

Annex II: Agrofuel-related projects funded under the FP7

Project name and budget	Partners	Description
<p>Industrial crops producing added value oils for novel chemicals</p> <p>Money received: € 5.791.183 from a total budget of € 10.774.424</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Sveriges Lantbruksuniversitet (Sweden) Partners: Universitaet Bonn, University of British Columbia, Axel Christiernsson International Aktiebolag, University of Guelph, Uniwersytet Gdanski, Universitaet Goettingen Stiftung Oeffentlichen Rechts, Centre National de la Recherche Scientifique, The University of Warwick, Commonwealth Scientific and Industrial Research Organisation, Plant Research International B.V., Rheinisch-Westfaelische Technische Hochschule Aachen, Bayer Bioscience NV, Donald Danford Plant Science Center, Iowa State University of Science and Technology, National Research Council of Canada's Plant Biotechnical Institute, Carleton University, US Department of Agriculture, University of Saskatchewan, Rothamsted Research Limited, Michigan State University, University of Alberta.</p>	<p>Replacing fossil oil with renewable resources is perhaps the most urgent need and the most challenging task that human society faces today. Cracking fossil hydrocarbons and building the desired chemicals with advanced organic chemistry usually requires many times more energy than is contained in the final product. Thus, using plant material in the chemical industry does not only replace the fossil material contained in the final product but also save substantial energy in the processing. Of particular interest are seed oils which show a great variation in their composition between different plant species. Many of the oil qualities found in wild species would be very attractive for the chemical industry if they could be obtained at moderate costs in bulk quantities and with a secure supply. Genetic engineering of vegetable oil qualities in high yielding oil crops could in a relatively short time frame yield such products. This project aims at developing such added value oils in dedicated industrial oil crops mainly in form of various wax esters particularly suited for lubrication.</p>
<p>Enhancing poplar traits for energy applications.</p> <p>Money received: € 2.987.778 from a total budget of € 4.140.924</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Institut National De La Recherche Agronomique (INRA) Partners: Swetree technologies AB-STT, University of Southampton, INRA Transfert S.A., Associazione Istituto di Genomica Applicata, Sveriges Lantbruksuniversitet, Flanders Interuniversity Institute for Biotechnology, Imperial College of Science, Technology and Medecine, Georg-August-Universitaet Goettingen Stiftung Oeffentlichen Rechts, Albert-Ludwigs-Universitaet Freiburg</p>	<p>The project is designed to develop domesticated energy poplars having both desirable cell-wall traits and high biomass yield under sustainable low-input conditions to be used as a source of lignocellulosic feedstock for bioethanol. Trees are attractive dedicated energy crops because they display a wide range of growth habits and can be grown on marginal lands unsuited to other agricultural crops including energy grasses, with reduced input costs and optimised land management.</p>

Project name and budget	Partners	Description
<p>Integrated European Network for biomass and waste reutilisation for Bioproducts</p> <p>Money received: € 775.003 from a total budget of € 870.894</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Haskolinn A Akureyri (Iceland) Partners: European Forest Institute, CENTIV GMBH (multi disciplinary research organization with the objective to support the competitiveness of small and medium-sized enterprises (SMEs) through technological innovations), Agricultural University, Chambre d'Agriculture di Centre, Procede Biomass BV, North Wales Mouldings LTD (doesn't exist any more), Ente Per Le Nuove Tecnologie, l'Energia e L'ambiente, European Biomass Industry Association, Plant Sciences Services GMBH, Biozoon GMBH, Lietuvos Energikos Institutas, Uinversitatea Tehnica Cluj-Napoca, Universidad de Santiago de COmpostela, Hoegskolan Kristianstad, Universitaet Fuer Bodenkultur Wien, Ukrainian Scientific and Research Institute of Ecological Problems, Danmarks Tekniske Universitet</p>	<p>This project promotes cooperation between research centres, business and other stakeholders devoted to the research, development and application of biomass and biofuel production and valorisation. It aims to make an inventory of biomass feedstocks in Europe and quantify the potential.</p>
<p>Sweet sorghum - An alternative energy crop for Biofuel production in semi-arid and temperate regions - SICA (Latin America, South Africa, India).</p> <p>Money received: € 2.967.975 from a total budget of € 4.950.937</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Centre de Cooperation International en Recherche Agronomique pour le Developpement (France) Partners: Universita di Bologna, International Crops Research Institute for the semi-arid tropics, Empresa Brasileira de Pesquisa Agropecuaria, Universita Cattolica del sacro cuore, Agricultural Research Council (ARC), KWS SAAT AG (independent seed company), Institut fuer energie - und umweltforschung heidelberg GMBH, Wirtschaft und infrastruktur GMBH & CO Planungs KG, Universidad Autonoma de Nuevo Leon</p>	<p>Bioethanol from crop plants is a promising, partial solution to sustainably satisfy the energy demand for road transport. The success of bioethanol from sugarcane in Brazil demonstrates proof of concept but cannot be transferred to water-limited or temperate environments. Fuel-food crops can help reconcile energy and food security issues. This project Will breed for improved cultivars and hybrids of sorghum for temperate, tropical semi-arid and tropical acid-soil environments. Molecular-genetic support is given by WP4 and agroecological adaptation in W5.</p>

