



Castor Oil for HVO



The castor oil plant (*Ricinus communis*) is native to Africa. A non-food plant, it is resistant to the hot, dry climate and needs little water, it therefore does not displace any land from food use. Castor seed typically contains between 40 percent and 60 percent oil, it has already been used by the industry in petrochemical applications, used as a lubricant oil for two-stroke engines before the development of synthetic oils.

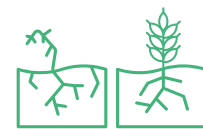
ENI, partner of the BIKE project, is developing a pilot cultivation of Castor oil plants in Tunisia and Italy (Sicily). This will be the world's first example of semi-industrial non-food being cultivated in a pre-desert area to generate sustainable biofuels, and it will make environment-friendly vegetable oil available as an alternative to gradually replace palm oil, which the EU has decided to phase-out by 2030. The castor oil will be instrumental for the production of **HVO** (Hydro-treated Vegetable Oil), a sustainable biofuel suitable for use in the transport sector.



Valorisation and restoration of arid/abandoned land, reducing soil erosion risks



Opportunity to develop a local value chain and to improve local socio-economic conditions in Tunisia



The cultivation helps forming a barrier against desertification by creating a less extreme microclimate



Production of HVO by means of proprietary technology



Production of HVO from low ILUC feedstock replacing conventional vegetable oil



HVO available on the market for use in the transport sector (light and heavy duty vehicles)

Key principles

Low-ILUC risk feedstock

Being cultivated on arid/abandoned land, Castor oil plantations respect the principles of RED II thus being categorized as a Low-ILUC risk feedstock, capable of producing renewable fuels and creating new economic opportunities for local communities in less developed regions.

Sustainability

There is a growing demand for the next decade of several million tons of lipidic feedstock not to be in competition with food and feed sector.. The uptake of these feedstocks in the production of biofuels will avoid further land displacement around the world and will provide a considerable contribution for the decarbonization of the transport sector.



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More information:

www.eni.com