

Recycler weaves jugs into rugs

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KAIZUKA, Osaka Pref. — Many companies are turning to recycling in response to rising public concern over the environment. But for one of the nation's most successful recycling companies, local carpet maker Negoro Sangyo Co., "green" still means the color of money.

Negoro Sangyo Co. began recycling polyester scraps into carpet fibers in 1973, not because it would wear well with conservationists, but because it made good economic sense.

During the 1973 oil crisis, the cost of petroleum-based polyester yarns for making carpets increased by 30 percent. So the company turned to polyester scraps left over from manufacturing videotapes, telephone cards and polyethylene telephthalate resin (PET) bottles.

The move has paid off. Negoro now occupies more than 50 percent of the domestic market for household carpets, according to Isao Negoro, president of the Senshu-based company.

"My only concern at that time was economic — lowering the cost of making carpets," Negoro said.

It costs about ¥150 to make yarn for 1-sq.-meter of carpet from scraps, compared with ¥180 per sq.-meter when polyester yarns are used.

This 20 percent cost savings occurs despite the extra processing needed to turn scraps into fiber, Negoro said.

Plastic scraps collected from factories are crushed into pellets, which are blended to adjust their viscosity. After blending, they are melted and transformed into fiber.

The fiber is dyed, coiled around a core thread by a high speed spinner and transformed into yarns that are tufted onto backing sheets to make carpet.

In contrast to many companies now trying to adopt environmentally friendly policies to boost their image, Negoro Sangyo can take advantage of the trend toward conservation without any major shifts in policy and practice.

"When we started to use polyester scraps, wholesalers



CARPETS MADE from recycled plastic bottles are shown by Negoro Sangyo President Isao Negoro, whose green activity has been a huge success. KIMIO IDA PHOTOS

told us to hide it, saying it would damage the product image," Negoro said. "These days, they ask us to advertise the fact that we recycle to help sell carpets."

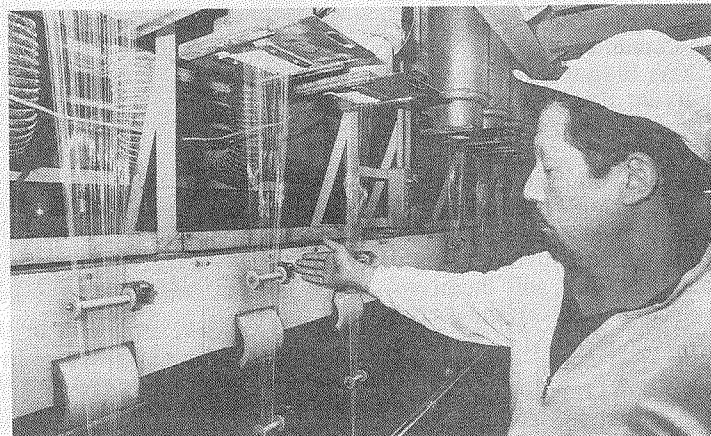
The company also has received many inquiries from customers who have heard about the recycling and want to know how to recognize the products in shops, Negoro said.

Responding to requests by wholesalers and consumers, the company started marketing a range of printed carpets named "Ecology" in spring.

Negoro sees another way his company can benefit from growing environmental awareness. Consumer movements that collect PET bottles for recycling may provide a stable supply of polyester materials.

The company currently uses about 1,000 to 1,300 tons of polyester scraps monthly. About 70 percent of this material is supplied domestically. But the firm must import the remaining 30 percent from the U.S., where PET bottle recycling programs are firmly established.

If similar programs were established in Japan, the secure supply channel would enable the company to expand into items other than carpets,



MOLDING MACHINES release fiber threads of melted polyester materials for weaving carpets in the Negoro Sangyo recycling factory.

Negoro said.

Domestic consumption of PET bottles grew drastically in the past decade due to its light weight and durability. In 1991, about 1.6 billion bottles for beverages were produced. Most were buried underground after use, according to the PET Bottles Association.

Due to growing public concern over the treatment of industrial waste, both industry and consumer groups have launched programs to deal with PET bottles recycling in recent years.

Next spring, the association will open a factory to recycle the bottles jointly with a

waste disposal company, aiming to reuse 5,000 tons of polyester bottles a year.

Consumers Cooperative Kobe launched a pilot project last October to collect PET bottles from customers at its branch. It expanded the operation to 14 branches last April.

If these programs succeed, Negoro plans to utilize them as a secure polyester source in the future.

However, some observers point out the inconveniences and difficulty in collecting bulky PET bottles, which take up space to store and are costly to transport.