term electricity bills through Canada Infrastructure Bank financing of utility demand-side management.
- Make better use of the electricity system we already paid for and reduce system costs by enabling demand flexibility.
- Encourage utilities to treat demand-side management as an alternative to more expensive energy supply by creating tools, resources and methodologies.
- Crowd in demand-side management funding through federal program design.

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Strengthening energy productivity

- Adopt world-leading minimum energy performance standards for electric motors, general service lighting and major home appliances.
- Renew and expand the Green Industrial Facilities Manufacturing Program.
- Modernize and scale building retrofits by renewing the Deep Retrofit Accelerator and Greener Neighbourhoods Pilot Program, with renewed objectives to make them a core component of an energy productivity strategy.
- Simplify and expand the Clean Technology Investment Tax Credit.
- Implement an industrial policy to create good jobs in the home contractor sector by coupling "green bank" capital provision and oversight with business development services.

Goals to strengthen energy productivity and affordability

The electricity strategy lists two initial challenges: first, to build new infrastructure to double Canada's electricity supply by 2050 and meet growing demand; and second, to accelerate electrification across the economy.

Without an equally strong focus on energy productivity and affordability, the electricity strategy will likely lead to spending in the electricity system that is both unproductive and unaffordable.

Utilities have a built-in tendency toward building infrastructure such as poles, wires and power plants that cost more than saving electricity or making better use of the grid Canadians have already paid for. A competitive and productive economy is created by using energy in ways that create economic and social value — not simply by spending more on electricity systems. Without further guidance, the strategy will likely result in a higher-cost electricity system than necessary.

Likewise, unmanaged electrification could push electric utilities toward high-cost, inflexible fixed infrastructure spending that puts upward pressure on electricity rates. Shifting more electricity demand to times when existing grids are

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underutilized can put downward pressure on rates by spreading fixed system costs over greater electricity sales.

Any funding that flows from the electricity strategy should avoid creating a bias toward new infrastructure over lower-cost demand-side solutions. If new funding primarily rewards capital-intensive generation, transmission, and distribution projects, the strategy could unintentionally reinforce the very cost pressures it seeks to solve. Federal programs should instead be designed to place demand-side management (DSM) on equal footing with new infrastructure so that public dollars support the lowest-cost and most productive way to meet electricity system needs.

The electricity strategy recognizes the role of demand-side solutions in managing demand and modernizing the system. That recognition should be elevated into a core principle for electricity planning, funding and investment. Energy efficiency and demand flexibility are electricity resources: they make better use of existing grid capacity, reduce the amount of new infrastructure required, and free up electricity system capacity for electrification. In this sense, DSM can function as a practical form of electricity supply: saving or shifting a kilowatt-hour can be equivalent to generating one, often at lower cost, with less infrastructure, lower volatility, and greater economic resilience.

We therefore propose the strategy adopt two additional goals:

1. **Double Canada's annual rate of energy productivity improvement and maintain or further improve that rate until 2050.**
2. **Eliminate energy poverty in Canada.**

Increased energy productivity means creating more economic benefit for every unit of energy we consume or produce. Between 2000 and 2024, our average annual improvement in energy productivity was 1.2 per cent.[1] Doubling this rate to 2.4 per cent per year and maintaining that rate of improvement until 2050 will ensure

[1] Measured by Total energy supply by GDP from International Energy Agency (IEA), World Energy Statistics & Balances - Canada, 2025., https://www.iea.org/data-and-statistics/data-product/world-energy-statistics-balances. Canada's energy productivity deteriorated in 2003 and 2016 and 2017, and then more dramatically improved, with a general trend tracking 1.2 per cent per year.

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Canada's economy remains competitive and resilient to volatility in global energy systems. Canada committed to a similar goal at the 2023 Conference of the Parties.[2]

On the second goal, we note that Prime Minister Mark Carney stated that there must be a "relentless focus on affordability," yet no affordability-specific goals or objectives are included in the strategy.[3]

Energy poverty is a situation where a household's bill is unaffordable relative to income, or where a household cannot access adequate energy services (e.g., escape from extreme heat). Nearly two million households in Canada are vulnerable to energy poverty.[4] Canada cannot become an energy superpower if its citizens experience energy poverty. The country can significantly reduce energy poverty by switching from more expensive fuels to electricity, increasing energy efficiency across all fuel types, and creating social safety nets.

