



27112015 PRESS RELEASE FROM
AS GREEN CUBE MANAGEMENT

EU backed Norwegian Innovation = 100% Renewable Energy

The Norwegian bioenergy consulting company AS Green Cube Management, is proud to announce that a new mobile unit for upgrading biofuel is about to be completed. The project is a result of close and constructive efforts from five European nations, partly funded by the European Commissions FP 7 program.

Project partners consist of SME's (small and medium sized companies) and RTD's (research/development/Technology) from Norway, Sweden, Poland, Czech Republic and Italy.

The project goal is first to assemble a functional demonstration unit to filter and upgrade biofuels for heating and transportation. When completed, the aim will be to automate the unit and connect a full scale FFA (free fatty acid) unit, creating a factory where bio heating oil can be produced from various types and qualities of fat and other bio oils.

Keeping the factory portable, enables companies to produce biofuel on site.

The new factory is called Green Box, the filtering and upgrading unit will be ready for commercial use in 2016.

Ultimately, waste and residue oils from food, recycling, meat and fishing industry will be utilized as heating oil, or as biodiesel feedstock. Consequently, saving the environment from increased CO2 emissions, as a result from decreased consumption of fossil fuels.

Norway, like most European countries, struggles with collection and storage of an increasing amount of waste oils. Green Box will not only be a solution to this problem, it will turn what previously was an expense into profit.

Bio heating oil generated from Green Box will be a source for renewable energy in Norway, helping the Norwegian government reach its goals to reduce emissions, and be a sustainable alternative to the governmental goal to remove fossil fuels used in heating for public and private housing within 2020.

Factsheet:**Bio heating oil/ Biodiesel**

- These bio fuels will replace fossil fuels and are well suitable for oil burners.
- Biodiesel replaces fossil diesel within transportation: truck, buss, train, heavy vehicles and stationary machinery with a diesel engine.
- Bio heating oil (BFO#1) can be stored over several years in tanks both out and inside.
- BFO#1 can be used by all oil burners made for light fossil heating oil.
- BFO#1 is an alternative when fossil heating oil is phased out in Norwegian by 2020.
- Ships and ferries can be modified to use renewable marine biodiesel.

Project partners:**Green Cube Management**

Green Cube Management (GCM) specializes within renewable fuels, such as conversion to renewable fuel, logistics and project management related to environmental initiatives. GCM offers consulting services related to renewable fuels for heating, bioenergy for transportation, construction and agriculture. GCM operates tank terminals and warehouses for biofuel and biodiesel, establishes heating facilities and develops IT tools.

Teknologisk Institutt AS

Norwegian, multidisciplinary knowledge company that offers services within a wide range of areas, such as: aerospace, oil and gas, renewable energy and telecommunications. Teknologisk Institutt (TI) is heavily involved in the project, focused on product development and project management towards the European Commission. TI has extensive experience with EU funded programs and a major contributor to the consortium.

Labor S.R.L.

Labor is a privately owned laboratory working with process development and control functions within handling of industrial waste. Labor's company structure and knowledge of the industry offers extensive analysis, design of prototypes and testing.

ICSO

The Institute of Heavy Organic Synthesis "Blachownia" (Polish abbreviation - ICSO) is an R&D center working within the field of organic chemistry. Since 1952 it has been a successful partner for both domestic and foreign organizations developing, implementing and improving chemical processes, production and sale of commodity chemicals. ICSO belongs to the top research units in Poland, which is proved by the category A, granted to ICSO by the Committee for Evaluation of Scientific Units. ICSO carries on R&D and implementation works within the scope of chemical sciences, performs chemical research, tests and analyses. The competence and experience of ICSO is proved by numerous publications, patents and commercial implementations.

Filtersystem Scandinavia AB

Swedish company that specializes within filter systems and filtration of bio oils. Filtersystem Scandinavia is responsible for the range of bio oils tested in the GreenBox gets filtered adequately for commercial use.

Asio spol. s.r.o

Asio is a company from the Czech Republic, working with development, production and technical services within waste treatment and water/ air purification.