

U N	Goal	14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
	Target	14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
	Indicator	14.3.1 Average marine acidity (pH) measured at agreed suite of representative sampling stations

I. Global indicator

<Type 4>

Indicator	Average marine acidity (pH) measured at agreed suite of representative sampling stations
Definition	<p>The average marine acidity is expressed as pH, the concentration of hydrogen ions on a logarithmic scale. At least two of the four parameters, i.e. pH, pCO₂, DIC (CT), and TA (AT) are measured and converted to pH values. An agreed suite of representative sampling stations are sites that have a measurement frequency that is adequate for describing variability and trends in carbonate chemistry in order to deliver critical information on the exposure of and impacts on marine systems to ocean acidification, and which provide data of sufficient quality and with comprehensive metadata information to enable integration with data from other sites in the country. For this indicator, data are that explain the variability of marine acidity collected from each sampling station and their annual mean values are used.</p> <p>Ocean acidification is the reduction in the pH of the ocean over an extended period, typically of decades or longer, which is caused primarily by the uptake of carbon dioxide from the atmosphere. The ocean absorbs up to 30% of the annual emissions of anthropogenic CO₂ to the atmosphere, leading the reduction in the pH, which affects marine lives, ecosystem, biodiversity, and food security. It may also negatively affect the services that the ocean provides, for example fisheries, aquaculture, tourism, transport, and coastal protection. In coastal areas it is more difficult to response to and manage the changes in marine acidity due to many factors such as freshwater run-off, sea-level rises, biological activity, temperature change, etc. Including instructions for improving monitoring, subjects of measurement and reporting in this methodology would help better understand and predict marine acidification observation and ensure quality management, storage, and sharing.</p>
Global indicator link	<p>■ Metadata: https://unstats.un.org/sdgs/metadata/files/Metadata-14-03-01.pdf</p> <p>■ Data: https://unstats.un.org/sdgs/indicators/database/</p>