Hello All,

Thank you for working on legislation to address the building sector of greenhouse gas emissions. This effort has the potential to make a significant impact on Oregon's carbon footprint.

Please forward this article to members of the Joint Task Force on Resilient Efficient Buildings. Information about the GWP of refrigerants and possible solutions including ideas for Building Codes is included. Of course, as our globe gets hotter, there will be increased demand for cooling, as detailed in this report.

In the event you have not seen this information, you may want to include it in your deliberations. The article is at:

https://doi.org/10.1146/annurev-environ-012220-034103

## Here is a quote:

"Air conditioning and refrigeration services are increasing rapidly in developing countries due to improved living standards. The cooling services industry is currently responsible for over 10% of global greenhouse gas (GHG) emissions, so it is critical to investigate how the expansion of cooling services will impact future GHG emissions. In this article, we first examine the current status and expected expansion of cooling services worldwide and the associated GHG emissions. Then, we review potential improvements and innovations that could reduce future GHG emissions. Three approaches to reduce GHG emissions within the cooling sector include converting to alternative refrigerants, improving energy efficiency, and moving toward a lower-carbon electricity grid. In addition, we identify eight interventions that apply to the built environment or the food supply chain that would lead to additional GHG reductions in the cooling sector."

Thanks for all you are doing, Wendy Woods, PhD