

CANADA

PROVINCE DE QUÉBEC

DISTRICT DE MONTRÉAL

RÉGIE DE L'ÉNERGIE

*Demande relative aux mesures de soutien à la
décarbonation du chauffage des bâtiments;*

No: R- 4169-2021 Phase 2

ÉNERGIR, s.e.c.

et

HYDRO-QUÉBEC

Demanderesses

- et -

OPTION CONSOMMATEURS

Intervenante

MÉMOIRE D'OPTION CONSOMMATEURS

par

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1. Introduction

Option consommateurs (OC) represents the interests of the residential customers of both Énergir s.e.c. (Énergir) and Hydro-Québec in its distribution activities (HQD) (hereinafter the "Distributors"). Thus, OC has reviewed the proposal of the Distributors with the interests of the residential customers in mind. OC understands that the main role of the regulator is to protect consumers from the negative impact that the market dominance of natural gas and electricity distribution monopolies could have. Indeed, the lack of competition resulting from monopoly markets exposes customers to paying higher prices for goods and/or services than would be the case in a competitive market.

The Scope of OC's participation in Phase 2 of the Distributors' Bi-energy program application for commercial and institutional ("CI") users of gas and other fuels, is limited to examination of the collateral impacts on the Énergir and HQD revenue requirements as related to residential customers, including:

- The estimated costs for conversions and the extent to which these costs will be subsidized by HQD and Énergir ratepayers. In addition to the HQD subsidies, there are contributions to the conversion costs from SITE (the regulator noted in Phase 1 that it has no jurisdiction over SITE).
- The impacts of making the CI Bi-energy offer available to other fuel users (including residential and commercial/institutional customers¹).
- Costs to ratepayers from cancellation of costs associated with electrical work for conversion. There will be a much higher unit cost than for residential conversions.
- OC notes the Federal Government NRCan Greener Homes Program (GHP) is relevant in that it could reduce the costs and subsidies from HQD ratepayers for conversions. NRCan GHP is a new program that applies to both the residential and small CI buildings.

¹ B-0126 Supplementary Evidence Dec.9. 2022

2. Background

HQD's activities are subject to the jurisdiction of the Régie de l'énergie (the "Régie"). Énergir's natural gas distribution activity is also subject to the jurisdiction of the Régie to the extent provided for in the Act Respecting the Régie de l'énergie (the "Act").

The Régie has exclusive jurisdiction to fix or modify the rates and conditions at which electricity is distributed by HQD and at which natural gas is distributed by Énergir.

In June 2021, the Government of Québec (the "Government") issued Order-in-Council 874-2021, indicating to the Régie its economic, social and environmental concerns with respect to the means to be put in place to reduce GHG emissions from the heating of buildings by 2030².

Following this decree, the Distributors appeared before the Régie to present a joint solution to support the government in its energy transition objectives. This solution consisted of the conversion to dual energy of Énergir's customers using natural gas for space heating or space and domestic water heating (the "Bi-energie Project").³

On July 13, 2021, the Distributors signed an agreement to govern the collaboration of the parties for the purpose of carrying out the Project (the "Agreement"). The Agreement includes, among other things, terms and conditions relating to the GHG Contribution and its method of determination.

In the first phase of the application, the Régie rendered decision D-2022-061 (the "Decision"), in which it granted the Distributors' request and recognized, among other things, the general principle relating to the "GHG Contribution" provided for in the Agreement.

The setting of a new Bi-energy rate for HQD and the approval of certain modifications to Énergir's Conditions of Service and Tariff are required in order to initiate the program for CI clients:

Section 48.4 of the Act provides that the Régie has jurisdiction to set a rate that is not provided for in Schedule I of the Hydro-Québec Act *when the conditions set out in that section are met, including the issuance of an order-in-council by the Government.*

² R-4169-2021 (phase 1), pièces [HQD-Énergir-1, document 1 \(B-0034\)](#), [HQD-Énergir-1, document 2 \(B-0093\)](#) and [HQD-Énergir-1, document 3 \(B-0007\)](#).

