

8 February 2024

Chair Holvey
House Committee on Business and Labor
Oregon State Capitol
Salem OR 97301

Chair Holvey, Vice-Chairs Elmer and Sosa, and members of the committee:

I write to express my strong support for HB4080. I am professor of environmental biochemistry and law at Portland State University and author of [From Knowledge to Power](#): The Comprehensive Handbook for Climate Science and Advocacy (Ooligan Press, 30 Nov 2021).

Offshore wind will be essential in meeting our state's aggressive commitments to a healthy climate, as articulated in the clean electricity law ([HB2021](#)), [Climate Protection Program](#) and numerous other recent initiatives. However, as described in the Oregon Global Warming Commission's most recent [biennial report](#) to the legislature, Oregon already missed its 2020 greenhouse gas emissions reduction target by 13%. Catching up and meeting our goal for 95% emissions reduction by 2040 will require deployment of all feasible approaches - particularly since our heavy reliance on hydropower is problematic given seasonal variations and climate change-induced reductions to snowpack. Solar and wind power are realistically our only major options for fully greening the electricity grid. In turn, a zero emissions grid is essential for electrifying industrial processes that presently run on natural gas and for replacing petroleum products in the transportation sector.

The offshore wind resource provides essential complementarity to land-based solar and wind farms. Importantly, it relieves some of the impact on land use that these large facilities entail, helping to fairly spread the impacts of where green electricity is sourced. Further, the capacity factor for offshore wind, especially off our more southerly coasts, is [substantially higher](#) than onshore wind and solar. This decreases the total expense for energy storage that will ultimately be needed, and helps to mitigate the higher capital costs of construction. Although some are concerned about the technological challenges of floating wind farms located in deep waters, an 11 turbine floating offshore wind with 88 MW capacity is [already in commercial operation](#) off the coast of Norway. This demonstrates the readiness of the technology.

The concerns expressed about the impacts of offshore wind on marine ecology, fisheries operation and aesthetics are valid and important. However, the potential impacts of runaway climate change are far worse. All technologies have environmental and human costs, and tradeoffs are inevitable. I would emphasize that we are still in an early phase of development, and that any specific built project will ultimately have to satisfy detailed, comprehensive environmental impact analyses conducted both by BOEM and state agencies. It would be shortsighted to allow such concerns to derail this planning bill.

Passing this bill will send a strong signal to the business and investment communities that Oregon is serious about fully joining the efforts of our partner West Coast states. While East Coast offshore wind is proceeding well, it is nonetheless clear that the upfront financial challenges are considerable, and this has caused delays to some projects in the past year. The necessary private investment in Oregon offshore wind will be greatly

enabled if companies perceive that Oregon's legislature is soundly on board to see these efforts through to a successful denouement. Passing this bill is an important step in the process.

Thank you for the opportunity to offer comments.

Sincerely,
John Perona, Ph.D., J.D.