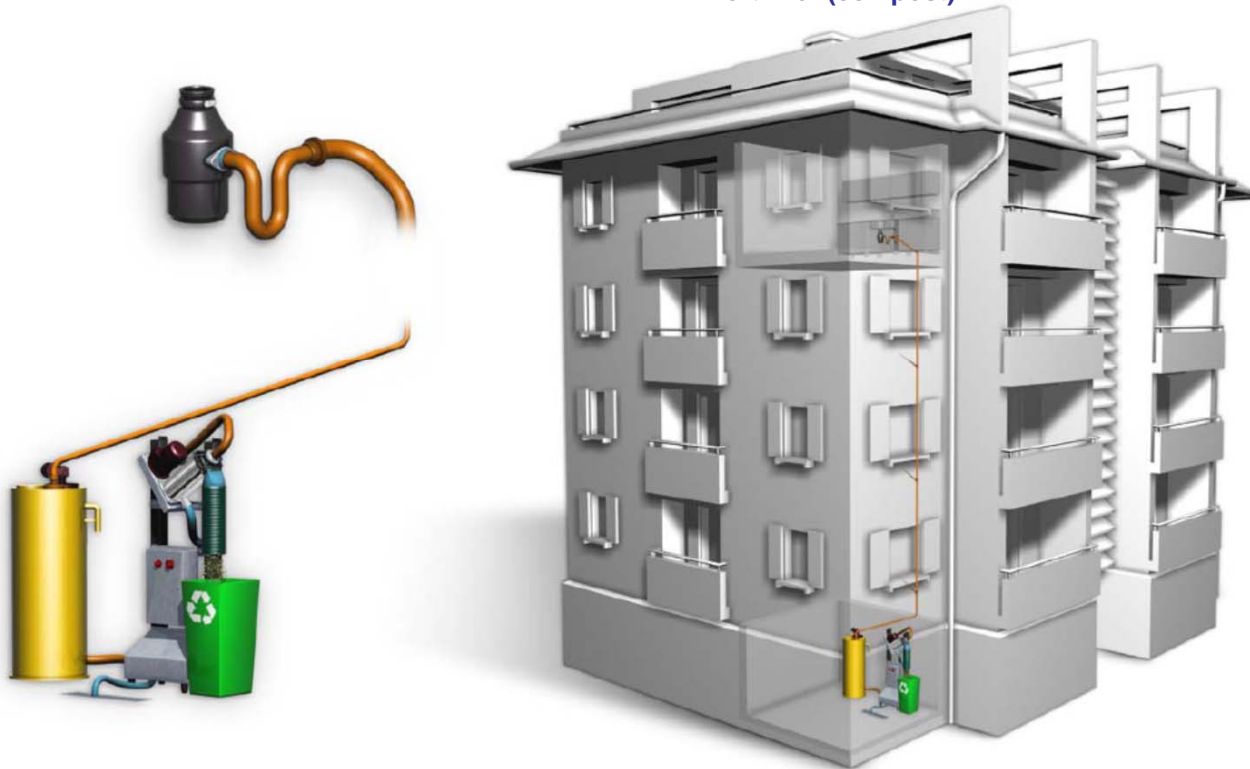


## C) FWD + DEHYDRATORS FOR RESIDENTIAL BUILDINGS



- Each household has installed its “collecting tool”, the FWD, just in the place where the food waste is produced, the kitchen’s sink. Furthermore FWD just grinds food waste
- The food waste is canalized, through the dedicated drainage line, to an area, usually in the basement, provided for its final collection
- Here a special tank and the innovative dehydrating equipment, controlled by a PLC, make the waste reduced in volume, deprived of liquid and low fermentation, ready to be collected at a scheduled time: for example at off-peak hours
- The ground and almost dry food waste can be efficiently treated for its recycling in anaerobic digesters or in composting plant, for green energy production. **Approximately from 1 tons of selected de-water food waste, it is possible to recover at least 150 cubic meters of biogas or about 100 cubic meters of methane; or about 0,30 tons of organic fertilizer (compost)**



# Model advantages

## For Municipal Companies:

- ✓ reduction of KFW (Kitchen Food Waste) in mass (50%) and in volume (80%);
- ✓ lower fermentation and absence of leakages because of the dehydrated state of the KFW at the end of the handling process;
- ✓ more balanced organization in collecting the waste during the cold and hot season;
- ✓ collection of high selected and fine shredded KFW mass for its recycling as agronomic fertilizer. This process benefits of a lower retention time thanks to the improved bacterial attack surface;
- ✓ availability of organic carbon in the waste water, at no cost, to keep under control the nitrogen content in the effluent water (for WasteWater Authorities);

## For Users:

- ✓ permanent food waste disposal system, reliable, comfortable and environmental friendly at a very low cost investment;
- ✓ better hygienic conditions in the kitchen and in collecting and disposing of;
- ✓ reduction of the handling and logistic costs in the waste management;

## For Real Estate Developers:

- ✓ lower urbanization charges;
- ✓ non-financial incentives such as: larger floor area ratios and greater heights than zoning laws allow, to encourage to adopt more sustainable practices;
- ✓ more competitive real-estate commercial proposal to the buyers.

