

Biorefineries and Eni

Our world currently relies on fossil fuels for the production of more than 80% of its energy. However, the consumption of fossil fuels causes greenhouse gas emissions as well as the exhaustion of non-renewable resources. This is the reason why biorefineries can play an important role in providing a new way to produce energy that is environmentally friendly and renewable.

■ What biorefineries do

Biorefineries are able to convert biomass into a variety of bioproducts, ranging from fuels for transportation to clothing.

Tons of biomass are produced worldwide every year and the quantity is likely to increase even more because of the amount of waste produced today.

The use of biomass in the production of energy and chemicals represents a clear advantage for our world.

■ Biorefineries in Italy

In Italy, the Italian multinational oil and gas company ENI has opened its second biorefinery in Gela, Sicily, converting an old oil refinery. The plant, launched in August 2019, turns used vegetable oil, animal fat, aquatic plants and the like into biofuels. As Eni's CEO has stated, the new biorefinery is "a step forward on the path to decarbonisation". In his opinion, getting value out of waste material and rubbish will represent an important future for the company and a great economic opportunity for the region.



■ Eni's technology

The technology used by the company, and first tested in the plant they opened in Venice some years before, is called Ecofining™, and it produces biofuel from domestic organic waste. This process is based on a particular technology that enables particulate emissions to be reduced and the engine efficiency of the vehicles which use it, to be improved. In this way, Eni is taking EU directives into full account by showing that the conversion of a conventional oil refinery into a biorefinery is possible with reasonable levels of investment.

Adapted from: <https://biofuels-news.com/news/eni-opens-second-biorefinery-in-italy-including-pilot-waste-to-fuel-plant/>

CEO (Chief Executive Officer): amministratore delegato
particulate: polveri fini, particolato

to range: spaziare
reasonable: ragionevole
step forward: passo avanti

1 Answer the questions.

1. What do fossil fuels cause?
2. What kind of energy do biorefineries produce?
3. Can people make clothes from biomass?
4. What is Eni?
5. When did Eni inaugurate its second biorefinery?
6. What does this new biorefinery represent according to Eni's CEO?
7. What is Ecofining™?
8. Where was it first experimented on?