Microsoft

Mastering Cloud for Sustainability: Troubleshooting Essentials

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Ask me about…

- *Power Platform*

- *Sustainability*

- *Coffee!*

Scenario

Contoso Coffee
Scope 3 Category 1 emissions

Contoso Coffee, a specialty coffee company, is having challenges when attempting to calculate their Scope 3 Category 1 – Purchased Goods and Services emissions.

Agenda

Data Ingestion Issues

Calculation Complications

Best Practices and Lessons Learned
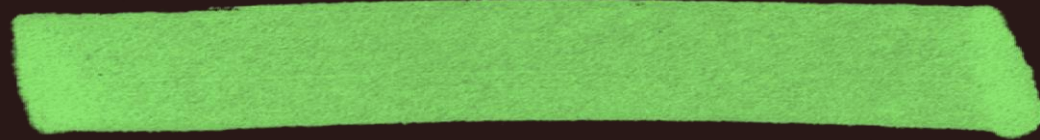
Tools, Resources, and Q&A

Meet Andrew!

Andrew is our friendly AI assistant!

He will be helping us troubleshoot the issues that Contoso Coffee is experiencing in the Scope 3 Category 1 emission calculations.

Data Ingestion

https://mc4stechsummit1.crm.dynamics.com/main.aspx?appid=534b8f39-d6ff-ee11-a1ff-0022482d979f&pagetype=entitylist&etn=msdyn_dataconnection&viewid=30a14698-a705-ec11-b6e6-002248775345&vie...

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SANDBOX

Try the new look

+ New   ⟳ Refresh

Data imports   Power Query templates

Data imports

Get a holistic, reliable look at your organization's emissions by using data imports to import activity and reference data. Learn more about data imports
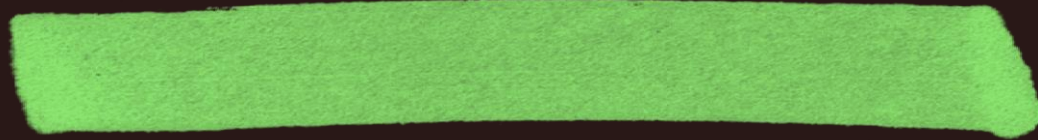
⚑ Clear all filters   ⚑ Filters   🔍 Search

Name ↑	Import status	Progress		Total records	Inserted	Failed	Updated	Deleted	Ready to import	Mapping statu
2023 Brazilian Coffee ...	● Error	ⓘ ▬▬▬▬▬	100%	11	—	11	—	—	🔵 Yes	Mapped

Navigation menu
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  - Allocation profiles (p...
- Value chain
- Settings

Key takeaways

→ **Click on the Connection name or the Information Icon to see the connection refresh history**

→ **Download and review the excel error report for more details**

→ **Use the data import error page to learn more about the error codes that were returned**

Resolve data import error messages

→ **Double check your reference data prior to attempting a data import.**

Calculations

Calculation profiles All active calc profiles by source - Power Apps - [InPrivate]

https://mc4stechsummit1.crm.dynamics.com/main.aspx?appid=534b8f39-d6ff-ee11-a1ff-0022482d979f&pagetype=entitylist&etn=msdyn_calculationprofile&viewid=3fd01268-8f52-ee11-be6f-000d3a36d099&viewType...

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What-if analysis (...

Document analysi...

Data

Imports

Carbon activities

All emissions

Water data

Waste data

Reference data

Data capture (pre...

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Calculations

Models

Calculation profiles

Factor libraries

Allocation profiles...

Value chain

Settings

Application

Report settings

Company profile

...ams chat

Show As | Show Chart | + New | ↻ Refresh

Share

All active calc profiles by source

Edit filters | Filter by keyword

These profiles are used to generate carbon emissions, water usage, and waste data. Learn more about calculation profiles

| Carbon activities | Carbon emissions | Water | Waste | Reference data | Value chain |

| | All | | | | | | |

Scope 1: Direct emissions						
Fugitive emissions						
Industrial process						
Mobile combustion						
Stationary combustion						

Scope 2: Indirect emissions						
Purchased cooling						
Purchased electricity						
Purchased heat						
Purchased steam						

| Scope 3: Value chain | upstream | | | | | |

| Scope 3: Value chain | downstream | | | | | |

Name ↑	Status	Last run	Processed Activiti...	Failed Activities	Owner	Created By
Contoso Purchased Coffee Beans	● Succeeded	5/1/2024 3:16 PM	0	0	Steven Pride	Steven Pride
Purchased Goods and Services Default Profil	—	—	—	—	Steven Pride	Steven Pride

Key takeaways

→ Check the Processed and Failed activity columns to ensure your calculation executed on the expected number of records.

