

# **Standing Committee on Natural Resources**

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### **EVIDENCE**

Tuesday, November 6, 2018

Chair

Mr. James Maloney

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**●** (1105)

[English]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): We're going to get going here. In anticipation of the bells ringing, we're going to revise our timetable a bit. We're going to hear from all three witnesses and then spare interrupting the witnesses in the second hour.

Mr. Melo and Mr. Rebel, you're here. We're going to be joined momentarily by Ms. Kalapos by video conference. Both of you know the procedure and how these things work. You have up to 10 minutes each to make your presentations. Because we're short of time, I'm going to spare everybody a grand introduction and just turn the floor over to you.

Please start us off, sir.

Mr. Bruce Rebel (Vice-President and General Manager, Association of Home Appliance Manufacturers Canada): Thank you very much.

My name is Bruce Rebel and I'm the vice-president and general manager of the Association of Home Appliance Manufacturers Canada. We are located here in Ottawa. Our members consist of some of the larger appliance manufacturers. I think you will recognize many of the names such as Whirlpool, Samsung, LG, etc. Those are our typical members.

I will get right into my comments.

Chair Maloney and members of the committee, good morning and thank you for the opportunity to testify on behalf of the Home Appliance Manufacturers Canada. AHAM represents manufacturers of major portable and floor-care home appliances as well as suppliers to the industry. Our membership includes more than 150 companies throughout the world. AHAM produces more than 95% of the household appliances sold in Canada.

Home appliance manufacturers selling products in Canada design and manufacture products for the entire Canada-U.S. market, not for any one specific province, state or jurisdiction. With manufacturers making identical or similar products available throughout Canada and the U.S., alignment and harmonization of product energy test procedures and energy standards between provinces and between Canada and the U.S. is critical to avoid costly duplicative testing and reporting. Appliances designed for just one province would be significantly more costly, would lead to longer wait times for products and likely would lead to drastic reduction in product

choices. In the end, it's the same appliance whether it's plugged in in Victoria or St. John's.

AHAM member companies are constantly striving to improve their products, whether it be for safety, energy efficiency or transitioning to refrigerant gases with low global warming potential. The pace of advancement in product technology requires a regulatory framework that can keep pace with the changes and improvements our members are introducing and with the changes that are occurring with our largest and most important trading partners.

The U.S. Department of Energy must, by statute, regularly review and consider revising its energy efficiency standards and test procedures, which, more often than not, results in new product energy efficiency performance levels being established and amended product test procedures being enacted.

The Government of Canada works hard to facilitate a cohesive regulatory framework for product energy efficiency and recently made significant strides in this area. I want to draw your attention to one such legislative effort.

After many years of consultation and work, we were delighted that Bill C-63 received royal assent in December 2017. The bill included amendments to the Energy Efficiency Act aimed at improving the process for updating efficiency standards and product test procedures to help Canada keep pace. These included a ministerial authority to make technical and administrative changes to regulations designed to maintain harmonization with another jurisdiction, as well as the authority to incorporate by reference technical standards documents to harmonize with another jurisdiction.

Both government and industry knew that these authorities were needed to keep abreast of advancements in energy efficiency, an important matter for all Canadians. However, the benefits of these critical process improvements cannot be realized until the cabinet enables the Minister of Natural Resources to utilize these new authorities. Using a football analogy, we are at the one-yard line and need only one more concerted effort to get these new authorities over the goal line and into practice. Natural Resources Canada's office of energy efficiency has developed an ambitious and busy forward regulatory plan for 2018 to 2020. Bringing these new ministerial authorities to bear upon the plan will be key to its success.

#### **●** (1110)

Why did the government decide we need these modern regulatory authorities? The changes to Canada's energy efficiency regulations contained in the recently enacted amendment 13 took 10 years to get published. The current process to amend Canadian energy efficiency regulations is overly lengthy and lacks nimbleness. This has created a significant regulatory burden for manufacturers who have to comply with different Canadian and U.S. energy efficiency requirements. Strangely enough, as some of you may not know, it's actually the U.S. requirements that are more stringent than Canada's.

