



Data review

Guidelines for reviewing your SIMAP data entry and results.

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Before using your SIMAP results to report your carbon and nitrogen footprints to campus or external stakeholders, it's important to ensure as great a degree of completeness and accuracy as possible. To achieve that, please take time to review your submission for the common errors or oversights outlined in this document.

The review contains several parts:

1. The user fills out the "User Review Section" [pg. 2-5], provides some information about boundaries and any additional documents, like a spreadsheet with original data, if you used it to upload the data into the SIMAP platform. Save this document with the name of your institution and the date it was completed. Then please email this document to simap@unh.edu.
2. To schedule the appointment, please, fill out the request for appointment form.
3. After we receive the documents, SIMAP staff will fill out the second portion of the document "SIMAP staff to review before the appointment" [pg, 6-7] using your information. After completing that, we will schedule a conference call to go over the data and fill in the remaining section "Review together during the appointment" [pg. 9-13] together.
4. If there are questions and additional clarification, they will be addressed during the joint call.

We are looking forward to the data review process for the Tier 1 subscribers.

User Review Section

In this section, user reviews before scheduling an appointment. User provides SI any uploaded files and information about the campus boundaries and systems including use of renewables; and the process for completing inventory, including data collection methodologies and primary sources.

- On the Account tab:

On the "Institution" page:

- Is your Zip code entered correctly?

On the "Budgets" page:

- Did you enter your budget data in current year \$ (SIMAP adjusts automatically for inflation)?

On the "Physical Spaces" page:

- Is your physical spaces data from the same report/source as previous years? Be sure to document the source in the notes section. If the source or methodology has changed, please note that as well.

On the "Populations" page:

- Is your populations data from the same report/source as previous years? Be sure to document the source in the notes section. If the source or methodology has changed, please note that as well.
- For the years with imported activity data (from previous versions of the CCC or CMAP):
- Check that your dates, sources, units, and labels are populated accurately. Do a spot check of at least 30% of sources. Document which ones you checked. Pay special attention to the items noted below, since the methodology for these has changed (from what was used in the CCC or CMAP), and some additional or altered data inputs have been added.
 - Source
 - Unit
 - Label
 - Date

Scope 1: Animals

- Checked that your animal data imported correctly.

Scope 3: Food

- Did you receive any error messages for skipped rows when you imported your file? If so, did you address those?

Scope 3: Waste and Wastewater

- No special instructions. Spot check, review Confidence factor and document any calculations/assumptions in the Notes section.

Sinks

- **Sequestration:** If you entered “Forest Preservation” data (column DL) on the input page of the CCCv9, it will have transferred to “Non-additional sequestration” in SIMAP. If, however, your MTCDE value is a measurement of carbon sequestration resulting from an afforestation, reforestation, or forest preservation project created or managed specifically as a carbon offset, then this entry should be deleted from the “Non-Additional Sequestration” form and entered instead on the “Offsets” page.
 - **“Other”** The values from “Other” columns (DP and DT) on the Input page of the CCCv9 should have transferred to the “Non-Additional Sequestration” page in SIMAP.
- Emissions Factors

Emissions Factors and Custom Fuel Mixes

- Make sure that any other custom fuel mixes or emissions factors that you had in the calculator were entered manually in SIMAP (the uploader is not designed to import them).
- For years with data entered manually:
 - Check that your
 - Dates
 - Sourcesunits are entered accurately. Try to do a spot check of at least 40% of sources. Focus on Scope 1: On-Campus Stationary and Scope 1: Mobile Sources, all Scope 2, Scope: 3 Commuting, Scope 3: Business Travel/Study Abroad, and Scope 3: Food.

Scope 1: Transport Fuels

- Verify that all relevant transport fuels are included.
- For Electric Fleet vehicles, enter the data in the “notes” section of relevant Scope 2 Purchased Electric entry (i.e., what % of the total purchased electricity was used to power fleet vehicles?).

Scope 1: Fertilizer

- Verify that all fertilizer inputs are included.

Scope 1: Refrigerants

- If you had a new refrigerant/chemical not already included in the SIMAP pick-lists, please verify that you entered it, along with its GWP value, on [Data Entry/Global Warming Potentials](#).

Scope 2

Scope 2: Utility Consumption

- Verify that all institutional utility consumption has been entered.