An affordability ladder

The current strategy runs the risk of building a higher-cost electricity system than necessary, which will needlessly damage Canada's competitiveness. We suggest policy should be guided by the following "ladder" to prioritize the most cost-effective, low-risk and customer-friendly actions to expand the electricity system.[5]

1. Save all electricity that is lower cost and lower risk than electricity supply options.

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[2] Government of Canada, COP28 Summary of Outcomes, February 12, 2024, https://www.canada.ca/en/services/environment/weather/climatechange/canada-international-action/un-climate-change-conference/cop28-summit/summary-outcomes.html.

[3] Office of the Prime Minister of Canada, "Prime Minister Mark Carney Delivers Remarks at the Greater Vancouver Board of Trade." https://www.pm.gc.ca/en/news/speeches/2026/05/20/prime-minister-mark-carney-delivers-remarks-greater-vancouver-board-trade/.

[4] Efficiency Canada, Energy Poverty in Canada, https://www.efficiencycanada.org/energy-poverty-in-canada/.

[5] Brendan Haley, "How to Grow the Electricity System Affordably," National Observer https://www.nationalobserver.com/2026/03/31/opinion/electrification-expansion-affordability/.

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2. Make better use of the already built grid by shifting the timing and location of electricity demand.
3. Build interregional transmission and utility-scale storage.
4. Expand zero-emission renewable electricity.
5. Construct large-scale, low-carbon generation.

This ladder prioritizes using existing grids efficiently, supporting solutions that enable customer energy savings and creating affordability benefits by paying customers for using energy at low-cost times. It avoids unnecessary investments in large-scale and inflexible projects that are frequently delayed and over budget — ensuring that when these projects must be built, they also have the time and space to be better planned and executed.

Energy productivity and energy affordability goals and concepts inform the following themes related to the electricity strategy. Below, we outline a number of actions the federal government could take to realize these two goals.

Strengthening energy affordability

Retrofitting one million homes

A Home Energy Performance Fund

The strategy introduces new "additional action on energy-saving retrofits for up to one million households across Canada." This is a clear goal, representing about six per cent of total residential households.[6] The strategy should view one million retrofits as an interim goal — not a cap. This should be a launching pad toward the retrofit of the entire building stock — by building lasting institutions and triggering market transformation. From a customer point of view, retrofit services should be available when people need them. Businesses need a stable market environment to enable hiring, training, and investment in new technologies and processes.

[6] Counting apartment units as households following Canada's Comprehensive Energy Use Database.

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Previous grant and loan policies have created a damaging boom-bust pattern that must not be repeated.[7]

Efficiency Canada has previously written on re-thinking the Canada Greener Homes Loan Program.[8] This previous program was popular yet did not effectively remove upfront costs or enable financing of multi-stage upgrades. It also missed an opportunity to encourage innovative contractor business models and blend public capital with social impact investors, credit unions, utilities, and other community or private financiers.

We suggest creating a **Home Energy Performance Fund** modelled after residential-focused "green banks" such as Australia's Household Energy Upgrades Fund, the U.S. National Energy Improvement Fund and Michigan Saves.

This policy would focus the federal government's role on the core functions of:

- Strategically deploying low-cost and patient capital to aggregators or home energy platform specialists that deliver finance.
- Establishing standards and customer protections that delivery partners must meet to access federal capital, along with due diligence requirements to ensure public funds flow to credible, high-performing delivery partners.
- Enabling data collection and transparency to encourage beneficial competition and performance.
- Encouraging innovation by funding retrofits that private markets are not yet prepared to finance on their own.

A federal organization focused on these functions would support a variety of financing solutions throughout Canada, including point-of-sale/installation finance delivered through contractors, utility on-bill financing, and property tax bill repayments (Property Assessed Clean Energy). It could also support a variety of financing strategies, such as personal loans, energy-as-a-service business models, subscription plans and green mortgages.

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[7] Brendan Haley, "Creating a New Policy Agenda for Residential Retrofits." https://www.efficiencycanada.org/policy-agenda-for-residential-retrofits/.

[8] Brendan Haley, "Re-Thinking the Canada Greener Homes Loan Program." https://www.efficiencycanada.org/re-thinking-the-canada-greener-homes-loan-program/.

