

# IFS Cloud Emissions Tracker

## Configuration Guide



## Table of Contents

1. Configuration Guide.....	3
1.1 Introduction .....	3
1.2 Prepare your IFS Organization Access Tokens .....	3
<b>1.2.1 Creating IAM Client Account</b> .....	4
<b>1.2.2 Adding Permission Set to the User</b> .....	4
1.3 Azure Key Vault and Create Secrets.....	7
<b>1.3.1 Create Azure Key Vault</b> .....	7
<b>1.3.3 Create Secrets</b> .....	11
1.4 Setting up OneDrive for Excel Upload .....	12
1.5 Update Environment Variables .....	13
1.6 Configuring Environment Connections .....	14
<b>1.6.1 Create Connections</b> .....	14
<b>1.6.2 Configure Connections</b> .....	15
1.7 Turning on the Emission Tracker Flows and Processes.....	17
<b>1.7.1 Turn on Emission Tracker Flows</b> .....	17
<b>1.7.2 Turn on Emission Tracker Processes</b> .....	19
1.8 Refresh Power BI Reports .....	20
<b>1.8.1 Add and refresh reports in PowerBI</b> .....	20
<b>1.8.2 Configure Power BI Reports</b> .....	24
1.9 Run Your Emissions Tracker Application .....	25
1.10 Configure your Scope 3 Excel Import Templates.....	26
2. Security Roles and Sharing Emissions Tracker Application with Users.....	27
2.1 Share the Application with Users .....	27

# 1. Configuration Guide

## 1.1 Introduction

**Note:** Ensure you've followed the IFS Cloud Emissions Tracker Installation Guide prior to beginning the Configuration Process.

This guide is designed to provide you with comprehensive instructions on how to configure and customize Emissions Tracker Application to meet your specific needs and preferences.

To help you navigate through the configuration process efficiently, this guide is organized into sections each focusing on a specific aspect of configuration. You can follow the steps sequentially or jump directly to the sections that address your immediate needs.

Before you begin configuring Emissions Tracker Application, make sure you have the necessary access rights and permissions.

### **Prerequisites for configuring IFS Cloud Emissions Tracker**

- Admin Access to PowerApps
- Climatiq API Key ([Climatiq - API for Carbon Footprint Calculations](#)) – will be provided by IFS.
- For IFS Cloud customers - This is necessary if you plan to use the IFS Organization Import Utility or the IFS Cloud Integration feature.
- Azure Key Vault Data Administrator (For IFS Cloud Customers) – this will be needed if you are planning to use IFS Organization Import Utility (optional)

## 1.2 Prepare your IFS Organization Access Tokens

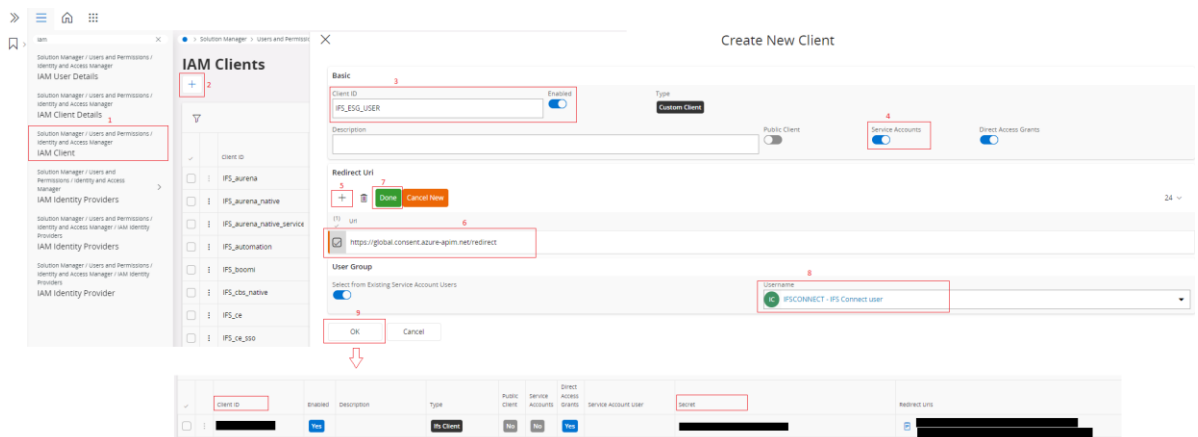
**Note:** This is an optional feature. If you want to configure this, you need to be a IFS Cloud customer.

### **Persona: IFS Cloud Customer**

The IFS Cloud Organization Setup Connector facilitates the direct importation of your company details from IFS Cloud. This is a one-time configuration that expedites the organization setup within the application. It's important to note that this feature is accessible exclusively to **IFS Cloud customers**, and is mandatory to configure this if you are planning to use IFS Organization setup connector features.

## 1.2.1 Creating IAM Client Account

1. Login to IFS Cloud and Go to **IAM Client** Page.
2. Add a new IAM Client.
3. Fill the Client ID with a suitable name (Example: IFS\_ESG\_USER) and turn on the **Enable** Toggle.
4. Turn on the service Accounts toggle On. (This will enable select from existing service Account Users on)
5. Add new Redirect URL as <https://global.consent.azure-apim.net/redirect>
6. For username, select the username where you want to give access.
7. Click on OK and see if your newly created record is visible in the grid.

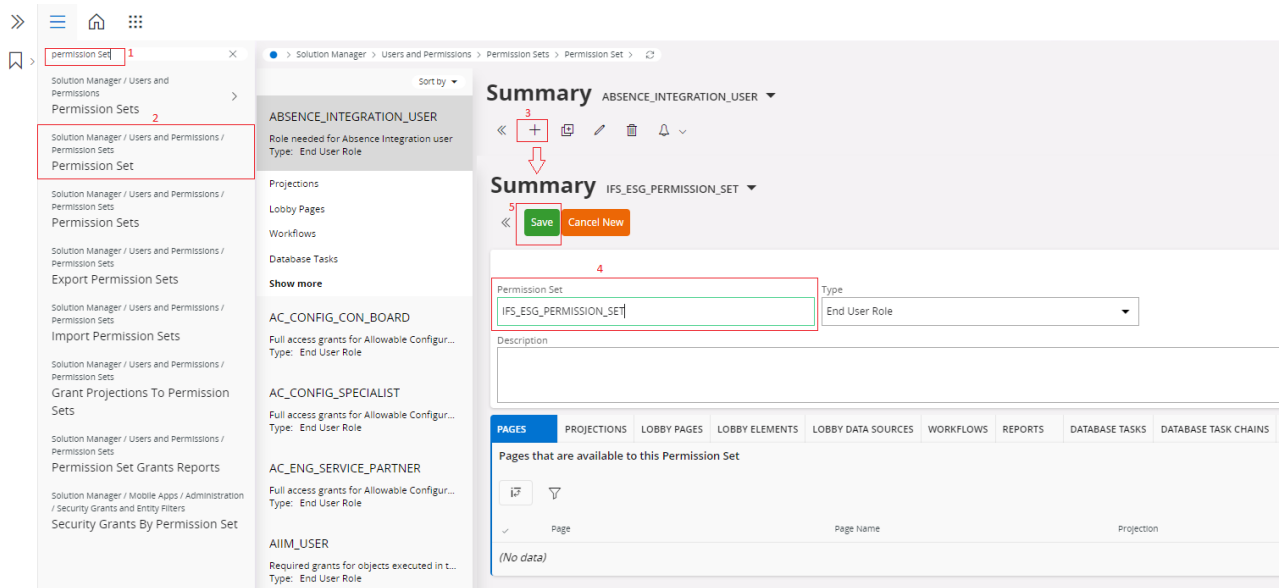


Client ID	Enabled	Description	Type	Public Client	Service Accounts	Direct Access Grants	Service Account User	Secret	Redirect URL
IFS_ESG_USER	Yes		Public Client	No	Yes	Yes	IFS_CONNECT - IFS Connect user	Secret	https://global.consent.azure-apim.net/redirect

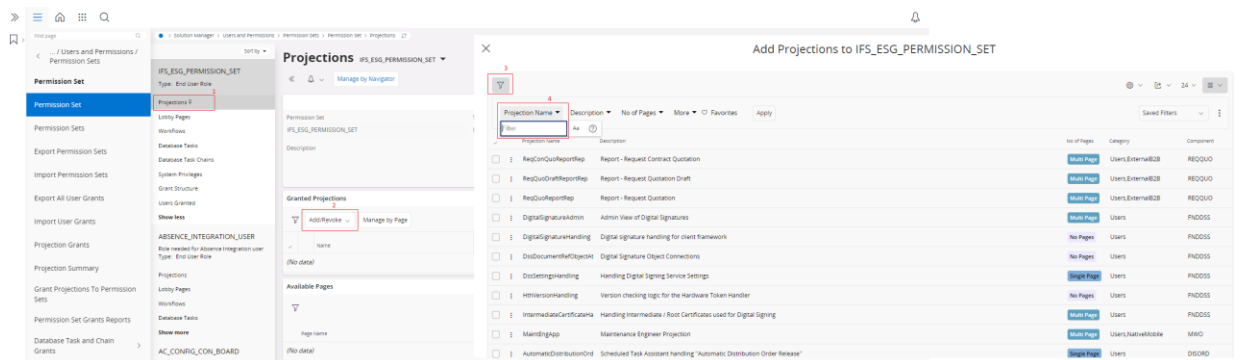
**Note:** You will need this newly created **Client ID** and **Secret** in Next Step. Section 1.5

## 1.2.2 Adding Permission Set to the User

1. Search **Permission Set** in the left Navigation search space. Select Permission Set
2. Select on new Permission Set.
3. Add a Name for the Permission Set (Example: IFS\_ESG\_PERMISSION\_SET)
4. You can leave the remaining selections as is, Click **Save**.



5. In the left navigation you can see the created Permission Set. Now let's map Projection to the IAM Client service Account User
6. Select the Projection and click on Add Projection.
7. From the panel you can filter the projection, select the checkbox, and hit ok button. You need to add below 5 projections.
  - CompanySiteHandling
  - CompaniesHandling
  - AccountingPeriodsHandling
  - SitesHandling
  - CompanyHandling



8. Next select "Users Granted" under the Permission set you have created.
9. Select Add Users and filter the user you have added under the IAM Client Account.

