**Toyota Ecopark Hydrogen Demonstration**

* <https://arena.gov.au/projects/toyota-ecopark-hydrogen-demonstration/>

**$3.07m** Funded by ARENA

**$7.37m** Total project cost

* **Lead Organisation** Toyota Motor Corporation Australia Limited

**Location** Altona, Victoria

* **Start Date** March 2019

**Summary**

The [Toyota Ecopark Hydrogen Demonstration project](https://www.toyota.com.au/news/toyotas-altona-site-to-be-home-to-victorias-first-hydrogen-refuelling-station) will transform part of Toyota Australia’s decommissioned car manufacturing plant in Altona (VIC) into a renewable energy hub to produce renewable hydrogen for both stationary energy and transport energy uses.

The project aims to demonstrate the technical and economic feasibility of producing, storing, and using hydrogen sourced from renewable powered electrolysis.

**How the project works**

The Toyota Ecopark Hydrogen Demonstration project is the second of a three phase plan to repurpose the Altona site into a Zero Emission Centre of Excellence.

Phase two includes the following deliverables:

* demonstrate that a combination of on-site [solar PV](https://arena.gov.au/renewable-energy/solar-pv-rd/) with [battery](https://arena.gov.au/renewable-energy/battery-storage/) storage and [hydrogen](https://arena.gov.au/renewable-energy/hydrogen/) production can provide Ecopark with reliable and continual power supply
* demonstrate that green hydrogen can fuel vehicles and supply electricity through the use of a fuel cell
* construction of a “Hydrogen Education Centre” to promote hydrogen innovation and education.

The Ecopark will also demonstrate the ability to fuel passenger vehicles, heavy vehicles and forklifts, and run hydrogen forklifts through warehousing operations in industry. The refuelling infrastructure will also be used as a demonstration site for relevant industry partners.

**Area of innovation**

As well as being the first known project in Australia seeking to use renewable energy for hydrogen production and use on a single site, a key deliverable will be the construction and operation of an education centre to promote hydrogen innovation and education.

Toyota aims to use the education centre to coordinate research activities that address technology development for the safe and cost effective generation and use of hydrogen. The education centre has been designed to support collaboration between government, technology developers and educators to progress the uptake of renewable hydrogen in Australia.

**Benefit**

The Toyota EcoPark project aims to drive hydrogen education and awareness in Australia, and demonstrate the feasibility of using multiple sources of renewable energy at a single site.

An innovation centre and a hydrogen refuelling station at the demonstration site may reduce the hurdles facing hydrogen infrastructure deployment and could potentially catalyse future hydrogen vehicle demand in Australia.