

# Tableau

PCF Application relies on 2 workbooks published on [Tableau Cloud](#), and available to a selection of Syensqo's Users as per security requirements specified prior.

This document aims at navigating the data source panel as well as knowing how to reach underlying data from the source. But also, outline all computed elements on each dashboard currently available on all Tableau servers projects:

[PCF - Product Carbon Footprint](#)

[PCF - Carbon Footprint - UAT](#)

[PCF - Product Carbon Footprint - DEV](#)

## 1. Data connection

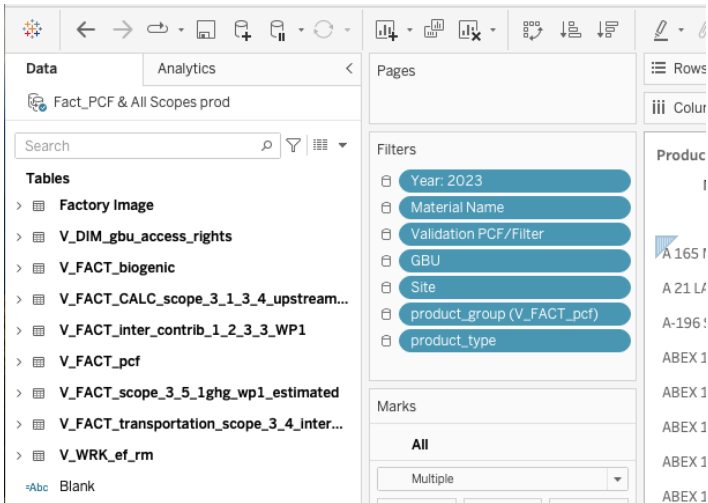
### a. Service Account

While dashboards can have a User as project or workbook owner. Connection and extraction of data from Google big query will always be used from a dedicated Service account. Credentials need to be requested to and granted by CloudOps team.

These credentials will allow connection and data extraction from each GCP projects and are available on [Google Drive](#).

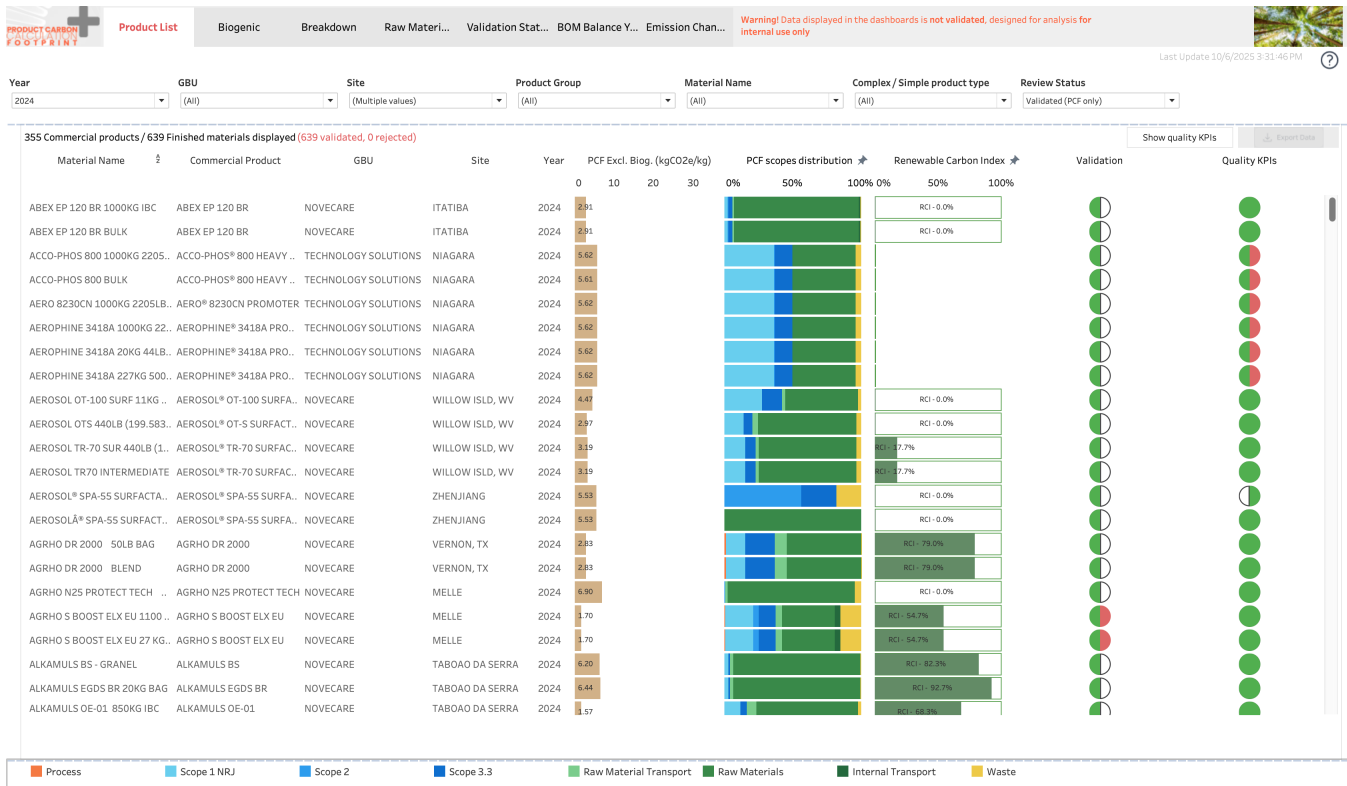
### b. Data Source Panel

Tableau workbook will only extract data from Google Big Query following the same model for all dashboards and each data source as seen below:



## 2. PCF - Product Carbon Footprint Advanced Workbook

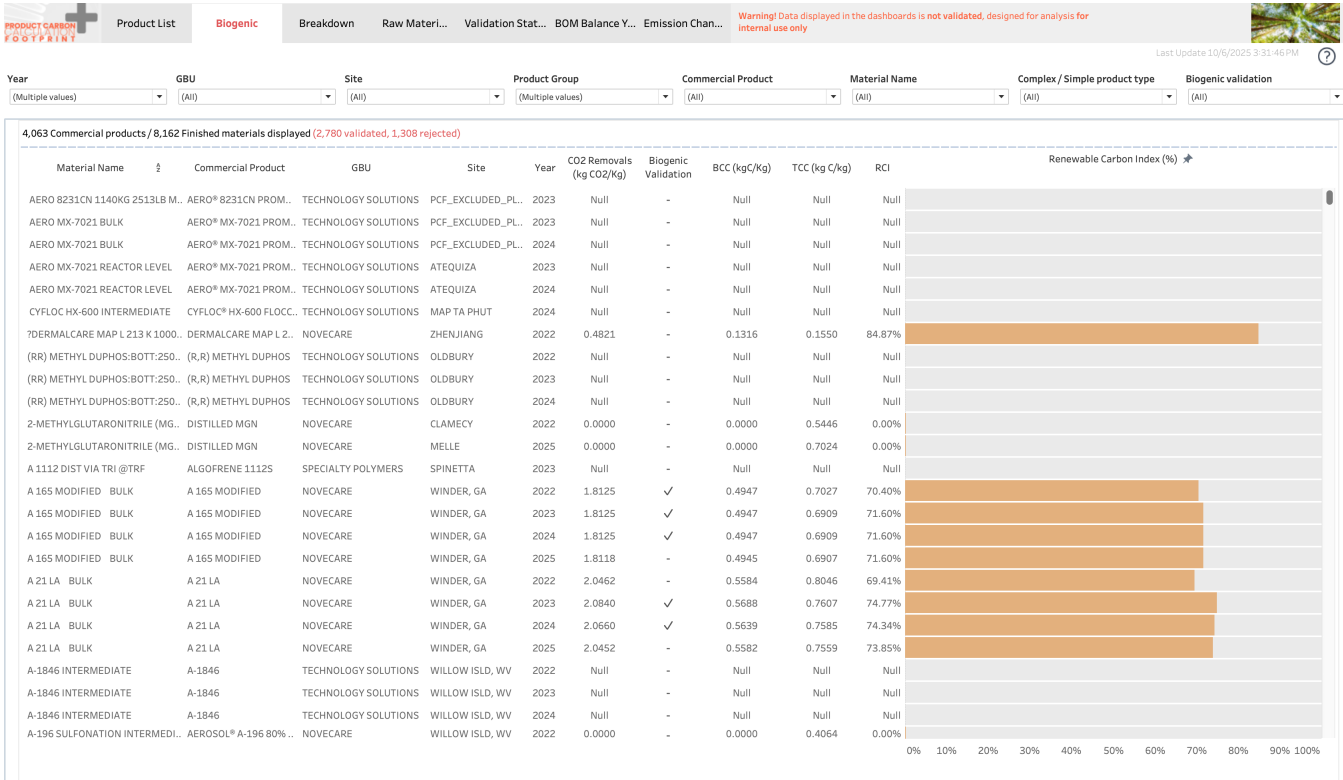
### a. Product List dashboard



b. Product List Calculated fields

Please refer to the document:

c. Biogenic dashboard



d. Biogenic Calculated fields

Please refer to the document:

e. Breakdown dashboard



■ Waste

Waste

?

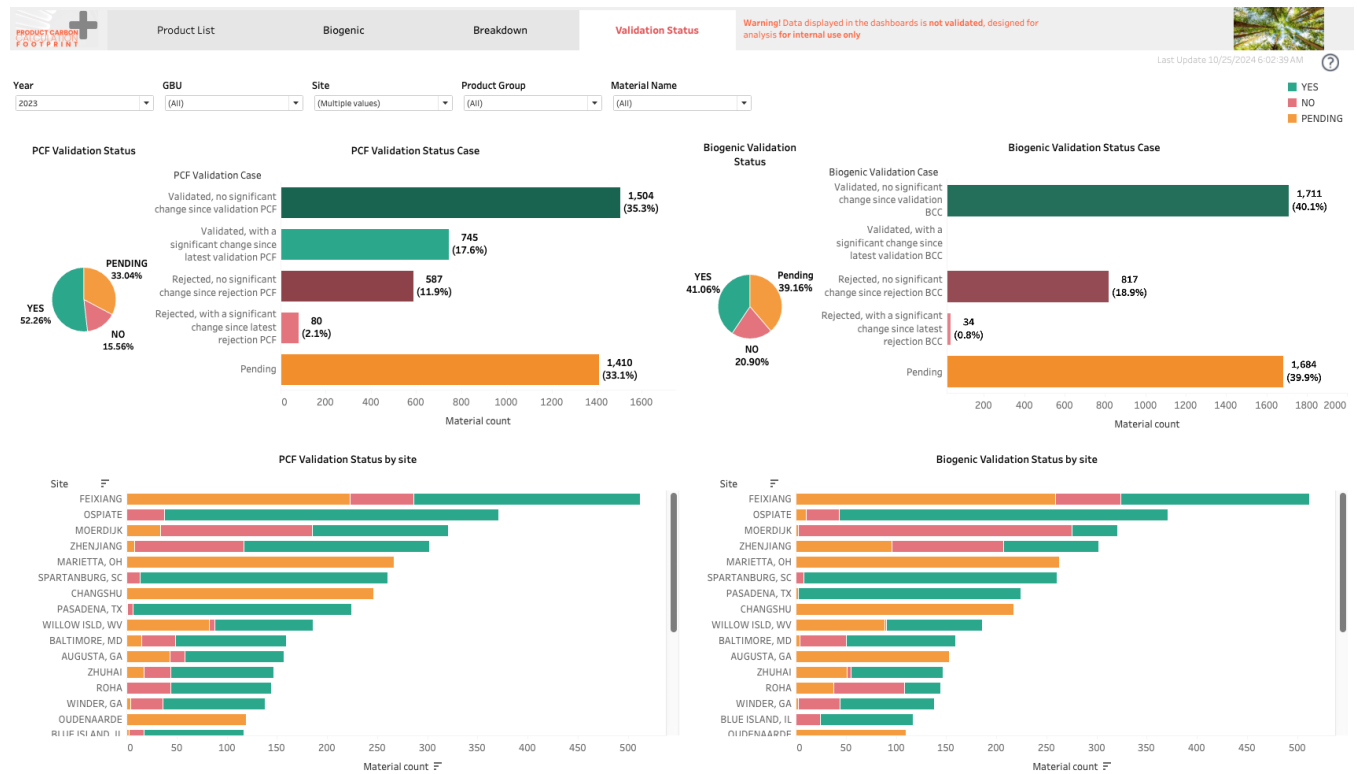
Waste

| Level | Interm.<br>Prod. Plant | Interm.<br>Prod. Name     | Raw Mat.                 | Source EF     | Contribution |
|-------|------------------------|---------------------------|--------------------------|---------------|--------------|
| 3     | 7752 Niagara Falls     | PHOSPHINE IN INTERMEDIATE | PHOSPHORIC ACID 100% SO. | Ecoinvent     | -2,631       |
|       |                        |                           | PHOSPHORUS BULK          | Supplier data | 26,235       |