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This model has the advantage of being fast and administratively simple, with the potential to provide a durable policy. It focuses on core federal government functions. It works through existing market actors and sends a market signal that encourages the creation of new financing platforms while building an institution with a lasting impact that avoids a boom-bust policy cycle. It offers customers choice, tailored to individual and regional needs, and creates the potential for federal funds to be blended with private or other public capital (e.g., utility DSM programs, municipal and provincial governments).

The green bank should use its capital deployment strategy to encourage solutions that provide finance when and how customers need it, such as when a furnace or air conditioner breaks down, over several years as part of a staged strategy, or for whole-building retrofits completed in a single phase. It can also establish standards that provide a market advantage to contractor businesses with the highest performance in building science and customer fairness.

Expand support for low-income energy efficiency

To meet the goal of eliminating energy poverty, a significant number of the one million retrofits should be targeted toward low-income and/or energy-poor homeowners and renters.[9] Financing strategies can help middle- to upper-income Canadians, but a responsible policy would not encourage low-income Canadians to take on additional debt. Decades of experience demonstrate the need for no-cost and direct installation program strategies for low-income households.

The strategy quotes an “energy wallet” analysis suggesting the average customer would benefit from electrification by 2050. However, this same analysis showed these benefits are less likely to flow to low-income households that do not own an electric vehicle. Targeted building envelope home upgrades, combined with strategic electrification, are thus needed to avoid worsening energy affordability for low-income Canadians. Affordability problems could be worse as a result of the

[9] 11 per cent of households were below the low-income measures (after-tax) based on the 2021 Census. Statistics Canada. 2023. (table). Census Profile. 2021 Census of Population. Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023.

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Iran war's impact on the price of heating oil, which could impact the upcoming heating season.

Budget 2024 allocated $800 million for the Canada Greener Homes Affordability Program to help low-to-median-income homeowners and tenants retrofit their homes. The program is designed to provide regional flexibility and to crowd in funding from utility DSM and other government programs.

This funding envelope is significantly below the $2.6 billion previously earmarked for the Canada Greener Homes Grant and is "significantly below estimates of the overall need," according to the Canada Electricity Advisory Council.[10]

We recommend increasing funding for the Canada Greener Homes Affordability Program to at least $2 billion and developing a national strategy to eliminate energy poverty in Canada.

Prioritize demand-side management

The electricity strategy states that "because the cheapest electricity is the power never used, energy efficiency and grid modernisation are some of the most effective ways to address affordability. They also give consumers more choice and reduce the need for costly new infrastructure."

Utility-led energy efficiency and grid modernization are DSM strategies. The affordability ladder concept noted above prioritizes DSM strategies that reduce energy use and optimize the timing and location of energy consumption. The electricity strategy recognizes the value of demand-side solutions; the next step is to ensure federal funding and financing mechanisms treat these solutions as electricity resources, not as secondary program spending. Below, we present federal strategies that can prioritize DSM over less affordable energy resource options.

[10] Canada Electricity Advisory Council, "Powering Canada: A Blueprint for Success." pg. 94, https://natural-resources.canada.ca/energy-sources/powering-canada-blueprint-success.

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Finance DSM through the Canada Infrastructure Bank

The electricity strategy states that "the current generation should not have to bear an unfair burden in shouldering the upfront investments for electricity system costs that will deliver energy to future generations."

This acknowledges the challenge of present-day customers paying for energy system investments that deliver benefits over their entire lifetime. Financing cost-effective resource decisions over time can mitigate short-term rate pressures while delivering long-term bill reductions by creating lower-cost energy systems.

This is a challenge for DSM that low-cost finance can solve.

DSM is a lower-cost option compared to energy generation. For example, saving a kilowatt-hour can cost 3–6 cents on a levelized cost basis.[11] Compare this to recent renewable energy procurements in Ontario (8.8 cents/kWh)[12], B.C. (7.4 cents),[13] or Hydro-Quebec's estimate of a 13 cents/kWh cost for electricity supply.[14]

Yet regulators, utilities and stakeholders can fail to invest in cost-effective DSM due to concerns over short-term rate impacts. Because DSM is often counted as an operational expenditure, these costs are paid by ratepayers the same year they are spent, even though benefits accrue 10–15 years in the future. In comparison,

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[11] From non-comprehensive review of DSM plans. See for example, https://ieso.ca/Sector-Participants/Energy-Efficiency/2021-2024-Conservation-and-Demand-Management-Framework#2024EEReport and American benchmarking study at https://www.aceee.org/research-report/u2601.

