

This project is based on a whole autonomous closed system. It deals with food self-production and self-transformation. Everything is integrated in a global loop-system connecting all equipment elements, to optimize resources, energy and waste. The chosen solutions to reduce the need for energy are radical, including energy autonomy (gas and electricity for heating and lighting) and dinner by candlelight. More savings is found in food production, water conservation, on-site plants, like vegetables and mushrooms, harvesting of honey, self-processing dairy products, soap, bread: less importantly, only local products, using more raw food selected ways of cooking-boiling and baking. There is not cutlery to wash.

Thanks to bio-latrines, feces turn into fertilizer and creates bio-gas to supply electrical lighting. Bio-gas (methane) burning creates heat, water, and carbon dioxide consumed by seaweed. Rainwater is recovered in two tanks. One for toilet's ware supply and another for plants and vegetables watering. The cooking systems are autonomous.

The innovative cooking system is based on three autonomous appliances whose functions are washing, cooling and cooking. These objects are designed with transparent materials and can be considered as pedagogic items destined to be seen by everybody in the restaurant, including clients to whom permission to walk in the cooking area has been given. The chef is preparing meals at the common table, all clients turned towards him, so as to adopt new eating habits.

Beyond sustainable and practical measures, the concept is to reinforce conviviality by gathering people together around a common table and by creating a performative and interactive moment to bring the fun back into meal times, forgetting the rules of propriety.

The cooking appliance is a hybrid object, because it takes on oven and hob functions. It steams, fries, boils and bakes, just by removing or adding a lid.

The refrigerator works with a thermoelectric module called 'Peltiers chip'. It needs little energy, therefore it can be powered by germ-batteries. A high-tech membrane in aerogel managed the high-performance insulation. This appliance encourages new eating habits by the types of food it can keep cold, and by making possible wine improving, water purifying and cheese self-processing.

The rinsing of veggies and grains is done in a 'water sink-fountain', working on Heron's physics system. It's a closed water circuit, purified by water-treatment plant and fish. It looks like two stacked fish tanks filled with lightly salty water, one with a little *Gara rufa* fish and some depolluting plants, and another with red seaweed.