

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

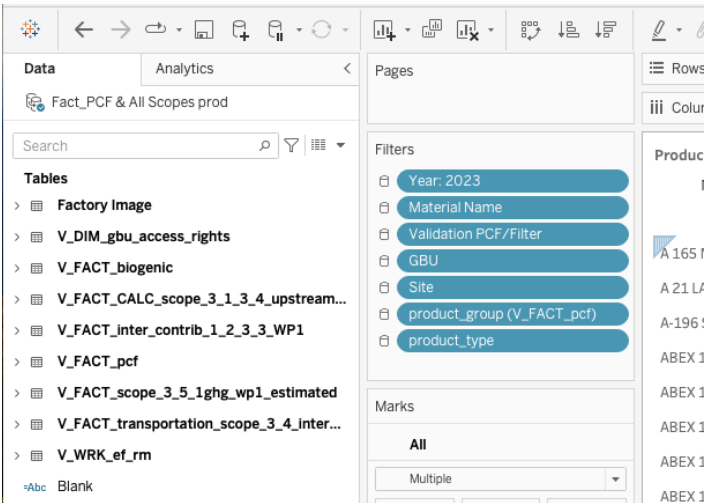
a. Service Account

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](#).

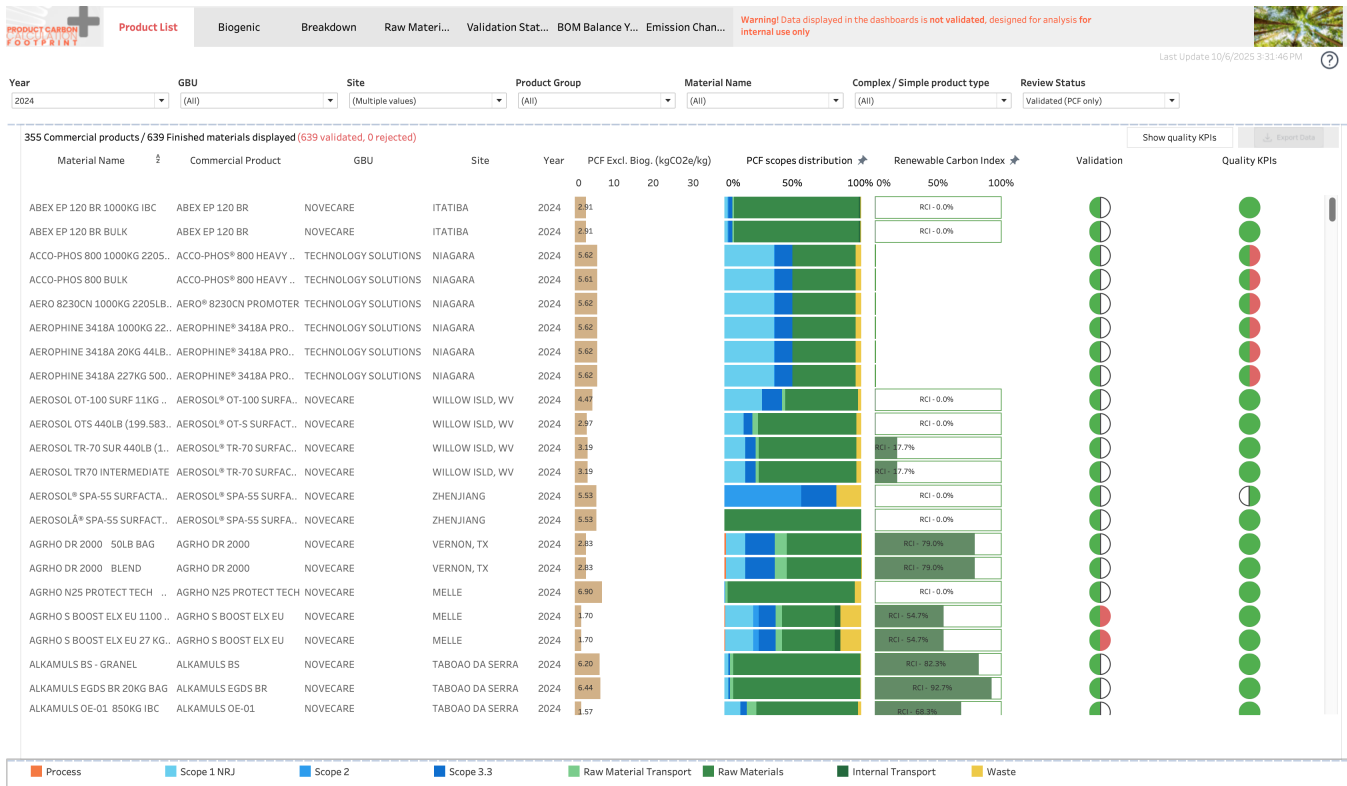
b. Data Source Panel

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

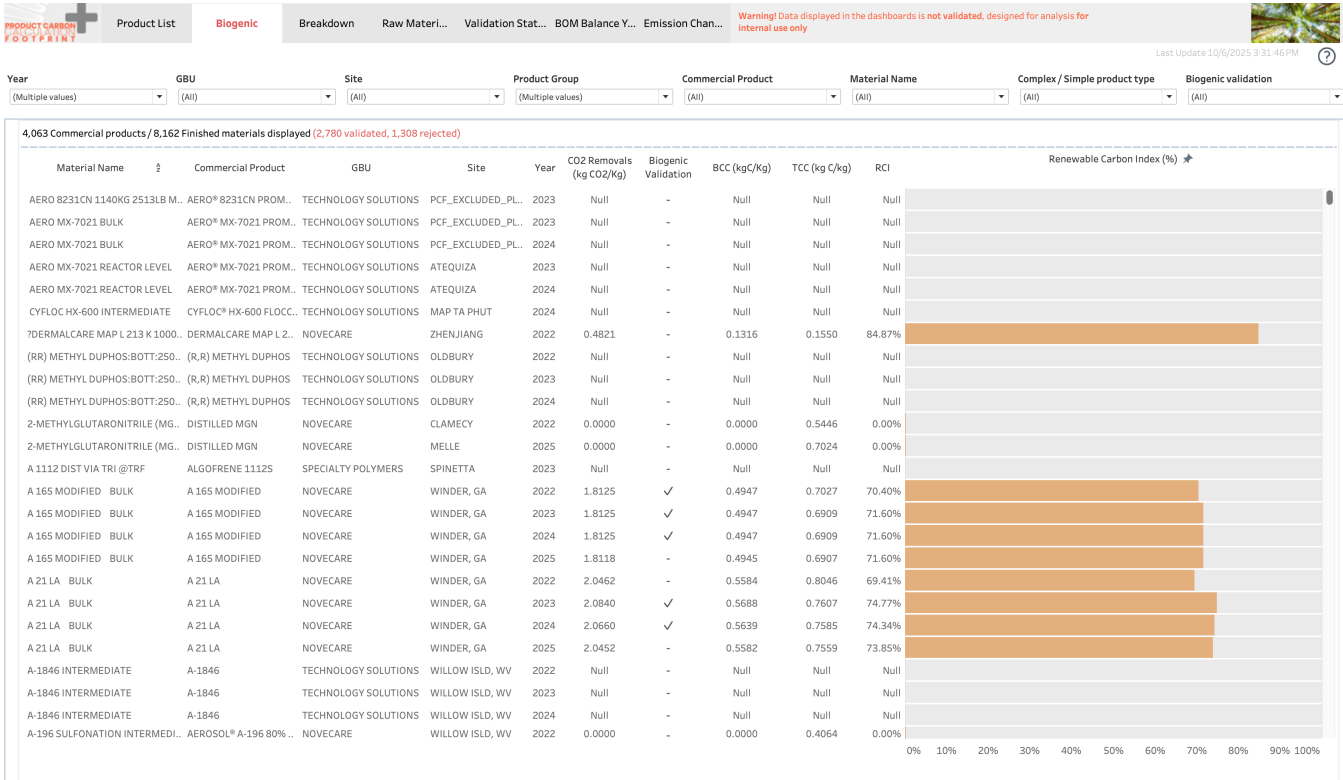
a. Product List dashboard

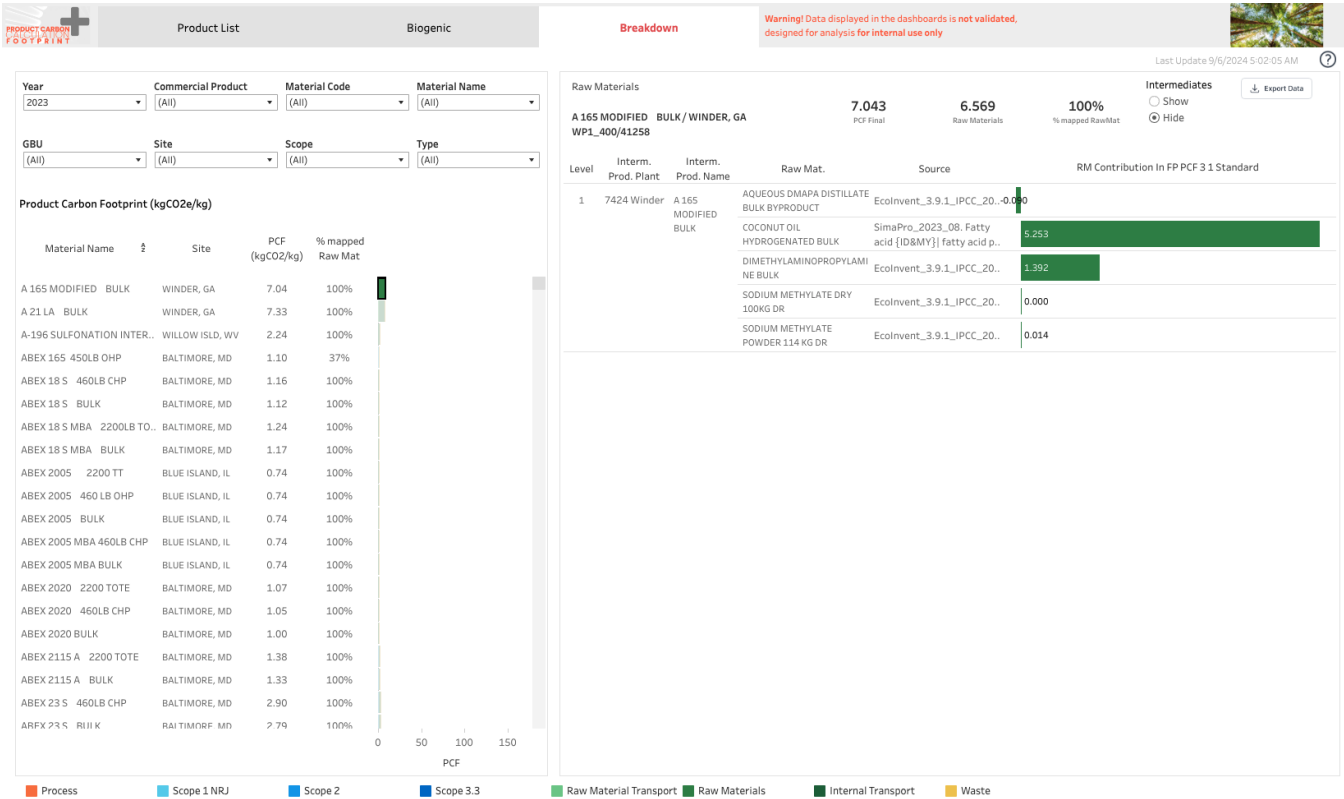


b. Product List Calculated fields

Please refer to the document:

c. Biogenic dashboard

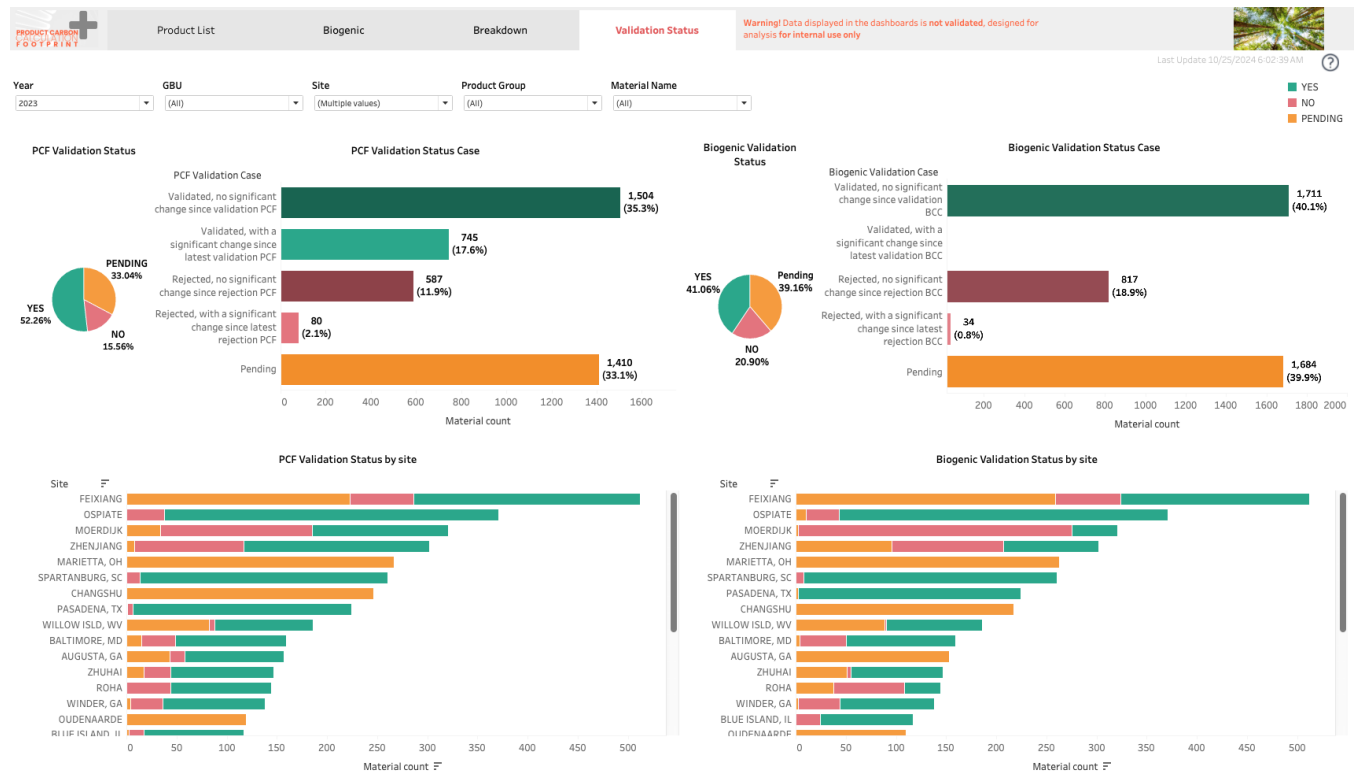




f. Breakdown Calculated fields

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 GBU										
2024 (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	PIGMENT - 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 Plant Site GBU Reference Year YoY BOM variation										
(All) (All) (All) (All) 2024 -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	TAVAU	0.00 %	2.89 %	2.89						
PVDF 6012/1001*TA C5400 45MVS H CB8 P	TAVAU	0.00 %	2.88 %	2.88						
PVDF 6020/1001*TA C5500 P500PEQH H	TAVAU	0.00 %	2.86 %	2.86						
PVDF 6012/1001*TA Q/W	TAVAU	0.00 %	2.86 %	2.86						
PVDF 1011/0001*TA C10000B P H	TAVAU	0.00 %	2.86 %	2.86						
PVDF 1010/0001S*TA F125CN P501	TAVAU	0.00 %	2.85 %	2.85						
PVDF 1010/0001<S>*TA F125CN P500	TAVAU	0.00 %	2.85 %	2.85						
PVDF 1015/1001*TA F50CN P200PEQH H	TAVAU	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

