

Frequently Asked Questions

What is NEXT Renewable Fuels?

NEXT Renewable Fuels is focused on the production of second-generation Advanced Green Diesel and other biofuels. NEXT's facility is currently in the planning and permitting phase and scheduled to open in 2021.

NEXT's executives bring decades of entrepreneurial and energy industry experience to this project. To help build NEXT Renewable Fuels Oregon, we have assembled a team of accomplished experts. Our technology partner, Honeywell UOP, has developed and deployed its Ecofining™ technology around the globe. NEXT's project and engineering manager, Triten IAG, has successfully managed the construction of more than 200 large-scale energy projects in 20 countries.

Where will this facility be located?

NEXT has secured over 100 acres of land at the Port of Columbia County's Port Westward Industrial Park. Port Westward is located near Clatskanie Oregon in rural Columbia County.

What products will the NEXT Renewable Fuels Oregon facility produce?

The Port Westward facility will produce more than 37,500 barrels per day of advanced biofuels at initial start-up, growing to more than 50,000 barrels a day at full capacity. Nearly 90% of that will be turned into NEXT's Advanced Green Diesel. A small percentage will become other residual renewable products, and roughly 9% will be turned into renewable propane that will be recycled back into the refining process. By recycling that renewable propane, we can further reduce greenhouse gas emissions by limiting the need for external inputs such as natural gas.

Where will these products go?

One hundred percent of NEXT's Advanced Green Diesel produced in Oregon will be purchased under long-term contracts with established multinational companies and shipped to West Coast markets. In February, NEXT announced a Purchase and Sale Agreement with Shell. Additionally, we hope to be able to provide renewable products to several local users of diesel and LPGs. Those discussions are ongoing.

Are biofuels like NEXT's Advanced Green Diesel the same as what's known now as biodiesel? Advanced Green Diesel and biodiesel are different products.

As a second-generation biofuel, Advanced Green Diesel is a true drop-in replacement for traditional petroleum-based diesel fuel. That means that while you *can* blend Advanced Green Diesel with traditional diesel, *you don't have to*. Our advanced biofuel can be used in diesel engines without modification and without negative long-term effects – while burning cleaner than other fuel options.

What are the environmental benefits?

Globally, carbon dioxide makes up the largest percentage of greenhouse gas emissions. In the United States, transportation represents the largest producer of greenhouse gases. The problem is clear. Products like NEXT's Advanced Green Diesel offer part of the solution. The greenhouse gas savings created by NEXT Renewable Fuels Oregon will be equivalent to removing more than 1 million automobiles from the road.

Where do those savings come from?

The environmental benefits generated by biofuels accrue over the product's life cycle. Fossil fuels begin with the mining of energy-rich hydrocarbons created by plants and animals that lived millions of years ago. These materials must be extracted, transported, refined and then burned, building emissions each step along the way. Ultimately, they release carbon that had been buried for those millions of years.

Biofuels, on the other hand, release the energy stored in the fats and oils of animal and plant materials that had only recently been removed from the atmosphere and stored as part of their natural life process. That chemical energy includes carbon. When these materials are used to produce fuel, they release the same carbon back into the environment to be recycled – and the process can begin again, with no net carbon emissions from the feedstock used to make the biofuel.

What is the feedstock and where will it come from?

Feedstock will include white and brown grease, several types of animal tallow and a variety of vegetable oils. **NEXT will NOT use virgin palm oil**. These feedstocks will be sourced from locations around the world and delivered to Port Westward by ship. NEXT has entered into a feedstock supply agreement designed to help keep the feedstock's life cycle carbon intensity (CI), which includes transport, as low as possible. To the extent that NEXT could periodically source lower-CI feedstock outside of this agreement, NEXT has the right to do so.

What permits will be required?

NEXT will need a number of federal, state and local permits and looks forward to demonstrating the projects ability to meet and exceed Oregon's strict environmental standards.

Some of the permitting highlights include: the project has been designed to reduce emissions and will fall under a Standard Air Contaminant Discharge Permit. In addition, the project will be one of the first new facilities reviewed under the State's Cleaner Air Oregon Program. US Army Corps of Engineers and Oregon Department of State Lands will oversee wetland fill of the creation of valuable wetland habitat. Columbia County will oversee various building permits.

NEXT plans to file the first permits in 2019.

How will this project benefit Columbia County?

NEXT will ultimately provide more than 200 local, family-wage jobs, contribute more than \$12 million a year in local property taxes, and pay more than \$5.5 million in Port fees. NEXT has signed memorandums of understanding with the Columbia Pacific Building Trades Council and the Pacific Northwest Regional Council of Carpenters for construction of the Port Westward facility.

What about rail traffic?

The vast majority of both feedstock and finished product will arrive and leave by ship. Manifest rail will be used on a limited basis for feedstock receipts, product shipments, and receipt of supplies and spare parts. NEXT projects no substantial increase in rail traffic in Columbia County, or elsewhere.

Why do the barrels per day of advanced biofuels that NEXT will produce exceed the barrels per day of feedstock that will be input into the production process?

During the production process, the feedstock oils are converted using hydrogen, a process known as hydrotreating. This process expands the molecules in the feedstock creating a yield increase. Depending on the feedstock, the yield is 108% to 111% of the input volume. Therefore, while we are permitting to use up to 50,000 barrels per day of feedstock at full capacity, we will produce about 54,000 barrels per day of advanced biofuels.

Will the NEXT facility process or produce any fossil fuels?

No. The NEXT advanced biofuels facility will not process or produce any fossil fuels. It will be permitted by the State of Oregon to receive and process feedstock from renewable, non-fossil fuel sources, and nothing else. Moreover, the machinery required to convert renewable feedstock to advanced biofuels is specialized; it is not capable of processing fossil fuels.