#### f. Breakdown Calculated fields

Please refer to the document:

### g. PCF validation status overview



#### h. PCF Validation status Calculated fields

Please refer to the document:

## I. Raw Materials

PRODUCT CARBON FOOTPRINT

Product List

Biogenic

Breakdown

Raw Materi...

Validation Stat...

BOM Balance Y...

Emission Chan...

Warning! Data displayed in the dashboards is not validated, designed for analysis for internal use only

Last Update 10/6/2025 3:31:46 PM

Year

2024

GBU

(All)

Export Data

| Source System      | Calendar Year      | Company Zone Name  | Plant Site Name    | Material Product Code | Material Product Name        | Material Value Chain Pur Name | Material Code      | Material           |
|--------------------|--------------------|--------------------|--------------------|-----------------------|------------------------------|-------------------------------|--------------------|--------------------|
| Enter filter value | Enter filter value | Enter filter value | Enter filter value | Enter filter value    | Enter filter value           | Enter filter value            | Enter filter value | Enter filter value |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 112020                | VINYLDENE FLUORIDE           | OTHER / SYENSQO PRODUCT       | 175713             | VF2 *TA CYL30MI    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 112020                | VINYLDENE FLUORIDE           | OTHER / SYENSQO PRODUCT       | 204954             | VF2 EX*CZ          |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 112020                | VINYLDENE FLUORIDE           | OTHER / SYENSQO PRODUCT       | 204954             | VF2 EX*CZ          |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 112021                | CHLORODIFLUOROETHANE (R-142) | MINERAL / FLUORO+BROMO+IODC   | 58062              | S142b *CZ          |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 112021                | CHLORODIFLUOROETHANE (R-142) | MINERAL / FLUORO+BROMO+IODC   | 58062              | S142b *CZ          |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 112021                | CHLORODIFLUOROETHANE (R-142) | MINERAL / FLUORO+BROMO+IODC   | 58062              | S142b *CZ          |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 112021                | CHLORODIFLUOROETHANE (R-142) | MINERAL / FLUORO+BROMO+IODC   | 58062              | S142b *CZ          |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 130007                | BISPHENOL AF                 | CRUDE OIL / AROMATIC          | 109025             | BISPHENOL AF *I    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 145015                | MAGNESIUM STEARATE           | OTHER / TAIL END RAW MATERIAL | 106959             | MAGNESIUM STE      |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 170000                | OTHER COLORANT               | MINERAL / METAL COMPOUND      | 206640             | PIGM - RED 265 C   |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200004                | POLYETHYLENE (PE)            | CRUDE OIL / ALIPHATIC / C2    | 109565             | HDPE YGH041 *S     |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200008                | POLYPHENYLSULPHIDE (PPS)     | OTHER / GROUP PRODUCT #       | 208480             | NHU 3470 PPS *I    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200008                | POLYPHENYLSULPHIDE (PPS)     | OTHER / GROUP PRODUCT #       | 208482             | NHU 3450 PPS *I    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200008                | POLYPHENYLSULPHIDE (PPS)     | OTHER / GROUP PRODUCT #       | 208482             | NHU 3450 PPS *I    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200008                | POLYPHENYLSULPHIDE (PPS)     | OTHER / GROUP PRODUCT #       | 208483             | NHU 3418 PPS *I    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200008                | POLYPHENYLSULPHIDE (PPS)     | OTHER / GROUP PRODUCT #       | 208645             | NHU 3490 PPS *I    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200039                | CO-POLYMER CTFE+VDF          | MINERAL / FLUORO+BROMO+IODC   | 109026             | VDF/CTFE COPOL'    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 200039                | CO-POLYMER CTFE+VDF          | MINERAL / FLUORO+BROMO+IODC   | 109026             | VDF/CTFE COPOL'    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 106045             | PTFE-VIRGIN GR/    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 106045             | PTFE-VIRGIN GR/    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 106045             | PTFE-VIRGIN GR/    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 106045             | PTFE-VIRGIN GR/    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 107928             | PTFE-PRESINTER     |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 109783             | PTFE-VIRGIN PAS    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 109783             | PTFE-VIRGIN PAS    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 109783             | PTFE-VIRGIN PAS    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 109783             | PTFE-VIRGIN PAS    |
| PF2_020            | 2024               | APAC               | CHANGSHU           | 212001                | POLYTETRAFLUOROETHENE (PTFE  | MINERAL / FLUORO+BROMO+IODC   | 109783             | PTFE-VIRGIN PAS    |

J. Bom Balance

PRODUCT CARBON FOOTPRINT

Product List

Biogenic

Breakdown

Raw Materi...

Validation Stat...

BOM Balance Y...

Emission Chan...

