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March 2021

Dear Honorable Members of the Committee on Environment & Natural Resource:

As a former member of this panel, I recall the many complex issues we had to learn and get up to speed about in order to make the most informed decision for our constituents. L.D. 226, "An Act To Limit the Use of Hydrofluorocarbons To Fight Climate Change," is one of those many complex matters.

I am completely in favor of L.D. 226's intent. In fact, I have a bill in this session to reduce environmental damage from the release of refrigerants through advance refrigeration technology – L.D. 866, "An Act Concerning Advanced Refrigeration Technology." This by the way is technology developed right here in Maine with Maine computer engineers -- mechanical, electrical, thermodynamic, and electronic. I have been fortunate to learn a lot about this issue since a constituent of mine invested in this most cost-effective refrigeration system in the industry that reduces global warming by an equivalent of installing \$1.2M of solar panels while saving \$75,000.00 in cost over a conventional system.

It is interesting to learn that this technology can run on most refrigerants like R448A, which has a low global warming potential (GWP) of 1273, but instead choose to use an HFC R-407F with a GWP of 1825. The decision to use a higher HFC, GWP refrigerant is made because it has the lowest overall NET environmental and energy impact.

Without understanding the matrix of factors involved in calculating a NET environmental impact of various refrigeration systems, L.D. 226 will result in an outcome contrary to its intent by a large magnitude over the life of a system.

L.D. 226 simply looks only at the GWP, which is only one simple component of many factors needed to conclude the lowest NET environmental impact we all hope to achieve. For example, if you use a refrigerant with a lower GWP, but it takes more refrigerants and electricity causing more carbon to be emitted from the electric power plants, the outcome will definitely cause environmental harm.

If L.D. 226 does not consider the "NET" environmental impact, it will cause small supermarket owners, like my constituent, to take a big step backwards in reducing environmental harm.

I strongly suggest that you invite a foremost expert on this subject matter, Jim LaBrecque, to your forthcoming work session so he can explain complex matters in simple ways.

If this Committee includes language regarding "net environmental impact", you will have my full support, and I will pull my bill.

Thank you for consideration in this matter

Sincerely,

Peter A. Lyford State Representative