## Atlas Wind: Mapping the Seabed Using Sound equinor



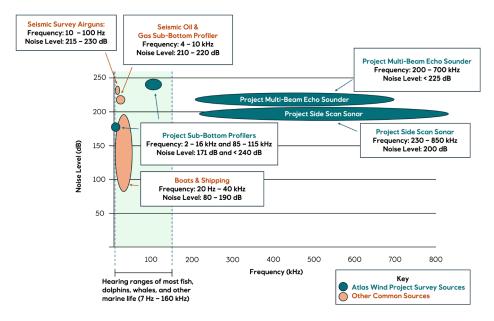
Equinor is committed to responsible surveying, prioritizing environmental stewardship and marine resources protection. We seek to minimize Atlas Wind's impact on the environment by collaborating with conservation groups, fisheries groups, front-line and tribal communities, and local communities. We are committed to using best practices to avoid, minimize and mitigate the environmental and social impacts of developing renewable energy in the Atlas Wind lease area.

#### **How is Sound Measured?**

The sound we hear is a function of level and frequency. Level refers to the loudness or volume of the sound, represented in decibels. Frequency, which defines the pitch, is measured in hertz. Different species hear at different frequencies and levels: whales hear lower frequencies best while dolphins are more adept at hearing higher frequencies.

It is worth noting that decibels in water are not the same as decibels in air, as the calculations are based on a different reference pressure.

### Noise Level and Frequency of Geophysical Surveying Equipment



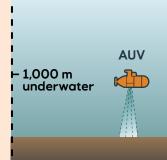


## Can Marine Wildlife Hear the Surveying Equipment?

Only one of the surveying technologies (the sub-bottom profiler) can be possibly heard by marine wildlife, but that does not mean there will be adverse impacts. The sub-bottom profiler falls in the range of hearing of some animals, but the size of the area which is impacted by the sound is very small, either because the sound beam is very narrow, or because it is operating very close to the seabed. This nearly eliminates the potential for exposure of animals – an animal would need to be swimming right under the equipment to be exposed to this sound.

# Have the Acoustic Impacts of Surveying Equipment Been Reviewed by Regulators?

The surveying technologies Equinor plans to use have been found to be passive, low energy or "de minimis" (not likely to result in adverse impacts) by the California Coastal Commission, the National Oceanic and Atmospheric Administration (NOAA) and the Bureau of Ocean and Energy Management (BOEM). The small area impacted by the sound as well as the frequencies at which the equipment operates result in minimal risk for marine wildlife. These technologies are designed to collect data while limiting impact to the surrounding environment.



#### For More Information