

Operaciones Portuarias Sostenibles y desechos

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MARITIME PROCUREMENT SERVICES



Más derechos para más gente



Resiliencia Del ingl. *resilience*, y este der. del lat. *resiliens*, *-entis*, part. pres. act. de *resilīre* 'saltar hacia atrás, rebotar', 'replegarse'.

1. f. Capacidad de adaptación de un ser vivo frente a un agente perturbador o un estado o situación adversos.

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MARCH 30, 2020

TIME

WHEN THE WORLD STOPS

WHAT TO KNOW
AND DO ABOUT
THE GLOBAL
PANDEMIC

STAMFORD,
CONN.

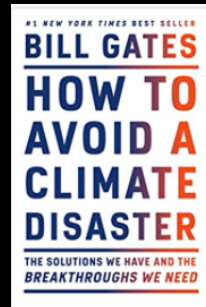
*Cheryl Chatter, 51, in
self-quarantine at
home, after she was
exposed to COVID-19
at a birthday party.
She was notified that
she tested positive
on March 17.*



time.com

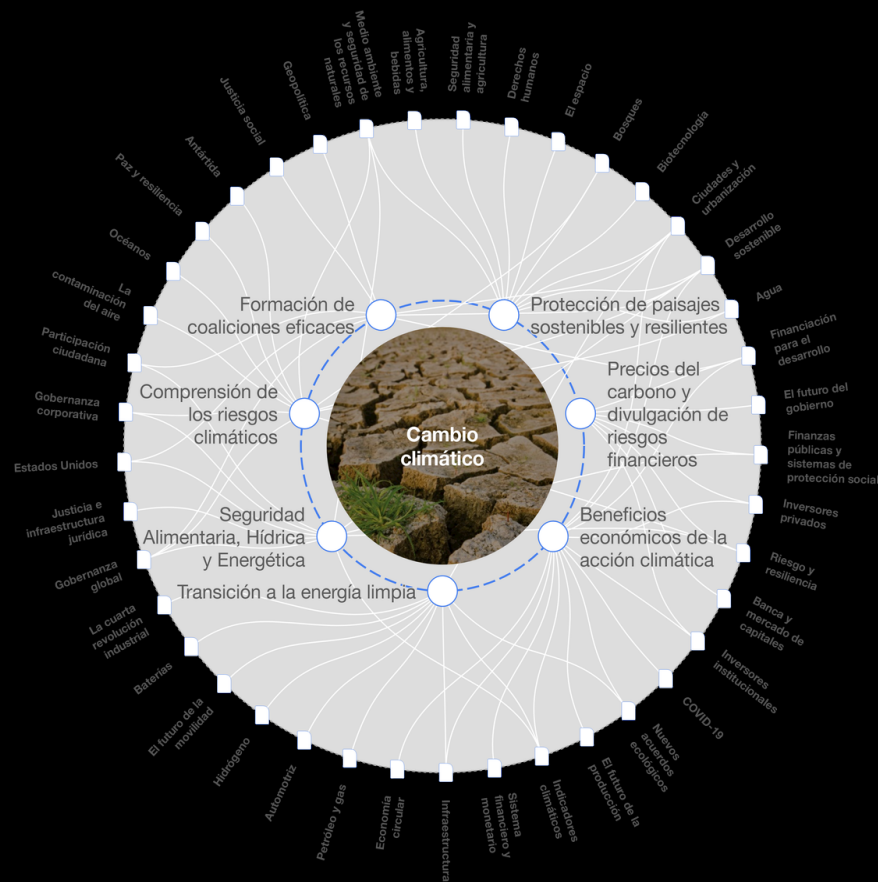
Impacto del Cambio Climático

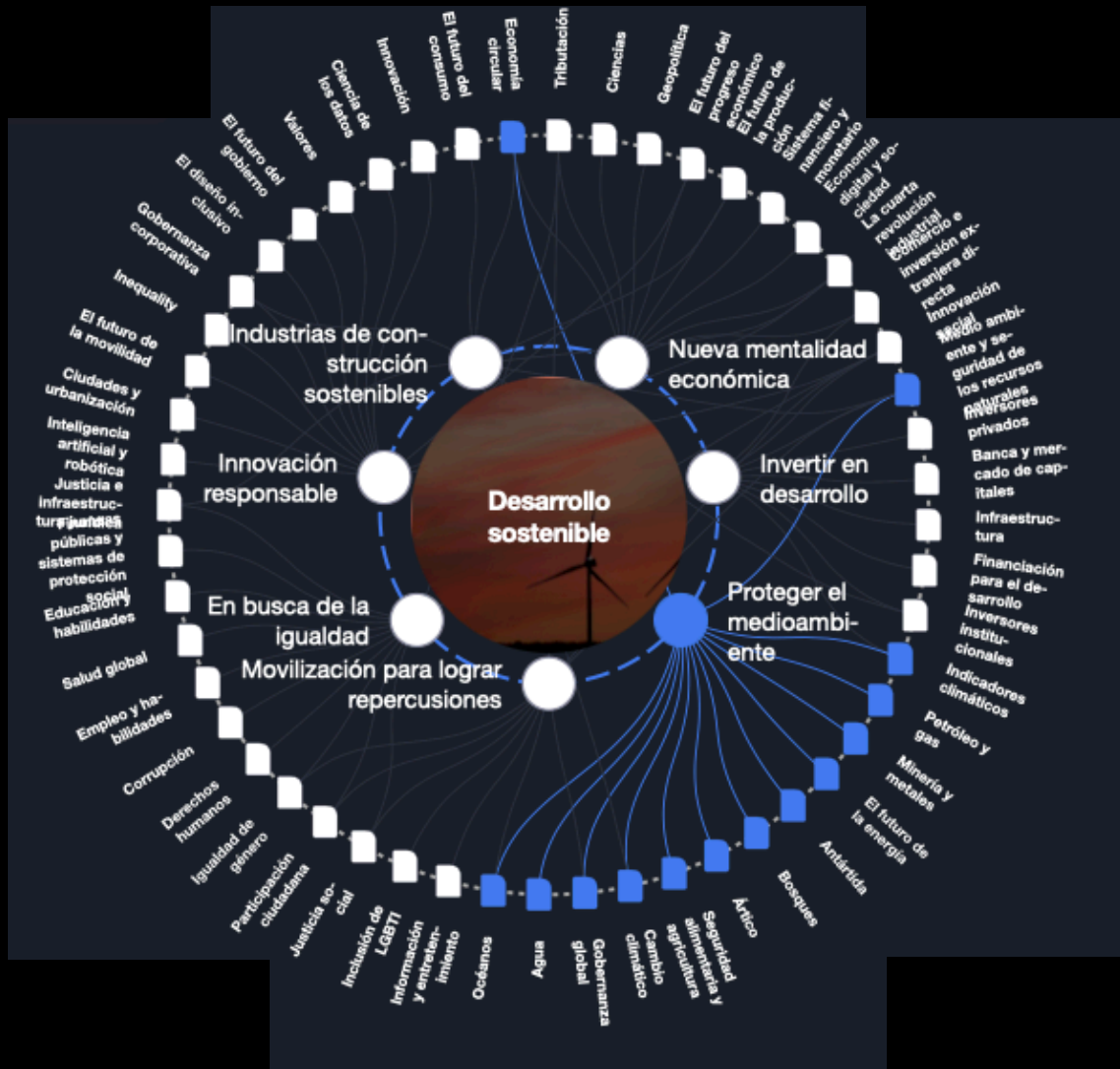
- **Siguientes 40 años:**
 - 980,000 muertes anuales / Escenario moderado
- **Fin de este siglo:**
 - 5 millones de muertes anuales / Peor escenario
- **Economía:**
 - Afectación = Tener una Pandemia cada 10 años
 - EUA : 1 Punto del PIB Anualmente

