



Ministry of Tourism and Environment
Republic of Maldives

Power BI step by step solutions for Exercise

CBIT Maldives

Capacity Building for Improved Transparency of
Climate Change Mitigation and Adaptation Actions in
the Maldives Project



Power BI Step-by-step solution guide



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Republic of Maldives

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Climate Change Mitigation and Adaptation Actions in
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Opening Power BI window

The screenshot shows the Power BI Desktop application window. The title bar reads 'Untitled - Power BI Desktop'. The left sidebar contains 'Home' and 'Open' buttons. The main area displays 'Select a data source or start with a blank report' with options: 'Blank report', 'OneLake catalog', 'Excel workbook', 'SQL Server', 'Learn with sample data', and 'Get data from other sources'. A purple arrow points from the 'Blank report' button to a callout box. Below this is a 'Recommended' section with a 'Getting started' card titled 'Intro—What is Power BI?'. At the bottom, there are filters for 'Recent' and 'Shared with me', and a search bar for 'Filter by keyword'.

Step 1: Open Power BI and Select Blank Report



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Adding Background Image to Canvas

The screenshot shows the Power BI Desktop interface with the following components:

- Top Ribbon:** File, Home, Insert, Modeling, View, Optimize, Help.
- Home Tab:** Clipboard (Paste, Cut, Copy, Format painter), Data (Get data, Excel workbook, OneLake catalog, SQL Server, Enter data, Dataverse, Recent sources), Queries (Transform data, Refresh), Insert (New visual, Text box, More visuals), Calculations (New visual calculation, New measure, Quick measure), Sensitivity, Share (Publish), and Copilot (Prep data for AI, Copilot).
- Left Pane:** Visuals, Fields, and Data.
- Canvas:** A large empty area with the text "Add data to your report" and "Once loaded, your data will appear in the Data pane." Below this are buttons for "Import data from Excel" and "Import data from SQL Server".
- Right Pane:** Visualizations, Format page, and Canvas background settings.

Four steps are highlighted with purple callout boxes:

- Step 1: Click on Canvas** - Points to the central canvas area.
- Step 2: expand Canvas Background** - Points to the "Canvas background" section in the right pane.
- Step 3: Browse image** - Points to the "Browse..." button in the "Image" section of the right pane.
- Step 4: Adjust image and properties** - Points to the "Image fit" and "Transparency" settings in the right pane.

At the bottom left, it says "Page 1 of 1". At the bottom right, it shows a zoom level of "68%".



Adding Background Image to Canvas

File

Home

Insert

Modeling

View

Optimize

Help

Paste

Cut

Copy

Format painter

Clipboard

Get data

Excel

OneLake

SQL Server

Enter data

Dataverse

Recent sources

Data

Transform data

Refresh

Queries

New visual

Text box

More visuals

Insert

New visual calculation

New measure

Quick measure

Calculations

Sensitivity

Sensitivity

Publish

Share

Prep data for AI

Copilot

Copilot

Visualizations

Format page

Search

Page information

Canvas settings

Type

16:9

Height

720 px

Width

1280 px

Vertical alignment

Top

Reset to default

Canvas background

Data

Add data to your report

Once loaded, your data will appear in the Data pane.

Import data from Excel

Import data from SQL Server

Get data from another source

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Page 1

+

Adjust Canvas settings



Importing Data to Power BI

File Home Insert Modeling

Paste Cut Copy Format painter Clipboard

Get data Excel workbook OneLake catalog

Import data from Excel

Get Data

All

File

Database

Microsoft Fabric

Power Platform

Azure

Online Services

Other

Excel Workbook

Text/CSV

XML

JSON

Folder

PDF

Parquet

SharePoint folder

SQL Server database

Access database

SQL Server Analysis Services database

Oracle database

IBM Db2 database

IBM Informix database (Beta)

IBM Netezza

MySQL database

Connect Cancel

Step 2: Window will pop up, Select the file type

Step 1: Click Get Data

Step 3: Click connect

Page 1 of 1



Importing Data to Power BI

Step 1: Select the file location

Step 2: Select the file

Step 3: Click Open



Importing Data to Power BI

FileHomeInsert

PasteCutCopyFormat painterClipboard

Get data

There are pending changes

Table2Table3AssumptionsRefrigerator EE

Page 1 of 1

Navigator

Display Options

Excercise Data Set.xlsx [4]

Assumptions

Refrigerator EE

Assumptions

Preview downloaded on Sunday, May 25, 2025

S. No.	Description	Value	Units
1	Emission factor	0.533	kg of CO2 / kWh
2	R22 - GWP	1810	kg of CO2
3	R134a - GWP	1430	kg of CO2
4	R410a - GWP	2088	kg of CO2
5	R610a - GWP	2088	kg of CO2
6	R32 - GWP	675	kg of CO2

LoadTransform DataCancel

Share

Prep data for Copilot AI

Copilot

Data

Search

You haven't loaded any data yet. Get data

Step 1: Select the tables from where data is to be loaded

Step2: Select the data file and click "transform data" in case data cleaning is required, else load data

After clicking transform – Power Query Window will open



Transform Data to Power BI – Power Query

Step 1: Click on Check the quality column under View section in ribbon

Step 2: Check for the errors if there. Update the errors by replace and editing

Column quality

Refrigerator EE (2)

	ABc Brand	ABc Type	123 Efficiency level	1.2 Annual E
1	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	2	
2	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
3	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
4	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
		With freezer, 300l < Adjusted Volume ≤ 900l	5	
		With freezer, 300l < Adjusted Volume ≤ 900l	4	
		With freezer, 300l < Adjusted Volume ≤ 900l	3	
		With freezer, 300l < Adjusted Volume ≤ 900l	3	
		With freezer, 300l < Adjusted Volume ≤ 900l	3	
		With freezer, 300l < Adjusted Volume ≤ 900l	2	
		With freezer, 300l < Adjusted Volume ≤ 900l	3	
		With freezer, Adjusted Volume ≤ 300l	3	
13	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
14	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	5	
15	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
16	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
17	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
18	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
19	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	
20	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
21				

Query Settings

PROPERTIES

Name

Refrigerator EE

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type



Transform Data to Power BI – Power Query

Step1: Check the data type / data format- Date need to updated to date format. Click on 123 adjacent to Date

Step 2: Select the correct format

Query Settings

NAME

Refrigerator EE

ALL PROPERTIES

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type

	Age volume (in L)	Model	Name of importer	Refrigerant	Date
1	477.24	Model 1	Importer -1	R410A	
2	525.08	Model 11	Importer -2	R134a	
3					
4					
5					
6					
7					
8	632.55	Model 16	Importer -2	R134a	
9	694.61	Model 17	Importer -2	R134a	
10	765.82	Model 18	Importer -2	R134a	
11	599.12	Model 2	Importer -1	R134a	
12	254.97	Model-5	Importer -1	R134a	
13	299.27	Model-7	Importer -1	R134a	
14	490.12	Model 19	Importer -2	R600a	
15	676.68	Model 3	Importer -1	R410A	
16	278.824	Model-6	Importer -1	R410A	
17	319.888	Model 10	Importer -1	R410A	
18	490.12	Model 20	Importer -2	R134a	
19	525.08	Model 21	Importer -2	R134a	
20	372.13	Model 10	Importer -3	R600a	
21					



Transform Data to Power BI – Power Query

The screenshot shows the Power Query Editor interface. The top ribbon includes tabs for File, Home, Transform, Add Column, View, Tools, and Help. The 'Transform' tab is active, showing various data transformation options like 'Merge Queries', 'Append Queries', 'Combine Files', 'Text Analytics', 'Vision', and 'Azure Machine Learning'. The main area displays a data table with columns: 'Age volume (in L)', 'Model', 'Name of importer', 'Refrigerant', and 'Date'. A formula bar at the top shows the M code: `= Table.TransformColumnTypes("#Promoted Headers",{"S. No.", Int64.Type}, {"Brand", type text},`. A 'Change Column Type' dialog box is open, asking: 'The selected column has an existing type conversion. Would you like to replace the existing conversion, or preserve the existing conversion and add the new conversion as a separate step?'. The dialog has three buttons: 'Replace current', 'Add new step', and 'Cancel'. A purple callout box points to the 'Add new step' button with the text: 'Step 1: Select the add new step (If data is refreshed the step will be applied automatically to added data)'. The right sidebar shows 'Query Settings' for 'Refrigerator EE (2)', including 'PROPERTIES' and 'APPLIED STEPS'.

Queries [4] This preview may be up to 9 days old. Refresh

Assumptions

Refrigerator EE (2)

Age volume (in L) Model Name of importer Refrigerant Date

100% Valid 100% Valid 100% Valid 100% Valid 100% Valid

0% Error 0% Error 0% Error 0% Error 0% Error

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

694.61 Model 17 Importer -2 R134a

365.83 Model 18 Importer -2 R134a

525.08 Model 21 Importer -2 R134a

44795 45140 45578 45600 45463 44810 44807 44651 44963 45104 45205 44954 44650 45004 45346 44961 45282 44664 44781

Change Column Type

The selected column has an existing type conversion. Would you like to replace the existing conversion, or preserve the existing conversion and add the new conversion as a separate step?

Replace current Add new step Cancel

Query Settings

PROPERTIES

Name

Refrigerator EE (2)

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type



Transform Data to Power BI – Power Query

Close the editor after performing all steps.

Changes will be reflected in the applied step. To undo – click on the x arrow.

Query Settings

PROPERTIES

Name: Refrigerator EE (2)

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- ✕ Changed Type1

	Age volume (in L)	Model	Name of importer	Refrigerant	Date
1	477.24	Model 1	Importer -1	R410A	8/22/2022
2	525.08	Model 11	Importer -2	R134a	8/2/2023
3	652.04	Model 12	Importer -2	R134a	10/13/2024
4	372.13	Model 13	Importer -2	R134a	11/4/2024
5	397.95	Model 10	Importer -1	R134a	6/20/2024
6	632.55	Model 14	Importer -2	R134a	9/6/2022
7	632.55	Model 15	Importer -2	R134a	9/3/2022
8	632.55	Model 16	Importer -2	R134a	3/31/2022
9	694.61	Model 17	Importer -2	R134a	2/6/2023
10	765.82	Model 18	Importer -2	R134a	6/27/2023
11	599.12	Model 2	Importer -1	R134a	10/6/2023
12	254.97	Model-5	Importer -1	R134a	1/28/2023
13	299.27	Model-7	Importer -1	R134a	3/30/2023
14	490.12	Model 19	Importer -2	R600a	3/19/2023
15	676.68	Model 3	Importer -1	R410A	2/24/2023
16	278.824	Model-6	Importer -1	R410A	2/4/2023
17	319.888	Model 10	Importer -1	R410A	12/22/2022
18	490.12	Model 20	Importer -2	R134a	4/13/2023
19	525.08	Model 21	Importer -2	R134a	8/8/2023
20	372.13	Model 10	Importer -3	R600a	2/20/2023



Transform Data to Power BI

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Properties Advanced Editor Manage Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Data Type: Date Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Text Analytics Vision Azure Machine Learning

Queries [4]

Assumptions Refrigerator EE (2)

fx = Table.TransformColumnTypes(#"Changed Type",{"Date ", type date})

	Age volume (in L)	Model	Name of importer	Refrigerant	Date
1	477.24	Model 1	Importer -1	R410A	8/22/2022
2	525.08	Model 11	Importer -2	R134a	8/2/2023
3	652.04	Model 12	Importer -2	R134a	10/13/2024
4	372.13	Model 13	Importer -2	R134a	11/4/2024
5	397.95	Model 10	Importer -1	R134a	6/20/2024
6	632.55	Model 14	Importer -2	R134a	9/6/2022
7	632.55	Model 15	Importer -2	R134a	9/3/2022
8	632.55	Model 16	Importer -2	R134a	3/31/2022
9	694.61	Model 17	Importer -2	R134a	2/6/2023
10	765.82	Model 18	Importer -2	R134a	6/27/2023
11	599.12	Model 2	Importer -1	R134a	10/6/2023
12	254.97	Model-5	Importer -1	R134a	1/28/2023
13	299.27	Model-7	Importer -1	R134a	3/30/2023
14	490.12	Model 19	Importer -2	R600a	3/19/2023
15	676.68	Model 3	Importer -1	R410A	2/24/2023
16	278.824	Model-6	Importer -1	R410A	2/4/2023
17	319.888	Model 10	Importer -1	R410A	12/22/2022
18	490.12	Model 20	Importer -2	R134a	4/13/2023
19	525.08	Model 21	Importer -2	R134a	8/8/2023
20	372.13	Model 10	Importer -3	R600a	2/20/2023

Query Settings

PROPERTIES

Name

Refrigerator EE (2)

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Changed Type1

Changes will be reflected in the applied step. To undo – click on the x arrow.



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Transform Data to Power BI

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Properties Advanced Editor Manage Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Data Type: Date Use First Row as Headers Replace Values Merge Queries Append Queries Combine Files Text Analytics Vision Azure Machine Learning

Queries [4]

Assumptions Refrigerator EE (2)

fx = Table.TransformColumnTypes(#"Changed Type",{"Date ", type date})

	Age volume (in L)	Model	Name of importer	Refrigerant	Date
1	477.24	Model 1	Importer -1	R410A	8/22/2022
2	525.08	Model 11	Importer -2	R134a	8/2/2023
3	652.04	Model 12	Importer -2	R134a	10/13/2024
4	372.13	Model 13	Importer -2	R134a	11/4/2024
	397.95	Model 10	Importer -1	R134a	6/20/2024
	632.55	Model 14	Importer -2	R134a	9/6/2022
	632.55	Model 15	Importer -2	R134a	9/3/2022
	632.55	Model 16	Importer -2	R134a	3/31/2022
	694.61	Model 17	Importer -2	R134a	2/6/2023
	765.82	Model 18	Importer -2	R134a	6/27/2023
	599.12	Model 2	Importer -1	R134a	10/6/2023
	254.97	Model-5	Importer -1	R134a	1/28/2023
13	299.27	Model-7	Importer -1	R134a	3/30/2022
14	490.12	Model 19	Importer -2	R600a	3/19/2023
15	676.68	Model 3	Importer -1	R410A	2/24/2024
16	278.824	Model-6	Importer -1	R410A	2/4/2023
17	319.888	Model 10	Importer -1	R410A	12/22/2023
18	490.12	Model 20	Importer -2	R134a	4/13/2022
19	525.08	Model 21	Importer -2	R134a	8/8/2022
20	372.13	Model 10	Importer -3	R600a	2/20/2022
21					

Query Settings

PROPERTIES

Name

Refrigerator EE (2)

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Changed Type1

Click on assumptions to transform and clean the data in the assumption sheet



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Transform Data to Power BI

Step 1: Drag the unit's column to left

Step 2: Select both columns (Click while holding ctrl command)

Step 3: Click on Add column and then click Merge column

Step 4: After clicking merge column – this dialog box will appear. Select the separator type, then Click ok

Merge Columns

Choose how to merge the selected columns.

Separator
Colon

New column name (optional)
Merged

OK Cancel

S. No.	Description	Units	Value
1	Emission factor	kg of CO2 / kWh	
2	R22 - GWP	kg of CO2	
3	R134a - GWP	kg of CO2	
4	R410a - GWP	kg of CO2	
5	R610a - GWP	kg of CO2	2088
6	R22 - GWP	kg of CO2	675



Transform Data to Power BI

FileHomeTransformAdd ColumnViewToolsHelp

Column From ExamplesCustom ColumnInvoke Custom Function

Conditional ColumnIndex ColumnDuplicate Column

FormatMerge ColumnsExtractParseFrom Text

StatisticsStandard ScientificFrom Number

TrigonometryRoundingInformationFrom Date & Time

DateTimeDurationText AnalyticsVisionAzure Machine LearningAI Insights

Queries [2]

AssumptionsRefrigerator EE (2)

123

S. No.

ABC

Merged

ABC

Description

ABC

Units

1.2

Value

Valid

100%

Error

0%

Empty

0%

Valid

100%

Error

0%

Empty

0%

Valid

100%

Error

0%

Empty

0%

Valid

100%

Error

0%

Empty

0%

Valid

100%

Error

0%

Empty

0%

1

2

3

4

5

6

1

2

3

4

5

6

Emission factor :kg of CO2 / kWh

R22 - GWP:kg of CO2

R134a - GWP:kg of CO2

R410a - GWP:kg of CO2

R610a - GWP:kg of CO2

R32 - GWP:kg of CO2

Emission factor

R22 - GWP

R134a - GWP

R410a - GWP

R610a - GWP

R32 - GWP

kg of CO2 / kWh

kg of CO2

kg of CO2

kg of CO2

kg of CO2

kg of CO2

Query Settings

PROPERTIES

NameAssumptions

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Reordered Columns

Inserted Merged Column

Reordered Columns1

Step 1: Drag the merged column to left

Step 2: Check the steps executed



Transform Data to Power BI

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Examples Custom Column Invoke Custom Function

Conditional Column Index Column Duplicate Column

Format Merge Columns Extract Parse From Text

Statistics Standard Scientific From Number

Trigonometry Rounding Information

Date Time Duration From Date & Time

Text Analytics Vision Azure Machine Learning AI Insights

Queries [2]

Assumptions

Refrigerator EE (2)

`= Table.ReorderColumns(#"Inserted Merged Column",{"S. No.", "Merged", "Description ", "Units", "Value"`

S. No.	Merged	Description	Units	Value
1	Emission factor :kg of CO2 / kWh	Emission factor	kg of CO2 / kWh	
2	R22 - GWP.kg of CO2	R22 - GWP	kg of CO2	
3	R134a - GWP:kg of CO2	R134a - GWP	kg of CO2	
4	R410a - GWP:kg of CO2	R410a - GWP	kg of CO2	
5	R610a - GWP:kg of CO2	R610a - GWP	kg of CO2	
6	R32 - GWP:kg of CO2	R32 - GWP	kg of CO2	

Step 1: Select 3 columns – S.No, Description, Units (Click while holding ctrl command)

Step 2: Check the steps executed

Query Settings

PROPERTIES

Name

Assumptions

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Reordered Columns

Inserted Merged Column

Reordered Columns1



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Transform Data to Power BI – Power Query

The screenshot shows the Power Query Editor window with the following components:

- File Bar:** File, Home, Transform, Add Column, View, Tools, Help.
- Home Tab:** Column From Examples, Custom Column, Invoke Custom Function, General.
- Add Column Tab:** Conditional Column, Index Column, Duplicate Column.
- Transform Tab:** Format, Merge Columns, Extract, Parse, From Text.
- Statistics Tab:** Statistics, Standard, Scientific, From Number.
- Trigonometry Tab:** Trigonometry, Rounding, Information, From Date & Time.
- Text Analytics Tab:** Text Analytics, Vision, Azure Machine Learning, AI Insights.

Queries [2]: Assumptions, Refrigerator EE (2).

