

01 | M4 CO3 A2 R9 T4

Innovative Solutions to Combat Climate Change in Amsterdam, The Netherlands

Climate change triggers flash floods due to heavy rainfall, higher temperatures, and increased droughts throughout European cities. In recent years, catastrophic events have occurred following persistent rainfall, outpacing the recurrence of these extreme events.

The Netherlands has extensive experience in large-scale water management. In this innovative urban project, the strategy involves implementing 10,000 m² of smart green roofs. Under the green roofs, water is stored, retaining water during heavy rainfall. An intelligent system allows for remote regulation of roof water levels based on weather forecasts and water management settings, allowing accumulated water to be released ahead of heavy rains. The initiative also offers several collateral benefits that affect other pressing issues facing cities. For example, facing the effects of climate change. Water storage helps reduce temperature and provides humidity when droughts are triggered during warm periods. The green roof can be also efficiently managed for urban agriculture and furthermore, it improves the survival rate of the plant layer and attracts birds and insects enhancing biodiversity.

Source: EESF project, based on RESILIO - Resilience nEtwork of Smart Innovative cLImate-adaptive rOoftops | UIA - Urban Innovative Actions



The European Commission support for the production of this publication does not constitute an endorsement of the contents which reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.