CLIMATE CHANGE AND INTERNATIONAL TRADE

Are shippers prepared for what lies ahead



"We are the first generation experiencing climate change, and the last that can do something about it."

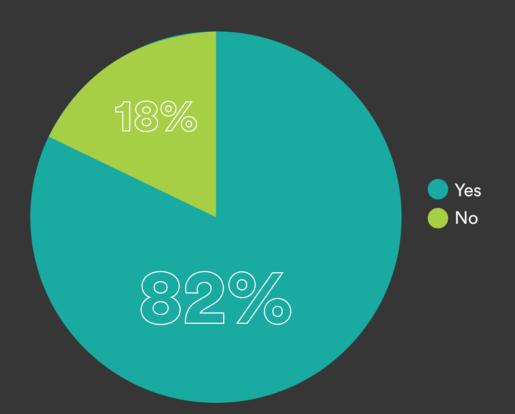
- Borak Obama, September 2014



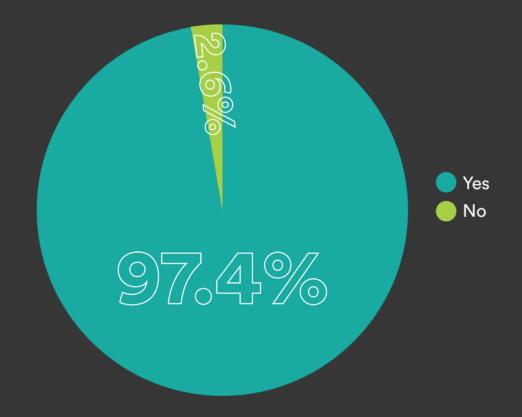


SCIENCE IS IN

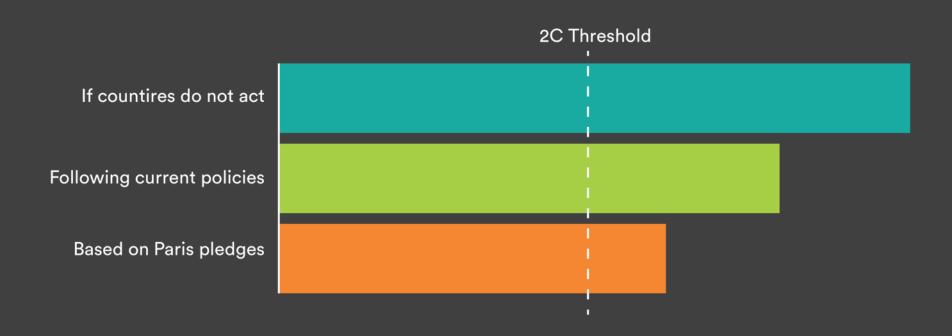
3146 EARTH SCIENTISTS



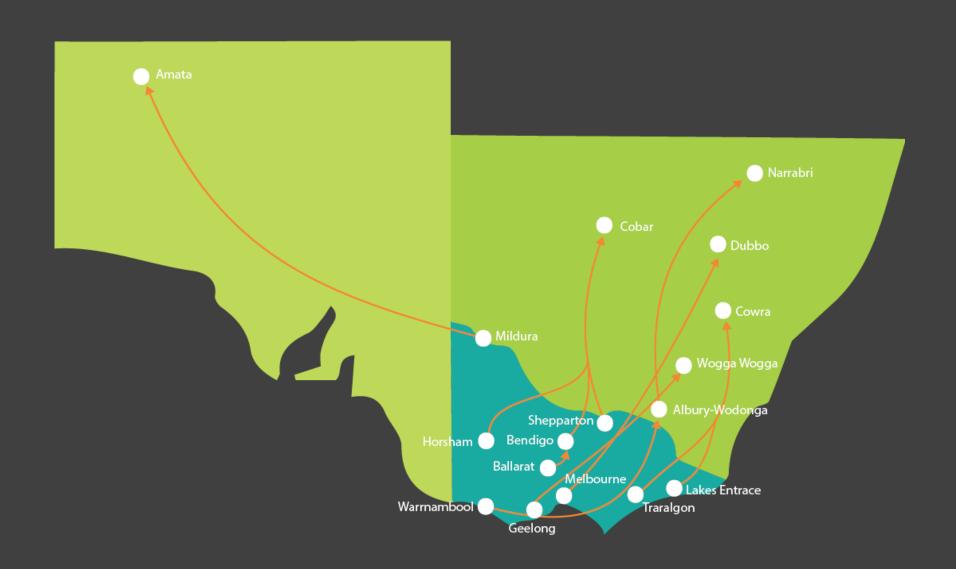
77 CLIMATOLOGISTS ACTIVELY ENGAGED IN RESEARCH



AVERAGE WARMING (C) PROJECTED BY 2100



WHERE ARE YOU MOVING TO IN A 4°C WORLD





Days over 35 degrees to double to 24 per year



PARIS AGREEMENT



196
Nations



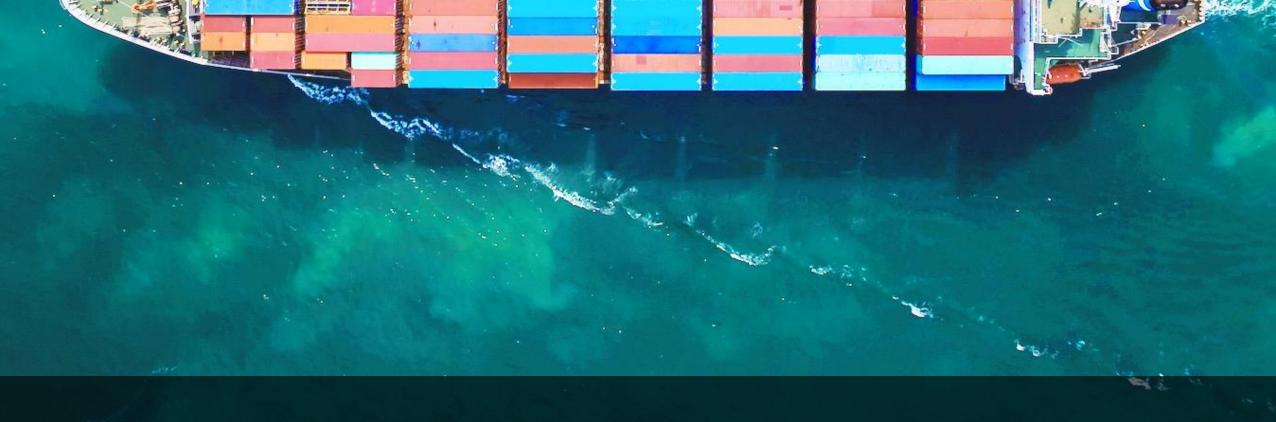
A

96Using or implementing

- Goal to keep global warming at 1.5-2C.