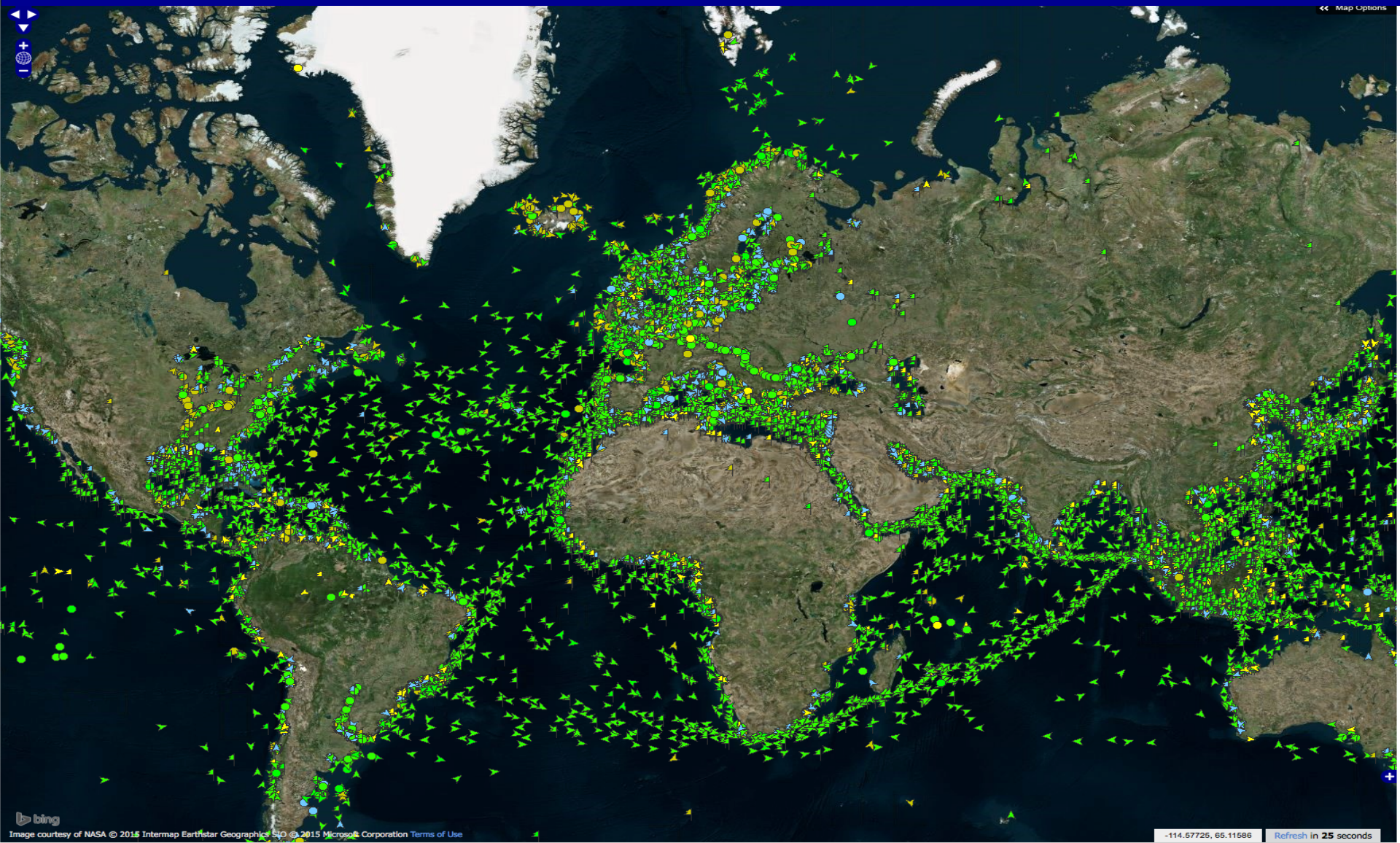


Cambio climático

Durante mucho tiempo, los climatólogos han advertido que para tener una probabilidad razonable de evitar un nivel catastrófico del cambio climático, la concentración de dióxido de carbono en la atmósfera debe mantenerse por debajo de **450 partes por millón**. En el año 2016, el más cálido del que se tenga registro, se cruzó el umbral de las **400 partes por millón** por primera vez, lo que destacó la urgente necesidad de acelerar la acción climática por parte de los gobiernos, las empresas y la sociedad civil.