Warning! Data displayed in the dashboards is not validated, designed for analysis for internal use only

Finish Product

(All)

Plant

(All)

Site

(All)

GBU

(All)

Reference Year

2024

YoY BOM variation

-3.58

24.66

YoY BOM Balance

| Finish Product                           | Site          | Previous Year | Reference Year | YoY variation |
|------------------------------------------|---------------|---------------|----------------|---------------|
| AQUIVION® G+ 165R/009.111 15KG BOX       | CLAMECY       | 0.00 %        | 24.66 %        | 24.66         |
| PPS XES000NA 020 S25 P1000               | OUDENAARDE    | 0.00 %        | 3.82 %         | 3.82          |
| PPS R-3-410BL L2T S25 P1000              | OUDENAARDE    | 0.00 %        | 3.80 %         | 3.80          |
| PK AV-651 G530 BG 355-3 S25 P1000        | CHANGSHU      | 0.00 %        | 3.62 %         | 3.62          |
| PPSU R-7800 BG 354-8 S25 P1000           | CHANGSHU      | 0.00 %        | 3.52 %         | 3.52          |
| PPSU R-7800 GY 384-1 S25 P1000           | CHANGSHU      | 0.00 %        | 3.38 %         | 3.38          |
| PPSU R-7800 WH 341-2 S25 P1000           | CHANGSHU      | 0.00 %        | 3.38 %         | 3.38          |
| CONC-BLK QA200 AROSPERSE 11W S25 P1000   | KALLO-BEVEREN | 0.00 %        | 3.31 %         | 3.31          |
| CONC-BLK QA200 AROSPERSE 11W S25 P1000   | KALLO-BEVEREN | 0.00 %        | 3.31 %         | 3.31          |
| PPSU R-7800 BG 354-1 S25 P1000           | CHANGSHU      | 0.00 %        | 3.26 %         | 3.26          |
| PPS R-4-270BL                            | AUGUSTA, GA   | 0.00 %        | 3.17 %         | 3.17          |
| PVDF 1008/1001<S>*TA C5500 45MVS H CB8 P | TAVAUX        | 0.00 %        | 2.89 %         | 2.89          |
| PVDF 6012/1001*TA C5400 45MVS H CB8 P    | TAVAUX        | 0.00 %        | 2.88 %         | 2.88          |
| PVDF 6020/1001*TA C5500 P500PEQH H       | TAVAUX        | 0.00 %        | 2.86 %         | 2.86          |
| PVDF 6012/1001*TA Q/W                    | TAVAUX        | 0.00 %        | 2.86 %         | 2.86          |
| PVDF 1011/0001*TA C10000B P H            | TAVAUX        | 0.00 %        | 2.86 %         | 2.86          |
| PVDF 1010/0001S*TA F125CN P501           | TAVAUX        | 0.00 %        | 2.85 %         | 2.85          |
| PVDF 1010/0001<S>*TA F125CN P500         | TAVAUX        | 0.00 %        | 2.85 %         | 2.85          |
| PVDF 1015/1001*TA F50CN P200PEQH H       | TAVAUX        | 0.00 %        | 2.84 %         | 2.84          |

Intermediate Product Usage factor

| Level | Interm. Product                    | Previous Year UF | Reference Year | YoY variation |
|-------|------------------------------------|------------------|----------------|---------------|
| 1     | AQUIVION® G+ 165R/009.111 15KG BOX | 0.00 %           | 24.66 %        | 24.66         |

Raw Material Usage Factor

| Level | Raw Mat.                           | Previous Year | Reference Year | YoY variation |
|-------|------------------------------------|---------------|----------------|---------------|
| 1     | PEEK KT820FP CA12.5 P300           | 0.00 %        | 0.00 %         | 0.00          |
|       | PEEK KT-820 SFP CA12.5 P300        | 0.00 %        | 0.83 %         | 0.83          |
|       | POTASSIUM HYDROXIDE 25KG BAG       | 0.00 %        | 0.01 %         | 0.01          |
|       | POTASSIUM HYDROXIDE 30% 1300KG IBC | 0.00 %        | 0.46 %         | 0.46          |
|       | SULFURIC ACID 80% 920KG IBC        | 0.00 %        | 5.42 %         | 5.42          |
|       | SULFURIC ACID 96% 1110KG IBC       | 0.00 %        | 17.95 %        | 17.95         |

K. Bom Balance Calculated fields

Please refer to the document:

L. Emission Changes

PRODUCT CARBON FOOTPRINT

Product L...

Biogenic

Breakdo...

Raw Materi...

Validation St...

BOM Balance...

Emission Cha...

Warning! Data displayed in the dashboards is not validated, designed for analysis for internal use only

Last Update 10/6/2025 3:31:46 PM

Finish Product

Gbu

Site

(All)

(All)

(All)

Contribution Last Year

| Finish Product Name                       |        |
|-------------------------------------------|--------|
| AERO 8231CN 1140KG 2513LB MX IBC          | 0.00   |
| AERO MX-7021 BULK                         | 1.76   |
| AERO MX-7021 REACTOR LEVEL                | 1.73   |
| BIO VANILLINE BRUTE BULK                  | 0.00   |
| CYFLOC HX-600 INTERMEDIATE                | 0.11   |
| RHOVANIL BTR BOX 25KG / PAL 600KG         | 0.00   |
| RHOVANIL US NAT - BOX 1KG                 | 0.00   |
| 2-METHYLGUTARONITRILE (MGN) BULK          | 0.00   |
| 4051 X FUT METAL 180 KG                   | 5.63   |
| 4070X 930KG IBC                           | 4.64   |
| ?DERMALCARE MAP L 213 K 1000KG IBC        | 0.00   |
| (RR) METHYL DUPHOS:BOTT:250G:NP           | 359.25 |
| *FENTACARE 2231 EF 85.5KG OH PLAS DR(CN)  | 0.00   |
| *O*FENTACARE DHT21 EV 75 50KG PLAS DR(CN) | 0.00   |
| *O*FENTACARE DHT21 EV 77 175KG MET DR(CN) | 0.00   |
| *O*FENTAMINE SDA001 STA001 CRUDE BULK(CN) | 0.00   |
| *OB*FENTACARE 1227 80PG 200KG PLAS DR(CN) | 0.00   |
| A 21 LA BULK                              | 10.07  |

Contribution previous years by scope

| Finish Product Name             | Scope                  | Contribution Diff Last year Vs Two years | Contribution Last Year | Contribution Two Years Ago |
|---------------------------------|------------------------|------------------------------------------|------------------------|----------------------------|
| (RR) METHYL DUPHOS:BOTT:250G:NP | Raw MAterial Transport | 0.00                                     | 0.00                   | 0.00                       |
|                                 | Raw Materials          | 328.34                                   | 359.25                 | 34.00                      |

