



European
Commission

GEnluS

Graphene-based solution for tackling oil spills



The project aimed at upgrading the production and commercialization of Grafysorber[®], an innovative graphene-based product for use as an oil adsorbent in the case of accidental oil spills. It replaces traditional unecological and ineffective absorbents and dispersants and enables re-use of the recovered oil.

Welcome to the graphene age



Oil spill treatment



Recycling

The Grafysorber[®] adsorbent is obtained from natural graphite through a patented production process. It has a very high and fast adsorption capacity for oils and hydrocarbons - 24 kg can effectively adsorb up to 2 tonnes of oil. It is completely recyclable and guarantees the recovery of adsorbed oils through different methods. It thus greatly reduces the amount of waste deriving from oil spill clean-up activities. Apart from oil spills clean-up, the product is suitable for water decontamination in oil & gas treatment plants, where its efficiency, versatility and compatibility with other additives to improve water clarification is greatly valued. It enables the carrying out of treatments that are not conventionally performed.

The product was invented by the technological company Directa Plus through adaptation of its patented G+[®] Technology. The EU funding for its commercialization was released between 2013–2015. Since then, it has become a significant part of the company's product portfolio and is being developed further.











- **Product sold in Italy, Romania, Canada, Oman and Qatar**
- **Focused on the B2C sector**
- **Contact: info@directa-plus.com**



ECO-innovation
WHEN BUSINESS MEETS THE ENVIRONMENT

Environment
& Climate
Action

Commercialisation results & areas of success

-  Annual turnover: €0,5–1 million
-  Annual sales of Grafysorber®: €250 000
-  Expected revenues in 5 years: €5–10 million
-  Expected market share in 5 years: 26–50%
-  Expected employees in 5 years: 40
-  Acquisition of SetCar (170 employees), an international provider of environmental services, to speed up Grafysorber®'s spread
-  Two contracts for decontamination services signed since acquisition, worth €6 million over 7 years
-  A new production plant inaugurated in 2014 with initial 30 t/year capacity
-  Mobile Production Unit: able to produce needed adsorbent on-site
-  In 2020 a European patent covering Grafysorber®'s use to decontaminate water in oil refining processes was granted



Launched in 2008, the Eco-innovation initiative was part of the EU's Entrepreneurship and Innovation Programme (EIP), set up to support innovation among SMEs and to improve their competitiveness. It was included in the EIP's annual work programmes.

The eco-innovation initiative bridged the gap between research and the market. It helped good ideas for innovative products, services and processes that protect the environment become fully-fledged commercial prospects, ready for use by business and industry. In doing so the initiative not only helped the EU meet its environmental objectives but also boost economic growth.

The LIFE programme has financed green innovation and clean tech solutions since its start in 1992. One of today's key priorities for LIFE is to support close-to-market projects delivering innovative environmental solutions, ensuring that they are sustainable and capable of being widely taken up by society in general, and the economy in particular.

The Close-to-market initiative's aim is to help and assist the LIFE projects with market potential to develop towards successfully maintaining project results via commercialisation and upscaling of the proposed innovative solutions.

LIFE can help you to sustain and thrive even after the end of the LIFE project.

HOW TO APPLY FOR LIFE FUNDING

The European Commission organises annual calls for proposals. Full details are available at <https://ec.europa.eu/easme/en/life>
<https://ec.europa.eu/easme/en/section/life/life-close-market-projects>

LEARN MORE

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