

The Live and Virtual Phosphorus Negotiation Game (P-Game): An Introduction to Playing with Sustainable Development Goals (SDGs)

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Abstract

Environmental decision-making and negotiations take place at the science-policy interface. While this fact is understood, it is challenging to convey to students how science and policy interact in environmental studies and social sciences. In this context, simulating environmental negotiations in serious games are effective experimental learning tools that can help. Phosphorus is crucial for global food security, and phosphorus production and management touch upon several Sustainable Development Goals (SDGs) that are in direct conflict with one another. The University of Continuing Education Krems is presently developing a Phosphorus Negotiation Game (P-Game) to teach students about the different dilemmas in phosphorus production and how to best address them. A live simulation as well as a virtual simulation of the P-Game are being developed and this work provides a first overview of the serious game.

Keywords: Serious game; environmental negotiation; live and virtual