Contribution/Emission previous years

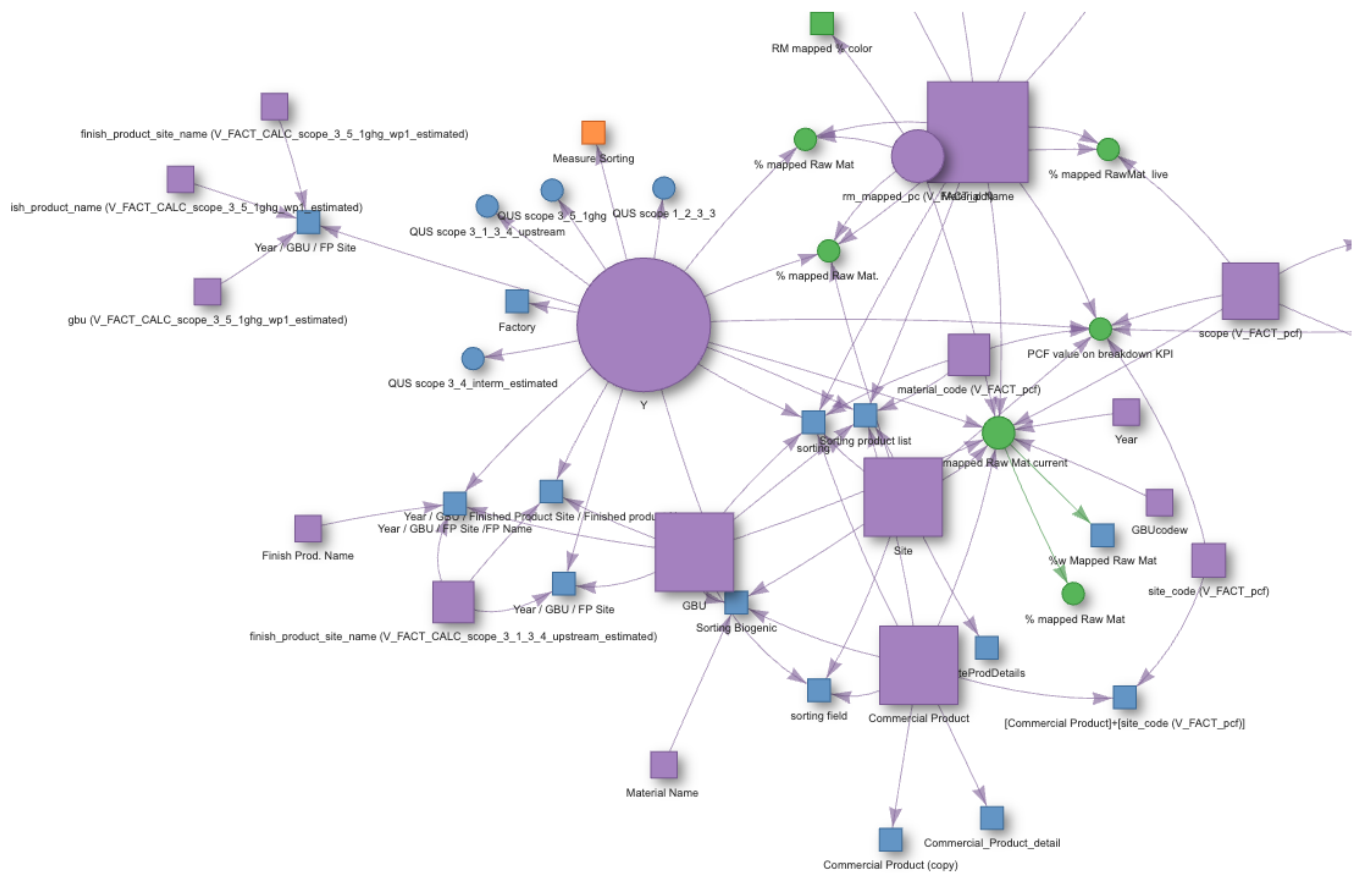
| Finish Product Name             | Intermediate Product Plant Name | Scope            | Sub Scope | Scope Contributor                     | Unit | Contribution Diff Last year Vs Two years | Contribution Last Year | Contribution Two Years Ago | Emission Factor Last Year | Emission Factor Two Years Ago | Usage Factor Last Year | Usage Factor Two Years Ago |
|---------------------------------|---------------------------------|------------------|-----------|---------------------------------------|------|------------------------------------------|------------------------|----------------------------|---------------------------|-------------------------------|------------------------|----------------------------|
| (RR) METHYL DUPHOS:BOTT:250G:NP | 6068 Oldbury                    | Raw Materials -- |           | DIETHYL ETHER 25L DRUM                | KG   | 0.00                                     | 0.00                   | 0.00                       | 0.00                      | 0.00                          | 2.10                   | 2.10                       |
| (RR) METHYL DUPHOS:BOTT:250G:NP | 6068 Oldbury                    | Raw Materials -- |           | DISTILLED TRIMETHYL PHOSPHITE         | KG   | 0.00                                     | 0.00                   | 0.00                       | 0.00                      | 0.00                          | 7.60                   | 7.60                       |
| (RR) METHYL DUPHOS:BOTT:250G:NP | 6068 Oldbury                    | Raw Materials -- |           | ETHYL ACETATE 175-180KG DR MET        | KG   | 6.46                                     | 33.88                  | 27.42                      | 3.99                      | 3.23                          | 8.50                   | 8.50                       |
| (RR) METHYL DUPHOS:BOTT:250G:NP | 6068 Oldbury                    | Raw Materials -- |           | HEXYLLITHIUM IN HEXANE 33% 276KG CY.. | KG   | 0.00                                     | 0.00                   | 0.00                       | 0.00                      | 0.00                          | 1.70                   | 1.70                       |
| (RR) METHYL DUPHOS:BOTT:250G:NP | 6068 Oldbury                    | Raw Materials -- |           | SODIUM HYPOCHLORITE 31KG DR           | KG   | 1.54                                     | 5.03                   | 6.57                       | 1.62                      | 2.12                          | 3.10                   | 3.10                       |
| (RR) METHYL DUPHOS:BOTT:250G:NP | 6068 Oldbury                    | Raw Materials -- |           | TETRAHYDROFURANE 180KG DR             | KG   | 320.34                                   | 320.34                 | 0.00                       | 7.20                      | 0.00                          | 44.50                  | 44.50                      |
| (RR) METHYL DUPHOS:BOTT:250G:NP | 6068 Oldbury                    | Raw Materials -- |           | THIONYL CHLORIDE 2.5L GLASS BOTTLE    | KG   | 0.00                                     | 0.00                   | 0.00                       | 0.00                      | 0.00                          | 0.93                   | 0.93                       |

