

## Environmental sustainability - Water quality - Oil leaks and spills

The oil leaks are probably the main catastrophic events that can happen today cause of human activity in oceans.

Usually, an oil spill event on the sea occurs by an accident of an oil tanker ship. The biggest spills happen usually by oil tankers. The biggest one was in 1979 West Indies by the ship Atlantic Empress, which collided with another tanker and caught fire and 300 nautical miles later sank, whit it's all load. This event caused a 287,000 tons spill(Adam Augustyn & The Editors of Encyclopaedia Britannica, 2021).

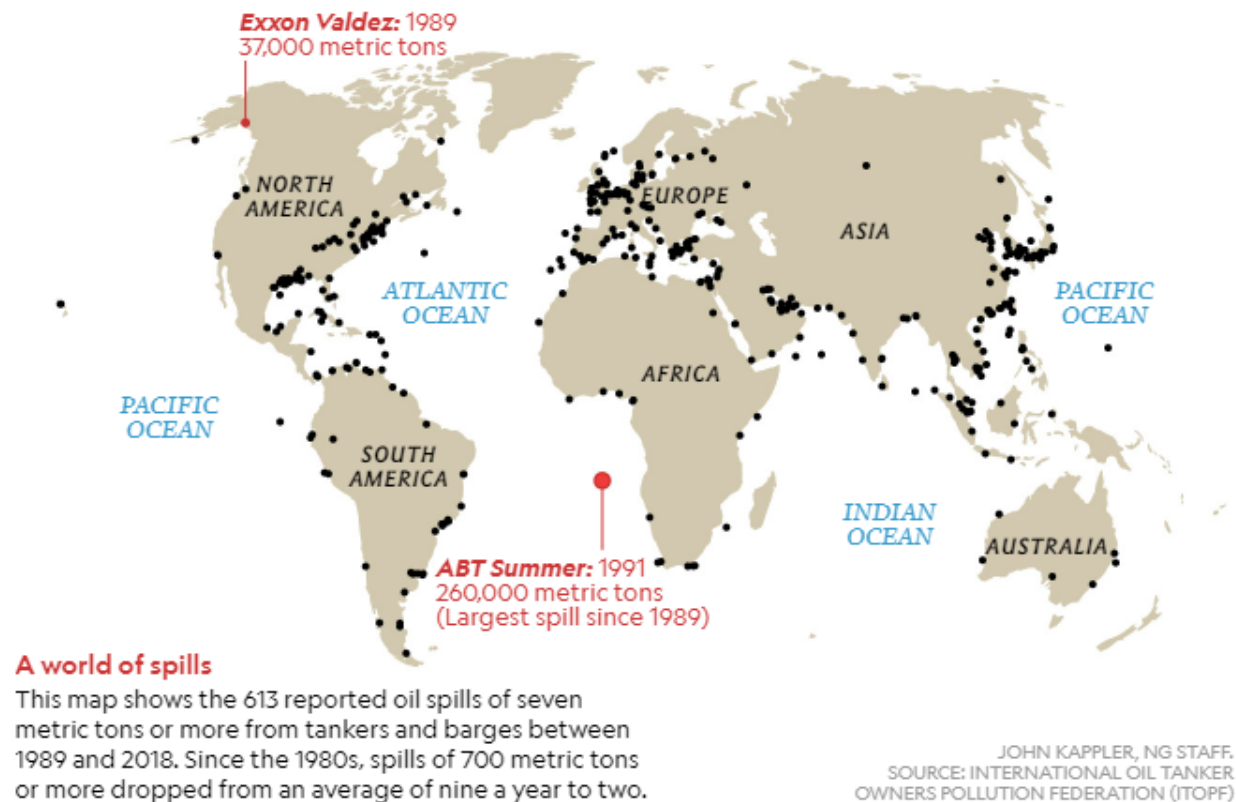


Figure 1 This map shows the 613 reported oil spills of seven(STEPHEN LEAHY, 2019)

Years later, the big oil firm, Exxon had a situation, called the „Valdez oil spill” at midnight on March 24 1989, when a supertanker ran aground in Alaska and 250,000 barrels of oil were lost in a short time. „Within days oil from the Exxon Valdez spread some 1,300 miles along the coast of what was pristine wilderness.”(*The Valdez Oil Spill*, 2018). As a cause of this 250000 seabirds, 3000 sea otters, 300 seals, 250 eagles, 22 killer whales and billions of eggs died.

These are of course just the named events, the biggest ones. As the following picture show, year by year there are several oil spills caused by oil tankers around the world. Even if we are saying that these happen fewer times than in old times, we can see that still, we are talking about a current problem.

