

Katalist x AIM Standard

How to account and report Katalist EACs aligned with AIM Platform
Standard & Guidance

September 2026

Introduction

Companies using book and claim to procure low emission maritime transport need to know how to properly account for Environmental Attribute Certificates (EACs) they purchase in their emissions inventory. [AIM's Standard & Guidance](#) offers concrete instructions for how companies should do this. Greenhouse Gas Protocol's Action and Market Instrument (AMI) working group is also working on guidance for this topic, but publication for this guidance is first planned for 2028.

This document shows how Katalist EACs should be used in emission accounting and reporting in accordance with AIM's guidance for quantification and reporting, found in Chapters 6 & 7 of the AIM guidance. AIM's standard also provides guidance around quality criteria for EACs and registries, and Katalist published a comparison against that guidance [here](#).

This document provides three examples, based on Katalist retirement statements, for how companies can use the three accounting approaches outlined in AIM: Product Matching Method using substitution without adjustments, Product Matching Method using substitution with adjustments, and the Emission Matching Method. It also includes a section on how the results from these approaches would be reported in emission inventories according to AIM guidance.

As more standards are developed around accounting and reporting EACs, Katalist will continue to assess and communicate how to apply our EAC towards emerging guidance.

Product Matching Method

The Product Matching Method can be used if the identified (sub)component of the inventory uses the same unit of volume of an activity as the emission intensity unit of the intervention. For Katalist users, the identified (sub)component would be Scope 3 maritime emissions and the unit of volume of any activity could either be an amount of fuel or an amount of transport work.

If the units of the identified (sub)components do not match the units in the EAC's emission intensity factor, product matching can still be used if the units in the EAC can be converted into the unit of the (sub)component.

If these units do not match or cannot be converted, companies must use the Emission Matching Method. Note that Katalist allows for EACs to be created using different cargo unit metrics for transport work (TEU, tonnes, etc.).

The following steps should be taking to determine whether a product is eligible for Product Matching:

1. Determine the quantity of activity data for the Scope 3 maritime emissions (can be expressed in amount of fuel or amount of transport work)
2. Determine the quantity of activity data included in the Katalist EAC. If the units on the Katalist EAC match the units used for the activity data for Scope 3 maritime emissions, proceed to step 3. If these units are not similar but can be converted, do the conversion and proceed to Step 3. If these units are not similar and cannot be converted, the Emission Matching Method must be used.
3. Compare the quantity of Katalist EAC activity data to the quantity of activity data in the Scope 3 maritime emissions.
 - a. If the quantity of activity data for the Katalist EAC is less than the quantity of activity data for the Scope 3 maritime emissions, then proceed to substitution accounting.
 - b. If the quantity of activity data for the Katalist EAC is greater than the quantity of activity data for the Scope 3 maritime emissions, then only the amount of activity data in the Katalist EAC equal to the activity data in Scope 3 maritime emissions can be used in the Product Matching Method. The excess activity data in the Katalist EAC can be used in a future reporting period, subject to vintage requirements, or reported in the beyond value chain ledger.

Once it is determined that the Katalist EAC is eligible for the product matching method, companies need to apply the substitution accounting approach to Katalist EACs.

The following steps should be taking for substitution accounting:

- 1) Determine the baseline intensity of the Katalist EAC
- 2) Compare the baseline intensity for the Katalist EAC against the emission intensity of the Scope 3 maritime emissions.
 - a. If they are identical, the substitution without adjustments approach can be used and the company can directly substitute the emission intensity of the Katalist EAC with the equivalent amount of activity data for its Scope 3 maritime emissions.
 - b. If they are not identical, the company must use the substitution with adjustments approach, described in step 3.
- 3) Substitution with adjustments has three steps.
 - a. Calculate the EAC impact on a per unit basis by subtracting the emission intensity of the EAC from the baseline intensity of the EAC.
 - b. Calculate the adjusted emissions intensity for the Scope 3 maritime emissions by subtracting the EAC impact on a per unit basis from the emission intensity of the Scope 3 maritime emissions.
 - c. Calculate the quantity of emissions from the for the contractual inventory. The contractual inventory emissions = Adjusted emissions intensity * quantity of Katalist EAC activity data + (Quantity of activity data for Scope 3 maritime emissions – quantity of Katalist EAC activity data) * Emission intensity of Scope 3 maritime emissions

Below are two examples that illustrate how companies should run through these steps using information sourced internally and available on Katalist retirement statements.