M. Emission Changes Calculated fields

Please refer to the document:

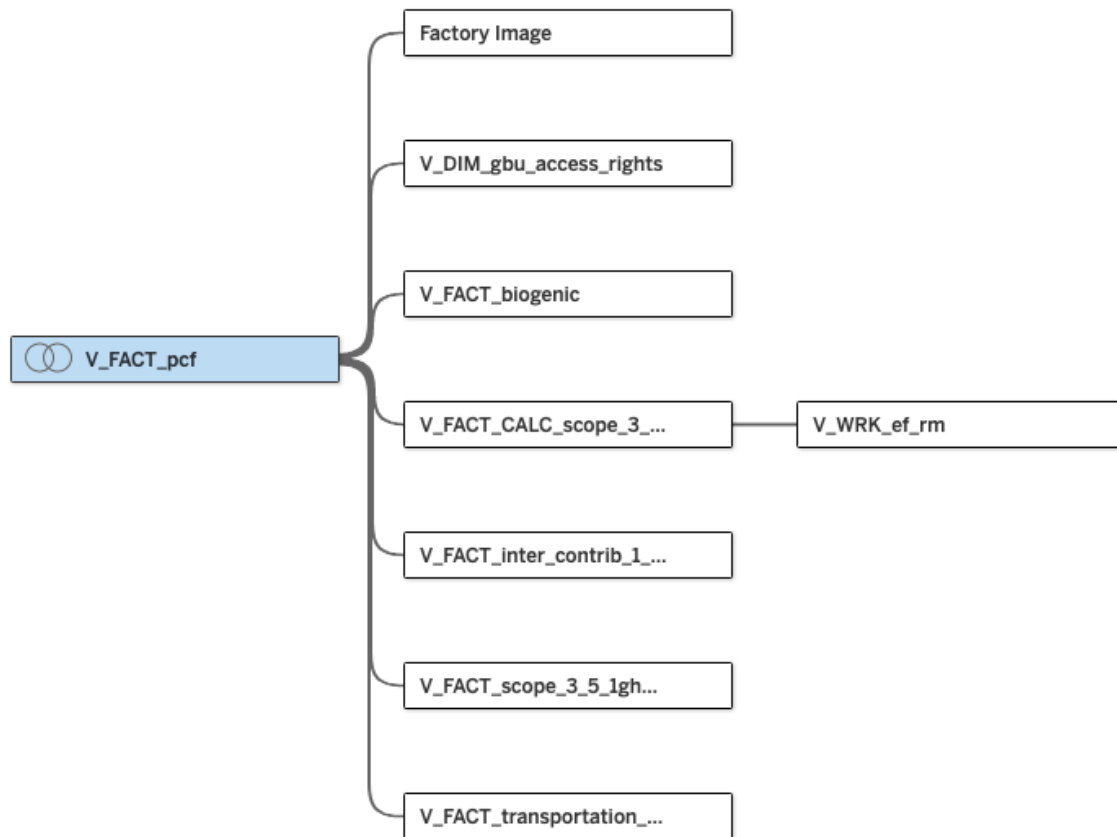
N.Attributes Dependencies - Advanced workbook

Please, download and open this document for an interactive version: [Advanced Network dependencies](#)



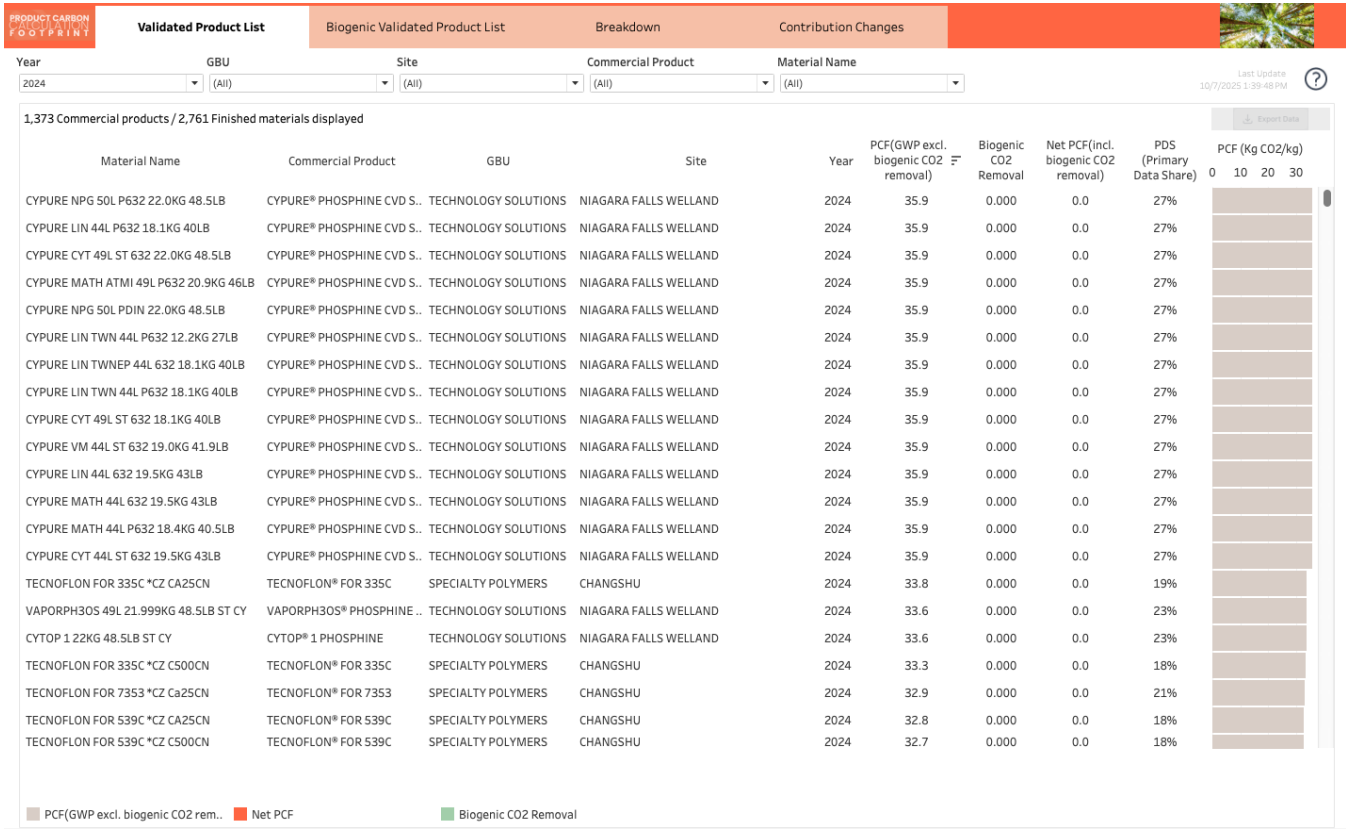
**O. PCF - Product Carbon Footprint Advanced Workbook data model**