Project name and budget	Partners	Description
<p>Targeted discovery of novel cellulases and hemicellulases and their reaction mechanisms for hydrolysis of lignocellulosic biomass.</p> <p>Money received: € 2.985.845 from a total budget of € 4.001.460</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Valtion Teknillinen Tutkimuskeskus (Vtt) (Finland)</p> <p>Partners: Institute of food research, Budapesti Muszaki es gazdasgtudományi egyetem, Wageningen Universiteit, Helsingin Yliopisto, A.N. Bakh Institute of Biochemistry of the Russian academy of sciences, Cooperatie Cehave Landbouwbelang U.A., Biogold OU, Dyadic Nederland BV, SEKAB E-technology, G R Wright and Sons LTD</p>	<p>The aim of the proposed project is to develop more efficient and therefore more cost-effective cellulosic and hemicellulosic enzyme tools for the enhanced hydrolysis of pre-treated lignocellulosic biomass in simultaneous saccharification and fermentation (SSF) conditions for bioethanol production.</p>
<p>Future Crops for Food, Feed, Fiber and Fuel.</p> <p>Money received: € 994.382 from a total budget of € 1.262.414</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Centre For Renewable Energy Sources</p> <p>Partners: Institut fuer Energie und Umweltforschung Heidelberg GMBH, Universita degli studi di catania, Agrotechnology and food innovations BV, Alma Mater Studiorum-Universita di Bologna, Instituto Nacional de Investigación y Tecnologia agraria y alimentaria, Institute for fuels and renewable energy, Facultad de Ciencias e Tecnologiada Universidade nova de Lisboa, Institut Wlokien Naturalnych inf Institute of Natural Fibres Ryszard K ozlowsky, Agricultural University of Athens, Universitatea de Stiinte Agronomice si medicina Veterinara - Bucuresti, National Agricultural Research Foundation.</p>	<p>The main objective of the project is to survey and analyse all the parameters that will play an important role in successful non-food cropping systems in the agriculture of EU27 alongside the existing food crop systems. The work will start with the prediction of the future land use in short term (2020) and long term (2030), taking under consideration restrict factors for agriculture and the market demand for non-food crops. Then environmental implications will be assessed compared to their respective conventional products (fossil energy, conversional materials).</p>

