Northwest Regional Clean Energy Innovation Workshop

University of Washington Seattle, Washington















Michael B. Pomfret

Assistant Director
Clean Energy Institute
University of Washington

Area of Expertise: University-Industry Partnerships, Testbed Facilities

Major Takeaways: University of Washington Workshop

Event Overview

- 120 participants and speakers from Idaho, Montana, Oregon, and Washington
- Strong representation from Northwest Tribes, National Labs, Research Universities, Small and Medium Sized Enterprises, Cleantech Investors, Fortune 500 Tech & Industrial companies, Utilities, Policy Makers and Regulators.
- Panels explored the Research Ecosystem, Innovation in Large and Small Enterprises, Regional Policy
 & Investment
- Keynote talks by Secretary Moniz, Senator Cantwell, Governor Inslee, and Representative Kilmer

Key Takeaways

- Current Northwest Regional Innovation Ecosystem: VERY PROMISING
 - NW clean energy start-ups are getting exits to market; some NW states have dedicated clean energy public investment funds; regional coordination has resulted in the formation of Cascadia Cleantech Accelerator, a 501(c)(3).
 - Globals in the NW like Amazon, Boeing, Freightliner, GE Grid Solutions, Itron, McKinstry, Microsoft, Paccar, Schweitzer, SolarWorld, and others have know-how to launch market-leading or market-making energy & efficiency products & services.
 - Region is an "all of the above" testbed for deep decarbonization, and an energy gateway to Canada and Asia.
 - Invaluable experience in social/environmental issues of Energy-Water nexus from 8 decades of hydropower development.
- Building a Broader Northwest Ecosystem: ROADMAPPING needed to ACCELERATE INNOVATION
 - Ingredients for a supercharged ecosystem are present in the Northwest.
 - A regional roadmap with coordination of public and private funds, strategic partners, testbed facilities, researchers and students will enable next-level performance.

Major Takeaways: University of Washington Workshop (continued)

Key Takeaways (continued)

- NW Opportunity: Create the nation's premier "all of the above" deep decarbonization testbed
 - Currently about 75% of NW electricity generation has no carbon emissions.
 - Energy efficiency and renewables are expected to meet future growth in the region's electrical load.
 - NW science and technology strengths in materials, computing, large data analytics, system analysis supports deeper decarbonization of the grid, transportation, building, and industrial sectors.
 - Deeper decarb: RD&D partnerships using regional and national testbeds to expand deployment of small modular nuclear, wind, geothermal, marine energy, energy efficiency, and grid modernization hardware and software.
 - Deeper decarb: RD&D partnerships to accelerate biofuels, electrification, & lightweighting for aviation & vehicles
 - Deeper decarb: RD&D partnerships using regional & national testbeds to accelerate clean energy smart manufacturing
- NW Opportunity: Leverage the region's energy and trade integration with Canada and Asia to accelerate global progress.
- NW Challenge: Coordination & communication across the region to focus on highest impact areas.
- NW Priority: Strategy and funding that mobilizes the partnerships & facilities needed to transition high impact innovations from research to prototypes and scalable demonstration projects.
- Next Step: Develop a roadmap to strategically align regional assets with globally impactful goals & milestones in order to accelerate prototype development and technology demonstrations at scale.