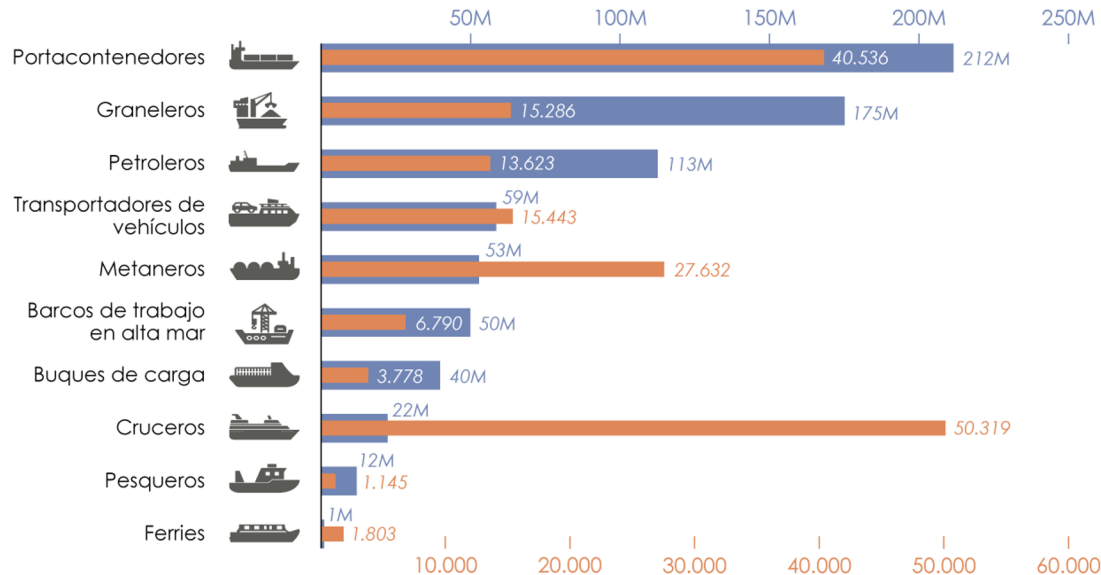
Map Options



Industria Marítima – Datos de emisiones

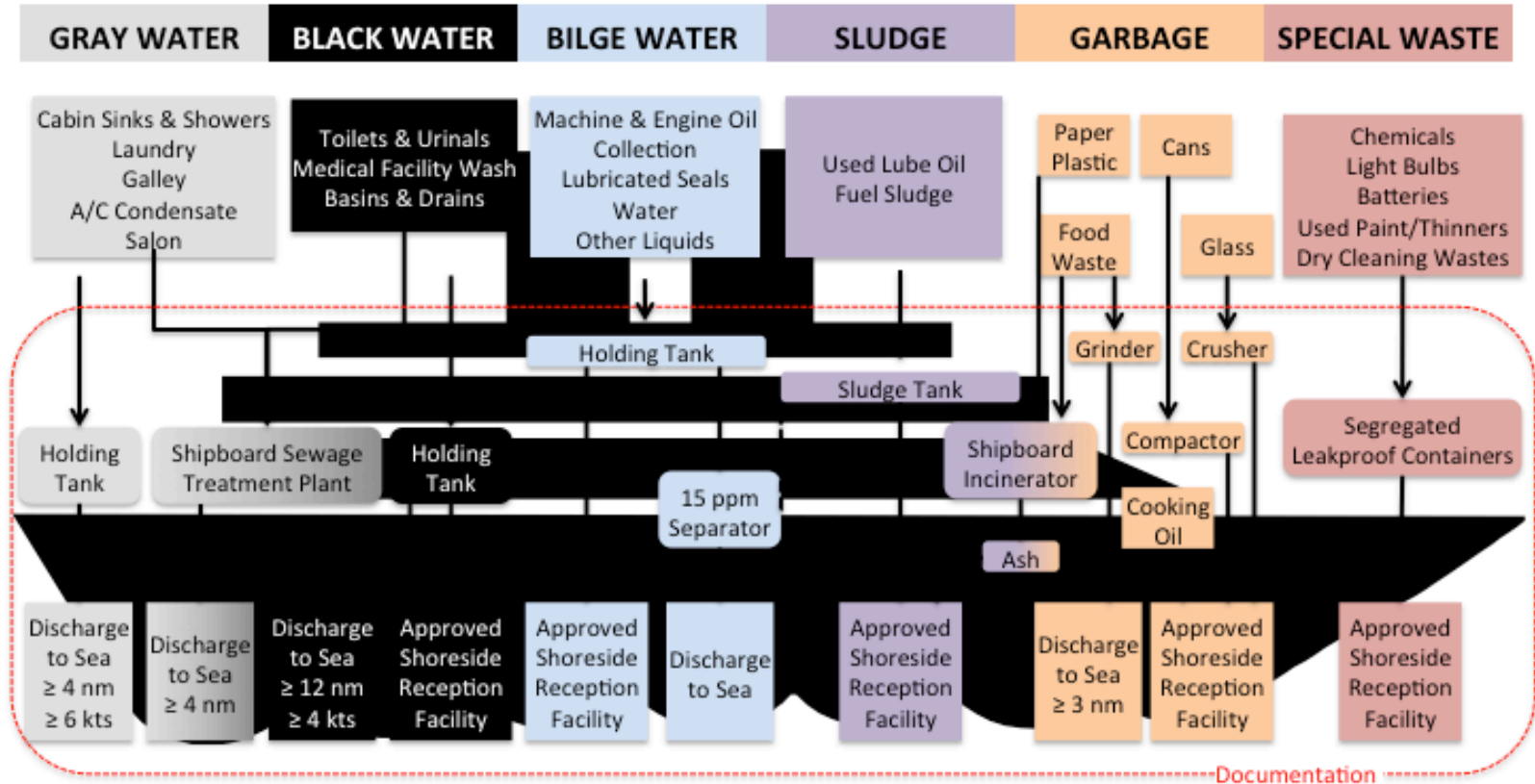
La contaminación del transporte marítimo

