

Version 1 / April 2026

IMPA MARITIME ENVIRONMENTAL FOOTPRINT (IMEF) INITIATIVE

DIGITAL WORKFLOW & EMISSIONS DATA INTEGRATION

SUPPLIER IMPLEMENTATION PACK

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pa** International
Marine
Purchasing
Association

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People, Planet, Profit, Purpose

IMPA IMEF

London, 6 November 2025

To: all Maritime Suppliers and Manufacturers,
Suppliers Associations, Manufacturers Association

Subject: Introduction to the IMEF Initiative and Digital Workflow Implementation

Dear Supplier,

We are pleased to share with you the first set of documents related to the IMEF (International Maritime Environmental Footprint) initiative, a collaborative effort led by IMPA and its working group to bring transparency, traceability, and accountability to emissions reporting across the maritime supply chain.

IMEF is designed to standardise the way emissions data is collected and exchanged between buyers and suppliers. It introduces a digital workflow that integrates emissions data into procurement processes, making environmental impact a fourth key dimension alongside price, quality, and availability.

This initiative is not only aligned with evolving regulatory expectations but also supports your business in becoming more competitive and future-ready.

Implementing the IMEF digital workflow offers several advantages:

- **Transparency:** Emissions data becomes visible and traceable across transactions.
- **Efficiency:** Structured data enables automation and reduces manual effort.
- **Compliance:** Supports readiness for upcoming regulations and carbon pricing mechanisms.
- **Market Preference:** Suppliers providing verified emissions data may be preferred by buyers seeking sustainable sourcing.

The first and simplest step is to create the necessary fields in your ERP system to store emissions-related data for each product, from cradle (production) to gate (delivery location). This includes mandatory and optional fields described in the attached documentation.

These fields will allow your system to interface with procurement platforms and transfer emissions data seamlessly at every transaction starting from the quotation.

To facilitate your work IMEF has created a customised document to be delivered to your ERP Manager with the ERP system implementation instruction.

In parallel, we encourage your Purchasing Dept. contact your sub-suppliers, retailers, or manufacturers and request emissions data for the products you purchase from them.

To facilitate your work IMEF has created a customised document to be delivered to your Purchasing Manager with the implementation instruction and a Template Letter to be sent to your sub-suppliers, retailers and manufacturers explaining the background and actions needed.

If your sub-suppliers cannot provide emissions data, do not worry. You can continue trading the items. The procurement platforms will automatically calculate estimated emissions using standard databases such as Ecoinvent and Exiobase, based on available information like:

- Product type and category
- Weight or Weight per Unit
- Cost
- Country of origin and delivery

Over time, suppliers who provide certified and transparent emissions data may be preferred by buyers.

We therefore recommend that you begin:

- Collecting emissions data where possible
- Updating your purchase contracts, terms and conditions, and internal documentation to support this transition
- Engaging with the IMEF framework at a smooth, effortless, but steady pace

We thank you for your commitment to sustainability and your support in making emissions transparency a reality in maritime procurement.

Please find attached:

- 01b IMEF Implementation Instructions for ERP Managers
- 01c IMEF Implementation Instructions for Purchasing Managers
- 01d IMEF Template Letter from SUPPLIERS to SUBSUPPLIERS

Should you have any questions or require assistance, please do not hesitate to contact us.

IMPA IMEF

impasave.org/projects/imef/imef-initiative

E: sustainability@impa.net

Supplier ERP Administrator

Introduction to the IMEF Digital Workflow

The International Maritime Environmental Footprint Initiative (IMEF) is a collaborative initiative aimed at standardising the collection and exchange of emissions data across the maritime supply chain. By establishing a common digital workflow, IMEF enables transparency, traceability, and accountability in emissions reporting. This initiative is crucial for driving sustainability in procurement decisions, ensuring that emissions data becomes a fourth dimension alongside price, quality, and availability.

This document provides role-specific instructions to support the implementation of the IMEF Digital Workflow. Each chapter outlines the responsibilities and system requirements for key stakeholders in the supply chain.