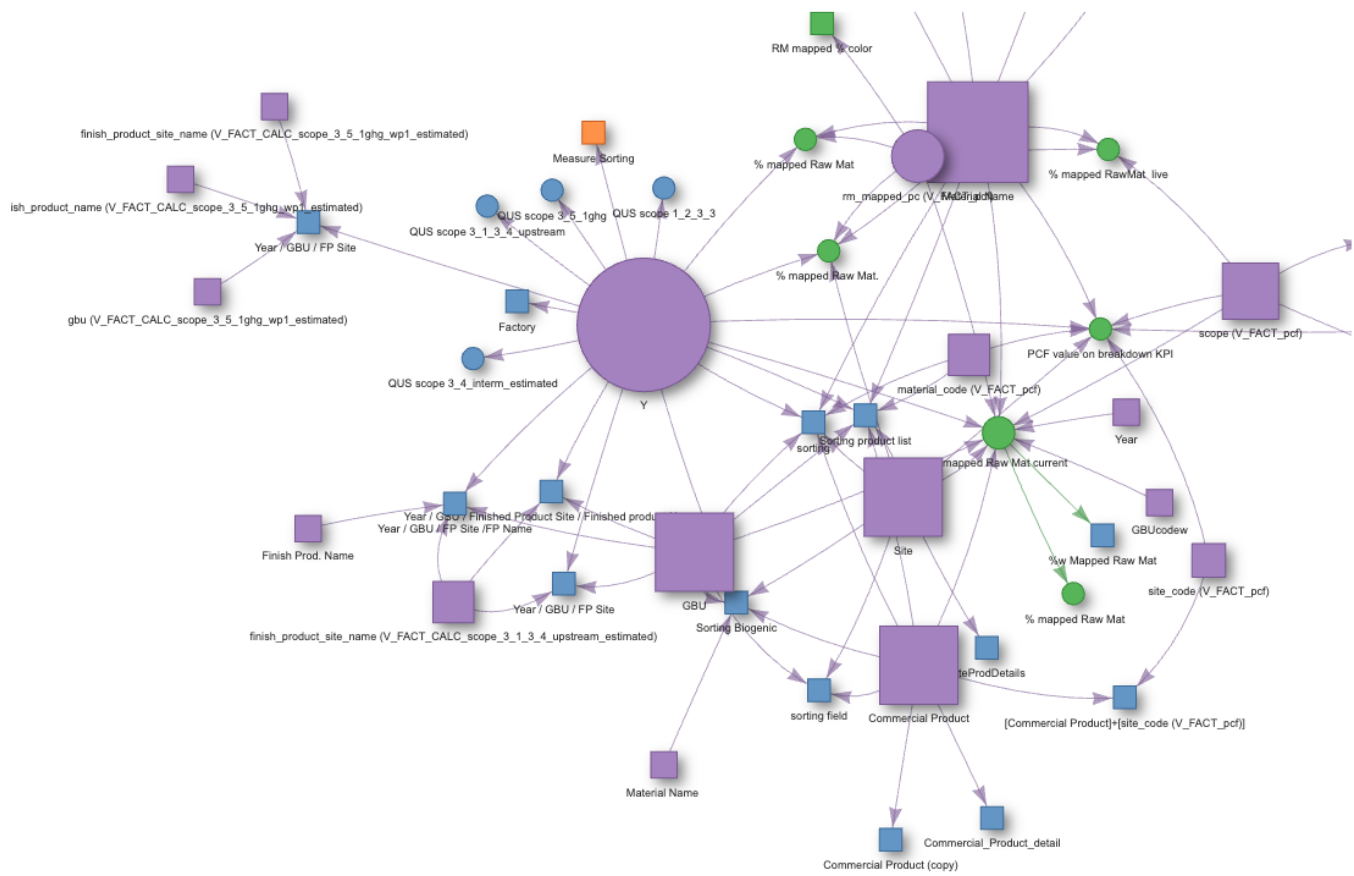
0.93

M. Emission Changes Calculated fields

Please refer to the document:

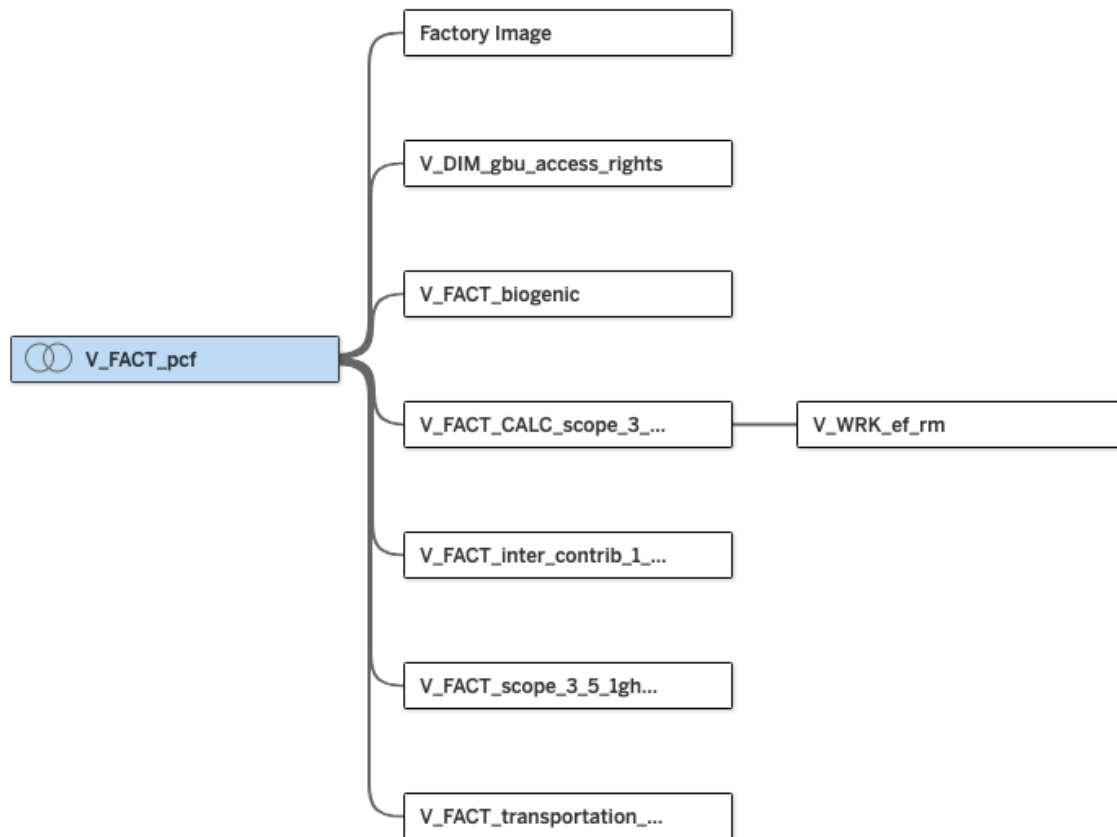
N.Attributes Dependencies - Advanced workbook

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



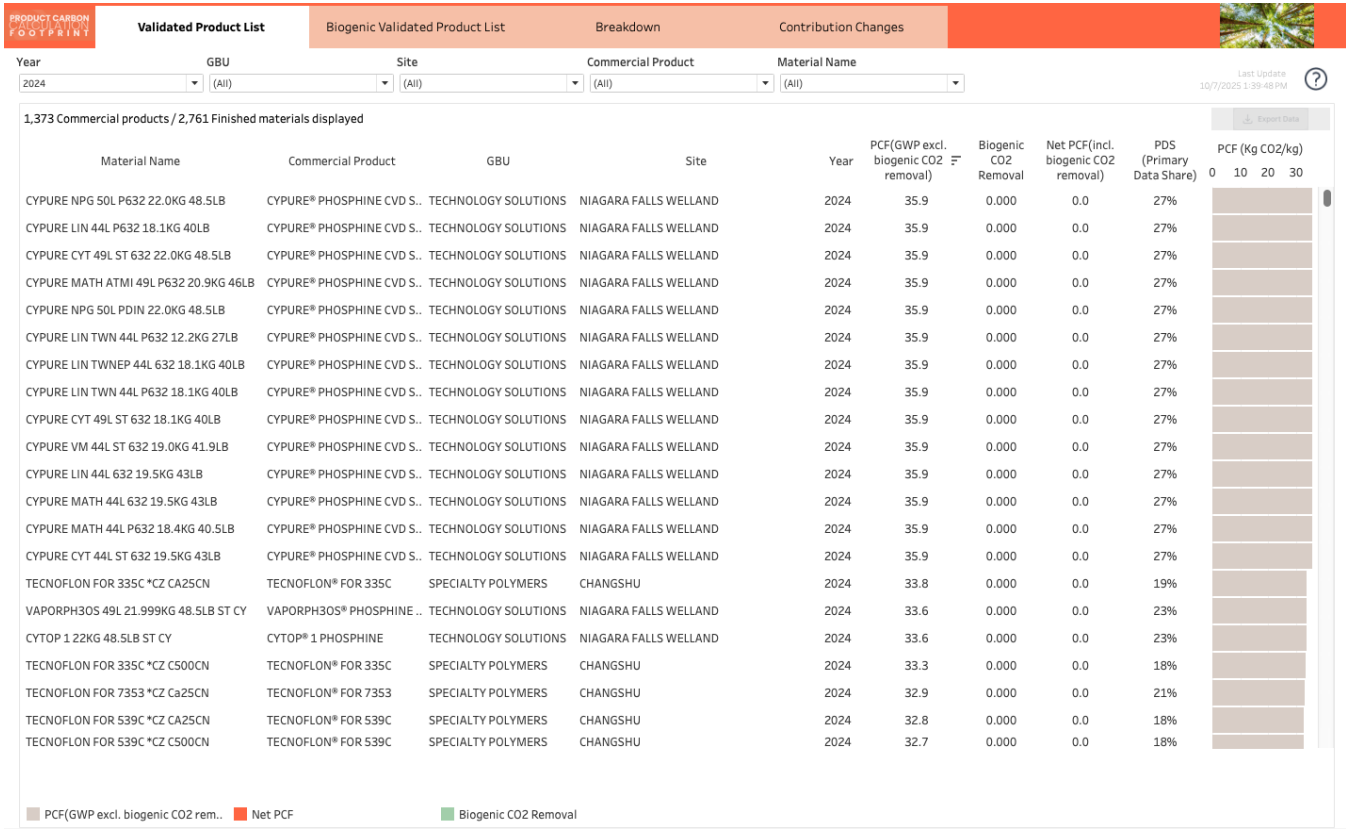
O. PCF - Product Carbon Footprint Advanced Workbook data model