- Of the 196 Nations that are signatories to the agreement, 174 have ratified, 96 nations are either currently using or have announced they will be implementing carbon markets into their national programs.

Shipping and Aviation were exempt as emissions defy national boundaries.





CLIMATE CHANGE & SHIPPING

In the most recent IMO study shipping accounted for 796 million tonnes of CO2 – about the same as Germany.

This represents 2.2% of global emissions.

NATIONS VS SHIPPING



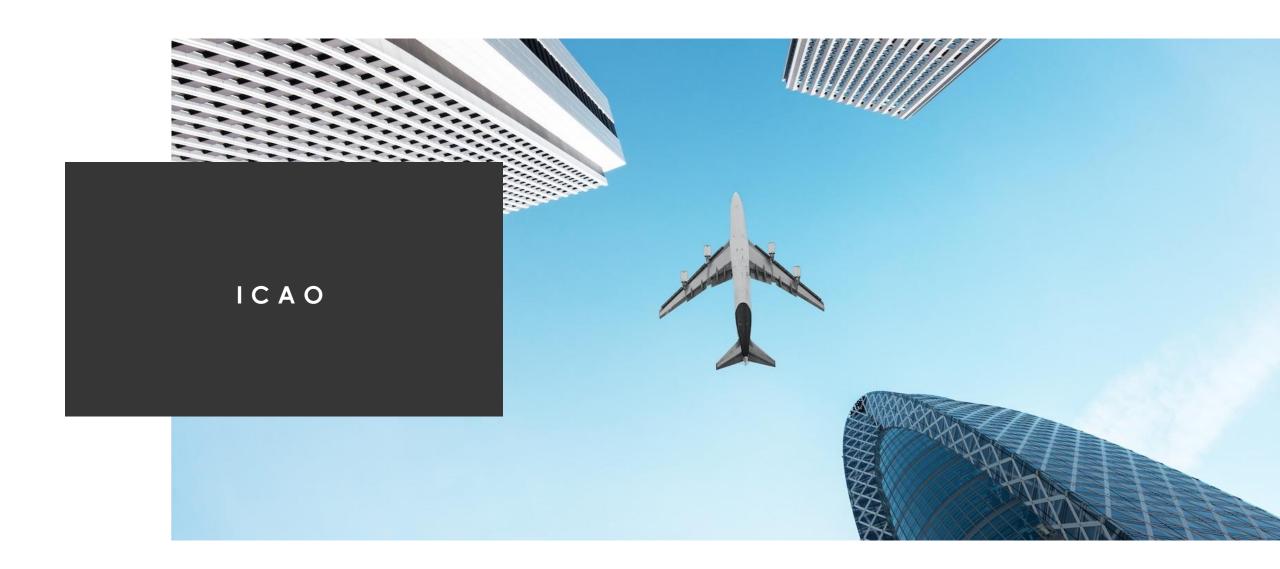






THE IMO& MEPC

- Maritime Environment Protection Committee (MEPC) is one of the 5 main committees within the IMO.
- Last month the MEPC (at its 72nd session) adopted an initial strategy to reduce shipping emissions by **at least** 50% by 2050 (based on 2008 levels).