ROLE-SPECIFIC INSTRUCTIONS

As a Supplier ERP Administrator, your responsibility is to ensure that your ERP system is capable of storing emissions data received from sub-suppliers. You must also ensure that this data can be exported through interfaces to procurement platforms at both the quotation and order confirmation stages. This includes creating new fields for emissions values, calculation methods, and weight per unit, and ensuring consistent data mapping.

RELEVANT DATA FIELDS

Attached to this document is the IMEF Digital Transactions Appendix data fields list, customised for Suppliers' ERP Managers. The highlighted fields should be created in your ERP against every item to be populated with sub-suppliers provided information as part of the standard purchasing process and stored for every purchased batch. If not available, there are some specific fields which could help the calculation of the emissions later in the process like the category and the weight per unit. You could develop automation features to populate the category and the weight per unit if not supplied by the sub-suppliers. All of these fields will also need to be populated on Quotations and Orders Confirmations when exporting to your customers at transactional level via the interfaces with Procurement Platforms.

Thank you for your commitment to the IMEF initiative. Sustainability in the maritime supply chain begins with data visibility. By enabling emissions transparency, we pave the way for procurement decisions that consider not only price, quality, and availability, but also environmental impact.

IMEF Digital Transactions Appendix for **Suppliers' ERP Managers**

<p>ERP</p> <p>Must be added to your ERP?</p>	<p>OUT</p> <p>going interfac e Quotes Orders etc</p>
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Title	Description	Field Name in the interface	Type	Digits	Reference/Standard	Y N	Remarks	Mandatory /Optional	Y N
Product Information:									
Product ID: 123456789	Your unique reference for the item in your ERP/Inventory not to be confused with IMPA code or PART NUMBER, this is the internal unique reference used by you internally to uniquely refer to the specific item/lot/batch etc.	SUPPLIER REF ID	Alphanumeric	128		N	It is your reference for the item in question	NA	Y
Product maker: qwerty	the maker/manufacturer/ producer, if known	MAKER	Alphanumeric	128		Y	If not there yet. Optional	Optional	Y
Product Specification: qwerty	a text field containing a collation of all the info available in the transaction, typically the line1, line 2, line....x, of the item, spare part ref/code and remarks /notes	PRODUCT SPECIFICATION	Alphanumeric	MEMO		N	It is your description of the product in your own ERP	NA	Y
MAKER ID/MSG CODE	the maker or supplier unique reference, typically the PART NUMBER or IMPA CODE or a catalogue reference used to identify the product commercially	MAKER ID	Alphanumeric	50		N	already existing	NA	Y
COUNTRY OF ORIGIN (CRADLE)	The origin of the item, if available	COUNTRY OF ORIGIN	Alphanumeric	3	ISO 3166 COUNTRIES	Y	if not there yet. Could be used for cases in which the vendor is unable to provide emission data, to refine the calculation later	Optional	Y

WEIGHT PER UNIT	the weight per unit	WEIGHT PER UNIT	Numerical	5		Y	if not there yet. Could be used for cases in which the vendor is unable to provide emission data. If a weight per unit is available, the buyer could use this and the category to calculate emissions	Optional	Y
CATEGORY	The product category of the item in order to identify the Emission factors in EXIOBASE (for spend basis) and/or ECOINVENT (for weight basis) for the calculation by the web service in case the PCF is not provided by the vendor	CATEGORY	Alphanumeric	50	EXIOBASE product category for spend basis or ECOINVENT category for weight basis in conjunction with above WEIGHT per UNIT	Y	if not there yet. Could be used for cases in which the vendor is unable to provide emission data. If a weight per unit is available, the buyer could use this and the category to calculate emissions	Optional	Y
Transaction data									
UNIT OF MEASURE	the unit of measure of the transaction	UNIT OF MEASURE	Alphanumeric	5	TBA	N	It is your UoM so no need to add. Just need to make sure this is consistent with WEIGHT per UNIT.	Mandatory	Y
Environmental Impact:									
Date of Calculation:	it is the date of the calculation, can be in the past	DATE OF CALCULATION	DATE	DATE		Y	if available this data will come from your suppliers and will be populated in your stock system. If not available will be blank.	Mandatory	Y
Total Carbon Footprint:	the cradle to gate emissions in Kg CO2 equivalent (ie 1500.25 kg CO2 equivalent (CO2e))	PCF	Decimal (999.99)	6+4		Y	if available this data will come from your suppliers and will be populated in your stock system. If not available will be blank.	Mandatory	Y