Formula Bar: `= Table.RemoveColumns(#"Reordered Columns1",{"S. No.", "Description ", "Units"})`

Table Data:

	Merged	1.2 Value
	Valid 100%, Error 0%, Empty 0%	Valid 100%, Error 0%, Empty 0%
1	Emission factor :kg of CO2 / kWh	
2	R22 - GWP:kg of CO2	1810
3	R134a - GWP:kg of CO2	1430
4	R410a - GWP:kg of CO2	2088
5	R610a - GWP:kg of CO2	2088
6	R32 - GWP:kg of CO2	675

Query Settings:

- PROPERTIES:** Name: Assumptions.
- APPLIED STEPS:** Source, Navigation, Promoted Headers, Changed Type, Reordered Columns, Inserted Merged Column, Reordered Columns1, Removed Columns.

Callout Box: Double click on label and change the name



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Transform Data to Power BI – Power Query

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Column From Examples Custom Column Invoke Custom Function General

Conditional Column Index Column Duplicate Column

Format Merge Columns Extract Parse From Text

Statistics Standard Scientific From Number

Trigonometry Rounding Information From Date & Time

Date Time Duration Text Analytics Vision Azure Machine Learning AI Insights

Queries [2]

Assumptions Refrigerator EE (2)

Assumptions 1.2 Value

Valid 100% Valid 100%

Error 0% Error 0%

Empty 0% Empty 0%

1 Emission factor :kg of CO2 / kWh 0.533

2 R22 - GWP:kg of CO2 1810

3 R134a - GWP:kg of CO2 1430

4 R410a - GWP:kg of CO2 2088

5 R610a - GWP:kg of CO2 2088

6 R32 - GWP:kg of CO2 675

Check the text properties

All steps are being reflected in Applied steps

Query Settings

PROPERTIES

Name

Assumptions

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Reordered Columns

Inserted Merged Column

Reordered Columns1

Removed Columns

Renamed Columns



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Transform Data to Power BI – Power Query

The screenshot displays the Power Query Editor window. The main area shows a table with two columns: 'Assumptions' and 'Value'. The 'Assumptions' column contains a list of items with their status (Valid, Error, Empty) and a percentage. The 'Value' column contains numerical data. The formula bar at the top shows the formula: `= Table.RenameColumns(#"Removed Columns",{{"Merged", "Assumptions"}})`. The right sidebar shows the 'Query Settings' pane with the 'Name' field set to 'Assumptions' and a list of 'APPLIED STEPS' including Source, Navigation, Promoted Headers, Changed Type, Reordered Columns, Inserted Merged Column, Reordered Columns1, Removed Columns, and Renamed Columns. Two callout boxes provide additional information: one points to the 'Assumptions' column header and the 'Value' column header, stating 'Check the text properties (Text for column 1 and Decimal numerical data for column 2)'; the other points to the 'Renamed Columns' step in the 'APPLIED STEPS' list, stating 'All steps are being reflected in Applied steps'.

Queries [2]

- Assumptions
- Refrigerator EE (2)

Formula Bar: `= Table.RenameColumns(#"Removed Columns",{{"Merged", "Assumptions"}})`

	Assumptions	Value
	<ul style="list-style-type: none">Valid 100%Error 0%Empty 0%	<ul style="list-style-type: none">Valid 100%Error 0%Empty 0%
1	Emission factor :kg of CO2 / kWh	0.533
2	R22 - GWP:kg of CO2	1810
3	R134a - GWP:kg of CO2	1430
4	R410a - GWP:kg of CO2	2088
5	R610a - GWP:kg of CO2	2088
6	R32 - GWP:kg of CO2	675

Query Settings

PROPERTIES

Name: Assumptions

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Reordered Columns
- Inserted Merged Column
- Reordered Columns1
- Removed Columns
- Renamed Columns

Check the text properties (Text for column 1 and Decimal numerical data for column 2)

All steps are being reflected in Applied steps



Transform Data to Power BI – Power Query

Click on the Transform tab and then click Transpose to make this table transpose

Queries [2]

- Assumptions
- Refrigerator EE (2)

Transpose

Transpose this table, treating rows as columns and columns as rows.

	Valid	100%	Valid	100%
1	Emission factor :kg of CO2 / kWh		0.533	
2	R22 - GWP:kg of CO2		1810	
3	R134a - GWP:kg of CO2		1430	
4	R410a - GWP:kg of CO2		2088	
5	R610a - GWP:kg of CO2		2088	
6	R32 - GWP:kg of CO2		675	

Query Settings

PROPERTIES

Name

Assumptions

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Reordered Columns
- Inserted Merged Column
- Reordered Columns1
- Removed Columns
- Renamed Columns



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Transform Data to Power BI – Power Query

The screenshot displays the Power Query Editor window. The main area shows a table with 5 columns (Column1 to Column5) and 2 rows of data. The formula bar at the top indicates the query is based on the 'Renamed Columns' table, transposed. The 'Applied Steps' pane on the right shows a list of steps, with 'Transposed Table' at the bottom, highlighted by a callout. Another callout points to the first row of the table, highlighting the column headers.

Queries [2]

- Assumptions
- Refrigerator EE (2)

Table

Column1 Column2 Column3 Column4 Column5

Valid 100% Valid 100% Valid 100% Valid 100% Valid 100%

Error 0% Error 0% Error 0% Error 0% Error 0%

Empty 0% Empty 0% Empty 0% Empty 0% Empty 0%

1 Emission factor :kg of CO2 / k... R22 - GWP:kg of CO2 R134a - GWP:kg of CO2 R410a - GWP:kg of CO2 R610a - GWP:kg of CO2

2 0.533 1810 1430 2088 2088

Query Settings

PROPERTIES

Name

Assumptions

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Reordered Columns
- Inserted Merged Column
- Reordered Columns1
- Removed Columns
- Renamed Columns
- Transposed Table

Check the data in the column Heading appearing in row 1

Table has been transposed – Check the applied steps



Transform Data to Power BI – Power Query

Step 2: Click on the use first row as header

Step 1: Click on row 1

Query Settings

PROPERTIES

Name
Assumptions

All Properties

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Reordered Columns
- Inserted Merged Column
- Reordered Columns1
- Removed Columns
- Renamed Columns
- Transposed Table

	Column1	Column2	Column3	Column4	Column5
1	Emission factor :kg of CO2 / kWh	R22 - GWP:kg of CO2	R134a - GWP:kg of CO2	R410a - GWP:kg of CO2	R610a - GWP:kg of CO2
2	0.533	1810	1430	2088	2088

Column1 Emission factor :kg of CO2 / kWh
Column2 R22 - GWP:kg of CO2
Column3 R134a - GWP:kg of CO2
Column4 R410a - GWP:kg of CO2
Column5 R610a - GWP:kg of CO2



Transform Data to Power BI – Power Query

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Transform

Add Column

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Group By

Use First Row as Headers

Use Headers as First Row

Transpose

Reverse Rows

Count Rows

Data Type: Any

Detect Data Type

Rename

Replace Values

Fill

Pivot Column

Unpivot Columns

Move

Convert to List

Split Column

Format

Extract

Merge Columns

Parse

Statistics

Standard

Scientific

Trigonometry

Rounding

Information

Date

Time

Duration

Run R script

Run Python script

Assumptions

Refrigerator EE (2)

Promote the first row of this table into column headers.

pose(#"Renamed Columns")

Column1	Column2	Column3	Column4	Column5
Valid 100%	Valid 100%	Valid 100%	Valid 100%	Valid 100%
Error 0%	Error 0%	Error 0%	Error 0%	Error 0%
Empty 0%	Empty 0%	Empty 0%	Empty 0%	Empty 0%
Emission factor :kg of CO2 / kWh	R22 - GWP:kg of CO2	R134a - GWP:kg of CO2	R410a - GWP:kg of CO2	R610a - GWP:kg of CO2
0.533	1810	1430	2088	

Column1

Emission factor :kg of CO2 / kWh

Column2

R22 - GWP:kg of CO2

Column3

R134a - GWP:kg of CO2

Column4

R410a - GWP:kg of CO2

Column5

R610a - GWP:kg of CO2

Query Settings

PROPERTIES

Name

Assumptions

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Reordered Columns

Inserted Merged Column

Reordered Columns1

Removed Columns

Renamed Columns

Transposed Table

Click – Use first row as headers



Transform Data to Power BI – Power Query

The screenshot shows the Power Query Editor window with the following elements:

- Step -2:** A purple callout box pointing to the 'X' button in the top right corner of the editor window, with the text "Step -2: Close the Power Query Editor window."
- Step -1:** A purple callout box pointing to the column headers in the data preview, with the text "Step -1: Check the data labels for each column". The data preview shows a table with columns: "Emission factor :kg of CO2 / kWh", "R22 - GWP:kg of CO2", "R134a - GWP:kg of CO2", "R410a - GWP:kg of CO2", and "R6:". The first row of data has values: 0.533, 1810, 1430, and 2088.
- Step -3:** A purple callout box pointing to the "Yes" button in a "Power Query Editor" dialog box, with the text "Step -3: Pop up will appear Click on Yes". The dialog box asks "Do you want to apply your changes now?" and has buttons for "Yes", "Not now", and "Cancel".

The "Query Settings" pane on the right shows the "APPLIED STEPS" list, which includes "Changed Type1" at the bottom.



Transform Data to Power BI

File

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OneLake catalog

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Publish

Prep data for Copilot AI

Clipboard

Data

Queries

Insert

Calculations

Sensitivity

Share

Copilot

Visualizations

Build visual

Filters

Values

Drill through

Cross-report

Keep all filters

Add drill-through fields here

Data

Search

Assumptions

Refrigerator EE (2)

Date

Type

Step -1: Click on Table view to evaluate the energy savings

with your data

pane onto the report canvas.

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Using DAX formulas

File Home Help **Table tools** **Column tools** Share

Name: Date Format: *Wednesday, Marc... Summarization: Don't summarize Data category: Uncategorized Sort by column: Sort Data groups: Groups Manage relationships: Relationships **New column** Calculations

Structure Formatting Properties Sort Groups Relationships Calculations

Step -1: Right click on the header or Click on New Column from tool bar

Sort ascending
Sort descending
Clear sort
Clear filter
Clear all filters
Copy
New measure
New column
Refresh data
Edit query
Rename
Delete
Hide in report view
Unhide all
New group

	Annual Energy Consumption (kWh/ year)	Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Date
2	419.75					Monday, Aug
4	365					Wednesday, Au
4	408.8					Sunday, Octo
3	390.55					Monday, Noven
5	317.55					Thursday, Ju
4	416.1					Tuesday, Septe
3	533					Saturday, Septe
3	470.85					Thursday, Ma
3	576.7					Monday, Febr
2	518.3					Tuesday, Ju
3	448.95					Friday, Octo
3	332.15					Saturday, Janu
3	354.05					Wednesday, Ma
5	343.1					Sunday, Ma
3	566.48					Saturday, Febr
3	280.69					Saturday, Febr
3	306.6					Friday, Decem
4	343.1					Wednesday, April 13, 2022
4	365					Monday, August 8, 2022
3	390.55					Sunday, February 20, 2022
4	232.87					Monday, October 17, 2022
4	335.8					Sunday, February 26, 2023

Table: Refrigerator EE (2) (50 rows) Column: Date (49 distinct values)



Using DAX formulas

File Home Help Table tools Column tools

Name Column

Data type Whole number

Summarization Sum

Data category Uncategorized

Sort by column

Data groups

Manage relationships

New column

Share

Step -3: Click ok

Step -2: Formula bar will become active – Use DAX formula to carry out the calculation

DAX formula to calculate the days after the sale of the EE equipment = Today () – sheet name. column. Date hierarchy

Step -1: New Column will add on the right most corner of the sheet

Formula = Today() – Refrigerator EE (2)' [Date].[Date]

1 Days after sale = today()-'Refrigerator EE (2)'[Date].[Date]

Energy Consumption (kWh/ year)	Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Date
419.75	477.24	Model 1	Importer -1	R410A	Friday, October 6, 2023
365	525.08	Model 11	Importer -2	R134a	Saturday, January 28, 2023
652.04	372.13	Model 12	Importer -2	R134a	Wednesday, March 30, 2022
		Model 13	Importer -2	R134a	Sunday, March 19, 2023
				R410A	Saturday, February 24, 2024
				R410A	Saturday, February 4, 2023
				R410A	Friday, December 22, 2023
				R134a	Wednesday, April 13, 2022
				R134a	Monday, August 8, 2022
				R134a	February 20, 2022
				R134a	October 17, 2022
				R600a	Sunday, February 26, 2023

Energy Consumption (kWh/ year)

Total adjusted storage volume (in L)

Model

Name of importer

Refrigerant

Date

Column

Search

Assumptions

- Σ Emission factor :kg of CO2 / ...
- Σ R134a - GWP:kg of CO2
- Σ R22 - GWP:kg of CO2
- Σ R32 - GWP:kg of CO2
- Σ R410a - GWP:kg of CO2
- Σ R610a - GWP:kg of CO2

Refrigerator EE (2)

- Σ Annual Energy Consumption ...
- Brand

Column

Date

- Date Hierarchy
 - Year
 - Quarter
 - Month
 - Day

Σ Efficiency level

Model



Changing the data format

File Home Help Table tools Column tools

Name: Days after sale

Data type: Date/time

Format: *3/14/2001 1:30:55 ...

Summarization: Don't summarize

Data category: Uncategorized

Sort by column

Data groups

Manage relationships

New column

Properties

Sort

Groups

Relationships

Calculations

Step -2: Click on Whole number, from drop down menu

Step -1: Select the column

Model	Importer	Refrigerant	Date	Days after sale
Model 14	Importer -2	R410A	Monday, August 1, 2022	10/11/1902 12:00:00 AM
Model 15	Importer -2	R134a	Wednesday, August 2, 2023	10/31/1901 12:00:00 AM
Model 16	Importer -2	R134a	Wednesday, August 2, 2023	8/19/1900 12:00:00 AM
Model 17	Importer -2	R134a	Wednesday, August 2, 2023	7/28/1900 12:00:00 AM
Model 18	Importer -2	R134a	Wednesday, August 2, 2023	12/12/1900 12:00:00 AM
Model 2	Importer -1	R134a	Wednesday, August 2, 2023	9/26/1902 12:00:00 AM
Model 5	Importer -1	R134a	Wednesday, August 2, 2023	9/29/1902 12:00:00 AM
Model 7	Importer -1	R134a	Wednesday, August 2, 2023	3/4/1903 12:00:00 AM
Model 19	Importer -2	R600a	Wednesday, August 2, 2023	4/26/1902 12:00:00 AM
Model 3	Importer -1	R410A	Tuesday, June 27, 2023	12/6/1901 12:00:00 AM
Model 6	Importer -1	R410A	Friday, October 6, 2023	8/27/1901 12:00:00 AM
Model 10	Importer -1	R410A	Saturday, January 28, 2023	5/5/1902 12:00:00 AM
Model 20	Importer -2	R134a	Wednesday, March 30, 2022	3/5/1903 12:00:00 AM
Model 21	Importer -2	R134a	Sunday, March 19, 2023	3/16/1902 12:00:00 AM
Model -4	Importer -3	R410A	Saturday, February 24, 2024	4/8/1901 12:00:00 AM
Model 11	Importer -3	R600a	Saturday, February 4, 2023	4/28/1902 12:00:00 AM
Model 11	Importer -3	R600a	Friday, December 22, 2023	6/11/1901 12:00:00 AM
Model 11	Importer -3	R600a	Wednesday, April 13, 2022	2/19/1903 12:00:00 AM
Model 11	Importer -3	R600a	Monday, August 8, 2022	10/25/1902 12:00:00 AM
Model 11	Importer -3	R600a	Sunday, February 20, 2022	4/12/1903 12:00:00 AM
Model 11	Importer -3	R410A	Monday, October 17, 2022	8/16/1902 12:00:00 AM
Model 11	Importer -3	R600a	Sunday, February 26, 2023	4/6/1902 12:00:00 AM

Data

Search

Assumptions

- Σ Emission factor :kg of CO2 / ...
- Σ R134a - GWP:kg of CO2
- Σ R22 - GWP:kg of CO2
- Σ R32 - GWP:kg of CO2
- Σ R410a - GWP:kg of CO2
- Σ R610a - GWP:kg of CO2

Refrigerator EE (2)

- Σ Annual Energy Consumption ...
- Brand

Date

- Date Hierarchy
 - Year
 - Quarter
 - Month
 - Day

Days after sale

- Σ Efficiency level
- Model



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Changing the data format

File Home Help **Table tools** **Column tools** Share

Name: Days after sale
 Data type: Date/time
 Format: *3/14/2001 1:30:55 ...
 Summarization: Don't summarize
 Data category: Uncategorized

Sort by column
 Data groups
 Manage relationships
 New column

Structure: 1 Days after sale = today()-'Refrigerator EE (2)'[Date].[Date]

Consumption (kWh/ year)	Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Date	Days after sale
419.75						10/11/1902 12:00:00 AM
365						10/31/1901 12:00:00 AM
408.8						8/19/1900 12:00:00 AM
390.55						7/28/1900 12:00:00 AM
317.55						12/12/1900 12:00:00 AM
416.1						9/26/1902 12:00:00 AM
533						9/29/1902 12:00:00 AM
470.85						3/4/1903 12:00:00 AM
576.7						4/26/1902 12:00:00 AM
518.3						12/6/1901 12:00:00 AM
448.95						8/27/1901 12:00:00 AM
332.15						5/5/1902 12:00:00 AM
354.05						3/5/1903 12:00:00 AM
343.1	490.12	Model 19	Importer -2		Sunday, March 19, 2023	3/16/1902 12:00:00 AM
566.48	676.68	Model 19	Importer -2		Saturday, February 24, 2024	4/8/1901 12:00:00 AM
280.69	278.824	Model 19	Importer -2		Saturday, February 4, 2023	4/28/1902 12:00:00 AM
306.6	319.888	Model 19	Importer -2		Friday, December 22, 2023	6/11/1901 12:00:00 AM
343.1	490.12	Model 19	Importer -2		Wednesday, April 13, 2022	2/19/1903 12:00:00 AM
365	525.08	Model 19	Importer -2		Monday, August 8, 2022	10/25/1902 12:00:00 AM
390.55	372.13	Model 10	Importer -3	R600a	Sunday, February 20, 2022	4/12/1903 12:00:00 AM
232.87	220.98	Model -4	Importer -3	R410A	Monday, October 17, 2022	8/16/1902 12:00:00 AM
335.8	518.36	Model 11	Importer -3	R600a	Sunday, February 26, 2023	4/6/1902 12:00:00 AM

Data type change

With this data type change, your data will be stored differently. This may cause a loss of data or precision. After you make this change, you can restore the column by refreshing the table.

Do you want to continue?

