

### THE GLOBAL GOAL 14.1: REDUCE MARINE POLLUTION

#### GOAL 14:

- Sustainable usage of the ocean's resources
- Conserving and protecting different species living in the oceans

#### TARGET 14.1:

- Reduce all kinds of marine pollution
- Prevent making new pollution

Pollution is mainly caused by humans

- Debris and nutrient pollution
- Nutrient pollution -> overgrowth

PLASTIC POLLUTION IS CHOKING THE OCEAN  
17+ MILLION METRIC TONS OF PLASTIC ENTERED THE OCEAN IN 2021  
PROJECTED TO DOUBLE OR TRIPLE BY 2040



### Beach cleaning on Sjøla Island

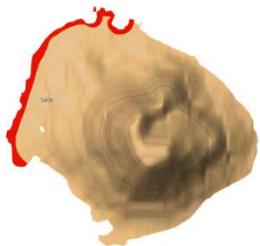
Organization *In the same boat*

- Voluntary work
- Cleans islands and shores in Norway
- People from around the world



We cleaned beaches with people from *In the same boat*

- Island Sjøla
- In total 275,69kg
- We cleaned the red portion of the map below



### SOURCES OF MARINE POLLUTION

#### The most common sources:

- Fishing industry (fishery)
- Agriculture
- Aquaculture (fish farming)
- Marine industry (ships, boats, harbors)

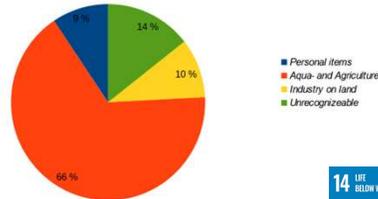
#### Other sources:

- Inland trash that is coming to the ocean by surface runoff (rivers etc.)
- Illegal dumping in the ocean
- Inland industry

#### The kind of trash there is:

- old fishing nets and lines
- plastic containers (canisters, storage boxes, barrels etc.)
- food packages (glass and plastic bottles)
- everyday things (plastic spoons, bags)
- metal and plastic parts from machinery

Different sources of pollution in the Atlantic ocean



### EFFECTS OF POLLUTION ON MARINE LIFE

- Microplastics in aquatic animals like fish, mammals and other marine species -> plastic buildup in apex predators



- Overgrowth, nutrient pollution -> damage in ecosystems

- Mass extinction of many species.

### ISSUES AND DANGERS OF PLASTIC POLLUTION

- 50-70 trillion pieces of plastic in the ocean
- Climate change
- Weather patterns
- Damage to different ecosystems



### CONSERVE AND SUSTAINABLY USE THE OCEANS, SEA AND MARINE RESOURCES FOR SUSTAINABLE DEVELOPMENT

#### MARINE POLLUTION IN NORWAY

- A lot of trash come from fishing industries
- We have almost destroyed some ecosystems in our past -> stricter regulations nowadays
- The domesticated salmon can carry diseases that the natural breed doesn't have, and that may have severe consequences on the local ecosystem if they escape.

#### MARINE POLLUTION IN FINLAND

- Not many aquaculture companies -> not as much plastic pollution -> no companies with focus on cleaning
- Nutrient pollution from runoff waters (e.g., agriculture) -> overgrowth
- More pollution inland (e.g., in cities, forests and camps sites)

#### MARINE POLLUTION IN ICELAND

- 80% of marine pollution comes from fishing industries.
- Most are fishing lines and net made from hard plastic
- From 3.6.2021 all non-reusable plastics have been banned from stores in Iceland.

### OTHER FACTS REGARDING PLASTIC POLLUTION

- Fishing farms have regulations on amount of microplastic and parasites they can have in their fish
- There is more plastic in the Atlantic Ocean than determined before.
- Overfishing and hunting too much can and will hurt ecosystems extensively
- Escaping farm salmon can displace the natural breed of salmon
- There are two floating plastic waste islands in the Atlantic Ocean, which are more or less the size of Texas.

### WAYS TO REDUCE PLASTIC POLLUTION

There are many ways to reduce plastic pollution, for example:

- Cleaning beaches
- Using reusable (or paper) bags instead of plastic bags.
- Paper straws instead of plastic straws (or no straws at all LIKE A CHAD)
- Using reusable bottles instead of buying plastic bottles in stores.
- Recycling



### SOURCES

THE 17 GOALS | Sustainable Development, <https://sdgs.un.org/goals> (read on 6.10.2022)  
The Global Goals, <https://www.globalgoals.org/> (read on 6.10.2022)  
Google Maps, <https://google.com/maps> (read on 6.10.2022)  
<https://www.inthesameboat.eco/> (read on 7.10.2022)  
Geoheritage, culture and sustainable communities in Finland, Iceland and Norway, <https://geoheritage.fas.is/> (read on 7.10.2022)

Pictures:  
Veikka Konttinen  
Marjaana Laukkanen  
Nuutti Karhu