Emisiones de CO2 **totales** por tipo de flota y **medias** por embarcación* (2019)

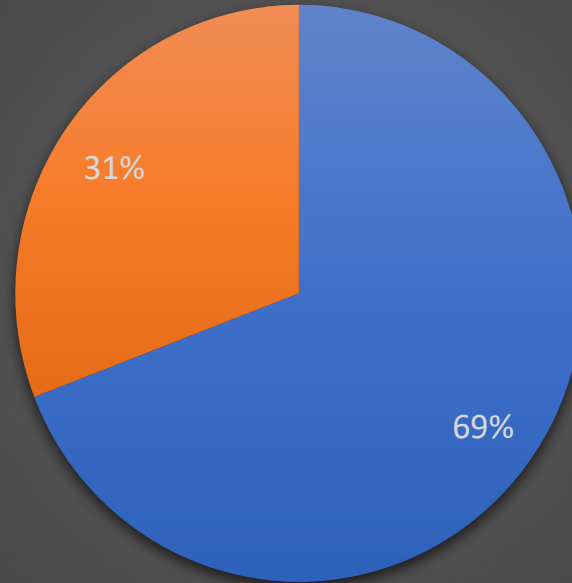


- The ship and naval industry as a whole is responsible for approximately **2.2% of all global emissions** with some 800 million tons per year.
- **Landfills** equals **1.9%** of annual GHG emissions.
- Shipping is responsible for **18-30% of all the world's nitrogen oxide (NOx)** pollution and 9% of the global sulphur oxide (SOx) pollution.
- **70%** of all ship emissions are within **400km of land**.

Residuos generados por embarcaciones



Residuos Producidos

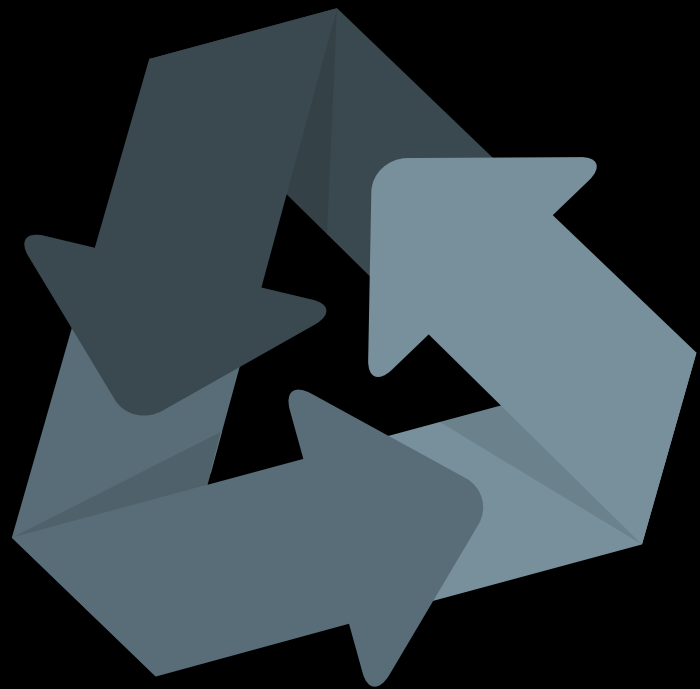


■ Residuos producidos por buques

■ Residuos producidos por LATAM

Residuos producidos por buques	347,000,000.00
Residuos producidos por LATAM	154,800,000.00