→ Use the Edit Filters function on the respective activity data page to further test your calculation profile filter.

→ Double check your filter row operators if you are not seeing the correct number of records.

https://mc4stechsummit1.crm.dynamics.com/main.aspx?appid=534b8f39-d6ff-ee11-a1ff-0022482d979f&pagetype=entitylist&etn=msdyn_calculationprofile&viewid=3fd01268-8f52-ee11-be6f-000d3a36d099&vi...

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Try the new look

Show As | Show Chart | + New | ⟳ Refresh

Share

All active calc profiles by source

Edit filters | Filter by keyword

These profiles are used to generate carbon emissions, water usage, and waste data. Learn more about calculation profiles

Carbon activities | Carbon emissions | Water | Waste | Reference data | Value chain

	Name ↑	Status	Last run	Processed Activiti...	Failed Activities	Owner	Created By
All	Contoso Purchased Coffee Beans	● Completed With Errors	5/2/2024 2:30 AM	11	11	Steven Pride	Steven Pride
Scope 1: Direct emissions	Purchased Goods and Services Default Profil	—	—	—	—	Steven Pride	Steven Pride
Fugitive emissions							
Industrial process							
Mobile combustion							
Stationary combustion							
Scope 2: Indirect emissions							
Purchased cooling							
Purchased electricity							
Purchased heat							
Purchased steam							
Scope 3: Value chain | upstream							
Scope 3: Value chain | downstream							

Sidebar navigation:

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- Waste insights
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- Intelligent insight...
- What-if analysis (...
- Document analysi...

Data
- Imports
- Carbon activities
- All emissions
- Water data
- Waste data
- Reference data
- Data capture (pre...
- Data approval
- Custom dimensions

Missing Factor Mapping

A factor mapping could not be found that matched this activities reference data, or the factor mapping was mapped to an emission in a different factor library.

Check the factor mapping fields used in the model against your activity data.

Check that factor mappings have been correctly configured for the fields and factor library listed in the model

Add factor mappings for reference data you may not have mappings for.

Fuel * EF (Fuel Type): Missing or incorrect emission factor mapping. Please check the mappings and try again.

GHG Unit issue

The GHG unit fields, CH4 unit, N2O unit, CO2 unit, etc. are not using units in the Weight/Mass unit group or are missing a base unit.

Check the emission factor unit values

Check the unit group being used in the EF unit values

Check the base unit for the units and unit group

Calculating emissions failed for this activity. Please try again. If the problem continues, contact your system administrator or Microsoft Support for help. Writing the emission failed due to the following error: Unable to convert from CO_2E unit to CO_2E (mt). This could be because one of the base units is not defined or they have different base units. Please check the CO_2E unit and try again.

Unit conversion issue

The units in use are from different unit groups or missing a base unit to use in conversion

Check the Emission or Estimation Factor unit group against the activity data unit group

Check that the base unit is set for the unit used and the unit group

Consider using an Estimation Factor to convert from one unit group to another.

Spend-based calculation: The unit conversion is not possible from kg to USD 2018. Either the base unit for one of the units is not defined, or the given units have different base units. The unit conversion is not possible from kg to USD 2018. Either the base unit for one of the units is not defined, or the given units have different base units.

Key takeaways

→ Use the Show History button for a calculation profile to review the calculation job history.

→ Hover over the Error message column to see more details about a calculation error.

→ Open the calculation model and source data in new tabs for further investigation.

→ If the calculation model uses factor mappings, check that factor mappings are configured for the reference data in use.

→ Check the units and unit groups to be used in the calculation.

Best Practices
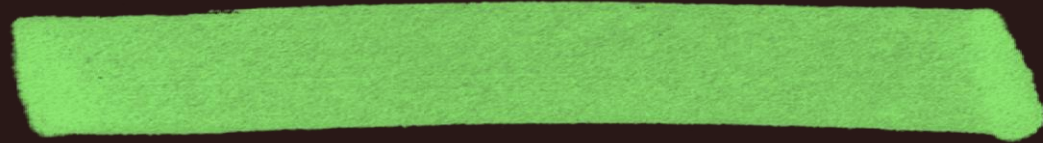
Best Practices and Lessons Learned

Check your Reference Data!

Ensure your reference data is correctly configured to avoid issues.

Test profile filters in your data views

Use activity data views to test your calculation profile filters.

Check factor mappings against activity data

Compare factor mapping reference data with your activity data to identify any discrepancies.

Double check units and unit groups

Verify the units and unit groups, adding any specific to your region or industry.