Scope 3

Scope 3: Commuting

- Verify that your method of collecting the data has not changed significantly from the methodology used in your baseline year. (If it has, you may need to adopt an updated baseline year, at least for your Scope 3 emissions. Or do a baseline adjustment to ensure consistent methodologies.)
- Verify that “Confidence” indicators for all entries are accurate. If not “High,” use the Notes section to indicate data issues or questions.

Scope 3: Business Travel and Study Abroad

- No special instructions. Spot check, review Confidence factor and document any calculations/assumptions.

Student Travel to/from Home

- Is all known student travel accounted for?

Scope 3: Paper

- Are all known paper purchases accounted for? If not, be sure to document what paper sources are and are not represented in your data inventory.

Scope 3: Food

- Carefully document your contacts, data sets, and approach in the “Notes” section so that it can be repeated in the following years. If you scale your food data, then it is important that you continue to scale the same type of data set with the same method.

Scope 3: Waste and Wastewater

- Is all MSW disposal accounted for?
- Is all wastewater treatment accounted for?

Sinks: Non-Additional Sequestration

- Make sure that these are entered as MTCDE.
- Document the method of calculating the MTCDE in the notes section, including any raw data used in the calculation, in the Notes section.)

Sinks: Offsets

- Verify that all purchased and sold offsets ([see definition here](#)) are included in this section.
- For Custom Emissions Factors and Custom Fuel Mixes
- If you want to revert to the default EF (for example, the eGrid factor), delete any Custom EF or Custom Fuel Mix entered for the relevant year. (You could use the “Notebook” section to store the CFM values for future reference, should you ever want to utilize it again.)

SIMAP staff to review before the appointment

Once the user section is completed, please send your files to simap@unh.edu and our staff will perform a data check as outlined in the list below. Once this is completed, we will contact you to schedule a joint review appointment.

- For the years with imported activity data (from previous versions of the CCC or CMAP):
- Do a spot check of at least 75% of sources. Note which ones you checked. Pay special attention to the items noted below, since the methodology for these has changed (from what was used in the CCC or CMAP), and some additional or altered data inputs have been added.
 - Source
 - Unit
 - Label
 - Date
- Verify that sources used for cogeneration are entered/labelled as such.
- Verify that cogeneration efficiencies and outputs are entered correctly.

Scope 1: Fertilizer

- Make sure the entries for “organic” versus “synthetic” transferred correctly.

Scope 1: Refrigerants

- Make sure the list of chemicals/refrigerants relevant to your institution has populated correctly.

Scope 3: Business Travel and Study Abroad

- No special instructions. Spot check, review Confidence factor and document any calculations/assumptions.

Scope 3: Student Travel to/from Home

- For each mode (Auto/Carpool/Bus/Train/Air), verify that the # of students* % of trips * average # trips * passenger miles per trip in SIMAP is equal to the input number of miles or passenger miles from the CCC.

Scope 3: Food

- Did all food categories, quantities and qualifiers import properly?
- Compare the number of rows in their food uploader to the number of data points in SIMAP to confirm they all imported properly.

Scope 3: Paper

- Verify that the paper types (e.g. uncoated freesheet, coated freesheet, coated groundwood, etc..) for which you had data in the CCC translated accurately to SIMAP, and that the quantities and % recycled match.

Scope 3: Waste and Wastewater

- No special instructions. Spot check, review Confidence factor and document any calculations/assumptions in the Notes section.

Sinks

- Compost –The values from the “On-Campus Composting” column (DL) on the Input page of the CCCv9 should be included under “Compost” in SIMAP
- Sequestration – The values from “Forest Preservation” column (DL) on the Input page of the CCCv9 should have transferred to the “Non-Additional Sequestration” page in SIMAP. Assuming this is a calculation of the carbon sequestered in campus forests or lands that were/are NOT specifically established as a carbon offset or managed primarily for maximum carbon sequestration, this is where they should stay.
- Offsets - The values from the “Retail Offsets” columns (DN and DO) on the Input page of the CCCv9 should have transferred to the “Offsets” page in SIMAP.

Emissions Factors and Custom Fuel Mixes

- Verify that any Custom Fuel Mix that you may have entered for electricity transferred accurately.

Review together during the appointment

- These are the data points to be reviewed together during the appointment.

- On the Account tab:

On the “Institution” page:

- Are the correct eGrid regions selected from the drop-downs for:
 - eGrid for data prior to 2007
 - eGrid for data in 2007 and beyond
- Did you select the most recent or relevant “Emissions Factor Version”?
- If this is the account to be used for institutional reporting, did you select the “Yes” button under the “Official Account” designation?

