

Imagine using trash to power your TV

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YOU may one day get electricity from your garbage, and pay less to dispose of it, if a new research centre successfully designs a dream system for converting waste into energy.

Under this system, each community will have a hub that collects its organic waste, and then use it to generate electricity.

The hub will then channel the electricity to the homes in the community.

The Residues and Resource Reclamation Centre (R3C) aims to achieve this in five years' time.

R3C director Wang Jing-Yuan said that, with this system,

less trash will need to be sent to incinerators or landfills, and less energy will be spent on transporting it.

This will in turn lower disposal costs, he said.

The centre, the latest addition to Nanyang Technological University's (NTU) Nanyang Environment and Water Research Institute, was officially launched yesterday.

It also plans to create toilets that can minimise the amount of water used for flushing, and make waste-water reclamation easier.

It will collaborate with waste-management companies - such as SembCorp Industries and Keppel Seghers - along with the National Environment Agency to turn ideas for recycling waste, and for purifying and saving water, into reality.

Along with the R3C, two other facilities under the institute, which have been active for a year, were also officially launched yesterday.

One of them, the Singapore Membrane Technology Centre, will look into cost-efficient methods of purifying waste water.

The other is a collaboration between NTU and Danish waste-water consulting firm Dansk Hydraulisk Institut (DHI). The DHI-NTU Water and Environment Research Centre and Education Hub aims to develop new ways of managing water and waste.

The three centres will receive a total of \$95 million from the Environment and Water Development Council, the Economic Development Board, industry partners and NTU over the next five years, to fund their projects.

In the past three years, the Government has pumped \$680 million into the "cleantech" industry, which involves the development of environmentally friendly technologies for recycling water and waste, and producing clean energy.

The sector is expected to be a key growth area, said Mr Goh Chee Kiong, the Economic Development Board's director of cleantech.

He estimates the number of jobs in the sector would triple from 6,000 three years ago to 18,000 in six years' time.

By that time, cleantech is expected to contribute \$3.4 billion to Singapore's gross domestic product.

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