

RESANAT, an abbreviation of “restverontreiniging saneren met nature-based technieken” is a Flemish-Dutch cooperation to improve a couple of remediation techniques for PAH’s and mineral oil contaminations in soils. To stimulate the redevelopment of sites with this type of contamination, seven smaller and larger companies from Flanders and the Netherlands are working together with research institute Deltares and the Public Waste Agency of Flanders.

Current remediation and controlling techniques are expensive, energy intensive, perdurable and demand a lot of groundwater. RESANAT will focus on the innovation of three sustainable remediation techniques, where plants, micro-organisms, minerals, wind- and solar power will be used to tackle the pollution. Thousands of locations dealing with traces of this contamination could be reused with the help of these techniques.

The improvement of the remediation techniques will occur in three pilot projects. Two of them will take place in Flanders: De Lieve in Ghent, a small river containing PAH’s, will be decontaminated with the help of porous structures filled with organoclay. The former Carcoke terrains in Zeebrugge will be the location of several phytoremediation experiments to determine to which extent the tar, PAH’s and cyanide pollution can be removed by their roots.

The third pilot, located in the Dutch village of ‘s Gravenmoer, collects information on the practical applications and scaling up of fixed biostimulation. Biostimulation is the acceleration of biological decay by applying micro-organisms to the exact location of the pollution. By further developing the method, there’s a possibility that the aftercare of some sites could be terminated.

The project has a total value of 2.2 million euros. About 50% is subsidized by the European Union. As the project leader, the Public Waste Agency of Flanders will do the general coordination, communication, sharing knowledge and write the good practices at the end of the project.