

# Development of Lunar Cruiser



We are open to discussing new business bridging the automobile and space industries.

Toyota plans to provide a pressurized rover Lunar Cruiser for the Artemis project.

Toyota has been contracted by JAXA to carry out conceptual design for a pressurized lunar rover.

All of Toyota's production vehicles, most notably the Land Cruiser, are designed to come back home safely. The Lunar Cruiser is no exception.

Taking part in developing a vehicle such as a pressurized rover, which must bear the harsh environment, is an engineer's lifelong dream.

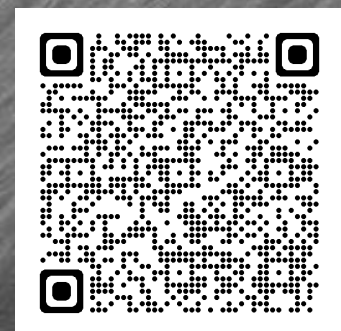
Toyota's goal in engaging space with development is to contribute to creating technology essential to the SDGs and a Carbon Neutral Society. We also believe that contribution to lunar society development can help make a better life here on earth.

Here are the key technologies for our development, many of which are based on the same technologies of production vehicles.

- Fuel Cell
  - Compact stacks, using pure oxygen
- Autonomous Driving
  - Self localization, Risk grid visualization
- Powertrain Control
  - Independent control, Crawl Control
- Vehicle Dynamics Control
  - Anti-rollover control

Contact: [lunarcruiser-ss@mega.tec.toyota.co.jp](mailto:lunarcruiser-ss@mega.tec.toyota.co.jp)

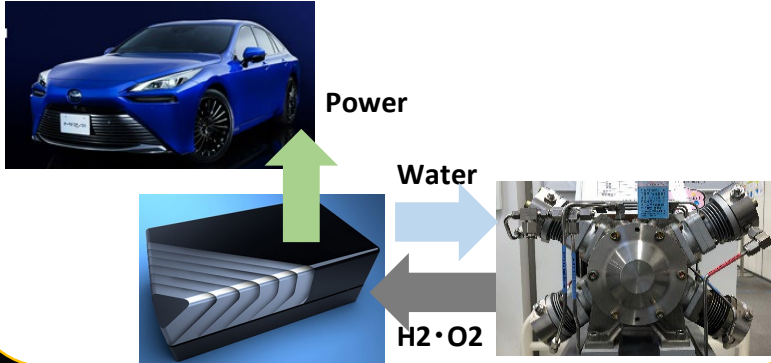
More on this website



## Fuel Cell

### Regenerative Fuel Cell

**TOYOTA**



The fuel cell system generates electricity via a chemical reaction between hydrogen and oxygen generated by water electrolysis which is powered by a solar panel. The water generated through power generation is recirculated to the system for electrolysis.

## Autonomous Driving

### Autonomous



Autonomous driving first localizes the vehicle and creates a risk grid from surrounding objects. This also calculates a potential path which enables safe and efficient travel.

## Schedule

