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# **A sustainability paradox? Sustainable operations in the offshore oil and gas industry: the case of Petrobras**

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## **Abstract**

Improved sustainability performance in increasingly complex business environments is a challenging task for organizations operating in many different industries. In the offshore oil and gas industry, the use of potentially hazardous materials and operation under progressively hostile environments increases the risk of major accidents. Regulators have been trying to catch up on the design of regulatory frameworks that prevent these types of events, aiming to protect people, assets, and the environment. Although there are some recommended practices that companies have been using as the basis for their process safety management systems (PSMS), lack of uniformity and inefficient enforcement remain as two fundamental problems. This paper explores these two problems and takes some first steps toward a broader discussion about these important issues. We draw from the literature on sustainable operations to develop a descriptive case study of the offshore oil and gas industry by employing document analysis and an analysis of the Health, Safety and Environment Management System (HSEMS) of Petrobras, a world leader energy company. By employing multiple primary and secondary data collection strategies, including a number of formal expert interviews, we map, explore and compare major recommended practices for PSMS, identify a series of gaps in policy and practice, and offer a number of recommendations and implications for practice, policy, and research.

*Keywords: Sustainable operations; process safety management systems; offshore oil industry; major accidents; environmental protection; social impacts;*

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