Project name and budget	Partners	Description
<p>Novel methods of treatment of animal by-products for the production of substances with biologically valuable functional properties</p> <p>Money received: € 2.670.000 from a total budget of € 3.690.000</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Universita Degli Studi Di Parma. Partners: Symbol Ltd, A.N. Bakh Institute Of Biochemistry of the Russian Academy of Sciences, State Institution All-Russian Research Institute For Poultry Processing Industry Of Russian Academy Of Agricultural Sciences Gu Vniipp, Mobitek-M, Agricola Tre Valli Societa Cooperativa, Core Biotech Sa, Belgium Vlaamse Instelling Voor Technologisch Onderzoek N.V.</p>	<p>This project aims at developing a technological platform for multi-purpose processing of animal by-products, in particular poultry ones, flexible enough to be tailored to different industrial sector needs. Using a novel bio-catalytic approach unmarketable poultry secondary resources will be converted into value added peptide hydrolysates leading to marketable end-products, with programmable nutritional properties, and bio-diesel. Innovative techniques will be used for the molecular characterization of the hydrolyzates.</p>
<p>Bioethanol and Beyond - Novel enzymes and microorganisms for biomass conversion to bioethanol</p> <p>Money received: € 5.900.000 from a budget of € 8.250.000</p> <p>Programme Area: COORDINATION Call: KBBE</p>	<p>Coordinator: Valtion Teknilline Tutkimuskeskus (Finland) Partners: Roal Oy, Syngenta Crop Protection AG, SEKAB E-Technology, Green Sugar GMBH, Dyadic Nederland BV, Chemtex Italia SRL, Universite de la Mediterranee S'aix-Marseille II, Universita'degli studi di Milano-Bicocca, Helsingin Yliopisto, Chalmers Tekniska Hoegskola AB, Univerza V Ljubljani, VIB, Lunds Universitet, Universiteit Utrecht, Johann Wolfgang Goethe Universitaet Frankfurt Am Main, École Polytechnique Federale de Lausanne.</p>	<p>The project provides novel efficient enzymes and microbes for 2nd generation bioethanol production. It generates through metabolic engineering and mutagenesis & screening approaches robust yeast strains that have a broad substrate range and can (co-)ferment sugars to ethanol with high productivity, and that are significantly more stress tolerant, i.e. inhibitor, ethanol and thermotolerant than the current <i>S.cerevisiae</i> strains used in ethanol production.</p>
<p>Engine and turbine combustion of bioliquids for combined heat and power production</p> <p>Money received: € 1.600.000 from a total budget of € 4.310.000</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: B.T.G. Biomass Technology Group Bv. Partners: The Likhachev Plant (Amo Zil), Aston University, Federal State Unitary Enterprise "Central, Order Of The Red Banner, Scientific Research Automobile and Engine Institute, Universita Degli Studi Di Firenze, Encontech B.V., Boreskov Institute Of Catalysis, Siberian Branch Of Russian Academy Of Sciences</p>	<p>The aim of the project is to adapt a diesel engine and a micro gas turbine to enable the combustion of various bio-liquids including pyrolysis oils and blends. The combustion of plant oils in diesel engines is possible but for the future less desirable because they are derived from food crops (first generation biofuels). Fast pyrolysis liquids derived from ligno-cellulosic materials (second generation biofuel type), are superior in terms of sustainability. Combustion in prime movers like turbines or engines is however still troublesome, although demonstrated already on a significant scale.</p>

Project name and budget	Partners	Description
<p>Advanced cleaning devices for production of green syngas.</p> <p>Money received: € 2.720.000 from a total budget of: € 4.090.000</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: Lunds Universitet. Partners: Forschungszentrum Juelich GmbH, Lantmannen Energi Ab, Johnson Matthey Plc., Porvair Filtration Group Limited, Norges Teknisk - Naturvitenskapelige Universitet, Biomasse - Kraftwerk Guessing GmbH Und Co. Kg, Technische Universiteit Delft, Alma Mater Studiorum-Universita Di Bologna, Technische Universitaet Muenchen</p>	<p>The project's key goal is the development of a novel gas cleanup in order to reduce impurities from the gasifier's product gas to limits required for upgrading to syngas using as a feedstock in production of vehicle fuels. To accomplish this target that biomass conversion should preserve high-energy efficiency in the subsequent synthesis steps and prevent catalytic poisoning, an alternative product route and more efficient gas cleaning systems are required.</p>
<p>Reforming of crude glycerine in supercritical water to produce methanol for re-use in biodiesel plants.</p> <p>Money received: € 2.093.414 from a total budget of € 2.997.449</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: B.T.G. Biomass Technology Group Bv (Netherlands) Partners: Acciona Servicios Urbanos Srl, Uhde High Pressure Technologies GmbH, Sparqle International B.V., Rijksuniversiteit Groningen, Univerza V Mariboru, Boreskov Institute Of Catalysis, Siberian Branch Of Russian Academy Of Sciences</p>	<p>This project aims to improve the energy balance, carbon performance, sustainability and overall economics of biodiesel production. Biodiesel is produced by transesterification of vegetable oils with methanol. Glycerine is a major by-product of the transesterification process. Due to the rapid increase in biodiesel production capacity in Europe also the amount of glycerine has increased rapidly. The overall project objective is to produce methanol from crude glycerine, and re-use the methanol in the biodiesel plant.</p>
<p>High efficiency consolidated bioprocess technology for lignocellulose ethanol</p> <p>Money received: € 3.662.944 from a total budget of € 5.434.814</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: Helsingin Yliopistouniversity of Helsinki (Finland) Partners: Roal Oy, Tartu Ulikool, Kobenhavns Universitet, National Technical University Of Athens, Biogold Ou, Holm Christensen Biosystemer Aps, Inbicon A/S, Valtion Teknillinen Tutkimuskeskus (Vtt),</p>	<p>Lignocellulosic bioethanol has the potential of contributing to a sustainable and secure European energy supply for the transport sector. European research and industry is presently among the forerunners in developing lignocellulosic bioethanol. In this project, a combined approach is used to develop a novel integrated concept for hydrolysis and fermentation of lignocellulosic feedstocks.</p>

