20190302 - Mel Siegel <<u>mws@cmu.edu</u>> - Clean Energy Jobs (HB 2020) Testimony

To Co-chairs Dembrow and Power, and members of the Joint Committee on Carbon Reduction:

I'm here today to support HB 2020, the Clean Energy Jobs bill.

My name is Mel Siegel. I'm an actively-retired emeritus professor of robotics in the School of Computer Science at Carnegie Mellon University. Seven or eight of the core faculty in the outstanding robotics research program at Oregon State University received their PhDs in my department and in other departments at CMU, and I taught several of them.

My wife is also an emeritus retired professor, an epidemiologist at the University of Pittsburgh Medical School. We decided to retire to Bend in large part because Central Oregon's dry climate and unique vegetation provided almost miraculous relief for her severe asthma. But much of the relief that moving here initially provided her has in the last few years been negated by the summer forest fire smoke that is directly attributable to climate change.

But what I really want to talk to you about today is a nascent economic opportunity that is not yet often discussed when we talk about clean energy. It is a problem that I worked on during the latter years of my research and teaching career in robotics. It is the problem that clean energy sources, which are now ready-to-go with young but already well-developed industries supplying them, are not always where you want them when you want them -- think sun, wind, and water -- so there are now tremendous economic opportunities to develop and commercialize brand new innovative technologies, and brand new clean industries, in energy storage and management, and we here in Oregon could be on their leading edges. If I were to advise one of the soon-to-graduate students here today I would say "forget plastics -- go do energy storage and power management!". And the message from me that I'd like you to take away from me today is please "support clean energy and energy storage and power management!".

Thank you for listening!