Yes **Cancel**

Click Yes

Data

Search

- Assumptions
 - Emission factor :kg of CO2 / ...
 - R134a - GWP:kg of CO2
 - R22 - GWP:kg of CO2
 - R32 - GWP:kg of CO2
 - R410a - GWP:kg of CO2
 - R610a - GWP:kg of CO2
- Refrigerator EE (2)
 - Annual Energy Consumption ...
 - Brand
- Date
 - Date Hierarchy
 - Year
 - Quarter
 - Month
 - Day
- Days after sale
 - Efficiency level
 - Model



Changing the data format (Date to number)

File Home Help **Table tools** **Column tools** Share

Name: Days after sale
Data type: Whole number
Format: Whole number
Summarization: Sum
Data category: Uncategorized

Structure: 1 Days after sale = today()-'Refrigerator EE (2)'[Date].[Date]
Formatting: \$ % 0
Properties: Sort by column, Data groups, Manage relationships, New column

Consumption (kWh/ year)	Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Date	Days after sale
419.75	477.24	Model 1	Importer -1	R410A	Monday, August 22, 2022	1015
365	525.08	Model 11	Importer -2	R134a	Wednesday, August 2, 2023	670
408.8	652.04	Model 12	Importer -2	R134a	Sunday, October 13, 2024	232
390.55	372.13	Model 13	Importer -2	R134a	Monday, November 4, 2024	210
317.55	397.95	Model 10	Importer -1	R134a	Thursday, June 20, 2024	347
416.1	632.55	Model 14	Importer -2	R134a	Tuesday, September 6, 2022	1000
533	632.55	Model 15	Importer -2	R134a	Saturday, September 3, 2022	1003
470.85	632.55	Model 16	Importer -2	R134a	Thursday, March 31, 2022	1159
576.7	694.61	Model 17	Importer -2	R134a	Monday, February 6, 2023	847
518.3	765.82	Model 18	Importer -2	R134a	Tuesday, June 27, 2023	706
448.95	599.12	Model 2	Importer -1	R134a	Friday, October 6, 2023	605
332.15	254.97	Model-5	Importer -1	R134a	Saturday, January 28, 2023	856
354.05	299.27	Model-7	Importer -1	R134a	Wednesday, March 30, 2022	1160
343.1	490.12	Model 19	Importer -2	R600a	Sunday, March 19, 2023	806
566.48	676.68	Model 3	Importer -1	R410A	Saturday, February 24, 2024	464
280.69	278.824	Model-6	Importer -1	R410A	Saturday, February 4, 2023	849
306.6	319.888	Model 10	Importer -1	R410A	Friday, December 22, 2023	528
343.1	490.12	Model 20	Importer -2	R134a	Wednesday, April 13, 2022	1146
365	525.08	Model 21	Importer -2	R134a	Monday, August 8, 2022	1029
390.55	372.13	Model 10	Importer -3	R600a	Sunday, February 20, 2022	1198
232.87	220.98	Model -4	Importer -3	R410A	Monday, October 17, 2022	959
335.8	518.36	Model 11	Importer -3	R600a	Sunday, February 26, 2023	827

Data

Search

- Assumptions
 - Σ Emission factor :kg of CO2 / ...
 - Σ R134a - GWP:kg of CO2
 - Σ R22 - GWP:kg of CO2
 - Σ R32 - GWP:kg of CO2
 - Σ R410a - GWP:kg of CO2
 - Σ R610a - GWP:kg of CO2
- Refrigerator EE (2)
 - Σ Annual Energy Consumption ...
 - Brand
- Date
 - Date Hierarchy
 - Year
 - Quarter
 - Month
 - Day
 - Days after sale
 - Σ Efficiency level
 - Model



Using DAX formula to calculate the Baseline Scenario

Step 1: Add new column

Step 2: Use DAX formula to calculate the annual baseline line energy consumption

**Step 3: Click ok
Data will be updated in each row**

DAX Formula with if command : $\text{Baseline Energy} = \text{if}(\text{'Refrigerator EE (2)'}[\text{Total adjusted storage volume (in L)}] < 300, (465 + 1.378 * \text{'Refrigerator EE (2)'}[\text{Total adjusted storage volume (in L)}]) * .533, (465 + 1.378 * \text{'Refrigerator EE (2)'}[\text{Total adjusted storage volume (in L)}]) * .506)$

Energy consumption of 2 star Refrigerator is considered as baseline

h/ year)	Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Date	Days after sale	Baseline Energy
419.75	477.24	Model 1	Im		Monday, August 22, 2022	1015	797.764180
365	525.08	Model 11			Wednesday, August 2, 2023	670	831.121481
408.8	652.04	Model 12			Sunday, October 13, 2024	232	919.646626
390.55	372.13	Model 13	Im		Monday, November 4, 2024	210	724.474340
317.55	397.95	Model 10	Im		Thursday, June 20, 2024	347	742.47780
416.1	632.55	Model 14	Im		Wednesday, September 6, 2022	1000	906.05687
533	632.55	Model 15	Im		Monday, September 3, 2022	1003	906.05687
470.85	632.55	Model 16	Im		Thursday, March 31, 2022	1159	906.05687
576.7	694.61	Model 17	Im		Monday, February 6, 2023	847	949.329325
518.3	765.82	Model 18	Im		Tuesday, June 27, 2023	706	998.981779
448.95	599.12	Model 2	Im		Friday, October 6, 2023	605	882.747204
332.15	254.97	Model-5	Im		Tuesday, January 28, 2023	856	435.113835
354.05	299.27	Model-7	Importer -1	R134a	Wednesday, March 30, 2022	1160	467.651033

Removing the decimals

File Home Help Table tools Column tools

Name Baseline Energy Format Decimal number Summarization Sum Data type Decimal number \$ % , .00 0

Structure Change the number of decimal places shown

1 Baseline Energy = if('Refrigerator EE (2)'[Total adjusted storage volume (in L)]<300, (465+1.378*'Refrigerator EE (2)'[Total adjusted storage volume (in L)]*.533,(465+1.378*'Refrigerator EE (2)'[Total adjusted storage volume (in L)]*.506))

Step 2: Remove the decimal – enter 0.

Step 1: Select column

year	Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Date	Days after sale	Baseline Energy
419.75	477.24	Model 1	Importer -1	R410A	Monday, August 22, 2022	102	798
365	525.08	Model 11	Importer -2	R134a	Wednesday, August 2, 2023	670	831
408.8	652.04	Model 12	Importer -2	R134a	Sunday, October 13, 2024	232	920
390.55	372.13	Model 13	Importer -2	R134a	Monday, November 13, 2023	210	724
317.55	397.95	Model 10	Importer -1	R134a	Thursday, February 20, 2024	347	742
416.1	632.55	Model 14	Importer -2			1000	906
533	632.55	Model 15	Importer -2			1003	906
470.85	632.55	Model 16	Importer -2			1159	906
576.7	694.61	Model 17	Importer -2			847	949
518.3	765.82	Model 18	Importer -2			706	999
448.95	599.12	Model 2	Importer -1			605	883
332.15	254.97	Model-5	Importer -1			856	435
354.05	299.27	Model-7	Importer -1	R134a	Wednesday, March 30, 2022	1160	468
343.1	490.12	Model 19	Importer -2	R600a	Sunday, March 19, 2023	806	807
566.48	676.68	Model 3	Importer -1	R410A	Saturday, February 24, 2024	464	937
280.69	278.824	Model-6	Importer -1	R410A	Saturday, February 4, 2023	849	453
306.6	319.888	Model 10	Importer -1	R410A	Friday, December 22, 2023	528	688
343.1	490.12	Model 20	Importer -2	R134a	Wednesday, April 13, 2022	1146	807
365	525.08	Model 21	Importer -2	R134a	Monday, August 8, 2022	1029	831
390.55	372.13	Model 10	Importer -2	R600a	Sunday, February 20, 2023	1108	724

Data

Search

- Assumptions
 - Σ Emission factor :kg of CO2 / ...
 - Σ R134a - GWP:kg of CO2
 - Σ R22 - GWP:kg of CO2
 - Σ R32 - GWP:kg of CO2
 - Σ R410a - GWP:kg of CO2
 - Σ R610a - GWP:kg of CO2
- Refrigerator EE (2)
 - Σ Annual Energy Consumption ...
 - Baseline Energy
 - Brand
- Date
 - Date Hierarchy
 - Year
 - Quarter
 - Month
 - Day
 - Days after sale
 - Σ Efficiency level



Adding measure to evaluate energy saving

File Home Help **Table tools** Column tools Share

Name Refrigerator EE (2)

Manage relationships New measure Quick measure New column New table Mark as date table

Choose from a list of common calculations and add the results to the selected table.

year)	Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Day
419.75	477.24	Model 1	Importer -1	R410A	Monday
365	525.08	Model 11	Importer -2	R134a	Wednesday
408.8	652.04	Model 12	Importer -2	R134a	Sunday
390.55	372.13	Model 13	Importer -2	R134a	Monday
317.55	397.95	Model 10	Importer -1	R134a	Thursday
416.1	632.55	Model 14	Importer -2	R134a	Tuesday
533	632.55	Model 15	Importer -2	R134a	Saturday
470.85	632.55	Model 16	Importer -2	R134a	Thursday
576.7	694.61	Model 17	Importer -2	R134a	Monday
518.3	765.82	Model 18	Importer -2	R134a	Tuesday
448.95	599.12	Model 2	Importer -1	R134a	Friday
332.15	254.97	Model-5	Importer -1	R134a	Saturday
354.05	299.27	Model-7	Importer -1	R134a	Wednesday
343.1	490.12	Model 19	Importer -2	R600a	Sunday
566.48	676.68	Model 3	Importer -1	R410A	Saturday
280.69	278.824	Model-6	Importer -1	R410A	Saturday
306.6	319.888	Model 10	Importer -1	R410A	Friday
343.1	490.12	Model 20	Importer -1	R410A	Monday
365	525.08	Model 21	Importer -1	R410A	Monday
390.55	372.13	Model 10	Importer -1	R410A	Monday
232.87	220.98	Model -4	Importer -3	R410A	Monday
335.8	518.36	Model 11	Importer -3	R600a	Monday

Quick measure

Copilot can help Get measure suggestions in DAX query view. [Try it now](#)

Select a calculation to create a measure.

Subtraction

Calculate the difference between two values. [Learn more](#)

Base value

Baseline Energy

Value to subtract

Annual Energy Consumption (kWh/ year)

Add

Data

Search

Assumptions

- Σ Emission factor :kg of CO2 / ...
- Σ R134a - GWP:kg of CO2
- Σ R22 - GWP:kg of CO2
- Σ R32 - GWP:kg of CO2
- Σ R410a - GWP:kg of CO2
- Σ R610a - GWP:kg of CO2

Refrigerator EE (2)

- Σ Annual Energy Consumption ...
- Baseline Energy
- Brand

Date

- Date Hierarchy
- Year
- Day
- Days after sale
- Efficiency level

Step 1: Drag the Baseline energy – Annual Energy consumption

Step 2: Click Add



Renaming measure

File Home Help Table tools Measure tools

Name Baseline Energy mi... Format Decimal number Data category Uncategorized

Home table Refrigerator EE (2) \$ % 0

Structure Formatting Properties

1 Baseline Energy minus Annual Energy Consumption (kWh/ year) =
2 SUM('Refrigerator EE (2)'[Baseline Energy]) - SUM('Refrigerator EE (2)'[Annual Energy Consumption (kWh/ year)])

Quick measure Copilot can help Get measure suggestions in DAX query view. Try it now

Data Search

Step 2: Rename - Baseline Energy minus Annual Energy Consumption (kWh/ year) to -- Annual Energy saving (kWh/year)

Base value Baseline Energy

Name [Baseline Energy minus Annual Energy Consumption (kWh/ year)]

Step 1: Click on Measure

Add

Σ R410a - GWP:kg of CO2
Σ R610a - GWP:kg of CO2
Σ Refrigerator EE (2)
Σ Annual Energy Consumption ...
Baseline Energy
Baseline Energy minus ...
Brand
Date
Date Hierarchy
Year
Quarter
Month
Day
Days after sale

S. No.	Brand	Efficiency level	Annual Energy Consumption (kWh/ year)
7	Brand -1	With freezer	2
8	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3
9	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3
10	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	2
11	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3
12	Brand -2	With freezer, Adjusted Volume ≤ 300l	3
13	Brand -2	With freezer, Adjusted Volume ≤ 300l	3
14	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	5
15	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3
16	Brand -2	With freezer, Adjusted Volume ≤ 300l	3
17	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3
18	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4
19	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4
20	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3
21	Brand -1	With freezer, Adjusted Volume ≤ 300l	4
22	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4



Renaming measure

FileHomeHelpTable toolsMeasure tools

NameBaseline Energy mi...

FormatDecimal number

Data categoryUncategorized

Home tableRefrigerator EE (2)

Commit

Structure

Formatting

Properties

New measure

Quick measure

Calculations

1 Annual Energy saving (kWh/year)

2 SUM('Refrigerator EE (2)')[Baseline Energy] - SUM('Refrigerator EE (2)')[Annual Energy Consumption (kWh/ year)]

S. No	Brand	Type	Efficiency level	Annual Energy Consumption (kWh/ year)
1	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	2	
2	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
3	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
4	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
5	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	5	
6	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	
7	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
8	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
9	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
10	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	2	
11	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
12	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
13	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
14	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	5	
15	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
16	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
17	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
18	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
19	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	
20	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
21	Brand -1	With freezer, Adjusted Volume ≤ 300l	4	
22	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	

Quick measure

Copilot can help

Get measure suggestions in DAX query view. [Try it now](#)

Select a calculation to create a measure.

Subtraction

Calculate the difference between two values. [Learn more](#)

Base value ⓘ

Baseline Energy

Value to subtract ⓘ

Annual Energy Consumption (kWh/ year)

Add

Data

Search

Assumptions

Emission factor :kg of CO2 / ...

R134a - GWP:kg of CO2

R22 - GWP:kg of CO2

R32 - GWP:kg of CO2

R410a - GWP:kg of CO2

R610a - GWP:kg of CO2

Refrigerator EE (2)

Annual Energy Consumption ...

Baseline Energy

Baseline Energy minus Annu...

Brand

Date

Date Hierarchy

Year

Quarter

Month

Day

Days after sale

Click ok



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Renaming measure

FileHomeHelpTable toolsMeasure tools

NameBaseline Energy mi...

FormatDecimal number

Data categoryUncategorized

Home tableRefrigerator EE (2)

Commit

Structure

Formatting

Properties

New measure

Quick measure

Calculations

1 Annual Energy saving (kWh/year)

2 SUM('Refrigerator EE (2)')[Baseline Energy] - SUM('Refrigerator EE (2)')[Annual Energy Consumption (kWh/ year)]

S. No	Brand	Type	Efficiency level	Annual Energy Consumption (kWh/ year)
1	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	2	
2	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
3	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
4	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
5	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	5	
6	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	
7	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
8	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
9	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
10	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	2	
11	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
12	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
13	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
14	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	5	
15	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	
16	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	
17	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
18	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	
19	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	
20	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	
21	Brand -1	With freezer, Adjusted Volume ≤ 300l	4	
22	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	

Quick measure

Copilot can help

Get measure suggestions in DAX query view. [Try it now](#)

Select a calculation to create a measure.

Subtraction

Calculate the difference between two values. [Learn more](#)

Base value ⓘ

Baseline Energy

Value to subtract ⓘ

Annual Energy Consumption (kWh/ year)

Add

Data

Search

Assumptions

Emission factor :kg of CO2 / ...

R134a - GWP:kg of CO2

R22 - GWP:kg of CO2

R32 - GWP:kg of CO2

R410a - GWP:kg of CO2

R610a - GWP:kg of CO2

Refrigerator EE (2)

Annual Energy Consumption ...

Baseline Energy

Baseline Energy minus Annu...

Brand

Date

Date Hierarchy

Year

Quarter

Month

Day

Days after sale



Renaming measure

File

Home

Help

Table tools

Measure tools

Name

Annual Energy savi...

Format

Decimal number

Data category

Uncategorized

New measure

Quick measure

Home table

Refrigerator EE (2)

Structure

Formatting

Properties

Calculations

1 Annual Energy saving (kWh/ year) =

2 SUM('Refrigerator EE (2)'[Baseline Energy]) - SUM('Refrigerator EE (2)'[Annual Energy Consumption (kWh/ year)])

Total adjusted storage volume (in L)	Model	Name of importer	Refrigerant	Date	Days after sale	Baseline Energy	
75	477.24	Model 1	Importer -1	R410A	Monday, August 22, 2022	1015	798
365	525.08	Model 11	Importer -2	R134a	Wednesday, August 2, 2023	670	831
8.8	652.04	Model 12	Importer -2	R134a	Sunday, October 13, 2024	232	920
55	372.13	Model 13	Importer -2	R134a	Monday, November 4, 2024	210	724
55	397.95	Model 10	Importer -1	R134a	Thursday, June 20, 2024	347	742
6.1	632.55	Model 14	Importer -2	R134a	Tuesday, September 6, 2022	1000	906
33	632.55	Model 15	Importer -2	R134a	Saturday, September 3, 2022	1003	906
85	632.55	Model 16	Importer -2	R134a	Thursday, March 31, 2022	1159	906
6.7	694.61	Model 17	Importer -2	R134a	Monday, February 6, 2023	847	949
8.3	765.82	Model 18	Importer -2	R134a	Tuesday, June 27, 2023	706	999
95	599.12	Model 2	Importer -1	R134a	Friday, October 6, 2023	605	883
15	254.97	Model-5	Importer -1	R134a	Saturday, January 28, 2023		
05	299.27	Model-7	Importer -1	R134a	Wednesday, March 30, 2022		
3.1	490.12	Model 19	Importer -2	R600a	Sunday, March 19, 2023	806	807
48	676.68	Model 3	Importer -1	R410A	Saturday, February 24, 2024	464	
69	278.824	Model-6	Importer -1	R410A	Saturday, February 4, 2023	849	
6.6	319.888	Model 10	Importer -1	R410A	Friday, December		
3.1	490.12	Model 20	Importer -2	R134a	Wednesday, April		
365	525.08	Model 21	Importer -2	R134a	Monday, August		
55	372.13	Model 10	Importer -3	R600a	Sunday, February 26, 2022	1120	724
87	220.98	Model -4	Importer -3	R410A	Monday, October 17, 2022	959	410
5.8	518.36	Model 11	Importer -3	R600a	Sunday, February 26, 2023	827	826

Name

Annual Energy saving (kWh/ year)

Quick measure

Measure is added and renamed

Data

Search

Assumptions

Emission factor :kg of CO2 / ...

R134a - GWP:kg of CO2

R22 - GWP:kg of CO2

R32 - GWP:kg of CO2

R410a - GWP:kg of CO2

R610a - GWP:kg of CO2

Refrigerator EE (2)

Annual Energy Consumption ...

Annual Energy saving (...)

