

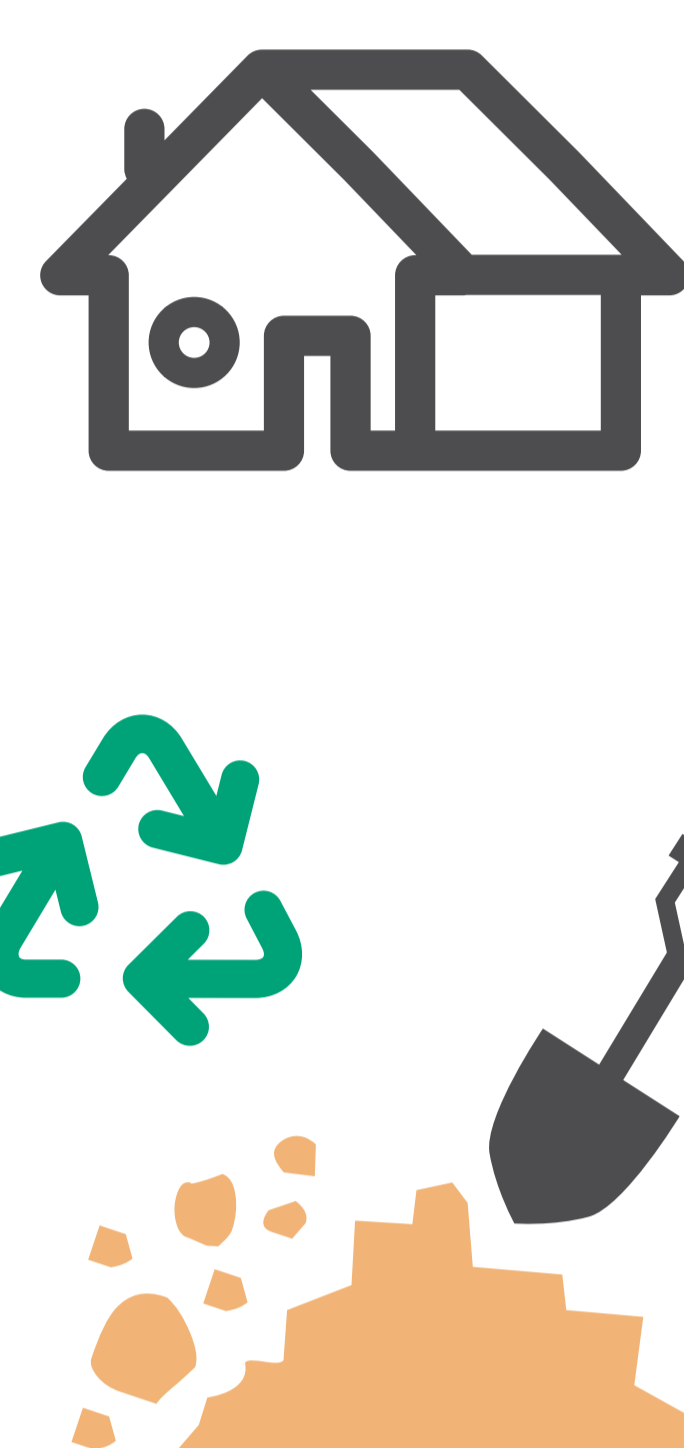
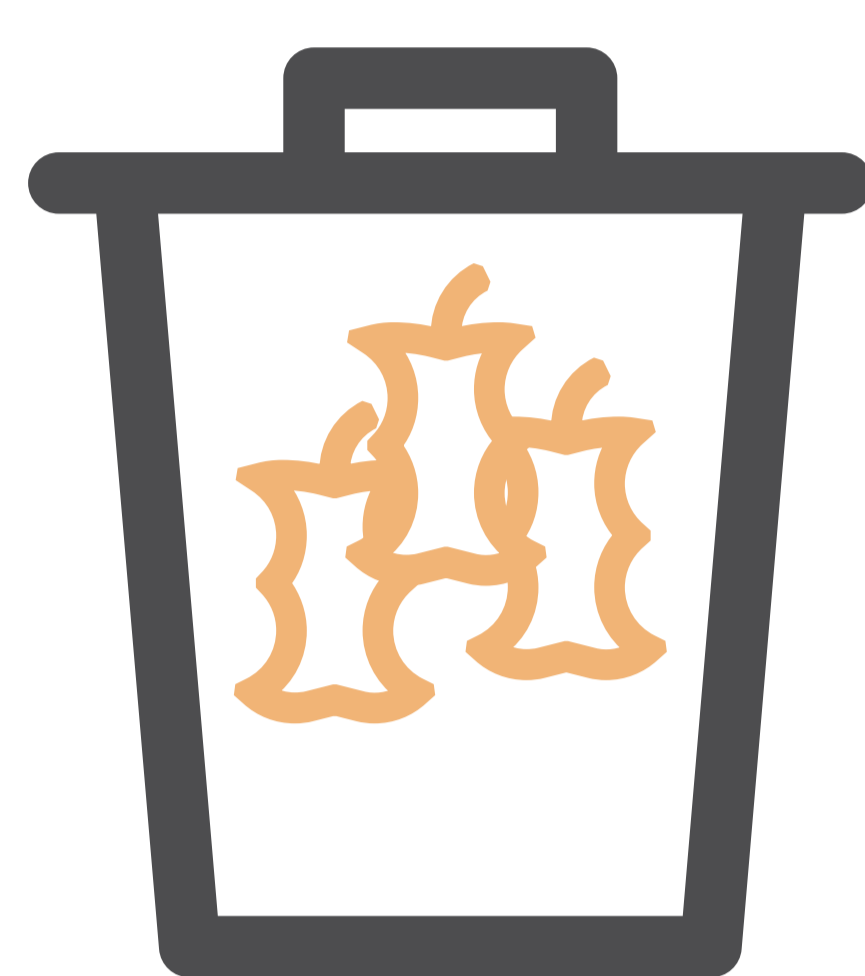
