

PINE BEND REFINERY



Celebrating 70 years of operations, the Pine Bend refinery is a leading producer Minnesotans depend on for fuels and other petroleum-based products and is among the **most innovative and efficient refineries** in the country.



375,000 barrels
of crude oil per day



Community Advisory Council
is among the nation's oldest and longest-running



Produces **gasoline, diesel, jet fuel, fertilizer, asphalt** and **heating fuels**



\$200 million
average annual investment in innovations and improvements



1000+ employees
and thousands of contractors annually at MN's most-active worksite



Home to the **largest-of-its-kind** solar project that helps power refinery operations

STEWARDSHIP WITH A PURPOSE

At Flint Hills Resources, stewardship encompasses the responsible management of our actions and the resources entrusted to our care in ways that respect the rights of others.

Environment

- Since 2000, Pine Bend has reduced total criteria air emissions by approximately 70% while increasing production to meet demand.
- Compared to other large U.S. refineries, emissions per barrel are approximately 20% lower than the industry average.
- Since 2010, the refinery has saved more than 3 billion gallons of water through wastewater recycling and stormwater recovery.



Health and Safety

Rather than using a traditional rules-based safety system that requires people to never make a mistake, Flint Hills uses a principle-based approach that values input from those doing the work, focuses on learning and creates safeguards to avoid serious injuries.

Over the last 14 years, the refinery has averaged an annual Total Recordable Injury Rate (TRIR) of 0.86, which is equivalent to **less than one recordable injury per 100 full-time employees.**

People and Communities

We strive to make a difference in the communities we call home and work to create lasting partnerships with many local community organizations.



Environment: The Wildlife Habitat Council (WHC) named Flint Hills Resources Pine Bend its first-ever certified gold site in the Twin Cities in recognition of its habitat restoration and conservation efforts. Flint Hills was recognized for its efforts across its land holdings in Dakota County, which includes the Pine Bend Bluffs. Since 2000, Flint Hills has partnered with Friends of the Mississippi River and Great River Greening to protect and conserve hundreds of acres of natural prairie and oak savanna.

STEM education: From immersive STEM learning experiences with the Minnesota Zoo and local robotics teams to a statewide reading challenge with the Minnesota Wild, Flint Hills supports learning throughout our community.

Public safety/first responders: Flint Hills Resources maintains a fully functioning, two-house fire department at the Pine Bend refinery. In addition, Pine Bend provides mutual aid industrial fire training to the Rosemount, Eagan, Inver Grove Heights and Hastings fire departments. Firefighters from these departments have been using the refinery's fire training grounds for free since 1991. Pine Bend also grants scholarships for local firefighters to attend industrial firefighting programs.

Innovation

Our team is constantly innovating and finding new ways to improve our operations so that Pine Bend can remain one of the nation's most competitive refineries.

- **Advanced weather technology** empowers our engineers to predict and respond to weather impacts on operations and safety up to 72 hours in advance using future trajectory.
- State-of-the-art combined heat and power (CHP) system uses natural gas and a heat recovery process to **improve efficiency and save about 400,000 gallons of water** use per day compared to traditional systems.
- **Digital leak detection** sensing network quickly detects even the smallest leaks automatically and in near real-time.

Virtually every drop of oil becomes an essential product for modern life.

Jet fuel	Commercial airlines and private aircraft
Diesel fuel	Cars, trucks, farm equipment and railroad engines
Gasoline	Cars, trucks, boats and ATVs
Ammonium Thiosulfate (ATS)	Fertilizer for farmers
Asphalt	Roads and roofing
Propane and butane	Home and industrial fuel
Chemical feedstocks	Plastics for use in a variety of products