

PACIFIC NORTHWEST Renewable Hydrogen Action Plan



EXECUTIVE SUMMARY

This *Pacific Northwest Renewable Hydrogen Action Plan* features a **two-part call to action** to accelerate the region's renewable hydrogen (RH2) sector, and deliver significant economic and environmental benefits together for the Pacific Northwest (PNW).

The purpose of this Action Plan is to provide an initial agenda for RH2 supporters to cohere around and collaborate to accomplish. We envision a diverse set of cross-sector organizations coming together who want to accelerate the PNW's RH2 sector - project developers, big customers, utilities, public agencies, climate-focused NGOs, trade and economic development groups - using this Action Plan as its starting point agenda.

1. Lead with Projects: Invest in and Build RH2 Deployment Hubs

RH2 Deployment Hubs connect RH2 production with robust demand, supported by infrastructure to store and deliver RH2 to maximize customer convenience and satisfaction. To invest in and build Deployment Hubs, project initiators - which can be project developers, major customers, utilities, local economic development groups, corporations or cities - will assemble project development partnerships. These partnerships will facilitate clusters of RH2 projects that combine private, utility, and public dollars to deliver attractive investment returns in value for all participants. Key sub-elements of this call to action:

- **Project development partnerships** to plan, design, and finance clusters of projects at RH2 deployment hubs. Hub developers scale production to match demand from multiple types of customers, and deploy RH2 storage and delivery infrastructure to best serve the needs of specific customers.

- **Deployment hubs developed at priority locations** where multiple RH2 users can be concentrated, including at transport fueling stations, ports, and around select industrial facilities – including energy utility facilities. And deployment hubs initiated by PNW-based corporations and by cities with deep commitments to greening their operations and adding resiliency to supply chains.
- **Key policy incentives and standards** to stimulate diverse RH2 demand, that a coalition of RH2 advocates in the PNW can align behind and advocate together. The coalition also needs to develop performance criteria to help agencies rationalize and prioritize public investment in RH2 projects, especially with prospects growing for significant federal and state dollars for RH2 and other clean energy infrastructure.

2. Create the 10-year RH2 Roadmap

To realize the region’s full, optimal potential for RH2, we need a long-range roadmap. This enables us to see where we’re going and to better prioritize policies, projects, and performance metrics to get there. Ultimately, states should lead the roadmapping, ensuring that RH2 roadmaps are fully integrated into and harmonized with state energy and climate strategies. But the PNW RH2 coalition need not wait for state action – it can begin Roadmap work now. Key sub-elements of this call to action:

- Develop a vision for the role of RH2 in a fully realized zero-carbon energy-industry system for the PNW looking 10-20 years out, grounded in state-of-the-knowledge analysis of technology, markets and carbon performance.
- This vision for the longer-term role of RH2 and its derivatives in future zero-carbon scenarios will enable state RH2 roadmaps to nest properly into and optimize value of the larger state energy and climate strategies. PNW RH2 strategies should also consult and align with similar RH2 roadmaps in British Columbia, California, and the wider West, and draw lessons and adapt policy tools developed by leading RH2 regions globally.
- System-wide RH2 roadmapping is also the right venue for considering a variety of next-tier opportunities, and for prioritizing opportunities that can attract local, utility, and private investment into projects that fit well in the 10-year RH2 Roadmap. These projects will also offer a strong value proposition for federal and state funders, by demonstrating a clear business case for project investors and clear consistency with state energy and climate priorities.
- Roadmaps can also help surface the research, demonstration, and deployment (RD&D) initiatives that can strategically accelerate RH2 commercialization. RD&D initiatives can collaborate with deployment hub project developers to measure and evaluate performance and recommend innovations. And they can deploy pilot projects to test business models for the most promising and impactful next-tier opportunities.