[12] IESO, "Long-Term 2 Energy Supply (Window 1) Request for Proposals - Final Results." https://www.ieso.ca/-/media/Files/IESO/Document-Library/long-term-rfp/energy/LT2e-1-20260409-Public-Result-Table.pdf.

[13] BC Hydro, "BC Hydro Secures Electricity Purchase Agreements with New Renewable Energy Projects at a Lower Cost than Previous Calls." https://www.bchydro.com/news/press_centre/news_releases/2025/call-for-power-epas.html.

[14] Hydro-Quebec, "Working Together to Use Energy Wisely." https://www.hydroquebec.com/data/mieux-consommer/pdf/summary-energy-efficiency-pathway.pdf.

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supply projects like power plants cost more yet can have a lower immediate rate impact because their costs are amortized over the life of the plant.

This means that utilities, regulators, and stakeholders often prioritize alleviating short-term rate impacts by reducing DSM, even though this leads to higher mid- to long-term costs.[15] Utility regulators can allow DSM costs to be amortized over time, reducing short-term rate impacts and better aligning cost recovery with long-term benefits. However, they are often reluctant to do so because ratepayers must ultimately pay a higher lifetime cost for utility debt financing.

A policy that provides low-cost capital to finance large power plants or transmission build-outs and not DSM would create a perverse incentive to build a more expensive electricity system than necessary. Funding mechanisms developed under the electricity strategy should not make it easier to build new infrastructure than to avoid the need for it through energy efficiency and demand flexibility because doing so would create incentives for a more expensive electricity system.

We recommend that the Canada Infrastructure Bank develop a financing mechanism for DSM. Its Clean Energy portfolio can include electricity utility DSM portfolios and natural gas utility DSM portfolios that align with strategic electrification objectives.[16]

Most DSM portfolio budgets are in the $100-million scale,[17] consistent with the Infrastructure Bank's current practice, and non-repayment risk is low because

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[15] For example, a recently filed Efficiency Nova Scotia DSM plan targets GWh energy savings that are only 64 per cent of the level of savings found to result in lower long-term electricity system costs in an Integrated Resource Plan because stakeholders cited "concerns primarily focused on short-term affordability" (pg. 27 of 71).

[16] See Brendan Haley et al., Breaking Fuel Silos in Demand Side Management (Efficiency Canada, 2024), https://www.efficiencycanada.org/fuel-report/.

[17] James Gaede et al., "The 2025 Energy Efficiency Programs Report." See https://www.efficiencycanada.org/2025-programs-report/.

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funding is recouped from ratepayers after utility regulators approve DSM as a prudent investment.

Enable demand flexibility

The electricity strategy recognizes several elements of demand flexibility, such as demand response, distributed energy resources and grid modernization. However, the federal government can further accelerate progress by strengthening programs, benchmarks, market conditions, and regulations that enable jurisdictions and utilities to incorporate flexible demand more cost-effectively into planning and operations.

Demand flexibility will not scale without clear and coordinated market signals that encourage the adoption of demand-response-ready technologies: equipment that is connected, interoperable, and able to respond to utility or aggregator signals. Yet Canada's markets are often too small and fragmented for individual utilities or program administrators to send clear signals to manufacturers, contractors, retailers, and distributors on their own.

Federal support for coordinated market transformation can help align common specifications and qualified product lists, enabling utilities to harmonize decisions about incentive eligibility and ensuring that federal incentive programs reinforce a consistent national direction. Federal support can also strengthen supply chain engagement by working with retailers, distributors, contractors, and trade allies to stock, promote, and offer point-of-sale enrollment for demand response-ready technologies, increasing their availability and adoption.

Quantifying the full value of demand response remains challenging, particularly for smaller utilities and early-stage jurisdictions. Yet doing so is essential to assessing demand flexibility on equal footing with traditional infrastructure investments. Utilities would benefit from collective efforts to establish Canadian-specific guidance and reference values that support credible estimates that planners and regulators can use. This work could generate nationally accessible best practices for assessing the full system benefits of demand flexibility, including time- and location-specific avoided costs and harder-to-measure attributes such as

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emergency load-shedding capability, operational and strategic flexibility, reliability, and resilience, which are not frequently quantified.

