

\$12 million plant in Woodland to employ 50, divert tons of carpet from landfills (PHOTOS)

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Italian company Aquafil S.p.A. is building a carpet recycling plant in Woodland to divert rugs from Northern California landfills.

The 120,000-square-foot plant represents a \$12 million investment, and will eventually employ about 50 people, said [Kathy Long](#), spokeswoman with Aquafil America, based in Cartersville, Georgia.

[Keith Beswick](#), plant manager in Woodland, said the operation should start up by the end of the first quarter.

When it's running, a pair of continuous conveyor lines will devour, shred, spin, treat and separate carpet into its component parts in less than 30 minutes, Beswick said. The Woodland plant will have a capacity to process 36 million pounds of carpet per year. Aquafil is already collecting bales of used carpet.

The most valuable component of used carpet is Nylon 6, a high-value polymer, which can be treated at Aquafil's processing plant in Slovenia to again become virgin Nylon 6. Then it may again be used to make carpet.

The other main components of carpet are polypropylene, which is a cheaper common plastic, and calcium carbonate, which is a mineral.

Since April 2016, California carpet retailers have charged 20 cents per square yard on all new carpet sales to develop funding to encourage investments in carpet recycling. An Aquafil plant in

Arizona, which opened in December, and the Woodland plant will process carpet generated in California, and very little from Arizona, where carpet recycling is not subsidized, said [Franco Rossi](#), president of Aquafil America.

“Without the subsidy, we could not do this process. Calcium carbonate is basically dirt, and dirt is cheap,” Rossi said. The Woodland plant will sell its calcium carbonate to companies that make concrete or cinder block, he said.

Nylon 6 is a higher-value product, Rossi said. The Aquafil plant in Woodland will turn it into pellets, which it will then ship to Slovenia.

“It holds a good value because it can be made into its original base material again,” Rossi said. The pellets of Nylon 6 from Woodland will be processed into a monomer in Slovenia, where any dye can be extracted. Then the pure ingredient may be made again into a new polymer.

Based in Trento, Italy, Aquafil has 14 plants in eight countries that send Nylon 6 to Slovenia, Long said. The Woodland plant will use a combination of dry and wet processes to break the carpets down. The plant reuses its water and the company tends to seek out solar power to operate.

About 85 percent of carpet nationally is put into landfills, said [Heidi Sanborn](#), executive director of the National Stewardship Action Council in Sacramento. “It is a big problem. It’s bulky and takes up a lot of room, and yet it can be completely recycled.”

Aquafil sells its new Nylon 6 to manufacturers, including the more than 100 carpet plants based between Dalton, Georgia, and Atlanta, Long said. Nylon 6 is used in carpet because it's resilient and wear-resistant, Rossi said.