

# Assessment of the Bioremediation of Oil Spills on the Mediterranean Shoreline

Project Proposed by

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## **Abstract**

The planned oil and gas exploration activities off the coast of Lebanon, including drilling, extraction, and transportation activities, increase the risks of major oil spills that could have devastating impacts on the Mediterranean shoreline. However, these risks can surely be controlled with sound environmental planning. In this context, this study aims at determining if bioremediation with inorganic mineral nutrients (namely nitrogen and phosphorus) enhances the removal of crude oil compared to intrinsic oil biodegradation rates. It is anticipated that, with the high pollution levels of the Lebanese shoreline, the concentrations of nutrients already present along the Lebanese coast are high enough to sustain high intrinsic biodegradation rates without human intervention. The results from this study would provide strategic inputs to guide policy makers and spill responders for an effective bioremediation of potential oil spills on the Lebanese shoreline.