



## OIG identifies opportunities for Amtrak to reduce locomotive idling, more easily achieve emission reduction goals

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WASHINGTON – Amtrak appears to be on track to reach its goals to reduce greenhouse gas emissions and increase its purchase of carbon free and renewable electricity, but it has opportunities to use its own data to reduce excess locomotive idling and to train employees about its sustainability goals, an Amtrak Office of Inspector General report released today said.

According to the report, Amtrak set a goal of reducing greenhouse gas emissions to 40 percent below its 2010 baseline by 2030. To help reach this target, it set goals to purchase 100 percent carbon-free electricity by 2030 and to purchase 100 percent renewable electricity by 2035. To meet these goals, the company has undertaken several initiatives, including buying more efficient electric locomotives for the Northeast Corridor and more fuel-efficient diesel locomotives for use nationwide. It has also switched to more energy-efficient LED lighting in its facilities and stations. Further, the company has developed a plan to increase its purchases of carbon-free electricity to achieve the 2030 goal.

The OIG found, however, that Amtrak could take additional steps to more easily achieve these goals to include leveraging data it already gathers to further reduce excessive idling of its diesel locomotives and mandating training on sustainability goals for management staff. While the company has reduced excess idling— idling for more than one hour—by 21 percent from October 2016 through March 2022, further efforts would not only reduce emissions, but would reduce fuel costs and wear and tear on locomotives, the report said.

Amtrak since 2016 has tracked and reported monthly on excess idling. The company installed automatic engine stop/start technology in its locomotives that will shut down a locomotive after two hours of idling unless other conditions—like temperatures below 40 F or the need to maintain air pressure in brake lines—require continued idling.

An OIG analysis of excess idling in Chicago, Amtrak’s largest locomotive maintenance facility, found more than 500 incidents in June 2021 when a locomotive shut down after two or more hours of idling and restarted less than 30 minutes later, sometimes repeatedly.

According to the report, back-to-back instances of excessive idling when factors like air temperature are not in play can indicate a mechanical problem or maintenance error. For example, a leaky air hose may trigger a locomotive to restart if its onboard system detects low air pressure. Because there is no mechanism to alert maintenance personnel about these issues, such as a text alert, staff are not able to easily identify locomotive restarts that result from malfunctions or maintenance errors, the report said.

The OIG also found that Amtrak was not currently using data it has available to better track when idling locomotives are powering passenger cars (head-end power on) and when they are not (head-end power off). Given that a locomotive uses about 30 gallons of diesel per hour when head-end power is on versus 4 gallons of diesel when head-end power is off, the company could

use this data to more accurately assess the cost of idling and better target its reduction efforts, the report said.

The OIG made three recommendations to help address the report's findings. Amtrak management agreed with the OIG's recommendations and has plans to address them. More information is included in the full report which can be downloaded on the OIG's website: <https://direc.to/iXPM>.

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