Testimony of Congresswoman Chellie Pingree House Select Committee on the Climate Crisis Member Day Thursday, November 14, 2019

Thank you to Chairwoman Castor, Ranking Member Graves, and Members of the Select Committee on the Climate Crisis for holding this Member's Day event and for the opportunity to speak today. I would like to highlight the ways the climate crisis is affecting my home state of Maine, as well as discuss solutions being developed and implemented there that can serve as models for other communities and are potential areas for new or further federal investment.

For Maine and so many communities across our nation, climate change is not an abstraction, but rather a tangible threat to local economies and the people who live in them. Farmers are already being impacted by changing growing seasons and extreme weather events. The productivity of our state's forests is also threatened as the temperature changes and invasive species outbreaks increase. Additionally, the ocean in the Gulf of Maine is warming at a rate 99 percent faster than the rest of the world. The sea level off our coast is 8 inches higher than it was in 1950, and it is continuing to rise at the rate of about 1 inch every 8 years, threatening homes, businesses, ecosystems, and endangered species. Ocean acidification is another harmful side effect of climate change. Almost 30 percent of carbon dioxide emissions are absorbed by our oceans, and as our oceans get warmer, their composition changes, further affecting the ways aquatic plants and animals grow.

This all poses a massive threat to Maine's key industries. Farms, forests, fisheries, working waterfronts, and tourism are all grappling with the implications of changing temperatures. The future of Maine's communities, economy, and the lives and health of our citizens depends on policymakers' ability to confront the challenge of the climate crisis.

But Maine is not standing idly by; we are tackling this challenge head-on. Earlier this year, the Maine Legislature and Governor Mills enacted a sweeping bipartisan climate change bill, which includes slashing greenhouse gas emissions by 80 percent and increasing the amount of electricity from renewable sources to 100 percent by 2050. In addition, the legislation created a 35-member Maine Climate Council charged with developing specific plans to meet these goals. Although the Governor's goals seem lofty, they are in keeping with the spirit of innovation on display by so many of our public and private sector citizens. Our state motto, Dirigo, means "I lead," and Mainers are demonstrating that leadership in many fields.

For over 10 years, the University of Maine has led the country in developing an economical way to harness renewable wind energy in deep ocean waters. Last week, the Public Utilities Commission approved a contract for Maine Aqua Ventus, a first-of-its-kind floating offshore wind pilot project developed at the University. This project is poised to be the first offshore wind project in the country that features a floating platform. In addition to providing renewable energy, the University has estimated the project will produce nearly \$152 million in total economic output and more than 1,000 Maine-based jobs.

Individual citizens are also taking action. After noting the changes in his oyster stock due in part to increasing acidification in the water ways where he farms, Bill Mook of Mook Sea Farm started adapting his business. He created a filtration system to ensure appropriate pH levels are maintained to protect the growing shellfish. He is also growing his own oyster food through a unique heterotrophic method to produce algae. This unique process differs from the industry's standard phototrophic process and reduces time, labor, and electrical costs.

Additionally, Maine's forestry sector provides a range of solutions to climate change, from creating wood products to providing renewable energy sources. Maine has the highest percentage of forest land in the country, the vast majority of which is privately owned. Exciting new technologies are being developed in Maine that convert forest residues from harvesting and processing wood into renewable chemicals, biofuels, and other bio-based materials. For example, the University of Maine's Advanced Structures and Composites Center has developed a way to make nano cellulose for use in bio-plastics and fully recyclable materials using wood products and lumber.

The intersection of agriculture and climate change is especially of interest to me, having been an organic farmer since the 1970s. Earlier this year, I released a document with five principles to help guide discussions around climate change and agriculture, and I am currently working on legislation that I look forward to sharing with the Select Committee. Those five principles are:

- prioritize soil health initiatives;
- protect farmland and improve farm viability;
- support pasture-based livestock systems;
- invest in on-farm and rural energy initiatives; and
- reduce food waste.

I would like to thank the Select Committee for holding a hearing on agriculture last month, including a farmer on the panel, and facilitating a conversation that recognizes how vital farmers are to climate change mitigation and adaptation. Agriculture is one of the few industries that can actually reverse the effects of climate change by storing carbon in the soil. We have not given farmers enough credit for this fact, and I am excited about the efforts in the private sector to figure out how we can better compensate farmers for the ecosystem services they provide.

One innovative project in Maine that will help farmers sequester more carbon and reduce greenhouse gas emissions is OpenTEAM, or Open Technology Ecosystem for Agricultural Management. OpenTEAM is a public-private partnership between Wolfe's Neck Center for Agriculture and the Environment based in Freeport, Maine; Stonyfield Organic; and Foundation for Food and Agriculture Research, which receives farm bill funding. Right now farmers have a multitude of options when it comes to decision-making software, but most of those platforms do not communicate with one another so it is difficult to share information up and down the supply chain. OpenTEAM is an interoperable platform to help farmers make soil health decisions by offering a range of tools in one place, from carbon measurement to remote sensing.

Confronting the climate crisis requires us all to work together to develop, implement, and share the best solutions. States, communities, and individuals have already begun this work, and I look forward to continuing to work with the Select Committee as you develop policy recommendations. I would like to again thank the Committee for your important work on this topic.