

PERSPECTIVES OF SRF / RDF FUEL IN UKRAINE

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Waste management approaches are being actively reformed in Ukraine, in particular for municipal solid waste (MSW). On November 8, 2017 the National Strategy for Waste Management in Ukraine until 2030 was adopted; on February, 2019 the National Waste Management Plan till 2030 was adopted by the decision of the CM of Ukraine. According to the Plan, an act of the Ministry of Regional Development "On approval of recommendations on the use of waste from refuse-derived fuels (RDF)" should be developed in Ukraine.

Already adopted DSTU EN 15359: 2018 "Solid Renewable Fuels (SRF) - Technical Characteristics and Classes" (EN 15359: 2011, IDT), which provides SRF characteristics for three important qualitative parameters:

- Economic parameter (net calorific value, NCV),
- Technological parameter (chlorine content),
- Environmental parameter (mercury content).

According to the European standards, the NCV of SRF > 15 MJ/kg. Compliance with these parameters ensures the possibility of using SRF in waste incineration plants or in incinerators (in coal-fired power plants or in cement kilns). The State Agency on Energy Efficiency and Energy Saving of Ukraine and the Ukrainian Cement Manufacturers Association, Ukrcement, started cooperation on the production of SRF fuel in Ukraine, with the further use of SRF for cement furnaces complying with environmental norms.

RDF is a fuel derived from a waste with NCV = 8-14 MJ/kg. RDF is a generic term used for mixed waste, the composition, characteristics and properties of which are not fully known. RDF is not a "stable" material. It is subject to reactions and degradation at a rate that can be unpredictable because of its heterogeneous composition and not standardized preparation. None of the RDF fuel production stages involves the removal of such hazardous waste as batteries, lamps and devices containing mercury, residues of drugs, paintwork and the like. Its use in waste incineration plants or in incinerators is only possible after the installation of gas cleaning equipment to comply with the provisions of Directive 2010/75 / EC.

The work presents comparative characteristics of SRF and RDF fuel and considers the possibility and feasibility of their use in Ukraine.