

# Spanish White Biotech Pipeline\*

## BIOPROCESSES

Company	Code	Indication	Basic R&D	Applied R&D	Ready for exploitation	Industrial scale up	Available	Technology transfer in process	Patent
3P BIOPHARMACEUTICALS	3P-BIO	Manufacture and Purification of Recombinant Proteins (GMP)							
3P BIOPHARMACEUTICALS	3P-BIO	Production of Monoclonal Antibodies (GMP)							
BIOCHEMIZE	PB-est	Enzymatic and microbial platform for esterification of organic compounds							
Biomar		Recovery and purification of natural organic compounds from microbial cultures							
Biomasslinic		Method for obtaining maslinic acid and hydroxitirosol from olive by products							
BIOMEDAL	CASCADE	Bacterial expression system							
BIOMEDAL	rProtein A Resin	Immunoglobulin capture and purification							
Biopolis	Bio-CI	Custom cloning and expression of recombinant protein							
Biopolis	Bio-Snt	Biosynthesis of chemical compounds							
Biopolis	Bio-BPL	Process development for biopolymers production							
Biopolis	Bio-Cpe	High added value compounds extraction							
Biopolis	Bio-Ctl	Bioprocesses / biocatalysis							
BIOSENTIA - BIOMASSBOOSTER	BMB	Genetic Engineering Platform to increase biomass yield - Enhanced Species with overexpressed BMB-707 gene							
BIOT	BP-08X	Biofermentation development							
GADEA BIOPHARMA		Biotechnological production of steroids							
GADEA BIOPHARMA		Biotechnological production of APIs							
GAIKER - IK4		Biopolymers development							
GAIKER - IK4		Contaminated soils bioremediation							
GAIKER - IK4		Biological treatments for water purification							
GH Genhelix	GHL- PUR	Manufacture and Purification of Recombinant Proteins (GMP)							
IUCT	BIO-OA02	Biosynthesis of Exopolysaccharides							
IUCT	GC-BIO-DTFF	Biosynthesis 2-deoxytrifluorotimidina / Anticancer and Antiviral							
Laboratorios LETI		Production of protein extracts / allergens							
Lonza	Lonza Biologics Porriño	Monoclonal antibodies and recombinant proteins using mammalian cell culture							
Lonza	Lonza Biologics Porriño	Custom manufacturing of Biosimilars							
Lonza	Lonza Biologics Porriño	Custom manufacturing early clinical stages to commercial supply.							
Lonza	Lonza Biologics Porriño	Proces validation and comparability studies							
Lonza	Lonza Biologics Porriño	Analytical services							
Lonza	Lonza Biologics Porriño	Stability studies of DS and DP							
BIOCHEMIZE	PB-red	Enzymatic and microbial platform for reduction of oxygen functional groups							
BIOCHEMIZE	PB-oxi	Enzymatic and microbial platform for oxydation of aromatic methylenes							
BIOCHEMIZE	PB-met	Enzymatic and microbial platform for methylation of aromatic compounds							
BIOCHEMIZE	PB-rac	Enzymatic and microbial platform for separation of racemic compounds							
BIOCHEMIZE	PB-ald	Enzymatic and microbial platform for aldolic condensations							
BIONATURIS	FLYLIFE	Baculovirus expression system. MVB, WSVB, upstream development, downstream development, analytical development, scale-up							
BIONATURIS	FLYPIDS	Recombinant expression of second generation vaccines (VLPs, chimeric, subunits)							
IUCT	BIO-Can	Biotechnological synthesis of anticancer drugs							
IUCT	BIO-Vir	Antiviral drug biobased synthesis							
PROTEOS BIOTECH	PROTEOS-PPS	Protein Purification System							
CLEAN BIOTEC	Halodepur	Biodepuration process of hypersaline wastewater							