Baseline Energy

Brand

Date

Date Hierarchy

Year

Quarter

Month

Day

Days after sale



DAX functions for Energy Saving calculation

File Home Help Table tools Column tools

Name: Annual Energy Savi... Format: General Summarization: Sum Data category: Uncategorized

Structure: Formatting: Properties: Sort: Groups: Relationships: Calculations:

1 Annual Energy Saving (kWh/year) = ('Refrigerator EE (2)'[Baseline Energy]-'Refrigerator EE (2)'[Annual Energy Consumption (kWh/ year)])*'Refrigerator EE (2)'[Days of sale of ee equipment]/365*'Refrigerator EE (2)'[Sales]

of importer Refrigerant Date of sales Baseline Energy Days of sale of ee equipment Sales Annual Energy Saving (kWh/year)

ter -1 R410A Monday, August 22, 2022 797.6 1015 28 29400.8276140274

ter -2 R134a Wednesday, August 2, 2023 831.1 670 7 5988.62502191781

te 2921.01896100822

te 4219.81554936986

te 11300.1782011616

te 33587.0304109589

te 3078.00621313973

te 5529.80357694247

te 18157.4208537534

ter -2 R134a Tuesday, June 27, 2023 999.1 706 26 24195.0832288438

ter -1 R134a Friday, October 6, 2023 882.7 605 1 718.812155780822

ter -1 R134a Saturday, January 28, 2023 435.1 856 21 5079.37095649315

ter -1 R134a Wednesday, March 30, 2022 467.5 1160 21 7571.80385038

ter -2 R600a Sunday, March 19, 2023 806.7 806 24 2457.1137

ter -1 R410A Saturday, February 24, 2024 937.1 464 84 11646.156114411

ter -1 R410A Saturday, February 4, 2023 452.8 849 18 23650.5997134247

ter -1 R410A Friday, December 22, 2023 688.1 528 8 24073.0429911671

ter -2 R134a Wednesday, April 13, 2022 806.7 1146 8 11646.156114411

ter -2 R134a Monday, August 8, 2022 831.1 1029 18 23650.5997134247

ter -3 R600a Sunday, February 20, 2022 724.4 1198 22 24073.0429911671

Annual Energy Saving (kWh/year) = ('Refrigerator EE (2)'[Baseline Energy]-'Refrigerator EE (2)'[Annual Energy Consumption (kWh/ year)])*'Refrigerator EE (2)'[Days of sale of ee equipment]/365*'Refrigerator EE (2)'[Sales]

Formula = (Annual energy consumption baseline – Annual energy consumption EE equipment)* year since EE equipment is installed * number of sales of EE equipment

New Column is added and renamed

Data

Search

Assumptions

- Average Cost of Power
- Emission factor
- R134a - GWP
- R22 - GWP
- R32 - GWP
- R410a - GWP
- R610a - GWP

Refrigerator EE (2)

- Annual Energy Consumption ...
- Annual Energy Saving (kWh/...
- Baseline Energy
- Brand

Date of sales

- Date Hierarchy
- Days of sale of ee equipment
- Efficiency level



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DAX functions for Energy Saving calculation

File Home Help Table tools Column tools

Name: Annual Energy Savi... Format: Decimal number Summarization: Sum Data category: Uncategorized

Data type: Decimal number

Structure: Formatting: Properties: Sort: Groups: Relationships: Calculations: New column

1 Annual Energy Saving (kWh/year) = ('Refrigerator EE (2)'[Baseline Energy]-'Refrigerator EE (2)'[Annual Energy Consumption (kWh/ year)])*'Refrigerator EE (2)'[Days of sale of ee equipment]/365*'Refrigerator EE (2)'[Sales]

Adjusting decimal number

of importer	Refrigerant	Date of sales	Baseline Energy	Annual Energy Consumption (kWh/ year)	Days of sale of ee equipment	Annual Energy Saving (kWh/year)
ter -1	R410A	Monday, August 22, 2022			28	29401
ter -2	R134a	Wednesday, August 2, 2023			7	5989
ter -2	R134a	Sunday, October 13, 2024	919.6	232	9	2921
ter -2	R134a	Monday, November 4, 2024	724.4	210	22	4220
ter -1	R134a	Thursday, June 20, 2024	742.5	347	28	11300
ter -2	R134a	Tuesday, September 6, 2022	906.4	1000	25	33587
ter -2	R134a	Saturday, September 3, 2022	906.4	1003	3	3078
ter -2	R134a	Thursday, March 31, 2022	906.4	1159	4	5530
ter -2	R134a	Monday, February 6, 2023	949.6	847	21	18157
ter -2	R134a	Tuesday, June 27, 2023	999.1	706	26	24195
ter -1	R134a	Friday, October 6, 2023	882.7	605	1	719
ter -1	R134a	Saturday, January 28, 2023	435.1	856	21	5079
ter -1	R134a	Wednesday, March 30, 2022	467.5	1160	21	7572
ter -2	R600a	Sunday, March 19, 2023	806.7	806	24	24573
ter -1	R410A	Saturday, February 24, 2024	937.1	464	20	9434
ter -1	R410A	Saturday, February 4, 2023	452.8	849	1	400
ter -1	R410A	Friday, December 22, 2023	688.1	528	29	15988
ter -2	R134a	Wednesday, April 13, 2022	806.7	1146	8	11646
ter -2	R134a	Monday, August 8, 2022	831.1	1029	18	23651
ter -3	R600a	Sunday, February 20, 2022	724.4	1198	22	24073

Quick measure

Data

Search

- Assumptions
 - Average Cost of Power
 - Emission factor
 - R134a - GWP
 - R22 - GWP
 - R32 - GWP
 - R410a - GWP
 - R610a - GWP
- Refrigerator EE (2)
 - Annual Energy Consumption ...
 - Annual Energy Saving (kWh/...
 - Baseline Energy
 - Brand
- Date of sales
 - Date Hierarchy
 - Days of sale of ee equipment
 - Efficiency level



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DAX functions for Emission Reduction

File Home Help **Table tools** **Measure tools** Share

Name: Emission Reduction Format: General Data category: Uncategorized

Home table: Refrigerator EE (2) \$ % .00 Auto

Structure Formatting Properties Calculations

1 Emission Reduction = SUM('Refrigerator EE (2)'[Annual Energy Saving (kWh/year)])*SUM(Assumptions[Emission factor])/1000

Step 2: Rename the measure

Step 3: Use DAX function to multiply the energy saving and emission factor

Step 1: Add new measure

S. No.	Brand	Type	Efficiency level	Annual Energy Consumption (kWh/ year)	Total adjusted storage volume (in L)
1	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	420	
2	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	470	
3	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	533	
4	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	471	
5	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	577	
6	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	518	
7	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	449	
8	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	332	
9	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	354	
10	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	5	343	
11	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	566	
12	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	281	
13	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	307	
14	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	343	
15	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	365	
16	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	391	
17	Brand -1	With freezer, Adjusted Volume ≤ 300l	4	233	
18	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	336	
19	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	336	

Data

Search

- Σ R32 - GWP
- Σ R410a - GWP
- Σ R610a - GWP
- Refrigerator EE (2)
 - Σ Annual Energy Consumption ...
 - Annual Energy Saving (kWh/...
 - Baseline Energy
 - Brand
- Date of sales
 - Date Hierarchy
 - Days of sale of ee equipment
 - Σ Efficiency level
 - Emission Reduction
 - Model
 - Name of importer
 - Refrigerant
 - Σ S. No.
 - Σ Sales
 - Σ Total adjusted storage volum...



DAX functions for Emission Reduction

File Home Help **Table tools** **Measure tools** Share

Name Format Data category

Home table \$ %

Structure Formatting Properties Calculations

1 Emission Reduction = SUM('Refrigerator EE (2)'[Annual Energy Saving (kWh/year)])*SUM(Assumptions[Emission factor])/1000

S. No.	Brand	Type	Efficiency level	Annual Energy Consumption (kWh/ year)	Total adjusted storage volume (in L)
1	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	420	
2	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	365	
3	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	409	
4	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	391	
5	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	5	318	
6	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	416	
7	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	533	
8	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	471	
9	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	577	
10	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	518	
11	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	449	
12	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	332	
13	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	354	
14	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	5	343	
15	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	3	566	
16	Brand -2	With freezer, Adjusted Volume ≤ 300l	3	281	
17	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	307	
18	Brand -1	With freezer, 300l < Adjusted Volume ≤ 900l	4	343	
19	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	363	
20	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	3	391	
21	Brand -1	With freezer, Adjusted Volume ≤ 300l	4	233	
22	Brand -2	With freezer, 300l < Adjusted Volume ≤ 900l	4	336	

Quick measure

Search

- Σ R32 - GWP
- Σ R410a - GWP
- Σ R610a - GWP
- Refrigerator EE (2)
 - Σ Annual Energy Consumption ...
 - Annual Energy Saving (kWh/...
 - Baseline Energy
 - Brand
- Date of sales
 - Date Hierarchy
 - Days of sale of ee equipment
 - Σ Efficiency level
 - Emission Reduction
 - Model
 - Name of importer
 - Refrigerant
 - Σ S. No.
 - Σ Sales
 - Σ Total adjusted storage volum...

Measure added



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Adding data in Column for cost of the power saving (Maldivian Rufiyaa / kWh)

File Home Help **Table tools** Share

Name: Assumptions

Structure: Manage relationships Relationships

Calculations: New measure Quick measure New column New table Mark as date Calendars

Emission factor	R22 - GWP	R134a - GWP	R410a - GWP	R610a - GWP	R32 - GWP	Average Cost of Power
0.533	1810	1430	2088	2088	675	3.0

Step 1: Add new column

Step 2: Data in the new column

Quick measure

Data

Search

- Assumptions
 - Average Cost of Power
 - Σ Emission factor
 - Σ R134a - GWP
 - Σ R22 - GWP
 - Σ R32 - GWP
 - Σ R410a - GWP
 - Σ R610a - GWP
- Refrigerator EE (2)
 - Σ Annual Energy Consumption ...
 - Annual Energy Saving (kWh/...
 - Baseline Energy
 - Brand
- Date of sales
 - > Date Hierarchy
 - Days of sale of ee equipment
 - Σ Efficiency level
 - Emission Reduction
 - Model



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Adding new measure for evaluating cost savings

Step 1: Add Quick measure

Step 2: Select the data of cost of power and annual energy saving

Step 3: Multiply – conversion rate - Maldivian Rufiyaa to USD conversion

Step 4: Divide by 1000 to make '000 USD saving

Formula:

```
1 Energy Cost Saving (USD) =  
2 SUM('Assumptions'[Average Cost of Power]) * SUM('Refrigerator EE (2)'[Annual  
Energy Saving (kWh/year)]) * .065/1000
```

Quick measure

Copilot can help Get measure suggestions in DAX query view. [Try it now](#)

Select a calculation to create a measure.

Multiplication

Calculate the product of two values. [Learn more](#)

Base value ⓘ

Average Cost of Power

Value to multiply with ⓘ

Annual Energy Saving (kWh/year)

Add

Data

- Assumptions
 - Average Cost of Power
 - Cost Saving USD
 - Emission factor
 - Energy Cost Saving (USD)
 - R134a - GWP
 - R22 - GWP
 - R32 - GWP
 - R410a - GWP
 - R610a - GWP
- Refrigerator EE (2)
 - Annual Energy Consumption ...
 - Annual Energy Saving (kWh/...
 - Baseline Energy
 - Brand
- Date of sales
 - Date Hierarchy
 - Days of sale of ee equipment
 - Efficiency level



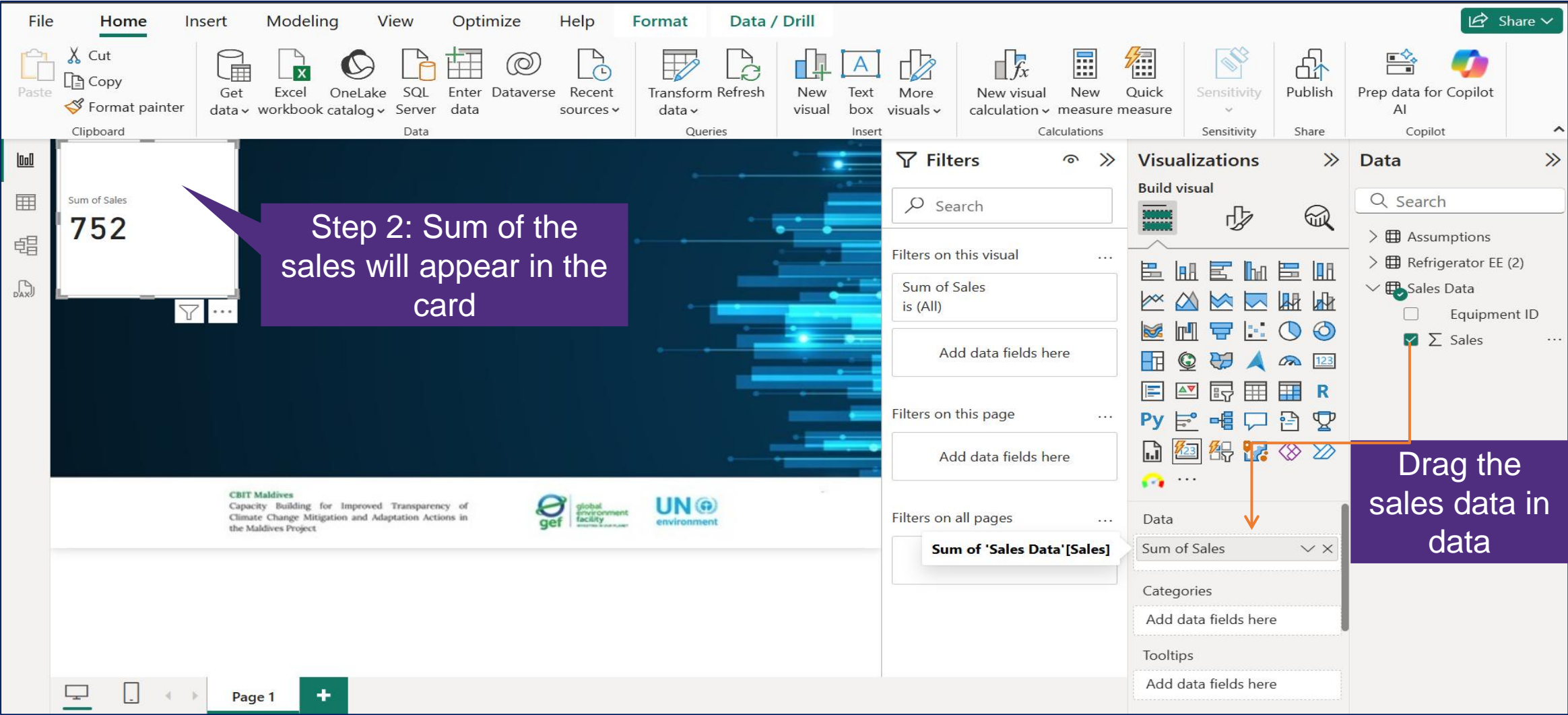
Preparing Dashboard

The screenshot displays the Power BI Desktop application with the 'Format' and 'Data / Drill' tabs active. The main workspace shows a blank dashboard with a dark blue background and a grid of data fields. A purple callout box points to the 'Card (new)' option in the 'Visualizations' panel, indicating the first step: 'Click on Card from Visualization panel'. Another purple callout box points to the 'Add data fields here' button in the 'Filters' panel, indicating the second step: 'Blank card will be added to the screen'. The 'Data' panel on the right shows a list of assumptions and refrigerators, with a search bar and expandable sections. The bottom status bar shows 'Page 1' and a green plus button.

