Ocean Acidification, It's Happening Now!





What is Ocean Acidification?

Our ocean absorbs approximately 25% of the carbon dioxide (CO_2) released in the atmosphere which combines with seawater to produce carbonic acid. CO_2 is an acidic gas, so the addition of 26 million tonnes of carbon dioxide to the ocean every day is acidifying the seawater; we call this process "ocean acidification."

Ocean acidification is happening now.

Why is this an issue?

As our oceans become more acidic, marine creatures, including corals, shellfish, and calcareous plankton will find it difficult to build their skeletons. Ocean acidification will reduce the growth rates of hard corals, leading to a projected net loss of global coral reefs by 2050. Loss of coral reefs will mean loss of critical habitat for important seafood species and could result in increased rates of coastal erosion.

Did you know?

- By 2050, coral reefs may not only stop growing, but start to get smaller as they dissolve faster than they are built.
- Coral reefs dissipate 97% of the wave energy that would otherwise impact shorelines.
- Increasing ocean acidification will damage internal organs of young yellowfin tuna, leading to depleted tuna stocks.

What are we doing?

SPREP is coordinating a Pacific Partnership on Ocean Acidification with the Pacific Community and the University of the South Pacific, supported by the New Zealand Ministry of Foreign Affairs and Trade and the Principality of Monaco.

At pilot sites in Fiji, Kiribati, and Tokelau, work is underway to increase resilience to ocean acidification through practical adaptation activities such as buffering acidification though seagrass planting, coral restoration, and locally managed conservation initiatives, as well as building local capacity to monitor and report ocean acidification data.

