

Engaging stakeholders in participative climate adaptation solutions

Water Resilient Cities,
11 September 2019

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Head of Sustainability & Resilience
Essex County Council

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Presentation Agenda

1. Short introduction to SPONGE 2020
2. 'Customer Journey' through Sponge toolbox
3. Next steps

SPONGE 2020

- Overall Objective:
“improve the adaptation capacity of cities and densely-built areas in the 2-seas region by co-creating and implementing innovative climate change adaptation solutions with local stakeholders.”
- SPONGE2020 is NOT about technical measures!



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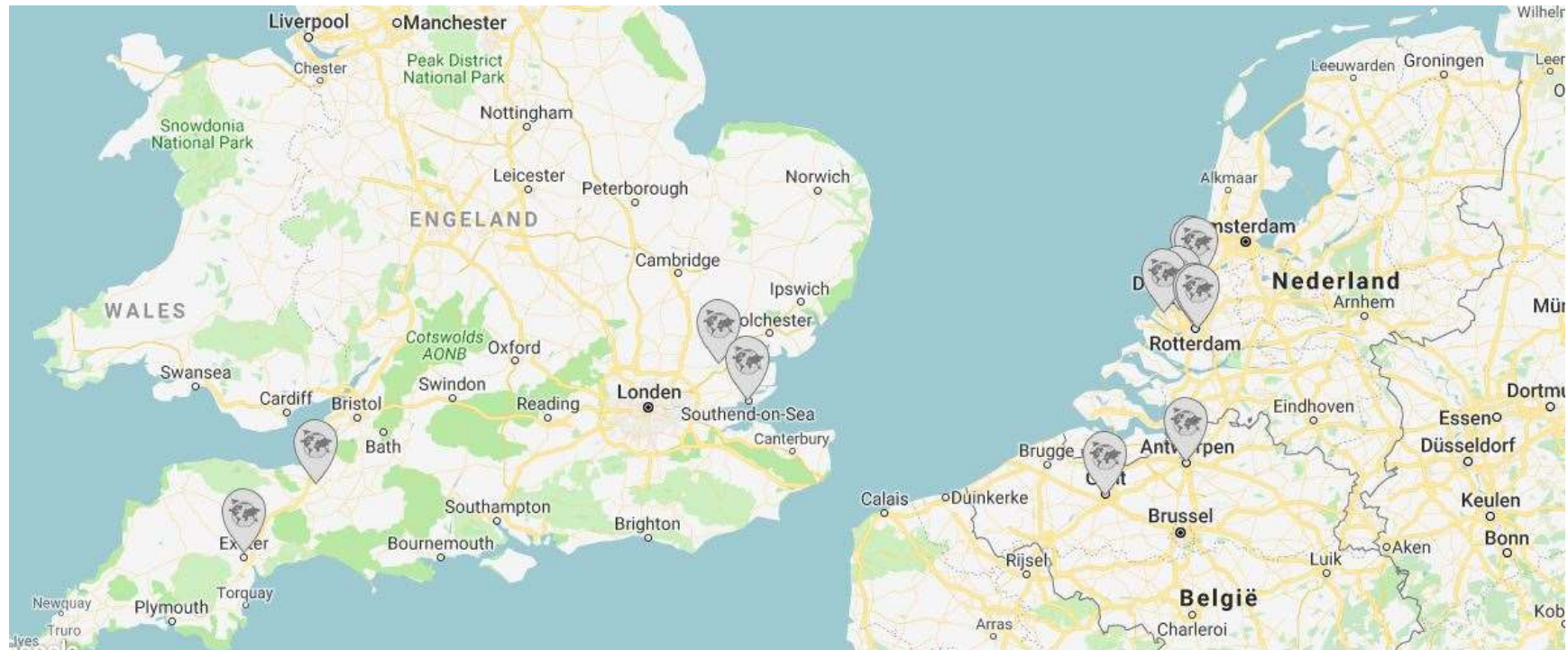
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Project Outputs

The project will deliver **four key outputs**:

- 7 complementary pilot demonstrator projects to implement innovative SuDS solutions with heavy involvement of local stakeholders
- 1 toolbox for stakeholder engagement in climate adaptation
- 1 guidance pack for participative climate adaptation in densely built areas
- 1 Cross-border action plan to introduce participative local climate strategies

2-Seas Area



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Project Partners



Gemeente Rotterdam

Municipality of Rotterdam
The Netherlands



Somerset County Council
United Kingdom



Provincie Oost-Vlaanderen
Belgium



Essex County Council
United Kingdom



City of Antwerp
Belgium



Westcountry Rivers Trust
United Kingdom



Regional water authority of Delfland
The Netherlands



Municipality of Westland
The Netherlands



Southend-on-Sea Borough Council
United Kingdom



Municipality of Leiden
The Netherlands



Schieland en de Krimpenerwaard
Regional Water Authority
The Netherlands



Rijnland District Water Control Board
The Netherlands

Urban morphology types

Pilots:

- City district with social housing and small enterprises
- Urban public spaces in a densely built port
- Major public institution – hospital
- Peri-urban sites on medium-sized towns
- Town centre on tourist coastal seafront
- Residential area
- High density greenhouse area
- Densely built historic city

Toolbox stakeholder participation

- Climate adaptation is not (just) a technical challenge – it is a social and community challenge
- How to involve other partners in climate adaptation action, e.g. communities, hospital, agricultural businesses, businesses in town centres, etc.
- Use of knowledge from behavioural science experts (Wageningen Uni)
- Experiences from Sponge pilot projects (monitoring & evaluation)



Incentives to contribute to flood adaptation in cities

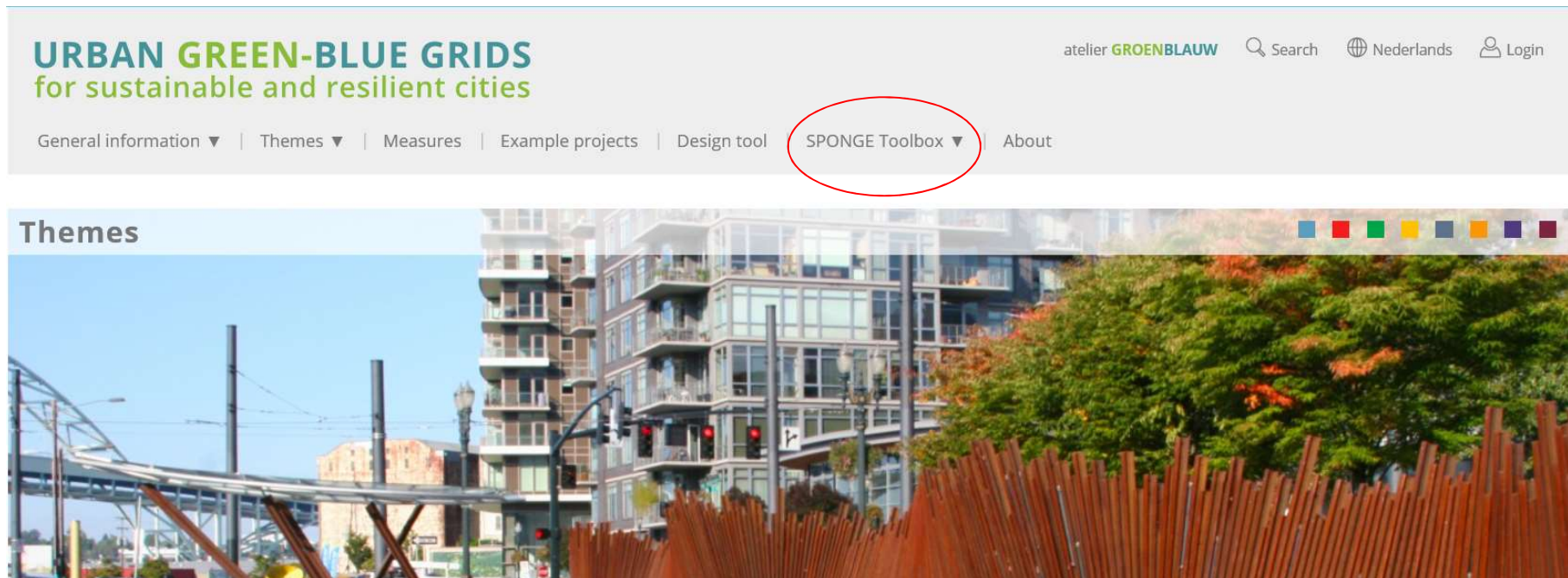
Stakeholder analyses in Belgium, the UK and the Netherlands

