Unit of Execution	Environmental Education Centre
Programme	Green energy in my house
Name	
Programme	Ken, Chuian-Fu / Hsieh, Chiu-Lan
Hosts	

## 1. Programme abstract:

Our school upholds the spirit of prospering with the local community and industry, and it uses the strength of local universities to develop local characteristics, solve industrial problems, and fulfil the social responsibilities of a university. To achieve the vision of humanistic care, environmental conservation, talent cultivation, and local industry sustainability through environmental practice curriculum planning, our school will recruit residents of the Taichung, Changhua, and Nantou community; volunteers from local environmental protection groups; returned young farmers; and young students from universities and colleges to participate in the activities to understand local environmental issues in-depth. To cooperate with the Energy Conservation and Carbon Reduction Policy of the Environmental Protection Administration (EPA) of the Executive Yuan, as well as 12-year compulsory education, the programme integrates environmental education into the fields of life science, technology application and learning, and design-related courses.

The programme trains seed teachers and volunteer associations, promotes the application of renewable energy and energy transformation, implements energy-saving actions, and improves energy-saving education and resource sustainability. The programme also cooperates with local schools and communities in Fangyuan to promote the development of environmental education concepts, strengthening local connections and assisting in problem solving. In addition, the programme solves the problem of certification extension for environmental education personnel of units affiliated with the EPA's main business department.

## 2. Results:

A total of 151 trainees participated in this programme. Participants consisted of students in college or above; faculty members of our school; people in local community groups and locals from Fangyuan, Changhua; ecological commentators; cultural and historical workers; and teachers in elementary and middle schools, etc., who are interested in environmental education. There were no additional fees.

- 1. Course for Green Energy Sustainability Facts
  - 1. Provide students with an understanding of the current status of green energy technology in Taiwan.
  - 2. Through the on-site investigation and comparison of offshore wind power and

the dialogue with the commentators in Taiwan Power Company, the course encourages trainees to understand the actual state of the green energy environment of the local community and to understand how to obtain and use relevant government resources.

- 2. Home Energy-Saving DIY Course:
  - 1. Introduce new knowledge of energy-saving techniques in life, enhance the breadth and depth of students' environmental knowledge with the addition of the 30 years of development experience in Dutch offshore wind power to the course, and deepen the relationships among community residents. The impact of renewable energy on the local environment and industries is incorporated, and practical experiences or cases from domestic and foreign communities are discussed.
  - 2. Actually assemble LED bulbs to understand the principle, observe the power consumption through the electric meter and actually replace different types of bulbs and tubes on the spot to demonstrate the actual power consumption of energy-saving appliances.
- 3. Community Action Course and Activities:
  - 1. Through the actual repair of small household appliances and other operations, practically teach students about the safe use of home electricity. Furthermore, students are asked to inventory and share which electrical appliances at home are large energy-consuming appliances.

2. Private experts participated in the event, sharing many small details and tips on home appliance repair.

- 3. Through actual visits to the resource inventory for the Wang Kung oyster art community, the local SWOT is understood. After they were taught technology plan design and courses in green energy and learned about innovative community action design curriculum concepts, at least three sets of teaching plans were designed to be provided to the Wang Kung oyster art community.
- 4. The activities not only involve young students, but also community residents. Through many course discussions, exchanges, and sharing, new highlights of local green energy are explored. Using innovation + creativity + practice, community green energy education is improved, and new ideas for teaching plans are developed.
- 5. To allow students to be closer to the community environment, topic discussions and creative teaching plans are designed. Through rolling revision and group operations, the planning, design, and communication of green energy teaching plans are completed.
- 4. Green Energy "Come to My Home" Course:

- 1. Let the students actually assemble solar panels and see their working efficiencies.
- 2. Through the sharing of Sunnyfounder, students learn that there are many different ways to join in use of green energy.
- 3. Through a symposium, students' suggestions for this programme can be learned, and students can share their learning and opinions, so that people can have more communication channels.

Corresponding SDG indicator

SDG01 SDG02 SDG03 SDG04 SDG05 SDG06 SDG07  $\square$ SDG08 $\square$ SDG09 $\square$ SDG10 $\square$ SDG11 $\square$ SDG12 $\square$ SDG13 $\square$ SDG14 □SDG15□SDG16**∭**SDG017

Supporting photos





Caption: Visit to Fangyuan wind turbine

Caption: Explaining home appliance repair





Caption: Green energy curriculum design | Caption: Assembling solar panels activity

**Related** links

Link for Environmental Education Centre of NCUE https://reurl.cc/zemVZQ