Regulation is an efficient means to ensure all new equipment for priority technologies is demand-response ready. Once the Energy Efficiency Act is modernized, the federal government should use its expanded authority to begin developing requirements for priority technologies to be connected, interoperable, and demand-response ready. Coordinated market transformation would prepare the market, including manufacturers and the rest of the supply chain, for regulation. Canada should also build toward a consumer-authorized energy data access framework that allows customers to securely share demand-response-relevant device data with utilities or aggregators, while signalling to original equipment manufacturers that standardized, privacy-protective access will become part of future requirements for demand response-ready equipment. These regulations should enable capability and consumer protection, not mandatory customer participation.

Develop supports for comprehensive integrated resource planning

The electricity strategy includes "Supports for Integrated Resource Planning to address silos for infrastructure planning across gas, electric, and thermal energy networks." Yet silos are not the only challenge in identifying the most cost-effective system expansion pathways in utility planning. Integrated resource planning (IRP) should ensure all available resources, including DSM, demand flexibility, generation, transmission, and distribution are assessed on equal footing.

Efficiency Canada's *No Margin for Error* report found that few IRPs enable DSM as an alternative to more expensive supply-side resources because models fail to make it a resource option.[18] A practice of reducing load growth projections by energy savings targets is more common. This means that the benefits of DSM to the utility system (e.g., deferring investment in infrastructure) and customers are also consistently neglected or underestimated.

[18] James Gaede and Brendan Haley, "No Margin for Error." See https://www.efficiencycanada.org/utility-report/.

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To support more comprehensive, affordable and productive IRPs, the federal government can:

- Develop analytical tools and best practices to incorporate DSM as an endogenous resource option within IRPs.
- Quantify time and locational avoided cost benefits of demand flexibility, distributed generation, storage and other DSM strategies.
- Quantify the benefits of low-income energy efficiency to reduce utility costs related to credit and collections. A forthcoming Efficiency Canada review of cost-effectiveness testing practices found no utility counts these benefits.[19]
- Develop methodologies to quantify non-energy benefits of energy efficiency. These benefits are frequently underestimated via stakeholder negotiation processes in public utility regulation.

Adopt crowd-in co-funding approaches in federal programs

Government co-funding with DSM administrators can have a significant impact on program policies related to electrification and the overall level of DSM. Efficiency Canada's *Breaking Fuel Silos in Demand Side Management* report discusses how federal funding — through the Canada Greener Homes Grant and for charging infrastructure — triggered both gas and electric utilities to support electrification.[20]

Government funding can encourage more DSM co-funding by improving cost-effectiveness from a utility perspective, but it can also crowd out DSM funding. This depends on the attribution rules that allow a DSM administrator to count energy savings benefits toward their program activities. Unpredictable or boom-bust government funding cycles make this harder by creating unstable planning

[19] Brendan Haley and Carol Maas forthcoming, "Aligning DSM Cost-Effectiveness Testing with Public Policy."

[20] Brendan Haley et al., Breaking Fuel Silos in Demand Side Management (Efficiency Canada, 2024), https://www.efficiencycanada.org/fuel-report/.

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signals for regulators and DSM administrators, rather than enabling durable coordination between public funding and utility DSM portfolios.[21] We thus suggest:

- All federal funding and financing policies should be designed to crowd in additional DSM funding. This could include publishing a statement (or negotiating with provincial governments or utilities) to enable full attribution of energy-saving benefits to DSM administrators and agreement to increase DSM efforts rather than reducing budgets as a response to federal funds.
- Providing multi-year funding certainty (or long-term financing strategies such as through the above-mentioned "green bank") so federal initiatives can be incorporated into IRP and DSM portfolios, and so demand-side solutions can be selected as an alternative to more expensive supply options.

Strengthening energy productivity

Below are policy suggestions related to the goal of doubling energy productivity, recognizing that energy productivity and affordability are interrelated and complementary objectives.

Save electricity with appliance and equipment standards

The strategy acknowledges that "the cheapest electricity is the power never used," and the more electricity we save, the more is freed up to be used for more productive purposes to strengthen Canada's economy.

The federal government has the ability to save significant amounts of energy and electricity, in particular, by **regulating the performance of appliance and equipment standards through the Energy Efficiency Regulations**.

[21] Discussed in Brendan Haley and Carol Maas forthcoming, Aligning DSM Cost-Effectiveness testing with public policy.