Additionally, the long delay prompted provinces to introduce and publish their own regulatory energy efficiency requirements. This resulted in a chaotic mosaic of regulatory requirements that extended right to the Canadian consumer. The Canadian and U.S. energy labels that must accompany home appliances had different annual energy consumption values, leading to substantial consumer confusion as to why the same product consumed more or less electricity in one country versus the other. The reality is, the appliance consumes the same amount of electricity. It was the misaligned regulations that required appliance manufacturers to report results from two different non-harmonized test procedures.

In August 2014, the Canada-U.S. regulatory co-operation council joint forward plan included the goal of aligning new and updated energy efficiency standards and test methods for energy-using equipment. AHAM proposed and strongly supported this initiative. In June 2018, Canada and the U.S. signed a memorandum of understanding reaffirming their commitment to the regulatory co-operation council, as it is a practical and proven form devoted to reducing, eliminating and preventing unnecessary regulatory differences between the two countries.

With the publication of Canada's energy efficiency regulatory amendment 13 in December 2016, and the recent publication of amendment 14 on October 31, the energy efficiency standards and product test procedures are now largely aligned and harmonized with those previously published by the U.S. Department of Energy.

For Canada to be able to maintain a regulatory posture to ensure the energy efficiency regulations can be updated, improved and remain in alignment with jurisdictions of our important trading partners, the new ministerial authorities in the act need to be up and running. It would be terribly unfortunate if the bill was enacted to improve energy efficiency and the new authorities were never realized.

The goal of aligning and harmonizing energy efficiency standards, test procedures and labelling provides the best outcome for consumers, manufacturers, retailers and regulators themselves.

A regulatory environment that is responsive to the introduction of new technologies, and is better positioned to harmonize with our largest trading partner will not only achieve public policy goals of reducing greenhouse gases and electricity consumption but also contribute to maintaining the production and availability of affordable appliances for Canadian consumers.

The harmonization and alignment of home appliance energy conservation standards and test procedures between Canada and the U.S. is a top priority for my association and its members. We continue to strongly support this goal and urge this work to continue under the auspices of the regulatory co-operation council.

We would welcome this committee's support of our ask of the government that we get these ministerial authorities across the goal line so we can put them to use.

I want to briefly show you some of that confusion here. I have provided copies of the diagrams to the clerk.

You can see here on my right, this is what the old label used to look like. You can see that in the United States and Canada the energy consumption values per annum are different. That is what was causing the confusion. This tag typically hangs in every refrigerator, clothes dryer and washer.

#### • (1115)

I have here with me an aligned and harmonized energy tag. You can see that the annual consumption of this particular refrigerator is now aligned and harmonized and there's no longer confusion for the consumer as to why this appliance consumes more or less electricity in one country than the other. As I indicated earlier, the answer is that it doesn't. The analogy would be if I'm testing a motor vehicle at 50 kilometres an hour. If I test it at 100 kilometres an hour, I will get different results. That's what we were getting as well.

Thank you very much.

The Chair: Thank you.

Mr. Melo.

Mr. Fernando Melo (Policy Advisor, Clean Energy Canada): Good morning, Mr. Chair and members of the committee.

My name is Fernando Melo. I'm a policy adviser with Clean Energy Canada, a climate and energy think tank at Simon Fraser University. I'd like to start by thanking you for inviting me to present the research in our report "Less is More" as part of your study on the economic opportunities for energy efficiency in Canada.

Our report details why energy efficiency is a win-win for Canada's environment and economy, exploring the potential that efficiency has to grow Canada's economy, create real jobs, save households money and ultimately meet Canada's commitments under the Paris Agreement.

I would like to acknowledge and thank my colleagues at Efficiency Canada and Dunsky Energy Consulting, who worked with Clean Energy Canada in the preparation of our report "Less is More".

At Clean Energy Canada, we often describe ourselves as small but mighty. We do a lot, from conducting original research to talking to everyday Canadians about clean energy and, above all else, finding solutions. We know that the global clean energy transition is an opportunity for Canada to build an innovative and growing economy with good jobs, healthy communities and pristine environments.

