



# Microplastic pollution in Norway

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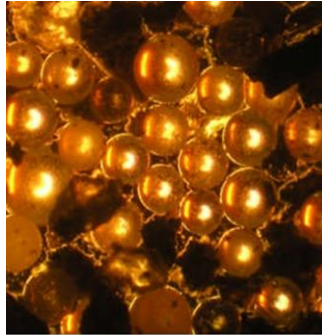


# Three reports on microplastics

- Sources of microplastic pollution to the marine environment
- Microplastics from waste water treatment plant
- Microplastics in marine environments: Occurrence distribution and effects

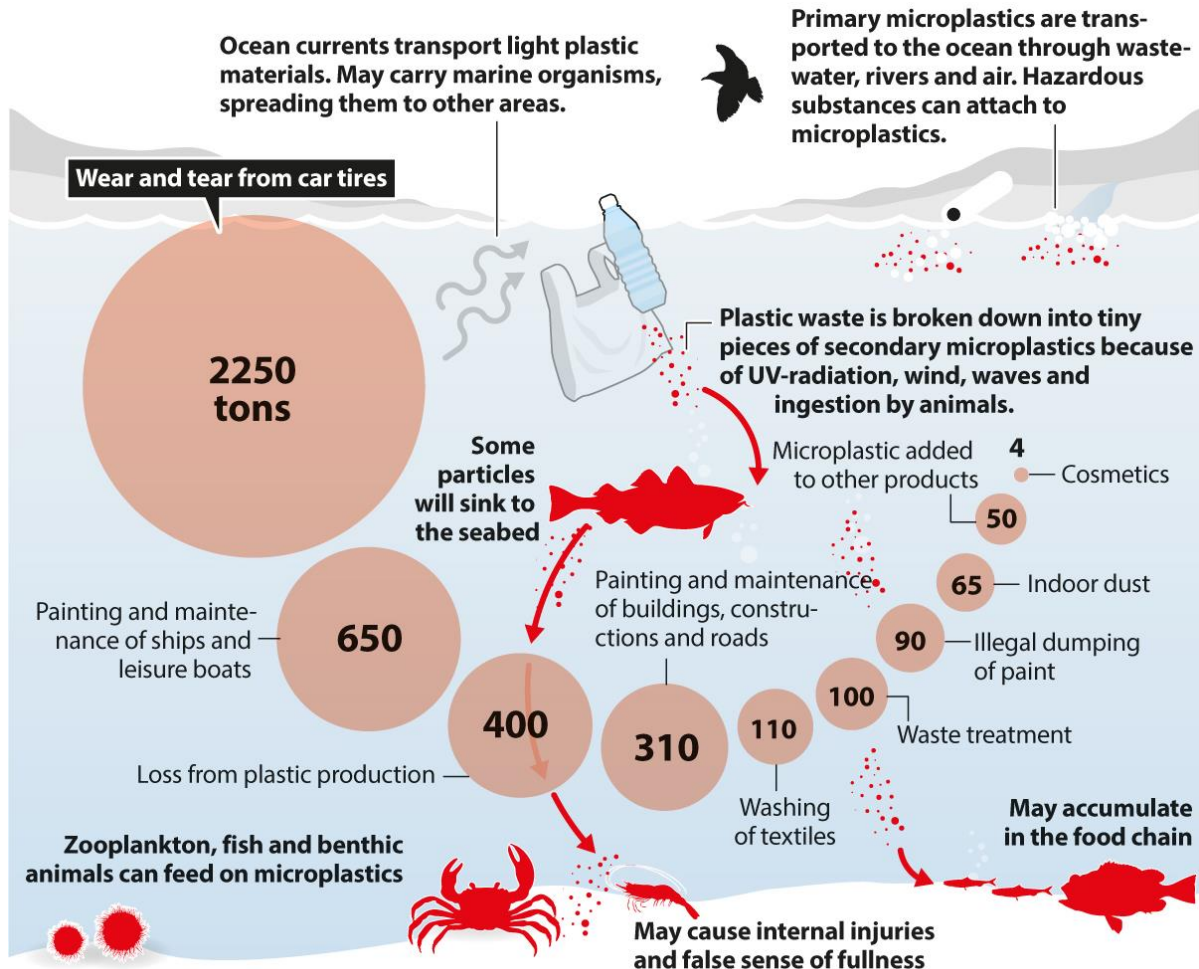


# What are the main land based sources of microplastics in Norway?



# Land based sources of microplastics (tons)





SOURCE: «Sources of microplastic-pollution to the marine environment» / Mepex



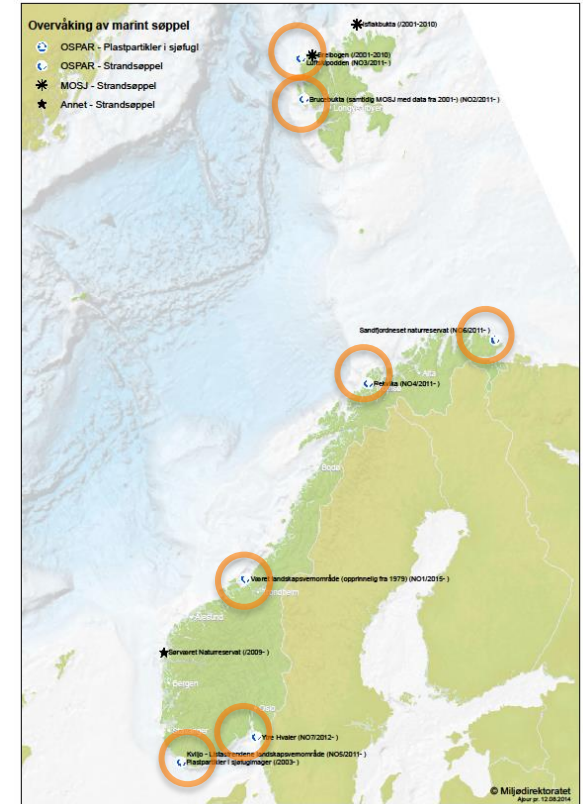
# Marine litter is also an important source

- 1-5% of marine litter is turned into microplastic annually
- More than 10.000 tons of marine litter per year



# Mapping and monitoring

- Monitor beaches, ocean surface, column and -floor
- Lost fishing gear
- Plastic particles in northern fulmars



# Microplastics from waste water treatment plants

- Three selected modern waste water treatment plants in Norway
- Retention efficiency close to 100 percent for larger particles
- Varies with particle size and shape



# What do we know about the effects of microplastics?

- Microplastics can transport and spread hazardous substances
- Marine organisms ingest microplastics
- Can release chemicals in marine biota

# What are we doing now?

- Continuously improving our waste management regulations
- Fishing for Litter
- Grant scheme for measures against marine litter
- Support UNs environmental program UNEP
- Following the process in EU, OSPAR and Nordic cooperation



# What are the knowledge gaps?

- What are the largest sources and how to attack them?
- How do microplastics affect marine organisms?
- What are the chemical risks?
- How do we define microplastics?
- How do we reduce marine littering?

# Download the reports on microplastics here:

- <http://www.miljodirektoratet.no/no/Publikasjoner/2015/Januar1/Microplastics-in-marine-environments-Occurrence-distribution-and-effects/>
- <http://www.miljodirektoratet.no/no/Publikasjoner/2015/Januar1/Mikroskrapp-i-avloppsvatten-fran-tre-norska-avloppsreningsverk/>
- <http://www.miljodirektoratet.no/no/Publikasjoner/2015/Januar1/Sources-of-microplastic-pollution-to-the-marine-environment/>





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