



# Inventory of nutrient recovery R&D projects

*4<sup>th</sup> Phosphorus in Europe Research Meeting*

Lapo Braconi – ETA Florence Renewable Energies

2<sup>nd</sup> June 2021

The Database is publicly available in ODS format on the following page of ESPP's website:  
<https://phosphorusplatform.eu/activities/r-d-and-projects>

Overview projects					Running EU funded projects								
ESPP research project members	Running EU funded projects	Running non-EU funded research	Finished EU funded projects	Finished non-EU funded research	Acronym	Full name	Project description	Starttime	Endtime	Funding	Website	Email	Contact person
ENRICH	AFTERLIFE	ABC REACH	3R2020+	ABC PERMIT	AFTERLIFE	Advanced Filtration TEchnologies for the Recovery and Later conversion of relevant Fractions from wastEwater	AFTERLIFE proposes a flexible, cost- and resource-efficient process framed in the zero-waste and circular economy approach for the recovery and valorisation of the relevant fractions	01/09/2017	31/08/2021	Horizon 2020, BBI-2016-R01 - Valorisation of the organic content of wastewater as feedstock, contributing	<a href="http://www.alterlife-project.eu">http://www.alterlife-project.eu</a>	<a href="mailto:paolo@eggplant.it">paolo@eggplant.it</a> , <a href="mailto:info@eggplant.it">info@eggplant.it</a> , <a href="mailto:andreas.scharf@nova-institut.de">andreas.scharf@nova-institut.de</a>	Paolo Stufano and Andreas Scharf
Fertimanure	AgRefine	ABONOCARE	A_Propeau	Agri4Value	AgRefine	A Disruptive Innovative Cooperative Entrepreneurial (DICE) education, training and skills development programme	The AgRefine integrated training program will facilitate the amelioration of Europe's agri-sector competitiveness and environmental sustainability challenges by	01/10/2019	30/09/2023	Horizon 2020, MSCA-ITN-2019 - Innovative Training Networks	<a href="https://cordis.europa.eu/project/id/860477">https://cordis.europa.eu/project/id/860477</a>	<a href="mailto:joseph.sweeney@ucd.ie">joseph.sweeney@ucd.ie</a> , <a href="mailto:cormac.d.murphy@ucd.ie">cormac.d.murphy@ucd.ie</a> , <a href="mailto:fionnuala.murphy@ucd.ie">fionnuala.murphy@ucd.ie</a>	Joseph Sweeney, Cormac Murphy, Fionnuala Murphy
Lex4Bio	AgriChemWhey	AquaGreen	ABOWE	AlgalFertilizer	AgriChemWh	An integrated biorefinery for the conversion of dairy side streams to high value bio-based chemicals	Whey Permeate (WP) and De-lactosed Whey Permeate (DLP) are major side-streams of dairy processing and represent a key challenge for the dairy industry due to a lack of	01/01/2018	31/12/2021	Horizon 2020, H2020-BBI-JTI-2016, BBI-2016-F01 - Valorisation of by-products or waste-streams	<a href="https://www.agrichemwhey.com">https://www.agrichemwhey.com</a>	<a href="mailto:info@agrichemwhey.eu">info@agrichemwhey.eu</a> , <a href="mailto:ir@glanbia.com">ir@glanbia.com</a>	
LIWE LIFE	Agriplus Hohenlohe	Amphore	ACTIVE WETLANDS	AquaEnviro UK	Agriplus Hohenlohe		aim of increasing the efficiency of arable farming in the Hohenlohe region by nutrient recovery from farmyard manure; validation of the efficiency of the fertilization strategy	gen-19	01/12/2021	EIP-agri	<a href="https://www.steinbeis-europa.de/agriplus_en">https://www.steinbeis-europa.de/agriplus_en</a>	<a href="mailto:jennifer.bilbao@steinbeis-europa.de">jennifer.bilbao@steinbeis-europa.de</a> , <a href="mailto:regina.huettner@steinbeis-europa.de">regina.huettner@steinbeis-europa.de</a> , <a href="mailto:bilbao@steinbeis-europa.de">bilbao@steinbeis-europa.de</a>	Jenifer Bilbao, Regina Huttner
