The 17 Sustainable Development Goals — also known as the SDGs or the Global Goals — came into effect on January 1, 2016 following an historic United Nations Summit in September 2015. 193 governments from around the world agreed to implement the Goals within their own countries in order to achieve the 2030 Agenda for Sustainable Development. Over the next fifteen years, with these new Goals that universally apply to all, countries will mobilize efforts to end all forms of poverty, fight inequalities and tackle climate change, while ensuring that no one is left behind.

These new, interconnected goals build on the successes of the Millennium Development Goals, or MDGs, while also identifying new priority areas such as climate change, economic inequality, innovation, sustainable consumption, peace and justice, among others.

Although each country faces specific challenges in pursuit of sustainable development, special attention is given to the most vulnerable countries, in particular, African countries, less developed countries, landlocked countries and small island developing states. There are also serious challenges within many middle-income countries.

For each of the 17 goals, there is a list of specific targets we aim to reach. The targets discussed in this guide have been summarized for ease of reading. For a more detailed list of all the 169 targets, visit GlobalGoals.org.
CONSERVE AND SUSTAINABLY USE OUR OCEANS, SEAS AND MARINE RESOURCES

Oceans, coastal zones and marine resources are essential to human well-being, as well as social and economic prosperity worldwide. Beyond humankind, oceans support over 200,000 identified species and countless other species that have yet to be discovered. Keeping our oceans clean and healthy is in our best interests because they help protect our drinking water, weather, climate, food and oxygen. Managing the impact of trade and transportation means increasing international cooperation to protect vulnerable habitats, invest in sustainable industry practices, and address wasteful habits.

TARGETS

- Reduce marine pollution by 2025 by reducing sources of pollution from human sources on land.
- Enact laws that protect our oceans from destructive fishing practices such as illegal fishing and overfishing.
- Minimize the impacts of ocean acidification through enhanced scientific cooperation and action at all levels.

“"We know that when we protect our oceans we’re protecting our future.”"

Bill Clinton
Former US President
The protection of our marine environments is integral to the species that live in them and the communities that rely on them. From absorbing carbon dioxide (CO2) and managing the temperature of our atmosphere, oceans help balance our climate system. The health of our oceans impacts the realities of climate change in a big way. Over time, human activity has contributed to the negative impacts of climate change on our planet and our own oceanic well-being.

From food and medicine to fuel and fun, oceans provide a wealth of resources to humanity. Over three billion people depend on marine and coastal biodiversity for their livelihoods, with fisheries alone directly or indirectly employing over 200 million people.

Marine ecosystems represent the largest aquatic ecosystems on our planet. From salt marshes to coral reefs and estuaries to the sea floor, marine waters cover two-thirds of the surface of the Earth. Marine ecosystems have extensive biodiversity and support a large amount of biomass, or the mass of all species in an ecosystem. Did you know our oceans contain 36 million tonnes of blue whales and 379 million tonnes of Antarctic krill?

Oceans, seas and marine resources (such as fish, gas, minerals, renewable energy and tourism) are increasingly being threatened, degraded or destroyed by human activity. Pollution from chemicals like phosphates, lead, oil, nitrates, mercury, land run-off, overfishing and the destruction of coastal habitats for human expansion are all negatively impacting the well-being of the species who live in our marine ecosystems.

Acidification, caused from increased absorption of CO2 in our oceans, is making our waters more acidic, with harmful consequences on marine organisms, such as decreasing species immune responses and coral bleaching.

Marine conservation involves protecting and preserving our ocean’s ecosystems by limiting human-caused damage, restoring damaged ecosystems and establishing protective policies and projects to ensure humanity understands and respects the fine balance of life under water.
Why does this issue matter?

- **Oceans are important to our economy**
  Did you know that our coastal and marine resources contribute an estimated $28 trillion to the global economy each year? Despite how much we rely on these resources, they are extremely vulnerable to environmental degradation, overfishing, climate change and pollution. Protecting our oceans means stopping overfishing to improve our ecosystems and biodiversity. In order to find a healthy balance, our planet’s fish stocks need to be kept within sustainable limits, at or above the abundance level that can produce maximum sustainable yields.

- **Our ecosystems need to be protected**
  River basins, marine ecosystems, coral reefs, the sea floor and the atmosphere are all part of the hydrological system. The extent and connectivity of this system means the impacts of pollution are often felt far from their source. The hydrological system is important for climate change regulation because of the role it plays in absorbing heat and CO2 from the atmosphere and protecting coastal areas from flooding and erosion.

  Since the beginning of the industrial revolution, the ocean has absorbed about one third of the CO2 released by human activities, reducing the full impact of climate change. Protecting our hydrological system means developing policies and programs that ensure ecosystems upstream and downstream are preserved.