In 2010 ICAO adopted 2 sectoral <u>aspirational goals</u>

- 1. 2% annual fuel efficiency improvement.
- 2. Carbon neutral growth from 2020 onwards.

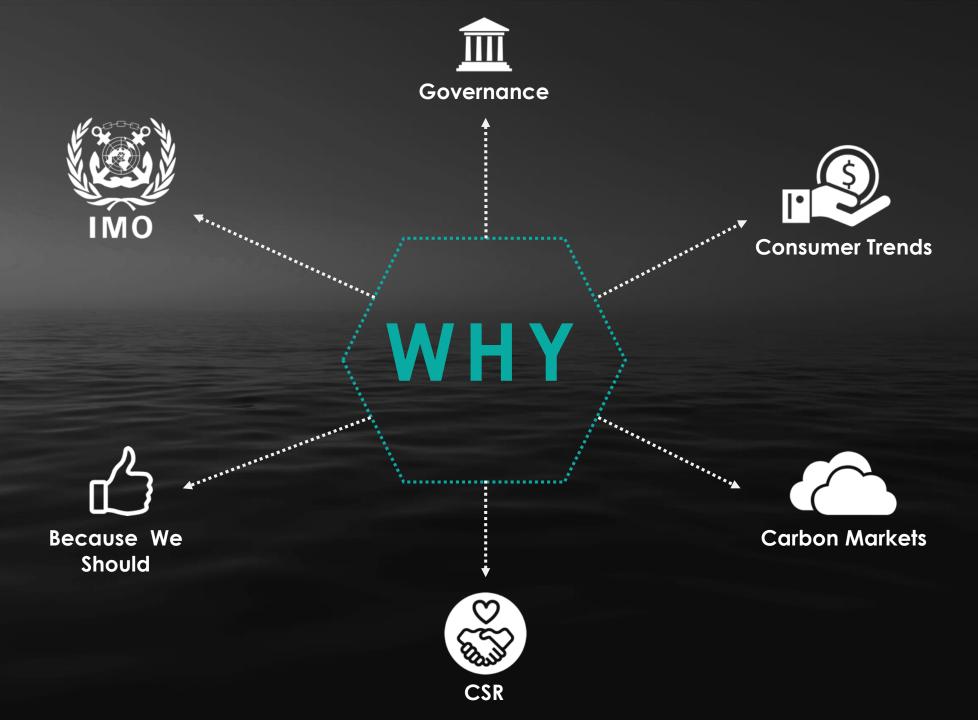
Includes a basket of measures

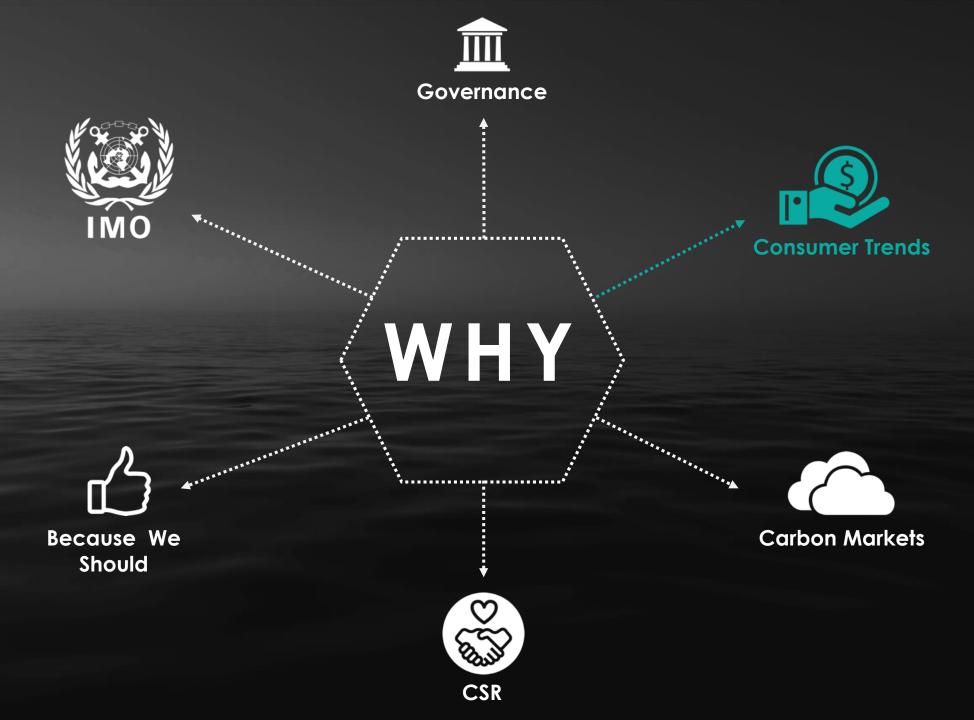
- Tech advances.
- Operational Improvements.
- Alternative fuels.
- Market Based Measures CORSIA (Carbon Offset and Reduction Scheme for International Aviation).