MongOS	AgriWasteValue	Baltic Fish	ADD-ON	ASHES	AGRIWASTEVAL	AgriWasteValue - to transform agricultural by-products and residues into	The aim of the AGRIWASTEVALUE project is the integration of agricultural by-products and	2018	01/01/2022	INTERREG	<a href="https://www.agriwastevalue.eu/en/welcome">https://www.agriwastevalue.eu/en/welcome</a>	<a href="mailto:Florent.allais@agroparistech.fr">Florent.allais@agroparistech.fr</a> , <a href="mailto:clemence.rotol">clemence.rotol</a>	Florent Allais
Pegasus	ALG-AD	BIOFORG	AGRI-KNOWS	AVA-CleanPhos									
Phos4You	ARREAU (EIP Water, international)	Circular NP	AGRIFORVALOR	Bio-Ore									
Prosumer	B-FERST	Coastal Reed Project	AgriMax	BiofuelcellAPP									
QUB Phosphorus from wastewater	B-WaterSmart	Ecosec mobile struvite reactor	AgroCycle	BIOUREA									
RePhoKUs	BioMonitor	ENDOFWASTEWATER	ALGAECAN	Biochar-Soil-Plant Interface Research									
Run4Life	BIOPLAT-EU	Gypsum Initiative	ALL-GAS	BioVakka Vehmaa biogas / digestate									
SMART-Plant	Biobased Fertilisers Achterhoek	Grass2Algae	Ammonia Trapping	CLOOP									
SYSTEMIC	Biorefine Cluster Europe	Helsinki wastewater nutrient recod	Anadry	DemoWare									
Wetsus Phosphate Recovery them	CHIMERA	I-PHYC	ANPHOS	Denmark IRMAR project									
	CINDERELA	LOTUS HR	ANSWER	EDASK									
	Circular Agronomics	Manure Recycling Project	AQUA	ElPhoDia									
	Circular City Re.Solution	MeY4bioPP	Aquavlan	ePhos									
	CIRCWASTE	MoRECo	Aquemfree	ExtraPhos									
	City Loops	Netherlands Micronutrients from	ARBOR	Ferti-Mine									
	Clamber	PARFORCE	Baltic Blue Growth	FIX-PHOS									
	CROCODILE	PhoResNet	Baltic COMPASS	Global TraPs									
	C-Voucher	R2T	Baltic Deal	GOBI									
	DECOST	RAHI	Baltic EcoMussel	GreenSpeed									
	DEEP PURPLE	Rec Alkaline	BALTIC MANURE	H2O-C2C									
	Dry4Gas	Recycle4Bio	BALTIC PHOENIX	IF2O - COOPERL									
	ECOSTAT Nutrient Research	REFLOW Stockholm	Baltic Slurry Acidification	IMPROVE-P									
	ELECTRA	RESTOR	BERAS	IWARRC									
	EMBRACED	RUN	BEST	KIVIREKI									
	FARMYING	SOILFOOD	BIOBIGG	KRN-Mephrec									
	FertiCycle	SLUDGEFFECT	BioCannDo	MAB3									
	HOOP	TYPKI	BioEcoSim	Manure Nutrient Calculator									
	Horti-blueC	Wcycle	BIOFECTOR	Manure With Value									
	Houseful		BioGreenhouse	Manuvalor									
	HYDROUSA		BioRaEE	Meerwaarde Mest en Mineralen									
	IDESoWa		Biorefine project	MIND-P									
	iSQAPER		BioSTEP	NexCities									
	ITERAMS		Bioteam	Normative Manure System									
	KTI PyroPhos		BLOOM	Nurec4org									
	LIFE ARIMEDA		BONUS MICROALGAE	Nutricycle									
	LIFE POREM		BONUS OPTITREAT	Nutrient Clearing House									
	LIFE Waste2NeoAlginat		BONUS PROMISE	Nutrient Cycling Ecosystem									
	LIWE		BSR WATER	Nutrient Neutral Municipality									
	Model2Bio		ByProtVal	Nutrient recovery Grødalund									
	NEMO		CANTOGETHER	NUTS									
	New C Land		CHROMIC	OCAPI									
	Newbies		CIRC4Life	Ochre and biochar research									