PROTEOS BIOTECH	PROTEOS-BESE	Bacterial expression system in E. coli							
SENSIA	Biosensor	Biomolecular interaction analysis and the presence of chemical compounds							
Biomar		Bacterial, fungi and yeasts fermentation						Prototype	
Biopolis	Bio-PHA	Process Development for PHA production							
Biopolis	Bio-Rp	Production and purification of recombinant proteins							
Biopolis	Bio-Bph	Production of biopharmaceuticas, key organic compounds and green chemicals							
BIOT	BPR-FUTUR	New microorganisms for industry							
GADEA BIOPHARMA		Bacterial and fungal fermentation and DSP							
GAIKER		Bioremediation							
GAIKER		Production of Microbial recombinant proteins							
GH Genhelix	GHL - MIC	Production of biologicals expressed in mammalian cell lines							
GH Genhelix	GHL - MAM	Production of biologicals expressed in mammalian cell lines							
GH Genhelix	GHL - BIOSIM	Biosimilar MABs development platform							
GH Genhelix	GHL - VACC	Production of biological vaccines through single use equipment							
IUCT	GC-BF	Synthesis and purification of biofuels either by chemical or biotechnological routes							
NEIKER		Production of Recombinant Proteins							
Neuron Bio (Neuron BioIndustrial)	MICROBIOTOOLS by Neuron @	Bioremediation platform							
PROTEOS BIOTECH	PROTEOS - PEX	Protein expression systems							
PROTEOS BIOTECH	PROTEOS - PRP	Production of Recombinant Proteins							
PROTEOS BIOTECH	PROTEOS - BFERM	Bacterial fermentation							
NEIKER		Production of Omega-3-Rich Oil from microalgae							
NEIKER		Production of carotenoids from microalgae							
PROTEOS BIOTECH	PROTEOS-PPMW	Proteolytic processes - meat waste							
PROTEOS BIOTECH	PROTEOS-PPDA	Proteolytic processes - dairy applications							
ABENGOA BIOENERGÍA		Hydrolysis enzymatic technology for 2G biofuels production							
ABENGOA BIOENERGÍA		Technologies to achieve greater starch conversion in 1G biofuels production							
ABENGOA BIOENERGÍA		Cellulolytic and hemicellulolytic enzymes							
CLEAN BIOTEC	Phytodesal	Soil desalination with salt phytoaccumulators							
IUCT	BIO-13P	Biosynthesis of 1,3-propanodiol							
Neuron Bio (Neuron BioIndustrial)	TriBioPlast @	Biopolimers production							
Neuron Bio (Neuron BioIndustrial)	w3-SCO	Production of Omega-3-Rich Oil by fermentation							
Neuron Bio (Neuron BioIndustrial)	NST-Pkt	Biosynthesis of new poliketides derivatives							
PROTEOS BIOTECH	PROTEOS-BESB	Bacterial expression system in Bacillus megaterium							
LEITAT		Bioprocess for textile processing							
LEITAT		Enzymatic improvement of fats and fat valorization							
LEITAT		Substitution of chemical processes for bioprocesses							
PROTEOS BIOTECH	PROTEOS-PPDET	Proteolytic processes - detergents applications							
PROTEOS BIOTECH	PROTEOS-MBP	Microbial biogas production							
PROTEOS BIOTECH	PROTEOS-BPEFA	Biocatalysis processes - Essential fatty acids							
PROTEOS BIOTECH	PROTEOS-BS	Production of Biosimilars							
ARQUEBIO	N4B-RP	Recombinant proteins for gene therapy							
LEITAT		Obtention of protein hydrolysates							
GAIKER - IK4		Development of MIP (Molecular Imprompted Polymers)							
GAIKER - IK4		Development of soil remediation process based on nanoparticles							
IUCT	BIO-CEM	New microorganisms for self healing concrete							
LEITAT		Enzymatic synthesis of prebiotic ingredients							

