

Marine Debris



NOAA Marine Debris Program | Office of Response and Restoration | NOAA National Ocean Service

Hawaii's Nets to Energy Program & Partnership

Marine debris of all types accumulates in and around the islands of Hawai'i due to oceanic currents and winds in the North Pacific. Much of the debris is made up of derelict fishing nets. Large conglomerations of these nets, sometimes weighing thousands of pounds, are removed from Hawaii's reefs and shores each year. Instead of adding these nets to already congested landfills, in 2002, Hawaii's multi-partner marine debris group devised a unique program to use this marine debris to create electricity.

The nets are transported to the facility of Schnitzer Steel Hawai'i Corporation, a mainland-based scrap metal recycler. There the nets are chopped into small pieces suitable for combustion at the City and County of Honolulu's H-Power energy from waste facility run by Covanta Energy. Schnitzer Steel Hawai'i Corporation transports the chopped net pieces to the H-Power facility. There the nets are burned, producing steam which drives a turbine that creates usable electricity. All services (transport included) are donated free of charge.

This Nets-To-Energy program is possible only through the partnership and support of Hawaii's multi-partner marine debris group including the businesses listed above as well as Matson Navigation Company and Alliance Trucking.

Derelict fishing net, line, and rope removed during any and all NOAA-funded marine debris removal projects in Hawai'i are used to create electricity through Hawaii's Nets to Energy Program.

Since 2002, over 800 tons of derelict nets have been used to create electricity – enough to power nearly 350 Hawai'i homes for a year each!



Derelict net and rope are cut free of charge at the facility of Schnitzer Steel Hawai'i Corporation.

BENEFITS OF THIS PROJECT

- Minimizes government cost through significant industry involvement
- Minimizes impacts on already stressed Hawai'i landfills
- Produces oil-independent electricity through downcycling of derelict nets

Marine debris is

any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes.



Transported to the facility of Schnitzer Steel where nets are chopped into small pieces.



Combusted to create electricity at the City and County of Honolulu's H-Power energy from waste facility run by Covanta Energy.



100 tons of net = enough electricity to power 43 homes for a year!

For more information visit

www.MarineDebris.noaa.gov/projects/netstoenergy.html

Marine debris is

a problem we can solve together. Reduce, reuse, recycle, and participate in local beach or stream cleanups. If we each do a little, together we can make a big difference.