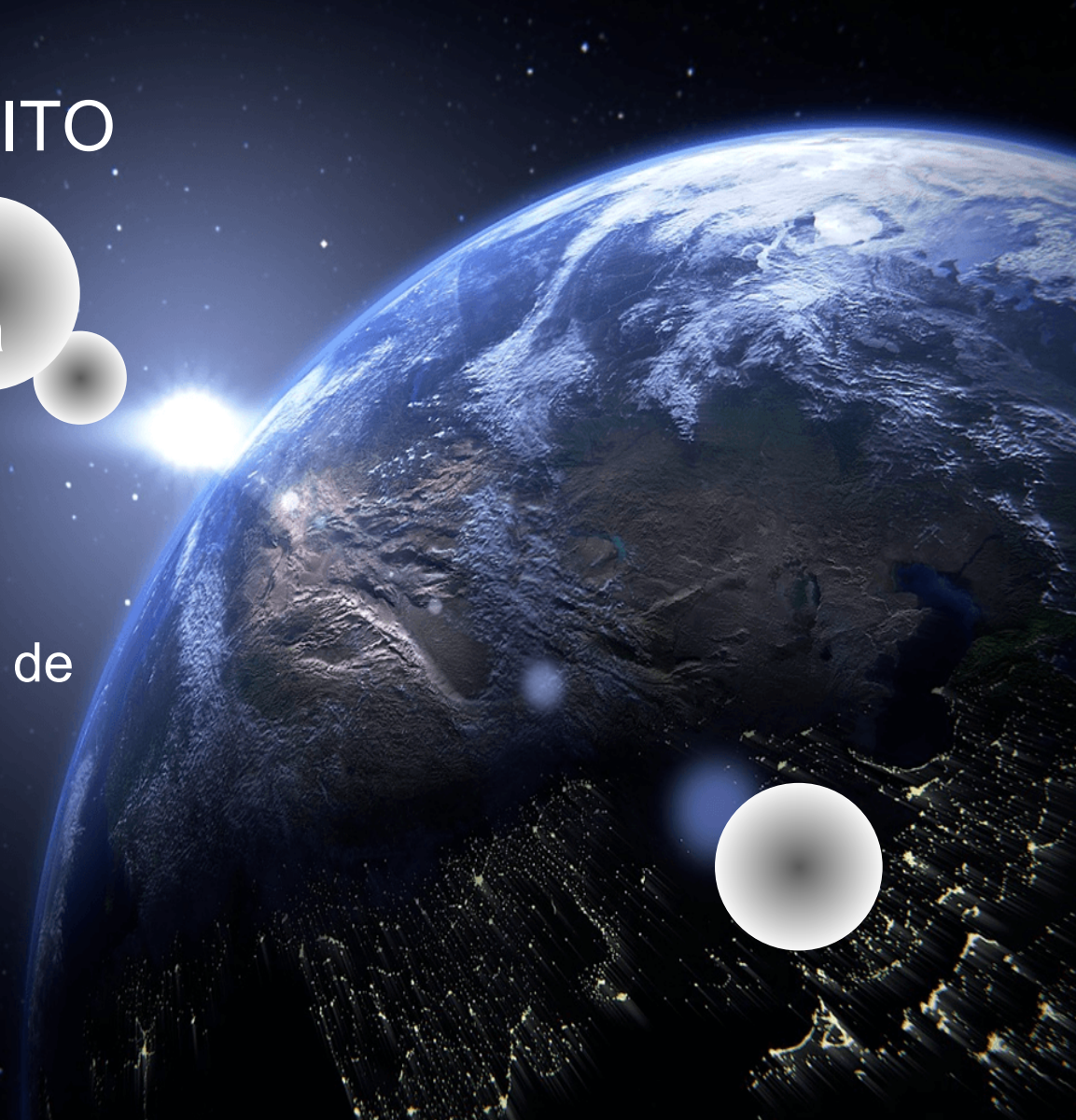
4X



NUESTRO PROPÓSITO

**Contribuir a la
descarbonización de la
industria marítima**

...A través de un modelo de
economía circular en el
manejo de residuos





¿Por qué estamos aquí?