Example 1: Substitution without adjustments

Company A receives the below Katalist EAC and runs through the steps outlined in the Product Matching Method section. Yellow circles are data points required for these steps.



EACs ID number
0f4a2842-7ce8-494a-aa99-6a230530c150

Voyage date
22/01/2025 - 29/04/2025

Date of booking
07/09/2026

Date of Retirement
07/09/2026

Retirement Statement



Katalist confirms that the following SMF has been retired from the Katalist registry by Testtestest / AIM Compliant Cargo Owner as a Cargo Owner.

SMF Amount	Total GHG savings
141131 Tonnes	400.000 Tonnes CO ₂ eq
of B-100 Biodiesel	83.625 %
	compared to:
	HFO

This fuel was consumed on a Container ship sailing from Port A to Port B, and includes total fuel consumption while at sea and at berth. Emission-related values (e.g. emission savings and intensities) exclude upstream credits.

Sustainability information

Emission scope	SMF-3	
Calendar year in which retirement will apply	2026	
Vintage period	31/12/2028	
Uploader Name	Katalist Demo B Demo B - Shipping	
IMO No.	8675309	
Vessel Name	AIM Carrier Ship	
SMF Energy	5.222 TJ	(A)
SMF Emission Intensity	15.000 gCO ₂ eq/MJ	(C)
Absolute GHG emissions of SMF	78.328 Tonnes CO ₂ eq	
LCV of SMF	0.037 MJ/g fuel	
Fossil Baseline of Reference emission intensity	91.601 CO ₂ eq/MJ (HFO)	(B)
Certification scheme of SMF	ISCC EU	
Proof of Sustainability number	ISCC 90210	
Type of feedstock	Used cooking oil (UCO) entirely of veg. origin	
Country of origin of feedstock	China	

Determining whether this EAC is eligible for Product Matching

- 1) Company A has identified a total of 3,000,000 TEU-nm maritime transport in their Scope 3 inventory, which has emissions of 540 tCO₂eq. They know that this transport work was done using HFO with an emission intensity of 91.601 gCO₂eq/MJ and is equivalent to 5.895 terajoules (TJ) of fuel. Fuel is the activity data this company uses for its Scope 3 maritime emissions.
- 2) The quantity of Katalist EAC activity data is 5.222 TJ of fuel, which is expressed in the same units (TJ) as the activity data of the Scope 3 maritime emissions.
- 3) The quantity of the activity data for the Katalist EAC (5.222 TJ) is less than the quantity of activity data in the Scope 3 maritime emissions (5.895 TJ). All the activity data in this EAC meets the Product Matching Method and the company proceeds to the substitution accounting approach.

Substitution accounting

- 1) The baseline intensity of the Katalist EAC is 91.601 gCO₂eq/MJ.
- 2) The emission intensity of the Scope 3 maritime emissions is 91.601 gCO₂eq/MJ. This is identical to the baseline intensity of the Katalist EAC. The company can use the substitution account approach without adjustments and can directly substitute the emission intensity of the Katalist EAC with the equivalent amount of activity data for its Scope 3 maritime emissions. Contractual inventory emissions are calculated as per below formula.
 - a. Contractual inventory emissions = Emissions intensity Katalist EAC * quantity activity data Katalist EAC + (Quantity activity data Scope 3 maritime emissions – quantity activity data Katalist EAC) * Emission intensity Scope 3 maritime emissions
 - b. Contractual inventory emissions = 15.000 gCO₂eq/MJ * 5.222TJ + ((5.895TJ- 5.222TJ) * 91.601gCO₂eq/MJ) = 140.0 tCO₂eq

The below data points were used in this example, and yellow circles denote figures found in Katalist retirement statement.

Data Point	Figure
Qty. activity data Scope 3 maritime emissions	5.895 TJ
Emission intensity Scope 3 maritime emissions	91.601 gCO ₂ eq/MJ
Qty. activity data Katalist EAC	5.222 TJ A
Baseline intensity Katalist EAC	91.601 gCO ₂ eq/MJ B
Emissions intensity Katalist EAC	15.000 gCO ₂ eq/MJ C

Table 1 - Data points for substitution without adjustments

Example 2: Substitution with adjustments

Company A receives the below Katalist EAC and runs through the steps outlined in the Product Matching Method section. Yellow circles are data points required for these steps.



EACs ID number
0f4a2842-7ce8-494a-aa99-6a230530c150

Voyage date
22/01/2025 - 29/04/2025

Date of booking
07/09/2026

Date of Retirement
07/09/2026

Retirement Statement



Katalist confirms that the following SMF has been retired from the Katalist registry by Testestest / AIM Compliant Cargo Owner as a Cargo Owner.