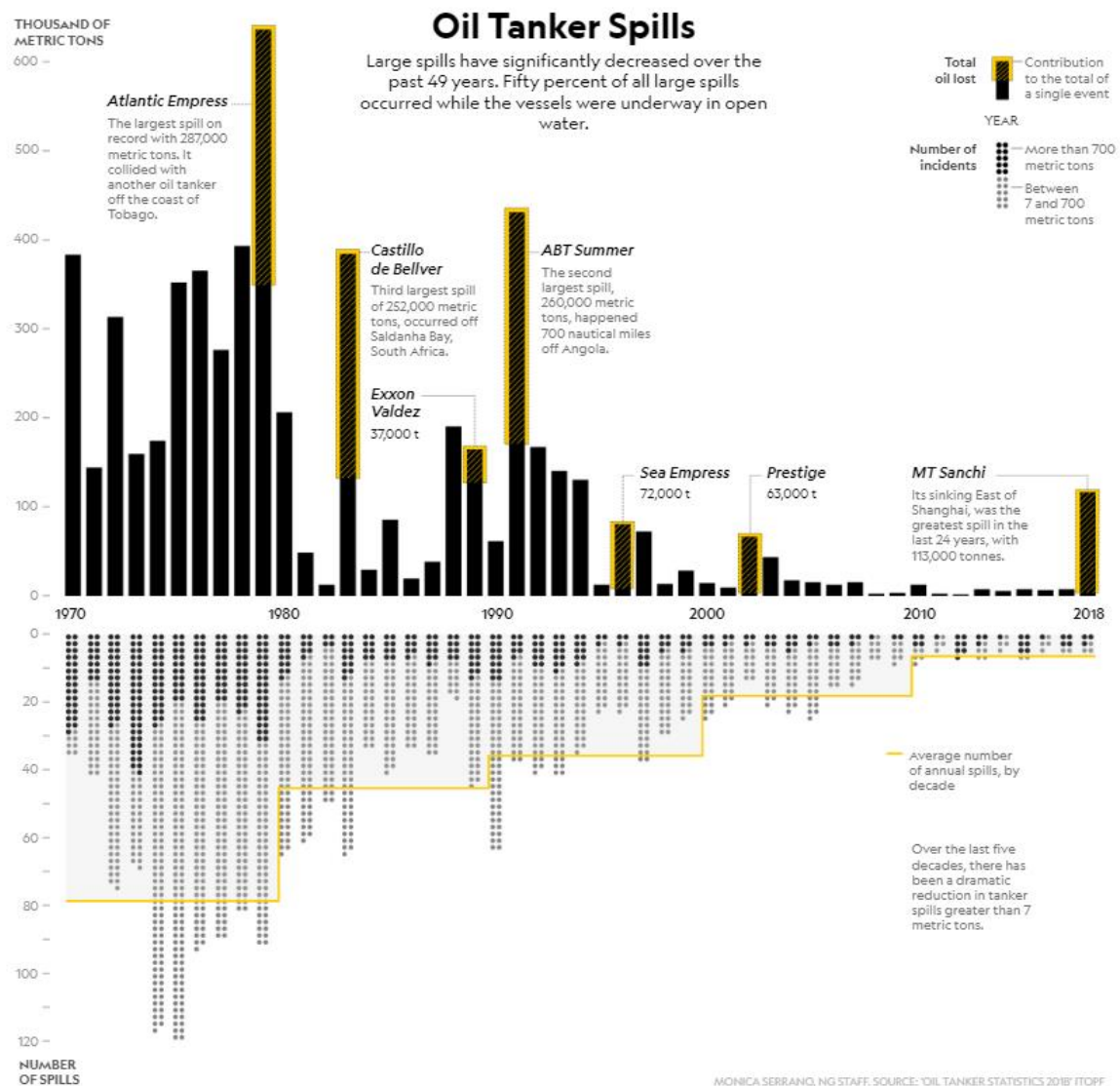


Figure 2 Oil Tanker Spills(STEPHEN LEAHY, 2019)

„Some of the oil is still there, too. Recent sampling along the coast revealed pockets of oil buried four to eight inches under sand and gravel, often topped by stones” which means that we can’t fully clean up after an event like this one. „A powerful storm or earthquake could potentially put that oil residue back”.

Exxon paid about \$2 billion in cleanup costs and \$1.8 billion for habitat restoration and personal damages related to the spill. (Editors, n.d.)

Such a catastrophic event can happen in accidents of oil rigs too. One of them, and the biggest spill caused by this was BP’s in 2010 in the Gulf of Mexico on the oil platform of Deepwater Horizon(Richard Pallardy, 2022).

„The Gulf of Mexico is home to 21 species of marine mammal, most of which humans rarely see—so scientists have to listen. The sounds these animals emit can reveal which species are still active many

years after the spill, and which have declined.” (Richard Pallardy, 2022) For the human victims, BP agreed to at least \$7.8 billion as compensation and spent \$71 billion to recover natural fails(MARK SCHLEIFSTEIN, n.d.).

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