

Version 1 / April 2026

IMPA MARITIME ENVIRONMENTAL FOOTPRINT (IMEF) INITIATIVE

DIGITAL WORKFLOW & EMISSIONS DATA INTEGRATION

IMPLEMENTATION PACK FOR BUYER ERP SYSTEM

impa|save
People, Planet, Profit, Purpose

**im
pa** International
Marine
Purchasing
Association

Buyer ERP Manager

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 Buyer ERP Manager, you must ensure that your ERP system is updated to receive emissions data from procurement platforms. This includes emissions calculated on an activity basis, weight basis, or spend basis. Your system should be able to store and process this data to support sustainability-driven procurement decisions.

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 **BUYERS / PURCHASING ERPs / SHIOWNERS**

To create in Purchasing ERP
 Data flowing from Procurement
 Platform interface for Quotations and
 Order Confirmations

Title	Description	Field Name in the interface	Type	Digits	Reference/Standard	YN	Remarks
Supplier's Information:							
SUPPLIER ID	a unique reference for all purchasing systems and procurement platforms to identify the vendor, for the time being the procurement platform id, a mapping could be generated	SUPPLIER ID	Alphan umeric	50	The buyer assigned id for the vendor + the procurement platform id or a new database generated by IMPA or similar	N	already there
Supplier Country	the country of the supplier	SUPPLIER COUNTRY	Alphan umeric	3		N	already there
Product Information:							
Product ID: 123456789	The supplier unique reference for the item (not to be confused with IMPA code or PART NUMBER) this is the internal unique reference used by the supplier in his ERP to uniquely refer to the specific item/lot/batch etc.	SUPPLIER REF ID	Alphan umeric	128		Option al	If not there yet, make sure not to confuse this with IMPA Code or Part Number this is the vendor unique SKU of the product
Product maker: qwerty	the maker/manufacturer/ producer, if known	MAKER	Alphan umeric	128		N	already existing

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 merging both the buyer and vendor info	PRODUCT SPECIFICATIO N	Alphan umeric	MEMO		N	Not needed in purchasing ERP unless you wish to keep record of it
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	Alphan umeric	50		N	already existing
COUNTRY OF ORIGIN (CRADLE)	The origin of the item, if available	COUNTRY OF ORIGIN	Alphan umeric	3	ISO 3166 COUNTRIES	option al	if not there yet, to implement as a separate field or flow into remarks
WEIGHT PER UNIT	the weight per unit	WEIGHT PER UNIT	Numeri cal	5		option al	if not there yet, optional
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	Alphan umeric al	50	EXIOBASE product category for spend basis or ECOINVENT category for weight basis in conjunction with above WEIGHT per UNIT	option al	if not there yet, optional
Transaction data							
COUNTRY OF DELIVERY (GATE)	The place in which the delivery is taking place and for which the supplier is providing data on (GATE) Could be extrapolated from the EXW if not available elsewhere	COUNTRY OF DELIVERY	Alphan umeric al	3	ISO 3166 COUNTRIES	N	already existing
VALUE	The unit price of the item	VALUE	Numeri cal	99,999, 999.999 9		N	already existing

CURRENCY	The currency of the transaction	CURRENCY	Alphan umeric al	3	ISO 4217 CURRENCIES	N	already existing
UNIT OF MEASURE	the unit of measure of the transaction	UNIT OF MEASURE	Alphan umeric	5	TBA	N	already existing
QUANTITY	The quantity transacted	QUANTITY	Numeri cal	99,999, 999.999 9		N	already existing
USD/EUR VALUE	A transitional calculation based on exchange rate to be used ad hoc in case the AGENT need to calculate PCF Emissions using spend basis	USD/EUR VALUE	Numeri cal	99,9999 ,9999,9 99.9999		N	already existing
Environmental Impact:							
Date of Calculation:	it is the date of the calculation, can be in the past	DATE OF CALCULATIO N	DATE	DATE		Y	if available this data will come from suppliers
Total Carbon Footprint:	the cradle to gate emissions in Kg CO2 equivalent (ie 1500.25 kg CO ₂ equivalent (CO ₂ e))	PCF	Decim al (999.9 9)	6+4		Y	if available this data will come from suppliers
Lifecycle Stages Included:	a text description with Raw material extraction (A1), transportation to manufacturing (A2), manufacturing process (A3)	LIFECYCLE STAGES	Alphan umeric	50	EPDF Taxonomy	Y	if available this data will come from suppliers
EF EMISSION FACTOR	The Emission Factor utilised to calculate the Emissions or viceversa the result of the emissions/weight or value	EF	Numeri cal	5+4		Y	if available this data will come from suppliers
INFLATION ADJUSTMENT	the inflation adjustment used	INFLATION ADJ	%	2+2		Y	if available this data will come from suppliers
Data Quality and Verification:							

Calculation Method:	a text indicating the calculation methodology used	CALCULATION METHOD	Alphanumeric		ACTIVITY BASIS / SPEND BASIS / WEIGHT BASIS / LCL	Y	if available this data will come from suppliers
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.
Verification Document: EXAMPLE URL		VERIFICATION DOCUMENT	URL	100	URL	Y	URL of the verification certificate
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
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
Data Source: Supplier provided, externally audited		DATA SOURCE	Alphanumeric	50	TBA	Y	if available this data will come from your suppliers or the interface