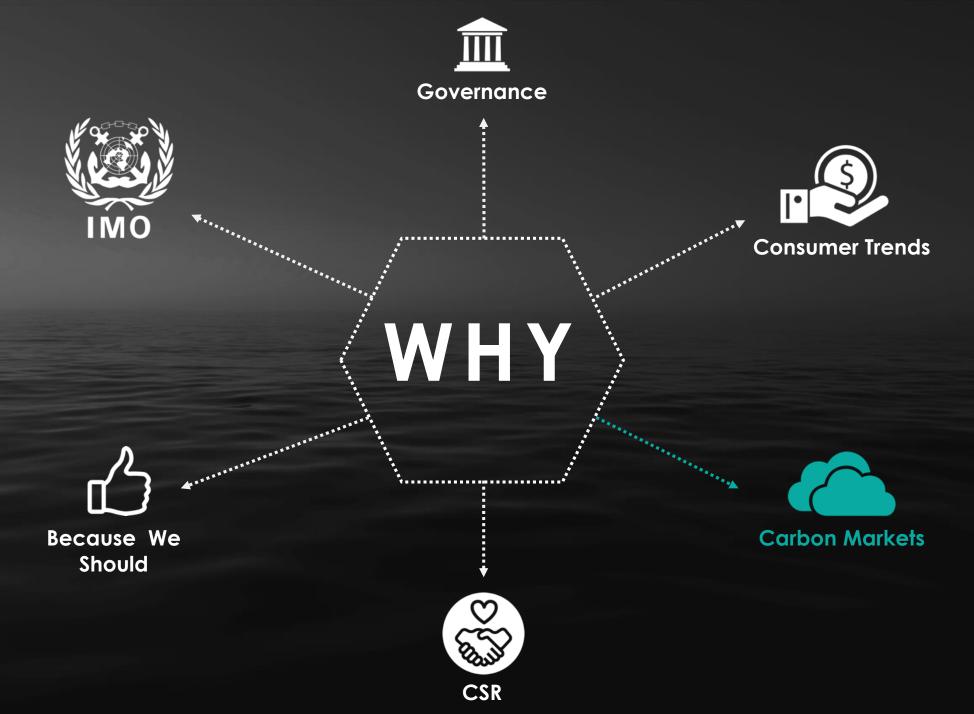
WHAT'S THE MOTIVATOR FOR BUSINESSES ACT?











PARIS AGREEMENT

From the 196 countries that are signatory to the Paris Agreement, 96 nations are either currently using or have announced they will be implementing carbon markets into their national program.

