Seismic surveys: Australia key messages

Main messages

- Seismic surveying is a low-risk, short period, widely used, well understood geophysical technology that is the first step in understanding what lies beneath the ocean floor.
    - That includes identifying prospective oil and gas resources, geological sites for carbon capture and appropriate locations for offshore wind turbines and other renewable energy infrastructure.
- Seismic surveying has been used for decades in Australian waters with no evidence of harm to the marine environment.
- Fisheries in regions that host oil and gas activities continue to be some of the most productive in Australia. These industries can, and do, coexist in Australia and in many other regions worldwide.

More general points on seismic

- Over 2,000 seismic surveys have been conducted in Australian waters since the 1960s (including 100s of surveys along the off the southern coast of Australia, along the Bass Strait and around Tasmania) with no evidence of the impacts many opponents have claimed as likely.
- The seismic industry has a long and strong track record of operating safely, sustainably, and successfully in Australian waters.
- It is subject to robust regulation and only performs activity after extensive consultation with local communities and stakeholders and environmental review.
- Experience in Australia and worldwide shows that fisheries and the oil and gas industry successfully co-exist. In 2021 the commonwealth government, seismic and fisheries worked together to prepare a guidance framework for successful co-existence. This was published in 2022 as Supporting cooperative coexistence of seismic surveys and commercial fisheries in Australia's Commonwealth marine area Guidance Framework
- EnerGeo alongside Australian and global partners have been conducting research through the international Sound and Marine Life Programme since 2005 under the auspices of the International Association of Oil and Gas Producers (IOGP) to improve understanding of the potential impact of sound on marine life.

What is seismic?

- Seismic surveys are used to produce detailed images of the various rock types beneath the ocean floor. This sound is generated by compressed air. The resultant sound waves bounce off underground rock formations.
- The volume of the sound produced during seismic surveys is comparable in magnitude to many naturally occurring and other man-made sound sources, such as storms, lightning strikes or other marine animals.

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- Recent research shows that there is no evidence that seismic surveys have population impacts on marine life[1].
- The seismic and geoscience industries, like fisheries, work in a comprehensive regulatory environment that considers all relevant science and potential risks to the environment.
- The oil and gas industry is also required to ensure our activities do not impact on other marine industries.
- The geoscience and seismic industry is committed to genuine engagement with all stakeholders impacted by, or with a genuine interest in, our activity.

Community concerns

- We know that there are many who have genuine questions and concerns, and we are committed to responding to them.
- False and exaggerated claims too often distort public discussion and do nothing to inform the community on important processes to support critical decisions about our energy supply.
- It is also important to recognize that Australia has well-established procedures and regulations to manage these issues. It is important that we respect that process.
- We know this activity can be conducted safely and sustainably – and that it enables informed decisions on the location of future energy infrastructure.
    - Geoscience work is as essential to offshore renewable energy projects as it is to traditional oil and gas exploration and production. It is also essential in identifying geological sites for carbon storage.

About EnerGeo Alliance

- Founded in 1971, EnerGeo Alliance is a global trade alliance for the energy geoscience industry. Formerly known as the International Association of Geophysical Contractors (IAGC), EnerGeo Alliance and its member companies span more than 50 countries, and together oversee the safe discovery, development, and delivery of mainstay sources of energy, alternative energy and low-carbon energy solutions that meet the growing world's needs.

[1] https://www.aims.gov.au/information-centre/news-and-stories/seismic-surveys-have-no-significant-impact-commercially-valuable-fish-nw-australia and https://www.aims.gov.au/information-centre/news-and-stories/seismic-survey-unlikely-affect-pearl-production-lucrative-nw-oyster-industry