

PAVING A NEW PATH

A collaboration between Dow, SCG, the FTI and a school hope to make recycled plastic roads more common. **B3**

DEVELOPMENT

FTI: Recycled plastic roads key to BCG



A road inside RIL Industrial Estate in Rayong is built with plastic-mixed materials under a joint project of Dow Thailand and SCG Group to promote a circular economy.

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The Federation of Thai Industries (FTI) stresses cross-sector cooperation such as the latest multi-party move to promote recycled plastic roads as a key to helping Thailand achieve its BCG goal.

BCG, which refers to bio-economy, circular economy and green economy, shares the goal of better natural resource use while driving economic activities.

"Thailand has potential to adopt BCG, but it requires close cooperation from all sectors," FTI chairman Supant Mongkolsuthree told the *Bangkok Post*.

Following the FTI's agreement with 18 private and state agencies on BCG model development in July, expected to benefit 50,000 people, a tripartite cooperation on the road project between transport officials, university scholars and businesses has been formed.

The goal is to turn plastic waste into a value-added material for road construction, marking a "crucial start" for

the Highways Department to change its method of building and repairing roads in the future, department chief Sarawut Songsivilai said.

His department, together with the Rural Roads Department, joined hands with Chiang Mai University; SCG Group, Thailand's largest cement maker and industrial conglomerate; and chemical maker Dow Thailand to conduct a more thorough study on new road construction techniques and better plastic waste disposal.

They want to promote a circular economy that emphasises upcycling to make unwanted materials usable and gives them higher value.

Earlier tests by SCG and Dow found plastic materials can be mixed with asphalt concrete to build stronger and more durable roads. The construction was carried out in many places, including a road near Bang Sue pond in Bangkok and industrial estates in Rayong and Chon Buri.

According to their findings, a road

one kilometre long and six metres wide requires three tonnes of recycled plastic. That amount is equivalent to almost 900,000 plastic bags.

SCG and Dow have built recycled plastic roads spanning a distance of 7.7km, using up to 23 tonnes of plastic garbage.

Mr Sarawut expects the new study will lead to wider application in other public places, helping the country build transport infrastructure.

"We are a builder and repairer of more than 70,000km of two-lane roads countrywide," he said.

"One of our strategic plans is to support innovation and other modern technologies to develop highways."

President and chief executive Roon-grote Rangsiyopash said SCG will share with the study team its experience in the upcycling process, from sorting plastic garbage to cleaning and grinding it.

"We need to use resources more wisely to cope with global environmental problems, particularly plastic

waste, which lacks efficient management," he said.

Dow Thailand president Chatchai Luanpolcharoenchai believes using plastic materials this way will be a good solution to the garbage, which is barely recycled.

His company has built recycled plastic roads in the US, India, Indonesia, the Philippines, Vietnam and Thailand to raise environmental awareness based on the circular economy.

Similar roads were also built in the compound of Chiang Mai University under its waste management scheme, said rector Niwes Nantachit.

"When all of us work together, our efforts will amplify positive outcomes," said Mr Chatchai, applauding the stance shared by the three parties.