

Senator Sollman, Co-Chair

Representative Bynum, Co-Chair

Senator Knopp, Co-Vice Chair

Representative Wallan, Co-Vice Chair

Joint Committee on Semiconductors

Oregon State Legislature

Salem, OR 97301

Feb. 27th, 2023

Re: Support for Senate Bill 4

Dear Co-Chair Sollman, Co-Chair Bynum, Co-Vice Chair Knopp, Co-Vice Chair Wallan and Members of the Committee:

Grape Solar is an organic grown Oregon company founded by me and my wife in Eugene.

Over the course of last decade, we have built relationships with manufacturers both in the United States and around the globe to supply solar panels to big box retailers such as Costco, Home Depot, Lowes, etc. since 2009. Our market coverage is nationwide.

Our new vision is to create Oregon Solar Industrial Park (OSiP) to build our own internal manufacturing capabilities in Oregon, creating high paying renewable energy manufacturing jobs here in Oregon.

The demand for solar panels in the United States is approximately 50GW (50 billion watts) annually. However, 85% of solar products is imported. We want to change that. We believe Oregon is the best place to build solar panels in the United States, these are the reasons:

1. Oregon was the largest solar panel manufacturing base in the United States for several decades until recently. Oregon still maintains a good number of skilled workers who know how to make solar cells which is very unique in the U.S.A.
2. Oregon has the most reliable and low cost for electricity and clean water which are the most important resources to make solar wafers, cells and related products which are semiconductors.
3. Our proximity to West Coast ports and I-5 corridor that leads to major markets.

We write to express our support for Senate Bill 4 which should expand Oregon's semiconductor to include solar cell manufacturing which is bigger in scale than computer chips in terms of silicon usage, semiconductor manufacturing job creation, and equal importance to our national security.

Nationally, after Solar World in Hillsboro closed, there is no independent solar cell manufacturers in the whole United States anymore, but the demand is at least \$10B annually in the USA. Many solar panel manufacturers have announced building solar panel assembly factories in Arizona, Georgia, Texas, etc. But none of them have plans to build upstream solar cells, wafers, etc. Oregon, well-positioned for a comparative advantage to leverage the federal funding available in the Inflation Reduction Act must act

boldly and swiftly. These federal dollars of nearly \$375B create a generational opportunity to invest in Oregon's manufacturers and workforce in the pursuit for economic prosperity, particularly in the solar and energy storage manufacturing verticals: polysilicon raw materials, wafers, solar cells, solar modules, battery cells, and electronics that go into the solar + energy storage systems that are increasingly powering American homes and businesses and utilities.

State and federal investments to strengthen Oregon's semiconductor Business including solar cells and Lithium battery cells will prove to be an economically viable transaction. In solar cell manufacturing, for example, a matching state funds with the federal IRA solar incentives (from polysilicon at \$3.00/kg, wafers at \$12/sq meter, cells at \$0.04/watt, modules at \$.07/watt) at 50GW scale, could produce an additional 52,000 family jobs and approximately \$3.25 billion in new state tax revenue annually at 6.5% state tax rate. Even if we only produce 10GW, or 1/5 of the total 50GW, that will benefit all Oregonians in the shared interest to bolster economic opportunity and become a key partner to support national security in particular the security of renewable energy.

It is crucial Oregon demonstrates its commitment to renewable energy manufacturing as it had always been in the last 50 years through a comprehensive and competitive package that in addition to the provisions in SB 4 includes the creation of per watt produced similar to the federal level incentives outlined at Inflation Reduction Act and CHIP Act deliver funding for industrial site readiness with the power supply needed, extends enterprise zones, the strategic investment program and gainshare, and invests in workforce development and university research. Incentive programs and policy changes will serve as a mechanism to attract solar cell manufacturing as the core of semiconduction industry which is larger than traditional computer chip industry already in terms of production scale worldwide.

We urge the committee's continued support for legislation that sets Oregon and our communities on an innovative path. Thank you for your leadership, partnership, and consideration of our testimony.

Sincerely,

Haiyang (Ocean) Yuan

President

Grape Solar, Inc.

2635 West 7th Place, Eugene, Oregon 97402