The shift of fuel microorganisms towards (oleo)chemistry

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There are 900 million vehicles running today, and there will be 1.5 billion vehicles running in 2030. With this perspective, the replacement of fossil energy and the risk of competition between food and fuel, the renewable fuel from the microorganisms (fungi, yeasts and bacteria) fermentation gained a lot of attention. Several technologies have been developed by National Research Institutes, granted by public funds, and then scaled up by newborn companies.

Their business model is copied from the oil industry: 10% of barrels which is used for chemistry generates 25% turn over whereas the rest of barrels going up to smoke only generates 75% turn over. So these bioenergy industries are building cellular biochemical platforms both for fuels and (Oleo) chemicals derivates production: bio based surfactants, renewable lubricants, bio based plastic…

We will present a panorama of the green derivates and describe the value chains consolidated through stakeholder's alliances.