Change Log for 45VH2-GREET

45VH2-GREET (Rev. May 2025)

The 45VH2-GREET (Rev. May 2025) model implements the following changes relative to 45VH2-GREET (Rev. January 2025):

- Ability for users to account for bespoke information (i.e., foreground data) to represent specific aspects of their natural gas supply chain.

45VH2-GREET (Rev. January 2025)

The 45VH2-GREET (Rev. January 2025) model implements the following changes relative to 45VH2-GREET (Rev. Sept. 2024):

- Ability to represent additional electricity inputs for high-temperature electrolysis.
- Ability to represent steam co-product for facilities that use reformers with cryogenic carbon capture and sequestration (CCS).
- Revised approach to account for impurities and mixed gases, in alignment with the 45V Final Regulations.
- Representation of grid regions defined in 45V Final Regulations.
- Representation of additional methane feedstock (renewable natural gas (RNG) from manure, RNG from wastewater treatment plants, upgraded coal mine methane).

45VH2-GREET (Rev. Sept 2024)

The 45VH2-GREET (Rev. November 2024) model implements the following changes relative to 45VH2-GREET (Rev. August 2024):

- Improvements to user interface for electricity feedstock.

45VH2-GREET (Rev. August 2024)

The 45VH2-GREET (Rev. August 2024) model implements the following changes relative to 45VH2-GREET (Rev. March 2024):

- Inclusion of renewable electricity feedstock for high-temperature electrolysis, as described in Section 2.3 of the "Guidelines to Determine Well-to-Gate Greenhouse Gas (GHG) Emissions of Hydrogen production Pathways using 45VH2-GREET Rev. August 2024" document.

45VH2-GREET (Rev. March 2024)

The 45VH2-GREET (Rev. March 2024) model implements the following changes relative to 45VH2-GREET 2023:

- Modifications to address tool functionality (fixes to prevent crashes and popups to explain features).
- Correcting macros that utilize the heating value of natural gas and landfill gas.
- Correcting a programming error in simulation of the gasification of biomass.

- Removing the cap on the amount of nitrogen co-product that users can input for the autothermal reforming (ATR) process. Instead, a pop-up message was added notifying users to check their inputs.