Fact_PCF & All Scopes prod



3. PCF - Validated Product Carbon Footprint

a. Validated Product list dashboard



1,373 Commercial products / 2,761 Finished materials displayed

Export Data

Material Name	Commercial Product	GBU	Site	Year	PCF(GWP excl. biogenic CO2 removal)	Biogenic CO2 Removal	Net PCF(incl. biogenic CO2 removal)	PDS (Primary Data Share)	PCF (Kg CO2/kg)
CYPURE NPG 50L P632 22.0KG 48.5LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE LIN 44L P632 18.1KG 40LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE CYT 49L ST 632 22.0KG 48.5LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE MATH ATMI 49L P632 20.9KG 46LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE NPG 50L PDIN 22.0KG 48.5LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE LIN TWN 44L P632 12.2KG 27LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE LIN TWNEP 44L 632 18.1KG 40LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE LIN TWN 44L P632 18.1KG 40LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE CYT 49L ST 632 18.1KG 40LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE VM 44L ST 632 19.0KG 41.9LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE LIN 44L 632 19.5KG 43LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE MATH 44L 632 19.5KG 43LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE MATH 44L P632 18.4KG 40.5LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
CYPURE CYT 44L ST 632 19.5KG 43LB	CYPURE® PHOSPHINE CVD S...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	35.9	0.000	0.0	27%	
TECNOFLON FOR 335C *CZ CA25CN	TECNOFLON® FOR 335C	SPECIALTY POLYMERS	CHANGSHU	2024	33.8	0.000	0.0	19%	
VAPORPH30S 49L 21.999KG 48.5LB ST CY	VAPORPH30S® PHOSPHINE ...	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	33.6	0.000	0.0	23%	
CYTOP 1 22KG 48.5LB ST CY	CYTOP® 1 PHOSPHINE	TECHNOLOGY SOLUTIONS	NIAGARA FALLS WELLAND	2024	33.6	0.000	0.0	23%	
TECNOFLON FOR 335C *CZ C500CN	TECNOFLON® FOR 335C	SPECIALTY POLYMERS	CHANGSHU	2024	33.3	0.000	0.0	18%	
TECNOFLON FOR 7353 *CZ Ca25CN	TECNOFLON® FOR 7353	SPECIALTY POLYMERS	CHANGSHU	2024	32.9	0.000	0.0	21%	
TECNOFLON FOR 539C *CZ CA25CN	TECNOFLON® FOR 539C	SPECIALTY POLYMERS	CHANGSHU	2024	32.8	0.000	0.0	18%	
TECNOFLON FOR 539C *CZ C500CN	TECNOFLON® FOR 539C	SPECIALTY POLYMERS	CHANGSHU	2024	32.7	0.000	0.0	18%	

PCF(GWP excl. biogenic CO2 rem..