³ R-4169-2021 (phase 1), pièce [HQD-Énergir-1, document 1 \(B-0034\)](#), Annexe A.

On July 6, 2022, the Government published Order-in-Council⁴ 1395-2022 (the "Decree"), in which it expressed economic, social and environmental concerns regarding the HQD's request to set a new dual-energy electricity-natural gas rate for CI customers. The conclusions of the Decree provide as follows (our translation):

"That the following economic, social and environmental concerns be indicated to the Régie de l'énergie with respect to the electricity distributor's request to set three new dual-energy electricity-natural gas rates for commercial and institutional customers:

- *Commercial and institutional customers should be eligible for new rates that promote the use of dual energy electricity-natural gas for space heating;*
- *These rates should be competitive, so as to encourage the conversion of heating systems to dual energy electricity-natural gas, thereby contributing to the target of reducing greenhouse gas emissions from building heating by 50% by 2030."*

Following the issuance of the Decree and the Decision, the Distributors are applying to the Régie for approval of the terms and conditions of the new dual-energy rate for HQD's CI customers and for approval of certain amendments to Énergir's Conditions of Service and Tariff.

3. The Phase II Bi-energy Application

The processing of the application is being carried out in two phases.

The first phase included recognition of a general principle under which a contribution for the reduction of GHG was established (the GHG Contribution), as well as its method of establishment, allowing for a sharing of the costs of decarbonization for the purpose of establishing the revenues required by the Distributors for setting their respective rates. However, while providing an overview of the electric-natural gas cooperative offer (the "Offer"), the first phase dealt with the tariff and the Offer for residential customers only, given the availability of mature technologies and the existence of HQD's DT rate for the residential customer base.

⁴ [Décret 1395-2022](#).

In Phase 2, HQD requests that the Régie to set a new dual-energy rate for small and medium-sized CI customers in three rate structures (as proposed in section 2.1 of the Distributors' evidence) and Énergir requests approval by the Régie of certain modifications to its Conditions of Service and Tariff (as proposed in Section 2.2.1 of the Distributors evidence).

The Distributors proposal for this customer segment takes into account decision D-2022-061 regarding Phase 1 of the application.

The Distributors indicated in Phase 1⁵ that the setting of a new bi-energy rate for CI customers would be necessary for the success of the project, as there is no bi-energy tariff offer for CI customers at this time.

The Distributors submitted to the Régie detailed evidence concerning the entire project relating to the CI clientele in support of their application⁶.

3.1. Request Specific to HQD

HQD requests that the Régie authorize the terms and conditions of a new dual energy rate for small and medium power CI customers for space heating, consisting of three rate structures (the "Dual Energy Rate CI").

The Dual Energy Rate CI is similar to the DT rate for residential customers, but includes some new proposals. HQD proposes, among other things, to divide the Dual Energy Rate CI into two seasonal structures, based on the general rate applicable to small and medium power customers, and to establish a heating period for Dual Energy Rate CI from October 1 to April 30 of the following year. This proposal aims to encourage decarbonization of heating by capturing the majority of the consumption associated with this energy use.⁷

HQD requests approval for setting of Dual Energy Rate CI, as detailed in Appendices A and B of exhibit B-0135.

⁵ R-4169-2021 (phase 1), [pièce HQD-Énergir-1, document 1 \(B-0034\), section 2.1.](#)

⁶ B-0135 , HQD-E-8, document 1 révisé.

⁷ Ibid 5

3.2. Request Specific to Énergir

Énergir requests that the Régie approve an amendment to Article 15.2.4 of its Conditions of Service and Tariff. The purpose of this amendment is to extend the exemption from the application of the peak service surcharge to customers who will be covered by HQD's new tariff so as not to reduce the attractiveness of dual energy to CI customers⁸.