Step 1: Click on Card from Visualization panel

Step 2: Blank card will be added to the screen

Preparing Dashboard



Preparing Dashboard

File Home Insert Modeling View Optimize Help Format Data / Drill

Paste Cut Copy Format painter Clipboard

Get data Excel workbook OneLake catalog SQL Server Enter data Data

Transform data Refresh Queries

New visual Text box More visuals Insert

New visual calculation New measure Quick measure Calculations

Sensitivity Publish Share

Prep data for Copilot AI Copilot

Share

Filters

Visualizations

Format visual

Search

Visual General

Callout values

Apply settings to

Series

All

Values

Font

DIN 45

B I U

Color

fx

Transparency

Sum of Sales

752

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UN environment

Page 1

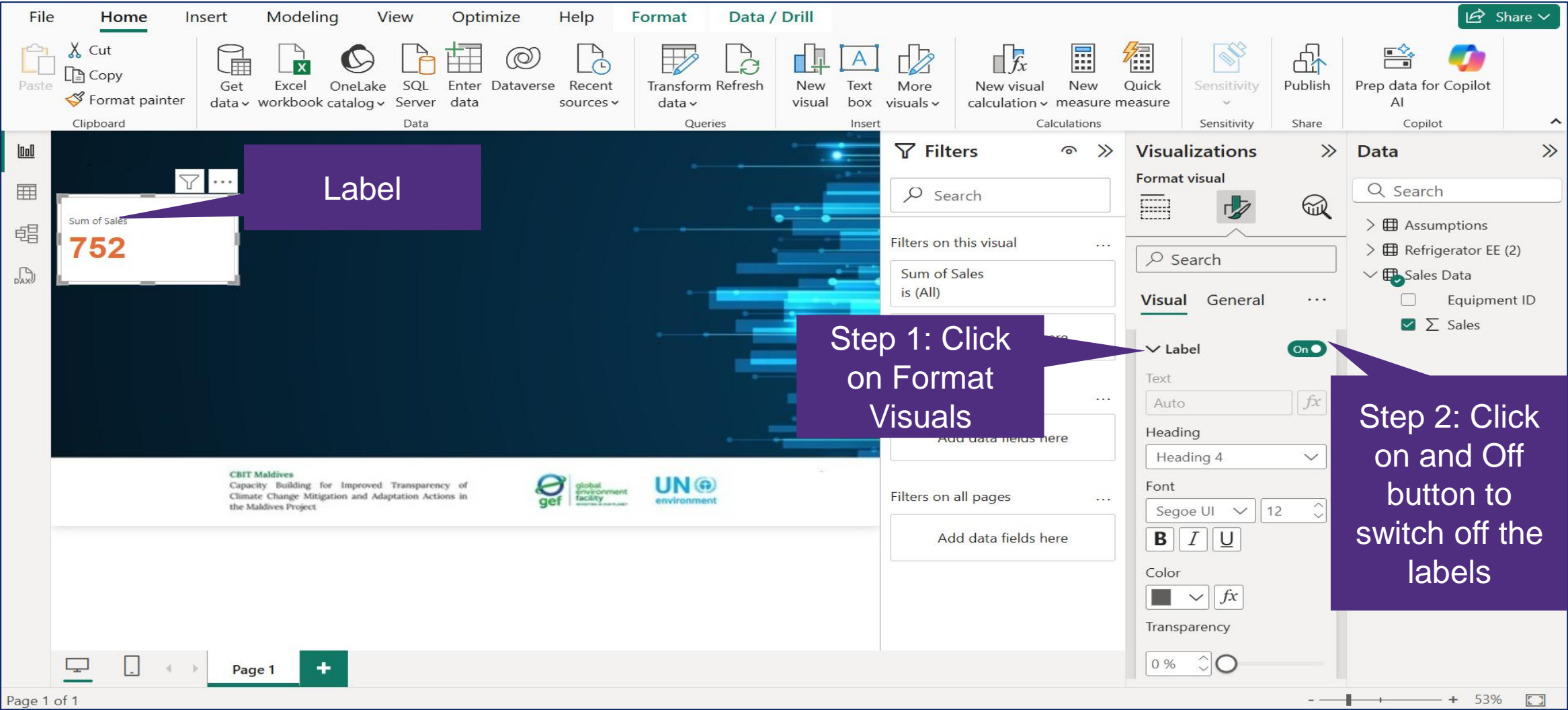
Step 1: Click on Format Visuals

Step 2: Click on Callout Values

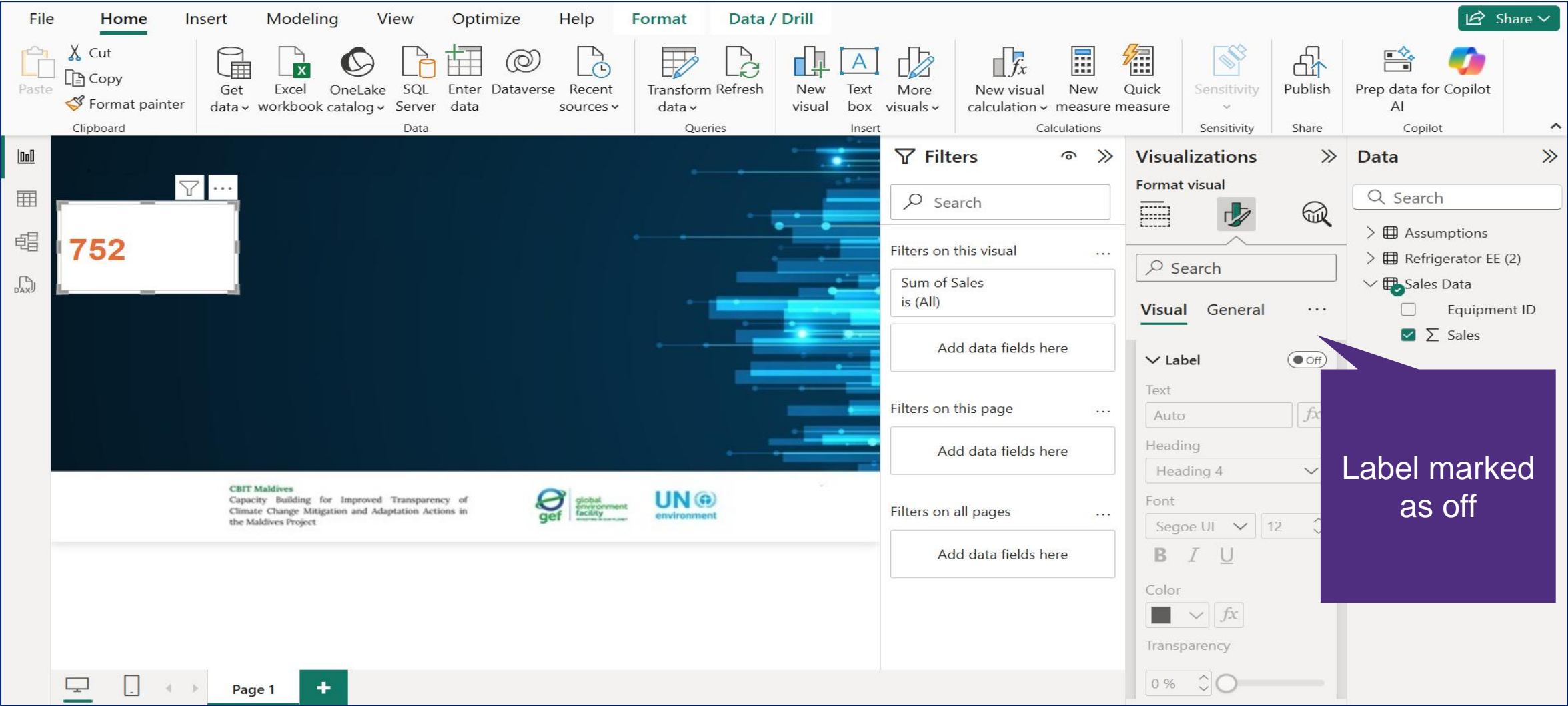
Step 3: Select font, size and color for the values



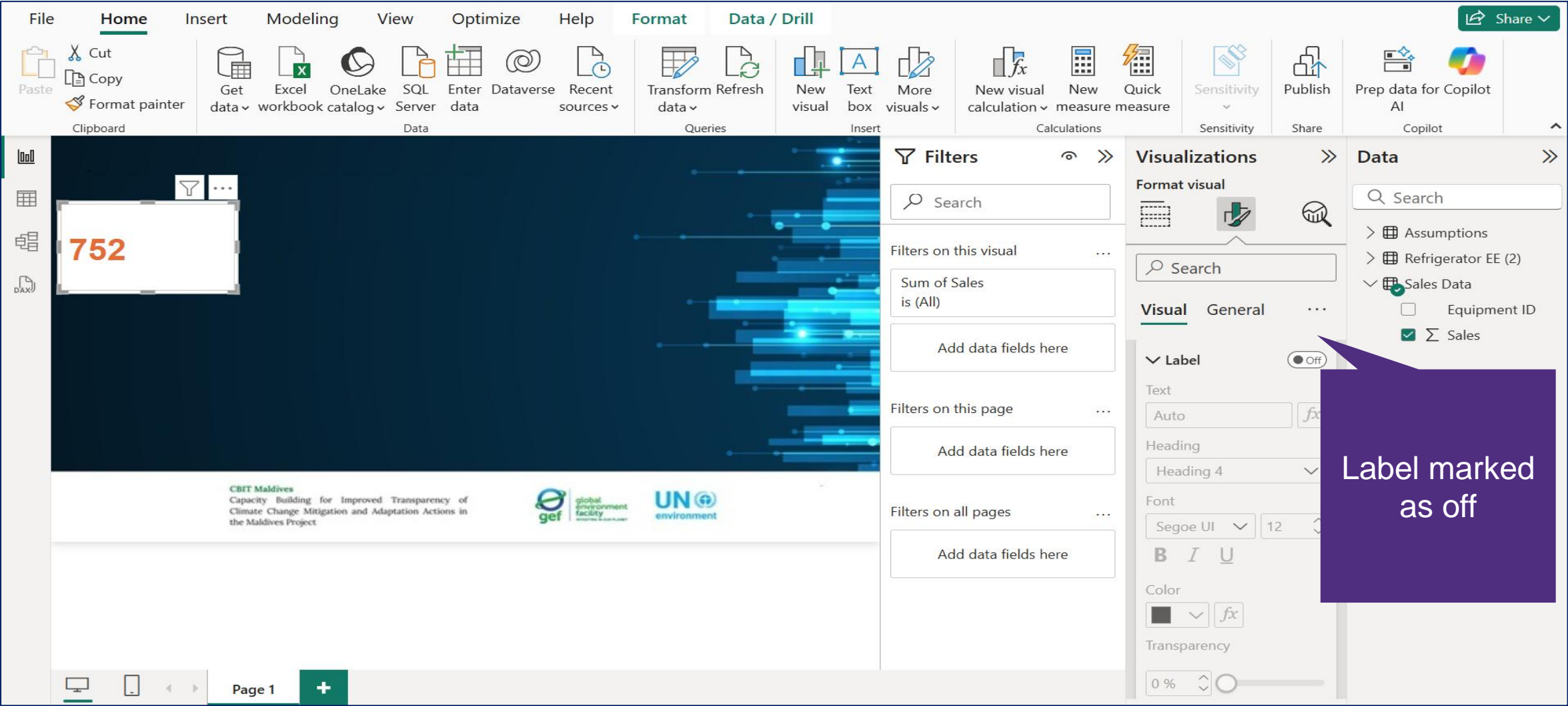
Preparing Dashboard



Preparing Dashboard



Preparing Dashboard



Preparing Dashboard

File

Home

Insert

Modeling

View

Optimize

Help

Format

Data / Drill

Paste

Cut

Copy

Format painter

Get data

Excel workbook

OneLake catalog

SQL Server

Enter data

Dataverse

Recent sources

Transform data

Refresh data

New visual

Text box

More visuals

New visual calculation

New measure

Quick measure

Sensitivity

Publish

Prep data for Copilot AI

Clipboard

Data

Queries

Insert

Calculations

Sensitivity

Share

Copilot

752

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UN

environment

Filters

Visualizations

Data

Search

Filters on this visual

Sum of Sales is (All)

Filters on all pages

Add data fields here

Format visual

Search

Visual

General

Images

Apply settings to

Series

All

Image

Image type

Image

Browse...

Transparency

0 %

Search

Assumptions

Refrigerator EE (2)

Sales Data

Equipment ID

Click on Images

Click on Images – Make it on

Click on Browse



Preparing Dashboard

The screenshot shows the Microsoft Power BI Desktop interface. The ribbon at the top includes tabs for File, Home, Insert, Modeling, View, Optimize, Help, Format, and Data / Drill. The 'Format' tab is active, showing various formatting options. A file explorer window is open, displaying the 'Images' folder. It contains several image files, including 'Energy_Saving_PNG-removebg-preview', 'POWER BI1.avif', and 'Sales_PNG-removebg-preview'. A callout bubble points to the 'Sales_PNG-removebg-preview' file with the text 'Browse the path'. Another callout bubble points to the 'Open' button at the bottom of the file explorer with the text 'Select Image and click open'. On the right side of the interface, the 'Visualizations' pane is visible, showing the 'Format visual' tab. A callout bubble points to the 'Image' section, specifically the 'Image type' dropdown and the 'Browse...' button, with the text 'Click on Browse'. Another callout bubble points to the 'Image' section with the text 'Click on Images – Make it on'. The 'Filters' pane is also visible, showing filters for the visual and the page.

File Home Insert Modeling View Optimize Help Format Data / Drill

Open

« Powe... > Images ...

Search Images & Icons

Organize New folder

Consultation on

Excercise Data Se

Final

Pratice Data Set

This PC

Windows (C:)

Network

Energy_Saving_PNG-removebg-preview

POWER BI1.avif

Sales_PNG-removebg-preview

File name: Sales_PNG-removebg-preview

All picture files (*.bmp;*.dib;*.rle)

Open Cancel

Browse the path

Select Image and click open

Filters

Visualizations

Format visual

Image

Image type

Image

Browse...

Transparency

0 %

Click on Images – Make it on

Click on Browse



Preparing Dashboard

The screenshot displays the Microsoft Power BI Desktop interface. The top ribbon includes tabs for File, Home, Insert, Modeling, View, Optimize, Help, Format, and Data / Drill. The 'Open' file dialog is open, showing the path 'C:\Windows\Images'. The 'Visualizations' pane on the right shows the 'Images' section with the 'Image' toggle turned on. The 'Data' pane on the right shows the 'Sales Data' table. The 'Filters' pane on the left shows the 'Sum of Sales is (All)' filter. The 'Open' dialog shows the file 'Sales_PNG-removebg-preview' selected. The 'Visualizations' pane shows the 'Image' toggle turned on. The 'Data' pane shows the 'Sales Data' table. The 'Filters' pane shows the 'Sum of Sales is (All)' filter. The 'Open' dialog shows the file 'Sales_PNG-removebg-preview' selected. The 'Visualizations' pane shows the 'Image' toggle turned on. The 'Data' pane shows the 'Sales Data' table. The 'Filters' pane shows the 'Sum of Sales is (All)' filter. The 'Open' dialog shows the file 'Sales_PNG-removebg-preview' selected.

Browse the path

Click on Images – Make it on

Click on Browse

Select Image and click open

Preparing Dashboard

File

Home

Insert

Modeling

View

Optimize

Help

Format

Data / Drill

Share

Cut

Copy

Format painter

Clipboard

Get data

Excel workbook

OneLake catalog

SQL Server

Enter data

Dataverse

Recent sources

Data

Transform data

Refresh data

Queries

New visual

Text box

More visuals

Insert

New visual calculation

New measure

Quick measure

Calculations

Sensitivity

Sensitivity

Publish

Share

Prep data for Copilot AI

Copilot

7..

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Page 1

+

Filters

Visualizations

Data

Search

Filters on this visual

Sum of Sales is (All)

Add data fields here

Filters on this page

Add data fields here

Filters on all pages

Add data fields here

Format visual

Visual

General

Search

Sales_PNG-remov...

Transparency

0 %

Position

Right of text

Vertical alignment

Space between image an...

4 px

Fix size

On

Size

Auto px

Assumptions

Refrigerator EE (2)

Sales Data

Adjust the image using settings

Click on size to adjust the image



Formatting the Visual



Visualizations

Format visual

Search

Visual General

Properties

Title

Title

Text

Heading

Font

Text color

Visualizations

Format visual

Search

Visual General

Subtitle

Divider

Color

Line style

Width

Ignore padding

Spacing

Reset to default

Visualizations

Format visual

Search

Visual General

Padding

Size

Alignment

Background

Color

Transparency

Visualizations

Format visual

Search

Visual General

Horizontal

Padding

Reset to default

Callout values

Reference labels

Images

Visualizations

Format visual

Search

Visual General

Values

Font

Color

Transparency

Horizontal alignment

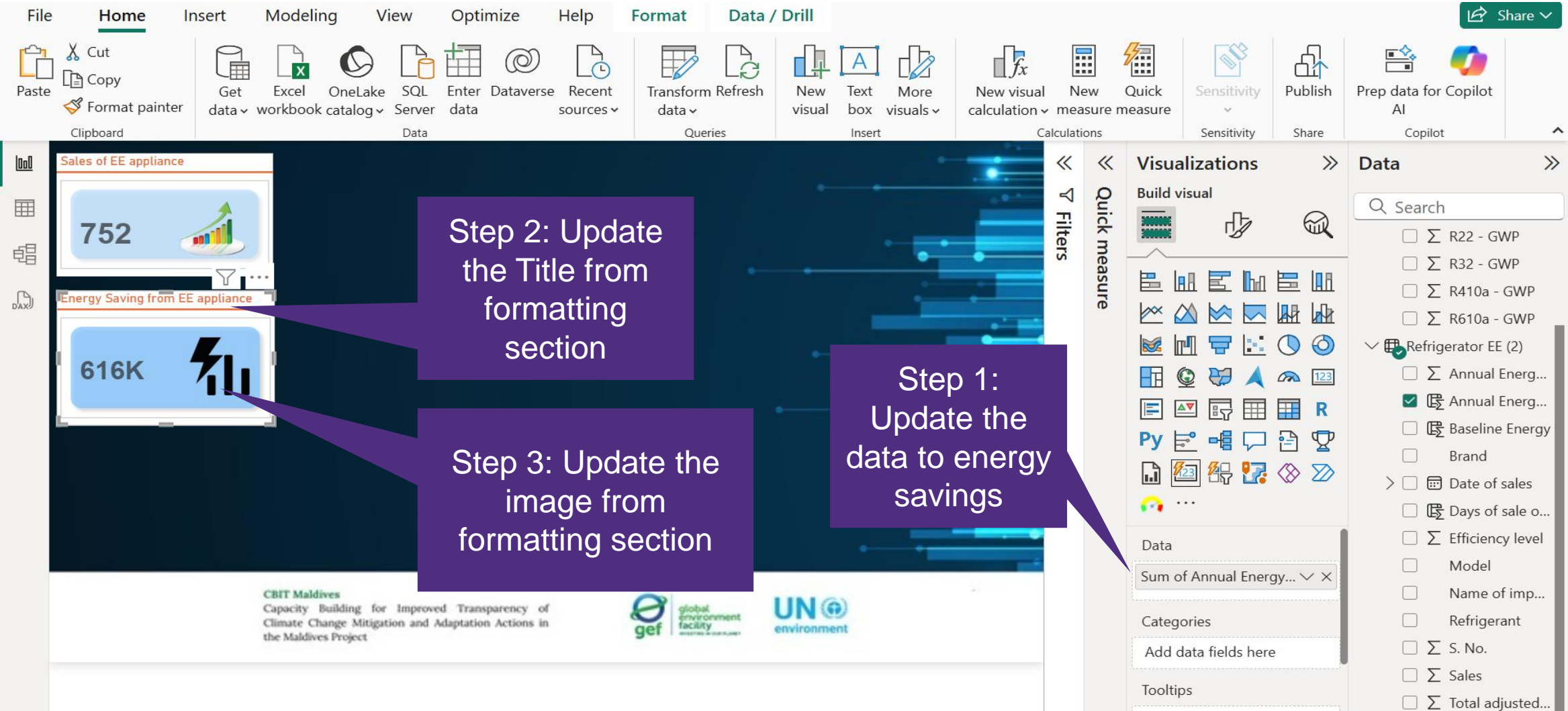
Text wrap



Preparing Dashboard

The screenshot displays the Microsoft Power BI Desktop interface. The top ribbon shows the 'Home' tab. The main workspace contains a bar chart titled 'Sales of EE appliance' with a value of 752. The 'Visualizations' pane on the right shows the 'Build visual' section with a bar chart icon selected. The 'Data' pane on the right shows a table with columns for 'Refrigerator EE (2)', 'Annual Energy...', 'Baseline Energy', 'Brand', 'Date of sales', 'Days of sale o...', 'Efficiency level', 'Model', 'Name of imp...', 'Refrigerant', 'S. No.', and 'Sales'. A callout box points to the bar chart with the text 'Step 1: Copy the card and paste'. Another callout box points to the bar chart with the text 'Step 2: Paste the card'.

