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## Production of biofuels and biobased compounds in urban biorefineries: A new paradigm for green chemistry

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Urban bio-refining is an original concept aiming at using urban wastes (household wastes, municipal wastes, industrial liquid and/or solid residues and side-products, etc.), mainly of vegetable origin, for the production of an array of biofuels and bioproducts. This urban bio-refining concept fits particularly with the economic, geographic and politic contexts and constraints of the Walloon Region (south part of Belgium). Indeed, Walloon Region is a very small territory (area of about 6,504 sq mi) with a temperate climate. Supply feedstock, mainly arising from forestry and agriculture, are thus rather restricted, submitted to importation, and subjected to non-standardized quality. Several examples of our regional strategy, still available on an industrial scale, are herein proposed and detailed.

### Biography

Aurore Richel is a Professor and Head of the Laboratory of Biological and Industrial Chemistry at the University of Liege – Gembloux Agro-Bio Tech. The laboratory is engaged in research and education in the fields of biological chemistry, bio-refining and industrial technologies. She and her team are involved in numerous projects and industrial collaborations, specializing in the areas of optimized use of vegetal biomass for biofuels and fine chemicals, pretreatments and cracking of lingo-cellulosic biomass and development of new methodologies with low environmental footprints.

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