**453**  
Projects  
currently in the  
Database



**14**  
ESPP Members  
(6 Running, 8  
Finished; 10 EU-  
Funded, 4 non-EU  
Funded)

**87**  
Running & EU  
Funded

**32**  
Running & non-  
EU Funded

**228**  
Finished & EU  
Funded

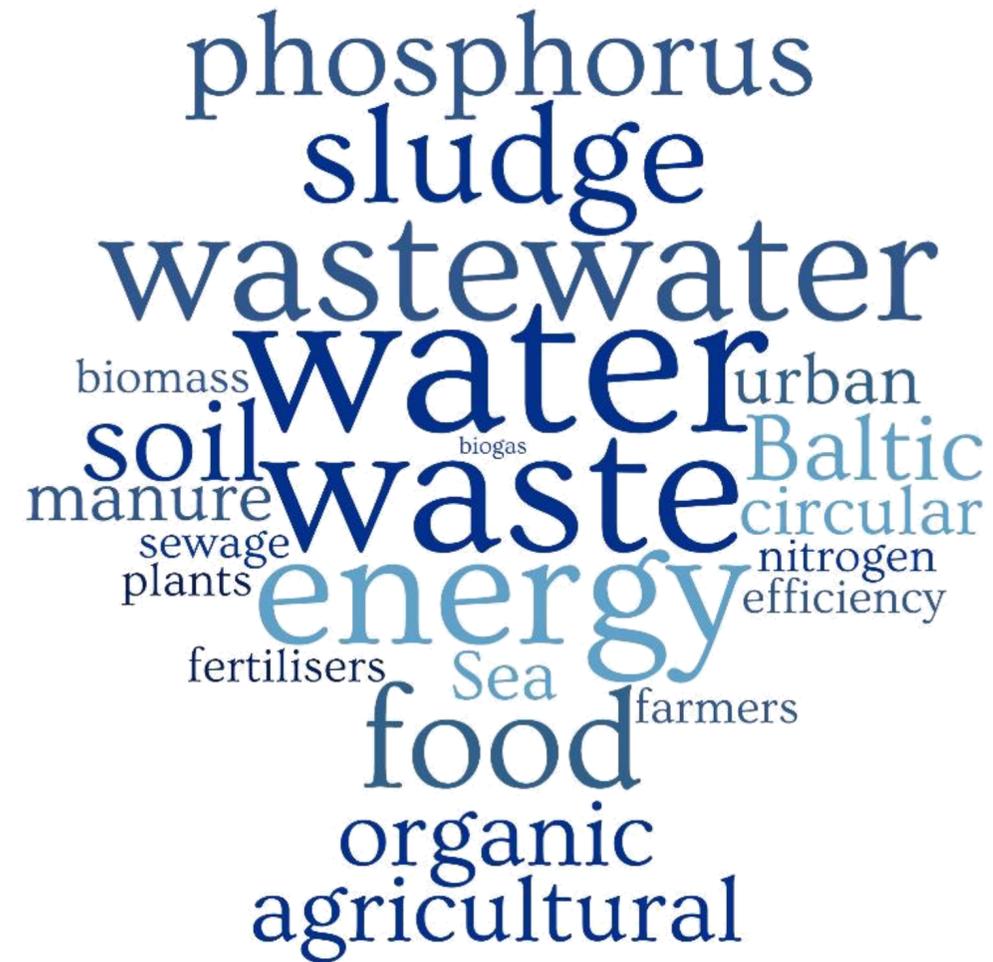
**92**  
Finished & non-  
EU Funded

- Unique database: it includes not only Horizon 2020 projects, but also LIFE, INTERREG, and nationally funded projects.
- It enables funders, researchers, industry to assess the state of nutrients related Research & Development.
- Allows proponents of projects to spot potential partners and to double check their proposal for added value, thus creating synergy and avoiding duplication.
- The database is living and kept up to date. If you wish to add a project to the inventory, reach out to me at [lapo.braconi@etaflorence.it](mailto:lapo.braconi@etaflorence.it)

