Port Services

PAMOS®
PROFESSIONAL SERVICES

pamos.ca

PORT SERVICES OVERVIEW

Air Quality & Greenhouse Gas Management

Support ports in meeting climate and air quality commitments through comprehensive carbon accounting, emissions inventories, and mitigation planning. Services include applying internationally recognized protocols to guide net-zero strategies, disclosure, and reporting; identifying Best Available Techniques for NOx, PM, and other pollutants; and conducting dispersion modelling to evaluate impacts and inform investment decisions.

Emergency Preparedness, Resilience & Response

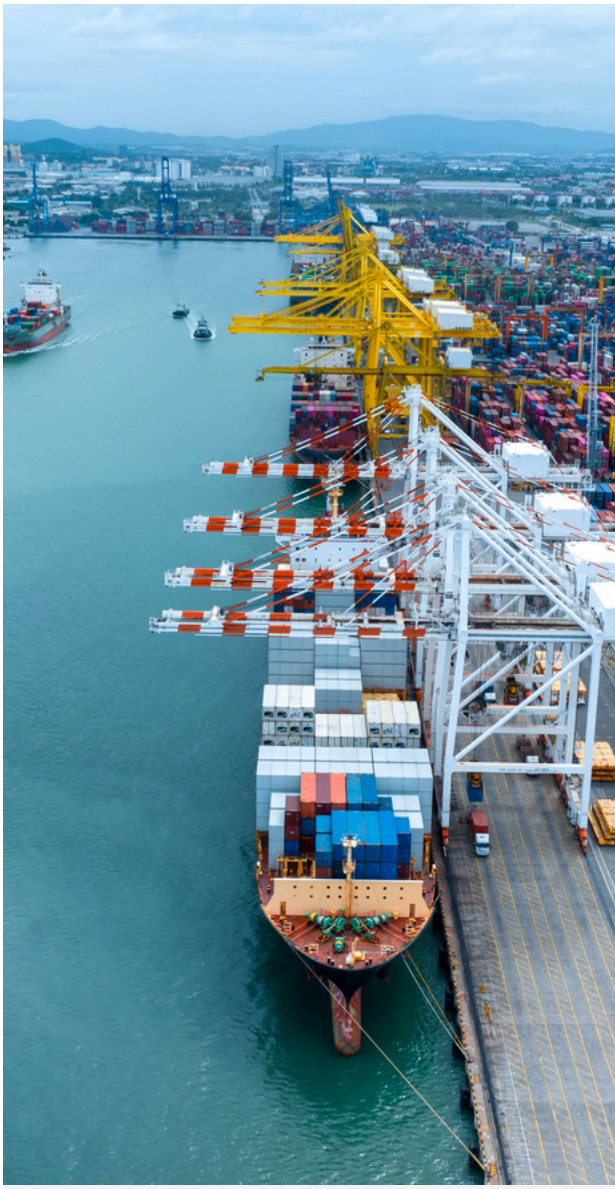
Help ports strengthen operational continuity by assessing risks from extreme weather and climate-driven disruptions. Develop defensible resilience strategies and practical response plans that safeguard critical infrastructure, maintain service reliability, and support long-term adaptation.

Outreach & Stakeholder Engagement

Design and implement engagement strategies that build trust, transparency, and collaboration across port communities. Support meaningful dialogue with residents, industry partners, government agencies, and the public to ensure shared understanding of port initiatives and environmental performance.

Grant Support and Administration

Supply technical and administrative elements to ensure timely and competitive grant applications for federal, state, and private funding opportunities. Provide reporting and administrative support to ensure compliance with grant requirements.



Underwater Noise Management and Mitigation

Provide science-based expertise to help ports understand, predict, and mitigate underwater noise impacts in alignment with regional and international marine environmental standards. Services include technical noise assessments; mitigation planning and implementation; monitoring and reporting; and staff training in effective noise-management practices. Develop Underwater Noise Management and Mitigation Plans aligned with sustainable port frameworks such as Green Marine.

Our Team

Gavin Bollan
Energy and Emissions Specialist

Gavin has over 30 years of experience in air quality, greenhouse gas management, and environmental permitting. He has undertaken port development environmental assessment work in Europe and the Middle East (including air quality monitoring) and worked with ports in the United Kingdom on managing the opportunities presented by new energy systems such as electrolytic hydrogen. Gavin has also supported UK freeports on master planning options and compatibility with renewable energy generation and new revenue streams including data centers. Gavin is the proprietor of Thorium Consult, an independent energy and emissions advisory consultancy based near Oxford, UK.

Nicole Boothman-Shepard
Risk Reduction and Climate Specialist

Nicole is a global disaster-risk-reduction and climate-adaptation leader who helps communities and infrastructure owners prepare for shocks, recover stronger, and invest for long-term resilience. Across transportation systems—including ports and other critical supply-chain assets—she brings expertise in all-hazards planning, equitable resilience, federal funding, and resilient recovery. She has helped public-sector clients secure approximately $12 billion for resilience, response, and recovery initiatives. A former vice-chair of the Transportation Research Board's Resilience Section and a 2024 FEMA Vanguard Fellow, Nicole champions practical, sustainable investments that deliver social, economic, and environmental benefits.

Ian Todreas
Senior Sustainability Strategist

Ian brings over 25 years of experience helping ports, government agencies, and community organizations improve environmental performance, prepare for climate change, secure funding, and optimize operations. His work includes leading diesel reduction outreach for tug and drayage operators at inland and coastal ports, training port-adjacent environmental justice communities using EPA's Community Action Roadmap, and helping ports achieve and advance their sustainable practices to secure Green Marine certification. Ian also authored EPA's case study on the San Pedro Bay Ports' Clean Air Action Plan, highlighting lessons from two decades of port sustainability leadership.

Jonathan Vallarta
Senior Underwater Noise Specialist

Jonathan is an internationally recognized underwater acoustician with almost 25 years of experience in passive acoustic monitoring, marine noise modelling, and regulatory impact assessment. He has led major port-related underwater noise studies in USA and, Canada, advised on port expansion reviews, and delivered training for ports-authorities, stakeholders, coastal communities, and indigeneous groups. In 2018, he participated as a Mexican delegate and panelist at the United Nations, contributing to global ocean-noise policy. As founder of PAMOS, he supports ports in developing noise management and mitigation plans aligned with Green Marine standards.

"Driving cleaner, smarter, and more sustainable ports through responsible emissions management, innovative solutions, and a clear commitment to a net-zero future."