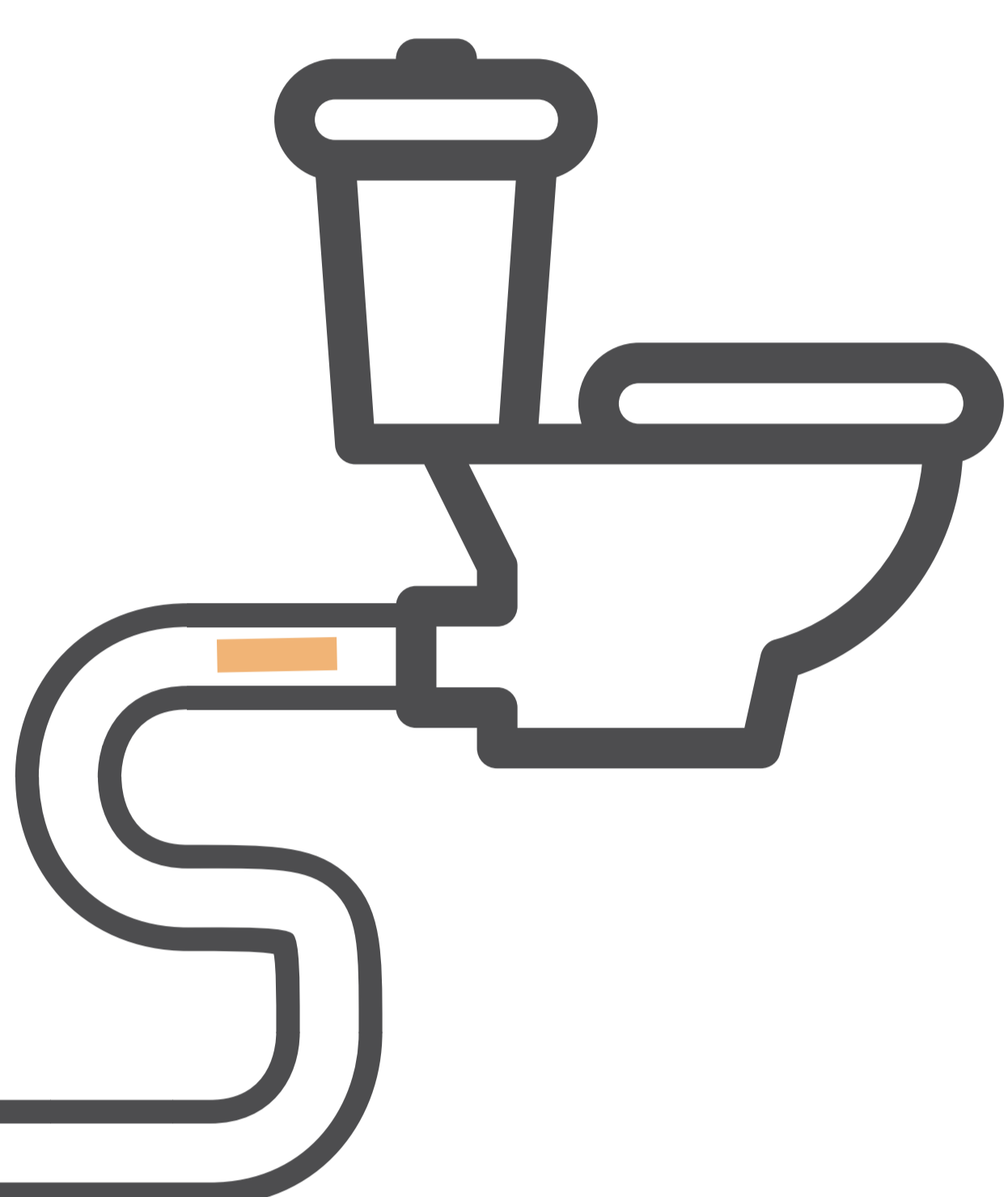
GREEN CHEMISTRY AND BIOENERGY

