

Frequently Asked Questions

What does the facility do?

The Kalama Manufacturing and Maritime Export Facility (KMMEF) is engineered to convert natural gas into methanol for use by China's chemical industry. China manufactures thousands of products used daily around the world including: building materials, foams, resins, plastics, paints, polyester, textiles, and a variety of health products. Our methanol will displace domestic Chinese methanol, which is made from coal and emits five times more greenhouse gas (GHG) emissions than at Kalama.

We are nearly finished permitting KMMEF. Our site is located alongside the Columbia River on industrially zoned property at the Port of Kalama. We have plans to permit a companion project at Port Westward after we complete work on KMMEF. Once launched, the Kalama plant will serve as a model for how industry can decarbonize the global economy in a material way.

Who is Northwest Innovation Works?

Northwest Innovation Works (NWIW) is a multi-national partnership led by Pan Pacific Energy Corporation with multiple investors from around the world including the China Academy of Sciences Holding Company. Our team of professionals combines decades of experience in project development, engineering, finance and manufacturing. We are headquartered in Kalama, Washington.

Why is the facility needed?

The Kalama Manufacturing and Maritime Export Facility is a global enterprise and national model, which reflects Washington citizens' values in creating jobs, investing in community and confronting climate change. KMMEF will deliver the single largest net reduction of GHG emissions anywhere in the Northwest. Our role in reducing China's reliance of coal-based methanol will lead to a reduction of as much as 12.6 million metric tonnes in climate change-inducing carbon dioxide annually, the equivalent of closing three TransAlta coal plants. We are proud to be delivering the type of meaningful, measurable climate action long sought by Washingtonians

Cowlitz County, a traditional industrial center, needs new investment to reverse a decade of decline. Local leaders have enthusiastically welcomed us for the family-wage jobs we will create. The plant's indirect benefits are the "shot in the arm" Cowlitz County has been looking for. Our arrival in Kalama will support local businesses, train local residents for employment at the plant and dramatically

lower countywide property taxes. In addition, to the positive impacts locally, many local citizens look forward to doing their part to confronting climate change.

How is the proposed facility being evaluated?

The Kalama Manufacturing and Maritime Export Facility has undergone rigorous, in-depth review by multiple state and federal agencies. Cowlitz County and the Port of Kalama serve as lead agencies under Washington's State Environmental Policy Act. A comprehensive Environmental Impact Study (EIS) was completed two years ago. Subsequent litigation led to the preparation of a Supplemental EIS (SEIS), includes a third party, independent expert analysis on the global life cycle GHG impact of our plant, performed by Life Cycle Associates. Their report focused on the life cycle impacts of GHG emissions associated with KMMEF in contrast to the status quo. The independent consultants concluded the facility would substantially reduce global GHG emissions, equivalent to annually removing 2.2 million cars off the road. The final SEIS will be released late in the first quarter of 2019.

How will the facility affect the environment?

The Kalama Manufacturing and Maritime Export Facility is at the leading edge of industrial commitment to confronting climate change.

By displacing coal-based methanol, which drives the Chinese chemical industry, our Kalama plant will annually remove roughly the equivalent to the greenhouse emissions generated by 2.2 million cars.

The plant is designed with state-of-the-art technology to minimize its impact to the local environment. Principal among these innovation are: Zero Liquid Discharge (ZLD) technology, the first on the Columbia River, insures that no wastewater from plant operations is released into the Columbia River. We also will be the first methanol plant at this scale to deploy Ultra Low Emissions (ULE) technology for methanol manufacturing which dramatically reduces our plant's own GHG emissions. In addition, the robust set of safety designs and procedures we engineered for the plant protects nearby communities from all contingencies.

We have also made the unprecedented commitment to offset 100% of the GHG emissions produced in Washington State in connection with our facility. This unprecedented mitigation program will continue as long as we operate.

What are the facility's economic impacts?

The consulting firm EcoNorthwest prepared an in-depth economic impact analysis of our proposed plant. Their analysis examined impacts during construction and operations.

Assuming a construction cost of \$1.8 billion, the local impacts during construction are:

- Approximately \$660 million in local spending on construction labor, goods, services
- \$625.9 million in direct economic impact during construction
- An estimated peak construction workforce of 1,000
- \$57.9 million paid out in state and local taxes

For operations, the facility will have following significant and long-term local impacts:

- an estimated 688 total jobs including 192 direct, and 496 indirect and induced jobs
- \$21 million in annual payroll for direct jobs
- Estimated \$30 - 40 million in annual tax payments paid to state and local authorities during operations