Find page

Users and Permissions / Permission Sets

Permission Set

Permission Sets

Export Permission Sets

Import Permission Sets

Export All User Grants

Import User Grants

Projection Grants

Projection Summary

Grant Projections To Permission Sets

Permission Set Grants Reports

Database Task and Chain Grants

IFS\_ESG\_PERMISSION\_SET

Type: End User Role

Projections

Lobby Pages

Workflows

Database Tasks

Database Task Chains

System Privileges

Grant Structure

Users Granted 0

Show less

ABSENCE\_INTEGRATION\_USER

Role needed for Absence Integration user

Type: End User Role

Projections

Lobby Pages

Workflows

Database Tasks

Show more

AC\_CONFIG\_CON\_BOARD

Sort by

Users Granted IFS\_ESG\_PERMISSION\_SET

Permission Set

IFS\_ESG\_PERMISSION\_SET

Description

Users Granted

Add Users

user

(No data)

Users that indirectly are granted this Permission Set

user

(No data)

Users Granted

Add Users

3

4

User

Active

More

Filter

Favorites

Apply

COPTESTER - COPTESTER

ANND - Anita Davies

NILEFR - Nicolas Lelercq

GIBOFR - Gilles Bourguard

JEFR - Jeremy Jeanyan

PAGUFR - Pascal Guilleminot

ALEX - Alexander Danielsson

JOHA - John Haley

DOWI - Donna Winsor

EMERSON - Emerson Fitzgald

FRFO - Fred Fox

**Note:** Before proceeding with step 1.3 for Azure Key Vault activation, it is mandatory to complete the following configurations.

- Prepare your IFS Organization Setup Connector – [Step 1.2](#)

## 1.3 Azure Key Vault and Create Secrets

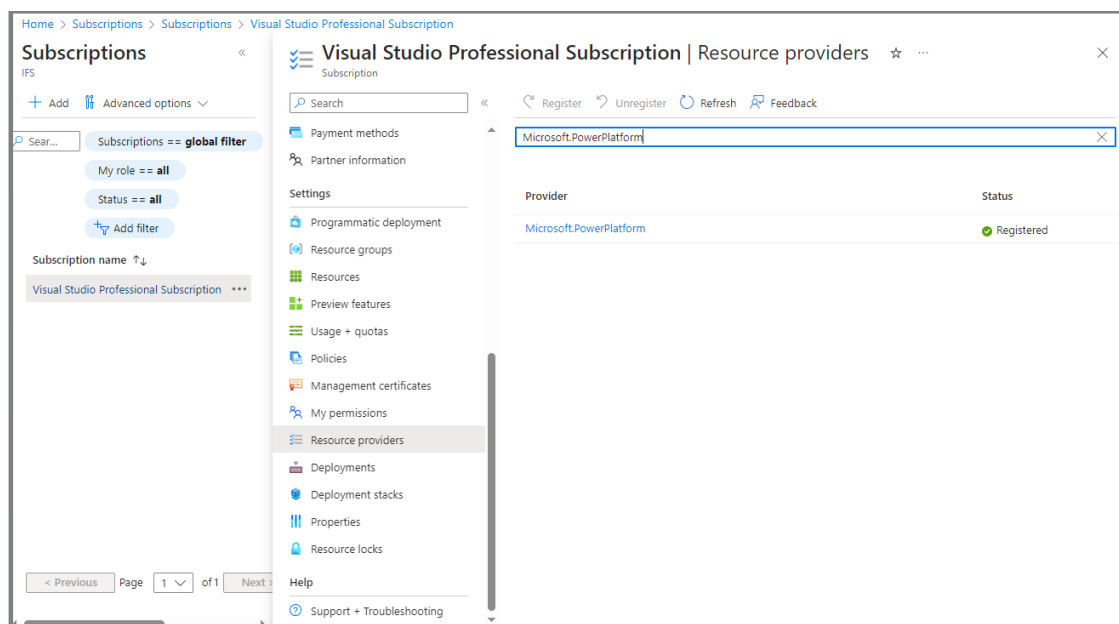
**Note:** This is an optional feature, you need to be an IFS Cloud customer for this.

**Persona: Azure Key Vault Administrator**

Refer to [Microsoft Key Vault documentation](#) for instructions on creating an Azure Key Vault.

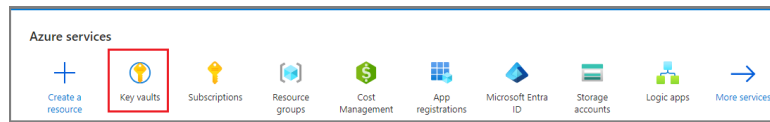
### 1.3.1 Create Azure Key Vault

1. Navigate to [portal.azure.com](https://portal.azure.com).
2. Register the Microsoft.PowerPlatform resource provider in your Azure subscription.
  - Go to your Azure subscription and locate the resource providers.
  - Verify if the Microsoft.PowerPlatform resource provider is registered; if not, proceed to register it.



3. Create an Azure Key Vault.
  - a. Locate the Key Vault in Azure and initiate the creation of a new Key Vault

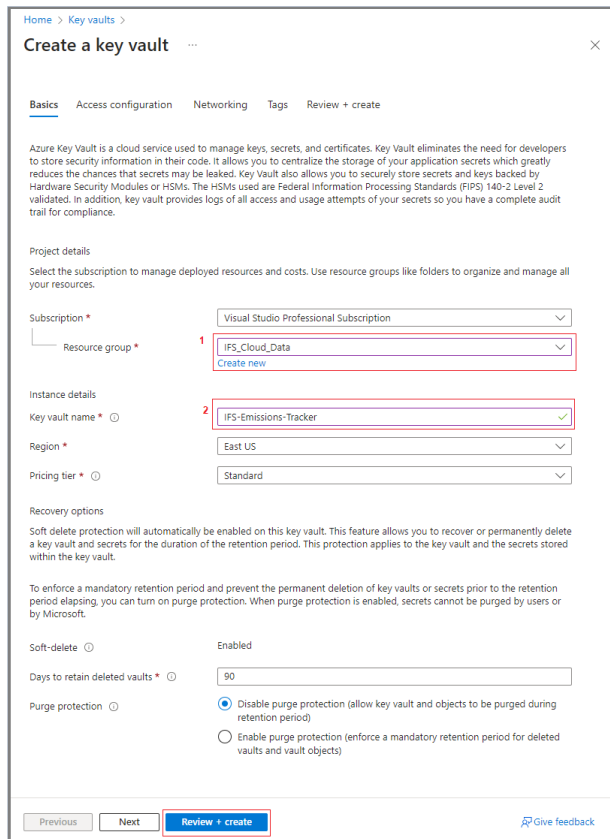




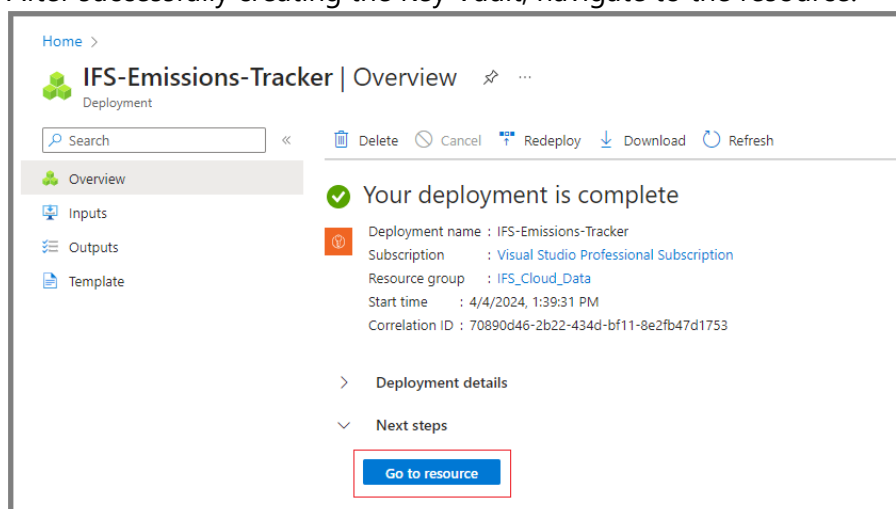


#### 4. Choose "New Key Vault."

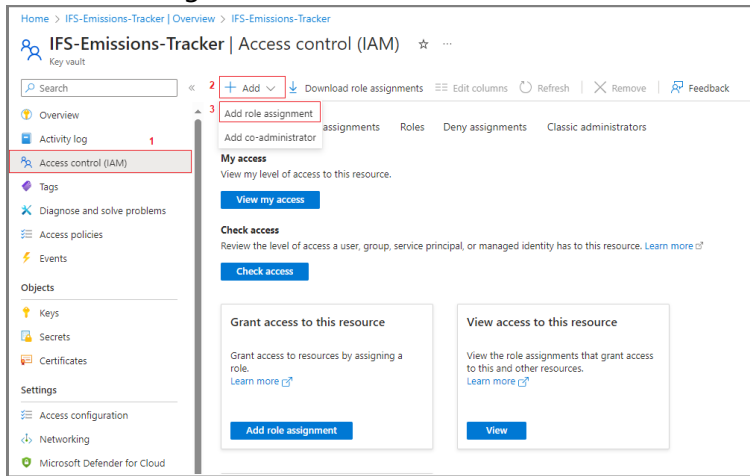
- i. Within the resource group section, choose "Create new" and assign a name for the resource group, for example, "IFS\_Cloud\_Data".
- ii. Enter a name for the Key Vault. Ex: IFS-Emissions-Tracker
- iii. Next, Select Review and Create button.



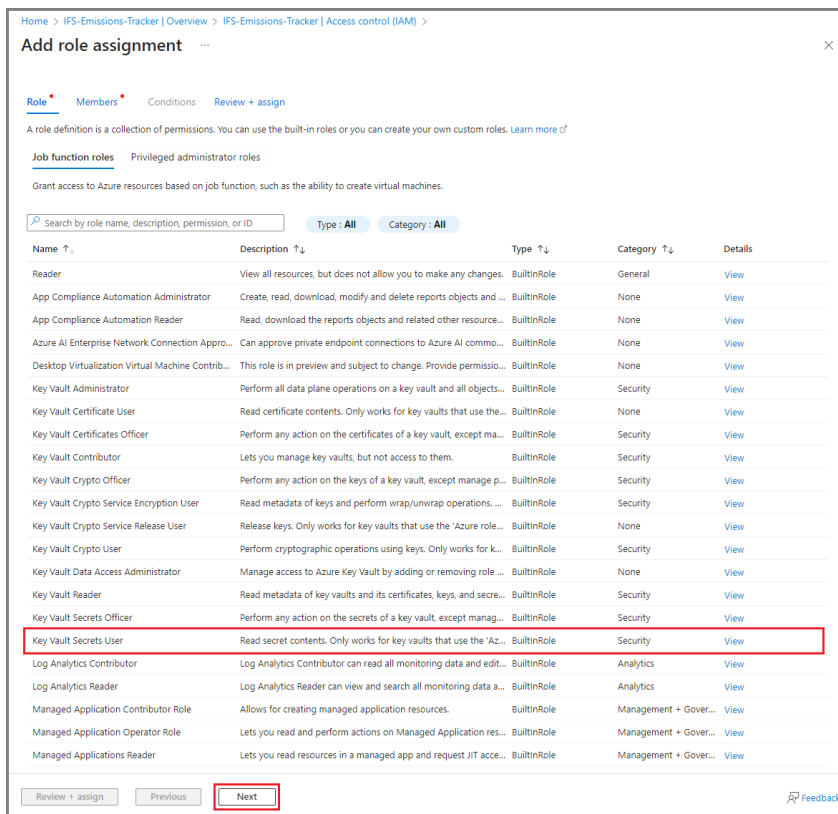
- iv. After successfully creating the Key Vault, navigate to the resource.