A less talked about but significant part of this transition is energy efficiency: being smarter about how we heat our homes, light up our nights and feed our families.

As we show in our report, energy efficiency is an opportunity to boost Canada's GDP by 1% over the next 14 years. This is a net growth of \$356 billion simply by using what we have in a smarter way.

Our research shows that this growth comes from spending on upgrades, but mostly it comes from the money that businesses and households will save on their energy bills over time. This improves business productivity and competitiveness, and it reduces the cost of living for Canadians. These savings are spent in the local economy, resulting in an even greater economic impact. If you think of it as an investment, the returns are impressive. Under the pan-Canadian framework, every \$1 spent on energy efficiency programs generates \$7 of GDP.

The measures outlined in our report and the real-world impacts they will have on the economy are not just born out of economic models. The measures are proven ones, with demonstrated cost-effectiveness in leading jurisdictions such as Massachusetts and Minnesota.

As I mentioned earlier, these economic gains will require an initial investment. That investment will mean more jobs for Canadians. In fact, it means the creation of 118,000 annual jobs between now and 2030. These are jobs for ordinary Canadians and jobs that can support a middle-class lifestyle. Best of all, these are new jobs in existing fields. The overwhelming majority of these jobs would be created in the private sector and would be for the long term. The pan-Canadian framework's energy efficiency components will mean more jobs for HVAC technicians, plumbers, electricians, insulators, window installers, carpenters and IT professionals, to name a few.

As part of our research, we spoke to tradespeople across Canada, and they see the opportunities that energy efficiency means for them. They are people like Ashley Duncan, an insulator with the B.C. Insulators union, Local 118, for the past eight years. She knows that her job is making a real difference in the lives of Canadians by delivering more affordable housing and building more sustainable buildings.

Investments in energy efficiency won't just keep people like Ashley employed for years to come while opening doors for other workers. They will make the lives of Canadians even easier. Our research shows that between 2017 and 2045 the average Canadian household can expect to save \$114 a year from efficiency measures in the pan-Canadian framework. That's money that families can spend elsewhere.

Efficiency will also help Canadian businesses to be more competitive globally. Canada has a well-documented productivity problem, and efficiency is a solution. Across Canada, businesses can expect a total of \$3.2 billion in energy savings. These savings for Canadian businesses can be reinvested in growing our economy, creating new jobs and increasing their productivity.

#### **●** (1120)

In addition to growing Canada's economy, energy efficiency measures would reduce carbon pollution significantly. In fact, onequarter of Canada's pollution-cutting targets under the Paris Agreement would be met by implementing these measures. Put another way, the pan-Canadian framework's efficiency measures are expected to cut an impressive 52 million tonnes of carbon pollution.

It's clear that energy efficiency can keep Canada on track to meet its emissions goals while enhancing our economy, creating jobs and leaving money in Canadians' wallets. While more will need to be done to hit our targets and minimize the costs of climate change, energy efficiency is an optimal solution. It's so optimal, in fact, that we should consider expanding our efforts while reaping the rewards that come with them.

Thank you for your time. I look forward to your questions.

**The Chair:** Okay, we weren't able to get the third witness connected who was joining us by video conference. If we're not coming back, the witness can be added to another panel quite easily.

The bells haven't started to ring yet. Do we want to start questioning? I don't think we'll even get through one person.

**Mr. Ted Falk (Provencher, CPC):** Mr. Chair, may I make a suggestion for five-minute rounds, if possible?

An hon. member: The bells are starting to ring.

The Chair: Let's do that.

Mr. Whalen is going to start for five minutes.

**●** (1125)

**Mr. Nick Whalen (St. John's East, Lib.):** Mr. Rebel, aren't there some perfectly legitimate reasons that appliances in the U.S. and appliances in Canada would have different expected energy usage? Our average room temperature in Canada is going to be different from the average room temperature in the U.S.

I was just looking at some of the online standards for how to test U.S. appliances, and they use 32.2°, plus or minus six degrees, as the testing platform. That doesn't sound like a reasonable average room temperature that Canadians use to test appliances.

Mr. Bruce Rebel: Each product has its own test procedure.