## BIOPRODUCTS

Company	Code	Indication	Basic R&D	Applied R&D	Ready for exploitation	Industrial scale up	Available	Technology transfer in process	Patent
ABENGOA BIOENERGÍA		DDGS Distillers Dry Grains with Solubles							
ABENGOA BIOENERGÍA		Sugars							
BIOMEDAL	LYTAG-2-PHASE	Protein separation and purification							
BIOMEDAL	nL24	Cost effective ligand for antibody purification							
BIOT	BA-76Z	Microalgae for recycling industrial wastewater							
GAIKER - IK4		Antibacterial polymers and coatings and evaluation of biocide properties							
GH Genhelix	GHL-11001	GHL-11001 MaB Biosimilar							
GH Genhelix	GHL-11002	GHL-11002 MAB Biosimilar							
IUCT	GC-S51	New solvent from renewable materials for synthesis of APIs							
IUCT	CAT-Apudp	New catalyst pyrimidin phosphorilase nucleoside							
IUCT	CAT-Bcun	New catalyst Purin Phosphorilase Nucleoside							
IUCT	CAT-Bcypm	New catalyst pyrimidin phosphorilase nucleoside							
IUCT	CAT-GBspum	New catalyst Purin Phosphorilase Nucleoside							
IUCT	CAT-Hmudp	New catalyst pyrimidin phosphorilase nucleoside							
IUCT	CAT-Ssdeod	New catalyst Purin Phosphorilase Nucleoside							
IUCT	GC-BIO-DF	2-deoxy-5-fluorouridine / Anticancer / Colon & Pancreas							
IUCT	GC-BIO-F	5-fluorouridine / Anticancer / Colon & Brust							
IUCT	BIO-TFT	Trifluorothymidine / Antiviral (Oftalmic) / Herpes Cornea							
IUCT	GC-BIO-DAP	2,6-diaminopurine deoxiriboside / Anticancer							
IUCT	BIO-AP	2,6-diaminopurine riboside / Antiviral / Anticancer							
IUCT	GC-S79	Solvents from renewable materials for the biodiesel sector							
IUCT	SOL-LAOC4	New solvent from renewable materials for metal degreasing							
IUCT	GC-S77	New solvent from renewable materials, from DMA							
IUCT	GC-DMA	New solvent from renewable materials for metal degreasing							
PROTEOS BIOTECH	PROTEOS-RPROT	Recombinant proteins and growth factors							
PROTEOS BIOTECH	PROTEOS-PCAI	Personal care active ingredients							
IUCT	GC-S77	New solvent from renewable materials for Paint and barnishes							
IUCT	GC-S78	New solvent from renewable materials for Crop protection							
ARQUEBIO		Modified biopolymers for cosmetic applications							
ARQUEBIO		Exopolysaccharides for cosmetic applications							
ARQUEBIO		Halomucines for cosmetic applications							
Biomar	IB-Agricultura	Microbial Biopesticides							
X-Pol Biotech	X-Pol Biotech	Qualiphi: A new standard for DNA amplification							
ABENGOA BIOENERGÍA		Microalgae collection							
ARQUEBIO	N4B-MP-He	Multifunctional proteins for healthcare end uses							
ARQUEBIO	N4B-MP	Multifunctional proteins for drug delivery							
Biomar	IB-Cosmética	Extract antifungal							
IUCT		New exopolysaccharides use as and nutraceutical and cosmetics							
IUCT	CAT-Halo1	Enzymatic mixture with hidrolitic activity							
IUCT	CAT-Halo2	Enzymatic mixture with lipase and protease activity							
IUCT	CAT-Halolip	New halolipase							
IUCT	CAT-Haloprot	New haloprotease							
X-Pol Biotech	X-Pol Biotech	New polymerases							
IUCT	BIO-K3	Menadione (vitamin K3)							
Biomar	IB-Acuicultura	Microbial control farms							

\* Based on data provided by ASEBIO associated companies. MAY 2012

# asebio

## Spanish White Biotech Pipeline 2012

**Spanish Bioindustry Association**  
 ASEBIO, the Spanish Bioindustry Association, encompasses over 200 firms, associations, foundations, universities, technology and research centers which carry out activities directly or indirectly related to biotechnology.