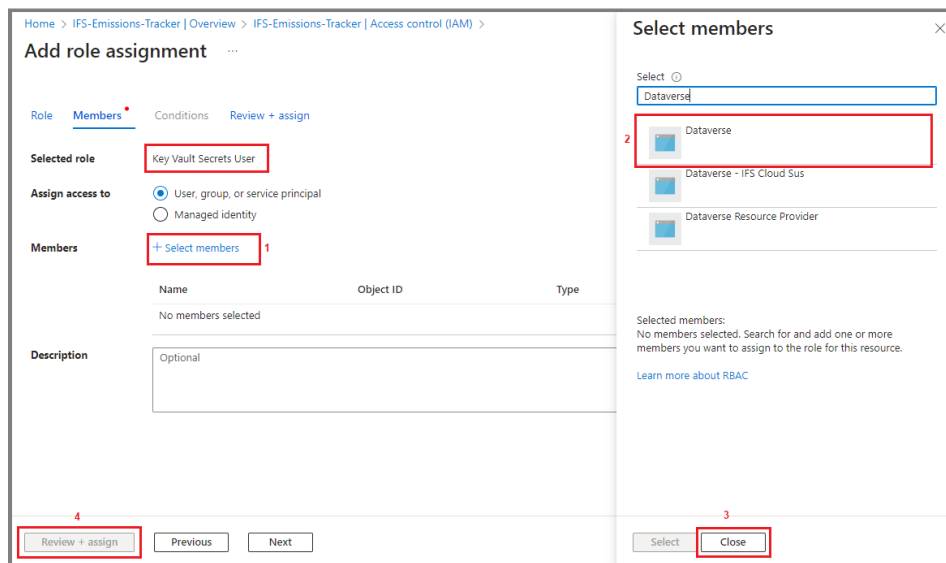
- Go to the resource and choose Access Control from the navigation menu. Then, click on Add Role Assignment.



- Choose the Key Vault Secret User.



- Choose "Members" and include "Dataverse." Afterwards, select review and assign.



Home > IFS-Emissions-Tracker | Overview > IFS-Emissions-Tracker | Access control (IAM) >

Add role assignment ...

Role **Members** Conditions Review + assign

Selected role **Key Vault Secrets User**

Assign access to ☒ User, group, or service principal ☐ Managed identity

Members **+ Select members** 1

Name	Object ID	Type
No members selected		

Description Optional

2 **Dataverse**

Dataverse - IFS Cloud Sus

Dataverse Resource Provider

Selected members:  
No members selected. Search for and add one or more members you want to assign to the role for this resource.  
[Learn more about RBAC](#)

4 **Review + assign** Previous Next

3 **Close**

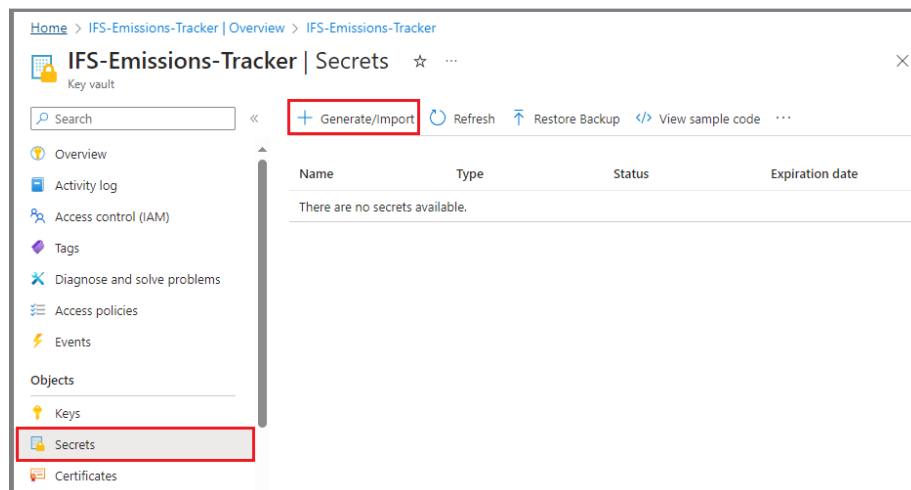
### 1.3.3 Create Secrets

You are required to generate two secrets.

Secret Name	Secret Value
IFS-Org-Client-ID	<a href="#">Section 1.2.1</a>
IFS-Org-Client-Secret	<a href="#">Section 1.2.1</a>

Table 1

- Find the "Secrets" in Key Vault Navigation and select "Generate/Import."



Home > IFS-Emissions-Tracker | Overview > IFS-Emissions-Tracker

IFS-Emissions-Tracker | Secrets ☆ ...

Key vault

Search << **+ Generate/Import** Refresh Restore Backup View sample code ...

Name	Type	Status	Expiration date
There are no secrets available.			

Overview

Activity log

Access control (IAM)

Tags

Diagnose and solve problems

Access policies

Events

Objects

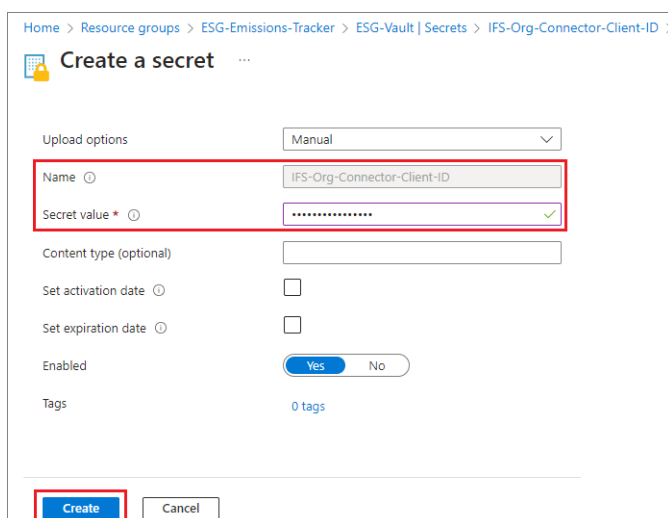
Keys

**Secrets**

Certificates

- Add Name, Secret Value and hit Create.
  - Name: IFS-Org-Client-ID

- Secret: xxxxxxxxxxxx (Created under [Section 1.2.1](#))



Home > Resource groups > ESG-Emissions-Tracker > ESG-Vault | Secrets > IFS-Org-Connector-Client-ID >

### Create a secret

Upload options: Manual

Name: IFS-Org-Connector-Client-ID

Secret value: [Masked]

Content type (optional):

Set activation date: ☐

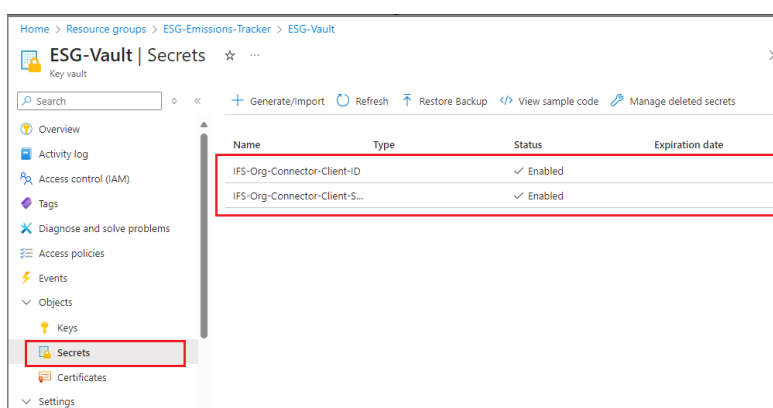
Set expiration date: ☐

Enabled: Yes No

Tags: 0 tags

Create Cancel

3. Create all two (2) secrets given in Table 1.



Home > Resource groups > ESG-Emissions-Tracker > ESG-Vault

### ESG-Vault | Secrets

Key vault

Search: [Search bar]

+ Generate/import Refresh Restore Backup View sample code Manage deleted secrets

Name	Type	Status	Expiration date
IFS-Org-Connector-Client-ID		✓ Enabled	
IFS-Org-Connector-Client-S...		✓ Enabled	

Overview Activity log Access control (IAM) Tags Diagnose and solve problems Access policies Events Objects Keys Secrets Certificates Settings

## 1.4 Setting up OneDrive for Excel Upload

The IFS Cloud Emissions Tracker allows users to upload data through Excel files, which are then stored in OneDrive. To achieve this, follow the steps provided below to save your Excel files onto OneDrive. This feature is optional, you can avoid setting this up if you do not plan to use this.

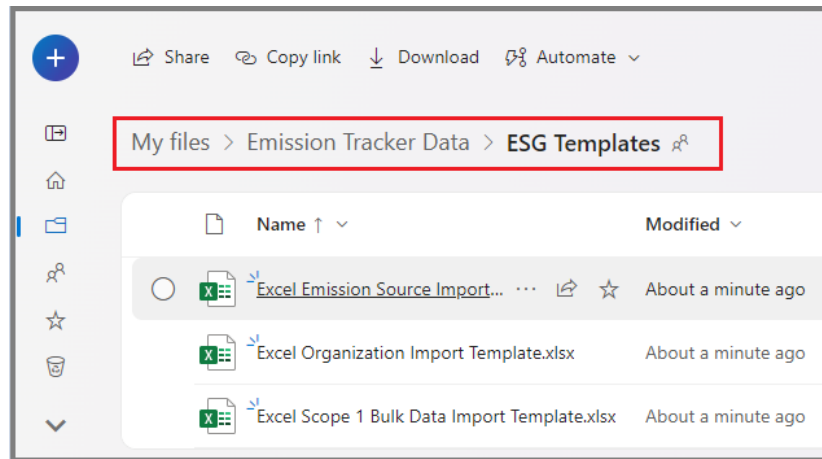
**Note:** This is an optional feature, The Excel template needed will be provided by IFS.

1. Create Folder in your OneDrive.
2. Upload the Bulk Upload excel file into this folder. Optionally, you can organize them into separate folders, and currently, there is one template file available.
  - i. Bulk Data Upload – (Upload Scope 1 & 2 Data)
3. You will need this Excel path in future steps, so make sure to keep note of this.

**Note:** How to read excel paths.

My files will be your Root folder. You can define Root folder with forward slash (/).

