



Waste biorefinery technologies for accelerating sustainable energy processes

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Olive pomace waste raw material as biochar precursor for arsenic adsorption

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Abstract: Olive oil production is one of the oldest biorefining processes in the Mediterranean. This process has evolved to become more efficient, but it still generates large amounts of waste in the form of olive pomace, which urgently needs to be harnessed and valorised. The BIOAs is a LIFE project aiming to demonstrate the environmental and economic feasibility of a process for the production of an innovative bio-adsorbent and, simultaneously, its use for the purification of drinking water from arsenic and other pollutants. The focus of the project will be the demonstration of a process to produce an innovative bio-adsorbent by the hydrothermal carbonization of the olive pomace (a by-product of the olive oil production industry) at a cost at least 50% lower, as compared to the conventional employed adsorbent GFH (Granular ferric hydroxide) and, simultaneously, its use for the water purification in line with the EU Directive of drinking water from arsenic. The LIFE BIOAs project involves six partners in Italy and Portugal. The planned actions of the LIFE BIOAs project will contribute to the implementation of the 6, 9 and 12 ONU objectives for a Sustainable Development for the Agenda 2030.