Recover all for a more sustainable world



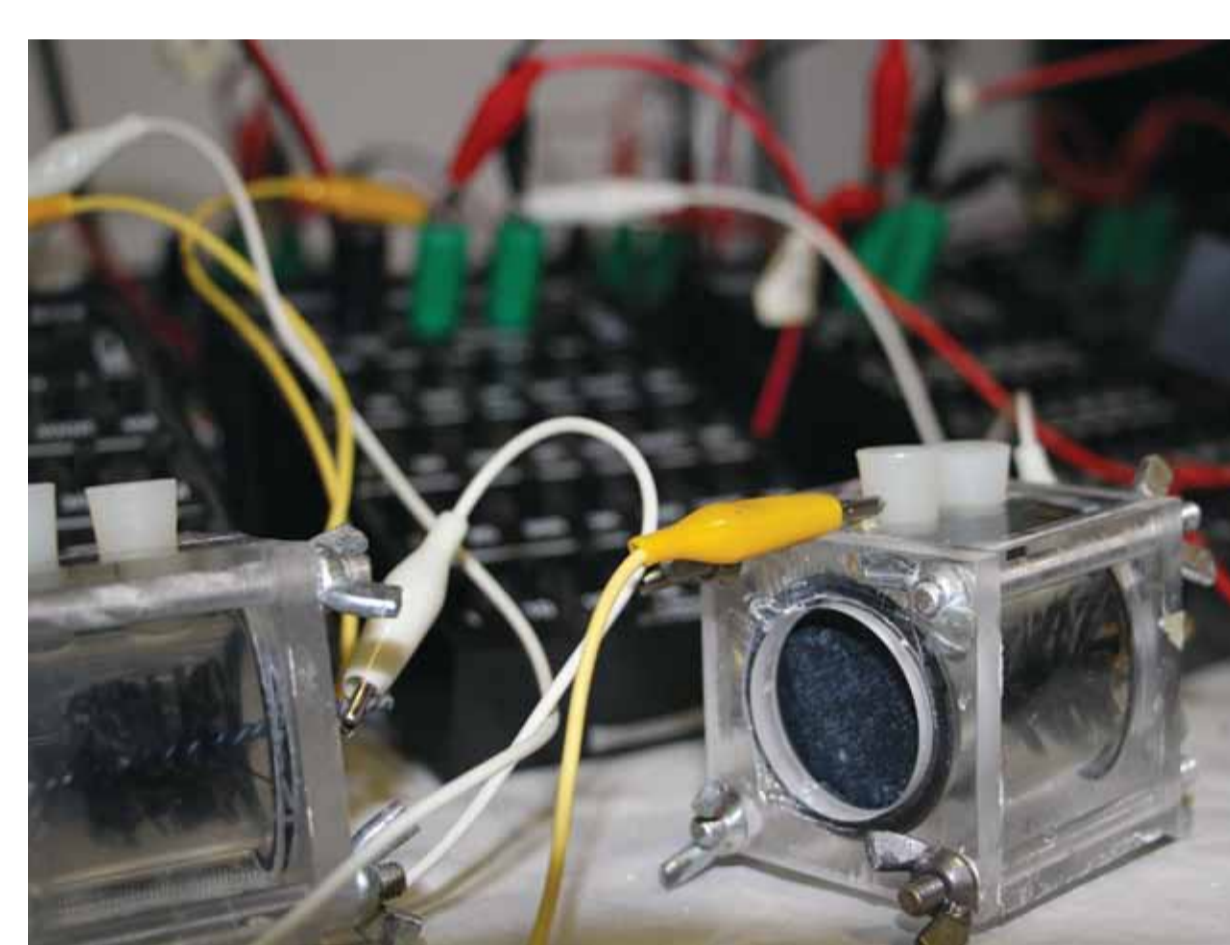
When we eat we produce **waste**, if it is used will become a valuable **resource**

