Good Practices in Sustainable Development

1. Organization Details (Please answer in the right column only)		
1.1 Name of the organization Include the full, official name of your company/ organization. **If you are selected as a winner, your organization's name will appear on the recognition plaque.**	Palermo Port Company SA	
1.2 Type of organization Please indicate the type of your organization: Micro, SME, Large Enterprise; and whether it's public, private, or mixed; NGO, Academia, etc.	Private SME.	
Sector to which the organization belongs:	☐ Consultancy ☐ Insurance companies ☐ Aeronautics and Defense ☐ Architecture ☐ Food and Beverages ☐ Legal Services and Lawyers ☐ Leisure and Tourism ☐ Marketing, public relations ☐ Automotive ☐ Real estate agencies ☐ Chemical ☐ Pharmaceuticals	☐ Infrastructure and Construction ☐ Industrial Engineering ☐ Banking and finance ☐ New Technologies ☐ Basic Services (electricity, gas, water, etc.) ☐ Telecommunications ☐ Mining and extraction ☐ Oil and Gas ☐ Distribution ☐ Support Services X Transport ☐ Other (Please specify):

Location (city, department): Indicate the city and department where the company/organization's main headquarters are located and the main operating departments.	New Site - Magdalena
Number of employees: Indicate the approximate number of direct employees at the company as of the application submission date. For part-time employees, provide an approximate FTE (full-time equivalent).	369
Brief description of the entity: **(Maximum 100 words)** Describe the company or organization's activity, its mission and values, strategy and area of work/business and any other information you consider relevant.	Palermo Sociedad Portuaria is a multipurpose terminal for operations in the steel, clean bulk, general cargo, industrial products, coke, and liquids industries. Our sustainability strategy focuses on developing innovative, science-based solutions aimed at generating value, social leadership, and environmental protection, aligned with our concept of operational excellence.
1.3 Primary contact of the organization (President or equivalent)	
Name(s) and surname(s): Indicate the name and surname of the president or equivalent, the highest authority responsible for the entity.	Ricardo Alfonso Román Herazo
Post: Please provide the official title of the organization's primary contact.	Manager
1.4 Main contact for application follow-up This section focuses on obtaining the contact information for the person responsible for the best practice. This person will be notified of the status and progress of the application. **You can include more than one contact if you wish.**	
Name(s) and surname(s):	Juan Roberto De Jesús Rua Díaz
Post:	Sustainability Professional
Email:	Juan.rua@coremar.com
Office and Cell Phone: (Include region and/or city prefixes)	(+57) 3005001922

2. Contribution to the Sustainable Development Goals

(Please answer only in the right column)

2.1 Main SDG *Select the*

SDG you wish to apply for, this is the one *to which good governance mainly contributes.*

presented practice. ***MARK ONLY ONE.***

If you are applying under SDG 5, 14 or 16, please tick ***ONLY ONE*** *of its subcategories.*

☐ **(SDG 1)** End poverty in all its forms everywhere

☐ **(SDG 2)** End hunger, achieve food security and improved nutrition and promote sustainable agriculture

☐ **(SDG 3)** Ensure healthy lives and promote well-being for all at all ages

☐ **(SDG 4)** Ensure inclusive and equitable quality education and promote development opportunities lifelong learning for all

(SDG 5) Achieve gender equality and empower all women and girls. **(If you are applying for this SDG, you must select *ONLY ONE of the following subcategories)***

- ☐ Actions that promote entrepreneurship in the countryside (rural)
- ☐ Leadership in promoting more women in STEM (Science, Technology, Engineering, Mathematics)
- ☐ Business promotion for empowerment and closing gaps
- ☐ Promoting safe environments for women

☐ **(SDG 6)** Ensure availability and sustainable management of water and sanitation for all

☐ **(SDG 7)** Ensure access to affordable, reliable, sustainable and modern energy for all