## Fact\_PCF & All Scopes prod



### 3. PCF - Validated Product Carbon Footprint

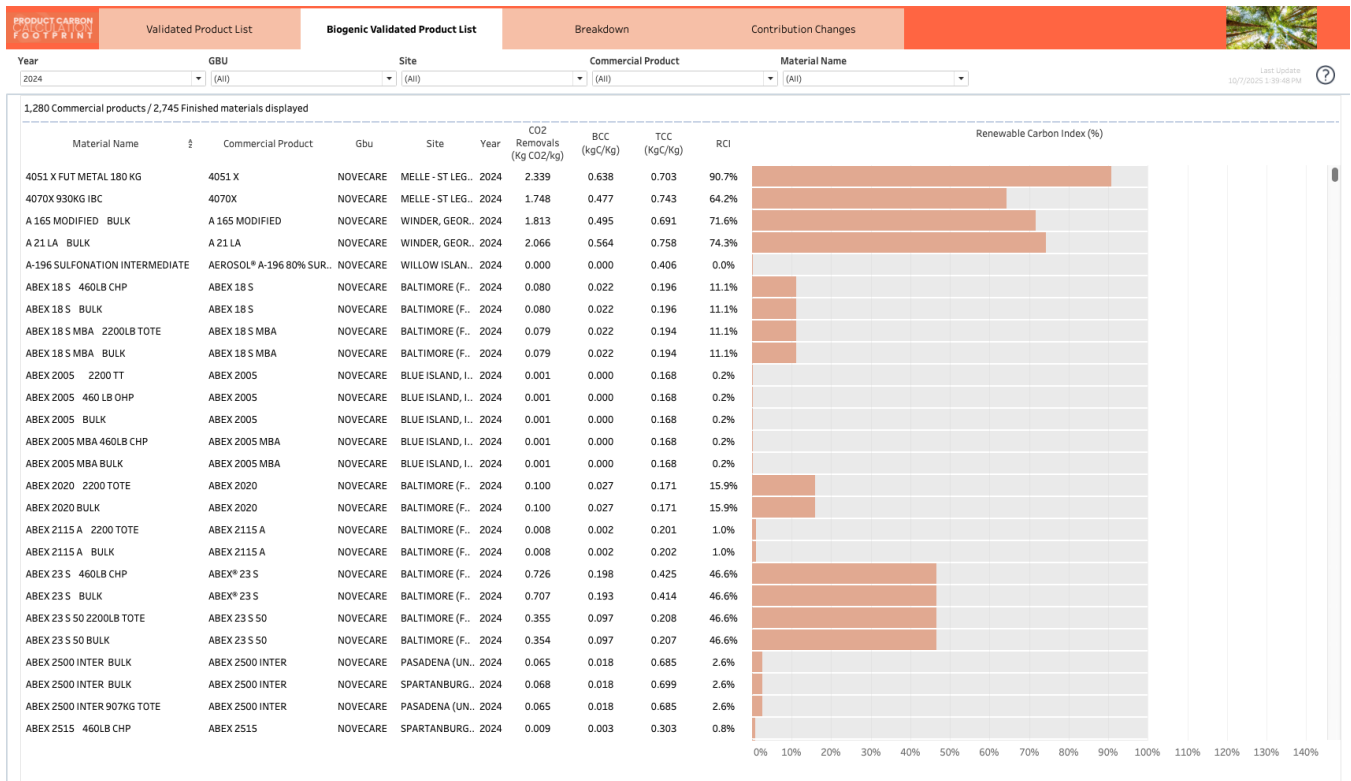
#### a. Validated Product list dashboard



b. Validated Product list Calculated fields

Please refer to the document:

