

# Accelerating the Transition to Advanced Clean Energy Technologies

### The Opportunity: A VERTical (Green) Economy

The VERTical innovation cluster will serve as a catalyst to accelerate the transition to advanced clean energy technologies and stimulate economic growth first in the Northwest, then across the U.S.

As the drive to decarbonize the economy accelerates, the Northwest region is uniquely poised to be the national leader in next-generation nuclear power generation as an essential part of a sustainable, all-of-the-above clean energy strategy.

#### **VERTical Innovation Cluster**

VERTical is a coalition of experts from industry, organizations and public agencies collaborating to accelerate the deployment of next-generation nuclear and other advanced clean energy systems.

The VERTical innovation cluster is based in the Northwest, the most robust green energy region in the U.S., with experienced developers, operators, workers, researchers and trailblazers.

Our collective efforts contribute to U.S. decarbonization goals, energy efficiency, equity, and resiliency for communities everywhere.

#### **VERTical's Priorities**

Through a grant from the Washington State Department of Commerce and administrated by Port of Benton, VERTical is implementing a proven international cluster model to drive innovation, solve challenges that limit the industry's growth and pursue market opportunities. Our priorities will:

Facilitate next-generation nuclear energy reactor demonstration and deployment projects.

Establish the first industry-led domestic Clean Energy Supplier Alliance to build a supply chain for next-generation nuclear and advanced clean energy systems. Ensure the readiness of the industry's future clean energy skilled trades and professional workforce to create a talent pipeline.



### **VERTical Projects**

VERTical's projects focus on delivering dispatchable and baseload clean energy generation resources by accelerating the deployment of energy systems like next-generation nuclear reactors and preparing the market to serve the industry for decades to come.

Our project team experts from private and public entities collaborate to help solve industry challenges and move next-generation clean energy technologies forward.

The innovation cluster's efforts will deliver scalable resources that communities throughout the U.S. can deploy – especially in areas most severely impacted by the closing of carbon-emitting energy generation facilities.

# Facilitate Next-Generation Reactor Demonstration & Deployment Projects

Next-generation nuclear energy reactor technologies are first-of-a-kind and require varied technical support, equipment and resource pipelines to create a sustainable industry. VERTical will collaborate with next-gen reactor companies to identify opportunities, plan, and provide technical expertise and resources.

#### Grow the Advanced Clean Energy Market

VERTical project partners will identify suitable properties and work with appropriate entities to eliminate encumbrances and secure funding for infrastructure or other required improvements to pre-package certified sites for next-generation nuclear reactors and advanced clean energy technology projects.

### Attract Capital for Next-Generation Nuclear

This project will help form a central location for investors to learn about new nuclear energy industry players and focus capital investments to accelerate the deployment of next-generation nuclear power reactor projects.

# Build the Next-Generation Nuclear U.S. Supply Chain Industry

There is no domestic supply chain for next-generation nuclear power plants. The newly established Clean Energy Supplier Alliance will fuel growth and accelerate the deployment of next-generation nuclear energy reactors by filling gaps, removing barriers and solving challenges in the industry's supply chain.

#### Prepare Tomorrow's Nuclear Workforce

VERTical's workforce readiness initiatives will engage industry, labor, education and training institutions from elementary to higher education and other partners to identify skills gaps and future industry requirements to prepare tomorrow's nuclear-skilled trades and professional workforce.

# Establish a Northwest Nuclear Quality Management Center of Excellence

Industry project partners will collaborate to establish the center of excellence to provide expertise, guidance and resources that will support the origination of a modern U.S. nuclear energy supply chain.

## **Educate & Advocate for Nuclear Energy**

VERTical will collaborate with local, state and federal entities for ongoing nuclear energy education and advocacy efforts to build knowledgeable audiences, strengthen relationships and provide factual information.



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