☐ **(SDG 8)** Promote sustained, inclusive and sustainable economic growth, full employment and productive and decent work for all

☐ **(SDG 9)** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

☐ **(SDG 10)** Reduce inequality within and among countries

☐ **(SDG 11)** Make cities and human settlements inclusive, safe, resilient and sustainable

X (SDG 12) Ensure sustainable consumption and production patterns

☐ **(SDG 13)** Take urgent action to combat climate change and its impacts (taking note of the agreements adopted at the United Nations Framework Convention on Climate Change forum Climatic)

(SDG 14) Conserve and sustainably use the oceans, seas, and marine resources for sustainable development. **(If you apply for this SDG, you must select *ONLY ONE of the following subcategories)***

- ☐ Sustainable coastal communities
- ☐ Protection of marine and coastal ecosystems

☐ **(SDG 15)** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

(SDG 16) Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

(If you apply for this SDG you must select *ONLY ONE of the following subcategories*)

☐ Human Rights and Business

☐ Fight against Corruption

3. Information on good practice

(Please answer only in the right column)

3.1 Title of the good practice: Indicate the name of the good practice presented. This should be a maximum of 12 words and less than 70 words. characters.	*Strategy manual for comprehensive waste management in port terminals: Focus on the Circular Economy.*
3.2 SDG target(s) to which your good practice contributes. Learn about the objectives and goals here.	*12.4* By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment. *12.5* By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse. *12.6* Encourage companies, especially large and transnational corporations, to adopt sustainable practices and incorporate sustainability information into their reporting cycle.
3.3 Date on which the proposed good practice began. Since when the proposed practice has been under development.	Start Date: 07-01-2025. Currently running: Yes X No
3.4 Objective(s) of the practice: (Maximum 200 words) Provide information on the project objectives and the specific problem it seeks to address or solve within the framework of the SDGs and their associated targets.	The project seeks to design and standardize strategies for comprehensive waste management in port terminals, based on the principles of the circular economy and international standards.
3.5 Initiative implemented: **(Maximum 300 words)** Explain the implemented project and the solution it provides to the problem and objectives identified on the	The implemented initiative consists of the development of a ***management*** project applied in Palermo Port Society, oriented to the design

based on the themes raised in the SDGs and their associated targets. You can also include a summary of the project in this section.	of strategies for comprehensive waste management under a circular economy approach based on processes in the port sector in Colombia. This proposal arises from the significant increase in waste generated by the growth of port operations, which represents an environmental, economic, and logistical challenge. Through a process analysis, the types of waste generated were identified (recyclable, non-recyclable, hazardous, post-consumer, special, among others). Tools were applied for process analysis, mass balance, and the PDCA model, which allowed for the quantification, classification, and proposal of control, collection, and recovery strategies for each category. As a result, guidelines were developed to implement a registration system, optimize storage areas, reduce operating costs, and move toward compliance with standards such as Ecoport and Zero Waste. Additionally, the practice strengthened the relationship between academia and the port sector.
3.6 Management and Quality: ***(Maximum 500 words)*** ***15% of the total score*** This section addresses the processes through which the good practice was created, implemented, and managed. The information and evidence highlighted demonstrate the positive impact achieved through clear objectives (based on the themes outlined in the SDGs and their associated targets), strong leadership, efficient management, a quality focus, sufficient resources, and effective dialogue and communication with stakeholders, making it sustainable and replicable. This section accounts for 15% of the total score.	The best practice implemented at Palermo Port Society is based on a comprehensive solid waste management system structured under the principles of the circular economy and the Zero Waste (ZW) certification model. This process was developed based on a descriptive and exploratory methodology, which began with a diagnostic assessment, generated by type, volume, and current management, identifying special waste as a priority, particularly waste wood used in port storage. The objective is to optimize waste management by minimizing its final disposal and to incorporate these flows into circular value chains, in line with the Sustainable Development Goals (SDGs), especially SDG 12 on responsible production and consumption. Research has allowed us to define strategies aligned with the continuous improvement cycle of the PDCA model (Plan, Do, Check, Act), promoting effective, replicable and sustainable management over time. The project's leadership was evident in the inter-institutional coordination between the research team, the port's environmental management officials, and internal stakeholders, establishing effective channels of communication and participation that strengthened the implementation of new practices, such as the systematization of waste registration and improvements in storage areas. In terms of quality, national and international standards were applied—including ISO 14001 and 20400—which guaranteed a rigorous and improvement-oriented technical approach.