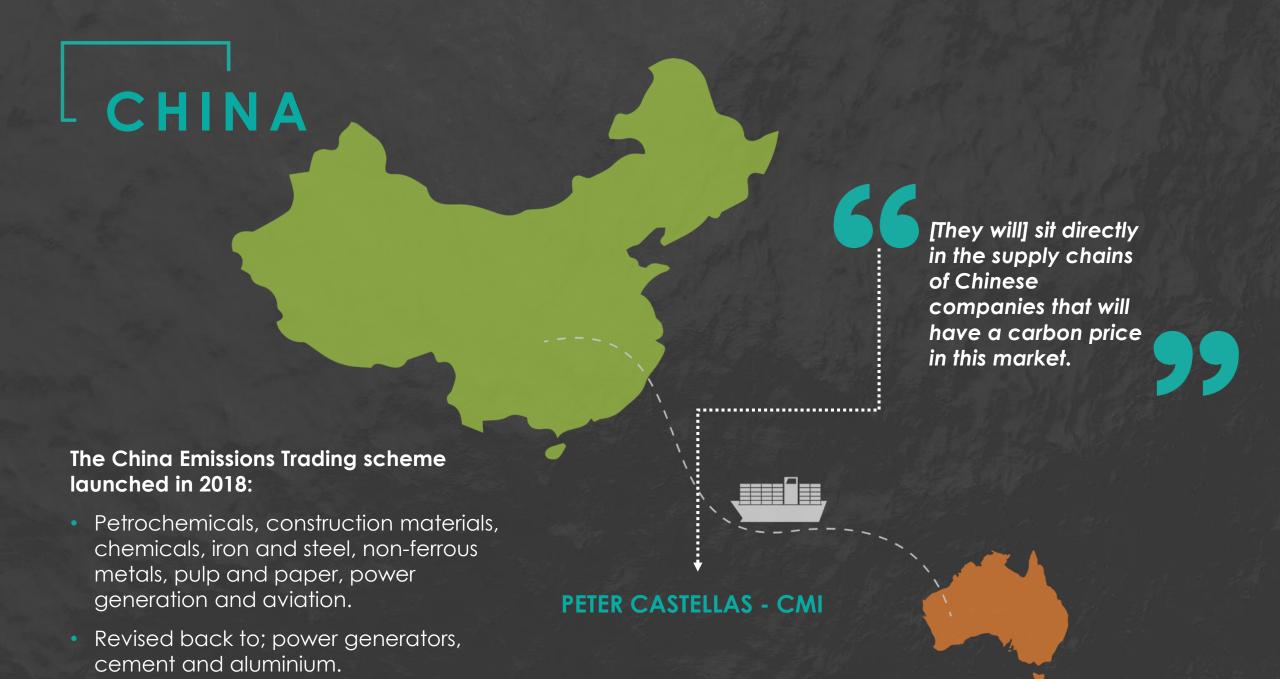


196Countries signed (out of 197)

174
Ratified



96Using or implementing



CHINA

The China Emissions Trading scheme launched in 2018;

- Petrochemicals, construction materials, chemicals, iron and steel, non-ferrous metals, pulp and paper, power generation and aviation.
- Revised back to; power generators, cement and aluminium.

"Share of global emissions subject to a trading scheme would double to 20 per cent once the Chinese scheme was operational and this would affect Australia's energy-intensive exports, which will effectively be subject to a carbon price even in the absence of a national ETS in Australia.

