

# 45ZCF-GREET Frequently Asked Questions

January 2025

# **Disclaimer**

This work was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof, its contractors or subcontractors.

# Introduction

45ZCF-GREET is the model that has been adopted by the U.S. Department of the Treasury to determine emissions rates for purposes of the Clean Fuel Production Credit under Title 26 of the U.S. Code, Section 45Z. The 45ZCF-GREET user manual describes the methodology used by 45ZCF-GREET to calculate life cycle greenhouse gas emissions of clean fuel production under a well-to-wheels system boundary and provides instructions on how the model should be used. The 45ZCF-GREET user manual provides instructions on use of the model. Before reading through this FAQ, ensure that you have properly downloaded and installed 45ZCF-GREET by following Section 3 in the user manual.

FAQs and answers in this document pertain only to the use of the 45ZCF-GREET model. Questions about the 45Z tax credit and eligibility for the tax credit should be directed to the Internal Revenue Service.

FAQs will be updated on a continual basis. If you have questions about use of the 45ZCF-GREET model, visit the GREET website for contact information.

# **Frequently Asked Questions**

1. Can 45ZCF-GREET run on an Apple Mac or older versions of Microsoft Excel?

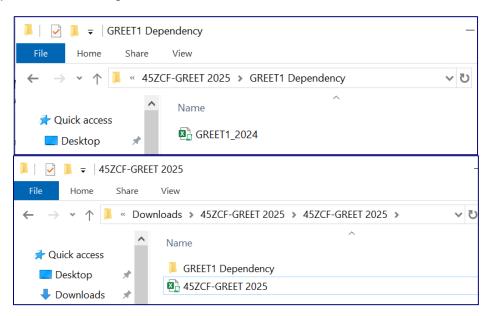
45ZCF-GREET was developed for use exclusively with Excel 365 on Windows operating systems. Older versions of Excel and Excel programs for different operating systems, such as macOS, will **not** properly run 45ZCF-GREET.

2. Do I need to open "GREET1\_2024.xlsm" in the "GREET1 Dependency" folder?

Users should only open the "45ZCF-GREET 2025" Excel file. The macros will take care of opening and setting up the link between the two files.

3. Do I need to move "GREET1\_2024.xlsm" out of the "GREET1 Dependency" folder?

Extracting the "45ZCF-GREET 2025" zip file creates a "45ZCF-GREET 2025" Excel file and a "GREET1 Dependency" folder, which contains "GREET1\_2024.xlsm." Please do **not** move the "GREET1\_2024.xlsm" file out of the "GREET1 Dependency" folder. Your file arrangement should match what appears in the images below.



4. Can I rename the files and folders located in the "45ZCF-GREET 2025" folder?

We do not recommend changing the names of any files or folders that are part of the unzipped file system, especially the "GREET1 Dependency" folder and "GREET1 2024" Excel file.

## 5. Can I replace "GREET1\_2024.xlsm" with an older GREET file?

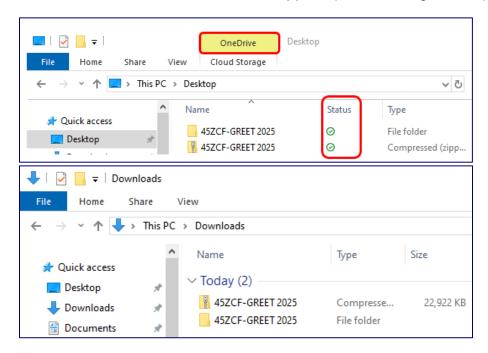
Please do not replace "GREET1\_2024.xlsm" that comes with the zip file. Doing so may cause errors and inconsistent results.

6. "45ZCF-GREET 2025.xlsm" allows me to enter process information; however, when I select "Generate LCA Results," no results are produced, and there is no error message. What is the issue?

This could be due to several reasons:

a. Please ensure that "45ZCF-GREET 2025.xlsm" and the "GREET1 Dependency" folder have been extracted into a local drive (e.g., C: or D: drive) and are being run from that drive. The security settings in some cloud drives (e.g., OneDrive) may prevent the execution of macros, so ensure that the folder where "45ZCF-GREET 2025.xlsm" is saved does **not** back up to a cloud drive. Close all open instances of "45ZCF-GREET 2025" and "GREET1\_2024.xlsm" before trying again.

To know if a folder is being backed up to OneDrive, look at the top ribbon in Windows Explorer upon selecting the folder. If the folder is being synced with OneDrive, "OneDrive" in a yellow box will appear at the top of the window with a "Cloud Storage" tab below it (first image below). Additionally, a "Status" column will appear with an icon next to each folder or file (indicating the sync status). If the folder is not being backed up to OneDrive, this text and tab will not appear (second image below).

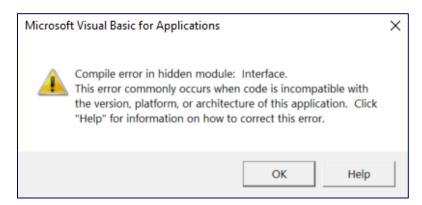


b. Please verify that both "45ZCF-GREET 2025.xlsm" and "GREET1\_2024.xlsm" (located in the "GREET1 Dependency" folder) are

- unblocked and macros are enabled (see Question 11). Close all open instances of "45ZCF-GREET 2025.xlsm" and "GREET1\_2024.xlsm" before trying again.
- c. Please ensure that another file with the name "GREET1\_2024.xlsm" is not open. This will prevent "45ZCF-GREET 2025.xlsm" from opening "GREET1\_2024.xlsm" required to run its calculations. We recommend closing both files and then opening "45ZCF-GREET 2025.xlsm" again.
- 7. "45ZCF-GREET 2025.xlsm" does not allow me to enter process information, and no error messages are observed. What is the issue?