	continuous. The use of mass balance as a technical tool allowed for the quantification and validation of waste generation, while checklists served to monitor compliance with the criteria required by the BC system. The allocation of resources was appropriate: appropriate technology was used for waste characterization, operational staff were trained in proper segregation and handling, and service providers for the utilization of recoverable waste were evaluated. Additionally, a risk and opportunity assessment was included. As a result, substantial improvements were identified in waste traceability, reduction, and recovery. This management model not only strengthens Palermo Sociedad Portuaria's environmental reputation but also sets a replicable precedent for other port terminals in Colombia and Latin America seeking to transition toward more circular, efficient, and sustainable operations.
3.7 Innovation: ***(Maximum 200 words)*** ***15% of the total score*** Explain why the good practice is innovative, why it presents a novel approach to a problem or a new way of managing and developing the business or its management that could be replicated based on the themes raised in the SDGs and their associated targets. Innovation is defined as something new: a new management model, a new way of working, a new solution, or a new approach to collaboration with partners and organizations. Practices that incorporate innovative activities (technologically or socially) into and their planning and/or execution, design, implementation, based on the principles of the Global Compact and the SDGs.	The best practice developed by Palermo Sociedad Portuaria represents an innovative approach to waste management in port environments, simultaneously integrating the circular economy model, the Zero Waste management system, and the mass balance technical tool, a rare combination in the maritime logistics sector. This approach not only allowed for the redesign of operational waste management, but also for the generation of a new way of making decisions based on real, traceable data, traditionally hidden in conventional systems. Furthermore, a PDCA management model with a circular approach was implemented, applicable and scalable to other systems. ports. Innovation is also reflected in the multi-stakeholder collaboration model between academia, business, and communities of interest, which has driven the development of replicable strategies aligned with SDG 12 (responsible consumption and production) and SDG 17 (partnerships for the goals). This model transforms the way ports address their environmental challenges.
3.8 Project Impact: ***(Maximum 500 words)*** ***40% of the total score*** *Describe the impact of the practice based on the benefits* *business/ organizational (if applicable) and*	The implementation of comprehensive waste management strategies based on circular economy principles, primarily based on the goals proposed by the Zero Waste system at Palermo Port Society, has generated tangible environmental, social, and organizational impacts. From a business perspective, the project enabled the establishment of a more efficient management system, with 100% traceability of

the benefits for society/ environment as well as the impact on the goals incorporated in the SDGs. This may include information on measurement indicators and project results. interesting include Quantitative evidence and qualitative evidence along with testimonies from participants and beneficiaries. It is recommended to include KPIs *(Key* Performance Indicators) associated with the SDGs and their goals and specific data. It refers to the evaluator's estimate of the magnitude of the social, economic or environmental change that the practice could generate, taking into account the SDG Goals identified in the form as SDG. Important: The impact that the Expert Evaluation Committee will take into account is that which occurs in Colombia.	waste, thanks to the adoption of tools such as mass balance and a PDCA model applied to port operations. This has reduced operational risks, improved regulatory compliance, and facilitated the process of achieving the goals proposed by the Zero Waste certification.

