

Online platform to help kick start the European market for recycled phosphorus

August 25 2015



An online platform has been launched to help kick start the European market for recycled phosphorus, a nutrient vital to agriculture.

This eMarket platform is a key deliverable of the EU-funded P-REX (Sustainable [sewage sludge](#) management fostering phosphorus recovery and energy efficiency) project, which is scheduled for completion at the end of August 2015. Incorporated into the website of the European Sustainable Phosphorus Platform, eMarket provides businesses with a place to meet and exchange information about nutrient recovery and recycling.

eMarket is non-commercial; use and participation of the platform is free of charge with information and content given on voluntarily base. The

project team is confident that the platform will provide an efficient and sustainable means of promoting the recovery of phosphorus from municipal sewage, and help businesses identify more cost-effective ways of obtaining this valuable nutrient.

Sourcing phosphorus sustainably is an important environmental and financial consideration for Europe. Excreted in urine, it is a vital nutrient for animal and plant life and a key ingredient in fertilisers and animal feed. Phosphorus cannot be produced artificially nor can it be substituted by any other substance.

Demand is such that the EU currently has to import 90 % of its phosphorus needs – some 975 000 tonnes annually – which is usually mined from phosphorus rock in North Africa and the Middle East. This is not the most environmentally sound nor the cheapest means of obtaining phosphorus.

The aim of the P-REX project has therefore been to devise tools that will enable Europe to reduce its dependence on costly imports through recycling phosphorus from sewage sludge (the thick semi-solid material left over after treating municipal wastewater). Recovered phosphorus from this sludge could theoretically cover about 20 % of Europe's current demand for the nutrient, P-REX researchers have estimated.

The project began in September 2012 with an evaluation of the costs and benefits of ten promising technologies to recover phosphorus from sludge. As the traditional application of sewage sludge in agriculture faces concerns over pollutants, sustainable alternatives are actively being sought in order to protect the environment and human health.

From this work, a guidance document for both policymakers and industry was developed, outlining suitable phosphorus recovery options and recommendations. As there are wide variations across Europe – and

even between regions – in how sludge is treated and disposed of, the P-REX recommendations are tailored to these differences.

The project next looked at ways of fostering a viable market for recycled phosphorous. Researchers argued that industry needs incentives – such as reasonable subsidies and EU-wide policies – in order to reach the economies of scale needed to reduce Europe's dependence on imports. The launch of the eMarket online platform ties in with this aim, through facilitating growth by linking European suppliers of recovered phosphorus with potential buyers.

Project results have been disseminated at international workshops and regional events to raise awareness among agriculture-based businesses of the economic potential of sustainable phosphorus sourcing. The launch of the platform should help ensure that Europe's nascent recycled [phosphorus](#) market continues to consolidate and grows.

More information: For further information please visit P-REX: p-rex.eu/index.php?id=13

Provided by CORDIS

Citation: Online platform to help kick start the European market for recycled phosphorus (2015, August 25) retrieved 3 May 2024 from <https://phys.org/news/2015-08-online-platform-european-recycled-phosphorus.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--