4. Commercial and Institutional Clients Targeted by Offer

In addition to targeting residential customers (the Offer described in Phase 1), the Phase 2 application targets Énergir's customers in the CI sector who have a space or water heating needs and who are planning to plan to change a heating appliance in the near future. As presented in Phase 1, CI customers with a gas consumption of:

- a) 15,000 m³ and less and
- b) 500,000 m³ and less

are eligible.

These volumetric levels were used for the various analyses conducted by the Distributors.

For CI customers, consumption volumes related to space heating will be converted to dual energy, while those related to water heating will be converted to all-electricity mode (TAE) where applicable. New buildings for which Énergir receives a request to connect to the gas network are also covered.

The Distributors estimate that approximately 35,000 commercial customers and 6,500 institutional customers may be eligible for the Offer.

The basic electricity uses of the proposed customers are currently billed at general small and medium power rates G, M or G9.

⁸ B-0135, section 2.2.1.

4.1. HQD Rate Measure

There is currently no dual energy rate available to CI customers. Therefore, HQD proposes to introduce a new dual-energy rate for space heating for CI customers with small and medium capacity. To be eligible for the proposed dual energy rate, customers must among other things, have a dual-energy heating system that uses electricity as the primary energy source and a fuel as a backup source, to be used primarily during periods of extreme cold, and that is equipped with a switching device that allows automatic transfer from one energy source to the other. The capacity of the dual energy system must be sufficient to provide the necessary heat for the heating of both space and hot water.

As with the HQD DT rate for residential customers, which applies to all fuels, HQD is proposing that all fuels, including fuel oil, propane or wood pellets, be eligible as a source of supplementary heating energy under the new CI dual fuel rates, even if the Offer is directed to the electricity/natural gas scenario, in order to maximize the reduction of GHG emissions, in an energy transition perspective.

4.2. Main terms of application

In order to encourage CI customers to adopt the Offer and convert their space heating to dual energy, HQD offers customers whose dual energy system characteristics allow space heating to be switched off, to charge for the use of electricity at an advantageous price outside of very cold periods, in exchange for the deletion of the load associated with this use during periods of high demand⁹.

In periods of extreme cold, the heating system will have to operate in back-up fuel mode. In addition, a higher price will be charged for any electricity consumption during these high demand periods.

This price combination is intended to provide an incentive for the customer to use the right source of energy at the right time.

⁹ The Offer is only beneficial to customers switching from natural gas to dual fuel because of the eligibility criteria for financial assistance.

HQD states that unlike the situation for residential customers, basic electrical uses as well as water heating needs of CI customers are heterogeneous. In fact, for some customers, the consumption associated with these uses may represent the majority of their electrical consumption, while for others it represents only a small portion.

In order not to penalize customers who have a significant captive use of electricity due to the nature of their activities, HQD indicates it is important to distinguish electricity consumption associated with space heating from that associated with other uses. This distinction allows the consumption associated with other uses (e.g. lighting and ventilation) to be billed at the applicable general rate and thus avoid cannibalization of sales already made for electricity.

Under the Offer for CI customers, HQD proposes to introduce separate metering for the electrical supply of the dual fuel system. The addition of a second meter allows for directly and efficiently measuring only space heating consumption.

Following the logic described above, water heating using a water heater converted to electricity will be metered with basic uses, such as lighting, and billed at the applicable general rate.

4.3. Switching from one energy source to another

In general, periods of colder temperatures coincide with high HQD supply needs and supply requirements and the times when electricity resources are most in demand.

Management tools for various periods, such as the DT rate, applicable to residential customers, which provides temperature-based switching, makes it possible to better meet HQD's supply needs, as opposed to the implementation of demand-side management tools for the same time periods.

In addition to allowing HQD to diversify its load management capabilities, temperature-based load shedding is justified because of the strong correlation.

By covering more hours than the 100 most critical hours, dual energy represents an appreciable contribution of winter energy at a time when HQD's surplus is coming to an end. The Régie noted that the DT rate seems to be an appropriate tool to combine the use of a fuel with heat pumps and thus get the Bi-energy Offer off to a good start, particularly the component that encourages adoption of heat pumps. This is also true for the CI sector.

