

Knowledge exchange on Climate Adaptation with Nature-based solutions and Best Management Practices for Sustainable (ground)water management in Resilient Cities

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Cities are becoming increasingly vulnerable to climate change, and there is an urgent need for climateproof resilient cities. Groundwater issues are not always visible to stakeholders so raising awareness and capacity building is of great importance. The Climatescan adaptation tool www.climatescan.nl is applied as an interactive tool for knowledge exchange and raising awareness on Nature-Based Solutions (NBS) targeting young professionals in ClimateCafes. Climatescan is a citizen science tool created through 'learning by doing', which is interactive, open source, and provides more detailed information on Best Management Practices (BMPs) as: exact location, website links, free photo and film material. Groundwater related BMPs such as stormwater infiltration by swales, raingardens, subsurface infiltration in Sponge cities are mapped and published on social media.

Climatescan is in continuous development as more data is uploaded by over 250 people around the world, and improvements are made to respond to feedback from users. In an early stage of the international knowledge exchange tool Climatescan, the tool was evaluated by semi-structured interviews in the Climatescan community with the following result: stakeholders demand tools that are interactive, open source, and provide more detailed information (location, free photo and film material).

In 2016 Climatescan was turned into an APP and within two years the tool had over 10,000 users and more than 3,000 international projects. More than 60% of the users are younger than 34 and 51% of users are female, resulting in engagement with an important target group: young professionals. The tool is applied in Climatecafe.nl around the world (The Netherlands, Sweden, Philippines, Indonesia, South Africa) and other water challenges with young professionals such as the Hanseatic Water City Challenge and Wetskills.

Recently a ClimateCafe was arranged in Malmö, Sweden, where the web-tool played a central part in knowledge exchange and in-field education on climate adaptation linked to WaterJPI funded projects INXCES and MUFFIN. In this event research was connected to the UNSDGs bringing awareness to the Sustainable Development Goals linked to (ground)water. To illustrate the power of the web-tool and the ClimateCafe surveys related to NBS and the UN SDGs were conducted before and after the event, and results will be presented at IAH.

In conclusion, there is a clear demand for a collaborative knowledge-sharing tool on (ground)water, where first impressions of different urban resilience projects can be quickly gained and examples of climate adaptation is easily accessible. Further work in linking events to the UN Sustainable Development Goals will further empower the usability of this web-tool www.ClimateScan.nl. This tool helps policy makers and practitioners to gather valuable data for decision-makers in a rapid appraisal at neighbourhood and city level. The results provide insights, create awareness, and build capacity with bringing together stakeholders in the Climatescan community.

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