PETER CASTELLAS - CMI











Because We Should



Carbon Markets





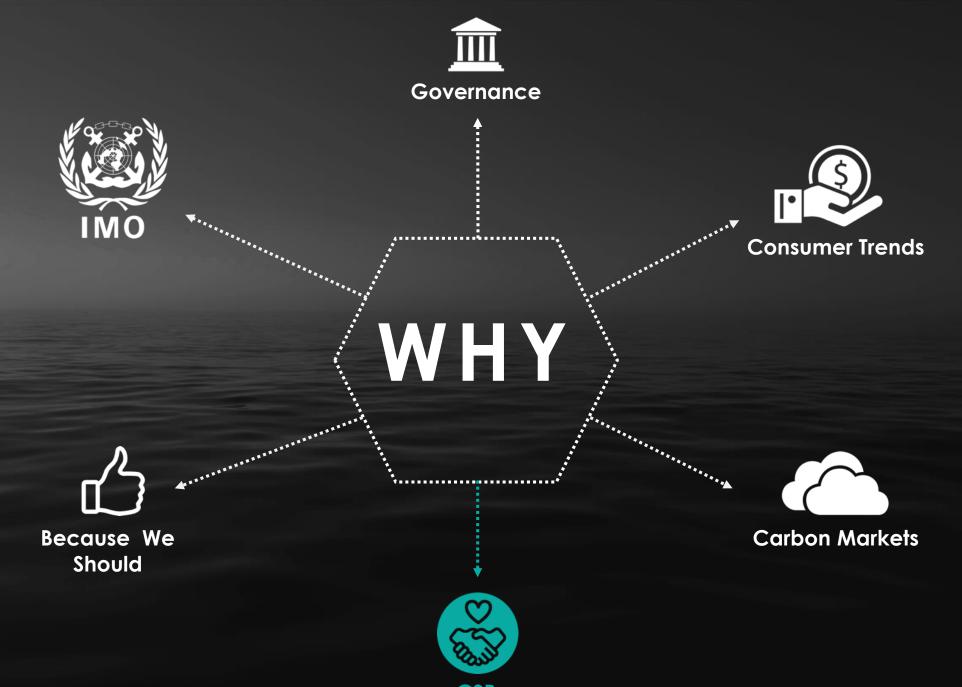
CALIFORNIA BUY CLEAN ACT

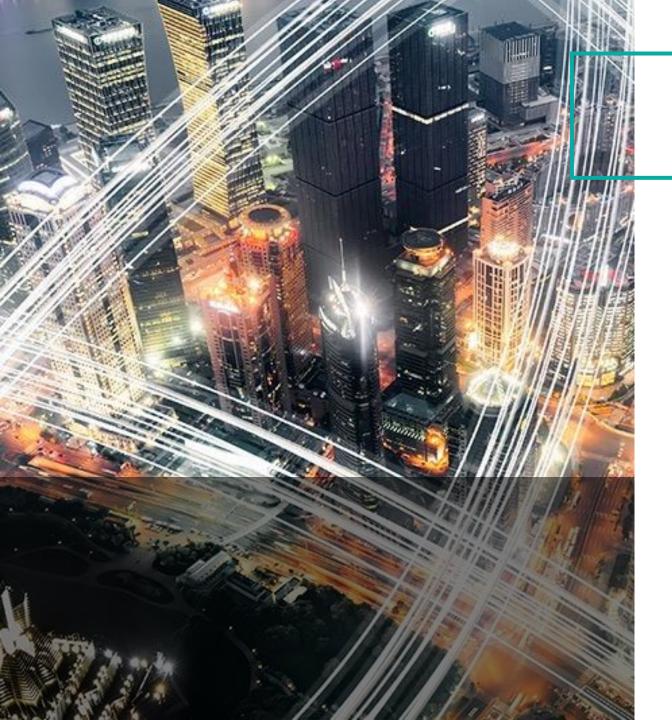
By incorporating emissions information from throughout the supply chain and product life cycle into procurement decisions, and using that information to help direct expenditure in key sectors; also setting a maximum carbon emission level for eligible building materials.

- Carbon steel rebar.
- Flat glass.
- Mineral wool board insulation.
- Structural steel.

What does this mean?

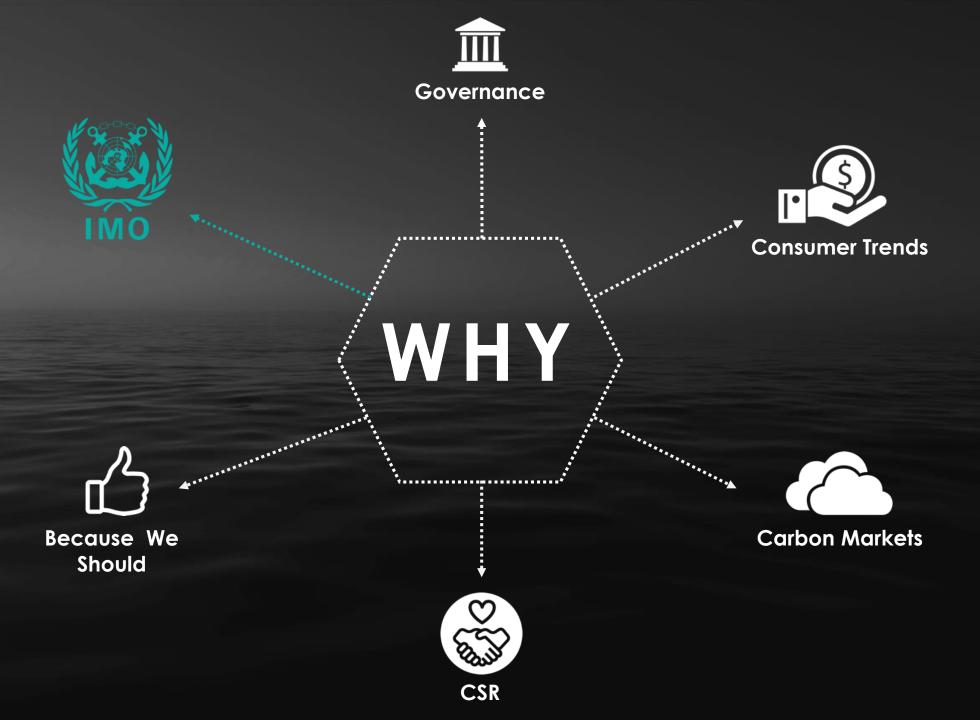
- Likely do more business with steel companies based in California.
- Less with firms based in China and abroad.
- The state will also take into account emissions from transportation.