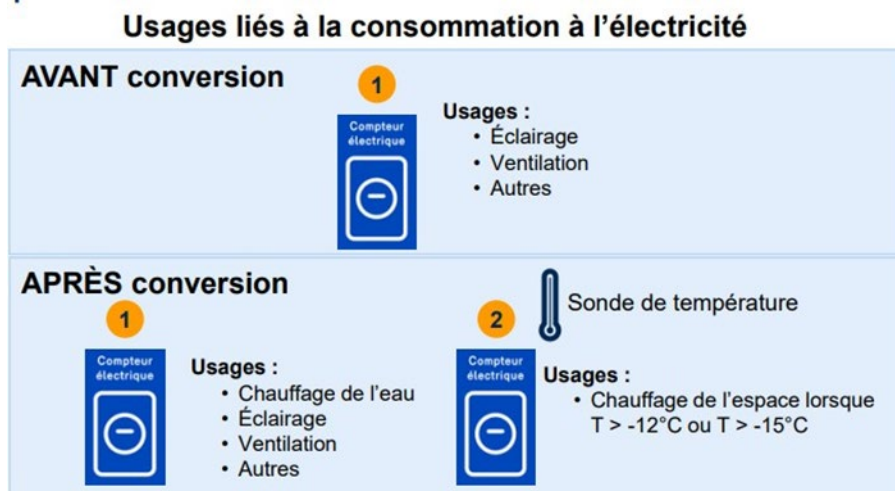
Thus, the proposed dual fuel rate will allow HQD to reduce the costs associated with serving CI customers for space heating compared to the all-electric (TAE) mode. Eligible customers will be able to realize annual savings on their applicable general electricity rate in return for turning off their electric space heating during periods when the temperature will be below the permutation temperature. During those periods, the space heating load shall be provided by an eligible back-up fuel.

The Distributors state this new tariff will encourage the installation of efficient heating equipment in CI buildings.

4.4. HQD Rate Structure

HQD proposes to establish the heating period for CI customers as October 1 to April 30 of the following year. This is because the space heating needs exceed the winter period defined in the electricity rates. Since the proposed dual energy CI is intended to charge a premium price to specifically encourage decarbonization of building heating, it is important to capture the majority of the consumption associated with this use.

In addition, HQD proposes to split the dual-energy rate into two seasonal structures based on the general rate applicable to small and medium power customers. The price structure of this rate will be identical for the heating season, but will be differentiated outside of the heating season:



5. Distributors' support for the acquisition of efficient equipment

In order to significantly increase the penetration of dual-energy and to allow the greatest number of CI customers to participate in the decarbonization of building heating, Énergir and HQD will financially support conversions to bi-energy in order to reduce the customer's return on investment (PRI) period when acquiring efficient equipment.

This type of equipment is already eligible for HQD's current program, as well as the commercial programs of Énergir's energy efficiency plan (PGEÉ), that targets this type of customers.

5.1. HQD's portion of the financial assistance

This type of equipment is already eligible for HQD's current energy efficiency programs (PGEÉ).

The Distributors also indicate that steps will be taken with manufacturers to develop the market for certain efficient equipment that is currently expensive and not very accessible, such as air-to-water heat pumps and hybrid rooftop units. For example, the Distributors intend to offer training to their partners, highlight ongoing showcase projects and the first conversion projects of CI customers participating in the Offer and continue discussions with equipment manufacturers and distributors. According to the Distributors, these efforts, combined with the new proposed tariff for CI customers, financial support for the acquisition of efficient equipment and the Distributors' marketing activities, should stimulate demand and accelerate the market transformation required to increase the availability and reduce the price of such equipment.

The financial assistance from HQD will be aimed at reducing the incremental costs of efficient heat pumps, according to the terms and conditions of the Efficient Solutions program. The budget for this energy efficiency program will be submitted in its next rate application, which is for the year 2025-2026.