- **We need more scientific cooperation and international laws**
  In order to conserve our oceans and reduce our impact, we need to develop strong platforms and policies that support and protect our water ecosystems. Investing in knowledge, improved technologies and ways to minimize acidification through scientific research and development are essential to achieving this goal. Ensuring that our governments, businesses and decision-makers protect our coastlines and oceans from overfishing and illegal fishing can help our coastal communities develop more sustainable practices.

“Why is it that scuba divers and surfers are some of the strongest advocates of ocean conservation? Because they’ve spent time in and around the ocean, and they’ve personally seen the beauty, the fragility and even the degradation of our planet’s blue heart.”

Sylvia Earle
American marine biologist and author
3 Who and what are affected?

- **Our ocean species and ecosystems**
  Sewage, industrial chemicals, land runoff, oil spills, mining and litter make up the largest sources of pollution in our oceans. The diversity of pollution sources increases the diversity of consequences to our ecosystems as well—from depleted oxygen levels and disruption of photosynthesis for coral and seaweed to accumulated waste in the food chain, our oceans are taking a beating from our business activities and behaviour. Runoff from fertilizers can cause **hypoxic zones**, or areas of the ocean with insufficient amounts of oxygen, light and nutrients to support other species caused by increases in algae.

- **Our population**
  When our oceans are polluted, it’s not just our ecosystems that pay the price. In an ecosystem of fish eating other organisms polluted with chemicals, levels of toxicity will rise over time. When we eat contaminated fish, we are digesting mercury, nitrates and micro-plastics. When consumed, it can increase our likelihood of diseases such as Parkinson’s disease, Alzheimer’s and heart disease.

The oceans provide us so much and it’s our responsibility to respect our ecosystems and our health by keeping it clean for generations with come.

4 What needs to be done?

- To repair our oceans and allow them to flourish in the future we need to increase international cooperation to protect vulnerable habitats, invest in research and sustainably harvest our natural marine resources. No act is too small—making changes to our daily lives to stop contamination in our marine ecosystems is an essential part of the process.

- To manage our impact on marine resources, we need to improve the uptake of sustainable social, political and economic practices through good governance and public accountability. Illegal fishing, and overfishing in particular, are being targeted as detrimental industries to the health of our oceans. Through the choices we make, we can put pressure on decision-makers to choose the sustainable path.

- Healthy oceans make for healthy humans, and they sustain life on Earth. When we protect key ecosystems, habitats, and species in **marine protected areas** (MPAs), we can restore and replenish biodiversity, along with social, cultural, and economic resources. With only 3.4 per cent of our oceans under protection, we need to encourage representatives and decision-makers to develop policies that encourage the designation of MPAs and partnerships that increase investment in these protected areas.

- As the cause of, and solution to, pollution on Earth, we have to start with ourselves if we want to improve our oceans. If researchers can develop sustainable **renewable resources**, we can also learn to recycle and pick up after ourselves. Social actions to reduce **fossil fuel** usage like taking public transit, or reducing pollution by eliminating plastic bags and cleaning our beaches, can have a great impact on the health of our oceans.
Initiatives to protect our oceans should identify ways to reduce the amount of pollutants entering our water systems through human activity. Addressing populations’ sustainable access to fresh water and sanitation will help in reducing pollutants entering our water ecosystems. Collaborative programs that address human activity while protecting life on land and life below water can help keep our oceans healthy and clean.

Ensuring we buy only what we need is a huge part of responsible consumption. Making sure products are recyclable and safe for our waters will help reduce the threat to our oceans, seas and marine resources.

Clean and biodiverse oceans have a direct relationship to our health and well-being. In achieving good health and food security for all, we need food that is healthy and free of bio-accumulated chemicals like mercury. We can improve the health of our food by reducing pollution, paying attention to fishing habits and techniques, and investing in research to address pollutants already in our oceans.

“I had fought on behalf of man against the sea, but I realized that it had become more urgent to fight on behalf of the sea against men.”

Alain Bombard
French biologist and physician
Consequences of inaction

- An inability to control climate change impacts will result in the rise of our oceans and severe effects on our coastal regions, especially in low-lying areas and increasingly vulnerable island nations. Without investment in climate change action, it is estimated that the cost of damage to the ocean will be US $322 billion per year by 2050.  

- By failing to take control of marine pollution, we will have negatively impacted the health and biodiversity of our oceans species and ecosystems. The spread of hypoxic dead zones will increase, ultimately impacting key marine industries like tourism and fishing, and the livelihoods of many.

**REFLECTION AND ACTION QUESTIONS**

1. How do you feel about the issue now that you know more about it?

2. How might this issue have been prevented? What could have been done differently?

3. How has this problem changed over time? Where do you see it going in the future?

4. What questions do you still have?

“\It is a curious situation that the sea, from which life first arose, should now be threatened by the activities of one form of that life. But the sea, though changed in a sinister way, will continue to exist; the threat is rather to life itself.\”

Rachel Carson
American marine biologist and author