

TABLE 3: 2017-18 BOARD AND CEO APPROVALS NOT YET CONTRACTUALLY COMMITTED, BY INVESTMENT PRIORITY

Investment priority	Number of projects	ARENA funds approved but not contractually committed in 2017-18
Delivering secure and reliable electricity	11	\$53.8 million
Accelerating solar PV innovation	3	\$5.5 million
Improving energy productivity	8	\$43.8 million
Exporting renewable energy	17	\$29.6 million

The case study below illustrates how ARENA integrates its focus area strategy and financial

assistance process to help fast track innovation in renewable energy technologies.

CREATING A HYDROGEN ECONOMY



Recent innovations in hydrogen generation, storage, transport and use could transform it into a flexible source of clean energy and a highly prospective future export industry for Australia. Recognising this opportunity, ARENA has undertaken a series of activities directed towards the long-term goal of creating an end-to-end renewable hydrogen supply chain for a future renewable energy export market.

This year ARENA completed a Request for Information (RFI) to gather information from across Australia on hydrogen-related research and projects currently being undertaken, assess Australia’s expertise, and hear a wide range of views about the sector.

In early 2018, ARENA opened a competitive research and development funding round to support hydrogen innovation. The ARENA Board approved 16 projects aimed at accelerating the development of the Australian hydrogen sector. These contracts were entered into shortly after the end of the reporting period.

To build on the funding round, ARENA commissioned a study focused on opportunities for exporting hydrogen to complement CSIRO’s National Hydrogen

Roadmap. Information from the RFI, roadshow, funding round and study were provided as input to the Hydrogen Strategy Group’s briefing for the COAG Energy Council, led by the Chief Scientist Dr Alan Finkel AO. ARENA’s CEO and General Manager, Strategy are members of the Hydrogen Strategy Group and supporting Taskforce, respectively, and provided significant input into the drafting of the advice.

ARENA also funded two hydrogen demonstration projects this year, including the ATCO H2 Microgrid Project, which received \$1.5 million in financial assistance.

The project aims to demonstrate renewable hydrogen production and use for electricity generation, fuelling gas appliances and injection into the existing natural gas pipeline. The concept of a ‘hydrogen city’ in an Australian context will also be studied.

By investing across the innovation chain, we hope to reduce supply chain costs for the medium and long term, stimulate investment and support near-term domestic hydrogen projects that can supply international markets.