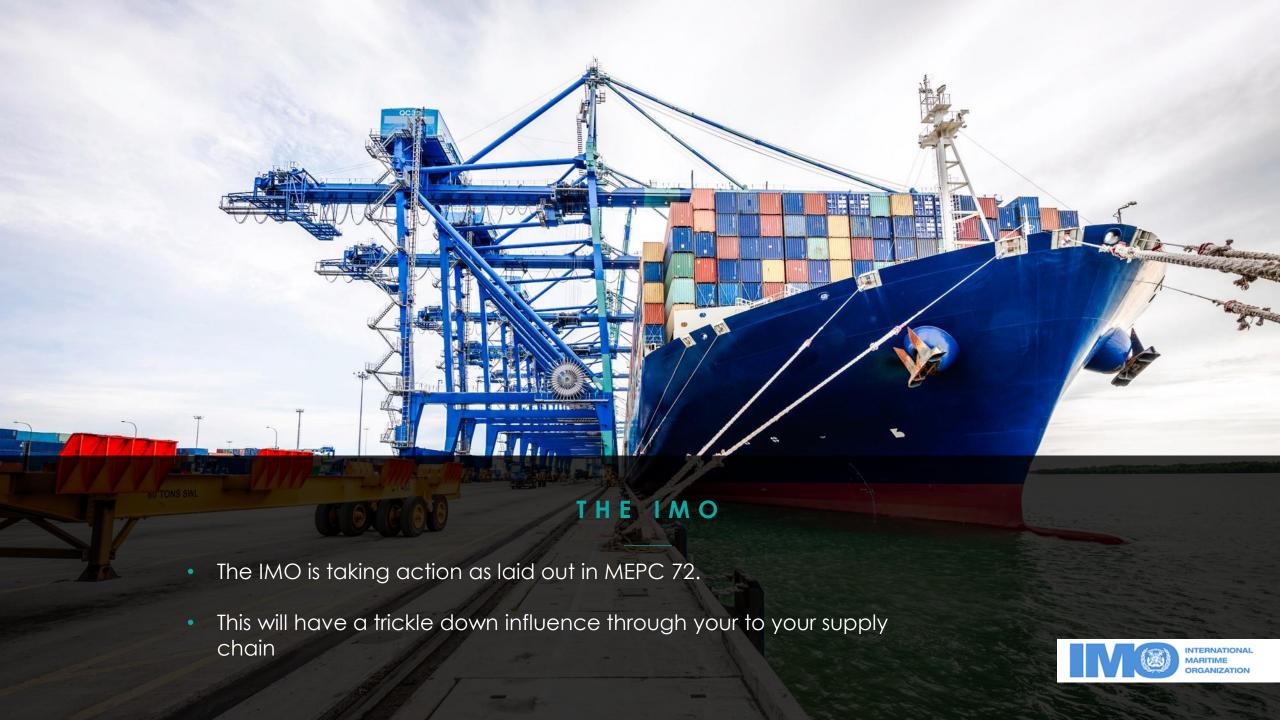


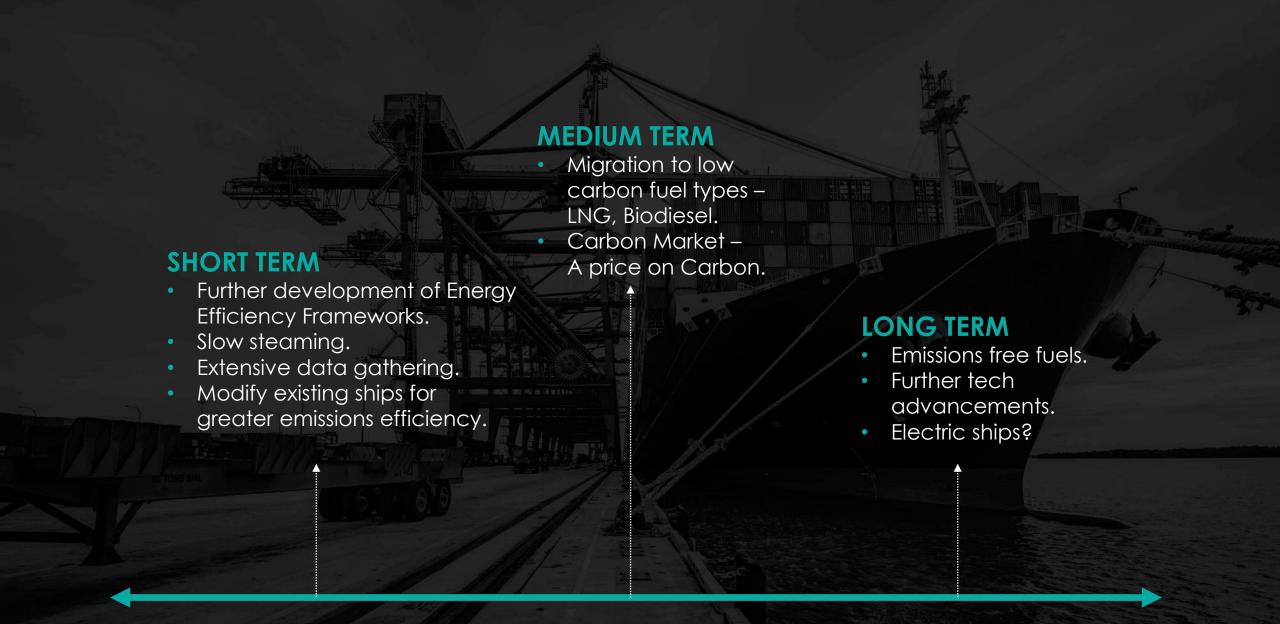


BUSINESS COMMUNITY IS TAKING THE LEAD

In PWC's 17th Annual Global CEO Survey – 75% of CEO's identified that satisfying societal needs (beyond those of investors, customers and employees) and protecting the interests of future generations is important.