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Efficiency Canada's *Benchmarking Canadian Minimum Energy Performance Standards for Appliances and Equipment* report[22] identifies opportunities, including:

- Adopting IE4 electric motor standards would cumulatively save 42 TWh of electricity from 2029 to 2050. Adopting IE5 standards could save 70 TWh.
- Aligning with finalized U.S. minimum energy performance standards for general service lighting, which are world-leading, would result in cumulative energy savings of almost 3 TWh by 2050, and this standard could be expedited through a ministerial amendment.
- The majority of dishwashers, electric cooking products, gas cooking products, and clothes washers/dryers sold in Canada already comply with U.S. DOE-finalized minimum energy performance standards, making adoption of these standards feasible in Canada.

The federal government has the authority to create significant energy savings, and the electricity strategy makes the case for freeing up electricity to power the Canadian economy. This means Canada should recognize the potential to save a significant amount of electricity through higher-performance electric motors and follow the U.S. DOE-finalized standards in lighting and major home appliances, regardless of whether current U.S. policy stalls or disrupts implementation.

Improve industrial energy productivity

The industrial sector will play a significant role in meeting a national energy productivity goal, both by saving large amounts of energy and increasing GDP through more productive industrial operations.

Industrial energy management presents a tariff-proof method for industries to save costs and improve productivity in today's unstable economic environment. Many savings are achieved through data insights and process optimizations, which can also extend the lifetime of existing equipment. These systems can enable well-

[22] Sarah Riddell, *Benchmarking Canadian Minimum Energy Performance Standards for Appliances and Equipment*. https://www.efficiencycanada.org/benchmarking-report/.

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planned digitization of production and strategic equipment investments to improve long-term energy and economic productivity.

The Green Industrial Facilities and Energy Management Program should be renewed and expanded. The program is reported to be over-subscribed, representing strong participation and significant energy-saving potential. We suggest that the strategy guide future expansions of this program, and other industrial energy efficiency initiatives, by the economy-wide goal of doubling the pace of energy productivity.

Modernize and scale retrofits

The existing building sector represents the largest potential for energy productivity improvements and is a larger market for the modernization of Canada's productivity-lagging construction sector.[23]

Canada's new housing strategy emphasizes "modern methods of construction" to improve the productivity of new home building. However, to free up electricity, encourage electrification, and bolster energy productivity, a modernization agenda is also needed in existing buildings.

The federal government's Deep Retrofit Accelerator Initiative (DRAI) and Greener Neighbourhoods Pilot Program (GNPP) have the potential to implement this modernization agenda. A forthcoming Efficiency Canada publication reviews these programs and their potential to transform building retrofits.[24] The report finds that program recipients started a series of innovation activities, which created momentum that could be more effectively directed toward an agenda to modernize and transform retrofit markets. However, the **programs should be shifted from short-term pilot projects with incremental retrofit objectives toward**

[23] Jenny Watt, Wulong Gu, Aled ab Iorweth, "Firm Size and labour productivity growth in Canadian residential construction" Statistics Canada, February 25, 2026. https://doi.org/10.25318/36280001202600200003-eng.

[24] Agar, B., Haley, B. 2026. How federal policy can transform building retrofits in Canada. Efficiency Canada, Carleton University, Ottawa, ON. Forthcoming.

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a transformative system change mandate. The strategy should call for the DRAI and GNPP programs to be renewed under stable budgets, with objectives to:

- improve retrofit productivity as a component of the construction sector productivity improvement goal
- drive innovation in modern methods of construction in existing buildings
- support growth and development of Canadian businesses and technologies

These programs would then become a core component of Canada's energy productivity strategy, creating a motor of innovation to make building retrofits higher value, lower cost and larger scale.