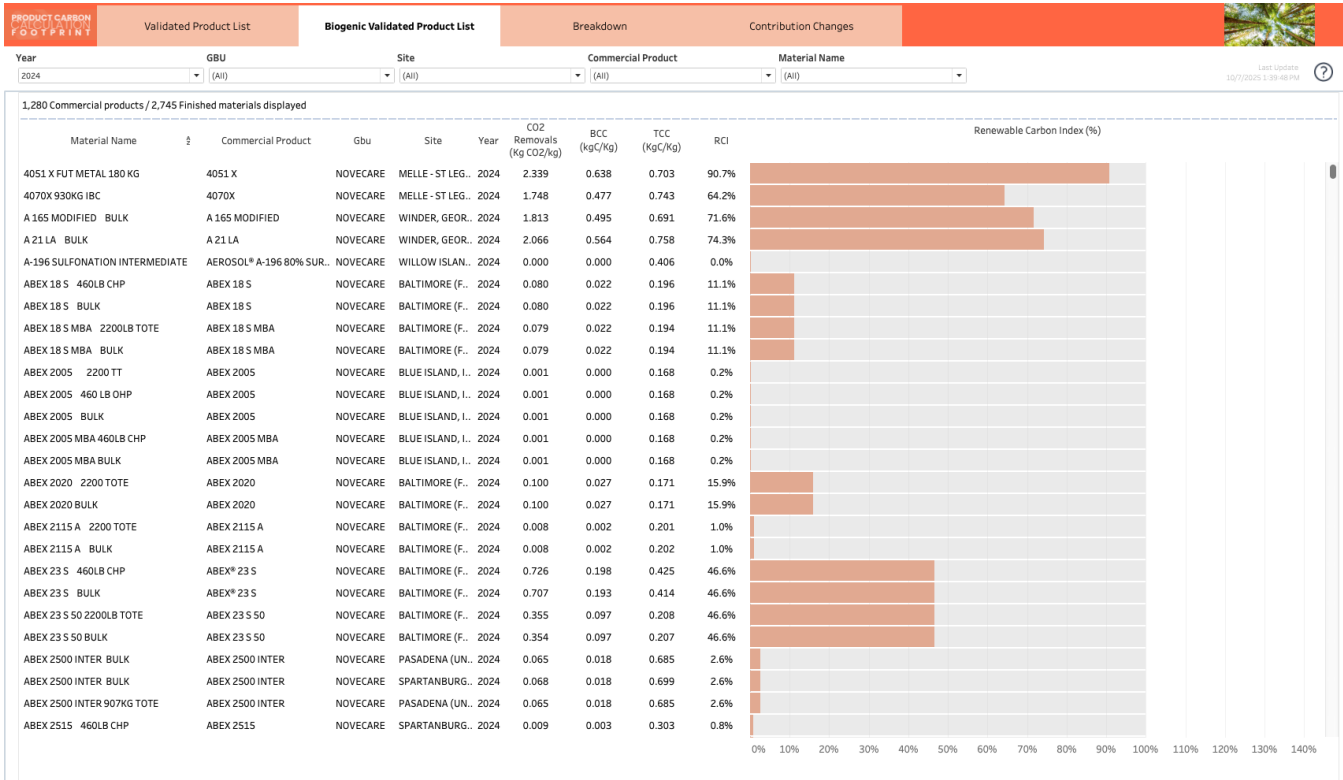
Net PCF

Biogenic CO2 Removal

b. Validated Product list Calculated fields

Please refer to the document:

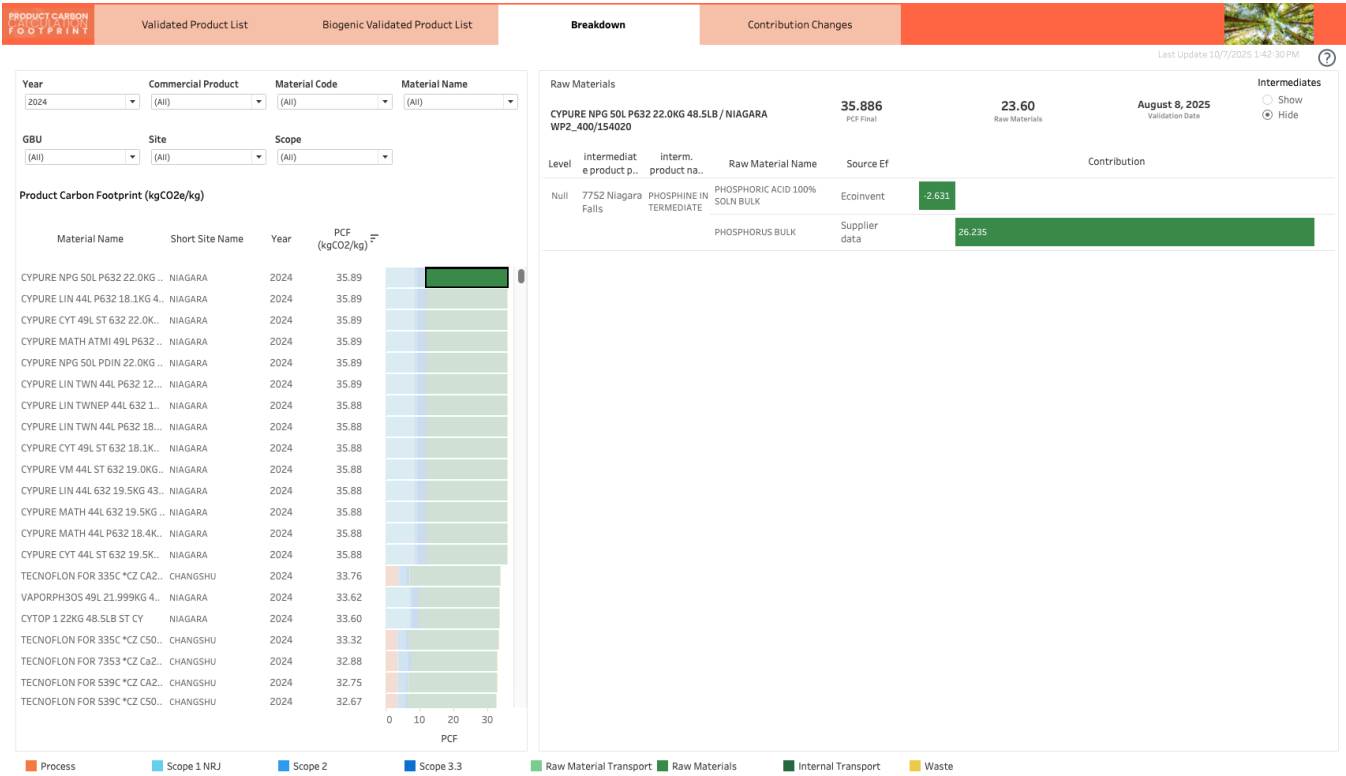
c. Biogenic Validated Product list dashboard



d. Biogenic Product list Calculated fields

Please refer to the document:

e. Breakdown dashboard



Product Carbon Footprint (kgCO2e/kg)