Consumer Trends

Carbon Markets



Because We Should



L BECAUSE WE JUST SHOULD

In a recent study conducted by QANTAS – 1500 participants were asked what their number one motivating factor to act on climate change:

- Environmental leadership.
- Intergenerational equity.
- Social justice.
- Status seeking.

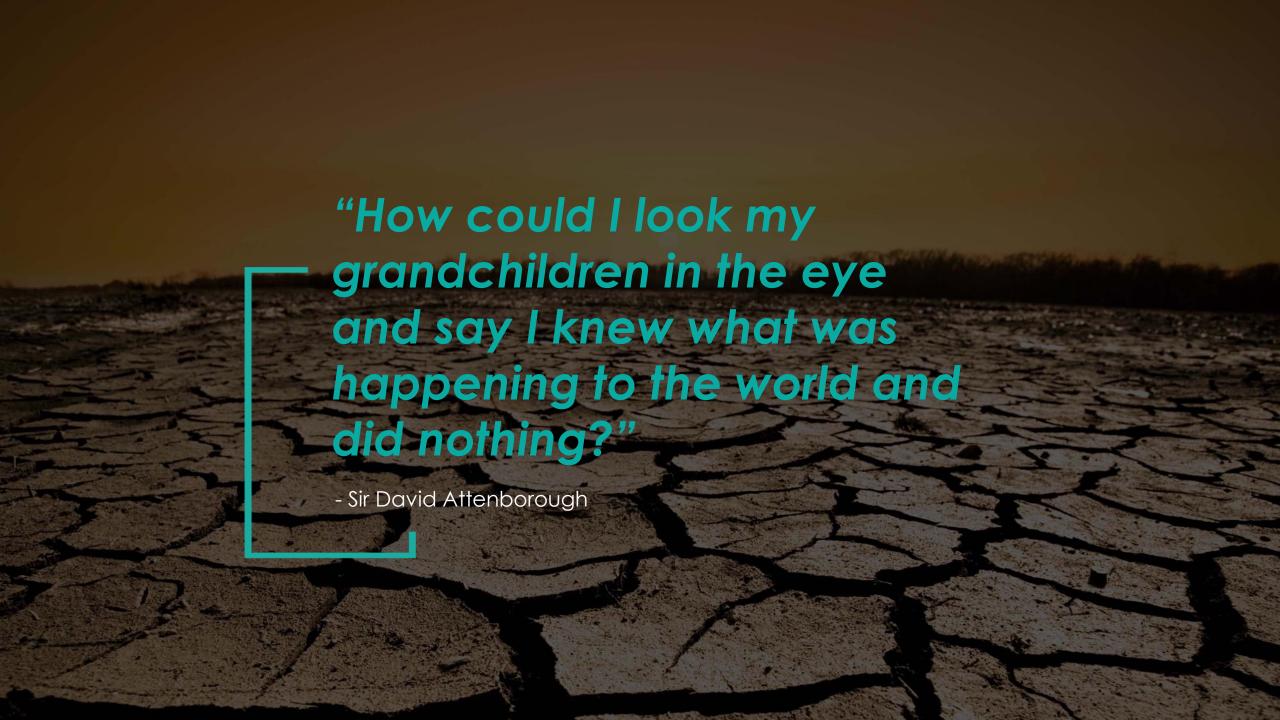


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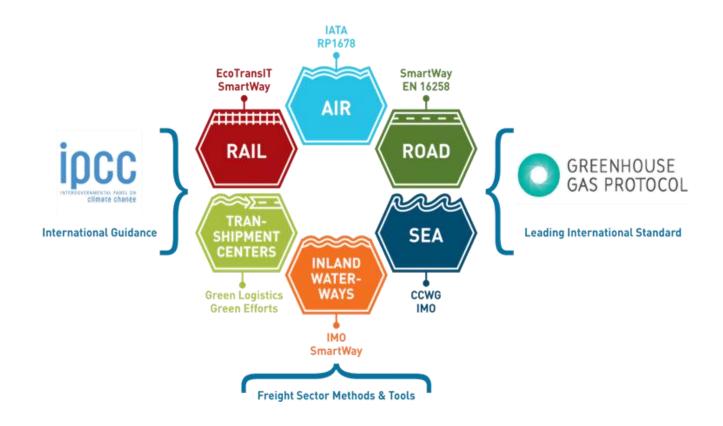




What is the GLEC framework?

To address the gap of a universally adopted method for calculating logistics emissions, the GLEC developed the first global framework for logistics emissions accounting together with input from academia, NGO's and other stakeholders.

It incorporates existing methodologies and addresses the major gaps in logistics chain.





CARBON NEUTRAL SHIPPING

CARBON NEUTRAL SHIPPING

Incitec Pivot Limited, CBL Markets and RightShip

- Mapped 2 years emissions for bulk vessel activities.
- Offset 146,000 tonnes of emissions.
- Carbon Neutral Shipping.