Lifecycle Stages Included:	a text description with Raw material extraction (A1), transportation to manufacturing (A2), manufacturing process (A3)	LIFECYCLE STAGES	Alphanumeric	50	EPDF Taxonomy	Y	if available this data will come from your suppliers and will be populated in your stock system. If not available will be blank.	Optional	Y
EF EMISSION FACTOR	The Emission Factor utilised to calculate the Emissions or viceversa the result of the emissions/weight or value	EF	Numerical	5+4		Y	if available this data will come from your suppliers and will be populated in your stock system. If not available will be blank.	Optional	Y
INFLATION ADJUSTMENT	the inflation adjustment used	INFLATION ADJ	%	2+2		Y	if available this data will come from your suppliers and will be populated in your stock system. If not available will be blank.	Optional	Y
Data Quality and Verification:									
Calculation Method:	a text indicating the calculation methodology used	CALCULATION METHOD	Alphanumeric		ACTIVITY / SPEND / WEIGHT / LCL	Y	if available this data will come from your suppliers and will be populated in your stock system. If not available will be blank.	Mandatory	Y
Verification Status: Independently verified	a text indicating the status of the verification	VERIFICATION STATUS	Alphanumeric	50	Y/N	Y	a Y/N basis if the supplier provided relevant info around independent verification of their data.	Mandatory	Y
Verification Document: EXAMPLE URL		VERIFICATION DOCUMENT	URL	100	URL	Y	URL of the verification certificate	Optional	Y
Traceability and Transparency									
Date Traceability Identifier:	a unique reference to identify (i.e. abc123xyz789tracehash)	DATE TRACEABILITY IDENTIFIER	Alphanumeric	100	#.....	Y	if available this data will come from your suppliers	Optional	Y
Emission Factors Version Used	reference to the emission factors used (ie EFv2025.1)	EF USED VERSION	Alphanumeric	50	FREE TEXT	Y	if available this data will come from your suppliers	Optional	Y
Data Source: Supplier provided, externally audited		DATA SOURCE	Alphanumeric	50	TBA	Y	if available this data will come from your suppliers	Optional	Y

Supplier Purchasing

Introduction to the IMEF Digital Workflow

The International Maritime Environmental Footprint Initiative (IMEF) is a collaborative initiative aimed at standardising the collection and exchange of emissions data across the maritime supply chain. By establishing a common digital workflow, IMEF enables transparency, traceability, and accountability in emissions reporting. This initiative is crucial for driving sustainability in procurement decisions, ensuring that emissions data becomes a fourth dimension alongside price, quality, and availability.

This document provides role-specific instructions to support the implementation of the IMEF Digital Workflow. Each chapter outlines the responsibilities and system requirements for key stakeholders in the supply chain.

ROLE-SPECIFIC INSTRUCTIONS

As a Supplier Purchasing representative, your role is pivotal in initiating the emissions data collection process. You are encouraged to contact your sub-suppliers to request emissions data aligned with the IMEF Digital Transactions Appendix. If your sub-suppliers provide this data, it should be stored in your ERP system for export to buyers via procurement platforms. If the data is not available, you are not required to calculate emissions yourself—this will be handled by the procurement platforms. In the long term, emissions data collection should become a standard practice and be included in purchase contracts.

RELEVANT DATA FIELDS

Attached to this document is the IMEF Digital Transactions Appendix data fields list, customized for Supplier Purchasing representatives. The highlighted fields should be populated with sub-suppliers provided information as part of the standard purchasing process and stored for every purchased batch, if available. If not available, there are some specific fields which could help the calculation of the emissions later in the process like the category and the weight per unit.

Thank you for your commitment to the IMEF initiative. Sustainability in the maritime supply chain begins with data visibility. By enabling emissions transparency, we pave the way for procurement decisions that consider not only price, quality, and availability, but also environmental impact.