Make existing tax credits work

The Clean Technology Investment Tax Credit can be claimed on projects after March 2023 and is a core component of the government's Climate Competitiveness Strategy. However, uptake is low. A Commissioner of the Environment Report found that less than 24 per cent of the projected investments were under review, and less than one per cent was paid out by July 2025.[25]

Uptake is low because potential applicants must assume significant financial risk without certainty that the incentive will be received. Applicants only find out if the tax credit is awarded after a retrofit; well-documented, eligible claims have been denied.[26] The application process is complex, requiring an expert tax consultant. Common retrofits, such as dual-fuel electric-gas heating systems, are ineligible. The credit only applies to equipment cost (e.g., heat pump), which is a small fraction of the total upgrade cost for large multi-unit residential or commercial buildings. These buildings should optimize related systems for supplementary heat, distribution, ventilation, filtration and smart controls. The tax credit is also

[25] Commissioner of the Environment and Sustainable Development, Implementing the Canadian Net-Zero Emissions Accountability Act - Financial Measures (Office of the Auditor General of Canada, 2025), Exhibit 6, https://www.canada.ca/en/auditor-general/our-work/audit-reports/implementing-canadian-net-zero-emissions-accountability-act-financial-measures.html.
[26] BOMA BC and LandlordBC, "Understanding and Advancing Tax Incentives for Low-Carbon Building Retrofits." https://www.boma.bc.ca/reports-guides-and-case-studies.

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limited to corporations and real estate investment trusts. Housing co-ops, not-for-profit housing, condominiums, and sole proprietors own and operate buildings and land yet are ineligible.

Budget 2025 announced improvements to the predictability and administration of the Scientific Research and Experimental Development tax incentive. The strategy should aim to work with organizations like the above-mentioned retrofit accelerators to improve the tax credits. **Immediate efforts to simplify and expand the Clean Technology Investment Tax Credit** and the Accelerated Investment Incentive (where applicable) include:

- Reduce risk by enabling pre-approval so the tax credit can be securely factored into the economics of retrofit projects.
- Improve clarity with a predetermined list of eligible energy upgrade measures.
- Enable well-designed energy upgrades by expanding eligibility to include the full project cost of systems instead of limiting the credit to equipment costs.[27]
- Expand eligibility by making the tax refundable for not-for-profit and tax-exempt organizations like co-operative housing, not-for-profit housing, and condominiums. Enable new construction builders to use the tax credit by transferring benefits to building owners.

An industrial policy for the home energy contractor sector

Canada will not achieve electrification and energy productivity goals without aligning home contractor business models with those goals. This is a strategic sector for future industrial policies that is often neglected. Good middle-class jobs will not be supplied in this century by the manufacturing sector or resource projects. We must look to domestic service and trades-oriented sectors to supply

[27] Including design costs to optimize systems and achieve energy savings from integrated design strategies, such as fat, short, and straight to reduce friction.

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jobs this century.[28] The home energy upgrade sector, which includes HVAC contractors, insulators and energy advisors, provides jobs that are unlikely to be offshored or disrupted by artificial intelligence. Indeed, there is significant potential to improve productivity and job quality through the strategic adoption of digital and AI technologies to reduce friction, improve customer interactions, and bolster performance through high-quality installations and monitoring.

The recommendation to deliver retrofit upgrade finance to Canadians through a "green bank" will also put positive transformation pressure on home contractors through standards and due diligence requirements that require customer protection and alignment with policy goals in return for accessing low-cost capital.

We suggest **complementing the "green bank" with business development services for the home contractor sector**.[29] The goal of the services will be to improve productivity to enable higher wages and more stable jobs and to support better contractor-customer relationships. These services could include:

- Heat pump and home upgrade sales strategies, rooted in market research.
- Assistance with the development of new business partnerships, such as the incorporation of energy advisory, blower door testing, and building envelope upgrades into HVAC service offerings.
- Creation and adoption of technologies and partnerships to simplify load calculations to properly size heating and cooling equipment (e.g. by using energy use data).
- Creation and adoption of technologies to commission heating and cooling equipment after installation.
- Support for succession planning and navigation of business buy-out offers to enable HVAC and home retrofit companies to remain Canadian-owned

[28] Dani Rodrik, An Industrial Policy for Good Jobs (The Hamilton Project, 2022), https://www.hamiltonproject.org/wp-content/uploads/2023/03/20220928_THP_Proposal_Rodrik_GoodJobs.pdf.

[29] See discussion on this topic in Abhilash Kantamneni et al., "Designing Home Retrofit Policy for the People Who Do the Work" (Efficiency Canada, 2024), https://www.efficiencycanada.org/designing-retrofit-report/.

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and to take advantage of announced capital tax exemptions to support employee ownership.

Conclusion

Please accept these comments based on Efficiency Canada's ongoing research and engagement, aimed at making sure the electricity strategy meets the government's goals for a more productive economy and affordable energy system.

We welcome further discussion on the ideas contained within this submission.