5.2. Énergir's portion of the financial assistance

Énergir's portion of the financial assistance will come from the consumer rebate retention program to cover a portion of the incremental cost of natural gas equipment and, where the customer opts for an eligible *high efficiency appliance*, financial assistance from the energy

efficiency plan (PGEÉ) will be available according to the terms and conditions in effect. The required budgets will be approved by the Régie under the usual regulatory processes.¹⁰

Only the approved 2023 program costs have been provided.^{11 12} The incremental costs for Bi-energy in 2024-2030 for HQD and Énergir have not been provided.

The 2022 HQD energy efficiency costs were proposed by TEQ and approved by the Régie and amount to \$23.7 million for buildings and possibly a portion of the industrial budget¹³.

The 2022-2023 Énergir energy efficiency costs were approved by the Régie and amount to \$37.4 million in assistance and \$4.3 million operating costs¹⁴.

5.3. Waiver of charges associated with electrical work performed by HQD

The language in HQD's new Terms of Service ("TOS") presented in Phase 1 of the application and approved by the Régie in its decision D-2022-079, consisting of the cancellation of the costs associated with the necessary work on the electricity distribution system, also alleviates the investments required by CI customers to enroll in dual energy. No additional changes to this provision are proposed. The cost of this is estimated at up to \$9 million a year or \$60 million 2023-2030

5.4. SITÉ Incentives

Additional financial incentives will be provided to CI customers by the innovation and energy transition sector ("SITÉ") of the Ministère de l'Énergie et des Ressources naturelles ("MERN") to complement the financial assistance offered by the Distributors for efficient equipment.

¹⁰ B-0137 DDR Response 4.1 to Régie

¹¹ [D-2022-123](#) (R-4177-2021 – phase 2), paragraphe 314.

¹² [D-2019-088](#) (R-4043-2018), Tableau 16 (mesures 67.17 et 38.2).

¹³ [D-2019-088](#) (R-4043-2018), Tableau 16 (mesures 67.17 et 38.2).

¹⁴ [D-2022-123](#) (R-4177-2021 – phase 2), paragraphe 314.

In its 2022 budget plan, the Government has indicated that it will make environmental protection a priority¹⁵. In this regard, the 2022-2027 plan which was unveiled in April 2022, presents a \$1 billion increase in the budget for planned actions (as compared to that of the 2021-2026 plan) and increases the budget for the measure "*Supporting the conversion from natural gas to electricity for peak management*" to \$158 million for the period".¹⁶ (our translation)

MERN plans to make financial assistance available to CI customers for dual energy under its EcoPerformance program¹⁷. The terms and conditions will be developed in such a way as to ensure the greatest possible participation. They should cover a portion of the additional costs of dual-energy equipment and related work for participating customers and, for some participating customers, the entire costs.

5.5. NRCan Greener Homes Program

The NRCan Greener Homes Program was announced in the 2022 Federal Budget

In Ontario, Enbridge Gas has entered into a 5 year funding agreement with NRCan to support the EGI Energy Efficiency Programs¹⁸. Over the period 2022-2027 federal support of up to \$613,437,876 is available.

The eligible homes include the following types:

- Single and semi-detached homes;
- Townhouses;
- Four season cabins;
- Mobile homes on permanent foundations;
- Permanently moored floating houses;
- Multi-use buildings (residential portion only); and
- Low-rise multi-unit residential buildings (3 storeys or less with footprint of 600m² or less).

¹⁵ [Budget 2022-2023, Votre gouvernement, Plan budgétaire, mars 2022.](#)

¹⁶ [Plan de mise en oeuvre 2022-2027](#) du Plan pour une économie verte 2030.

¹⁷ Hydro-Québec, [Décarboner le chauffage au meilleur coût grâce à la biénergie : une solution désormais disponible pour la clientèle résidentielle](#), 22 juin 2022.

¹⁸ The EGI-NRCan Agreement provides for (\$613,437,876). Federal Contributions over 2022-2027 based on EGI EE programs for the Ontario residential and small business sectors

During the Séance de travail, the Distributors confirmed that they are aware the federal Greener Homes Program.