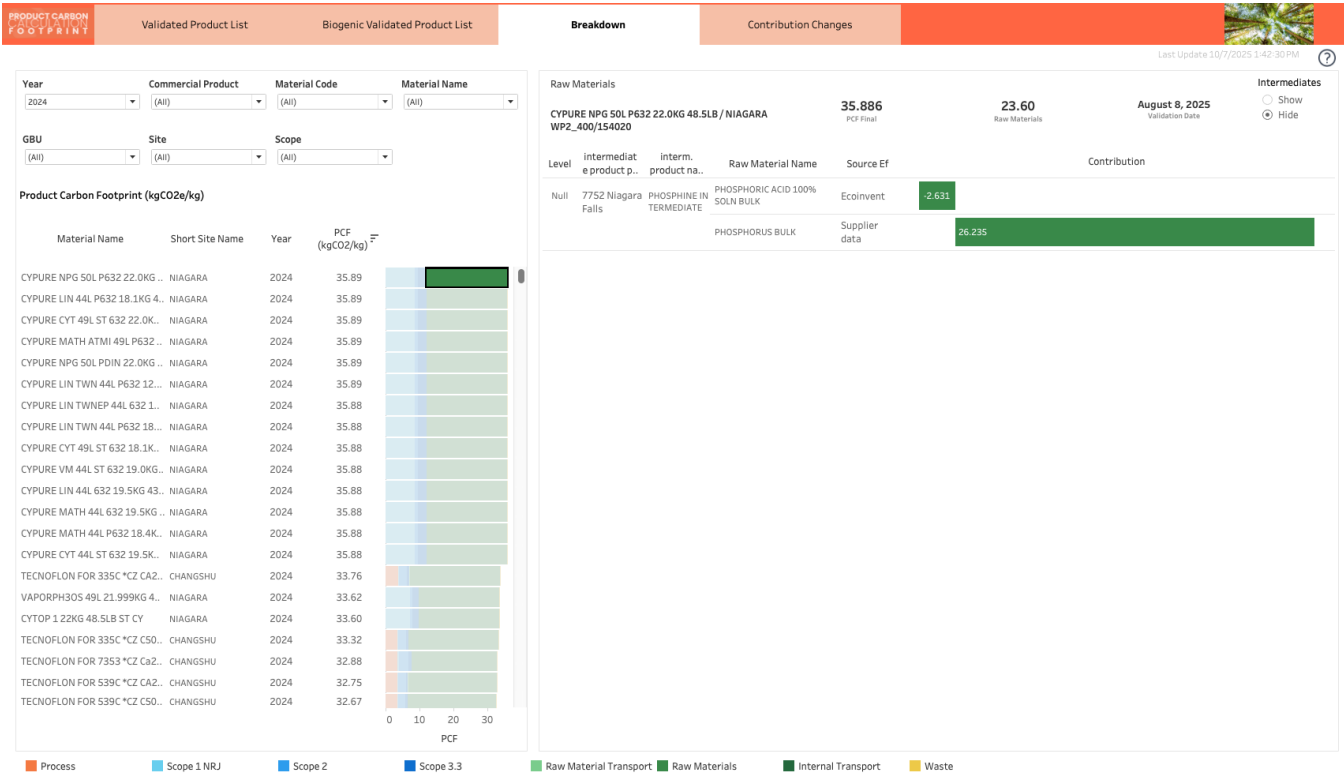
c. Biogenic Validated Product list dashboard



d. Biogenic Product list Calculated fields

Please refer to the document:

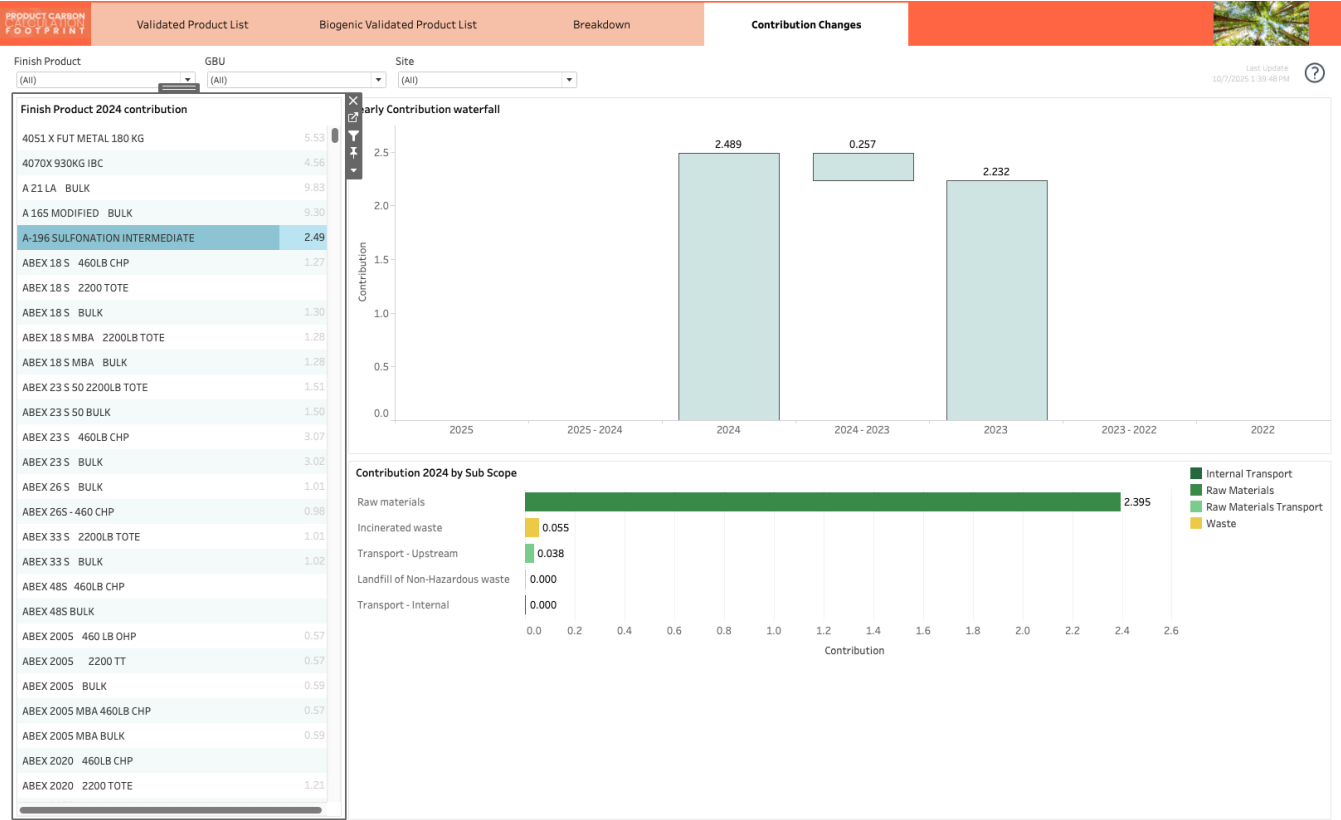
e. Breakdown dashboard



f. Breakdown list Calculated fields

Please refer to the document:

g. Contribution Dashboard



**g. Contribution Changes list Calculated fields**

Please refer to the document:

**h.Attributes Dependencies - Advanced workbook**

Please, download and open this document for an interactive version:

**i. PCF - Product Carbon Footprint validated Workbook data model**

🗂️ V\_FACT\_biogenic\_valid



🗂️ V\_PCF & All Scope

