



**Jardine Aviation Services**  
怡中航空服務

# SUSTAINABILITY NEWSLETTER

MAY 2023



## SUSTAINABLE DEVELOPMENT GOAL OF THE MONTH



### GOAL 14: **LIFE BELOW WATER**

In the last issue, we talked about the impacts of climate change and the importance of climate action. Climate change is so impactful, everything and everyone on this planet is affected, our ocean is no exception.



# THE IMPORTANCE OF OUR OCEAN

Our Ocean is important to us in many ways, ever since humans existed, the ocean has been nurturing us, and is our important source of food and recreation. Around 80% of tourism takes place in coastal areas. Ocean-related tourism industry grows an estimated US \$134 billion per year and supports over a third of the labour force in some countries. Marine fisheries provide 57 million jobs globally and provide the primary source of protein to over 50% of the population in least developed countries.



# OUR HOPE AND SAVIOUR

Every year, the ocean absorbs around 23% of our Carbon Dioxide emissions and helps mitigate the impacts of climate change. According to UNESCO, the ocean can be our ally against COVID-19. Bacteria found in the depths of the ocean are used to carry out rapid testing to detect the presence of COVID-19. And the diversity of species found in the ocean offers a wide range of pharmaceuticals.





# PROBLEMS: CLIMATE CHANGE

When global temperatures rise, the ocean water temperatures also increase, causing extensive marine heatwaves that kills marine organisms and threaten ecosystems.

## CORAL BLEACHING

More than 25% of marine species rely on coral reefs and their respective ecosystem but the reefs are highly threatened by our human activities.

Climate change is one of the major causes of coral bleaching, where corals in an area turn white and die. Corals are colorful because of the algae that lives on them, they help each other survive, the algae provide food for the corals, and the corals provides shelter for the algae. When the water temperature is higher than usual by 1 degree Celsius for a few weeks, the coral polyps eject their dinoflagellates, and without algae they lose their major source of food and are more susceptible to diseases.

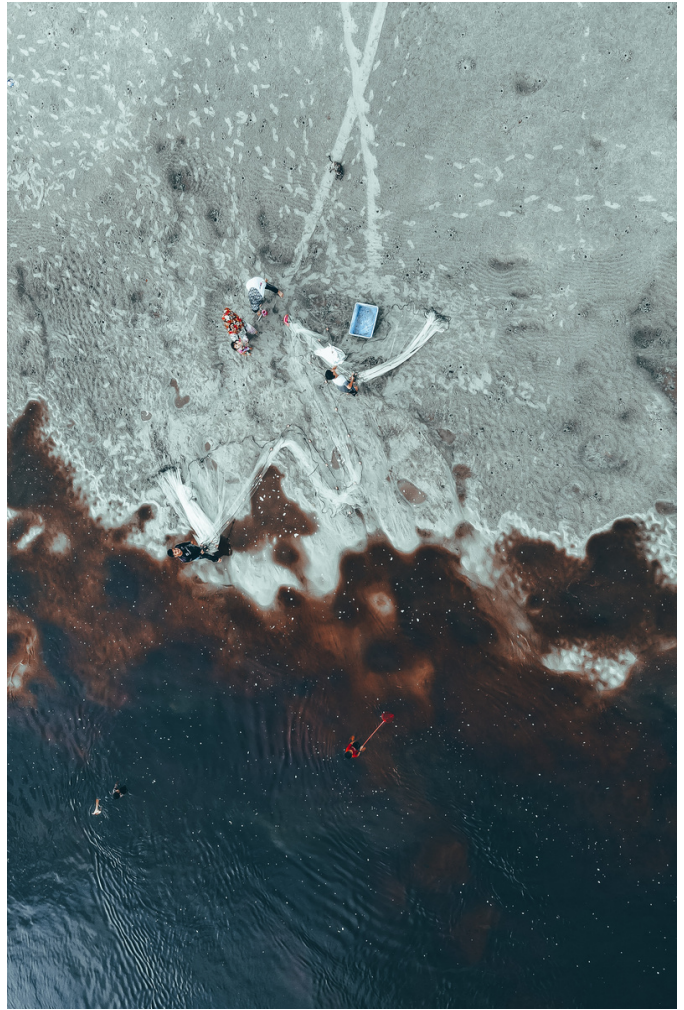
Ocean acidification, that happens because of increased CO<sub>2</sub> levels in the atmosphere, makes things worse. It makes it harder for organisms to form shells and hard parts.