As results we present for hazardous waste;

The identification of opportunities for improvement in spill response and the implementation of preventive strategies have led to a sustained reduction in the generation of contaminated sand at the port terminal:

Year	Sand contaminated generated (kg)	Reduction absolute (kg)	Percentage reduction compared to the previous year
2021	1.335	Base year	
2022	771	564	-42.24%
2023	350	421	-54.60%
2024	0	350	-100%
2025	0	0	0% (achievement maintenance)

The implementation of comprehensive strategies such as improved wastewater treatment, optimized maintenance processes, logistical monitoring of equipment cleaning activities, and the incorporation of water recirculation systems have led to a significant reduction in the generation of industrial sludge:

Year	Sludge industrialists generated (kg)	Absolute reduction (kg)	Percentage reduction compared to the previous year
2021	24070	Base year	
2022	20910	3160	-13.13%
2023	12610	8300	-39.69%
2024	7308	5302	-42.04%
2025	3930	3378	-46.22% *(vs. 2024)*

Total cumulative reduction (2021–2025): 20,140 kg (84% less than in 2021).

The strategies implemented at our emergency care center, focused on rigorous monitoring and standardization of processes, have allowed a significant improvement in the management of hospital waste.

Year	Waste hospital generated (kg)	Reduction absolute (kg)	Percentage reduction compared to the previous year
2021	290	Base year	
2022	178	112	-38.62%
2023	63	115	-64.61%
2024	60	3	-4.76%
2025*	(partial data)	—	—

Total cumulative reduction (2021–2024): from 290 kg to 60 kg ÿ 79.31% reduction.

The implementation of preventive measures, process improvements, and standardization allowed for an average reduction of 84.7% in costs associated with hazardous waste disposal, from $20,816,502 in 2021 to $3,187,950 in 2024, representing a total reduction of $17,628,552.

For ordinary waste, organic sludge management strategies allowed for an increase from 70 kg in 2021 to 1,660 kg in 2022, reaching 0 kg in 2023 and 2024 thanks to its use as a composting input. This process includes pruning remains, bulk sweeping, and other organic waste generated at the port, transforming them into compost reused in green areas. This management resulted in a reduction of $1,211,000 in costs during the analyzed period by avoiding final disposal. The initiative also contributes to COÿ mitigation and reinforces PSP's commitment to the circular economy, waste recovery, and sustainable environmental management.

(Centanaro Acuña, 2023).

Between 2021 and 2025, a waste recovery model was consolidated at the port terminal, articulated with the social management plan through the Palermo Conecta program. This initiative, supported by the Palermo Women Entrepreneurs Foundation, strengthens local organizations through the utilization and transformation of recyclable waste. Through this model, waste such as cardboard, scrap metal, plastic, large bags, paper, pulp, PET, and street sweeping was managed, generating cumulative revenues of over $107 million during this period. This approach has not only boosted the circular economy and community strengthening, but also fostered local job opportunities.

Data analysis shows that 2022 was the year with the highest valued volume, exceeding 382,000 kg of waste and representing $30,210,830 in revenue, followed by 2024 with more than 815,000 kg

	valued, although with a decrease in economic returns ($19,811,730), attributable to the valuation of lower-value materials commercial. In 2021, 435,680 kg of construction and demolition waste (CDW) were generated, while in 2022, 2023, 2024, and 2025, no such waste was generated, thanks to the implementation of a good management practice. This consisted of using CDW as fill material and refurbishment of terminal yards and facilities, thus promoting the sustainable use of these materials and avoiding their offsite disposal. This strategy not only reduced the environmental impact but also eliminated the costs associated with transportation and dump truck disposal that were incurred in 2021, generating economic benefits and strengthening the terminal's commitment to the circular economy. We have completed the analysis and implementation phase of the PDCA (Plan, Do, Check, Act) tool, along with mass balance, as strategic instruments for evaluating and optimizing wood waste management. These tools allowed us to identify and implement key actions aimed at logistical reorganization of wood use within the terminal. Throughout the period, progressive quantities were recorded: 125,631 kg in 2021, 163,785 kg in 2022, 255,543 kg in 2023, and a peak of 437,590 kg in 2024, mainly associated with the growth in steel handling, whose stowage requires large volumes of wood. Thanks to this exercise, it has been possible to accurately quantify the amount of wood needed for cargo storage, avoiding unnecessary requests and allowing the terminal to establish clear standards for stowage, storage, and reuse criteria. This best practice aims to reduce wood waste generation by 40% by 2025, optimizing resource use and strengthening the circular economy approach in operations. The other waste proposed in our matrix is standardized in post-consumer programs that allow the closing of cycles, supported by programs proposed in Colombia, by ANDI (Association of National Entrepreneurs of Colombia) that promote the circular economy in industrial sectors including national circular economy strategies proposed by the (Ministry of Environment and Sustainable Development, 2019) This model is fully replicable in other port terminals in the country, marking a clear roadmap for the operational sustainability of the port logistics sector in Colombia . ***We are currently building a manual for terminals.***