# Database-Wide Keywords



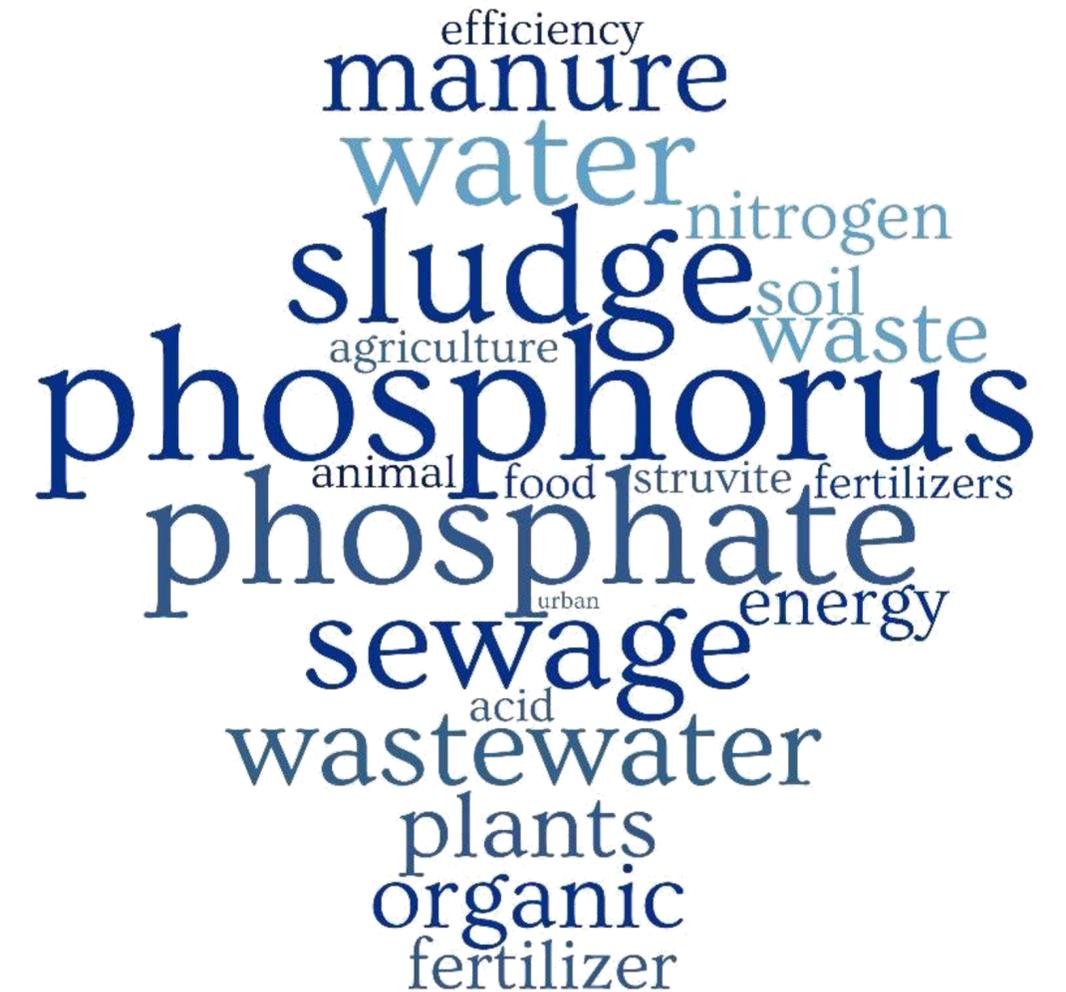
## EU-Funded Projects Keywords



A word cloud for EU-funded projects. The most prominent words are 'phosphorus', 'sludge', 'wastewater', 'water', 'waste', 'energy', 'food', 'organic', and 'agricultural'. Other visible words include 'soil', 'manure', 'sewage', 'plants', 'fertilisers', 'Sea', 'farmers', 'biogas', 'urban', 'Baltic', 'circular', 'nitrogen', and 'efficiency'.

phosphorus  
sludge  
wastewater  
water  
waste  
energy  
food  
organic  
agricultural  
soil  
manure  
sewage  
plants  
fertilisers  
Sea  
farmers  
biogas  
urban  
Baltic  
circular  
nitrogen  
efficiency