SMF Amount	Total GHG savings	Transport Work & intensity
141.131 Tonnes	(D) 400.000 Tonnes CO ₂ eq	(A) SMF: 2,608,310 TEU - miles
of B-100 Biodiesel	83.625 %	(B) 30.030 gCO ₂ eq/Twenty-foot equivalent unit nm
	compared to:	
	HFO	

This fuel was consumed on a Container ship sailing from Port A to Port B, and includes total fuel consumption while at sea and at berth. Emission-related values (e.g. emission savings and intensities) exclude upstream credits.

Sustainability information

Emission scope	SMF-3
Calendar year in which retirement will apply	2026
Vintage period	31/12/2028
Uploader Name	Katalist Demo B Demo B - Shipping
IMO No.	8675309
Vessel Name	AIM Carrier Ship
SMF Energy	5.222 TJ
SMF Emission Intensity	15.000 gCO ₂ eq/MJ
Absolute GHG emissions of SMF	(C) 78.328 Tonnes CO ₂ eq
LCV of SMF	0.037 MJ/g fuel
Fossil Baseline of Reference emission intensity	91.601 CO ₂ eq/MJ (HFO)
Certification scheme of SMF	ISCC EU
Proof of Sustainability number	ISCC 90210
Type of feedstock	Used cooking oil (UCO) entirely of veg. origin
Country of origin of feedstock	China

Determining whether this EAC is eligible for Product Matching

- 1) Company A has identified a total of 3,000,000 TEU-nm maritime transport in their Scope 3 inventory. The emission intensity of this transport work is 180.0 gCO₂eq/TEU-nm, which corresponds to 540 tCO₂eq. Transport work is the activity data this company uses for its Scope 3 maritime emissions.
- 2) The quantity of Katalist EAC activity data is 2,608,310 TEU-nm of transport work, which is expressed in the same units as the activity data of the Scope 3 maritime emissions.
- 3) The quantity of the activity data for the Katalist EAC (2,608,310 TEU-nm) is less than the quantity of activity data in the Scope 3 maritime emissions (3,000,000 TEU-nm). All the activity data in this EAC meets the Product Matching Method and the company proceeds to the substitution accounting approach.

Substitution accounting

- 1) Calculate the baseline intensity of the Katalist EAC.
 - a. $\text{Baseline intensity Katalist EAC} = (\text{Absolute GHG emissions Katalist EAC} + \text{Total GHG savings Katalist EAC}) / \text{Quantity activity data Katalist EAC}$
 - b. $183.4 \text{ gCO}_2\text{eq/TEU-nm} = ((78.3 \text{ tCO}_2\text{eq} + 400.0 \text{ tCO}_2\text{eq}) * 1,000,000 \text{ g/t}) / 2,608,310 \text{ TEU-nm}$
- 2) The emission intensity of the Scope 3 maritime emissions is 180.0 gCO₂eq/TEU-nm. As this is not identical to the baseline intensity of the Katalist EAC, the company must use the substitution with adjustment approach to accounting.
- 3) Substitution with adjustments steps.
 - a. Calculate the EAC impact on a per unit basis by subtracting the emission intensity of the EAC from the baseline intensity of the EAC.
 - i. $\text{EAC impact on a per unit basis} = \text{Baseline intensity Katalist EAC} - \text{Emission intensity Katalist EAC}$
 - ii. $153.4 \text{ gCO}_2\text{eq/TEU-nm} = 183.4 \text{ gCO}_2\text{eq/TEU-nm} - 30.0 \text{ gCO}_2\text{eq/TEU-nm}$
 - b. Calculate the adjusted emissions intensity for the Scope 3 maritime emissions by subtracting the EAC impact on a per unit basis from the emission intensity of the Scope 3 maritime emissions.
 - i. $\text{Adjusted emissions intensity} = \text{Emission intensity Scope 3 maritime emissions} - \text{EAC impact on a per unit basis}$
 - ii. $26.6 \text{ gCO}_2\text{eq/TEU-nm} = 180.0 \text{ gCO}_2\text{eq/TEU-nm} - 153.4 \text{ gCO}_2\text{eq/TEU-nm}$

- c. Calculate the quantity of emissions from the for the contractual inventory.
- Contractual inventory emissions = Adjusted emissions intensity * quantity activity data Katalist EAC + (Quantity activity data Scope 3 maritime emissions – quantity activity data Katalist EAC) * Emission intensity Scope 3 maritime emissions
 - $140.0 \text{ tCO}_2\text{eq} = 26.6 \text{ gCO}_2\text{eq/TEU-nm} * 2,608,310 \text{ TEU-nm} + (3,000,000 \text{ TEU-nm} - 2,608,310 \text{ TEU-nm}) * 180.0 \text{ gCO}_2\text{eq/TEU-nm}$

The below data points were used in this example, and yellow circles denote figures found in Katalist retirement statement.