One of the things we were finding—and I'll use an example—is that for the refrigerator test procedure, the U.S. had updated its test procedure. One thing they had done is lowered the set point of their refrigerators. Instead of testing a refrigerator, let's say at 5°C, they were testing the refrigerator at 3°C; whereas, in Canada, the requirement was still at 5°C.

Therefore, one thing that came out of the test in the U.S. context is that they were using more electricity. Then, as you do the math in terms of how much electricity is being used per annum, it would appear that the U.S. refrigerator is using more electricity than the Canadian one. That just isn't the case: the refrigerator functions the same way.

Now, there are environmental—

**Mr. Nick Whalen:** I would challenge you, Mr. Rebel, that in fact in the U.S.—I mean, I haven't been to the U.S. that often—they keep their rooms warm. Room temperature in an American household is somewhere around 78°F to 80°F, which I guess is like 24°C or 25°C. Back home in Newfoundland, we keep our houses at 19°C or 18°C, which is around 68°F or 66°F. There's different energy consumption.

**Mr. Bruce Rebel:** Certainly, there are differences in terms of the environments that these appliances are being used in. In the southern United States, it's warmer, more humid; you get more condensation.

There are differences in terms of the environment. However-

**Mr. Nick Whalen:** A consumer should have a different expected outcome. An American consumer should expect different energy consumption from their refrigerator and appliances than a Canadian consumer.

This is consumer information. If we try to harmonize consumer information for Americans versus Canadians, and we have completely different climatic environments, we're going to have bad information for both.

**Mr. Bruce Rebel:** It's based on a standard test procedure. The way that we use this standard test procedure is so that you compare apples to apples and not apples to oranges.

**Mr. Nick Whalen:** Well, we're growing apples up here and they're growing oranges in the U.S.

Don't consumers want to know how much electricity it's going to take to use their refrigerators for apples and the Americans for oranges?

**Mr. Bruce Rebel:** I think the benefit of the standard procedure is that it does allow you to compare not just against like products, but also other products in that refrigerator class.

**Mr. Nick Whalen:** What we're trying to compare, what consumers want to know, is how expensive it's going to be to operate an appliance in their typical operating environment. Canadians and Americans have different operating environments, so I'm not sure why we would want to....

There are a lot of things that I think we should harmonize with the Americans, but what about with Europe? If Canada were going to have a standard, should we just accept American standards and European standards and have a process to allow freer trade, as long as it's clear on the packaging which standard is being met?

Mr. Bruce Rebel: One of the big differences between North America and Europe is the electricity system, obviously. We use 120 volts and 60 hertz, whereas in Europe they're using 230 volts and, I believe, 50 hertz. The electricity system is very different, so you can't take a European appliance and plop it into the North American market. It just won't work.

I think the other thing you also have to take into account is that the appliances being made for the North American market typically are larger in their volume and capacity than those available in Europe.

Mr. Nick Whalen: Okay, that's fair enough.

Mr. Bruce Rebel: That's just because of the living space.

**Mr. Nick Whalen:** To access international markets, should appliance manufacturers have some type of a rectifier in them and operate the appliance on DC and then deal with the grid situation as

an input, a voltage system change? Don't most appliance manufacturers do that anyway?

(1130)

**Mr. Bruce Rebel:** No, they do not. As a typical example, your external power supply for your laptop computer is capable of doing that, but things like your hand blenders or your toasters would not include a rectifier to be able to deal with that different voltage.

**The Chair:** I'm going to have to stop you there. Thanks.

Mr. Falk.

Mr. Ted Falk: Thank you, Mr. Chairman.

Thank you, witnesses, for coming.

Mr. Rebel, this new agreement that we have now—I was going to call it NAFTA.5—failed to negotiate the removal of the tariffs on aluminum and steel. Can you tell me a little about how that has affected your industry as an appliance manufacturer?

Mr. Bruce Rebel: Certainly it has had some impact on our industry. Some of the steel and aluminum being used in the construction of appliances in the United States comes from Canada, so that does have an impact. Equally, there is an impact here in Canada in the retaliatory tariffs that have been put in place on some of those appliances and the parts of those appliances coming into Canada. They now cost more because of those tariffs.