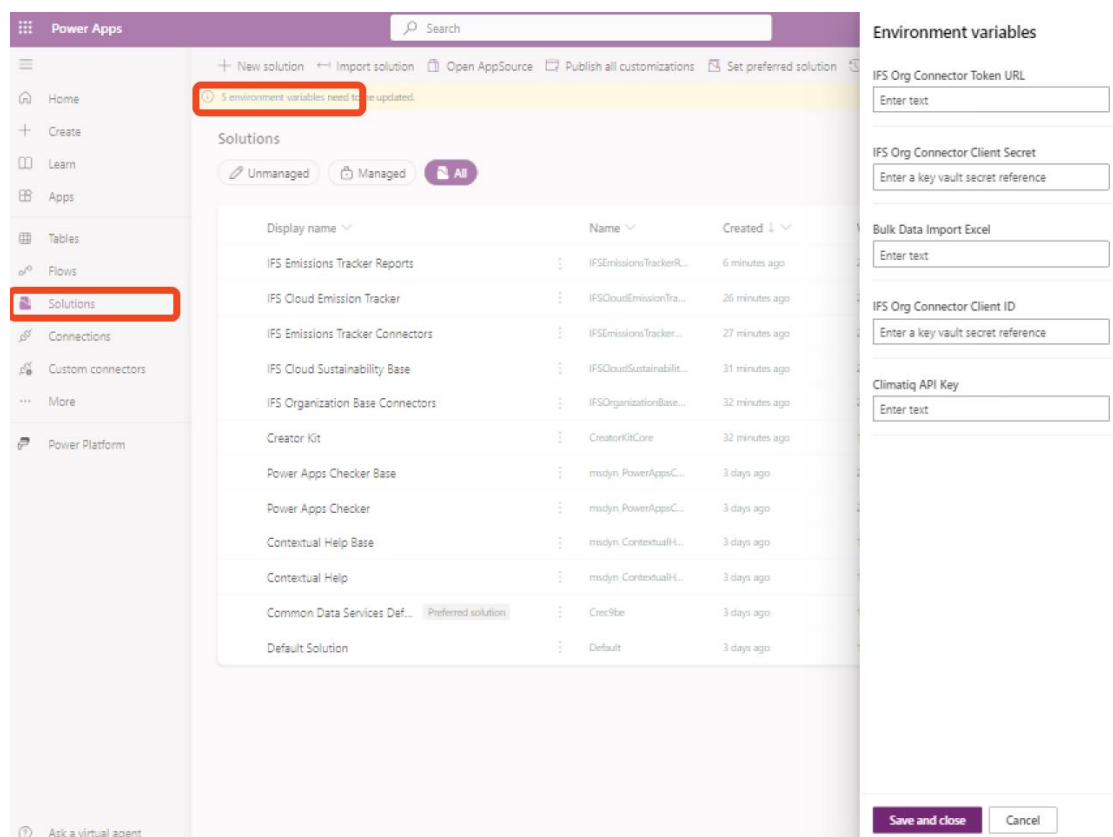
Ex: My files > Emission Tracker Data > ESG Templates > ExcelFileName.xlsx  
/ Emission Tracker Data/ ESG Templates / ExcelFileName.xlsx



## 1.5 Update Environment Variables

Once you install application successfully, you need to update configuration data to work with IFS Cloud and Excel file.

1. Navigate to your Power apps(make.powerapps.com) Environment and you can see there is warning available to update Environment variables.



Update selected environment variables as below.

	Environment Variable Name	Value	Required
1	Climatiq API Key	{ClimatiQ API Key Received from IFS}	Yes
2	ESG Organization Excel	<a href="#">Section 1.4</a>	No
3	Scope 1 and 2 Data Upload Excel	<a href="#">Section 1.4</a>	No
4	IFS Org Connector Client ID (IFS Cloud Customer Only)	/subscriptions/{AzureSubscriptionID}/resourceGroups/{ResourceGroupName}/providers/Microsoft.KeyVault/vaults/{VaultName}/secrets/{KeyName}	No
e x		/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/IFS_Cloud_Data/providers/Microsoft.KeyVault/vaults/IFS-Cloud-Keys/secrets/IFS-Org-Client-ID	No
5	IFS Org Connector Client Secret (IFS Cloud Customer Only)	/subscriptions/{AzureSubscriptionID}/resourceGroups/{ResourceGroupName}/providers/Microsoft.KeyVault/vaults/{VaultName}/secrets/{KeyName}	No
e x		/subscriptions/00000000-0000-0000-0000-000000000000/resourceGroups/IFS_Cloud_Data/providers/Microsoft.KeyVault/vaults/IFS-Cloud-Keys/secrets/IFS-Org-Connector-Client-Secret	No
6	IFS Org Connector Token URL (IFS Cloud Customer Only)		No
e x		ifs23r2bnddevcmb-ext-rnd.corporate.ifs.com/auth/realms/ifs23r2bnddevcmb	No

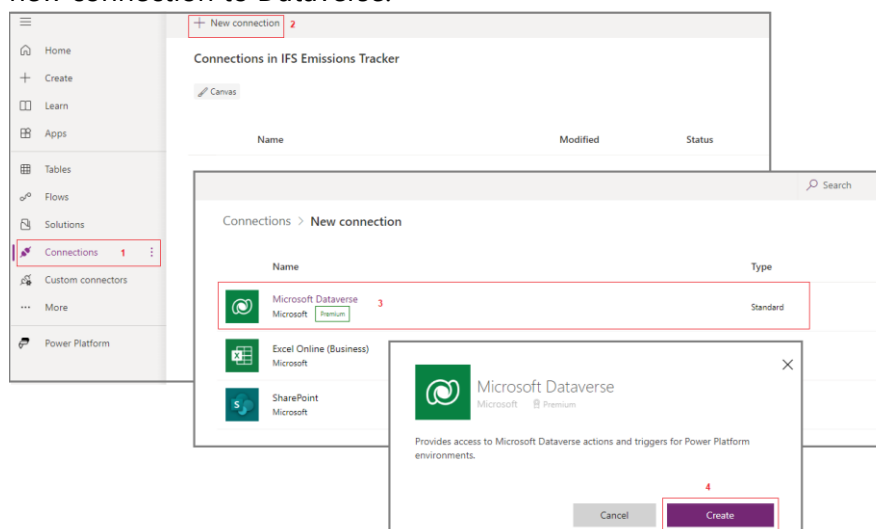
## 1.6 Configuring Environment Connections

### 1.6.1 Create Connections






**Note:** The Excel Online(Business), OneDrive for Business and IFS Organisation connector connections will be needed, if planning to use these features, they are optional.

1. Access the “Connections” option within the Power Apps environment. If you don't see it listed under Navigation, you can locate it under the ...More menu.

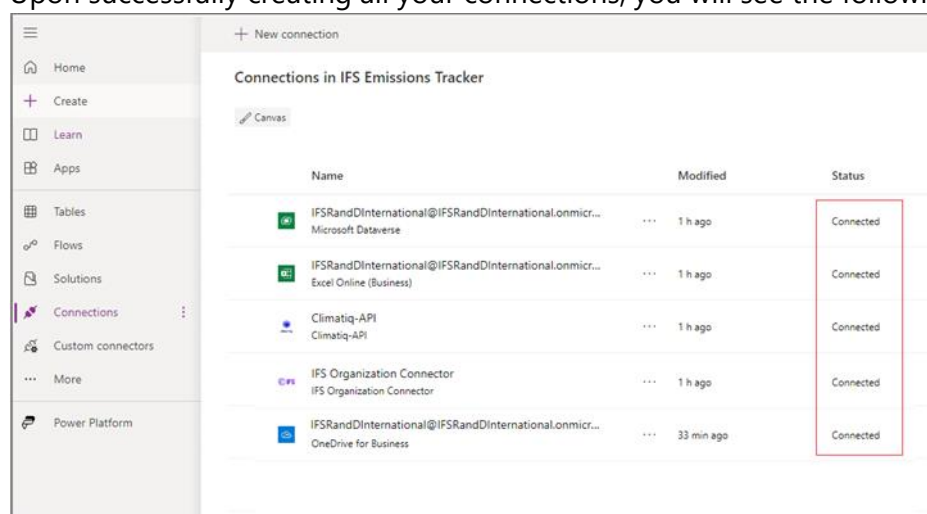
- Click on "New Connection" and then select **Dataverse** to initiate the creation of a new connection to Dataverse.



- Follow the same steps for below Connections.

Connection Name	Allowed User	Connection
Dataverse	Any user	 Microsoft Dataverse Microsoft Premium
Excel Online (Business)	Any user	 Excel Online (Business) Microsoft
OneDrive For Business	Any user	 OneDrive for Business Microsoft
Climatiq-API	Any user	 Climatiq-API IFS RandDInternational
IFS Organization Connector	(IFS Cloud Users Only)	 IFS Organization Connector IFS RandDInternational

- Upon successfully creating all your connections, you will see the following:

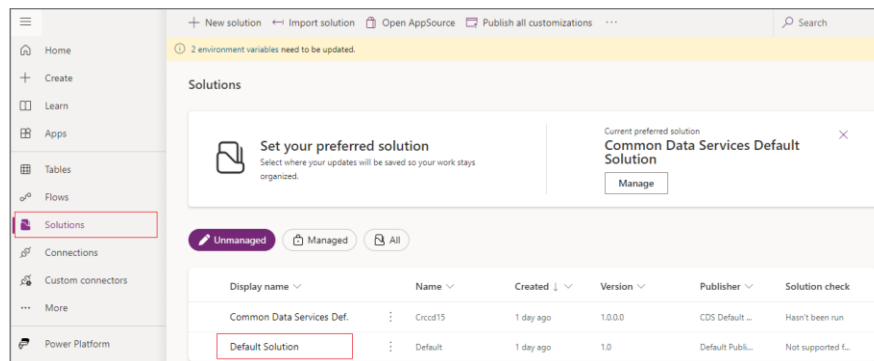


## 1.6.2 Configure Connections

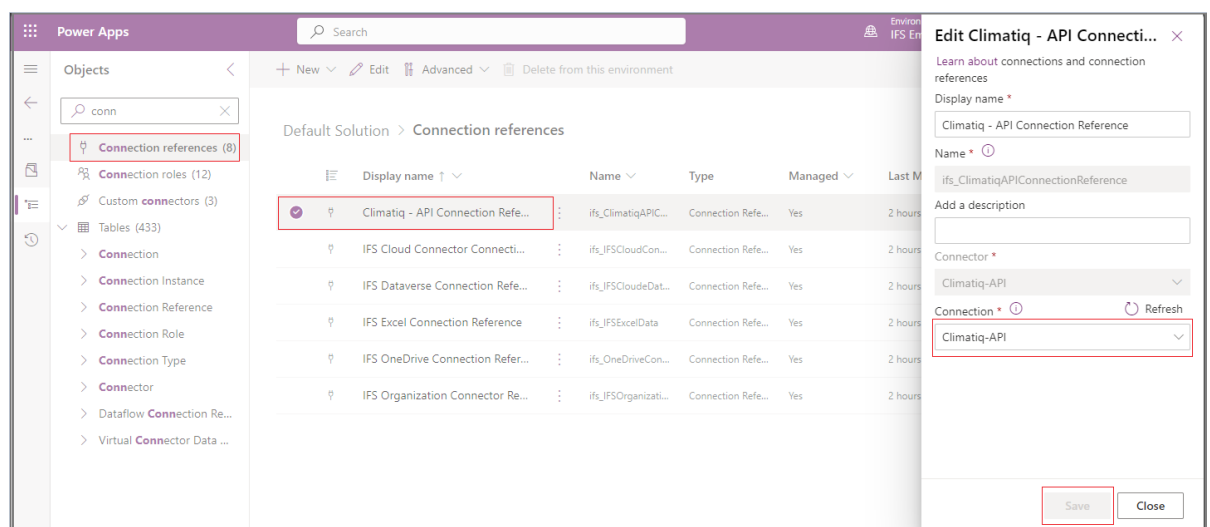
In here we are going to configure connections created in [sections 1.6.1](#)