On the “Physical Spaces” page:

- Is your data the same as you report to AASHE STARS? To other reporting platforms (e.g. Portfolio Manager, APPA/NACUBO surveys/others)?
- If you have energy-intensive spaces such as laboratories, healthcare, or other (e.g. server rooms), are those “subcategories” included. These are important for calculating the institutional EUI¹, which is a vital comparative metric for understanding your overall energy use performance.

On the “Populations” page:

- Is your data the same as you report to IPEDS? To AASHE STARS? If you report to either of those sources, please make sure you are using the same numbers.

On the Notebook page:

- Are all key data contacts noted here (offices, reports, individuals)?
- Is the rationale for what is included in organizational and operational boundaries described here? Are changes to these boundaries documented?
- Are any relevant general assumptions noted here?

For the years with imported activity data (from previous versions of the CCC or CMAP):

- Check that your dates, sources, units, and labels are populated accurately. Do a spot check of at least 75% of sources. Note which ones you checked.
- Pay special attention to the items noted below, since the methodology for these has changed (from what was used in the CCC or CMAP), and some additional or altered data inputs have been added.

¹ Energy Use Intensity

- Source
- Unit
- Label
- Date
- Check that primary sources or any necessary calculations for these entries are documented in the relevant Notes section.
- Verify that “Confidence” indicators for all entries are accurate. If not “High,” use the Notes section to indicate data issues or questions.
- Verify that your method of collecting the data has not changed significantly from the methodology used in your baseline year. (If it has, you may need to adopt an updated baseline year, or do a baseline adjustment to ensure consistent methodologies.)

Scope 1: Stationary Fuels

- For Solar-Electric, Solar Thermal, or Wind entries, verify that your response to the question of REC retention is accurate (using the checkbox). **Note:** If this source generates Renewable Energy Certificates (RECs) that your campus then sells, you **MUST** have the checkbox ticked to get accurate results. (It should also be checked if you keep them/retire them.) If this source generates power that you purchase through a Power Purchase Agreement, and the energy developer sells the RECs (to you or to another entity) separately, you **MUST** leave the checkbox unchecked to get accurate results.
- Verify that any REC purchases or sales related to those on-campus renewable installations are also entered in the “Renewable Energy” section under Scope 2. These **MUST** be entered in both sections to get accurate results.

Scope 1: Transport Fuels

- If you have Electric fleet vehicles, you may enter the data about the energy they consume in two ways; either by entering your electric fleet as “Other” and entering “0” as the custom emission factor for those sources, or by simply documenting the data in the “notes” section of relevant Scope 2 Purchased Electric data (i.e. for the Electricity entry that contains the kWh used by those vehicles.) Either way, the electricity used to power those vehicles should be included in the relevant year’s Scope 2: Purchased Electricity entry.

Scope 2: Renewable energy

- Make sure that all contractual renewable energy purchases or sales are noted here (even if you already entered them under Scope 1: Stationary or Scope 2: Utility Consumption.) If your institution has contracted for any renewable power “attributes”—whether through PPAs, Green Utility purchases or prices, Community Solar, Community Choice Aggregation, Green Tariffs or RECs—they must be entered here.

Scope 3: Commuting

- Verify that the number of commuters is correct (may differ from the # in the CCC).
- Verify that your mode distribution is accurate relative to your # of commuters.
- Verify that the number of one-way trips is accurate (this was left to user discretion in the CCC, so the number entered there might have been round-trips. If that's the case, you will need to adjust this number and/or your trip frequency number accordingly.)
- If you have commuters traveling using transit provided by the campus fleet (e.g. buses operated by the campus), the fuel for those buses should have been entered under the Scope 1: Transport Fuels section. To avoid double-counting, those bus-traveling commuters should be subtracted/discounted from both your total number of commuters and your percentage of commuters using that mode.

Scope 3: Food

- Did you enter a food scaling factor?

For years with data entered manually:

- Check that primary sources or any necessary calculations for these entries are documented in the relevant Notes section.
- Verify that "Confidence" indicators for all entries are accurate. If not "High," use the Notes section to indicate data issues or questions.
- Verify that your method of collecting the data has not changed significantly from the methodology used in your baseline year. (If it has, you may need to adopt an updated baseline year, or do a baseline adjustment to ensure consistent methodologies.)