Katrine Soma, Marijke Dijkshoorn-Dekker, Nico Polman

Toolbox Structure

1. Five steps to stakeholder engagement
2. Types of stakeholders
3. Methods to engage stakeholders
4. Pilot projects

<https://www.urbangreenbluegrids.com/sponge/>



1) Five steps to stakeholder engagement



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2) Types of stakeholders



Citizens

-

Grass-root organizations

Non-organized

-

Tenants

House owners



Companies

-

Developers

Private companies

Housing development companies

Drinking water companies

Horticulture companies

Research institutes



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2) Types of stakeholders Cont'd



Government

-

National government

Provincial government

Regional water authorities

Municipality

-

Infrastructure

City designers

Water specialists

Green specialists

Maintenance



NGO's



Housing corporations



Educational institutions



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3) Methods to engage stakeholders



Design sprint



Experimentation



Labs



Setting up a contact point in the neighbourhood



Speed dating to facilitate one-on-one conversations



Expert tables



Working with schools on climate adaptation



Work with artist to gather and visualise stakeholder aspirations



Tour/site visit for consultation with residents and entrepreneurs



Terms of reference



Citizen science



Guerrilla actions/flash mob



Educating children on climate adaptation outside the regular school programme



Data review and accessibility



Project website



Awareness campaign using the (social) media



Attending existing community group meetings and local festivals



Door-to-door conversations



Face-to-face meetings with stakeholders



Design workshops/Climate studio



Organising a conference



Celebrity endorsement



Garden makeover competition videos



Demonstration using 3-D models of the urban area



Organising a festival or community event



Celebrating milestones



School visits



Stakeholder excursion – visiting inspirational sites



Action days



Collaborative mapping – problems, opportunities and 'dream' scenarios

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4) Pilot projects

1. **Leiden:** Transforming a carpark into a green park
2. **Southend-on-Sea:** Retrofitting SuDS at City Beach, Marine Parade
3. **Delfland & Westland:** Working in cooperation with greenhouse growers to create capacity in their water basins ahead of heavy rainfall
4. **Antwerp:** Co-creating a Garden Street
5. **Somerset & WRT:** Demonstration Raingardens
6. **HHSK & Rotterdam:** Retrofitting SuDS at neighbourhood level - Agniesebuurt
7. **Essex:** Retrofitting SuDS at Basildon Hospital

Customer journey for the toolbox

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Stage 1

- Introduction
- 5 steps to stakeholder engagement and co-creation
- Stakeholders
- Methods
- Pilot projects
- About SPONGE2020

SPONGE Toolbox

About this toolbox

This toolbox pulls together insights from behavioural science and public sector marketing with proven practices in stakeholder engagement work. It provides local (water) authorities (partners and other actors) with tools to effectively mobilise local stakeholders in climate adaptation.

Discover the interests of
different stakeholders

Stakeholders >



Stage 2

SPONGE Toolbox > Pilot projects

Pilot projects



All stakeholders

- Citizens +
- Companies +
- Government +
- NGO's
- Housing corporations
- Educational institutions



Stage 3

Essex SPONGE 2020 Pilot



DATA

Location: Essex, UK
Realization state/year: Complete - 2019
Start year: 2018
Designer: Ringway Jacobs
Contact: Aleksandar Bogdanov, Project Coordinator, ECC -
aleksandar.bogdanov@essex.gov.uk;
03330139536

What is the problem?

Essex County Council, as the Lead Local Flood Authority, has duties to manage local flood risks and prepare and maintain a strategy for local flood risk management. As part of that, the Council produces localised Surface Water Management Plans (SWMPs) – preferred strategies for the coordinated management of surface water flood risk within a given area. In the South Essex SWMP (2012) surface water flooding was highlighted as an issue causing problems in localised areas in Basildon.

