



# Change Log for 45ZCF-GREET Model and User Manual

## 45ZCF-GREET (Rev. May 2025)

The 45ZCF-GREET (Rev. May 2025) model and associated User Manual implements the following changes relative to 45ZCF-GREET (Rev. January 2025):

- Added pathway for alternative natural gas from coal mine methane (CMM) capture and upgrading.
- Added pathway for ethanol from U.S. corn wet mills. A simplified plant-level allocation by mass is applied to derive the results for ethanol. The same indirect emissions value per MJ for dry mill corn ethanol is applied to wet mill ethanol.
- Added text to the GREET User Manual to quote [Notice 2025-11](#), sec. 401 to clarify that these (and potential future) model updates, including new types, categories or pathways, may be used immediately.
- Clarifies in the GREET User Manual that Carbon capture utilization and sequestration (CCUS) allows CO<sub>2</sub> stored in U.S. Class II wells used for enhanced oil recovery (EOR), in addition to Class VI wells. (Note: No changes to model only revisions to user manual.)
- Lifecycle emissions results updated to include the output in kilograms of CO<sub>2</sub> equivalent per million British thermal units (kg CO<sub>2</sub>e/MMBtu), consistent with Section 45Z tax credit.
- Corrected Summary Table 9b. in the GREET User Manual to reflect final Indirect land use change (ILUC) emissions factors for soy and canola. (Note: No changes to model or modeled results, only correcting summary data as presented in the manual.)
- Added coal as a process input option for biodiesel via Transesterification pathways.
- Revised Methanol input for biodiesel production to be entered in gallons as opposed to units of energy (MMBtu).