



CASE STUDY

CITY OF VANCOUVER

CITY OF VANCOUVER, WASHINGTON

Vancouver, Washington sits on the north bank of the Columbia River directly across from Portland, Oregon. The Pacific Coast is less than 90 miles to the west. The Cascade Mountain Range rises on the east. Vancouver has always been well served by rail. Current freight railroads operating in Vancouver include Union Pacific, the local shortline Lewis and Clark Railway.

The Issue

The City of Vancouver wanted to reduce emissions from idling switchyard diesel locomotive engines. A grant from the EPA funded 70% of the cost of retrofitting three diesel switchyard locomotives with the ZTR SmartStart® automatic engine start stop (AESS) system. Vancouver chose the industry-standard SmartStart because the system:

- Is a proven retrofit device that allows the locomotive engines to be shut down when not performing work and then quickly restarted when needed
- Will dramatically reduce fuel consumption, noise, soot and toxic air pollution for the surrounding neighborhoods
- Offered performance-based tests performed at the Chicago rail yard that save thousands of gallons of diesel fuel and can potentially reduce switchyard diesel locomotive idling emissions by **90 percent**
- Saves over **14,000 gallons** of fuel per year while eliminating over two tons of emissions per year and reducing noise by eight to **15 decibels**

Why ZTR?

For over 25 years ZTR has served the railway industry with innovative Control System Solutions to improve the performance of your existing locomotive fleet at only a fraction of the cost of new. Our fuel conservation solutions save you money and your locomotive fuel savings also help to reduce your carbon footprint.



SmartStart IIe has an ROI of less than 6 months, and it saves North American railroads 6,000 Litres of fuel every month.