The wide number of associates makes ASEBIO the most appropriate meeting platform to face up the challenges of developing the biotechnology sector in Spain.

Around 500 companies research and develop products in the Spanish biotechnology sector.

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ICEX

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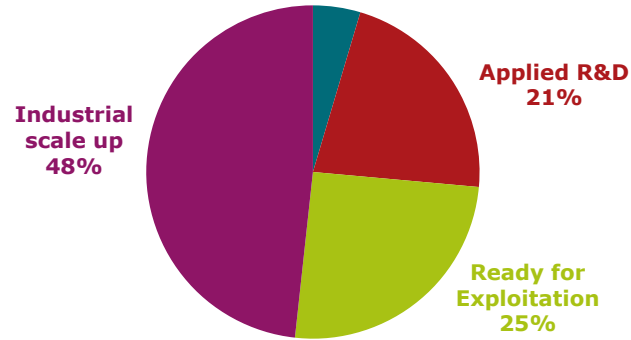
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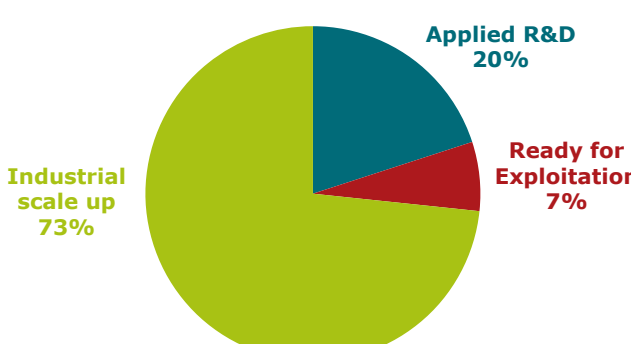
### BIOPROCESSES

Basic R&D 5%



### BIOPRODUCTS

Applied R&D 20%





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## asebio

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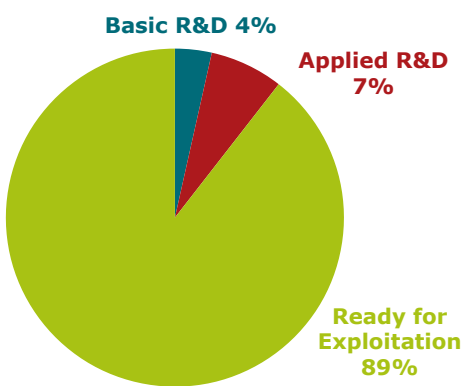
### TECHNOLOGIES