Material Name	Short Site Name	Year	PCF (kgCO2e/kg)
CYPURE NPG 50L P632 22.0KG .. NIAGARA		2024	35.89
CYPURE LIN 44L P632 18.1KG 4.. NIAGARA		2024	35.89
CYPURE CYT 49L ST 632 22.0K.. NIAGARA		2024	35.89
CYPURE MATH ATMI 49L P632 .. NIAGARA		2024	35.89
CYPURE NPG 50L PDIN 22.0KG .. NIAGARA		2024	35.89
CYPURE LIN TWN 44L P632 12.. NIAGARA		2024	35.89
CYPURE LIN TWNEP 44L 632 1.. NIAGARA		2024	35.88
CYPURE LIN TWN 44L P632 18... NIAGARA		2024	35.88
CYPURE CYT 49L ST 632 18.1K.. NIAGARA		2024	35.88
CYPURE VM 44L ST 632 19.0KG.. NIAGARA		2024	35.88
CYPURE LIN 44L 632 19.5KG 43.. NIAGARA		2024	35.88
CYPURE MATH 44L 632 19.5KG .. NIAGARA		2024	35.88
CYPURE MATH 44L P632 18.4K.. NIAGARA		2024	35.88
CYPURE CYT 44L ST 632 19.5K.. NIAGARA		2024	35.88
TECNOFLON FOR 335C *CZ CA2.. CHANGSHU		2024	33.76
VAPORPH3OS 49L 21.999KG 4.. NIAGARA		2024	33.62
CYTOP 1 22KG 48.5LB ST CY NIAGARA		2024	33.60
TECNOFLON FOR 335C *CZ C50.. CHANGSHU		2024	33.32
TECNOFLON FOR 7353 *CZ Ca2.. CHANGSHU		2024	32.88
TECNOFLON FOR 539C *CZ CA2.. CHANGSHU		2024	32.75
TECNOFLON FOR 539C *CZ C50.. CHANGSHU		2024	32.67

Process

Scope 1 NRJ

Scope 2

Scope 3.3

Raw Material Transport

Raw Materials

Internal Transport

Waste

Raw Materials

CYPURE NPG 50L P632 22.0KG 48.5LB / NIAGARA WPZ_400/154020

35.886

23.60

August 8, 2025

PCF Final

Raw Materials

Validation Date

Intermediates

Show

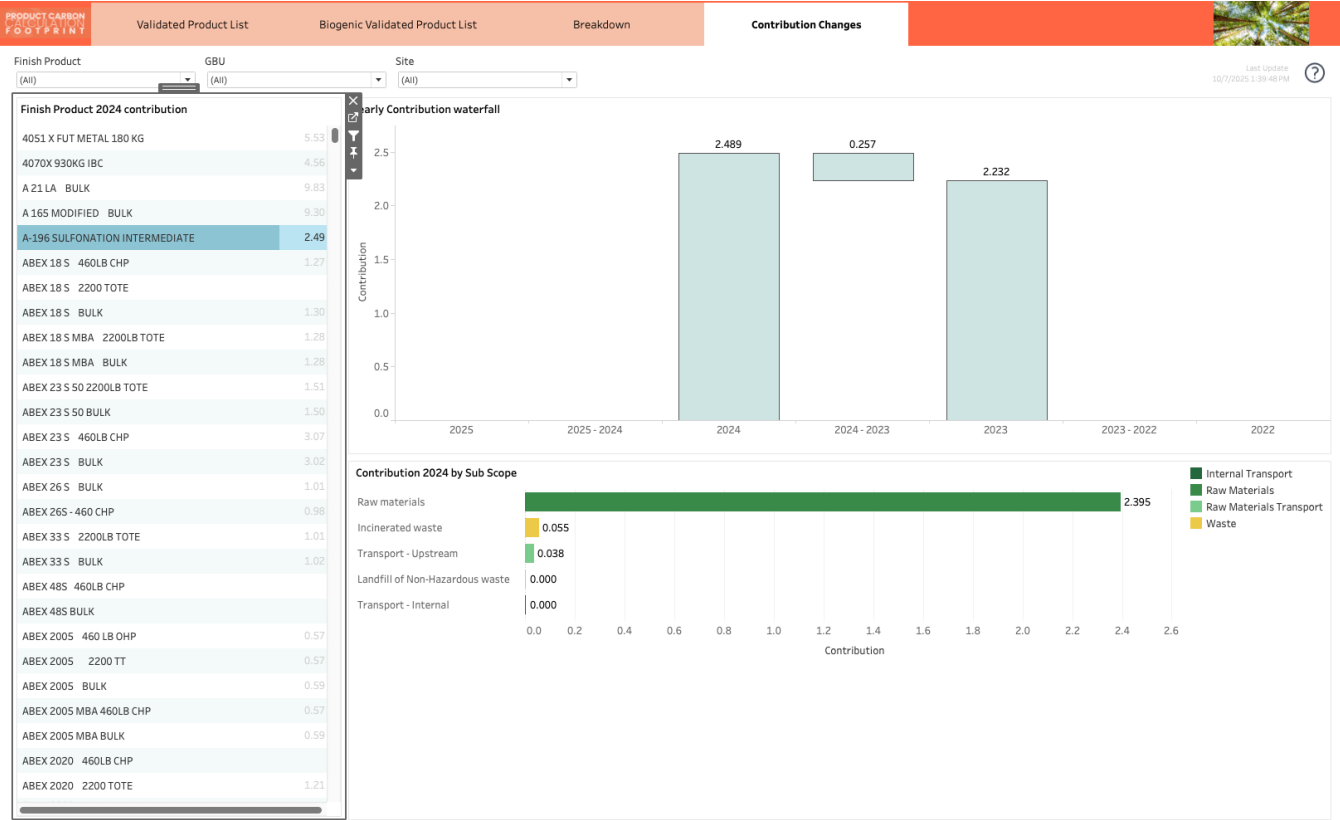
Hide

Level	Intermediat e product p...	Interm. product na..	Raw Material Name	Source Ef	Contribution
Null	7752 Niagara Falls	PHOSPHINE IN INTERMEDIATE	PHOSPHORIC ACID 100% SOLN BULK	Ecoinvent	-2.631
			PHOSPHORUS BULK	Supplier data	26.235

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