Project name and budget	Partners	Description
<p>Developing advanced Biorefinery schemes for integration into existing oil production/transesterification plants.</p> <p>Money received: € 992.197 from a total budget of € 1.008.159</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: University of York. Partners: Biorefinery.De Gmbh, Institut National Polytechnique De Toulouse, Universidad De Cordoba, Pannon Egyetem, Nogradi Erdokemia Termelo Es Kereskedo Kft Co, The Secretary Of State For Environment, Food And Rural Affairs, Universita Degli Studi Di Foggia, Centre Technique Interprofessionnel Des Oleagineux Metropolitains, Universiteit Gent, Wageningen Universiteit, The University Of Manchester, Danmarks Tekniske Universitet, Foundation For Research And Technology Hellas, Chimar Hellas Sa, Creol - Centre De Recherche Et D'experimentationsur Les Oleagineux Et Le Proteagineux, G. Dimitriadis & Sia O. E., Botanix Ltd, Charles Jackson & Co Ltd, Croda International Plc, Rotawave Limited, Seneca Green Catalyst Sl.</p>	<p>The aim of the project is to develop advanced biorefinery schemes to convert whole EU oil-rich crops (rapeseed, olive and sunflower) into energy (fuels, power and heat), food and bioproducts (chemicals and/or materials) making optimal uses of the side streams generated during farming/harvesting, primary processing (e.g. oil extraction and refining) and secondary processing (e.g. transesterification).</p> <p>To achieve the vision for 2030 (25% of the EU's transport fuel provided by biofuels), it will be necessary to promote the transition towards second generation biofuels (e.g. lignocellulosic ethanol, syngas gas based fuels, pyrolysis oil based biofuels) but also support the implementation of currently available biofuels including biodiesel via integrated production of energy and other added-value products through biorefineries.</p>
<p>Development of advanced biorefinery schemes to be integrated into existing industrial fuel producing complexes</p> <p>Money received: € 995.082 from a total budget of € 1.451.550</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: Energy Research Centre of the Netherlands; Partners: Aston University, Agrotechnology And Food Innovations Bv, Universiteit Gent, Stfi-Packforsk Ab, Repsol Ypf Sa, Valtion Teknillinen Tutkimuskeskus (Vtt), Abengoa Bioenergia Nuevas Tecnologias Sa, Cooperatie Cehave Landbouwbelang U.A, Bioro Nv, Vlaams Gewest Oost-Vlaanderen Gent, Energitekniskt Centrum I Pitea, Ten Kate Holding Bv, Value For Technology Bvba,</p>	<p>The overall aim of the project is to develop advanced biorefinery schemes to be integrated into existing industrial fuel producing complexes. S&T project objectives are: to make the production of biofuels more competitive, to identify and develop the optimal integrated biorefinery schemes for the production of best suited "building blocks" in terms of processes and bioproducts, and to identify opportunities of various biomass-based sectors to produce fuels while increasing their market competitiveness by co-producing added-value products.</p>