1. Access the “Solution” section within the PowerApps environment and select **Default Solution**.

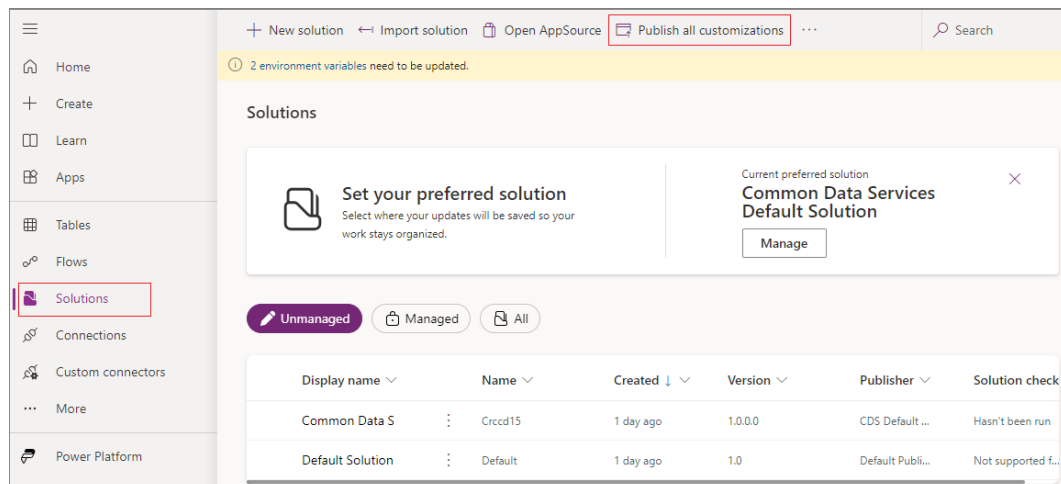


2. Within the default solution, search for **Connection Reference**.
3. Select each connection listed below and select the connection you have created under [section 1.6.1](#).



Connection Name	Allowed user
Climatiq - API Connection Reference	Any User
IFS Dataverse Connection Reference	Any User
IFS Excel Connection Reference	Any User
IFS OneDrive Connection Reference	Any User
IFS Organization Connector Reference	IFS Cloud Customers Only

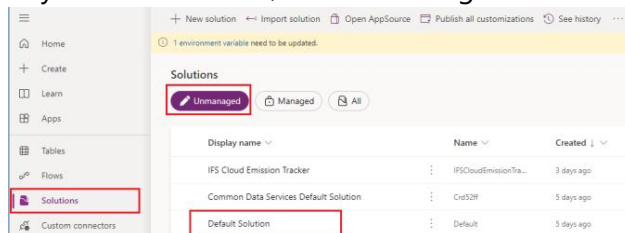
#### 4. Navigate back to Solution and Select "Publish all Customizations"



## 1.7 Turning on the Emission Tracker Flows and Processes

### 1.7.1 Turn on Emission Tracker Flows

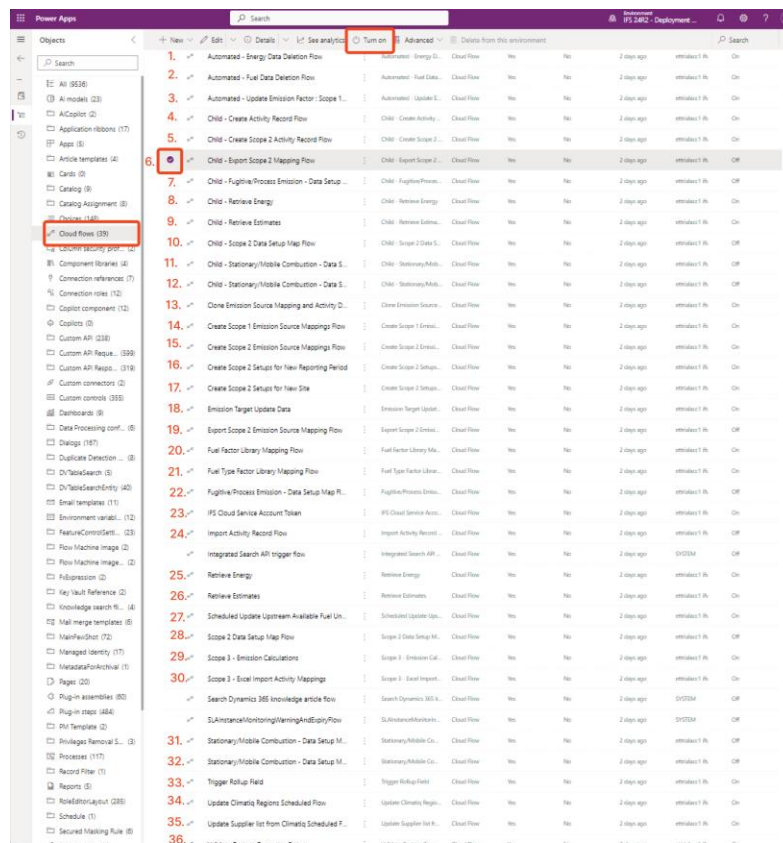
1. In your Environment, from the navigation Select Solutions.



- Under the Unmanage tab select Default Solution and search for cloud flows. You can see most of the flow's status will be off. We need to turn on all these flows.

**Note:** Turn on Child flows first.

- Select the flow and click on "Turn On" button on the tool bar. (If flow status is OFF)



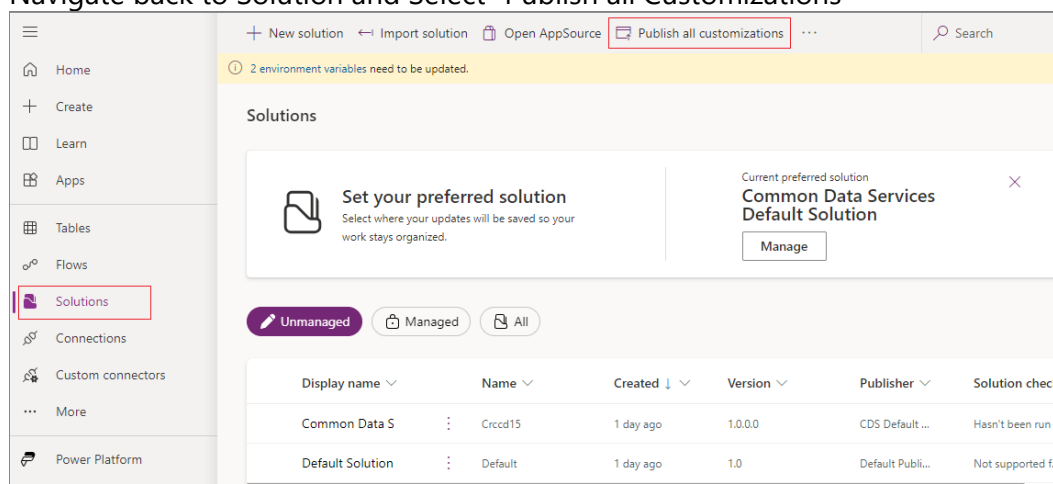
Following are the list of flows and it's related features, if needed that needs to be turned on:

Flow Number	Dependant Feature	Mandatory
1.	IFS Cloud Emissions Tracker	Yes
2.	IFS Cloud Emissions Tracker	Yes
3.	IFS Cloud Emissions Tracker	Yes
4.	IFS Cloud Emissions Tracker	Yes
5.	IFS Cloud Emissions Tracker	Yes
6.	Excel Bulk Upload Feature	No
7.	Excel Bulk Upload Feature	No
8.	IFS Cloud Emissions Tracker	Yes
9.	IFS Cloud Emissions Tracker	Yes
10.	Excel Bulk Upload Feature	No
11.	Excel Bulk Upload Feature	No
12.	Excel Bulk Upload Feature	No
13.	Clone Data Feature	No
14.	IFS Cloud Emissions Tracker	Yes

15.	IFS Cloud Emissions Tracker	Yes
16.	IFS Cloud Emissions Tracker	Yes
17.	IFS Cloud Emissions Tracker	Yes
18.	IFS Cloud Emissions Tracker	Yes
19.	Excel Bulk Upload Feature	No
20.	IFS Cloud Emissions Tracker	Yes
21.	IFS Cloud Emissions Tracker	Yes
22.	Excel Bulk Upload Feature	No
23.	IFS Cloud Organization Import Feature	No
24.	IFS Cloud Emissions Tracker	Yes
25.	IFS Cloud Emissions Tracker	Yes
26.	IFS Cloud Emissions Tracker	Yes
27.	IFS Cloud Emissions Tracker	Yes
28.	Excel Bulk Upload Feature	No
29.	IFS Cloud Emissions Tracker	Yes
30.	Scope 3 - Excel Bulk Upload Feature	No
31.	Excel Bulk Upload Feature	No
32.	Excel Bulk Upload Feature	No
33.	IFS Cloud Emissions Tracker	Yes
34.	IFS Cloud Emissions Tracker	Yes
35.	IFS Cloud Emissions Tracker	Yes
36.	IFS Cloud Emissions Tracker	Yes

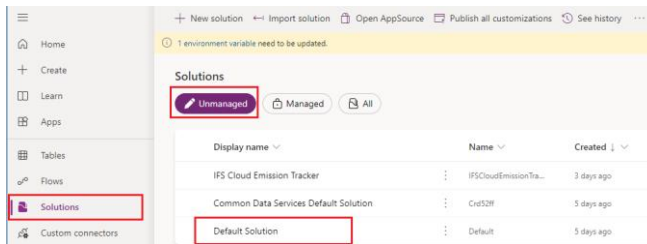
Now you are ready to Go ...