Preparing Dashboard



Updating Number format

Updating number format

Step 1: Select Sum of Annual energy from drop down

Step 2

Step 3



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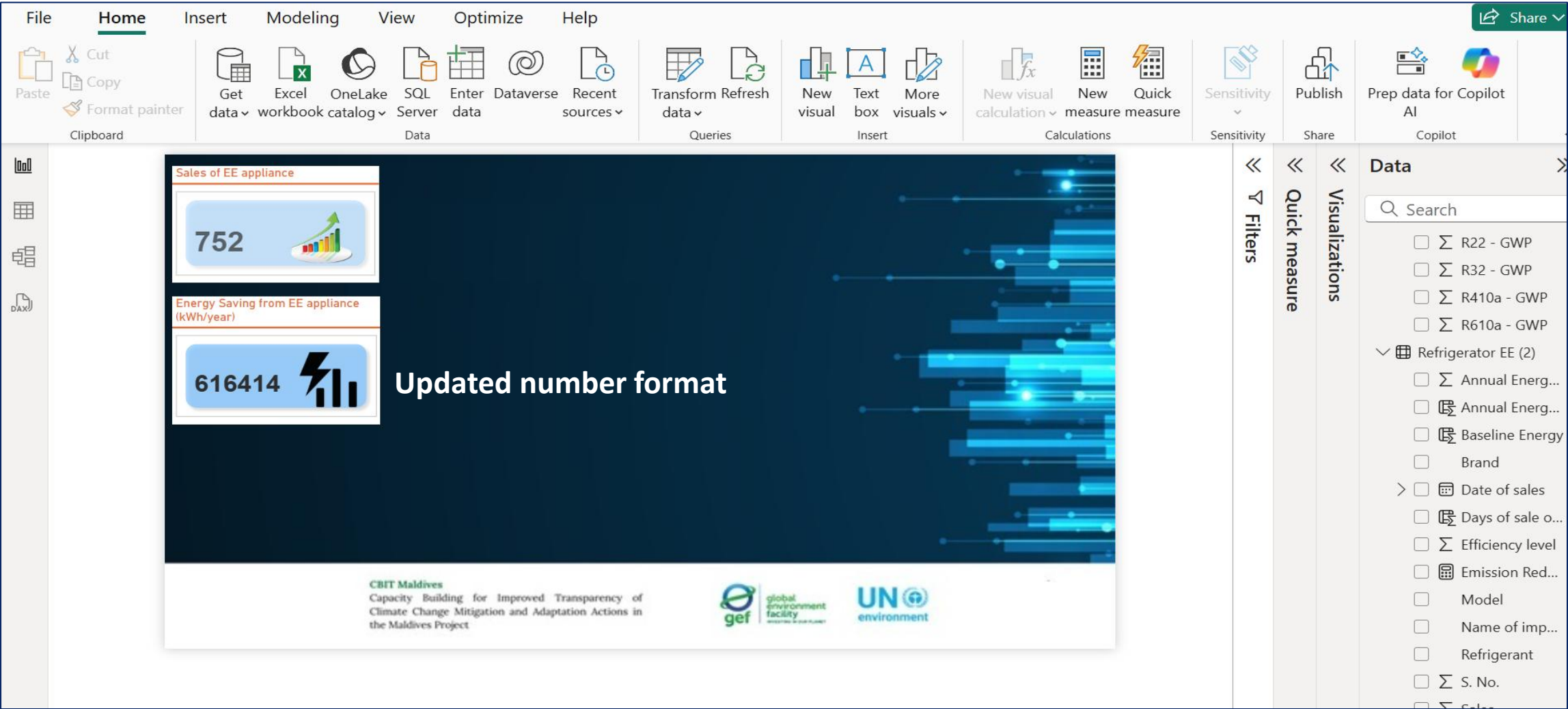


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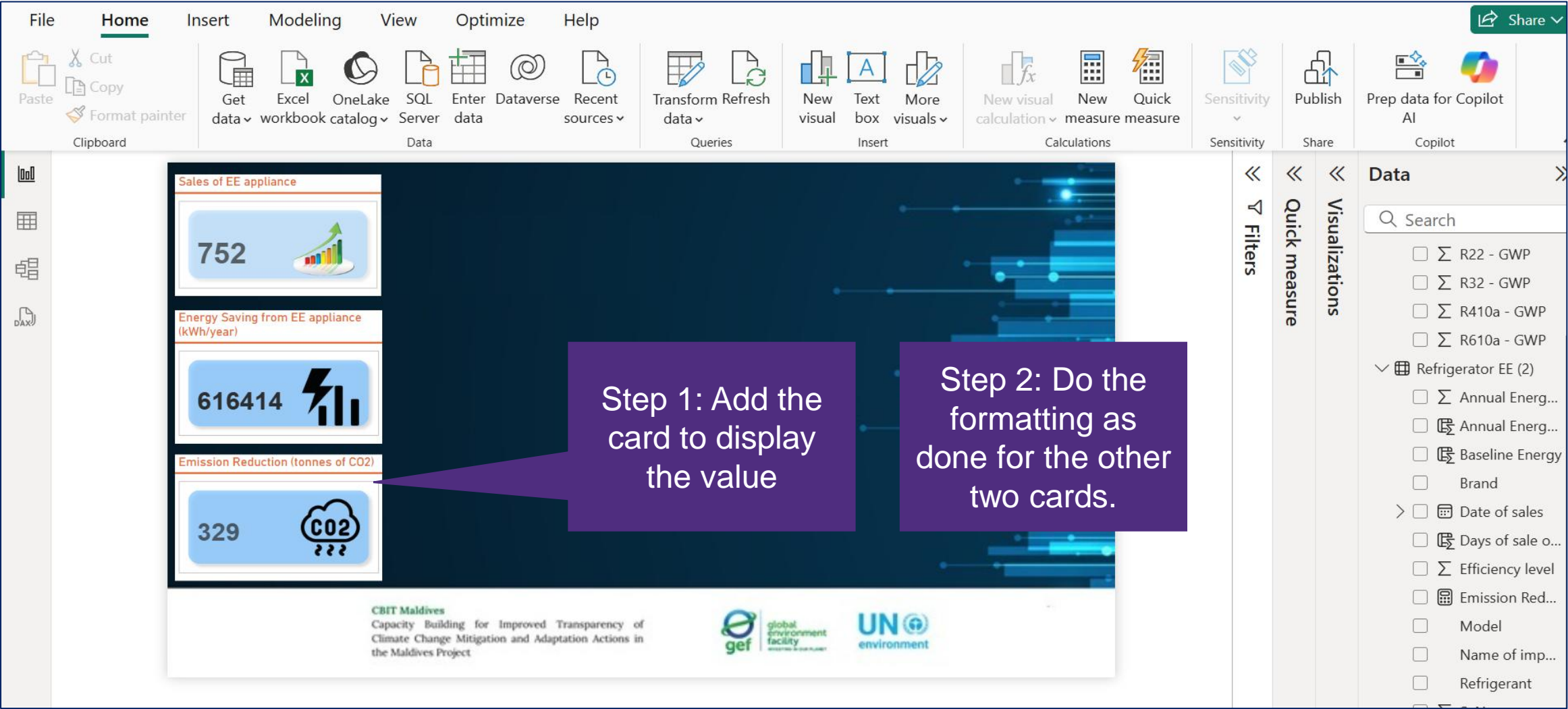


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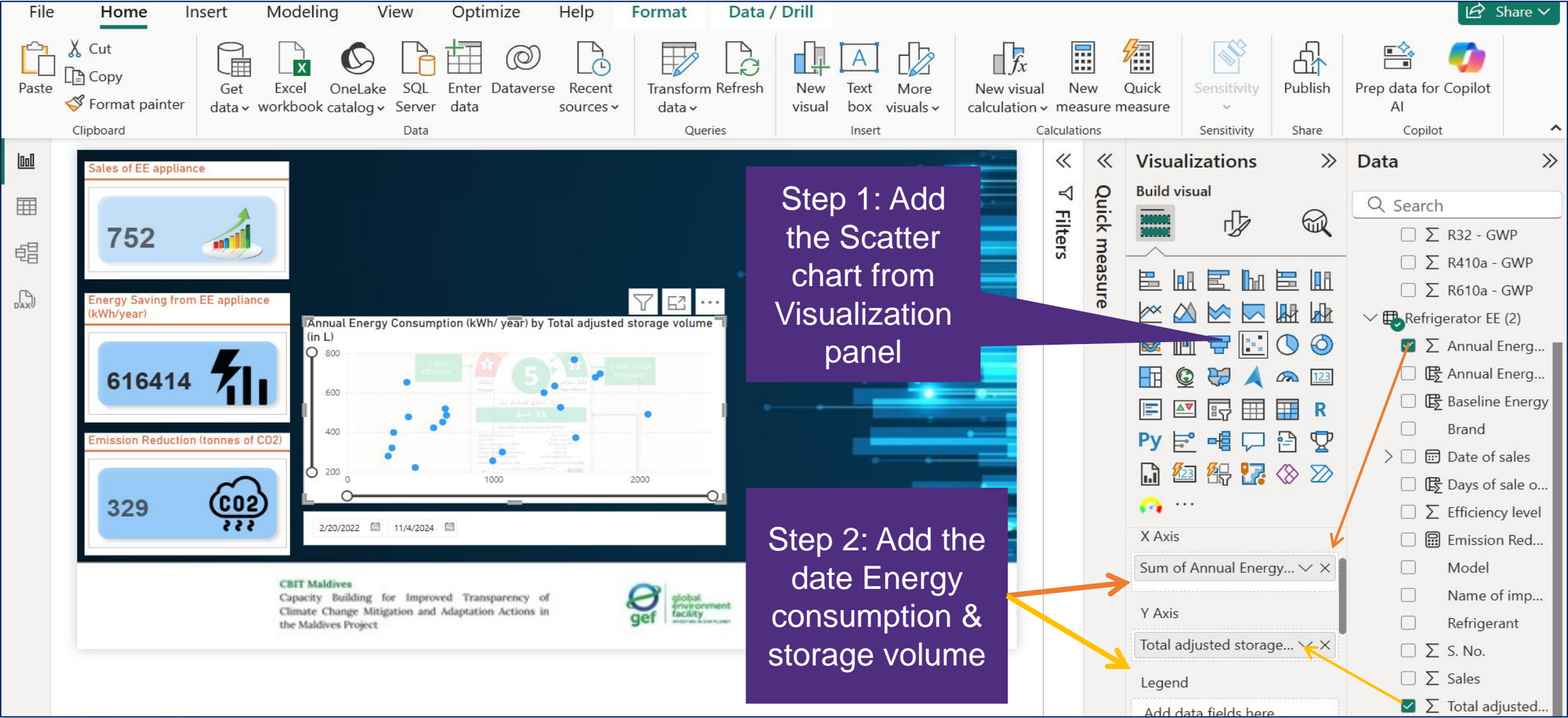
Updating Number format