Project name and budget	Partners	Description
<p>Biofuels assessment on technical opportunities and research needs for Latin America</p> <p>Money received: € 986.562 from a total budget of € 1.285.316</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: Wirtschaft Und Infrastruktur Gmbh & Co Planungs Kg. (Germany)</p> <p>Partners: Centro De Investigaciones Energeticas, Medioambientales Y Tecnologicas-Ciemat, B.T.G. Biomass Technology Group Bv, Danmarks Tekniske Universitet, Karl-Franzens-Universitaet Graz., Camara Argentina De Energias Renovables, Fundacion Bariloche, Fundacao De Apoio A Universidade De Sao Paulo, Universidad Catolica De Valparaiso, Universidad Nacional Autonoma De Mexico,</p>	<p>The overall objective of the project proposal is to identify technical opportunities and research needs for Latin America and to create and support specific RTD cooperation activities between LA and the EU in order to maximize synergies in the biofuels sectors: provide a broad overview of the existing biofuel sectors in all LA countries; identify priorities, needs and opportunities in the field of RTD for sustainable biofuel production and biomass conversion technologies; inform European and Latin American actors in the biofuel sector about opportunities for collaboration and partnerships; harmonize the agenda between LA and the EU on sustainable biofuel production; facilitate and advance mutual knowledge and technology transfer between biofuel stakeholders in LA and the EU; make recommendations on RTD and policies for the production and utilization of biomass conversion technologies</p>
<p>Sustainable and integrated production of liquid biofuels, bioenergy and green chemicals from glycerol in biorefineries</p> <p>Money received: € 3.750.000 from a total budget of € 4.970.000</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: Technical University of Denmark</p> <p>Partners: Prochimia Surfaces Sp. Z O.O. , Meroco As, A&A Biotechnology Biogasol Aps, Institut Fuer Energie Und Umweltforschung Heidelberg Gmbh.</p>	<p>The increase of the production of biodiesel from rapeseed and other vegetable oils is leading to an immense increase in the production of glycerol, which is an unavoidable by-product from the esterification process. Since the volume of the glycerol-byproduct has already started to exceed the current market need, the biodiesel producers are requesting new methods for sustainable glycerol management. The project is targeted to development of a novel technology based on biological conversion of the glycerol by-product into known and new, advanced liquid biofuels, bioenergy and valuable biochemicals in an integrated biorefinery concept.</p>

Project name and budget	Partners	Description
<p>Biomass energy Europe</p> <p>Money received: € 1.815.991 from a total budget of € 2.820.807</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: Albert-Ludwigs-Universitaet Freiburg. Partners: Institut Fuer Energie Und Umweltforschung Heidelberg Gmbh, European Forest Institute, Universiteit Utrecht, Metsantutkimuslaitos, Internationales Institut Fuer Angewandte Systemanalyse, B.T.G. Biomass Technology Group Bv, Centre For Renewable Energy Sources, Valtion Teknillinen Tutkimuskeskus (Vtt), Macedonian Geothermal Association (Maga), Scientific Engineering Centre "Biomass" Ltd, Institute For Fuels And Renewable Energy, National Agricultural University Of Ukraine, Faculty Of Forestry, University Of Zagreb, Universitaet Hamburg, Chalmers Tekniska Hoegskola Ab.</p>	<p>The objective of the project is to harmonise biomass resource assessments, focusing on the availability of biomass for energy in Europe and its neighbouring regions. This harmonisation will improve the consistency, accuracy and reliability of biomass assessments, which can serve the planning of a transition to renewable energy in the EU.</p>
<p>Enhancing international cooperation between the EU and Latin America in the field of biofuels.</p> <p>Money received: € 1.660.000 from a total budget of € 2.490.000</p> <p>Programme Area: COORDINATION Call: ENERGY</p>	<p>Coordinator: Novozymes A/S (Denmark) Partners: Novozymes Latin America Ltda. (Brazil), Centro De Tecnologia Canavieira (Brazil), Universidade Federal Do Parana (Brazil), Lunds Universitet</p>	<p>The project aims at developing the first cost-effective and industrially viable process for converting sugar cane bagasse and trash (i.e. sugar cane biomass) into fermentable sugars. Furthermore, the aim is to integrate such a process with existing production of 1st Generation ethanol based on sugar cane. In order to develop such a process, a deeper knowledge about the structural components of sugar cane biomass will be investigated with the aim of capturing the easier fraction of the cellulose sugars. The main technical barriers in the project relate to the application of an integrated approach, achieving economically attractive production of 2nd generation ethanol based on sugar cane biomass as opposed to converting biomass into energy or other alternative use.</p>
<p>Energy Second Generation Biofuels - EU Brazil Coordinated Call -OPEN-</p> <p>Budget: € 4.000.000</p> <p>Programme Area: COORDINATION Call: ENERGY</p>		