Mr. Ted Falk: Okay, good. So there's nothing positive on that front?

Mr. Bruce Rebel: Not at this stage.

Mr. Ted Falk: Not for the consumers, anyway.

Are the testing facilities for these appliances government operated, or does your association operate them, or are they independent labs?

Mr. Bruce Rebel: Typically in terms—

The Chair: Sorry, but I will just interrupt for one second to formalize this.

Do we have consent to let Mr. Falk finish?

Some hon. members: Agreed.

The Chair: Okay.

Mr. Ted Falk: Thanks, Mr. Chair.

**Mr. Bruce Rebel:** Testing these appliances is typically done against a standard, and that standard here in Canada is developed by the Canadian Standards Association. In the United States, it's done by the U.S. Department of Energy. The testing can be done by certified bodies like CSA, UL, Intertek.... There's a whole slew.

Mr. Ted Falk: Excuse me. Would these be independent...?

Mr. Bruce Rebel: These would be independent.

**Mr. Ted Falk:** So it's not as though we're going to be faced with a Volkswagen situation at some point, where....

**Mr. Bruce Rebel:** I would hope not. Here in Canada, every appliance regulated for its energy consumption has to be tested and certified by a certification body.

Mr. Ted Falk: I appreciate that the conditions and test parameters are now being standardized. I think there's a lot of merit in doing that, and obviously, as you've indicated with your two pieces of paper, it removes a lot of uncertainty and ambiguity about actual test results.

Mr. Bruce Rebel: Right.

**Mr. Ted Falk:** When you consider some of the testing that's going on, and when you're talking to some of your manufacturers when it comes to energy efficiency, are you seeing some really cool, innovative things coming or developments in that industry?

Mr. Bruce Rebel: One of the things I mentioned—and this is a very significant undertaking—is that here in North America, we are transitioning to a new refrigerant gas. We are currently using hydrofluorocarbons, or HFCs. HFCs happen to be a pretty potent greenhouse gas. Their global warming potential is thousands of times more than CO2. We are going to be transitioning to a new technology. These refrigerants will be hydrocarbons: propane, isobutane. One of the things you will see when we transition to these new refrigerants is a slight bump in energy efficiency. That just has to do with the thermodynamics of being able to compress and expand that gas.

Mr. Ted Falk: Will that be a negative bump or a positive bump?

**Mr. Bruce Rebel:** It will be a positive bump. The products will be more efficient because of the use of these new refrigerants. That also depends very much on how the product is manufactured and its capacity, but in general you will see a bump.

In terms of using these hydrocarbon gases, they have very low global warming potential, on the order of one to three times the global warming potential of CO2, so they are a significant improvement over the current HFCs. The one thing, obviously, is that gases like propane and isobutane are flammable, so precautions will need to be taken in terms of manufacturing. However, in both Europe and Asia, they have been using these hydrocarbon gases in their refrigerators, freezers and dehumidifiers for over 10 years already.

(1135)

Mr. Ted Falk: I have one more question.

When it comes to the use of electricity—like for toasters, as you mentioned—are there any innovations coming there where we could use electricity more efficiently to make toast as quickly and efficiently as is done currently and consume less energy?

**Mr. Bruce Rebel:** One of the things you are starting to see is the introduction of what I call smart appliances. These appliances will be connected to the Internet, whether wirelessly or via wire.

You'll be able to start to monitor the energy consumption. On your smart phone, you'll be able to do it. You'll be able to control it.

You'll also start to get smart grids. I'm sure many of you have heard this term. You'll start to get the utilities themselves to send signals to appliances to say that you want to delay the start of the clothes dryer cycle, because you need that power. You're going to delay that function or make it at half power as opposed to full power.

We're starting to get those sorts of interactions.

The Chair: Thank you, Mr. Falk.

Gentlemen, thank you very much.

Those lights flashing on the wall mean we have to return to the House of Commons and vote, so unfortunately, we have to stop.

We are very grateful for your taking time to be here, and the fact that we're cutting it short is in no way a reflection of how important your evidence is to this study.

The meeting is adjourned.

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