



## Memory Ink Technical Development Update

Strategic Elements Ltd (ASX: SOR) is pleased to provide an update on significant technical improvements in the Nanocube Memory Ink technology being developed with the University of New South Wales (UNSW). All advancements are being incorporated into the transparent demonstrator due in the third quarter of 2019.

Development of an advanced memory ink for printing onto plastic materials was significantly advanced over a number of months and resulted in new fabrication methods for Nanocube Memory Ink and its use on plastics. Patent coverage has been filed to protect the inventions generated from this work (intellectual property). The capability to print electronics onto plastic materials is a key commercial goal for the printed electronics industry as plastic is cheap, flexible and able to be used in industrial scale electronic printers. The patent filing is targeted at solving a critical issue in printing electronic inks onto plastic materials.

Recent development also included work funded by the Australian Federal Government (Research Connections Program). The team consisted of scientists from the Commonwealth Scientific and Industrial Research Organisation (CSIRO) at the Flexible Electronics Laboratory in Victoria and researchers from the University of New South Wales (UNSW). The team significantly optimised the Nanocube Memory Ink for use on glass surfaces enhancing its potential for use in transparent electronics.

The Company is collaborating with world leading Printed Electronics developers at VTT (Finland) to fabricate the optimised Nanocube Memory Ink onto advanced printed electronics glass materials. The optimised ink will contain all recent modifications made at UNSW laboratories and through the joint CSIRO Project and will be the most advanced Nanocube Memory Ink fabricated to date.

A transparent electronics demonstrator is currently being developed in conjunction with a leading Australian electronics product design company. The demonstrator is focused on showcasing the ability to print memory cells onto glass and the transparent nature of the ink. The modified Nanocube Memory Ink glass memory device fabricated at VTT Finland will be incorporated into the electronic device being manufactured in Australia.

The transparent demonstrator is due in the third quarter of 2019. More information to follow.

Managing Director Mr Charles Murphy said, "We have assembled a fantastic team of scientists and electronic engineers who have overcome many development challenges to date. It's an ambitious goal, but the success so far and size of the potential prize is energizing the whole team".

### Memory Ink Technology

The Nanocube Memory Ink is an advanced nanotechnology material to be coated onto non-silicon transparent or flexible surfaces, such as glass or plastic, to store and retrieve data (memory cells). When printed on a surface and assembled with electrodes, the liquid transparent ink containing billions of tiny nanometre scale cube-shaped particles operates as computer memory. The technology was invented at UNSW and is being developed by a global team of leading printed electronics experts.

### About the Company Strategic Elements

The Australian Federal Government has registered Strategic Elements (ASX:SOR) as a Pooled Development Fund with a mandate to back Australian innovation. A strong focus on science and innovation is characteristic of the Company's activities across the technology and resources sectors. The Company operates as a 'venture builder' where it generates ventures and projects from combining teams of leading scientists or innovators in the technology or resources sectors. Due to the Pooled Development Fund program that the Company operates under most shareholders pay no tax on capital gains or dividends.