

RENEWABLE ENERGY science education set

- Discover the science of **clean renewable energy**
- Multiple experiments in the classroom or at home
- Electronics, chemistry & physics in one science kit



NEW!



RENEWABLE ENERGY science education set

The Renewable Energy Science Education Set is a modular experiment set designed to demonstrate the workings of a complete clean energy technology system on a miniature scale.

With this very complete kit, an entire miniature renewable energy system can be constructed for experimentation and demonstration. This set includes a real working miniature wind turbine kit, a solar photovoltaic panel, an electrolyzer, a PEM fuel cell, and hydrogen storage system encouraging users to learn the system step by step, configure the system in different ways, and visualize the workings of clean energy principles from start to finish. Contained inside is a complete curriculum on renewable energy with easy to follow experiment manual, assembly guide, flash animations, and background history on the technology.



Renewable Energy Kit Contents (FCJJ-27)

- WindPitch turbine body
- Rotor head for profiled blades
- 9 profiled blades for turbine (3 sets of 3 types)
- Rotor head adapter for sheet blades
- 3 polypropylene sheet blades for turbine
- Turbine Support base
- Aluminum wind turbine post
- PEM Electrolyzer
- PEM Electrolyzer base
- PEM Fuel cell
- PEM Fuel cell base
- Hydrogen tank
- Oxygen tank
- Inner Gas containers
- Water/gas tank module base
- Flexible 2mm banana connecting leads
- Transparent silicon tubing
- Plastic plug pins for electrolyzer
- Battery pack with connecting leads
- Syringe
- Motor and fan module base
- Propeller blade
- Small car wheel
- LED module base
- Circuit board module base
- 100 ohm Variable Resistor module (potentiometer)
- 1 Watt Solar panel
- Adaptors, tubing clincher & purging valve
- Assembly instructions
- CD-ROM with renewable energy curriculum manuals



NEW! CD included in ALL Horizon Kits

Horizon's Renewable Energy EXPERIMENT MANUAL

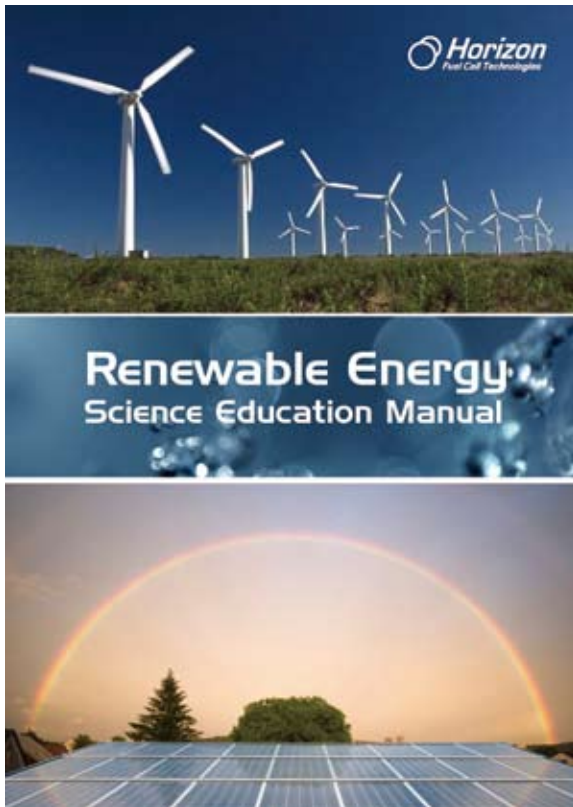
Designed to be premier experimentation manual with over 20+ experiments for middle school to high school level sciences. Performs an assortment of informative and relevant experiments using Horizon's science kits as hardware. Also introduces students to theory behind renewable energy sciences, basic electronics, data logging software, and contains activities to sponsor new ideas and encourage a next generation of green engineers and designers.

The manual also offers suggestions for further study on specific topics and theory. Written around the Renewable Energy Education Set, Solar Hydrogen Education Kit, and Hydro-Wind Education Kit, this book also includes setup adaptations that allow students to use Horizon car kits to perform a variety of the experiments as well.