IMEF Digital Transactions Appendix for **Suppliers' Purchasing Managers**

**Must be requested to Sub-Suppliers and
Manufacturers?**

Title	Description	Field Name in the interface	Type	Digits	Reference/Standard	Y N	Remarks	Mandatory /Optional
Product Information:								
Product ID: 123456789	Your unique reference for the item in your ERP/Inventory not to be confused with IMPA code or PART NUMBER, this is the internal unique reference used by you internally to uniquely refer to the specific item/lot/batch etc.	SUPPLIER REF ID	Alphanumeric	128		N	It is your reference for the item in question	NA
Product maker: qwerty	the maker/manufacturer/ producer, if known	MAKER	Alphanumeric	128		Y	if available, optional	Optional
Product Specification: qwerty	a text field containing a collation of all the info available in the transaction, typically the line1, line 2, line....x, of the item, spare part ref/code and remarks /notes	PRODUCT SPECIFICATION	Alphanumeric	MEMO		N	It is your description of the product in your own ERP	NA
MAKER ID/MSG CODE	the maker or supplier unique reference, typically the PART NUMBER or IMPA CODE or a catalogue reference used to identify the product commercially	MAKER ID	Alphanumeric	50		N	already existing	NA
COUNTRY OF ORIGIN (CRADLE)	The origin of the item, if available	COUNTRY OF ORIGIN	Alphanumeric	3	ISO 3166 COUNTRIES	Y	if not already available it would be important to collect and store the information especially for cases in which the vendor is unable to provide emission data, so this can be used to refine the calculation later	Optional

WEIGHT PER UNIT	the weight per unit	WEIGHT PER UNIT	Numerical	5		Y	if not already available, it would be important to collect and store the information if available from the supplier, especially for cases in which the vendor is unable to provide emission data, so this can be used to refine the calculation later	Optional
Transaction data								
UNIT OF MEASURE	the unit of measure of the transaction	UNIT OF MEASURE	Alphanumeric	5	TBA	N	It is your UoM in your own ERP to which the weight per unit refers to	Mandatory
Environmental Impact:								
Date of Calculation:	it is the date of the calculation, can be in the past	DATE OF CALCULATION	DATE	DATE		Y	if available this data will come from your suppliers	Mandatory
Total Carbon Footprint:	the cradle to gate emissions in Kg CO2 equivalent (ie 1500.25 kg CO2 equivalent (CO2e))	PCF	Decimal (999.99)	6+4		Y	if available this data must come from your suppliers	Mandatory
Lifecycle Stages Included:	a text description with Raw material extraction (A1), transportation to manufacturing (A2), manufacturing process (A3)	LIFECYCLE STAGES	Alphanumeric	50	EPDF Taxonomy	Y	if available this data will come from your suppliers	Optional
EF EMISSION FACTOR	The Emission Factor utilised to calculate the Emissions or viceversa the result of the emissions/weight or value	EF	Numerical	5+4		Y	if available this data will come from your suppliers	Optional
INFLATION ADJUSTMENT	the inflation adjustment used	INFLATION ADJ	%	2+2		Y	if available this data will come from your suppliers	Optional
Data Quality and Verification:								

Calculation Method:	a text indicating the calculation methodology used	CALCULATION METHOD	Alphanumeric		ACTIVITY / SPEND / WEIGHT / LCL	Y	if available this data must come from your suppliers	Mandatory
Verification Status: Independently verified	a text indicating the status of the verification	VERIFICATION STATUS	Alphanumeric	50	Y/N	Y	a Y/N basis if the supplier provided relevant info around independent verification of their data	Mandatory
Verification Document: EXAMPLE URL		VERIFICATION DOCUMENT	URL	100	URL	Y	URL of the verification certificate	Optional
Traceability and Transparency								
Date Traceability Identifier:	a unique reference to identify (i.e. abc123xyz789tracehash)	DATE TRACEABILITY IDENTIFIER	Alphanumeric	100	#.....	Y	if available this data will come from your suppliers	Optional
Emission Factors Version Used	reference to the emission factors used (ie EFv2025.1)	EF USED VERSION	Alphanumeric	50	FREE TEXT	Y	if available this data will come from your suppliers	Optional
Data Source: Supplier provided, externally audited		DATA SOURCE	Alphanumeric	50	TBA	Y	if available this data will come from your suppliers	Optional