

ASSESSMENT OF THE WIND RESOURCE  
AT THE GRACE PACIFIC QUARRY SITE IN KAPOLEI, OAHU

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## **Abstract**

The goal of this research project is to determine the feasibility of building a wind farm at Grace Pacific Quarry (GPQ) in Kapolei. This location was chosen because wind maps for Oahu suggest that the location of GPQ has a sufficient wind resource for a wind farm. Meteorological data from Grace Pacific Wind Towers were used to analyze the quality of the wind resource at GPQ. The people who work at First Wind in Hawaii were interviewed, and the wind resource at their wind farms was compared with that at GPQ. Finally, the thesis discusses local and political considerations and environmental impact studies needed to assess the feasibility of constructing a wind farm in Hawaii.