# POLLUTION

Main pollutants that go into the ocean caused by human impact are garbage, sewage, chemicals (DDT, PCBs, NO<sub>2</sub>, SO<sub>2</sub>, Mercury etc.), radioactive waste, heavy metals and oil. Among those, plastic pollution gains the most attention among the society, and yet litter and trash only make up 5% of the pollutants. We are still very far from fully protecting the ocean.



# PLASTIC

When plastic enters the ocean, they get degenerated by UV light, bacteria, and mechanical abrasion such as sand, wind and waves. They slowly go from macroplastics to microplastics that are very small and look like plankton that many marine animals usually eat. Every year, it is estimated that 5 to 12 million metric tonnes of plastic enters the ocean. Clean-up costs, financial losses in fisheries and other related industries lose costs around \$13 billion per year. 89% of plastic rubbish discovered on the ocean floor are single-use items such as plastic bags.



# DEAD ZONES

Other than plastics, nutrients from fertilizers can also be a big problem. They speed up the growth of marine autotrophs causing eutrophication, eutrophication stimulates the growth of some species to the detriment of the others, destroying the natural biological balance of an ocean area. Extra nutrients can come from waste water treatment plants, factory effluent, accelerated soil erosion, or fertilizers spread on land. They ultimately result in deadzones where marine animals suffocate, one of the famous dead zones is the Gulf of Mexico.



RED ALGAL BLOOM AT LEIGH, NEAR CAPE RODNEY. PHOTO BY MIRIAM GODFREY



## HOW CAN WE HELP?

We can help by making ocean-friendly choices when buying products or eating sea food. Selecting certified products could help guarantee that you're making the right choice. We can also choose sea food based on sustainable seafood guides, for example this guide provided by WWF <https://seafood-guide.wwf.org.hk/en/seafood-guide>. Spread the message about how important marine life is and why we need to protect it. Eliminate plastic usage as much as possible and organize/participate in beach clean-ups.

## QUESTION TIME ! CAN YOU GUESS

The ocean absorbs more than \_\_\_\_ percent of the excess heat in the climate system?

- a) 20
- b) 50
- c) 70
- d) 90

answer: d



# SUSTAINABILITY AVIATION NEWSFLASH



## Beach cleaning event (28th April)

To help protect our oceans, we've organized a beach cleaning event and helped clean up the garbage found on Pui O beach. There were lots of plastic fragments, cigarette butts, and water buffaloes!



## International Women's day (8th March)

We hosted a celebration for International Women's Day by encouraging colleagues to dress up in pastel colors to show appreciation towards our female colleagues as well as support towards Diversity and Inclusion.

## Earth hour 2023 (25th March)

We turned off all our non-essential lights in our offices during Earth Hour to contribute towards the environment and the sustainability of our planet. We encourage our colleagues to make turning off non-essential lights a norm and habit when no one is working in the area.





# SUSTAINABILITY AVIATION NEWSFLASH

**Hong Kong Air Cargo Terminals Limited (Hactl) has received both the Transport and Logistics - Gold Award in the Hong Kong Awards for Environmental Excellence (HKAEE), and Hong Kong Green Organisation Certification (HKGOC)**

Hactl Executive Director and Chief Financial Officer Amy Lam said: “The environment is a primary focus in every aspect of Hactl’s business, and sustainable behaviour is now embedded in every decision we take and everything we do. Our staff have truly taken this guiding principle to their hearts, and I am therefore delighted to share the award and certification with them, as recognition of their strong commitment.”

*Source: Double win for Hactl's sustainable practice (groundhandling.com)*



**World’s largest de-icing robot at Avinor Oslo Airport helps airlines benefit from lower costs and carbon emissions.**

The robot from MSG Aviation is ready to be built for de-icing, washing engine washing and technical inspection of aircrafts. The robot removes snow and ice from single-aisle and twin-aisle aircraft, cleans the fuselage and engines, as well as conducts technical inspections of the planes, made possible through MSG Aviation’s proprietary AI software. It will mean airlines will benefit from lower costs and carbon emissions.

“There is no reason why airlines should continue with manual, time-consuming and expensive processes, when we can do it faster, better, more environmentally friendly, and more cost-effective by using new technology. We can contribute to the airlines improving their efficiency and on-time performance, while saving money on fuel and reducing emissions,” said Trøen, CEO and major shareholder of MSG Aviation.



*Source: World's largest de-icing robot to land at Avinor Oslo Airport (groundhandling.com)*