

Ag for Oregon
Land for Tomorrow
March 25, 2025

To: House Committee on Climate, Energy and the Environment
From: Mike McCarthy PhD, McCarthy Family Farm llc
Re: HB 3422
Chair Lively and Members of the Commission

I represent Ag for Oregon; farmers, ranchers and forest land owners who advocate for improved conservation of our resource lands. I farm in Hood River County
Please support this bill. HB 3422 is an important improvement to the siting process and aligns the process with other land use processes.

I have been involved in farm and forest land protection in Oregon now for 44 years. Without the Oregon Land Use Program there would be no fruit industry left in Hood River County. A \$200 million dollar industry would be gone. The pear industry that produces 30-40% of pears grown in the US would be gone to subdivisions, restaurants, view homes and destination resorts. Instead we are able to grow US grown healthy produce to fill shelves in US supermarkets almost all year.

Solar and Renewable Energy

We all are aware of the huge need for renewable energy and we support expanding renewable production. A big concern is the exponential increase of electric energy use by EVs, AI, Data storage and cooling. Unless we contain these uses we will never reasonably be able to meet Renewable goals. **There has to be an energy conservation plan.** Corporate Tech is driving an unsustainable path and Oregon is buying into it.

I personally am very concerned about climate issues. I served on the Oregon Global Warming Commission Natural and Working Lands Advisory Committee for a year and have recently been appointed to the new ODOE Oregon Climate Action Commission, Natural and Working Lands Advisory Committee where we will work on improving CO2 storage and reducing GHG emissions on these lands.

There are tens of thousands of acres in Oregon already near or **connected to the grid** that should be utilized first. Buildings, parking lots, highway right of ways-**thousands of acres**. We should focus here first and make this work. If crops can truly be grown under panels and equipment used under panels, then solar can be installed above all roadways. We need to do what is environmentally sound first not what makes the most profit for energy companies and what they are promoting with marketing hype.

Decomissioning and removal of these facilities at the end of life is critical. We already have too many abandoned underground electric lines, sewer lines, domestic water lines, and phone lines that we pull up when we work our fields. We need a process where companies must restore lands and soils to an arable form. **Bonding will not be adequate** to cover costs to remove a facility 20 years in the future at what will be inflated costs. The farmer will be stuck with it.

This includes after wildfire. How will be land and soil be decontaminated and restored when these facilities melt down? The farmer/land owner has to be protected.

Protect Productive Farm Land

-Protect High Value, irrigated and other productive farm land from solar arrays. Seek alternative sites.

Protect Water Rights

-Protect water rights from loss by non use when solar is installed on farms.

Agrivoltaics

-Do not assume Agrivoltaics will be widely adopted. From my experience growing many crops and operating many kinds of equipment it will be difficult to raise crops uniformly, efficiently, productively and profitably under solar. **The Joint Research Centre (JRC) for the European Commission's publication on Overview of the Potential and Challenges for Agri-Photovoltaics (2023) in the European Union presents relevant information for Oregon's discussion.** They identified "greenwashing" as a concern where the industry promotes regular photovoltaic (PV) as applicable to Agrivoltaics (AV) or promotes AV that can't be farmed under. They are different. AV has to be designed specifically for the crop identified. And once designed will not work for many other crops. AV systems with tiltable panels have not been in use long. Will the tilt motors hold up? What happens if the tilt motors fail and the crop needs to be harvested immediately? Who pays for the crop loss? Operating within the narrow panel support post rows will be challenging with large mowing, tillage, harvesting equipment. Who will pay for panel and post damage which will inevitably occur over a 10-20 year facility lifespan?

Much of the farm equipment today because of operating and labor costs and small margins has an effective operating width of up to 100 ft or so. These will not fit in the rows, so farmers will reduce operating width, decrease acres covered per hour, increase fuel and labor costs per acre, increase passes per acre and increase soil compaction (and probably increase green house gas emissions per pound of product).

The solar panel post row will need some kind of vegetation management. Hand control would be cost prohibitive. Lack of control will result in a noxious weed strip and source for contamination of all crops in the area. A cover crop could be planted in this strip but this would likely require some management which would be cost prohibitive. An unmanaged strip that dries out would be a wildfire hazard and potential panel melt down. Who would pay?

Nutrient content and crop variability under different light intensities has not really been studied. It is a well known fact in the livestock industry that livestock leave forage ungrazed when it is grown in the shade. I have 60 years experience with this plus a PhD in livestock physiology and biochemistry. Apple and pear trees do not set as much fruit on shaded limbs. Apples grown in the shade do not get as red and have less sugar. These are observations of my own over 44 years but also documented in the literature which I could provide if I had nothing but time.

The JRC did list as a problem the inflation of land prices that would result to compete with solar and making it more difficult for young farmers to purchase land.

At this point in time the JRC has listed goals of the EU for lost production per hectare for AV but at this point has little documentation. They do expect however some loss of production, 10-20%.

PV on the Built Environment

-Prioritize solar on building, highway right of ways, parking lots. Include these sites in alternative analysis. These are already "at the grid".

Corporate Take Over of Oregon's Farm Land

-Don't let corporate energy companies drive the conversation. Land purchases or leases by solar companies and related speculation will drive up land prices making it harder for young farmers to buy land and also making it harder for farmers to inherit land.

Ag industry Cumulative Impacts

-Do Cumulative Impact Analysis which will include the impact on Ag industries and "critical mass" analysis.

No Way to protect farmers at decommissioning.

-Build into the process decommissioning so it is guaranteed that the farmer is not responsible. Ensure land is brought back to arable with no soil contamination left. A bond at today's cost will not be adequate for removal in 10 to 20 years. Will the underground wires be removed or will they forever be a problem for tillage operations, tangling in equipment, destroying bearings etc.

More Transmission Right of Ways on Farm Land

-Do not burden farmers with new transmission line Right-of-ways. These can take many acres out of production and reduce nearby farm uses.

Oversight on EFSC

-Do not let EFSC control the siting of facilities on farm land. We have a land use system on EFU.

Wildfire

-Build in that the energy company will be responsible if the facility "melts down" from wildfire. This would include site and soil decontamination.

Ground water

-Consider ground water impacts of the repeated herbicide use that will be required to control vegetation of the facility. Even under Agrivoltaics there will need to be vegetation control on the post line or this old dry vegetation will be a wildfire threat. This will require herbicides or hand work.

Summary

Unless the solar industry is tightly controlled they will operate on a maximum profit basis.

Farmers, the land, consumers and the environment will not be protected. In our enthusiasm for renewables we must not remove any protections for our farmland, our farmers and our communities.

In my lifetime we have lost one third of Oregon's farm land and now we are working on developing the next third. We are losing farmland in Oregon everyday to McMansion replacement dwellings with a huge footprint taking land out of ag; non farm dwellings; Measure 49 housing; spot zoning; large commercial buildings with no connection to Ag; home occupations with large buildings and yards that have nothing to do with Ag; massive wine tasting buildings with substantial parking lots, gardens and roadways; as well as Rural Residential. The combined impacts of these are substantiated by the USDA census of Ag and by observation in our own communities.

Please support this important change to the energy facility siting process. No Special treatment for corporations.