Company	Code	Indication	Basic R&D	Applied R&D	Ready for exploitation	Available	Technology transfer in process	Patent
3P BIOPHARMACEUTICALS	3P-Protexp	Protein expression systems	█	█	█	█		█
3P BIOPHARMACEUTICALS		Biosimilars Platform	█	█	█	█		█
3P BIOPHARMACEUTICALS	3P-TC	Development banks crops and human cells for cell therapy	█	█	█	█		█
BIOCHEMIZE	PB	Screening for microbial and enzymatic biocatalysis	█	█	█	█		█
BIOCHEMIZE	SC-enz	Enzymatic screening for modification of chemical structures	█	█	█	█	█	█
Biodescon	Biodescon - Trustwater	Purifies water from any microorganism using Ecasol	█	█	█	█		█
Biodescon	Biodescon - Airmanager	Purifies the air with an efficiency of Log10	█	█	█	█		█
Biodescon	Bioclad	Antimicrobial PVC cladding	█	█	█	█		█
Biomar		Process development and scale-up	█	█	█	█		█
BIOMEDAL	PROTEO-STAMP	Immobilization and shipment of tagged proteins	█	█	█	█		█
BIOMEDAL	HIS-TAG-2-PHASE	Aqueous two phase separation of histagged proteins	█	█	█	█	Prototype	█
BIOT	BP-32S	Photobioreactor Microalgae	█	█	█	█		█
GAIKER		CO2 Supercritic	█	█	█	█		█
GAIKER - IK4		Spray-drying	█	█	█	█		█
GAIKER - IK4		Pyrolysis and gasification	█	█	█	█		█
GAIKER - IK4		Photobioreactor	█	█	█	█		█
GH Genhelix	GHL - PROTO	Single use technology application to bioprocesses (Protoplant)	█	█	█	█		█
GH Genhelix	GHL - AD	Analytical development of bioprocesses	█	█	█	█		█
GH Genhelix	GHL - TT	Process development, scale-up, scale-down, and technology transfer of Bioprocesses (USP & DSP)	█	█	█	█		█
INGENIATRICS	FLOW FOCUSING *	One step microencapsulation producing small & homogeneous spheres, core-shell, double-shell particles.	█	█	█	█		█
INGENIATRICS	FLOW BLURRING *	Highly efficient spray of extremely fine droplets production	█	█	█	█		█
IUCT	Bio-SRC	Prospection, isolation, charectreization and performance of new microorganisms in industrial biotechnology	█	█	█	█		█
IUCT	Bio-PROC	Substitution of chemical processes for bioprocesses	█	█	█	█		█
IUCT	CG-Bio-GMO	Molecular biology: genetically modified microorganism	█	█	█	█		█
IUCT	Bio-HTB	High throughput biotechnological synthesis of small molecules	█	█	█	█		█
IUCT	GC-SOLV	Substitution for green safer solvent from renewable resources in diferent industrial applications	█	█	█	█		█
Lonza	Lonza Biologics Porriño	Manufacturing of mAb and and recombinant proteins using mammalian cell culture	█	█	█	█		█
Lonza	Lonza Biologics Porriño	Stirred and airlift bioreactors	█	█	█	█		█
Lonza	Lonza Biologics Porriño	Associated purification technology	█	█	█	█		█
Lonza	Lonza Biologics Porriño	Stirred bioreactors 5.000 & 10.000 L scale & single-use bioreactors	█	█	█	█		█
Lonza	Lonza Biologics Porriño	GS Protein expression System™, Epibase™, Potelligent® CHOK15V	█	█	█	█		█
NEIKER		Protein purification	█	█	█	█		█
GADEA BIOPHARMA	Ps	Aseptic lyophilization and filling of APIs	█	█	█	█		█
GADEA BIOPHARMA	Ps	Sterile final pharmaceutical forms	█	█	█	█		█
GAIKER - IK4		Active packaging	█	█	█	█		█
GAIKER - IK4		Biofunctional nanoparticles sintesis	█	█	█	█		█
GAIKER - IK4		Microencapsulation of biosubstances, active ingredients, and essential oils	█	█	█	█		█
GAIKER - IK4		Incorporation of active substances in textile fibers	█	█	█	█		█
INGENIATRICS	ONENEB	Improved sensitivity and robustness analytic nebulizer and micronebulizer for spectrometry systems	█	█	█	█		█
INGENIATRICS	NE-4	High trougput nebulizer for material process: drying, pulverisation, etc. Able to operate with highly viscous materials	█	█	█	█		█
INGENIATRICS	CELLENA	User-friendly bioencapsulation portable platform to encapsulate high molecular weight compounds, microorganisms and cells	█	█	█	█		█
INGENIATRICS	FLOW SPRAY-DRYER	Brand-new spray-drying and spray-chilling equipment integrating proprietary technology emitters for highly accurate and efficient microparticles production	█	█	█	█		█
INGENIATRICS	MICROPARTICLES DEVELOPMENT	Customised CRO microencapsulation services for cosmetics, chemicals, consumer goods, Including SPHERES, CORE-SHELL and DOUBLE SHELL structure	█	█	█	█		█
INGENIATRICS	MICROPARTICLES MANUFACTURING	Taylored in-plant scaled-up manufacturing	█	█	█	█		█
INGENIATRICS	ATOMIZATION EQUIPMENT	Development and manufacturing of proprietary technology nebulizers, atomisers, and equipments or devices including it	█	█	█	█		█
INGENIATRICS	COATING SYSTEMS	Development and manufacturing of proprietary technology coating systems	█	█	█	█		█
Lonza	Lonza Biologics Porriño	Cell line construction, process development to large scale custom manufacturing and regulatory support	█	█	█	█		█
PROTEOS BIOTECH	PROTEOS-MENC	Microencapsulation of active ingredients and enzymes	█	█	█	█		█
PROTEOS BIOTECH	PROTEOS-MEM	Microemulsification of active ingredients and enzymes	█	█	█	█		█
Laboratorios LETI		Protein Purification	█	█	█	█	Only special preparations	█
LAIMAT		Microencapsulation, peptides, proteins, essential oils, active principles	█	█	█	█		█
BIOMOL-INFORMATICS		Generating 3D computer models for bacterial protein polymers as scaffolds for nanowires	█	█	█	█		█
LAIMAT		Sensors for detection of antibiotics and toxics present in food, clinical toxicology and early diagnosis	█	█	█	█		█
LEITAT		Protein purification	█	█	█	█		█
LEITAT		Antimicrobial / antifungal screening	█	█	█	█		█
LEITAT		Enzyme immobilization	█	█	█	█		█