In response to an OC information request¹⁹ they indicated they had not held discussions with NRCan.

6. Financial Analysis from Customers' Perspective- PRI and Subsidy

In order to analyze the impact of the Offer from the perspective of eligible customers, five CI test cases were selected, two commercial and three institutional. The Distributors indicate that although the CI customer base is heterogeneous, both in terms of size and consumption profiles, these case studies capture the diversity encountered and thus illustrate the impacts of conversion to dual energy on a representative variety of energy bills.

The test cases selected to evaluate the PRI/Payback are described in section 3.2²⁰. As with residential customers, financial assistance to support the conversion of CI customers will be provided by the Distributors and by the SITÉ. As mentioned in section 2.3.3 of exhibit B-0135, these financial incentives have not yet been determined. A sensitivity study is therefore presented for information purposes in order to estimate the PRIs for customers based on the proportion of subsidized costs, of the additional costs of dual-energy equipment and related work for participating customers and, for some participating customers, the entire costs.

The July 2022 government Order-in-Council²¹ 1395-2022 (the "Decree"), in which it expressed economic, social and environmental concerns regarding HQD's request to set a new dual-energy electricity/natural gas rate for CI customers. The conclusions of the Decree provided as follows (our translation):

¹⁹ R-4169-2021 – Phase 2, Réponse à la demande de renseignements no 2 d'OC, Question 11

²⁰ R-4169-2021-B0135-Demand-PieceRev-2023_01_25 Section 3.2 Tables 5-9

²¹ Ibid 3

"That the following economic, social and environmental concerns be indicated to the Régie de l'énergie with respect to the electricity distributor's request to set new dual-energy electricity-natural gas rates for commercial and institutional customers:

- Commercial and institutional customers should be eligible for new rates that promote the use of dual energy electricity-natural gas for space heating;
- These rates should be competitive, so as to encourage the conversion of heating systems to dual energy electricity-natural gas, thereby contributing to the target of reducing greenhouse gas emissions from building heating by 50% by 2030."

6.1. OC Review/comments on PRI and Financial Support

TABLEAU 2 :

Volume de consommation considéré selon les cas types sélectionnés

Segments	Commercial		Institutionnel		
	Commerce de détail de petite taille	Bureau commercial	Bureau institutionnel	Hôpital	École secondaire
Chauffage et chauffe-eau (m ³)	5 209	10 812	76 018	213 222	331 342
Base électrique (kWh)	35 179	109 343	589 500	1 777 680	2 011 000

In order to understand the likely amount of contribution/subsidy required to encourage conversion, OC has analysed the PRI and the associated Capex contributions for financial viability, from a customers' perspective.

The Distributors assumed that commercial customers require simple payback (PRI) of 1-6 years and institutional customers a PRI of 8-10 years.

The following Table based on tables 5-9 of B-0135 and interrogatory responses, provides the following results:

