

Researchers develop system to clean seaweed from beaches

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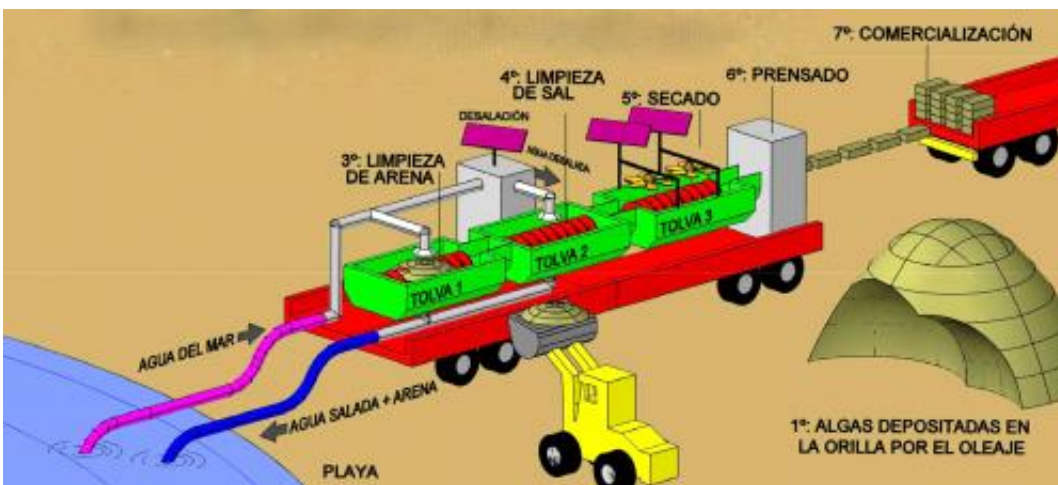


Seaweed on an Alicante beach.

A research group at the University of Alicante (Spain) has invented an algae removal and treatment system that turns this underused residue into a renewable source of energy: biomass. The process involves several stages of washing, drying and compacting without leaving the beach. Therefore, according to the team led by Professor Irene Sentana Gadea,

the system is cheaper, efficient and more environmentally friendly than the procedure used now by local authorities.

With the invention, protected with a national patent, up to an 80 percent of the weight and volume currently removed would stay on the beaches, as now with the seaweed water and sand are also sent to rubbish tips or [treatment plants](#). Professor Eloy Sentana Cremades says that as well as considerable savings on transportation, the new procedure would allow to give more uses to the dried seaweed.



Seaweed treatment system.

The system is based on a moving platform with wheels where three hoppers are installed. The first receives shovelfuls of wet seaweed with sand attached. [Seawater](#) is pumped in and poured back into the sea dragging the sand with it. In the next hopper, water purified with a solar-powered device would wash most of the residual salt from the algae, and in the third hopper it would be dried with air heated also by solar energy. The clean and dry seaweed could be then pressed by a system similar to the one used by rubbish trucks or converted into bales or pellets, ready to

be commercialized. No chemical products would be used in the process.

The method currently used has drawbacks such as the deterioration of beaches due to the extraction of sand that then has to be replaced, the weight of the waste, and the saturation of certain [landfills](#) to which it is taken. Also, as the material is impregnated with sand and salt and mixed with other wastes, the use of the dead seaweed is limited to rudimentary applications, such as aerating the ground for agricultural purposes.

Provided by Asociacion Ruvid

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