

# Californians deserve better: It's time to electrify boats

Ships are one  
of the worst  
polluters in  
California.



Harbor craft, such as tugboats, ferries, barges and dredges, contribute to a large portion of health and cancer risks to communities near ports.

In Los Angeles, Long Beach, and Oakland, harbor craft are one of the top three drivers of cancer risk to frontline communities.

## Missing the boat!

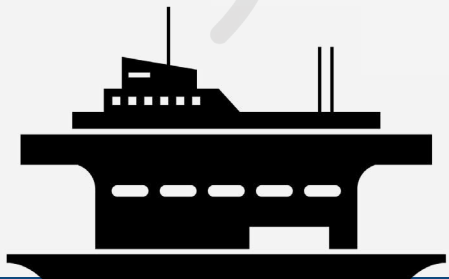
California is considering updated harbor craft rule requiring only 10% of the state's harbor craft to meet 100% zero-emissions this decade — *leaving 90% of California harbor craft to emit fossil fuel diesel!*

## The proposed rule:

- Will lead to no substantial CO2 reduction
- Continues to generate a significant amount of NOx annually. NOx is a ground-level ozone & lung irritant and weakens the body's defenses against respiratory infections like pneumonia and the flu

## The rule fails to:

- Combat global warming
- Protect port communities
- Protect public health
- Support new zero-emission technology



Benefits of setting an  
absolute zero-emission  
maritime target:

CLEANER AIR • IMPROVED PUBLIC HEALTH  
REDUCED NOISE POLLUTION  
QUALITY GREEN JOBS

**It's possible!** Like electric cars and trucks, California is a hub of **pilot demonstrations** with the Golden Gate Zero Emission Marine projects, Crowley Maritime e-tug project, and many more!



PACIFIC  
ENVIRONMENT

# What you can do:

Email California Air Resources Board (CARB) board members to set more ambitious emissions standards.

Send a pre-written message in just one click:

<https://actionnetwork.org/letters/californians-its-time-to-electrify-boats/>

Or, email: [cotb@arb.ca.gov](mailto:cotb@arb.ca.gov)

**Deadline: November 15, 2021**

Californians, the nation, and the world are facing a devastating public health, racial justice and climate crises.

*Join environmental justice, public health and environmental advocates to support zero emission for almost all harbor craft segments by 2035.*

## Fast Facts



**Boats spew diesel particulate matter, a cancer-causing pollutant.** Particulate matter gets into your lungs, weakens your immune system, and causes ground-level ozone, which can reach unhealthy levels on hot days.



Particulate matter is so small that it gets deep into your lungs, and your body can't screen out these poisons. It leads to increased rates of asthma, hospitalizations, cancer, and evendeadth.



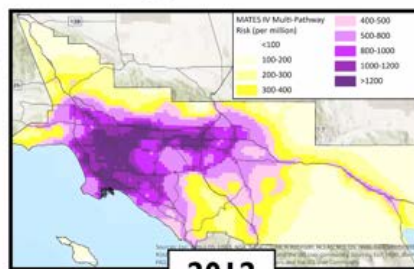
**The technology exists for zero-emissions boats and ships:** Just like cars and trucks, boats and ships must transition off fossil fuel.



**No industry should get a free pass at the price of our frontline communities and the environment.**

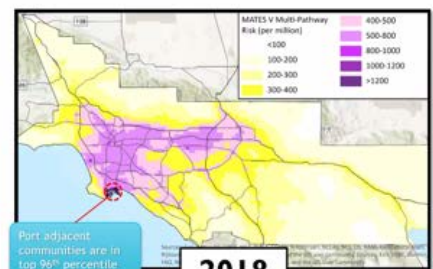
## Air Toxics Cancer Risk - Modeling Data

**MATES IV** Air Toxics Cancer Risk (Basin Average): **997-in-a-million**



**2012**

**MATES V** Air Toxics Cancer Risk (Basin Average): **454-in-a-million**



**2018**

Port adjacent communities are in top 95<sup>th</sup> percentile  
➤ Up to 57% higher than basin average

Source: MATES V Multiple Air Toxics Exposure Study  
<http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v>