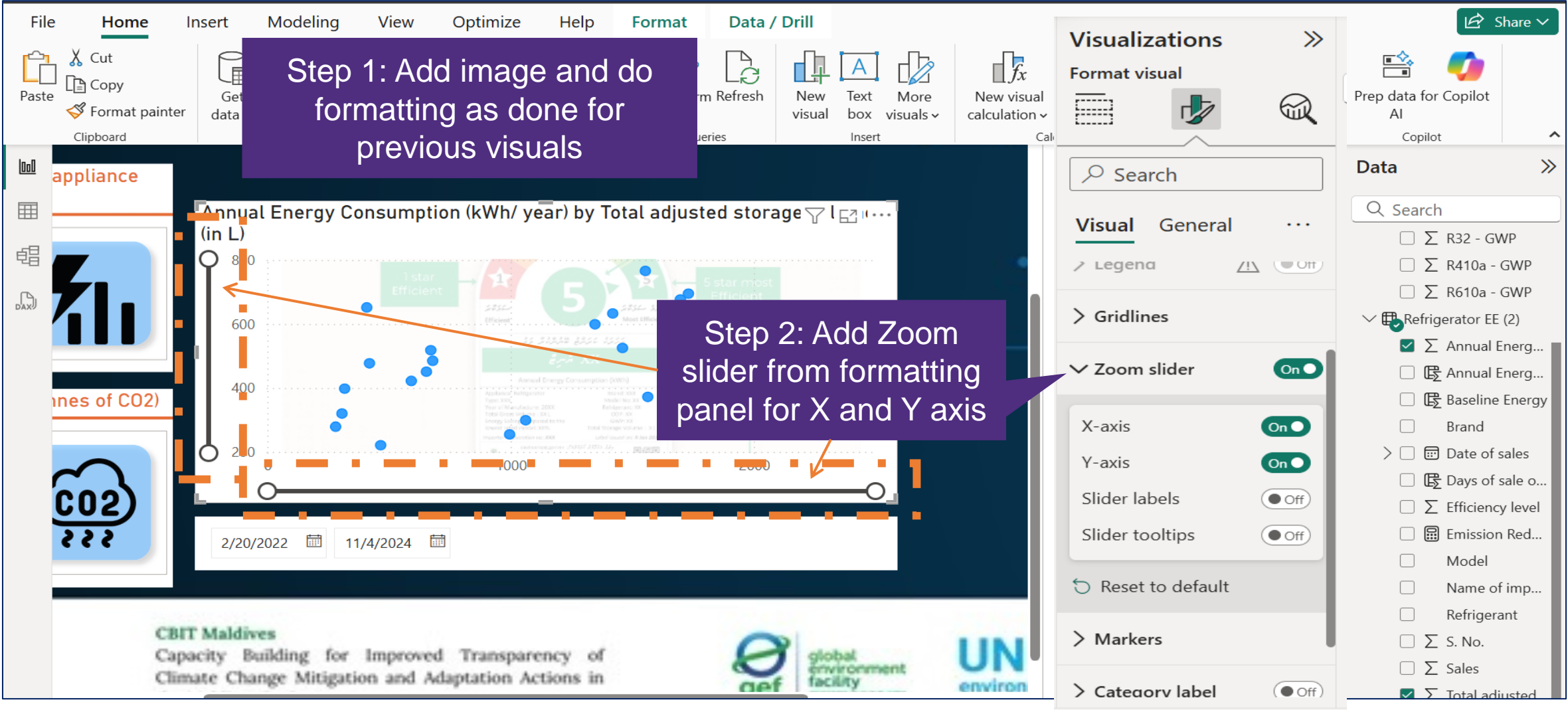
Preparing Dashboard



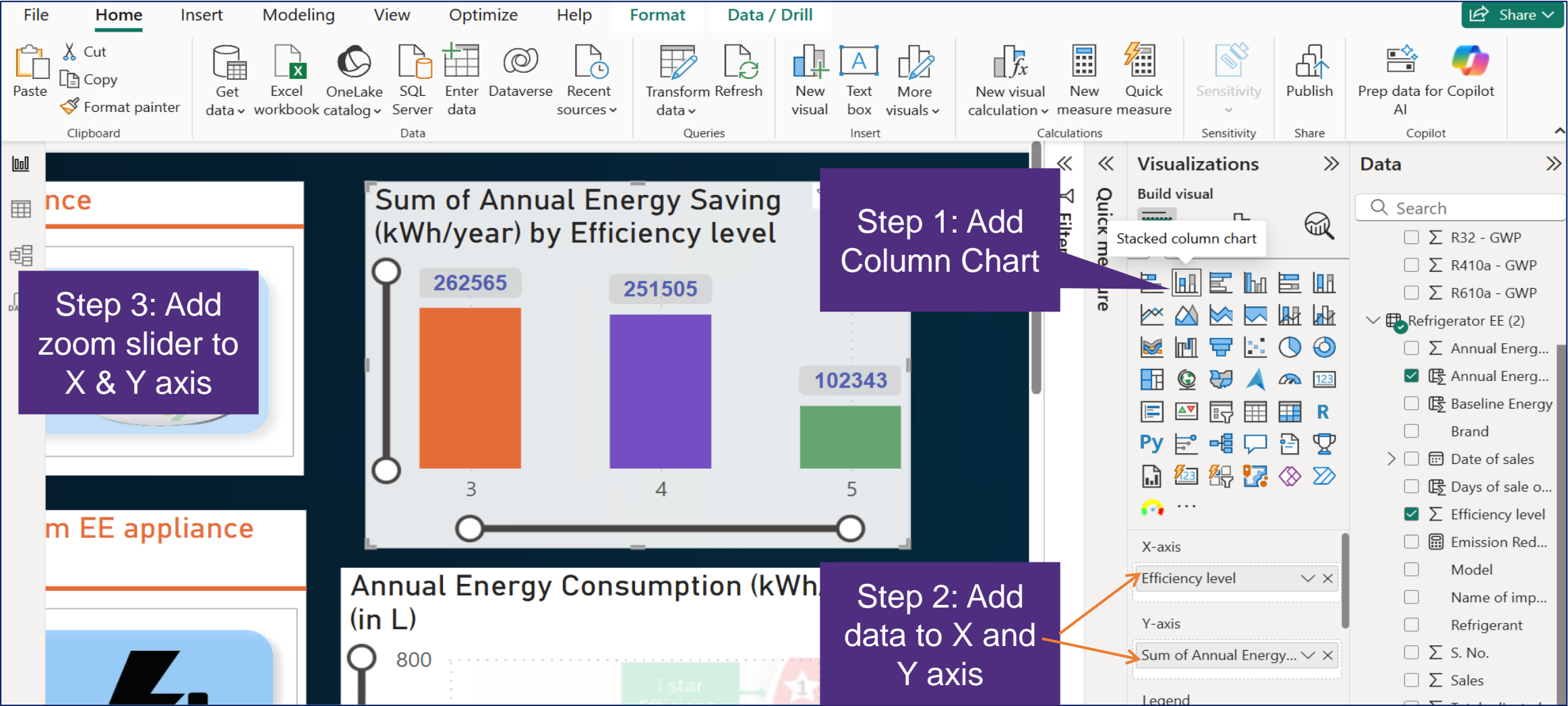
Adding Scatter Chart



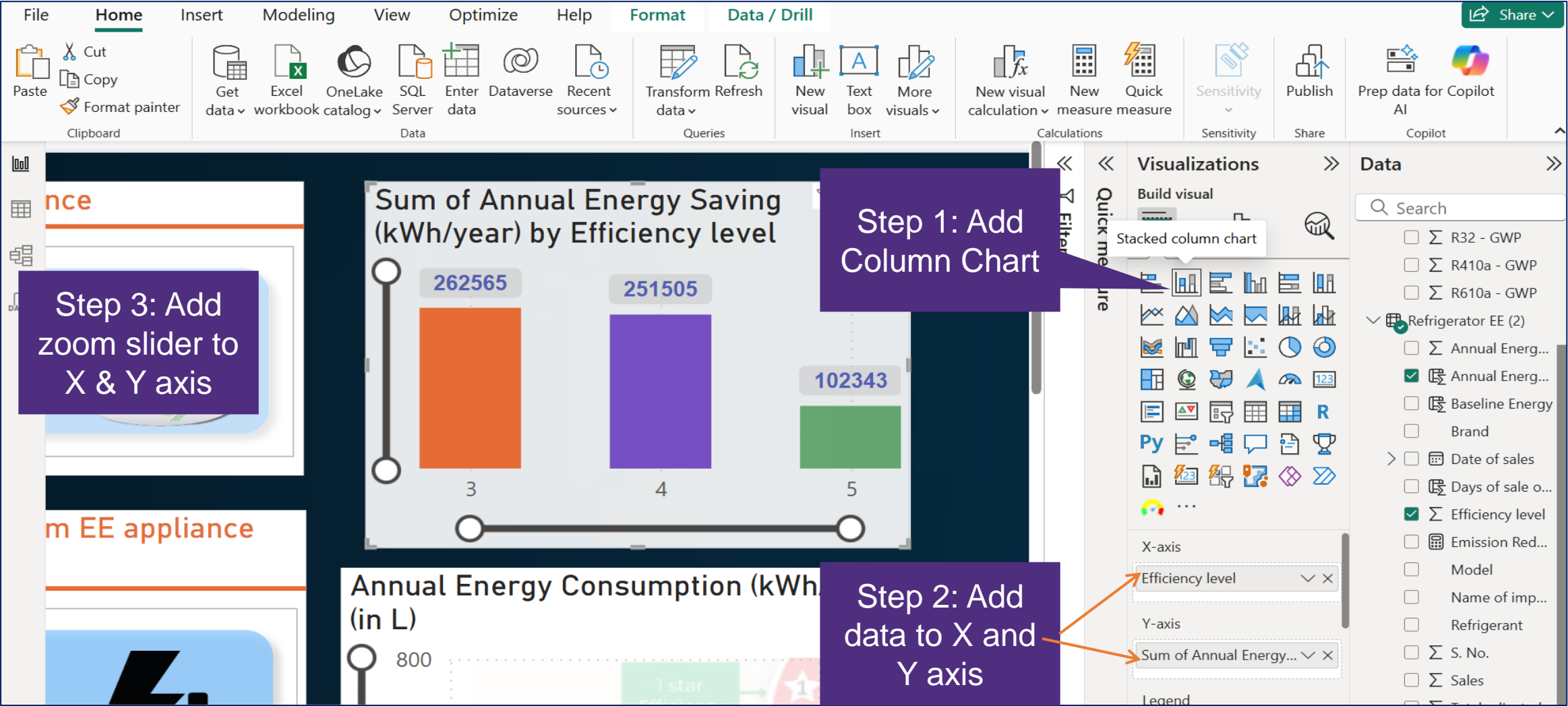
Adding Scatter Chart



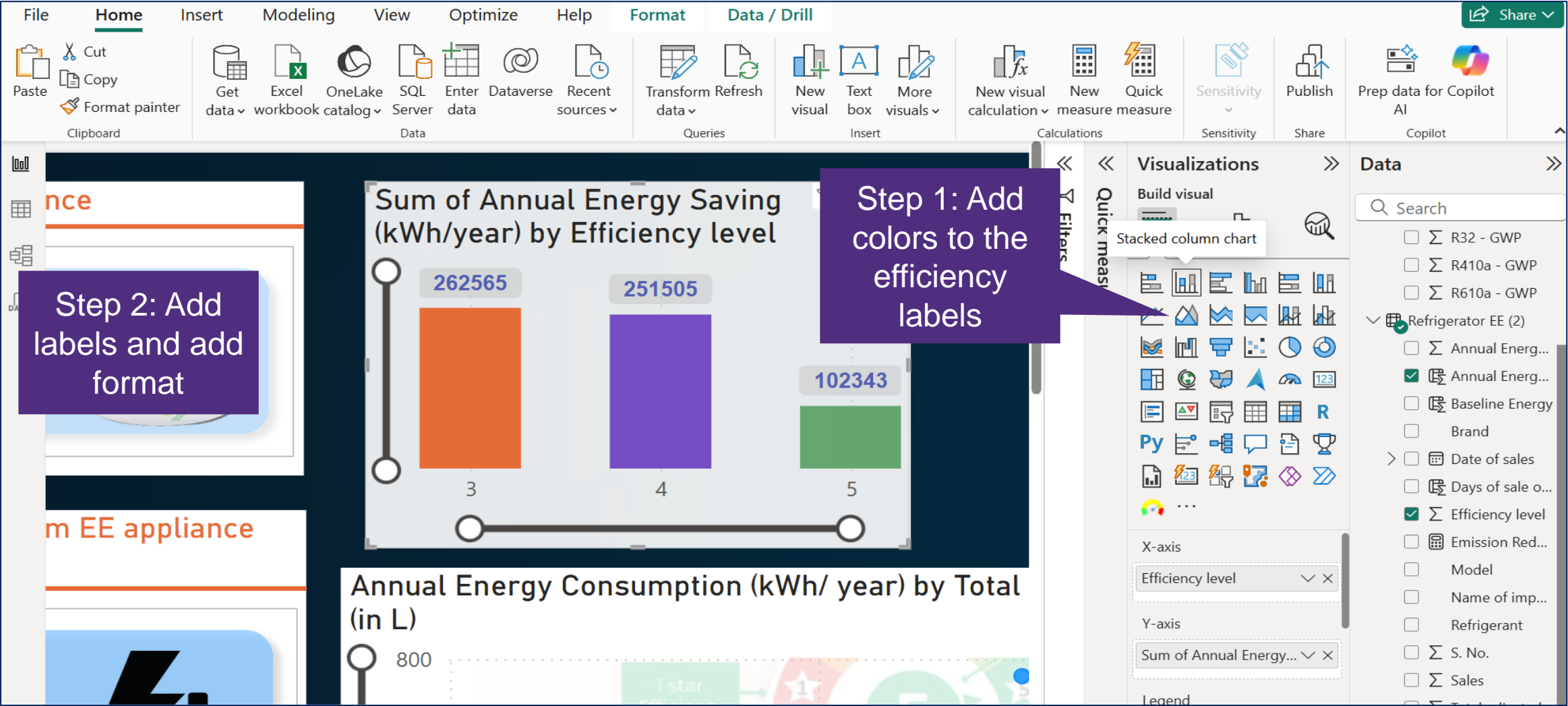
Adding Column chart



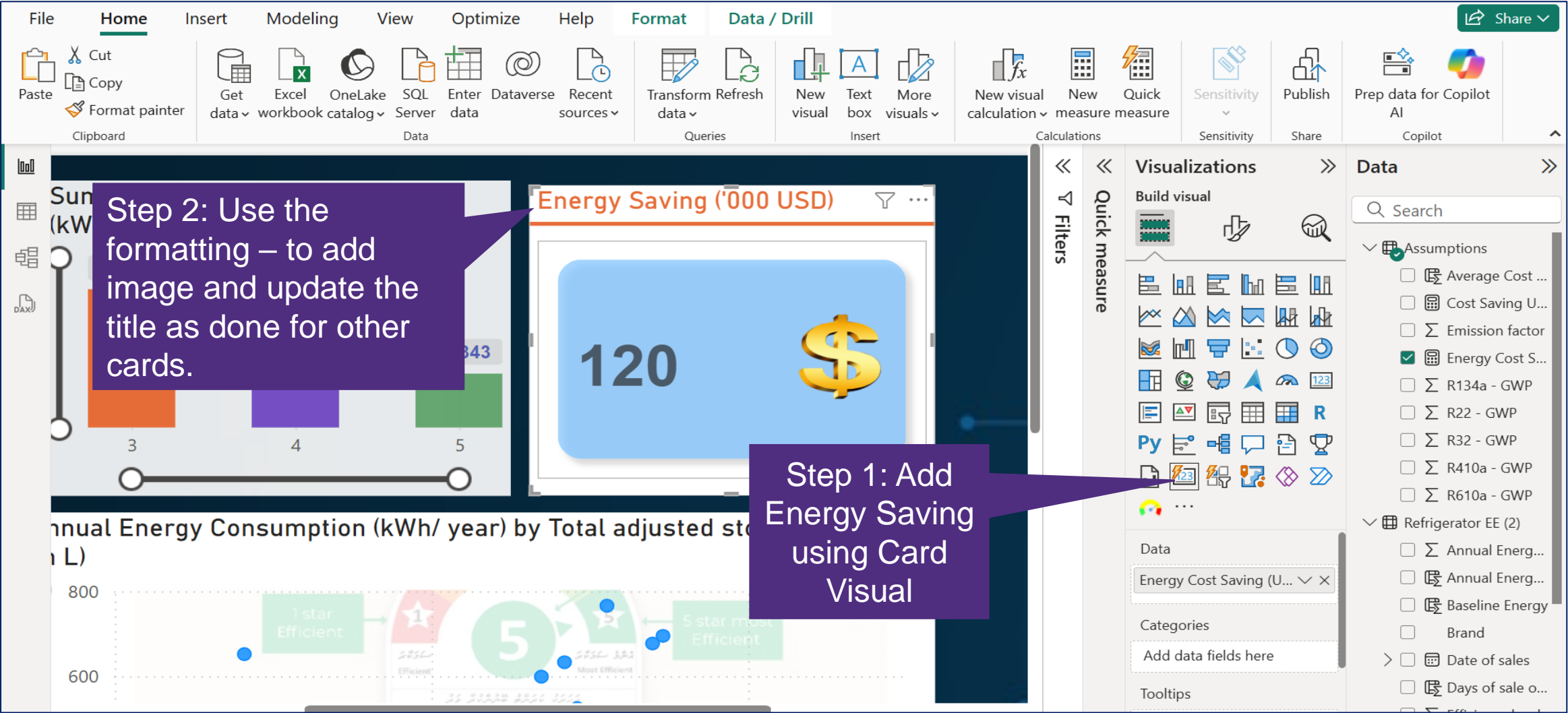
Adding Column chart



Adding Column chart



Adding Column chart



Adding Slices and Drill Down

Refrigerant

R134a **R410A** **R600a**

Step 1: Add Slicer from visualization panel

Step 2: Add the refrigerants under the slicer under fields

Adding Slices and Drill Down

Refrigerant

R134a **R410A** **R600a**

Step 1: Add Slicer from visualization panel

Step 2: Add the refrigerants under the slicer under fields

Formatting Slices

Step 1

Visualizations >>
Format visual

Shape
Rounded Rectangle

Top left corner
18 px

Top right corner
15 px

Bottom left corner
18 px

Bottom right corner
23 px

Step 2

Visualizations >>
Format visual

Values ☒

Font
Arial 14
B I U

Color
fx

Transparency
0 %

Horizontal alignment
Left Center Right

Text wrap
Off

Display units

Step 3

Visualizations >>
Format visual

Layout

Arrangement
Grid

Style
Cards

Max rows shown
3

Columns shown
3

Customize spacing ☒

Space between rows
3 px

Space between columns

Step 4

Visualizations >>
Format visual

Layout

Vertical alignment
Top Middle Bottom

Background ☒

Fill color
fx

Transparency
92 %

Hug contents
Off

Reset to default

Step 5

Visualizations >>
Format visual

Title ☒

Title

Text
Refrigerant fx

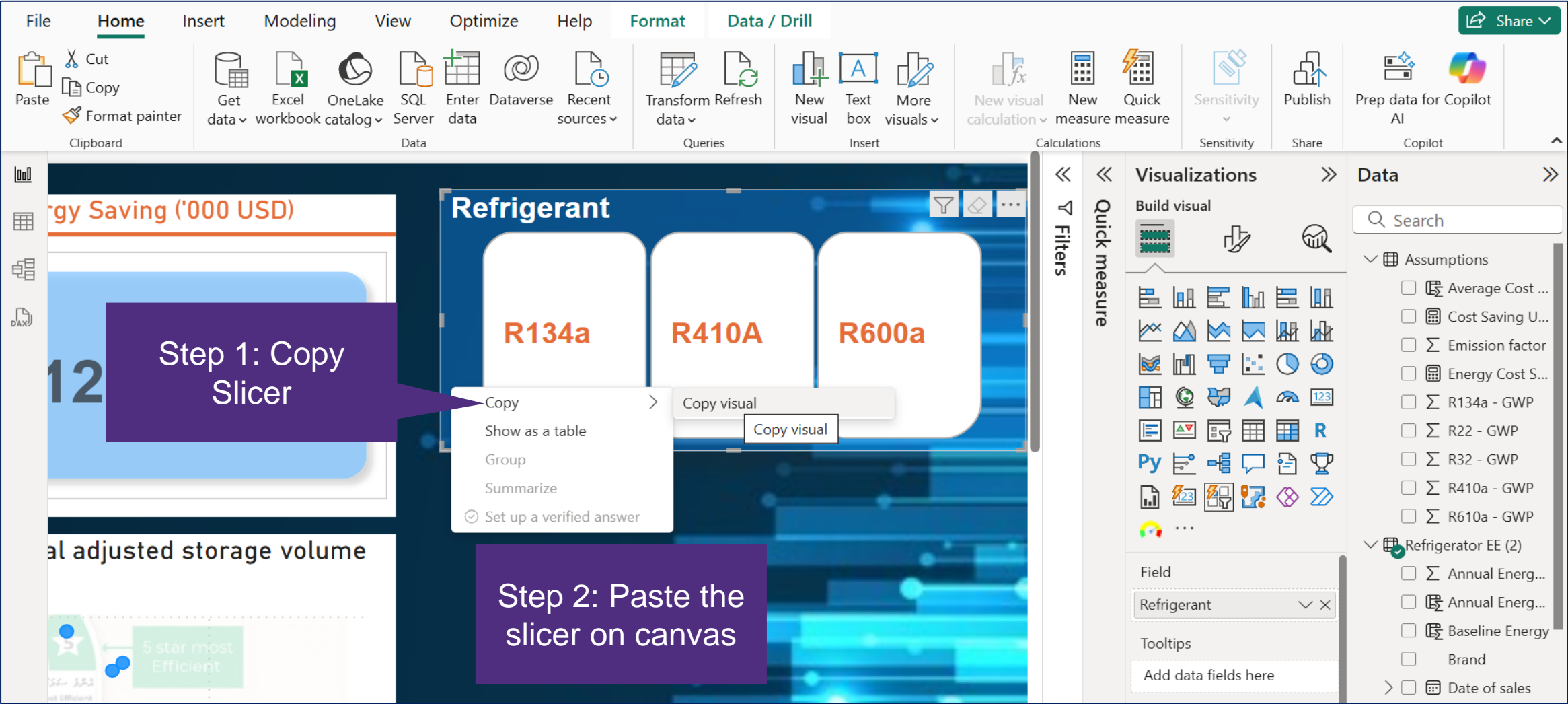
Heading
Normal

Font
Arial 14
B I U

Text color
fx

Background color

Adding new Slices

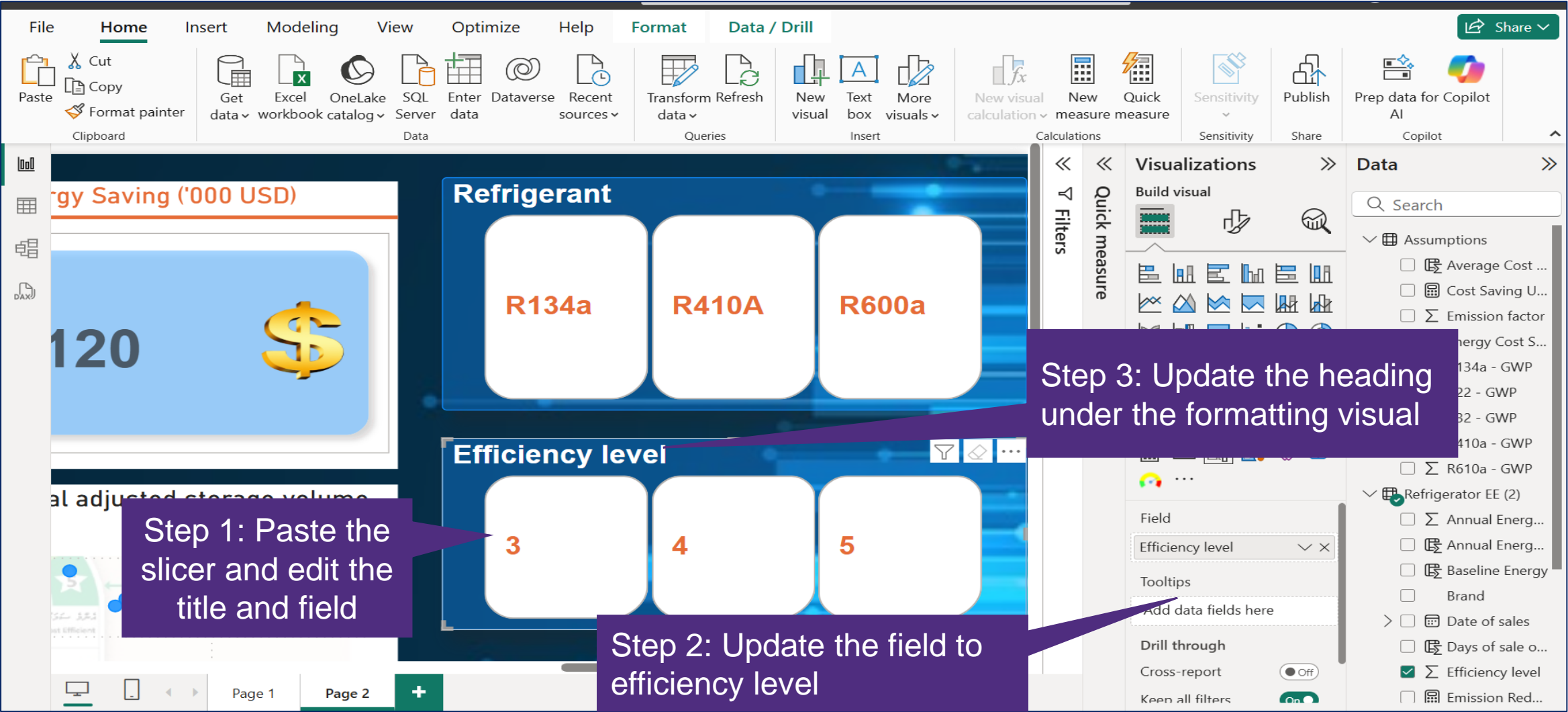


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Adding new Slices



Adding new Slices

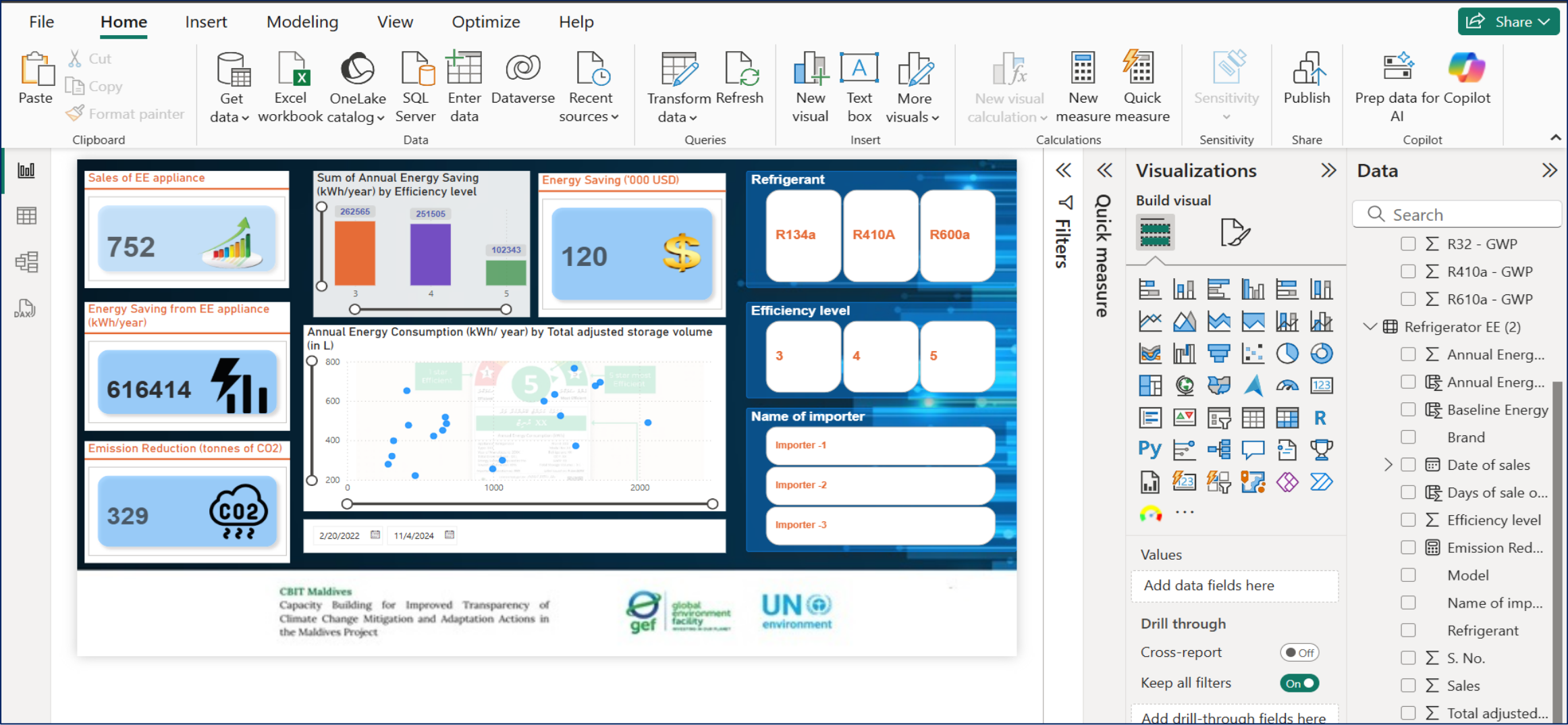
Step 1: Copy Slicer

Step 2a: Update the field to name of importer

Step 2b: Update the heading under the formatting visual

Step 2: Paste the slicer and edit the title and field

Final Dashboard



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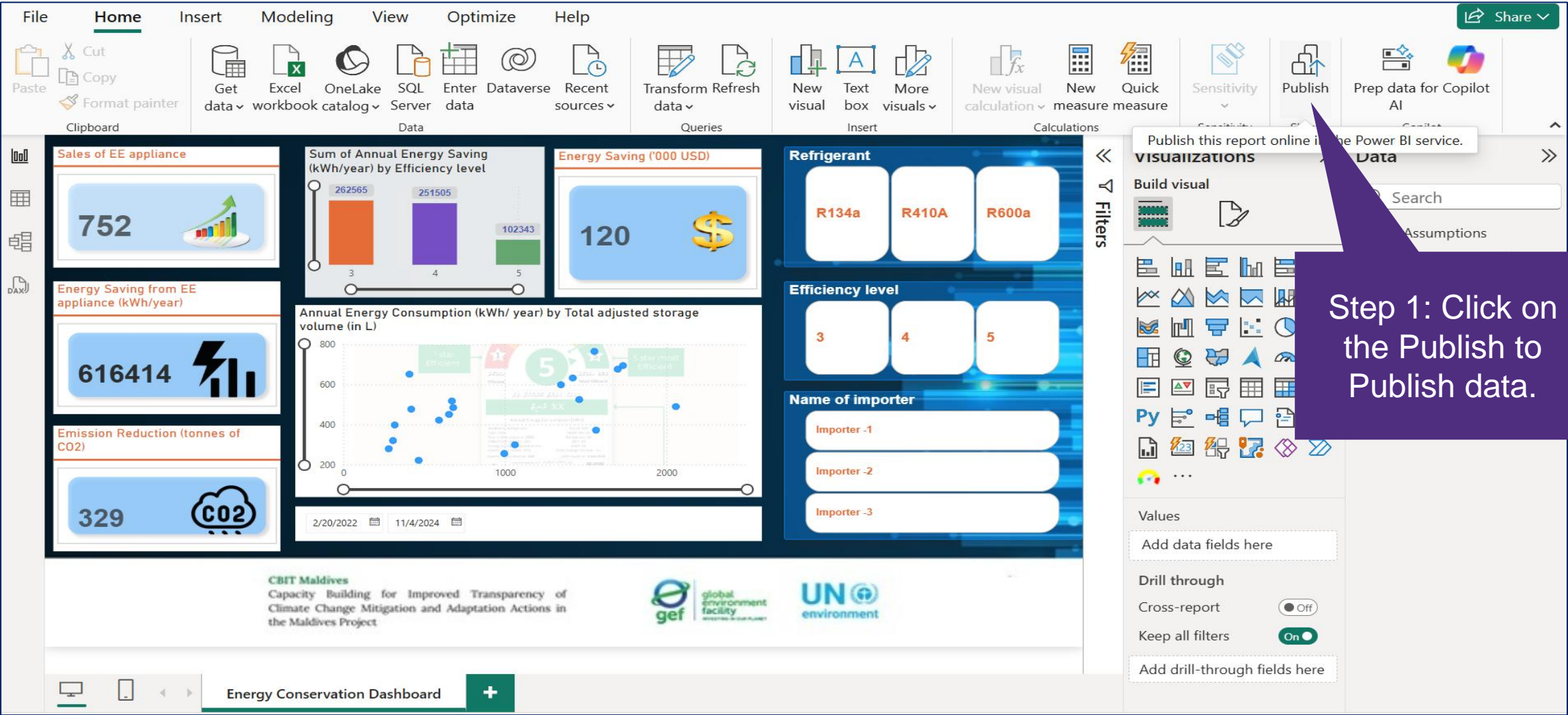


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Publishing data



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Publishing data

FileHomeInsertModelingViewOptimizeHelp

CutCopyFormat painter

PasteClipboard

Get data

Excel workbook

OneLake catalog

SQL Server

Enter data

Dataverse

Recent sources

Transform data

Refresh data

New visual

Text box

More visuals

New visual calculation

New measure

Quick measure

Sensitivity

Sensitivity

Publish

Share

Prep data for Copilot AI

Copilot

Visualizations

Data

Sales of EE appliance

752

Energy Saving from EE appliance (kWh/year)

616414

Emission Reduction (tonnes of CO2)

329

Sum of Annual Energy (kWh/year) by Efficiency

262565

Annual Energy Consumption volume (in L)

800

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Energy Conservation Dashboard

