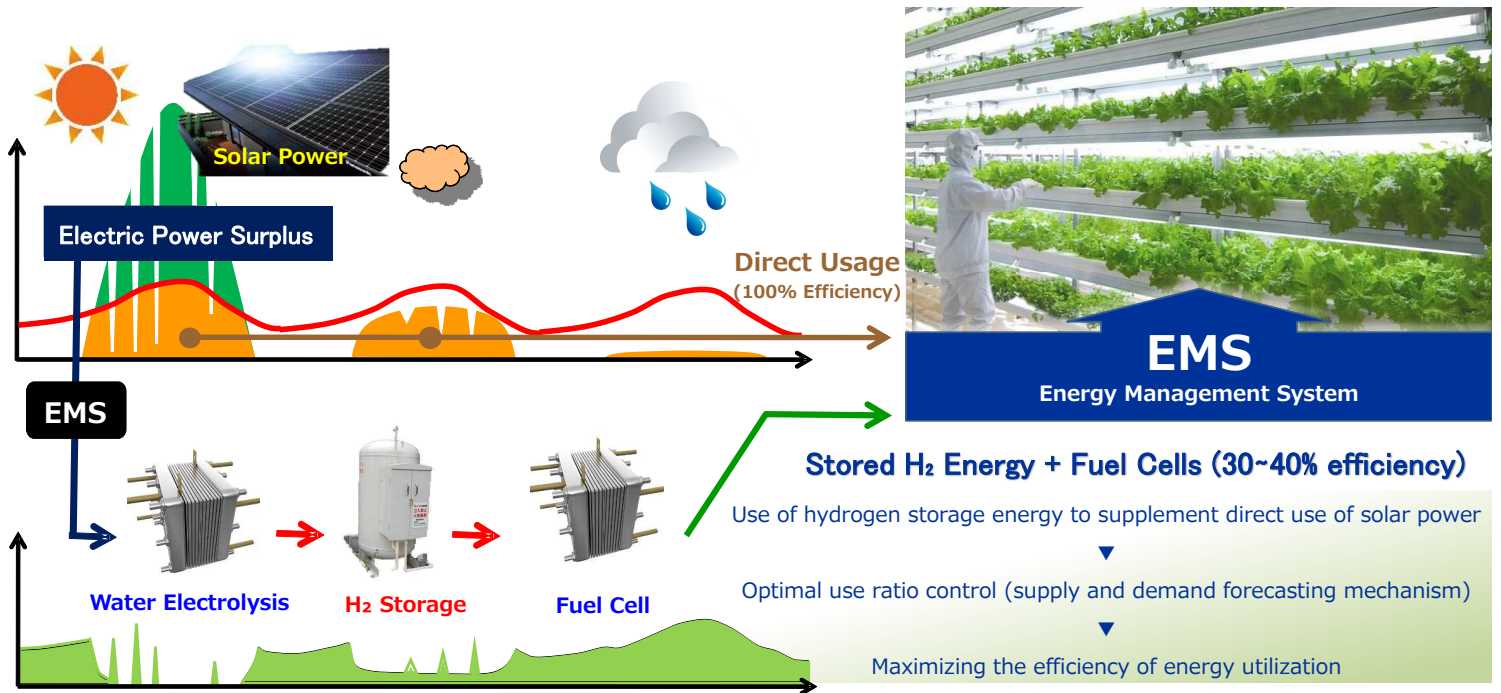


Renewable Energy Hydrogen Power Storage : Off-Grid Vegetable Factory

Renewable Energy Hydrogen Power Storage: Off-Grid Vegetable Factory

Enoah's unique technologies, such as water electrolysis stacks, gas fluid control, and fuel cell power generation, provide renewable energy driven hydrogen storage systems for off-grid vegetable factories.

In order to stabilize the use of renewable energy sources with large output fluctuations, the system converts and stores surplus electricity as hydrogen, which is then reconverted into electricity by the fuel cell when power is needed.



Comparison with Storage Batteries

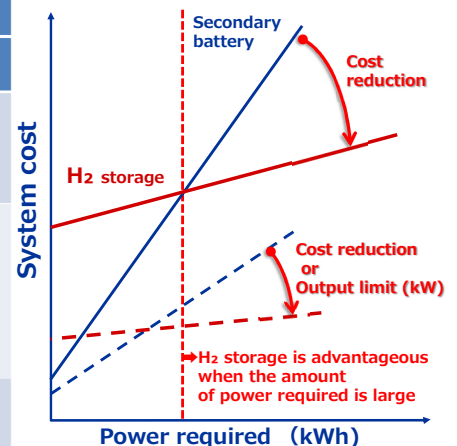
In off-grid (self-sufficient) power supply, energy storage for several days is indispensable.

If energy must be stored for more than one day, the cost-benefit of hydrogen storage over rechargeable batteries becomes evident.



Benefits of a Vegetable Factory with H₂ Energy Storage

Growth Stimulant	Proactive use of by-products Warm water production from fuel cells Water electrolysis with sterilization and growth-stimulant effects.
Self-supporting and Self-reliant	Renewable energy as the main power supply Operation is possible even in areas where grid power is not available.
Job creation	Even elderly people who are unable to work with traditional farming methods can work in vegetable farms.
Remote island operations	Time-shifting of power requirements H ₂ storage, in accordance with energy levels, enables the storage of a large quantity of electricity, ensuring a consistent supply of electricity throughout the year.
Improved productivity	Power supply independent of the power grid
Emergency response	Vegetable cultivation is possible even during disasters, allowing for the supply of fresh produce to disaster-affected areas.



Please note that the technical specifications for this device, as provided by the manufacturer in Japan, may differ depending on the country in which you plan to use the device. Please consult the relevant documentation or seek expert advice if you have any concerns or questions about using this device in a particular location.