

# VAPOR RECOVERY UNITS: REDUCING CO<sub>2</sub> EMISSIONS ON THE HOUSTON SHIP CHANNEL

As one of the largest energy infrastructure companies in North America, we recognize the critical role we play in advancing a low carbon future. Our operations not only help meet the energy needs of today; they also provide solutions for the energy transition of tomorrow. As such, we are actively making enhancements to our business practices and operations to support a low carbon future and reduce our emissions footprint.

## WHO WE ARE

Kinder Morgan provides **safe, reliable** and **environmentally responsible** energy storage and transportation services. We are the largest independent terminal operator in North America with a strong network of terminals that serve our customers' storage, distribution, blending and logistical needs. Our terminals store and handle petroleum products, chemicals, vegetable oils and **biofuels**.

## WHAT WE ARE DOING

Our **Terminals** business segment is making enhancements to its operations to **significantly reduce** the emissions profile of KMI's refined products terminal hub along the Houston Ship Channel by **adding five vapor recovery units (VRU)** to its Galena Park and Pasadena facilities. Upon completion of the project, the VRUs will reduce greenhouse gas (GHG) emissions by approximately **34,000 metric tons** annually.

## WHAT IS A VAPOR RECOVERY UNIT?

Replacing vapor combustion devices, such as enclosed flares, with VRUs are one of many actions that we are taking to reduce emissions. A **VRU captures emitted vapors** in transmix tanks, resulting in significant emissions reductions.

Our Terminals business unit is helping reduce GHG emissions by approximately

**34,000 metric tons**

That's equivalent to CO<sub>2</sub> emissions from:



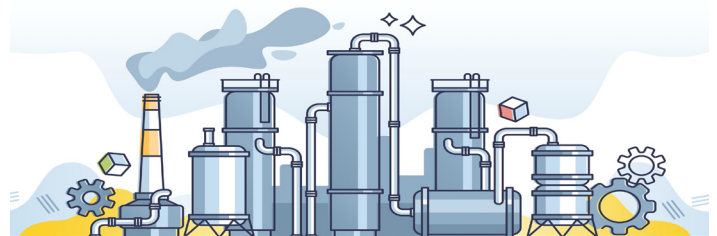
**3,860,547**  
gallons of gasoline  
consumed



**6,232**  
homes' electricity  
use for one year

## VRU BENEFITS

- In comparison to conventional storage tanks and similar solutions, **VRUs help reduce emissions by 95% more**.
- VRUs **minimize the risk of a fire** by collecting the combustible vapors from the tank.
- VRUs can help **protect our health, safety and the environment** by collecting potentially carcinogenic and flammable gases that can create serious health issues.



"Our project on the Houston Ship Channel is expected to substantially reduce the emissions profile of our operations in the area. KMI currently has 42 VRUs in place today and continues to evaluate economic opportunities across its Terminals and Products facilities for additional VRU installations."

- John Schlosser, KMI President of Terminals