Use the Data Imports area to run calculations automatically

Import data via Connections in the Data Imports area to enable automatic calculations.

Resources
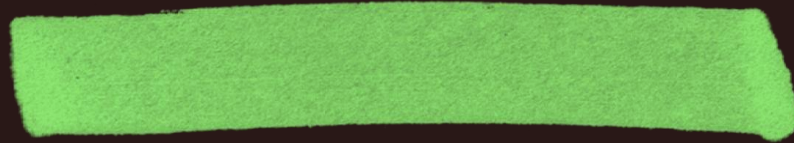
Tools and Resources

Information Icon

● Complete   ⓘ
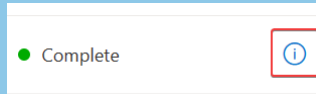
Use the Information icon on Data Import rows to take quick action on previous connection refresh attempts.

Resolve data import error messages

Show History
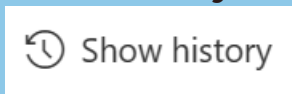
↺ Show history

Use the show history button to dig deeper into a calculation profile execution history.

Helpful Resources

aka.ms/mcfsdocs

aka.ms/mcfswai
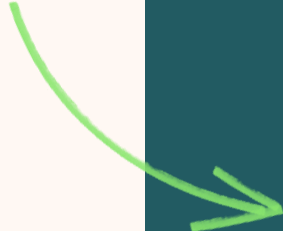
aka.ms/mcfslearning paths

Related sessions

Session	Title	Abstract	Speaker	Date
SUS03W	How to pursue water positive and zero waste objectives	Dive deep into the world of sustainable water and waste management through Sustainability Manager and get a glimpse of how our innovative solutions enable organizations to get better visibility into their water and waste data. Don't miss this opportunity to learn more about the efficient calculations, analysis, and reporting of sustainability data with Microsoft Cloud for Sustainability.	Abhinav Premsekhar	Wednesday, May 8
SUS01R	Custom factor mappings are as easy as 1, 2, 3	Discover the simplicity of custom factor mappings in Microsoft Cloud for Sustainability with this session. Learn how to streamline your emission calculations across multiple facets by leveraging factor mappings to avoid redundant computations. We'll explore how to enhance the built-in reference data with custom factor mappings, allowing for tailored activity calculations that can pivot on unique factors like timeframes or industry specific information.	Steven Pride	Thursday, May 9

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Thank you!

→ **How was the Summit? Share your feedback!**
aka.ms/MCfSTSFeedback

→ **Microsoft Cloud for Sustainability documentation**
aka.ms/MCfSDocs

→ **Join the Sustainability Community!**
aka.ms/MCfSCommunity

→ **Learning Resources**
aka.ms/CloudforSustainabilityLearnCollection

Appendix
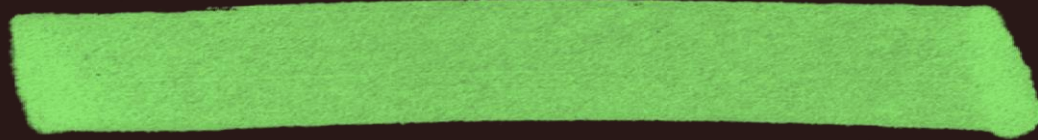
Data Ingestion Delayed

A data import job has been in the Scheduled status for an extended period, waiting to be processed.

Select the connection that is delayed.

Click Cancel on the Command bar.

The page will refresh

Click Import on the Command bar.

