

**Session Society: April 11th 13.45 hrs**

**2s1: What kind of circular society**

## **What are Irish and Scottish Stakeholders' Opinions of Phosphorous Recovery from Rural Wastewater in Ireland and Scotland?**

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Phosphorous (P) is an essential constituent of mineral fertilisers and a valuable resource. Unfortunately, mineral reserves of rock phosphate are depleting on a global scale. As a result, the European Commission has recently added rock phosphate to its critical raw materials list to ensure the security of supply. P cannot be substituted with any other mineral and therefore, it is of high economic importance. It is important to investigate alternative and sustainable sources of P including P sourced from wastewater. A stakeholder survey was conducted to capture the views of key stakeholders in Ireland and Scotland on the recovery of P from wastewater systems in rural areas. The survey aimed to explore their knowledge, views and opinions on the importance of P recovery and identify the positive outcomes and possible challenges in the future, in a rural context.

Over 130 urban and rural Irish and Scottish participants responded to the survey. The survey participants main concerns regarding wastewater effluent were contamination, environmental impact and the capacity of wastewater treatment plants. They also suggested that mineral fertiliser, animal manure and agriculture run-off contributed the most to P sources of P emissions in rural waterways. Both the rural and urban participants suggest that artificial fertilisers were the main source of P used in Ireland and Scotland. The urban participants in both countries suggested that P from recovered sources must be of good quality, whereas the rural participants suggested the price was the most important. In addition, the respondents from Ireland suggested that recovering P from rural wastewater is important to improve environmental protection and to have a good water status, whereas those in Scotland considered the cost as important.

It is central to get the end-users in Ireland and Scotland on board with using alternative sustainable P from recovered sources to actively close the nutrient cycle-loop and contributes to the circular economy.

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