Data Point	Figure
Qty. activity data Scope 3 maritime emissions	3,000,000 TEU-nm
Emission intensity Scope 3 maritime emissions	180.0 gCO ₂ eq/TEU-nm
Qty. activity data Katalist EAC	2,608,310 TEU-nm A
Baseline intensity Katalist EAC	183.4 gCO ₂ eq/TEU-nm
Emission intensity Katalist EAC	30.0 gCO ₂ eq/TEU-nm B
EAC Impact on per unit basis	153.4 gCO ₂ eq/TEU-nm
Adjusted emissions intensity	26.6 gCO ₂ eq/TEU-nm
Absolute GHG emission Katalist EAC	78.3 tCO ₂ eq C
Total GHG savings Katalist EAC	400.0 tCO ₂ eq D

Table 2 - Data points for substitution with adjustments

Emission Matching Method

The Emission Matching Method is used either when the intervention outcome is given as a change in emissions compared to a baseline or when the Product Matching Method can't be used due to different units that could not be converted to match.

The reduction of emissions coming from the Katalist EAC cannot exceed the proportion of the Scope 3 maritime emissions. Removals need to be extracted from the intervention and reported separately.

A company should take the following steps to calculate the GHG emissions from the emissions matching method.

For the Scope 3 maritime emissions:

1. Identify the targeted Scope 3 maritime emissions in the inventory and quantify it in tonnes of CO₂eq.
2. Use representative LCA or industry data to quantify the percentage of the Scope 3 maritime emissions being targeted by the Katalist EAC.
3. Multiply the values of step 1 and 2 to get the quantity of emissions that can be covered by the Katalist EAC.

For the Katalist EAC:

4. Determine the emission reduction percentage of the Katalist EAC compared to a credible baseline. Multiply the reduction percentage with the Scope 3 Maritime emissions to get the maximum emissions that can be targeted by the Katalist EAC.
5. Use the Katalist retirement statement to identify the GHG emission of the Katalist EAC.
6. Compare the quantity of GHG emissions from Scope 3 maritime emissions with the quantity of GHG emissions from the Katalist EAC to ensure the latter is lower or equal to the Scope 3 maritime emissions.

Example 3: Emission matching

Company A receives the below Katalist EAC and runs through the steps outlined in the Emission Matching Method section. Yellow circles are data points required for these steps.



EACs ID number
e8708351-0146-4dd6-9648-e9808cc4df91

Retirement Statement



Voyage date
22/01/2025 - 29/04/2025

Date of booking
07/09/2026

Date of Retirement
07/09/2026

Katalist confirms that the following SMF has been retired from the Katalist registry by Testestest / AIM Compliant Cargo Owner as a Cargo Owner.

SMF Amount
17,641 Tonnes
of B-100 Biodiesel

B

A

Total GHG savings
50,000 Tonnes CO₂eq
83.625 %
compared to:
HFO

This fuel was consumed on a Container ship sailing from Port A to Port B, and includes total fuel consumption while at sea and at berth. Emission-related values (e.g. emission savings and intensities) exclude upstream credits.

Sustainability information

Emission scope	SMF-3
Calendar year in which retirement will apply	2026
Vintage period	31/12/2028
Uploader Name	Katalist Demo B Demo B - Shipping
IMO No.	8675309
Vessel Name	AIM Carrier Ship
SMF Energy	0.653 TJ
SMF Emission Intensity	15.000 gCO ₂ eq/MJ
Absolute GHG emissions of SMF	9.791 Tonnes CO ₂ eq
LCV of SMF	0.037 MJ/g fuel
Fossil Baseline of Reference emission intensity	91.601 CO ₂ eq/MJ (HFO)
Certification scheme of SMF	ISCC EU
Proof of Sustainability number	ISCC 90210
Type of feedstock	Used cooking oil (UCO) entirely of veg. origin
Country of origin of feedstock	China