Publish to Power BI

Select a destination

Search

My workspace

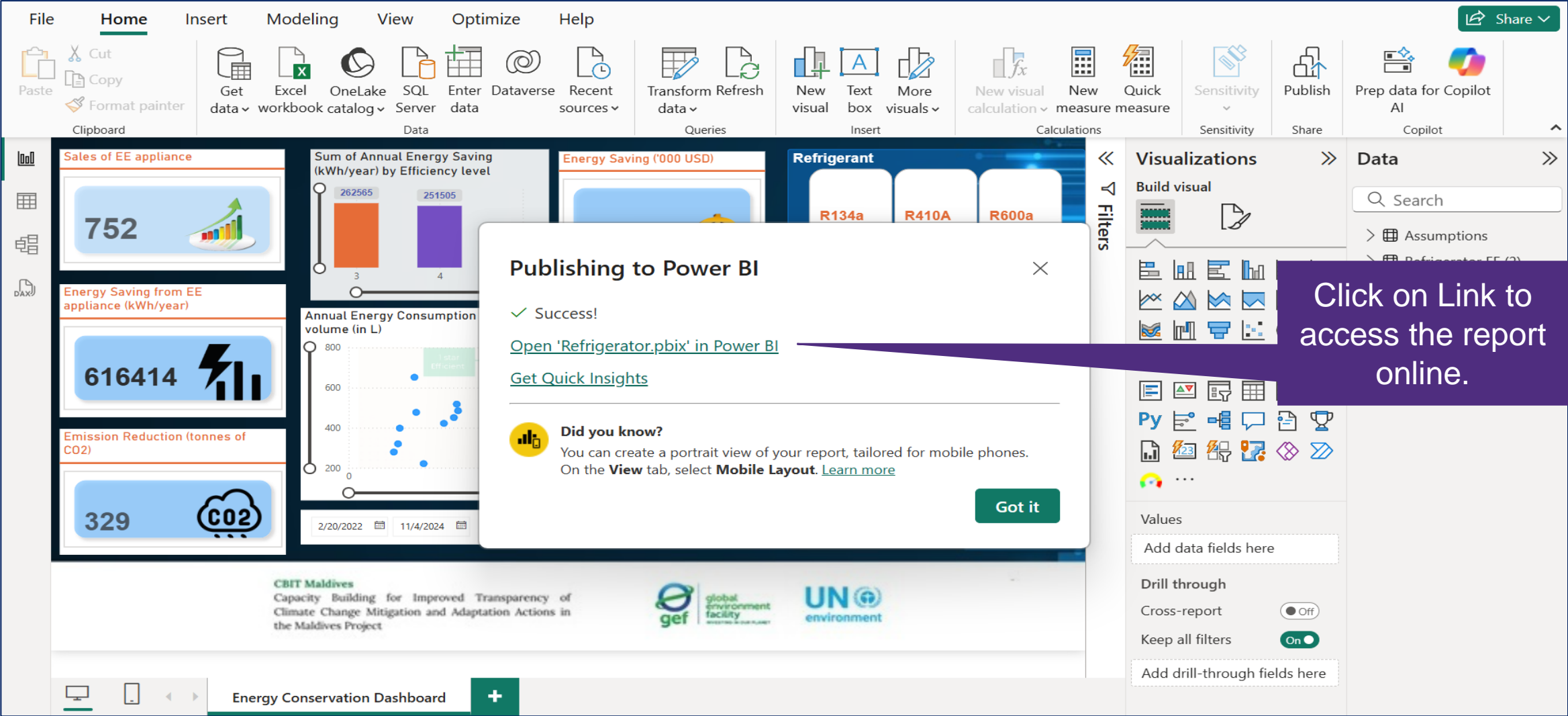
SelectCancel

Step 1: Select the workspace.

Step 2: Click on select.



Publishing data

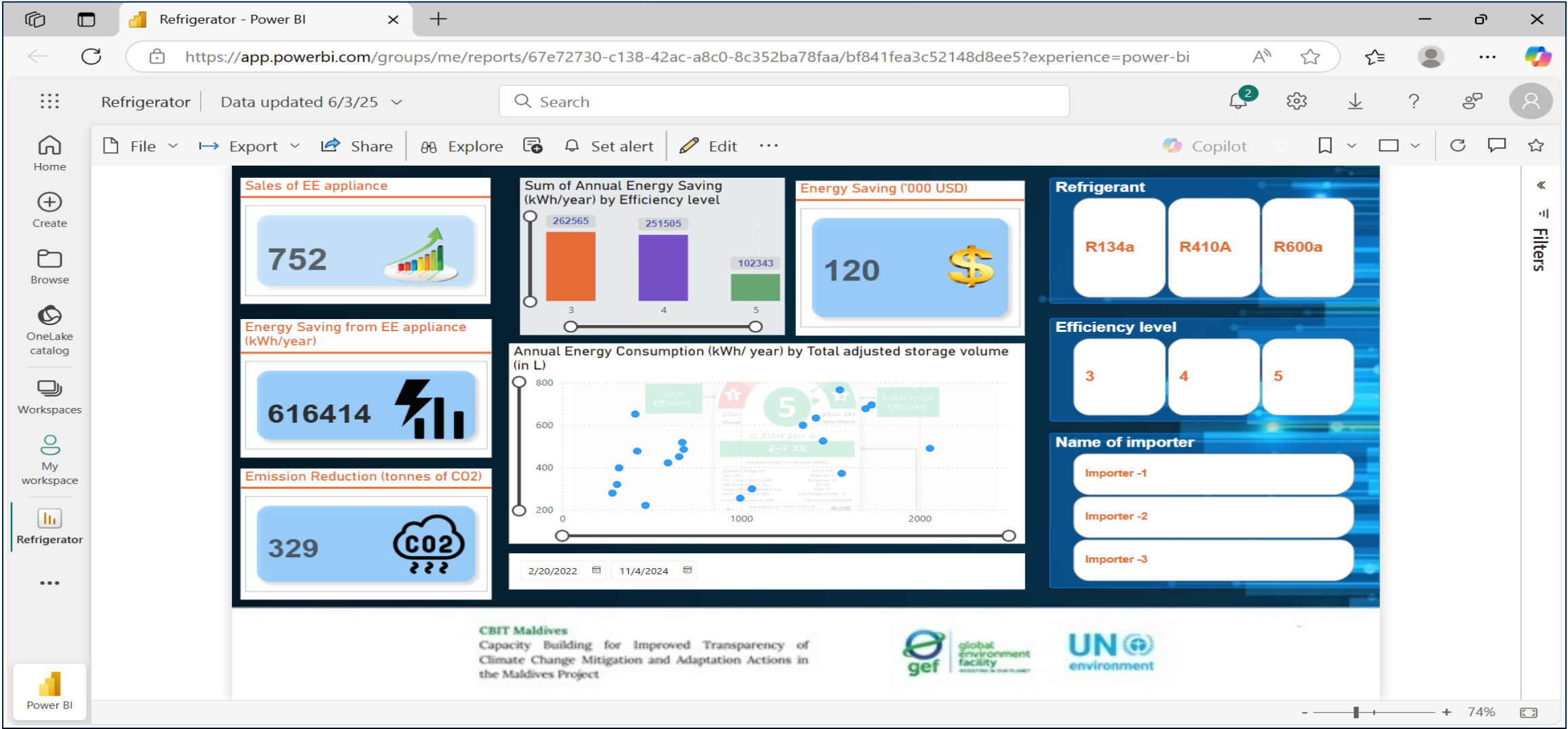


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Opening Report online



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Exporting online dashboard

The screenshot shows the Power BI web interface for a report titled 'Refrigerator'. The report displays various metrics including 'Sum of Annual Energy Saving (kWh/year) by Efficiency level' and 'Energy Saving (kWh/year)'. The 'Export' menu is open, showing options for 'Analyze in Excel', 'PowerPoint', and 'PDF'. A purple callout box points to the 'PowerPoint' option with the text: 'Step 1: Click on Export and then Power point'. Below this, the 'Export to PowerPoint' dialog box is open, showing the 'Choose how to export' dropdown set to 'Embed live data'. A second purple callout box points to the 'Copy' button with the text: 'Step 2: Click on Copy link or open in Power point'. The dialog also includes a 'Report page link' field with a URL and buttons for 'Open in PowerPoint' and 'Cancel'.

Step 1: Click on Export and then Power point

Step 2: Click on Copy link or open in Power point



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Exporting online dashboard

The screenshot shows the Power BI web interface for a report titled 'Refrigerator'. The report displays several visualizations, including a bar chart titled 'Sum of Annual Energy Saving (kWh/year) by Efficiency level' and a card showing 'Energy Saving (kWh/year)' with a value of 61641. The 'Export' menu is open, showing options for 'Analyze in Excel', 'PowerPoint', and 'PDF'. A purple callout box points to the 'PowerPoint' option with the text 'Step 1: Click on Export and then Power point'. Below this, the 'Export to PowerPoint' dialog box is open, showing the 'Choose how to export' section with 'Embed live data' selected. A second purple callout box points to the 'Copy' button with the text 'Step 2: Click on Copy link or open in Power point'. The dialog also shows a report page link and buttons for 'Open in PowerPoint' and 'Cancel'.

Step 1: Click on Export and then Power point

Step 2: Click on Copy link or open in Power point



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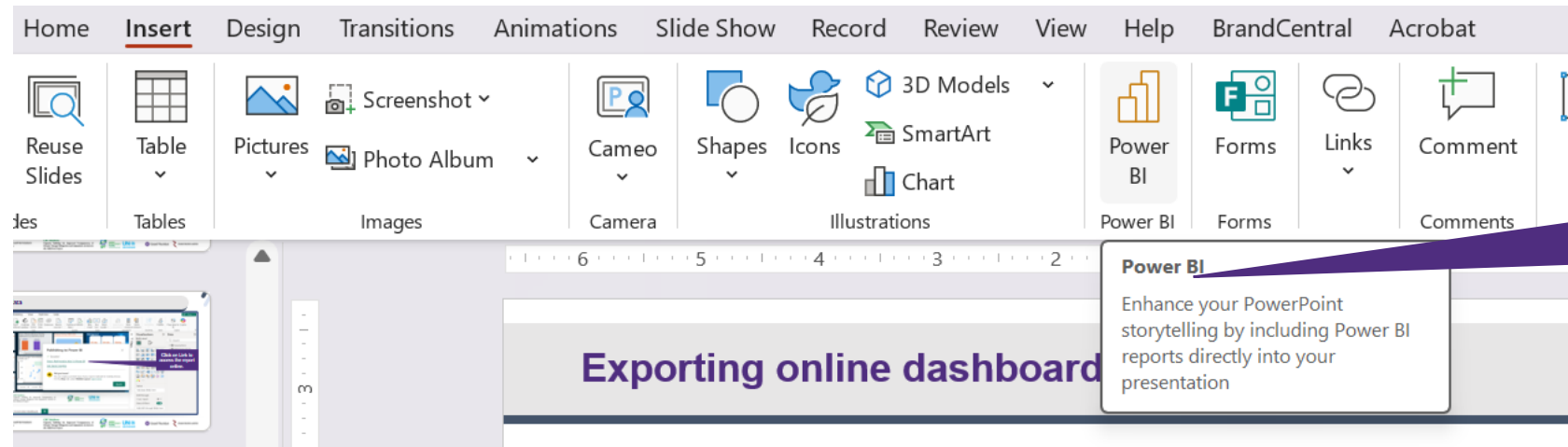


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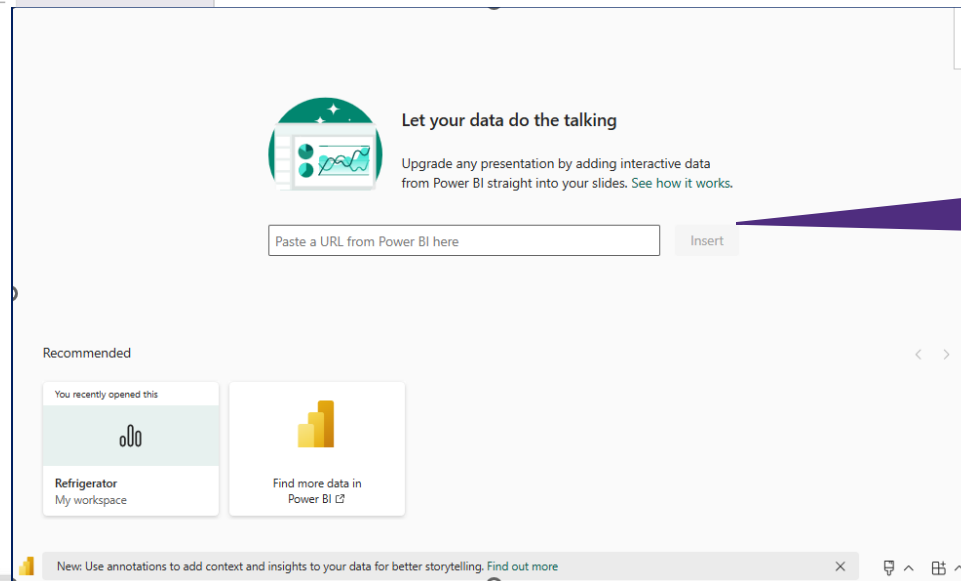


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Exporting online dashboard to Power Point



Step 1: Click on Power BI



Step 2: Paste URL



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Live data dashboard on Power point



Live dashboard is linked with Power point



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Thanks



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