EDITORIAL



Challenges of Water and Sewage Management from a Circular Economy Perspective

Marzena Smol

Assist. prof. dr.

The water and sewage sector is currently facing many challenges arising from the implementation of a circular economy (CE), which is the newest European political priority (COM no. 98, 2020). Circular economy is defined by the European Commission (EC) as an economic model where the value of products, materials and resources is maintained in the economy for as long as possible, and the generation of waste is minimised (COM No. 614, 2015). From the perspective of water and sewage management, the CE strongly underlines an importance of more optimal use of water (in production, consumption and processes), more efficient use of energy resources (for the production of kinetic, thermal or bio-thermal energy) and innovative use of available natural resources (recovery of nutrients). To measure the progress towards the CE, in 2018, a set of 10 CE indicators was proposed (COM No. 614, 2015), none of which directly refer to the water and sewage sector. Therefore, in the project Monitoring of water and sewage management in the context of the implementation of the circular economy assumptions (MonGOS), the CE monitoring framework for the European water and sewage sector will be developed by the group of experts from selected scientific institutions dealing with water and sewage issues. This framework will be based on six core actions (6R), which are in line with the European waste hierarchy: reduction, reclamation (removal), reuse, recycling, recovery and rethink. An important element of the project is exchange of good

practices and transfer of knowledge between participating institutions and organisation of education and promotion events. Therefore, the project includes organisation of three study visits in Poland (2021), Finland (2021) and Lithuania (2022), two summer schools in Poland (2021) and Latvia (2022), and one international conference in Poland (2022). The project MonGOS is financed by the Polish National Agency for Academic Exchange (NAWA) under the International Academic Partnerships Programme.

Scientific papers published in *Environmental Re*search, Engineering and Management can certainly be an important source of knowledge in one of the key tasks of the project which focuses on identification and assessment of the potential of CE transformation in the water and sewage sector in Europe.

Participating institutions:

Lead partner: Mineral and Energy Economy Research Institute of the Polish Academy of Sciences (Poland);

Strategic partners: Katholieke Universiteit Leuven (Belgium), Lappeenranta University of Technology (Finland), Kaunas University of Technology (Lithuania), Tallinn University of Technology (Estonia) and University of Latvia (Latvia);

Supporting partners: eRBeKa Foundation (Poland) and Gdansk Water Foundation (Poland).



