

April 11, 2017

[Addressed to: Parliamentary Leader of the Quebec Government]

Dear Colleague,

This letter shall address the questions from the opposition party member from Labelle, M. Sylvain Pagé, regarding the Education and Sports Minister decision to subsidize new-generation synthetic refrigerants for the Program of replacement or modification of refrigeration systems in ice rinks and curling centers.

First off, the opening of a third option for refrigeration systems will better suit many facility owners for which natural refrigerants do not represent an appropriate solution. In doing so, we will accelerate the replacement of older systems that often have exceeded their expected life cycle and are bad for the environment. Furthermore, this will encourage the open competition on the marketplace between contractors and manufacturers specializing in the manufacture and installation of refrigeration systems, which will in turn keep prices at a reasonable level.

On the topic of environmental issues, it is important to mention that the three options that are now admissible to the subsidy program do not endanger the ozone layer, and generate very little greenhouse gas emissions, with those two metrics being very important in our government fight against climate change.

“Pure” new-generation synthetic refrigerants (HFO) are a very recent innovation and have global warming potentials comparable to those of ammonia and carbon dioxide. That being said, despite the progress in technology over the past few years, the use of “pure” HFO refrigerants in ice rinks and curling centers is not possible for the time being, mainly because of flammability concerns with these substances. As such, blends have been developed to be able to use this new technology right now in ice rink and curling center refrigeration systems, in all safety.

The new refrigeration systems using HFO-based refrigerants hold minimal quantities of said refrigerant and minimize any leak potential to the atmosphere, which in turn reduces drastically the greenhouse gas emissions in comparison to the existing refrigeration systems that run on older refrigerant technology.

*To illustrate the environmental impact of the different systems, you will find in annex a comparative table of refrigerants. As you can see, the ozone depletion potential of all options is zero, and all options amount to a 97% to 100% reduction in greenhouse gas emissions compared to older refrigeration systems.*

Furthermore, concerning the associated costs of replacing or converting a refrigeration system, we request a feasibility study by a licensed engineer in order to compare at least two replacement refrigeration systems. The study must include a financial analysis of the options, on a period of 20 years. It shall account not only for the cost of replacing the system, but also for its maintenance and operation. The study will then recommend the best solution for every jobsite, in light of the financial analysis, but also of other particular factors specific to each facility.

In closing, I would like to recall the importance of replacing older refrigeration systems in ice rinks and curling centers in order to ensure the sustainability of the facilities and allow the population to play their sports in modern and safe facilities.

Please accept, dear Colleague, my best wishes.

The Minister,

[Signed: Sébastien Proulx, Minister of Education and Sports]