Calc model template for handling multiple unit groups

Example scenario: Stationary Combustion – Natural Gas activity data in Therms and Standard Cubic Feet (scf)
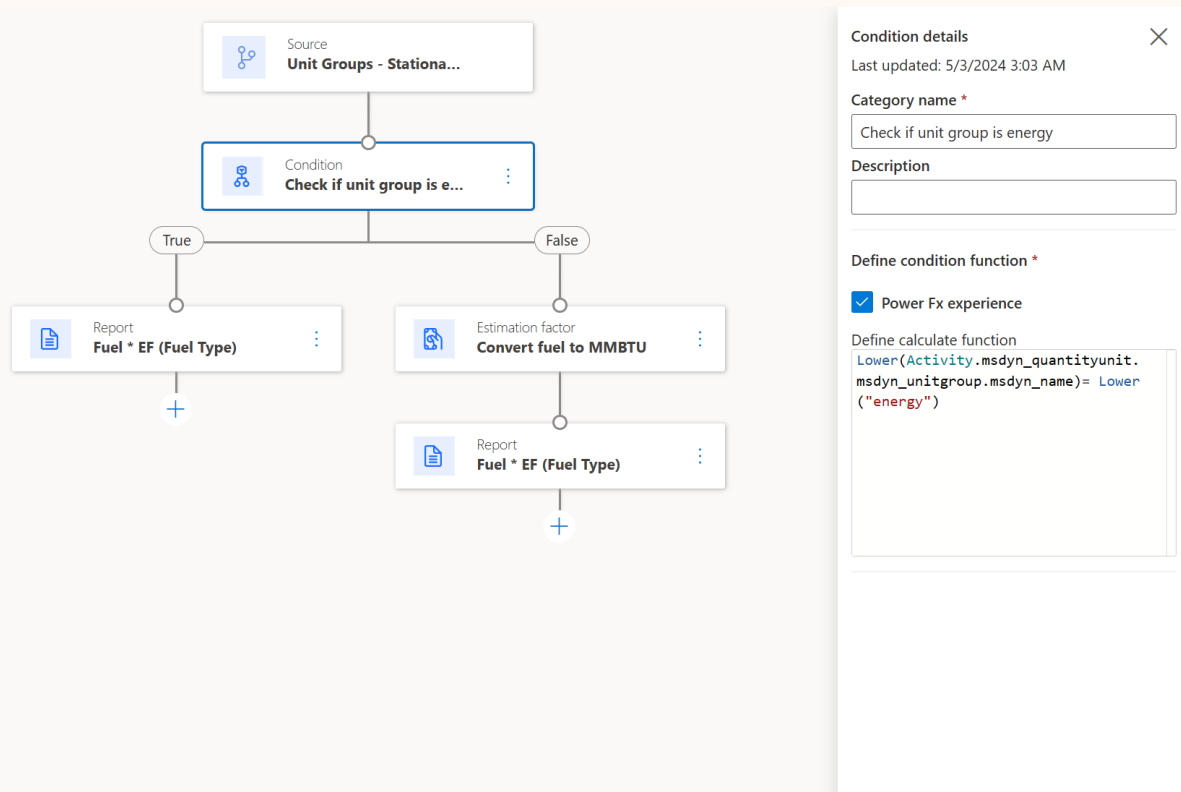
Conditional node

PowerFx expression template:

Lower(Activity.msdyn_quantityunit.msdyn_unitgroup.msdyn_name)= Lower("<unit_group_name>")

Example scenario:

Lower(Activity.msdyn_quantityunit.msdyn_unitgroup.msdyn_name)= Lower("energy")

Calc model template for handling multiple unit groups
Part 2: Explanation

In this scenario, Contoso is receiving natural gas invoices in multiple unit types, across different unit groups.

- They are receiving natural gas data in Therms, part of the Energy unit group, as well as Standard Cubic Feet (scf), part of the Volume unit group.
- A conditional node can be used to check the unit group name for the Activity Quantity unit field.

In this scenario, if the quantity unit, unit group is energy, then perform the report action using the EPA Stationary Combustion MMBTU factor library.

- Otherwise, we will convert from a volume unit to an energy unit using the Estimation Factor action.
- Once the unit conversion is performed in the Estimation Factor action, the new estimated quantity will be used in the report action using the EPA Stationary Combustion MMBTU factor library.

This will help avoid or resolve a unit conversion calculation error.

Deployment tips and tricks

1 NEVER install into **Default** environment type

Environment		Type
MSFT (default)	...	Default

2 Only install into Regions where MCFS is supported:
- Asia
- Australia (OCE)
- Europe (EUR)
- Germany (GER)
- Great Britain (GBR)
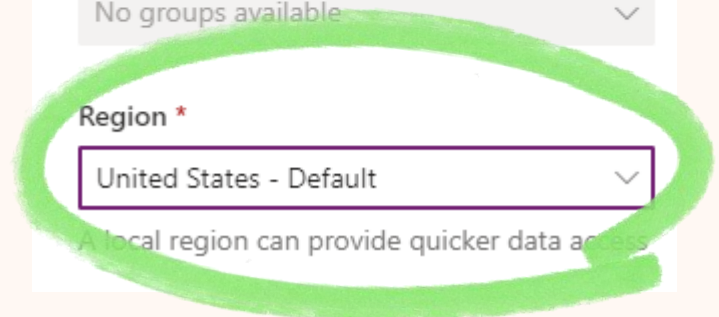- India (IND)
- United States

New environment

ⓘ This operation is subject to capacity constraints

Name *

SummitSandbox

Group

No groups available

Region *

United States - Default

A local region can provide quicker data access

Microsoft

Q&A

Please type your questions **in the chat** and we will answer them during the Q&A session.