Navigate back to Solution and Select “Publish all Customizations”

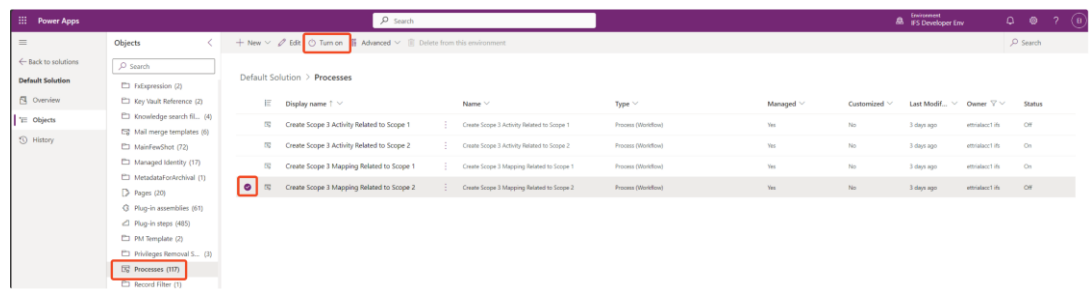


## 1.7.2 Turn on Emission Tracker Processes

1. In your Environment, from the navigation Select Solutions.

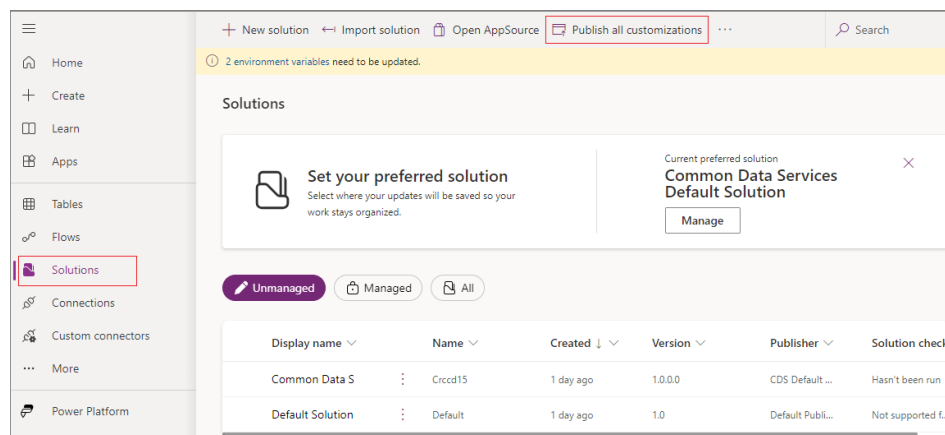


2. Under the Unmanage tab select Default Solution and search for processes. You can see most of the process's status will be off. We need to turn on all these processes.
  - Select the process and click on "Turn On" button on the tool bar. **(If process status is OFF)**



Now you are ready to Go ...

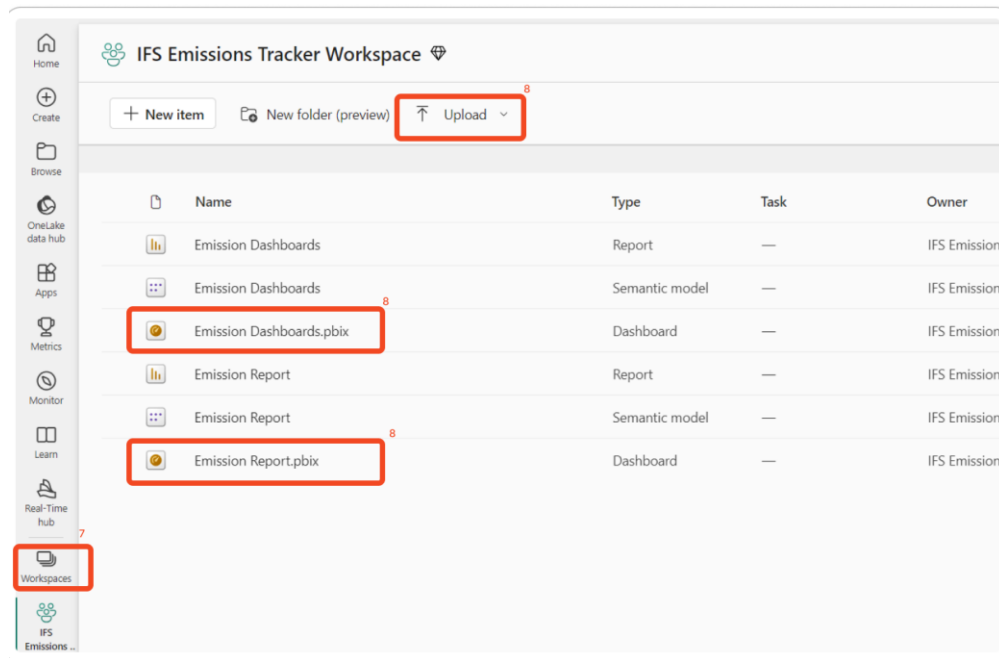
Navigate back to Solution and Select "Publish all Customizations"



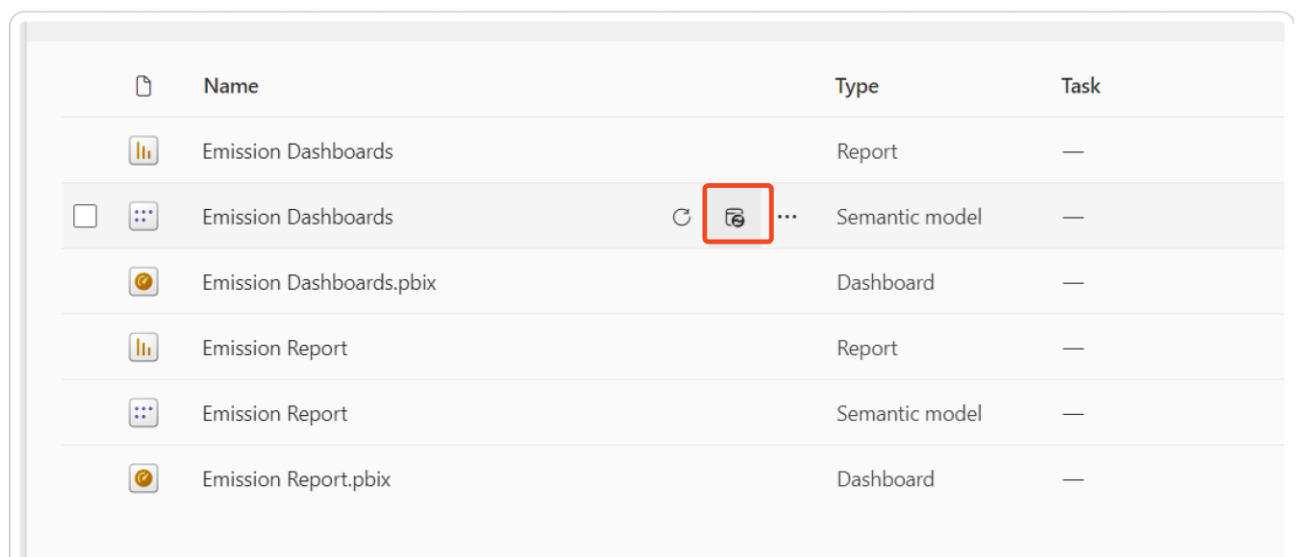
## 1.8 Refresh Power BI Reports

### 1.8.1 Add and refresh reports in PowerBI

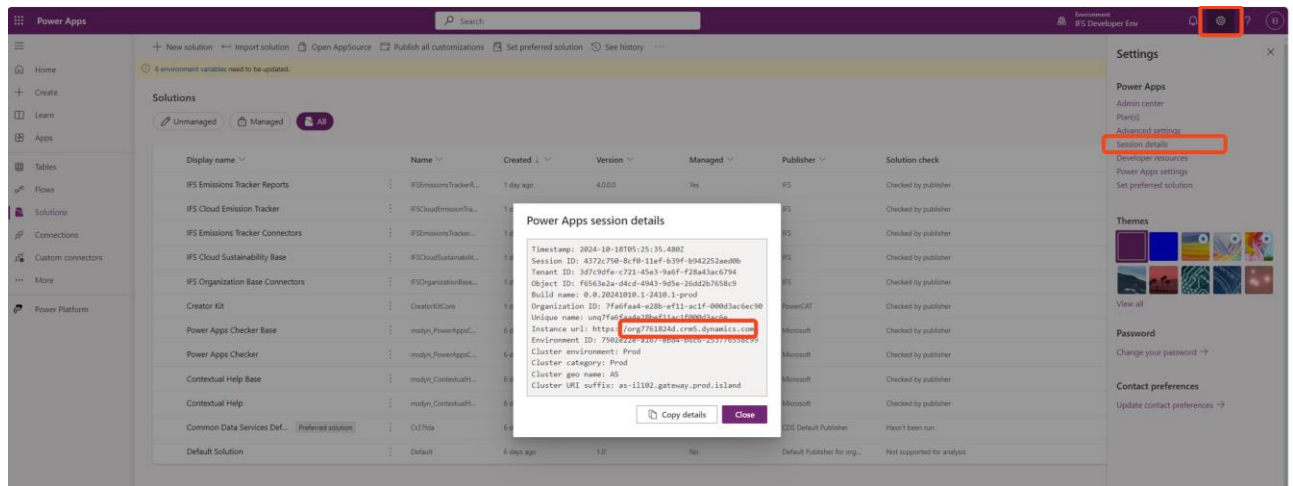
1. Login to [Power BI](#)
2. Go to Workspace and select your workspace (if you do not have a workspace already created, please follow these [steps](#) to create your workspace). This will open your workspace.
3. Inside your workspace click on Upload and then browse and upload the .pbix files shared to the workspace.



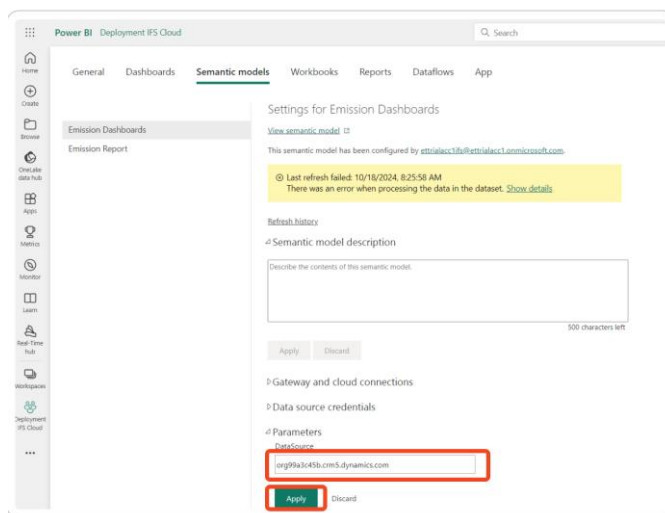
4. From Semantic model type select Schedule Refresh.