This could be due to the reasons identified in Question 6 above.

8. After I put my data into "45ZCF-GREET 2025.xlsm" and click the "Generate LCA Results" button, Excel displays the pop-up error: "Compile error in hidden module: Interface." Why am I receiving this error message?



This is because 45ZCF-GREET was designed for the 64-bit version of Office 365, and the user is using the 32-bit version. Users with 32-bit may experience issues with 45ZCF-GREET so we recommend running the 64-bit version.

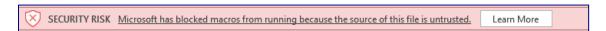
9. I get the error message "Could not find the GREET1\_2024.xlsm workbook."
Why am I receiving this error message?

This error is due to the Excel macro not being able to locate "GREET1\_2024.xlsm" in the "GREET1 Dependency" folder. Please ensure that "45ZCF-GREET 2025.xlsm" and the "GREET1 Dependency" folder are in the same folder and that "GREET1\_2024.xlsm" is in the "GREET1 Dependency" folder. In addition, verify that the file and folder are correctly named.

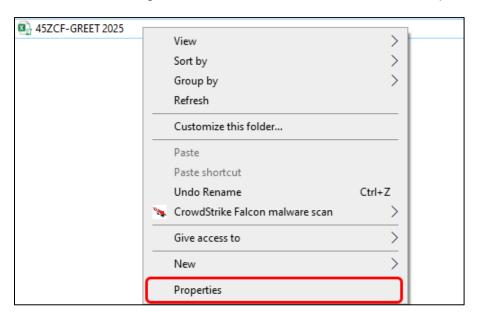
10. After putting all my process data into "45ZCF-GREET 2025.xlsm," clicking "Generate LCA Results" in "#NAME?" errors. Why am I seeing these errors?

Please ensure that the Excel version being used is Microsoft 365. "45ZCF-GREET" is not compatible with older versions of Microsoft Excel (e.g., Excel 2021, Excel 2019, Excel 2016).

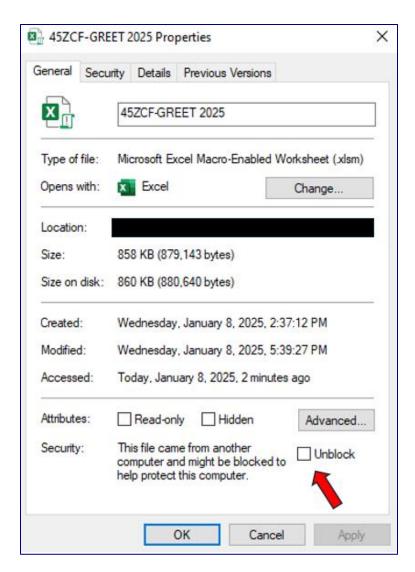
11.Upon opening "45ZCF-GREET 2025.xlsm," I see the banner message: "Microsoft has blocked macros from running because the source of this file is untrusted." How do I address this?



To correct for this issue, a user must "unblock" "45ZCF-GREET 2025.xlsm." To do so, the user should right-click on the XLSM file and select "Properties."



Under the "General" tab under "Properties," at the bottom, the user should check the box "Unblock" and then select "Apply." Reopen "45ZCF-GREET 2025.xlsm," and the Security Risk banner should no longer appear.



12. When I open up "45ZCF-GREET 2025.xlsm," I see the error "There are one or more circular references where a formula refers to its own cell either directly...." Then, when I click "OK" and run the model, I see "N/A" for D-LCA results. How can I get my model to run correctly?

We have observed this error when a user opens a new Excel file first before opening "45ZCF-GREET 2025.xlsm." The solution is to close all Excel files and only open "45ZCF-GREET 2025.xlsm." Do not open "45ZCF-GREET 2025.xlsm" when other Excel files are already open, as this may cause the model not to function properly.

13. Can I have access to the VBA password to see the macros in 45ZCF-GREET?

The VBA code is password-protected to prevent the alteration of underlying coding which could affect the functionality of the model. There will be an explainer document forthcoming that walks through how the user inputs trace

back to the dependency file and how results are pulled from it once calculations are finished.

### 14. My pathway is not represented in 45ZCF-GREET, what do I do?

Updates to 45ZCF-GREET may include more fuel pathways in the future. Alternatively, taxpayers will be able to file for a provisional emissions rate (PER) for their specific fuel production pathway once the process is available.

15.I am not seeing I-Effects appear in the results table for the *RD/SAF from Domestic and Brazilian Ethanol via ATJ-E* technology ("ATJ-E") when I click "Generate LCA Results". Why is this?

For the ATJ-E technology in 45ZCF-GREET, the I-Effects are tied to the feedstock for the ethanol (e.g., corn for corn ethanol), and are included in the "Feedstock (including I-effects)" row of the results table. To successfully generate a LCA result for ATJ-E, a user must calculate the CI for the source(s) of ethanol that is being used for the ATJ-E under the individual ethanol technology in 45ZCF-GREET (e.g., *Ethanol from Corn via Fermentation*), then copy over the total LCA results (including direct and indirect effects) as an input parameter for the ATJ-E technology.