OC Table 1	OC Estimate of Capex Subsidies with 80% Grant				[Based on Tables 2,5,6,7,8,9]			
Segments	Commercial				Institutionnel			
Numero Clients	35000				6500			
Cas type	Commerce de détail de petite taille		Bureau commercial		Bureau institutionnel		Hôpital	École secondaire
Chauffage et chauffe-eau (m3)	5209		10812		78018		213222	331342
Base électrique (kWh)	35179		109343		589500		177680	2011000
Segment # Buildings Estimate	20000		15000		6250		50	200
Heating System	Hot air/BienergieStd	Hydronic/BienergieStd	Hot Air	Bienergie Effic	Bienergie Std	Bienergie Effic.	Bienergie Effic.	Bienergie Effic.
PRI years (80% subsidy)	2		<1		6		35	8
\$ Subsidy/unit	-\$8,543		-\$9,762		\$0		-\$17,082	Not Viable
Capex Total Subsidy \$ Million	-\$170,864,000		-\$146,436,000		\$0		-\$85,412,000	-\$3,303,865,000
Notes								
1. Subsidy calculated based on Distributors' PRI Estimates								
2. # buildings estimates B-0138 DDR RepDDR no 2 de l'AHQ-ARQ Tableau R1.8 & 1.9								
R-4169-2021-B-0139-DDR-RepDDR AQCIE CIFQ Question 2 Preamble; Question 3 Preamble								
R-4169-2021 – Phase 2 B-0141 DDR RépDDRno 2 de la FCEI Tableau R1.6								
ADDITIONAL CASES R-4169-2021-Phase 2 B-0152 HQD-Energir Revised Document 3 Update of Excel File of Test cases Tables 10,11,12								
Segments	Commerce de détail de Petit taille<1500m3		École - moins de 50 000 m3		Commercial -Tarif G9			
Cas type								
Chauffage et chauffe-eau (m3)	1497		49963		10812			
Base électrique (kWh)	7622		74654		109343			
Segment # Buildings Estimate	N/A		N/A		N/A			
Heating System	Hot air/BienergieEffic.	Hydronic/BienergieStd	Bienergie Effic.		Bienergie Effic.			
PRI years (80% subsidy)	2		2		-5			
\$ Subsidy/unit	-\$5,788		-\$5,379		-\$570,284			
Capex Total Subsidy \$ Million	N/A		N/A		N/A			

The results indicate the following:

- Paybacks for commercial customers will require significant subsidies of up to 80% to achieve reasonable returns on investment. The estimated Capex subsidy requirements are:
 - Small retail and commercial offices (private sector) \$217.3 million
 - Commercial Offices \$85.4 million
 - Institutional Offices \$ 3.3 billion
 - Hospitals \$66.3 million
 - Secondary Schools \$349.4 million

- The Distributors will bear a high percentage of the subsidies, even allowing for all of the SITE \$158 million funding (available for both the residential and commercial sectors).
- The 2024-2030 budgets for the Distributors' support programs have not been provided.
- Even if all of the \$158 million from SITE²² were expended, the Distributors' subsidies over the period 2024-2030 will greatly exceed the Distributors' current energy efficiency budgets of about \$60-70 million a year.
- Absent additional funds from the NRCAN Greener Homes Program²³, the conversion costs of ~\$500 million (allowing for all of the \$158 million SITE funding applied to the CI sector and excluding Institutional Offices) will have a significant impact on the Distributors' revenue requirements over the period 2023-2030.
- The major Bi-energy support budget increases will result in higher revenue requirements for Énergir and HQD. The increased costs will add to the approved GHG contribution and proposed \$60 million in electrical connection costs.

OC is concerned that the incremental requirement for support of conversion costs paid by the Distributors will increase the revenue requirements and result in rates that will not be affordable for HQD customers, including the residential customers OC represents.

6.2. OC Comments on Rates of Conversion

The analysis undertaken by OC on the economic feasibility of the proposed conversion program for CI customers indicates conversions are, for the most part, not economic, except for some subsectors (small retail/office).

The Distributors indicate that the commercial sector conversions in existing buildings will primarily be replacement of heating systems at end of life and installations in new buildings. The conversion of 35,000 commercial buildings by 2030 is, in OC's view, a very optimistic target.

If conversions are mandated by the province and municipalities for existing institutional buildings, this sector may meet the target of 6,000 conversions by 2030. However OC estimates the incremental cost for the estimated 6,000 institutional buildings conversions could exceed \$3 billion.

²² SITE of the Ministère de l'Énergie et des Ressources naturelles

²³ Ibid 17

6.3. OC comments on Conversion of Oil, Propane and Other fuel heating systems

The Distributors indicate the Offer is available to customers using fuel oil, propane or biomass heating systems on the same terms that are applicable to Énergir customers.