5. Under the parameters section, change your organization URL. You can get this by going to your PowerApps environment, clicking on the settings icon and Next, click on session details.

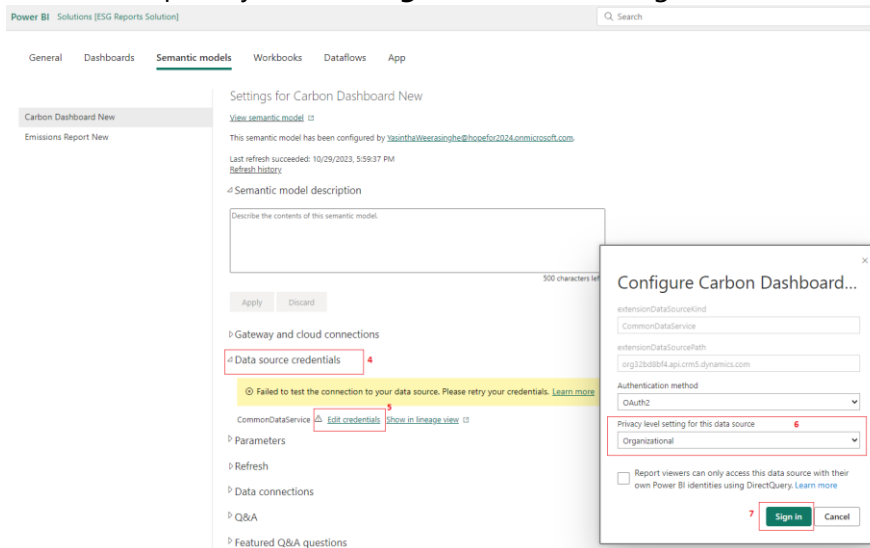


6. After changing your DataSource URL, Click on Apply.

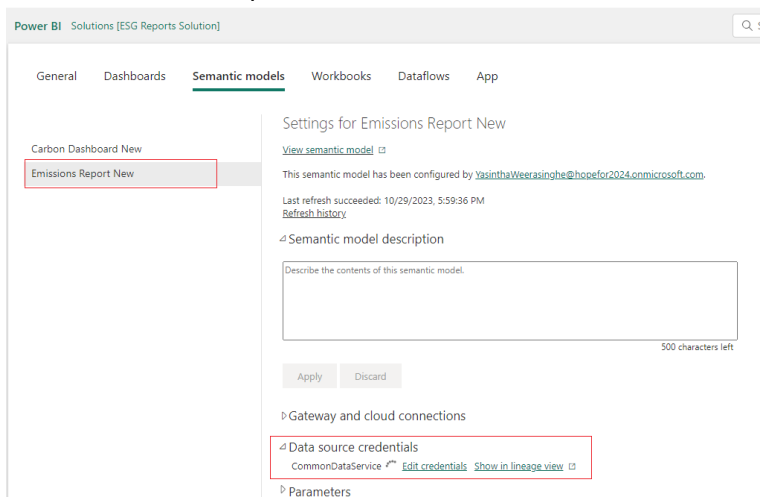




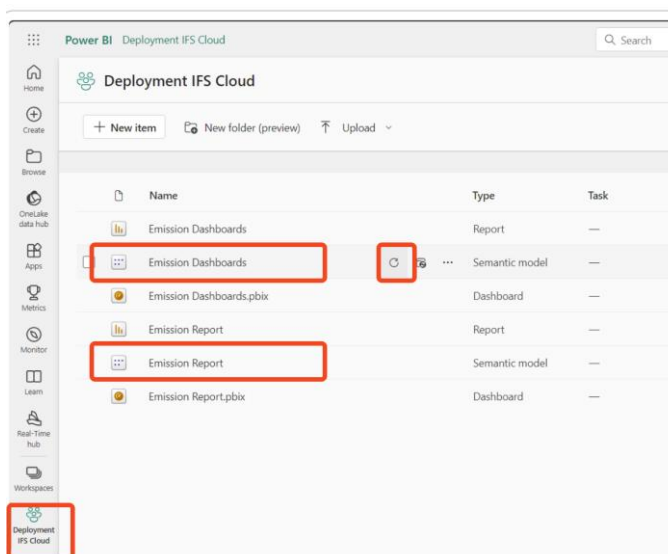
- Under Data source credentials, select edit credentials. It will populate popup and from there select privacy level as **Organizational** and sign in.



- Select the Other report and do the same.

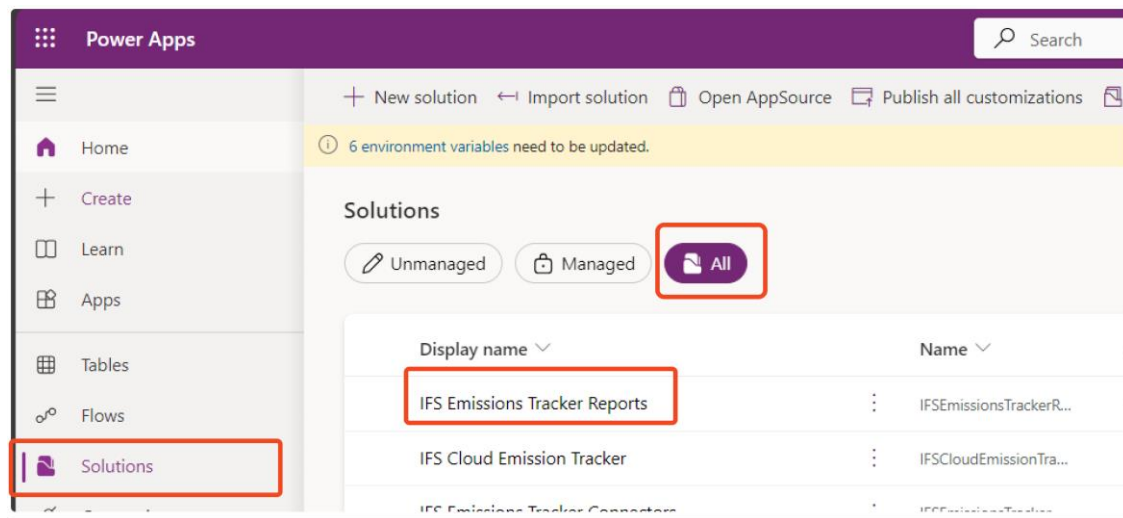


- Go back to workspace and Refresh the Reports.

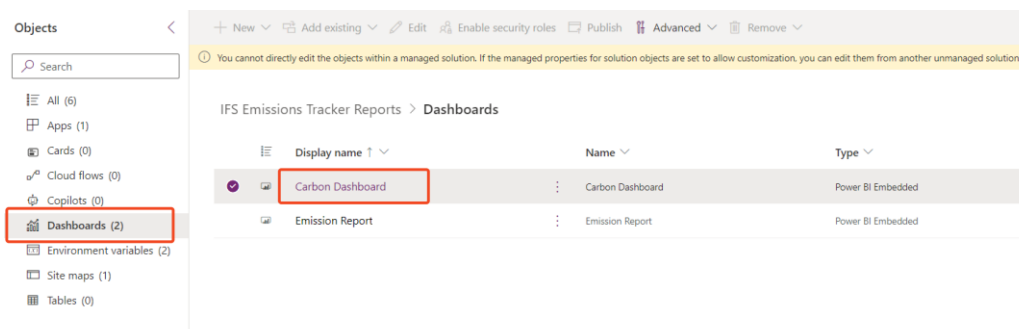


## 1.8.2 Configure Power BI Reports

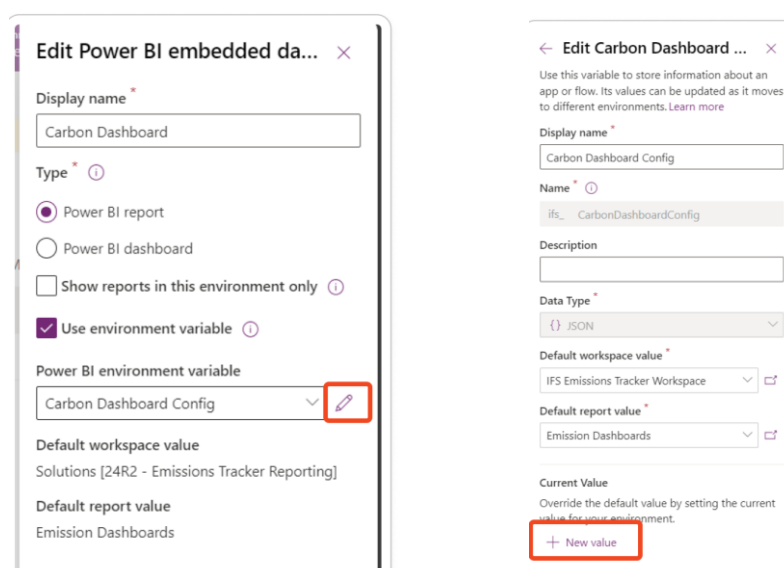
10. In your environment, navigate to solutions, IFS Emissions Tracker Reporting solution.



11. Navigate to the dashboard section and select carbon dashboard.



12. Go to edit Power BI Environment Variable. And select on new current value.



13. Select your workspace and the related report that you have added from the previous step and click on Save. And click on Save again in your Edit Power BI embedded panel again.

Default workspace value \*

IFS Emissions Tracker Workspace

Default report value \*

Emission Dashboards

Current Value

Override the default value by setting the current value for your environment.

Current workspace value

IFS Emissions Tracker Workspace

Current report value

Emission Dashboards

Remove this value before exporting if it shouldn't be used in other environments

Save Cancel

Current workspace value

IFS Emissions Tracker Workspace

Current report value

Emission Dashboards

Remove this value before exporting if it shouldn't be used in other environments

Save Cancel

14. Repeat steps 1 – 4 for emission reports dashboard as well.

## 1.9 Run Your Emissions Tracker Application

In your Environment, from navigation select Apps and now you can see **Emissions Tracker** App is available.

+ New app Edit Play Share Details Settings Turn off Delete

1 environment variable need to be updated.

