

Consultative Communication on the sustainable Use of Phosphorus

Response from UK Renewable Energy Association

The Organics Recycling Group of the Renewable Energy Association (www.organics-recycling.org.uk) welcomes the opportunity to comment on the Consultative Communication on the sustainable Use of Phosphorus. Particular reference within this response is in context of the sustainable management of biodegradable resources through a range of technologies including composting and anaerobic digestion.

Background of ORG/REA

The Organics Recycling Group (ORG), together with the Biogas Group, represents the interests of the biological treatment industry in the UK. We promote the sustainable use of organic waste derived materials through recycling of renewable resources and increasing its market value. The ORG also supports the circular economy and encourages greater availability of high quality waste derived products as resources to industry and general public. This includes generating renewable energy through anaerobic digestion and recycling organic resources to land through application of compost and digestate.

ORG comments on the specific questions

Q1 - Do you consider that the security of supply issues for the EU in relation to the distribution of phosphate rock is a matter of concern? If so, what should be done to engage with producing countries in order to tackle these issues?

Yes, we consider that the security of low contaminated phosphate rock supply is limited. Nevertheless, we believe the European Commission should also recognise renewable resources of phosphorus including waste derived compost & digestate, manure and biosolids and not only rely solely on mineral resources. As mainly available in three locations around the World, the transport of this material creates further questions on its environmental & economic impacts. The alternatives are widely available across Europe and worldwide, and provide not only sustainability through relatively local recycling of organics waste as fertilisers/soil conditioners but also a certain level of security over the supply of phosphorus. In

the UK 10.5 million tonnes of organic wastes were converted into renewable soil conditioners such as composts and digestates.

ORG supports [European Compost Network](#) (ECN) recommendation to broaden the scope of the EU Fertiliser Regulation to include organic waste derived fertilisers.

Q2 - Is the supply and demand picture presented here accurate? What could the EU do to encourage the mitigation of supply risk through i.e. the promotion of sustainable mining or the use of new mining technologies?

ORG agrees with the supply and demand picture presented in the consultative communication. There is an increased need for P rich fertiliser, especially across the developing countries where population growth can also be observed. On the supply side we are looking into a depletion of non-contaminated mineral resources and potentially costly investments into technologies which could tackle the issues. In addition to exploring the sustainability question over the mining process, the EC should also take into account the impacts of the mineral resources transboundary movements, as P reserves are mainly available in three locations around the World which means that in order to make them available to other countries trans frontier movements of these materials is essential.

We recommend the promotion of an effective use of renewable resources through recycling of organic wastes to land. This could be encouraged by the relevant EU legislations on biowaste and fertilisers, promoting separate collection of organic wastes and supporting the enhancement of the quality of the waste derived products.

Q3 - Do you consider that the information on the worldwide supply and demand of phosphate rock and fertiliser is sufficiently available, transparent and reliable? If not, what would be the best way to obtain more transparent and reliable information at EU and global level?

There are some initiatives actively working on sustainable use of phosphorus but the information/data are not easily available and/or widely discussed. In order to obtain reliable & transparent data from multiple sources there is a need to expand the existing platforms at national levels and make it more easily accessible to the public.

Q4 - How should we handle the risk of soil contamination linked to phosphorus use in the EU?

In order to limit the potential contamination linked with application of fertilisers to land it is recommended to look into the sources of the contamination. The potential heavy metal

(cadmium, uranium) contamination from raw phosphate rock could be significantly reduced by the use of renewable fertilisers. Waste derived products such as composts and digestates from source-segregated organic waste should undergo a very robust sampling regime and extensive controls before entering the relevant market and therefore pose a lower risk to soil. At the same time the quality of waste derived compost and digestate could be encouraged by promoting separate collection of organic wastes and enhance market/farmers acceptance of replacing mineral with organics fertilisers.

ORG supports the ECN's position and agrees that the contamination issue could also be effectively managed by introducing contamination threshold limits through the revised EU Fertiliser Regulation (EC) 2003/2003.

Q5 - Which technologies have the greatest overall potential to improve the sustainable use of phosphorus? What are the costs and benefits?

The vision of a higher level of nutrient cycle and obligatory organics wastes/sewage sludge recycling should be the preferred way forward. The relevant technologies include composting and anaerobic digestion processes.

ORG also advocates a ban on food waste from landfill, which would encourage diversion of valuable nutrients from landfill and move this up the waste hierarchy.

Q6 - What should the EU promote in terms of further research and innovation into the sustainable use of phosphorus?

Further steps in promoting the debate and R&D projects over the sustainable use of phosphorus should include the promotion of use of renewable fertilisers and their benefits on National, European and global levels. It should be encouraged on both demand and supply sides in parallel. Firstly, by establishing the market demand for high quality waste derived products (compost & digestate) through research projects and long term field trials on the effect of the application of the organic fertilisers to land, and market confidence in quality and consistency of the treatment process. Secondly, looking into the supply side the producers of renewable fertilisers could be supported by introducing incentives for further recycling, landfill ban and separate collection requirements.

There is currently a small incentive available to farmers through the agricultural Single Farm Payment scheme for using organic wastes in preference to artificial fertilisers, this should be reviewed and the incentive enhanced to promote further use of organic amendments in preference to mineral fertilisers.

Q7 - Do you consider that the available information on the efficiency of phosphorus use of recycled phosphorus in agriculture is adequate? If not, what further statistical information might be necessary?

The Waste Resources Actions Programme have field trials in the UK on application of waste derived compost and digestate to agricultural land (the so called, DC-Agri – see <http://www.wrap.org.uk/content/digestate-compost-agriculture>). The final report will be available in spring 2014. As per Q6, ORG recommends further long term field trials across Europe, which also compares the effects of organic fertilisers application to land. It is crucial to ensure the outcomes of these projects are widely available, recognised and promoted by the EC within the market.

Q8 - How could the European Innovation Partnership on 'agricultural productivity and sustainability' help to take forward the sustainable use of phosphorus?

ORG agrees with the ECN's comments on setting up an expert group on efficient P fertilisation and recycled P-fertiliser', raising awareness on the sustainable P management on global, European and national/local levels and promoting the use of organic fertilisers over mineral ones. The ORG would like to be included on this working group if it was to become established.

Q9 - What can be done to ensure better management and increased processing of manure in areas of over-supply and to encourage greater use of processed manure outside of these areas.

Ensuring that farmers are fully aware of the full range of benefits provided by using animal manures not only in respect to the nutrient benefits but other aspects of land management such as soil erosion prevention, humus addition and beneficial aspects of moisture retention in soils with higher organic matter where compost and digestate has been used in preference to artificial fertilisers.

Q10 - What could be done to improve the recovery of phosphorus from food waste and other biodegradable waste?

There are number incentives that could be implemented to improve the recovery of P from organic wastes, including:

- Encouraging or requiring separate collection of organic wastes;
- Minimising contamination issues during the collection process;
- Enforcing a landfill ban on food waste in long run

- Promoting and raising awareness of waste as resources concept;
- Increase market confidence in the value of waste derived compost and digestate;
- Raising awareness of compost and digestate benefits.

Q11 - Should some form of recovery of phosphorus from waste water treatment be made mandatory or encouraged? What could be done to make sewage sludge and biodegradable waste more available and acceptable to arable farming?

No comments.