

## 29th April 2011

## QUARTERLY ACTIVITIES REPORT FOR THE QUARTER ENDED 31<sup>st</sup> March 2011

The Directors of K2 Energy Limited (ASX: KTE) provide the following report for the Quarter ended 31<sup>st</sup> March 2011.

## **MEARS SOLAR**

K2 Energy Limited is pleased to update the market on the Company's solar program.

The company announced in March very successful results from the first phase of testing of ultra-thin MST™ solar cells, which were fabricated in the US. As previously reported these tests on ultra-thin cells of the same thickness showed increases in power output of up to 60%.

An additional set of solar cells for testing is being fabricated at Tei Solutions in Japan. Minor earthquake-related damage and power interruptions at Tei resulted in some delays, however the Tei facility is now operational and finalisation is expected shortly.

The MST™ technology involves the production of an altered or "nano-doped" layer of silicon that can be used in the manufacturing of silicon solar PV cells; a process already proven in traditional semiconductor manufacturing. This layer is introduced to increase the efficiency parameter for Photovoltaic (PV) technology and solar power generation in silicon PV cells. By improving the efficiency parameter, the use of MST™ technology in the PV cell development process reduces the amount of silicon required, potentially making PV cells significantly more efficient and much less expensive.

"The impact of the MST™ technology in the processing of silicon PV cells could greatly benefit solar manufacturers," said Robert Mears, CEO of Mears Technologies.

In 2010, K2 Energy Limited, located in Sydney, Australia, acquired the exclusive rights to the MST™ IP for all solar applications from Mears Technologies. K2 has provided the funding necessary for the R&D required to test and develop Mears' MST™ technology for use by large-scale solar panel manufacturers.



## **OIL AND GAS**

KTE retains its shareholding in Trey Resources I LLC, a US-based limited liability company. During the quarter there was no expenditure incurred in relation to this investment.