Apps

Start with data

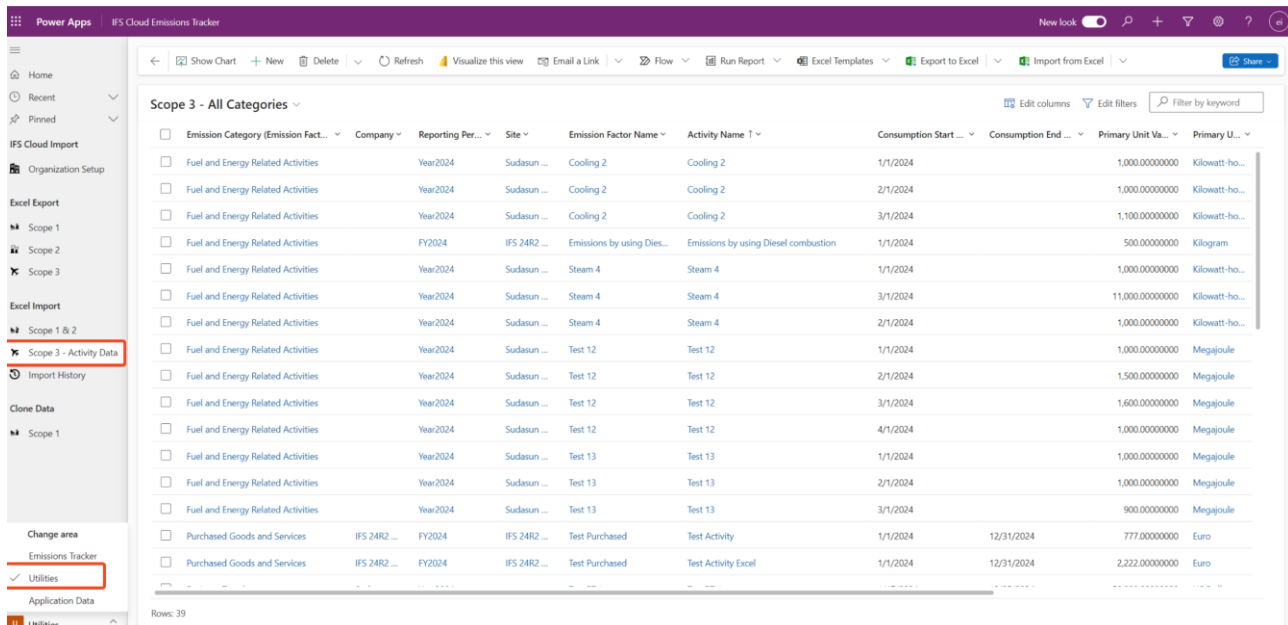
Create a table, pick an existing one, or even import from Excel to create an app.

My apps Shared with me All

Name	Modified
IFS Cloud Emissions Tracker	3 days ago

## 1.10 Configure your Scope 3 Excel Import Templates

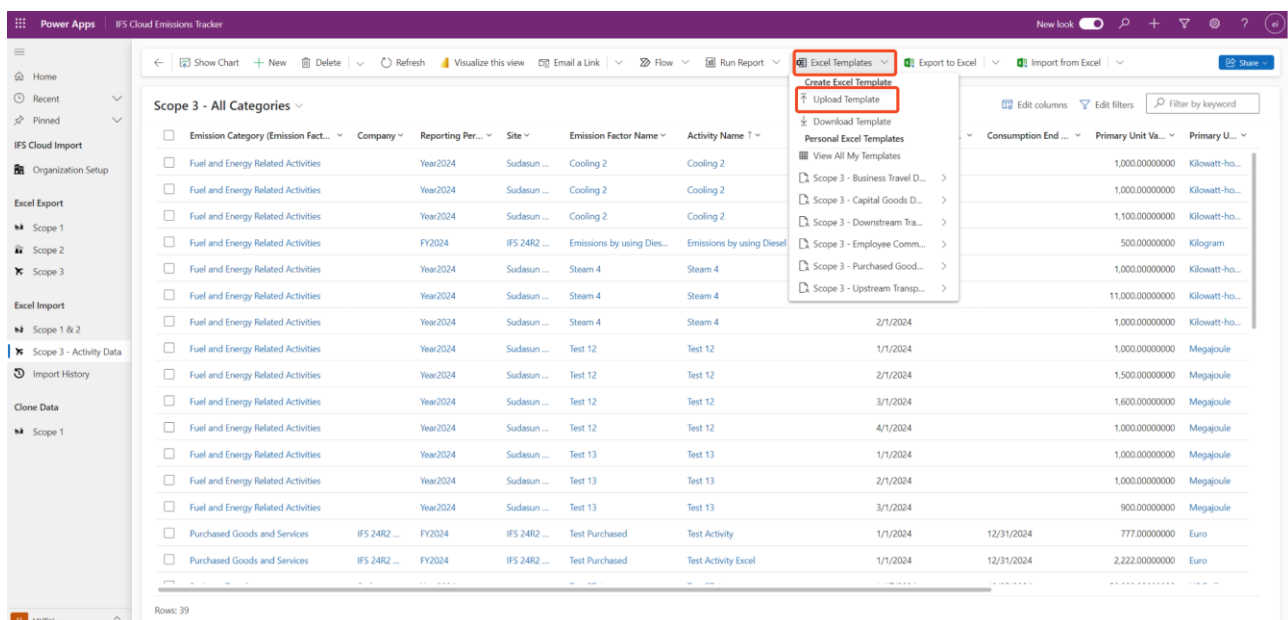
In your emissions tracker application, from navigation area select utilities and under Excel import navigate to 'Scope 3 – Activity Data'.



Emission Category (Emission Fact...	Company	Reporting Per...	Site	Emission Factor Name	Activity Name	Consumption Start	Consumption End	Primary Unit Va...	Primary U...
Fuel and Energy Related Activities	Sudasun ...	Year2024	Cooling 2	Cooling 2	Cooling 2	1/1/2024		1,000.00000000	Kilowatt-ho...
Fuel and Energy Related Activities	Sudasun ...	Year2024	Cooling 2	Cooling 2	Cooling 2	2/1/2024		1,000.00000000	Kilowatt-ho...
Fuel and Energy Related Activities	Sudasun ...	Year2024	Cooling 2	Cooling 2	Cooling 2	3/1/2024		1,100.00000000	Kilowatt-ho...
Fuel and Energy Related Activities	IFS 24R2 ...	FY2024	Emissions by using Dies...	Emissions by using Diesel combustion		1/1/2024		500.00000000	Kilogram
Fuel and Energy Related Activities	Sudasun ...	Year2024	Steam 4	Steam 4	Steam 4	1/1/2024		1,000.00000000	Kilowatt-ho...
Fuel and Energy Related Activities	Sudasun ...	Year2024	Steam 4	Steam 4	Steam 4	3/1/2024		11,000.00000000	Kilowatt-ho...
Fuel and Energy Related Activities	Sudasun ...	Year2024	Steam 4	Steam 4	Steam 4	2/1/2024		1,000.00000000	Kilowatt-ho...
Fuel and Energy Related Activities	Sudasun ...	Year2024	Test 12	Test 12	Test 12	1/1/2024		1,000.00000000	Megajoule
Fuel and Energy Related Activities	Sudasun ...	Year2024	Test 12	Test 12	Test 12	2/1/2024		1,500.00000000	Megajoule
Fuel and Energy Related Activities	Sudasun ...	Year2024	Test 12	Test 12	Test 12	3/1/2024		1,600.00000000	Megajoule
Fuel and Energy Related Activities	Sudasun ...	Year2024	Test 12	Test 12	Test 12	4/1/2024		1,000.00000000	Megajoule
Fuel and Energy Related Activities	Sudasun ...	Year2024	Test 13	Test 13	Test 13	1/1/2024		1,000.00000000	Megajoule
Fuel and Energy Related Activities	Sudasun ...	Year2024	Test 13	Test 13	Test 13	2/1/2024		1,000.00000000	Megajoule
Fuel and Energy Related Activities	Sudasun ...	Year2024	Test 13	Test 13	Test 13	3/1/2024		900.00000000	Megajoule
Purchased Goods and Services	IFS 24R2 ...	FY2024	IFS 24R2 ...	Test Purchased	Test Activity	1/1/2024	12/31/2024	777.00000000	Euro
Purchased Goods and Services	IFS 24R2 ...	FY2024	IFS 24R2 ...	Test Purchased	Test Activity Excel	1/1/2024	12/31/2024	2,222.00000000	Euro

Go to Excel Templates, and upload your scope 3 template excel files included with in package.

You can find the scope 3 excel template files under the Excel Templates 24R2 -> Scope 3 Import Templates



## 2. Security Roles and Sharing Emissions Tracker

### Application with Users

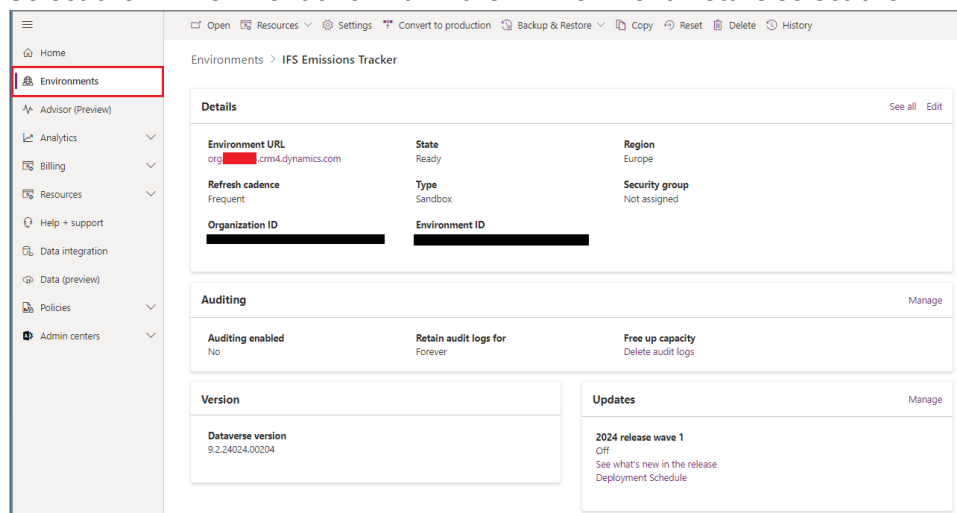
The Emissions Tracker currently includes the following security roles:

Role Name	Access Level
IFS ESG Manager	Full Access to the Application
ESG Admin	Full Access to the Application, Including Error Logs and ability to turn on processes

**Note:** Please make sure to assign the ESG Manager role to the end users and limit administrator access only to the designated administrators or system owners.

### 2.1 Share the Application with Users

1. Navigate to the Admin panel of your Environment. ([Power Platform admin center](#))
2. Select the Environment and within the Environment Details select the Environment URL



Next...

1. IFS Cloud Emissions Tracker Installation Guide
2. IFS Cloud Emissions Tracker Configuration Guide (you are here...)
3. [IFS Cloud Emissions Tracker User Guide](#)
4. IFS Cloud Emissions Tracker Support and Troubleshooting Guide