### BIOFUELS

Company	Types of Biofuel	Raw material	First (1st), second (2nd) or third (3rd) generation	Activity	Added value
ABENGOA BIOENERGÍA	Bioethanol	Cereal, sugarcane	1st	Industrial production	Improvement of yields over initial sugars together with high process profitability
ABENGOA BIOENERGÍA	Bioethanol	Lignocellulosic material	2nd	Development of technologies for industrial production	Flagship facility for commercial exploitation of 2G Bioethanol
ABENGOA BIOENERGÍA	Biodiesel	Oils	1st	Industrial production	Production process optimized for Biodiesel production
BANCO ESPAÑOL DE ALGAS	Biomass, biodiesel, bioethanol, biogas	Microalgae, cyanobacteria (marine, freshwater, brakish and hypersaline environments)	3rd	Fast growing strains, isolation of new species, selection of strains	New biodiversity & cultivation systems, extremophiles, new techniques, connection with pilot plant units at real conditions, and R&D groups
BIOMAR	Biodiesel	Microseaweeds	2nd	Strains research and development	Integrated processing of the biomass. Viability of the production.
BIOPOLIS	Biodiesel, bioethanol, biogas	Fermentative biomass microorganisms	2nd	Development of optimized microorganisms for biofuels	Process optimization
BIOSEMENTIA - BioMassBooster	Biodiesel, bioethanol, biogas	Microalgae	2nd	Development of species genetically optimized for efficient production of biomass	Significant yield increase (+260%) in the production of biomass
BIOSEMENTIA - BioMassBooster	Biodiesel, bioethanol, biogas	Higher plants and crops	2nd	Development of species genetically optimized for efficient production of biomass	Significant yield increase (+50%) in the production of biomass
CANVAX	Biodiesel	Jatropha	1st	Development of improved varieties	Jatropha production of varieties adapted to mechanical harvesting
GAIKER - IK4	Biodiesel	Oils	1st and 2nd	Process improvement, development and testing of new reactions	Versatile pilot plant facility
GAIKER - IK4	Biodiesel	Animal processing fats	2nd	Process improvement	Versatile pilot plant facility
GAIKER - IK4	Biodiesel	Microseaweeds	2nd	Development of the complete process: from microseaweed selection to biodiesel production	Pilot plant facilities for the microseaweed culture, filtration, extraction and production of biodiesel
GAIKER - IK4	All	All	1st and 2nd	Life Cycle Analysis and Life Cycle Costing	New tool for the environmental and social evaluation of biofuels
Ingeniatics	All	Fuel Delivery		Optimised fuel atomization	Diminishes emissions - gas and solid particles, makes combustion more efficient. Capacity to make viscous materials burn, e.g. glycerine
Ingeniatics	All	Emissions		Treatment of NOx Emissions	Diminishes NOx emissions utilising urea with improved efficiency
IUCT	Biofuels for S-50 diesel engines	Glicerol	2nd	Development of new biofuels and other biotech products	100% of biomass (oil) use, as it converts glycerin into a biofuel with improved properties compared to famers
IUCT	Heating	Glycerol and other	2nd	New biofuel for heating in industrial furnaces	100% biomass (oil) use. Substitutes fuel oils. Economically viable. Does not need preheating of the fuel oils for ignition
IUCT	Synthesis and purification of biofuels either by checmial or biotechnological routes	All	1st and 2nd	Process optimization of biofuel production	One stop shop for biofuel process optimization