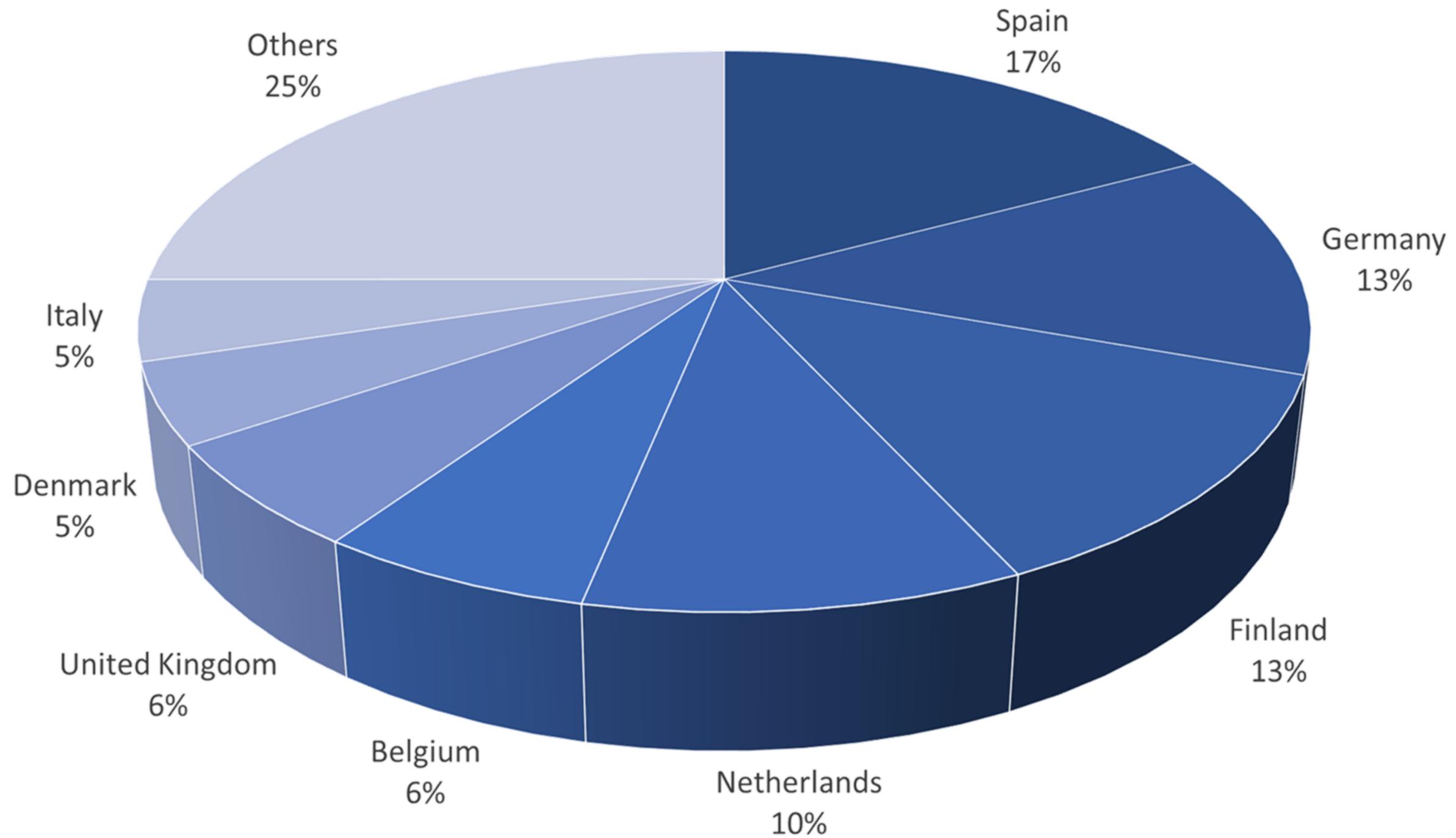
## Nationally Funded Projects Keywords



A word cloud for nationally funded projects. The most prominent words are 'phosphorus', 'phosphate', 'sewage', 'wastewater', 'plants', 'organic', and 'fertilizer'. Other visible words include 'manure', 'water', 'sludge', 'nitrogen', 'soil', 'waste', 'agriculture', 'animal', 'food', 'struvite', 'fertilizers', 'urban', 'acid', and 'energy'.

phosphorus  
phosphate  
sewage  
wastewater  
plants  
organic  
fertilizer  
manure  
water  
sludge  
nitrogen  
soil  
waste  
agriculture  
animal  
food  
struvite  
fertilizers  
urban  
acid  
energy

# Geographical Distribution of Projects in the Database





**Thank you!**

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