

IC4WATER RDI FUNDED PROJECTS BOOKLET

Project: MICRO AND NANOPLASTICS AS CARRIERS FOR THE SPREAD OF CHEMICALS AND ANTIBIOTIC RESISTANCE IN THE AQUATIC ENVIRONMENT

Acronym: NANO-CARRIERS

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Project partners

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Project structure (WPs description):

WP1 will aim to urban wastewater treatment plant-based emission loads of MNPs into aquatic ecosystems under various wastewater treatments and wastewater discharge or reuse options. We will identify and characterise the major types of plastics present at micro and nano-scales

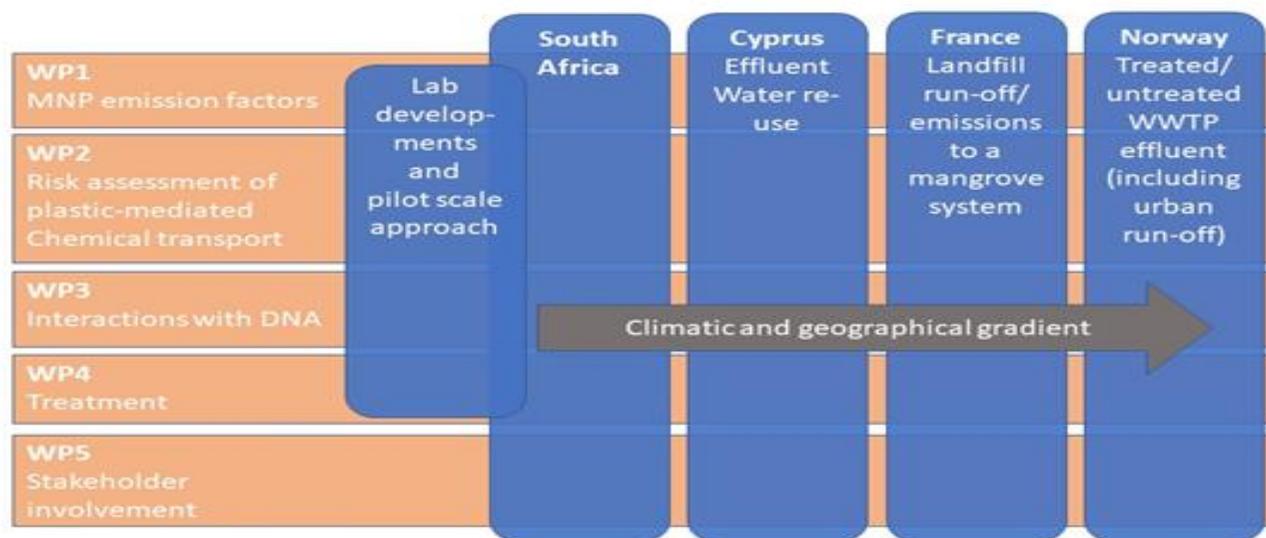
WP2 will aim to identify the most relevant and prevalent chemical additives associated with micro and particularly nano-size plastics as well as chemicals (CEC) adsorbed to plastics from the external environment. In addition we will focus on determining the fate/bioavailability of the chemical additives/CEC and associated risk once released into the environments

WP3 will focus on the evaluation of DNA sorption to MNPs (most common plastics) and possible associated change in DNA half-life in wastewater effluent and receiving waters. We will investigate whether MNPs act as carrier of common DNA in UWTPs effluents and the

aquatic environment and evaluate factors influencing sorption

WP4 will aim to assess risk and review treatment and risk management options for various scenarios or case studies proposed in this project

WP5 focuses on stakeholder involvement



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