Scope 1

Scope 1: Stationary Fuels

- Verify that all your relevant stationary energy sources are included. (SIMAP does not currently have dedicated source entries for on-campus hydropower, geothermal, or biogas energy installations, but you can use the "Other" designation for these, with an EF of 0.)
- Verify that, Solar Electric, Solar Thermal, or Wind entries, your response to the question of REC retention is accurate (checkbox). If this source generates Renewable Energy Certificates (RECs) that your campus then sells, you **MUST** have the checkbox checked to get accurate results. If this source generates power that you purchase through a Power Purchase Agreement, and the energy developer sells the RECs (to you or to another entity) separately, you **MUST** leave the checkbox unchecked to get accurate results.
- Verify that any REC purchases or sales related to those on-campus renewable installations are also entered in the "Renewable Energy" section under Scope 2.

- Verify that sources used for cogeneration are entered/labelled as such.
- Verify that cogeneration efficiencies and outputs are entered correctly.

Scope 1: Fertilizer

- Verify you did any calculations for “weighting” the nitrogen % inputs accurately.

Scope 1: Animals

- If you are a member of the Nitrogen Footprint Tool Network, did you enter a custom emissions factor for your research animals’ nitrogen footprint? See this document for more information:

How to transfer your data from the NFT to SIMAP

Scope 1: Refrigerants

- Verify that all refrigerants or chemicals that have a climate forcing impact are included.

Scope 2

Scope 2: Utility Consumption

- Verify that if the institution has a fuel mix other than the default location-based factor for its utilities (provided below), a custom location-based fuel mix has been entered.
 - For electricity, the default is based on eGrid data for US users, provincial data for Canadian users, and national data for all other users.
 - For steam, the default fuel mix is 50% natural gas, 50% distillate oil.
 - For chilled water, the default fuel mix is 50% natural gas, 50% distillate oil.
- Verify that your selection of emissions factor (location- or market-based) has not changed significantly from the methodology used in your baseline year. (If it has, you may need to adopt an updated baseline year. Or do a baseline adjustment to ensure consistent methodologies.)

Scope 2: Renewable energy

- Make sure that any contractual renewable energy purchases or sales are noted here (even if you already entered them under Scope 1: Stationary or Scope 2: Utility Consumption.) If your institution has contracted for any renewable power “attributes”—whether through PPAs, Green Utility purchases or prices, Community Solar, Community Choice Aggregation, Green Tariffs or RECs—they must be entered here. This means everything entered in the “Green Power Certificates” column of the CCC Input tab should be entered here.

Scope 3

Scope 3: Commuting

- Verify that the number of commuters for each category (students, staff, faculty) is correct. (This may be different than the number noted in the CCC file, which was based solely on the number of FTEs and Part-Time students/staff/faculty).
- Verify that your mode distribution is accurate relative to your # of commuters for each category (students, staff, faculty).
- If you have commuters traveling via transit provided by the campus fleet (e.g. buses operated by the campus), the fuel for those buses should have been entered under the Scope 1: Transport Fuels section. To avoid double-counting, those commuters for each category (students, staff, faculty) should be subtracted/discounted from both your total number of commuters for that category and your percentage of commuters using that mode in that category.

Scope 3: Food

- Did you enter a food scaling factor?

Scope 3: Waste and Wastewater

- If you are a member of the Nitrogen Footprint Tool Network, are you using the food consumption approach or the wastewater approach? If you are using the food consumption approach, did you enter a custom emissions factor? See this document for more information:
 - [How to transfer your data from the NFT to SIMAP](#)

Sinks: Compost

- Verify that the source types and qualifiers are accurate (*i.e.*, Agricultural vs dining waste, Compost used on campus as soil amendment?)

Sinks: Non-Additional Sequestration

- Verify that these reflect sequestration that is happening as a result of the institution's practices that are NOT "additional."

Sinks: Offsets

- Verify that all qualifiers (e.g., Origination, Type, Verification, Confidence) for the data entries are completed and accurate.

- For Custom Emissions Factors and Custom Fuel Mixes
- Explain what takes precedence.
- Verify that the relevant EF/Fuel mix has been entered/saved/selected for all sources. Custom Fuel Mix will take precedence over all other factors.

Completing your data set:

When your data set is finalized, go to the 'Data Mgmt' tab and [Status link](#). Check that year and click 'Save' to indicate that data entry is complete.