PUERTOS MEXICANOS PARA CRUCEROS



2019

PACIFICO
GOLFO CARIBE

950 Arribos
2001 Arribos

Fuente; Arturo Musi (AMEPACT)

VARIACIONES % RESPECTO AL MISMO PERIODO DEL AÑO ANTERIOR.

LLEGADA DE PASAJEROS

INDICADOR	ENERO-DICIEMBRE		VARIACION 2018-2019
	2018	2019	
PUERTOS DEL PACIFICO	1'894,632	2'279,310	20.3%
PUERTOS DEL GOLFO	5'970,918	6'647,307	11.3%
TOTAL	7'865,550	8'926,617	13.5%

Fuente; Arturo Musi (AMEPACT)

Acerca de Nosotros



MPS es la empresa con más experiencia para el cumplimiento del Convenio de Prevención de Contaminación del Mar por Buques, MARPOL 73/78 así como cumplimiento de sustentabilidad marítima en la region.

Tenemos la mayor presencia de nuestro giro en México abarcando los puertos más importantes del Pacífico, Golfo de México y Caribe. De igual manera, contamos con plantas de tratamiento de residuos propias en ubicaciones estratégicas.

MPS ha invertido más de USD 5 Millones en instalaciones para reducir la huella de carbono y potenciar el reciclaje.

Nuestro equipo ha estado en la industria marítima por más de 40 años como operadores de embarcaciones y servicios a buques con clientes de mayor reputación en la industria..

MPS FOOTPRINT



Main Ports

- Puerto Vallarta, Jalisco
- Ensenada, Baja California
- Acapulco, Guerrero
- Mazatlán, Sinaloa.
- Manzanillo, Colima
- Lázaro Cárdenas, Michoacán
- Altamira, Tamps
- Tampico, Tamps
- Tuxpan, Veracruz
- Veracruz, Veracruz.
- Coatzacoalcos, Veracruz
- Progreso, Yucatán.
- Cozumel, Quintana Roo

Recycling Facilities

- Guadalajara, Jalisco
- Ensenada, Baja California
- Coatepec, Veracruz



Near-term objectives

Working towards a safer, more sustainable and carbon-free maritime industry

❖ Zero landfill



Ship Offload

❖ Circular Model



Reception & Transportation

❖ Best sustainability practices



Treatment

❖ Traceability



Distribution

❖ Compliance oriented



Final destination
(sewages, recycling and treatment centers)



Companies with circular economy programs

How will MPS achieve its objectives?



Receive

- Solid waste classification needs to be standardized before ship offload (MPS standards).
- Incentive schemes with clients to promote better waste classification and management before offload.
- Pricing in terms of waste quality and market value



Treat

- Periodical and verifiable wastewater parameters and data to increase MPS' GHG inventory certainty.
- Measure solid waste in standardized form (kilograms)
→ Aligned with the first principle of Circular Economy



Distribute

- Sustainability and quality assurance with suppliers and product buyers (certification to assure circularity)
→ Aligned with the second principle of Circular Economy

Circularity Principles: Ellen MacArthur Foundation

MPS is currently working to diversify waste streams handled in its operations and implementing processes to create a systemic circular model within its value chain

1. Eliminate waste and pollution through implementing the **best treatment practices**.
2. **Maintain products and materials**, redirecting them to best in class recycling and upcycling solutions.
3. **Regenerate nature**.

