EO services contributing to SDGs - Loek Soil sealing/surface imperviousness mapping





- User: governments (national, provinces, municipalities), utilities sector and urban planning
- Challenge: in recent years extreme rainfall has appeared much more frequently than before. Urban environments have not been designed to deal with such high capacities of water. Climate adaptation has become a serious topic on the agendas of governments on different levels: how can we redesign urban landscapes to be sustainable and guarantee liveablility. Summarized: the stone environment should be more green. In the public space the government should come up with solutions that improve drainage without overloading the sewer systems, for private areas owners should be motivated to contribute by green gardens, green roofs, etc. Data on this topic is very scarce. NEO provides governments or their partners (advisors, engineers) data to use as input for models, to track down risks or manage policies. Important aspect is to keep the infrastructure data/maps up to date so it reflects the most recent (realistic) situation.
- Initiative: soil sealing/surface imperviousness map and monitoring service
- Results: 1) mapping the surface sealing in public and private spaces to identify sewer overload, flood risk, stone area concentrations, heat stress for data analysis. 2) a tool to support in public awareness of climate adaption (visualisation). 3) a supportive system for efficient asset management (e.g. underground cables). 4) automated workflow using open source data to provide up to date insights
- Service Provider: NEO BV

NEO mapping and monitoring services: https://www.neo.nl/imperviousness-surface-sealing/ Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans- border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.



Surface sealing area