Renewable Energy Education Curriculum

- Renewable Energy Education Manual
- Horizon Experiment Manual
- Flash Animations
- New Science Kit Assembly Guides
- Technical Support Section with Videos



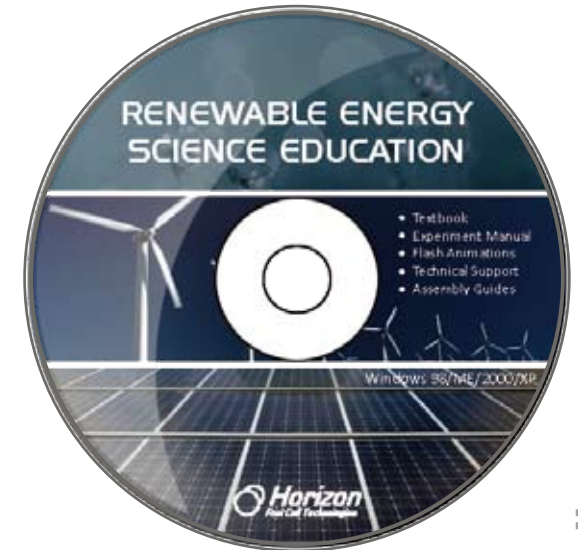
Renewable Energy Science EDUCATION MANUAL

The most complete and informative book available for introducing students to renewable energy. This manual showcases the technologies contained within Horizon's science kits and the latest developments in clean energy. The manual covers an array of topics in 7 chapters

- Global Warming & Climate Change
- Solar Technologies
- Wind Technologies
- Electrolyzers
- Fuel Cells
- Hydrogen Storage
- Basic Electronics

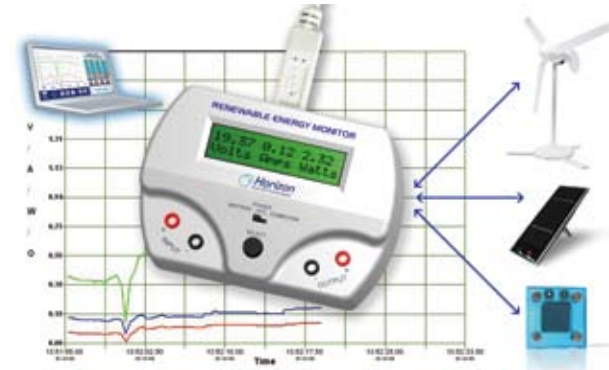
Explanatory FLASH ANIMATIONS

Easy to follow Flash animations that describe and show how a fuel cell works, different types of fuel cells, electrolysis, and various applications for fuel cells.

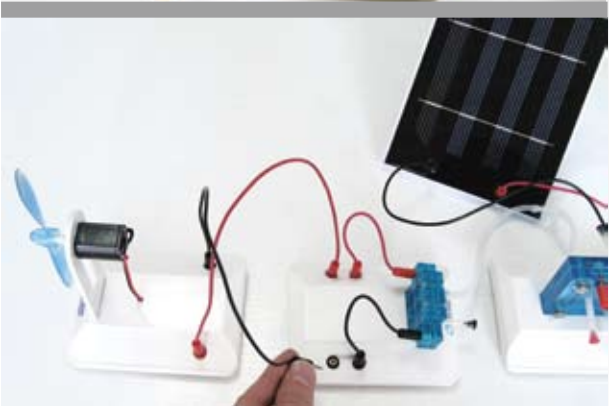
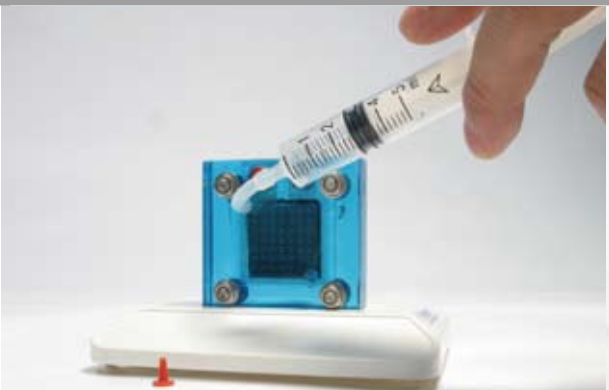


Renewable Energy Monitor

(sold separately)



The Renewable Energy Monitor is an educational evaluation and monitoring device with measurement software for graphical display of performance characteristics on your PC. This unique new device provides an immediate, graphical way for recording data directly- with no formulas and nothing to calculate. Numerous experiments and evaluation activities for hydrogen fuel cells, miniature wind turbine kits, and solar panels will now be quantifiable in real time for voltage, current, power, joules, resistance, and even RPM speed. Compatible with any of Horizon's clean energy educational kits!



Now available!

*For pricing and wholesale enquiries
Contact dane@horizonfuelcell.com*

Kit packaging dimensions:

430x303x105 (mm)

16.9x11.9x4.14 (in)

Carton size:

620x440x350 (mm)

24.4x17.3x13.8 (in)

6 kits per carton

www.horizonfuelcell.com