Emitted greenhouse gases

CO₂

CH₄

N₂O

HFCs



Presence in
12 ports



500+ services
provided in 2021



1,505.42 m³
Wastewater
treated in 2021

MPS' total carbon footprint

208 ton CO₂e

Amount of avoided emissions from
release of treated wastewater in
municipal wastewaters

329 kgCO₂e

Avoided emissions per total amount
of treated wastewater

219 gCO₂e / m³



Main emission sources from MPS' operations



Transportation



Fuel
consumption



Electricity
consumption

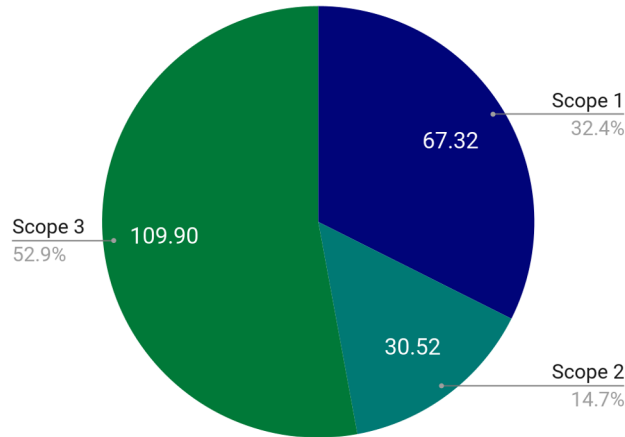


Municipal solid
waste
management



Wastewater
treatment

Total emissions per scope [tCO₂e]



Scope 1 emissions [tCO₂e]

Diesel consumption	17.37
Fuel oil consumption	37.96
Petrol consumption	5.68
LP Gas consumption	1.12
Fugitive emissions from wastewater treatment	3.44
Transport and distribution	1.75
Total scope 1 emissions	67.32

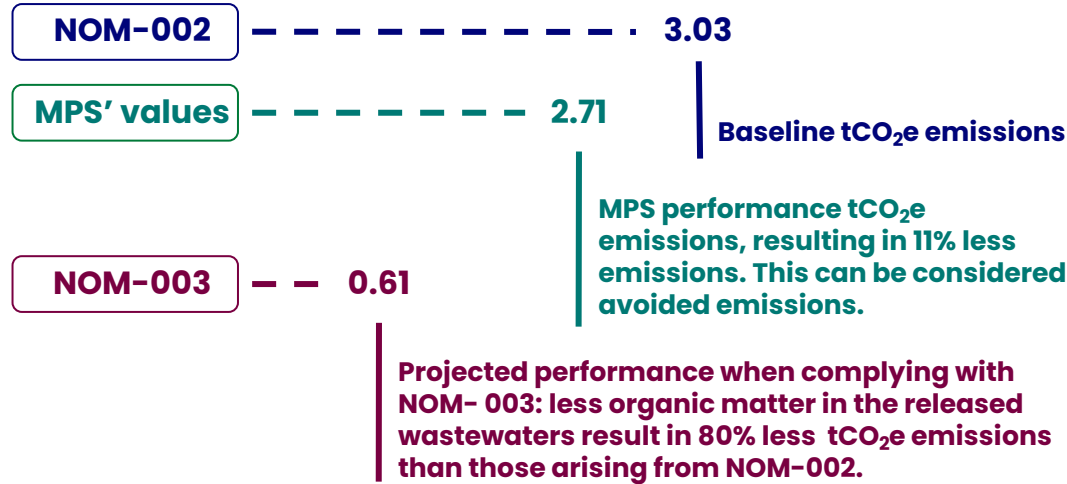
Scope 2 emissions [tCO₂e]

Electric power consumption	30.52
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Scope 3 emissions [tCO₂e]

Upstream transport and distribution	109.90
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Comparison of MPS' performance versus baseline emissions resulting from the release of treated wastewater to municipal sewage systems, using parameters from the Mexican official norm NOM-002 as baseline, MPS' GHG inventory performance and a scenario complying with NOM-003 parameters:



MPS' goal to line up with the Mexican official norm NOM-003 results in a higher, more robust treatment of wastewater, **improving MPS' position as an instrument in the industry's decarbonization:**



How does this relate to the need we have to reduce Scope 3 emissions related to treating the sludge we generate?

Let's say you generate 500 m³ of sludge per year, which ends up being treated by Maritime Procurement Services.

The treated wastewater is set to be released in municipal sewage systems, that generate emissions themselves. By having MPS release the treated wastewater, a total amount of 110 kgCO₂e is prevented from being emitted into the atmosphere.

This results in a decrease on your Scope 3 emissions, reducing your overall climate impact and lowering your mitigation requirements.



MARITIME PROCUREMENT SERVICES

¡MUCHAS
GRACIAS!