In January 1999 the Australian Research Council (ARC) announced that Research Centres Scheme funding would be provided to establish a Key Centre for Photovoltaic Engineering at the university. The Centre was headed by Professor Stuart Wenham with the initial aim to "develop high performance solar cells with potential to connect to existing electrical grids and cells for space applications". Objectives also included the development of courses to enhance the quantity and quality of teaching. The primary new initiatives of the Key Centre were in the educational area. In particular the Key Centre was developing the first Bachelor of Engineering in Photovoltaics and Solar Energy.

Initially located within the School of Electrical Engineering & Telecommunications, from 1 January 2000 the Centre became an autonomous unit within the Faculty of Engineering under the umbrella of the Centre for Photovoltaic Engineering.

In December 2002 approval was granted by the ARC for the establishment of a new ARC Centre of Excellence for Advanced Silicon Photovoltaics and Photonics. This new Centre absorbed the activities of the ARC Special Research Centre for Third Generation Photovoltaics and ARC funded projects of the Key Centre for Photovoltaic Engineering. Thus the ARC Key Centre for Photovoltaic Engineering ceased to exist by 13 June 2003 (file 992072). At the time the Centre was allowed to carry forward 2002 funds to be spent in 2003; however it did relinquish its 2003 allocation which was transferred to the new Centre for Excellence. The relinquishment was backdated to 1 January 2003.