They indicate the estimate of conversions based on the added electricity consumption :

TABLEAU 11 : IMPACT POTENTIEL DE LA CONVERSION DU CHAUFFAGE AUX COMBUSTIBLES AUTRES QUE LE GAZ NATUREL À LA BIÉNERGIE – 2030

	Consommation convertie (GWh)	Manque à gagner (M\$)	Impact tarifaire (%)
Mazout	179	(13)	0,07%
Commercial	70	(5)	0,03%
Institutionnel	109	(8)	0,04%
Autres	106	(8)	0,04%
Commercial	41	(3)	0,02%
Institutionnel	65	(5)	0,03%
Total	285	(21)	0,11%
Commercial	111	(8)	0,04%
Institutionnel	174	(13)	0,07%

The estimated loss of revenue for other fuel suppliers is \$21 million over 2023-2030.

The Distributors indicated they have no plans to compensate the other fuel suppliers for loss of revenue²⁴:

“Les Distributeurs ne prévoient verser aucune compensation aux 8 distributeurs de mazout ou de propane en cas de conversion de leurs clients à la biénergie. HQ rappelle qu’elle n’a conclu aucune entente avec ces distributeurs qui prévoirait que ces derniers fassent une promotion active de la conversion de leurs clients à la biénergie”.

²⁴ B-0143 Response to DDR No2 from OC Question 13.3

The electrical connection (see below) and the equipment costs for conversion of fossil fuel customers from propane/biomass/heating oil to Bi-energy for space and water heating, will require subsidies from HQD. The Distributors have not provided any evidence regarding the capital costs and the PRI for propane/biomass/heating oil conversions.

6.4. OC Comments on Incremental Cost of Electrical Connection

HQD applied the information from the analyses of residential and non-residential customer supply demands (Table 12) to the estimated 4,000 customers per year who will have to modify their electrical installations:

TABLEAU 12 :ANALYSE DES DEMANDES D'ALIMENTATION DE LA CLIENTÈLE AUTRE QUE RÉSIDENTIELLE

	Aérien	Souterrain	Total
Nombre de demandes annuelles	217	86	303
Proportion par rapport au total	72 %	28 %	100 %
Proportion des demandes dont le coût des travaux est égal à 0 \$	83 %	48 %	74 %
Proportion des demandes dont le coût des travaux est > à 0 \$	16 %	52 %	26 %
Coûts de travaux moyens (sauf frais d'intervention)	9 337 \$	27 948 \$	19 976 \$

The total financial impact thus obtained would be approximately \$8.3 million annually, including the intervention costs on the network. Of this annual amount, HQD estimates approximately \$1.9 million would be for residential customers and approximately \$6.4 million for non-residential customers.

HQD specifies that the slight decrease in the financial impact compared to the initial assessment of nearly \$9 million can be explained by the use of separate data for each of the clienteles for this new evaluation rather than the overall data, as was done in the analysis presented in Phase 1.

Over the 7 years of the residential and CI Bi-energy programs, an average of \$8.3 million annually (or ~\$60 million in incremental electricity connection costs) will be recovered in the HQD revenue requirement and rates.

7. Summary

7.1. OC Conclusions

- **The Bi-energy Offer for Commercial and Institutional customers of Énergir and other fuel suppliers will require major financial support for conversion. Conversions will take place at heating system end of life for existing buildings and in new buildings.**
- **The level of financial support for commercial buildings (privately owned) will exceed the current budgets of Énergir's and HQD's energy efficiency programs. Assistance from SITÉ will only partially reduce the amounts required.**
- **Potentially, some financial support could be available for small commercial buildings (as well as residential buildings) from the NRCan Greener Homes Program.**
- **For the Institutional Sector, the costs of conversion of public office buildings, are prohibitive.**
- **For Hospitals and Secondary schools, there will be a further major requirement for financial support above the current HQD and Énergir energy efficiency programs.**

OC is concerned that the incremental requirement for financial support of conversion costs paid by the Distributors will result in rates that will not be affordable for HQD customers, including the residential customers OC represents.

7.2. OC Recommendation

If, the Regie is inclined to approve the Distributors' CI Bi-energy program, it should do so subject to the following condition:

The Distributors provide and receive approval of, an estimate of the Capex support/subsidies they expect to provide for conversions under the CI sector program and the impact on revenue requirements and rates over 2023-2030.