Project name and budget	Partners	Description
<p>Alternative fuels and biofuels for aircraft development.</p> <p>Money received: € 6.822.685 from a total budget of € 9.743.498</p> <p>Programme Area: COORDINATION Call: TRANSPORT</p>	<p>Coordinator: European Virtual Institute For Integrated Risk Management.</p> <p>Partners: Office National D'etudes Et De Recherches Aeronautiques-Onera, Mtu Aero Engines Gmbh, Airbus Uk Limited, Deutsches Zentrum Fur Luft - Und Raumfahrt Ev, The University Of Sheffield, Centre National De La Recherche Scientifique (Cnrs), The Governing Council Of The University Of Toronto, Ifp - Institut Francais Du Petrole, Dassault Aviation Sa, Institut National De L Environnement Et Des Risques Ineris, Sasol Technology (Pty.) Limited, Avio S.P.A, Airbus Sas, Snecma Sa , Shell Aviation Limited, Airbus France Sas, Technologica Group - European Technical Joint Venture Cvba, Institut National Des Sciences Appliquees De Toulouse Insat, Rolls Royce Plc, Universitaet Karlsruhe (Technische Hochschule), Technische Universitaet Graz, Lesaffre International Sarl.</p>	<p>ALFA-BIRD project aims at developing the use of alternative fuels in aeronautics. In a context where the price of oil is increasing and with impact of fossil fuels on climate change, the sustainable growth of the civil aviation is conditioned by the respect of the environment. In this context, using biofuels and alternative fuels in aeronautics is a great challenge, since the operational constraints (e.g. flight in very cold conditions) are very strict, and due to the long lifetime of current civil aircraft. ALFA-BIRD gathers a multi-disciplinary consortium with key industrial partners from aeronautics (engine manufacturers, aircraft manufacturers) and fuel industry, and research organisations.</p>
<p>Exploiting the saccharification potential of pathogenic microorganisms to improve biofuel production from plants</p> <p>Money received: € 2.099.600 from a total budget of € 2.099.600</p> <p>Programme Area: IDEAS</p>	<p>Coordinator: Universita Degli Studi Di Roma La Sapienza (Italy)</p>	<p>The project aims at providing new knowledge on plant cell wall and innovative biotechnological solutions for biomass utilization.</p>
<p>Continuous production of biodiesel from waste cooking oil using green engineering</p> <p>Money received: € 45.000 from a total budget of € 45.000</p> <p>Programme Area: PEOPLE</p>	<p>Coordinator: Universidade Nova De Lisboa, Faculdade De Ciencias E Tecnologia</p>	<p>The main objective of the present proposal is the development of a complete continuous reaction/separation process for the production of biodiesel from waste cooking oil.</p>

Project name and budget	Partners	Description
<p>Training network on protective immune modulation in warm water fish by feeding glucans.</p> <p>Money received: € 3.078.798 from a total budget of € 3.078.798</p> <p>Programme Area: PEOPLE</p>	<p>Coordinator: University of Keele (UK). Partners: University Of Plymouth, Danmarks Tekniske Universitet, Wageningen Universiteit, Stiftung Tieraerztliche Hochschule Hannover, Dana Feed As, Tetra Gmbh, Immunocorp Animal Health As, Zaklad Ictiobiologii I Gospodarkirybackiej Polskiej Akademii Nauk,</p>	<p>The production of a young highly trained scientific group which will stimulate the development of a protection philosophy to disease is urgently needed in the European aquaculture and ornamental fisheries sector. The expansion of this important European commercial sector is also severely affected because of the lack of an industrial critical mass which would allow individual enterprises to establish an appropriate training programme. The project will address these important European issues with a co-ordinated scientific and complementary skills programme incorporating the training expertise available in Universities, Research Institutes and Industry. It will also meet the numerous challenges that face the application of biofuel to energy generation and in particular, the use of biofuel byproducts i.e. ² glucan, as a natural, environmentally friendly, protective immunomodulator in the warm water aquaculture and ornamental sector.</p>
<p>Application of biofuel by-products to the soil: implications for carbon sequestration and GHG Emissions</p> <p>Money received: € 159.434 from a total budget of € 159.434</p> <p>Programme Area: PEOPLE</p>	<p>Coordinator: Wageningen Universiteit</p>	<p>The aim of this proposal is to quantify the effect of by-products of biofuel production applied to the soil on GHG emissions and related N and C dynamics in the soil.</p>

Total: € 61.553.873