	port workers together with a very important association in ports, we hope to launch it soon* it would be interesting if as a management project it also arises from the pact.
3.9 Sustainability over time: ***(Maximum 200 words)*** ***20% of the total score*** Feasibility of the project continuing over time, even if it no longer has the support (financial or otherwise) of the company or organization.	The sustainability of the Palermo Port Society project is ensured through its structural integration into the Environmental Management System and its alignment with the corporate sustainability strategy, ensuring its continuity beyond the initial financial support. This practice promotes operational self-management, the optimization of existing resources, and the strengthening of internal capacities, without requiring significant additional expenditures. The educational component, with ongoing staff training and links to the *SustainPort 4.0 research center,* for the circular economy line allows for knowledge renewal and process updates, ensuring constant innovation. This combination of technical, organizational, and human factors makes the project sustainable, scalable, and replicable over time, even with changes in resource availability.
3.10 Alliances ***(Maximum 200 words)*** ***10% of the total score*** Explain how your best practice has fostered partnerships and/or teamwork with different entities and/or stakeholders. Achieving the SDGs is only possible through partnerships.	The best practice developed by Palermo Port Society has been possible thanks to the development of strategic alliances between the business sector and academia, promoting a collaborative approach to comprehensive waste management. The partnership with the University of the Coast enabled the development of diagnostics, technical analysis, and strategy design based on scientific criteria, including the application of mass balance and the PDCA model. In addition, collaborative work with waste recycling and disposal service providers was strengthened, fostering a network of stakeholders committed to the circular economy and waste reduction. The inclusion of a sustainable purchasing manual and dialogue with internal stakeholders (logistics operators, maintenance personnel, administrative areas) generated ownership of the model and improved daily practices. The project also promoted the creation of the SustainPort 4.0 port research center, a collaborative innovation platform aimed at generating sustainable solutions aligned with SDG 17 (Partnerships for the Goals). These partnerships have been key to ensuring the project's viability, replicability, and sustainability, demonstrating that transforming the environmental management model in ports is only possible through multi-stakeholder cooperation.

3.11 Current State of Good practice **(Maximum 300 words)** Describe the current status of the project / good practice implemented.	Over time, a sustained evolution in waste management has been consolidated, characterized by a progressive decrease in operating costs and a constant improvement in environmental indicators. This process has shifted toward a governance model, where decisions are aligned with defined guidelines and integrated transversally into operational and strategic processes. At the same time, data management and analysis capabilities have been strengthened, allowing for a more accurate understanding of system behavior. This comprehensive view makes it possible to identify deviations and anomalies in real time, facilitating timely corrective interventions and even anticipating potential scenarios.
3.12 Support Material Links **Share links to expand information on your best practices and/or view supporting materials.** **DO NOT use WE TRANSFER links or Platforms with restricted access**	0_consolidation_BI_residuos_final.xlsx 1002013169 - 1002032119 Strategies for integrated waste management in port terminals.pdf