The **treatment** of the organic fraction of our food waste and our dejection can produce renewable energy, fertilizers and renewable molecules useful to our well-being.



COMPOST

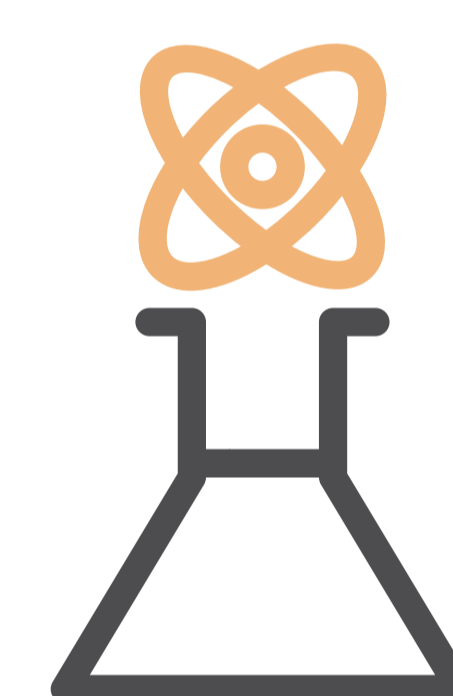
Through an aerobic degradation process of food waste, is produced a "soil" rich in beneficial properties for plants and suitable for cultivation in home and in open field.



MICROBIAL FUEL CELL

A microbial fuel cell is a bioreactor able to convert the chemical energy of the bonds of organic compounds present in

municipal wastewater into **electrical energy** through the metabolism of certain species of anaerobic microorganisms.

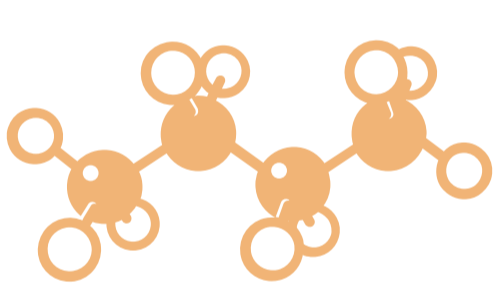


ANTIOXIDANTS

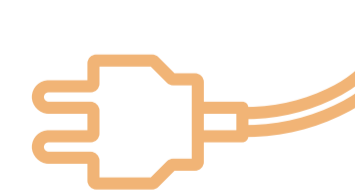
From residues of the food industry can be extracted **molecules beneficial** to human health, such as lycopene, an antioxidant found in the skins of tomatoes.

MICROALGAE

Unicellular photosynthetic organisms able to use the substances in wastewater to live. From microalgae are extracted **molecules beneficial** to human health such as Spirulina and Astaxanthin.



ANAEROBIC DIGESTION



Food waste and wastes, if degraded by anaerobic bacteria, produce biogas (converted into **electricity** on site) and a biomass can be used as **fertilizer**.



Progetto



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