1. Company A identifies and quantifies the Scope 3 maritime emissions in its inventory.
 - a. For the reporting year, its ocean freight emissions were 50 tCO₂eq.
2. Company A identifies GHG emissions from conventional marine fuel consumption as the targeted emissions source within the ocean freight inventory component. Based on emissions accounting data, the company determines that this emissions source represents 100% of the total ocean freight emissions.
3. The company calculates that the quantity of emissions that can be covered by the Katalist EAC.
 - a. $50 \text{ tCO}_2\text{eq} = 50 \text{ tCO}_2\text{eq} \times 100\%$
4. The company calculates the maximum GHG emissions that can be targeted by the Katalist EAC. It confirms that the use of a certified low-GHG marine fuel delivers an 83.625% emissions reduction compared to the conventional fuel baseline.
 - a. $42 \text{ tCO}_2\text{eq} = 83.625\% \times 50 \text{ tCO}_2\text{eq}$
5. The company identifies the amount of emission savings included in the Katalist EAC.
 - a. The Katalist EAC has 50 tCO₂eq of verified emissions savings.
6. The company compares the quantity of emissions savings associated with the Katalist EAC (50 tCO₂eq) with the maximum addressable quantity calculated in Step 4 (42 tCO₂eq).
 - a. Since $50 \text{ tCO}_2\text{eq} > 42 \text{ tCO}_2\text{eq}$, part of the Katalist EAC does not meet the requirements of the Emissions Matching method. 8 tCO₂eq ($50 \text{ tCO}_2\text{eq} - 42 \text{ tCO}_2\text{eq}$) needs to be reported in the beyond value chain statement while 42 tCO₂eq can be reported in the impact statement.

The below data points were used in this example, and yellow circles denote figures found in Katalist retirement statement.

Data Point	Source
Scope 3 maritime emissions	50 tCO ₂ eq
% targeted by Katalist EAC	100%
Qty. emissions covered by Katalist EAC	50 tCO ₂ eq
Emission saving % Katalist EAC	83.625% A
Maximum GHG emissions that can be targeted by Katalist EAC	42 tCO ₂ eq
GHG emissions savings Katalist EAC	50 tCO ₂ eq B

Table 3 - Data points for Emission Matching

Reporting

Once intervention outcomes are quantified as per the previous sections, they need to be reported in the company's inventory. AIM guidance introduces a 2-ledger system that complements the physical inventory as well as a beyond value chain ledger for intervention outcomes that don't pass AIM requirements.

- Contractual Inventory: Used for interventions whose GHG emissions have been quantified using the Product Matching method.
- Impact Statement: Used for interventions whose GHG emissions have been quantified using the Emission Matching Method
- Beyond Value Chain: Used for interventions that don't pass requirements for AIM standard.

The emissions in above examples would be reported as per below for Scope 3, Category 4.

	Physical Inventory	Contractual Inventory	Impact Statement	Beyond Value Chain
Examples 1&2	540 tCO ₂ eq	140 tCO ₂ eq	-	-
Example 3	50 tCO ₂ eq	-	-42 tCO ₂ eq	-8 tCO ₂ eq

Table 4 – Reporting by ledgers

AIM specifies that reporting intervention outcomes should occur as soon as possible after the intervention occurred. Katalist EACs list the vintage period on the retirement statement and should be reported no later than these dates.

Companies are also required to supplement the GHG report with a list of interventions reported in the different ledgers. This list should include a description of the intervention, the associated inventory (sub)component and the ledger it reported the intervention outcome in. AIM guidelines also recommended to get third party assurance on this reporting.

The intervention details for above examples would be reported as per below.

	Intervention	Associated Inventory (sub)component	Ledger
Examples 1&2	Maritime Shipping EACs from Supplier received via Katalist	Maritime Transport (Scope 3, category 4)	Contractual Inventory
Example 2	Maritime Shipping EACs from Supplier received via Katalist	Maritime Transport (Scope 3, category 4)	Impact Statement, Beyond Value Chain

Table 5 – Intervention details

Conclusion

The examples in this paper show that a Katalist EAC carries the data points a company needs to quantify and report an EAC under AIM's Standard & Guidance. Whether the EAC routes to the Product Matching Method or the Emission Matching Method, the inputs required by AIM are either on the retirement statement or calculable from it, alongside the vintage period and intervention details needed for the supplementary intervention list. Companies do not need to go back to their carrier to fill gaps before they can complete the accounting entry.

That information is also presented the same way on every Katalist EAC, regardless of the carrier who carrier generated it or the fuel used. A company procuring EACs across several carriers and fuel pathways can apply one process to all certificates rather than interpreting a different document format for each supplier, which keeps the accounting treatment consistent across the portfolio and makes the reporting easier to review and assure.