



โรงเรียนสร้างสรรค์สิ่งแวดล้อมดีเด่น เฉลิมพระเกียรติ

::NEWS CLIPPING::

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'THE GREENEST SCHOOL IN THAILAND'

The greenest school in Thailand?

How one school in Khon Kaen is teaching students to reduce, reuse and recycle

Ponsinee Kimpee is happy whenever her father fries eggs. It means that the 13-year-old can add the used vegetable oil to a bottle which, once full, she can take to school to be used to fuel the school van.

At Kumnongkoo Municipal School in Khon Kaen province, students are proud to produce their own biodiesel — a cleaner and cheaper alternative to conventional diesel — from recycled bio-oils. All Matayom 6 students are required to study biodiesel production as part of the school curriculum. The biodegradable fuel is used in the school van and in tractors operated by people in the local community.

Biodiesel is produced by combing vegetable-based waste cooking oils with methanol, using potassium hydroxide as a catalyst. The result is pure biodiesel with crude glycerine as a by-product.

Biodiesel works in conventional diesel engines no differently to derv, yet produces less emissions.

To raise public awareness and build support for policies that reduce global warming pollution and enhance the nation's energy security, since 2006 the school has sought to preserve natural resources and develop alternative sources of renewable energy.

As a result, Kumnongkoo Municipal School recently won the Honda School Environmental Challenge IV award in the Energy Category. The award was created in 1999 to support His Majesty the King's desire to meet the environmental challenges facing Thailand. Honda received permission from His Majesty to present the award to schools that demonstrate an outstanding commitment to preserving the environment in the areas of waste management, waste

water management and energy management.

Kumnongkoo Municipal School aims not just to produce biodiesel but to help protect the environment overall, said principal Chaimongkol Atthapongpaisarn.

Other environmental activities initiated at the school include organic gardens and a "rubbish bank" where students can "deposit" their recyclable rubbish and "withdraw" money. Students are also encouraged to use recycled paper and collect rubbish inside and outside the school area.

Asked if she was ashamed to be seen collecting rubbish on the streets, Ponsinee replied with a smile "sometimes I can't find even a single piece of paper on the street, so I go to events and parties in town and go home with a huge bag of glass bottles. I'm very proud of myself. I keep the streets clean and I can save money from rubbish. Those who throw rubbish on the street should be the ones feeling ashamed of themselves."

Apart from these initiatives, teachers

also encourage students to participate in environmental protection and conservation citing three general approaches: Avoidance, reduction and recycling.

"Students not only know how to make biodiesel, but also how to use it as well as other energy sources wisely. We encourage students to take responsibility for the environment as a whole and raise awareness of the environmental aspects of energy use," said Chaimongkol. "Students are encouraged to use their own stainless steel cups and to avoid using plastic bottles. They also wash their own dishes after lunch and use recycling bins in their classrooms. We want to make the learning process easy on students and have them use their 'green' knowledge in their daily lives."

The school has also built an "Energy Home" of ten solar panels on its roof to help provide its electricity. It also built a pedal-powered water pump, a pedal-powered washing machine and a pedal-powered grain mill. Students can pump water for use in the organic garden, can wash some clothes used in school activities and mill their own grain



Students at Kumnongkoo Municipal School learn how to turn used cooking oil into biodiesel.



without using any electricity.

"By milling our own grain we can avoid the use of agro-industrial chemicals and students can learn that it's not easy to get a plate full of rice: They might have to pedal for a whole hour!

So they try to finish their meals since they don't want to waste food and waste more of their sweat," said science teacher Khanokporn Sirimala.

All in all, the school serves as a resource centre where technology and

knowledge that are ecologically and socially appropriate are both disseminated and implemented, said Khanokporn.

"Many students have channelled concern for social and environmental issues into school activities," she said. "Apparently, their rubbish output has fallen and many students turn off appliances, lights and equipment when they are not in use. They are not forced to do this, but they are willing to do it and tell other people in their families and communities how to improve the environment. We all know that it's everybody's duty and responsibility to take care of and sustain our environment."

How are you helping to reduce your ecological footprint? Share your eco-friendly activities with us by emailing usnisas@bangkokpost.co.th.



School-made biodiesel is used in the school van.



The school's pedal-powered grain mill.



The school's 'rubbish bank'.