LEITAT	All	All	1st and 2nd	LCA	Quantification of the environmental improvements and sustainability of different processes of energy production and biofuels
LEITAT	Biogas	Organic waste	2nd	Process development	Process optimization
LEITAT	Cogeneration/Heating	Biomass	2nd	Energy studies	Study the technical feasibility of the power source
LEITAT	Bioethanol	Biomass	2nd	Pretreatment of raw material	Improvement of the saccharification efficiency by chemical or enzymatic pathways
LEITAT	Electricity	Organic effluents	2nd	Microbial Fuel Cells development	Obtaining energy from organic waste effluents
LEITAT	Biodiesel	Oils	1st and 2nd	Transesterification process development	Recovery of oily waste. More sustainable process
NEIKER	Diesel	Microalgae	2nd	Genetic transformation	Process profitability increase: mixed use algae
NEIKER	Diesel	Microalgae	2nd	Strains selection	Improving farm profitability
NEIKER	Diesel	Microalgae	2nd	Biomass production	Significant yield increase in the production of biomass
NEIKER	Diesel	Crops	1st	Crop agronomy	Improvement of farm profitability
NEIKER	Diesel	Crops	1st	Exploitation and valorization of byproducts	Integrated utilization of biomass: energy and animal feed
NEIKER	Biogas	Organic waste	2nd	Biomethanization process improvement	Recycling organic wastes to generate methane processes
NEIKER	Biogas	Microalgae	2nd	Biomass production	Technical feasibility study of the power source
NEIKER	Cogeneration	Organic waste	2nd	Digestatos Treatment	Technical feasibility study of digestate in agriculture
NEIKER	Cogeneration	Organic waste	2nd	Nutrients removal	Increased profitability of processes through a combination of different organic sources
NEIKER	Gas heating	Biomass	2nd	Improvement of biomass production systems	Reduced costs of intensive agricultural production systems: energy efficiency of production processes
Neuron Bio (Neuron BioIndustrial)	Biofuels	Raw glycerin; lignocellulose biomass	2nd	MicroBioil® (Production of renewable biofuels)	Valorisation of by-products. Increased biodiesel plant productivity (2-3%)
PIONEER HI-BRED	Biodiesel	Oil Crops (Sunflower and Rape)	1st	Development of improved varieties	Sunflower and rapeseed hybrids with higher levels of fatty acids and yield per unit area, adapted to specific agricultural conditions in Spain
PIONEER HI-BRED	Bioethanol	Crops (Corn and Sorghum)	1st	Development of improved varieties	Corn hybrids with higher starch content and extractable per unit area production adapted to specific agricultural conditions in Spain
PIONEER HI-BRED	Biomass	Crops (Corn and Sorghum)	1st	Development of improved varieties	Hybrids of maize and sorghum forage with high production capacity of dry matter per unit surface area adapted to specific agricultural conditions in Spain
PIONEER HI-BRED	Biogas	Crops (Corn and Sorghum)	1st	Development of improved varieties	Hybrids of maize and sorghum forage with high production capacity of dry matter per unit surface area adapted to specific agricultural conditions in Spain
PIONEER HI-BRED	Biogas	Fermentative biomass bacteria	2nd	Development of specific starins	Strains of Bacillus spp. With a high generation capacity of lactic acid for the preservation of forage and cell lysis capacity for a more effective capacity in anaerobic digestion

### TECHNOLOGIES



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