Realised Measures / Projects related to Flood Risk in the Parish of Basildon

MEASURES ↓



STAKEHOLDERS ↓



METHODS ↓



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Stage 4

Essex SPONGE 2020 Pilot



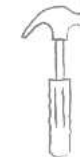
MEASURES ↓



STAKEHOLDERS ↓



METHODS ↓



Related measures



Ground infiltration



Additional water storage



Creating, maintaining and improving green areas and unhardening surfaces



Green maintenance aimed at developing biodiversity



Building a retention area

DATA

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Stage 5

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 Dashboard

General information
 Themes
 Measures
 Example projects
 Design tool
 SPONGE Toolbox
 About

Measures • Heat • Reducing heat with vegetation • Creating, maintaining and improving green areas and unhardening surfaces



city park © pixhere.com

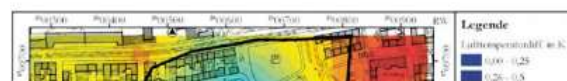
Water	
Heat	
Biodiversity	
Urban agriculture	
Air quality	
Energy	
Social and economic importance	
Multifunctional space usage	
Costs	

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Small areas of vegetation, for example green inner-city areas, do not have any effect on a town or city's climate, though they do affect its microclimate. Small green zones are oases in the urbanised area, where the shade provided by trees and the fewer hot, paved surfaces mean that air and surface temperatures are lower. Many possibilities for introducing green areas into towns and cities on a small scale have not yet been utilised, for example between the rails of tramlines and in places of unused paved surfaces.

Parks of 2.5 hectares or more in size have a measurable cooling effect on the surrounding areas. Ideally, the parks should be designed to have grass and shrubs, and the trees should be spread far enough apart to allow the wind to blow through them freely. The cooling effect is caused by the evapotranspiration and the shade. At night the cooling effect is greatest, when air flows between the park and the surrounding areas. The effect reaches half of the diameter more or less proportionate to its diameter.

Grids of connected green areas function in a similar manner. [Ministerium für Klimaschutz, NRW, 2011]



Related projects

- 't Geertje farm, Zoeterwoude, The Netherlands
- Agniesebuurt Rotterdam, The Netherlands
- Bo01, Malmö, Sweden
- Brasserhout, The Hague, The Netherlands
- Co-creating a garden street
- Essex SPONGE 2020 Pilot
- EVA-Lanxmeer: Living Lab
- Hof van Heden, Hoogvliet, Rotterdam
- Jenfelder Au, Hamburg
- Kristalblad, Hengelo/Enschede
- Landscape park Duisburg-Nord
- Leiden: Noorderkwartier- Oost
- Plan Tide, Dordrecht, the Netherlands
- Portland, Oregon, US
- Redevelopment of the River Scheldt left bank
- Rijkswaterstaat office in Terneuzen, The Netherlands

MEASURES ↓



EXAMPLES ↓



Stage 6

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SPONGE Toolbox > Pilot projects > Essex SPONGE 2020 Pilot

Essex SPONGE 2020 Pilot



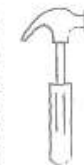
MEASURES ↓



STAKEHOLDERS ↓



METHODS ↓



Stakeholders

Citizens

Drinking water companies

NGO's

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General information ▾

Themes ▾

Measures

Example projects

Design tool

SPONGE Toolbox ▾

About

SPONGE Toolbox > Stakeholders > Grass-root organizations

Stakeholders

 Citizens	-
Grass-root organizations	
Non-organized	+
 Companies	+
 Government	+
 NGO's	
 Housing corporations	
 Educational institutions	



Grassroots groups are typically made up of members of the community who have been brought together around a certain issue. These groups and organizations use collective action on a local scale to bring about change, to encourage community members to take responsibility for local pressing issues and to take action.

In climate mitigation projects, grassroots and citizen associations are essential to activate local people and ensure their commitment. These groups may be interested in a specific geographical region or a specific social or environmental issue. By promoting the project to existing groups, it can be easier to communicate in a targeted way and to ensure that people with different backgrounds and interests are involved.

Related pilots



Green roofs on Leiden Station area



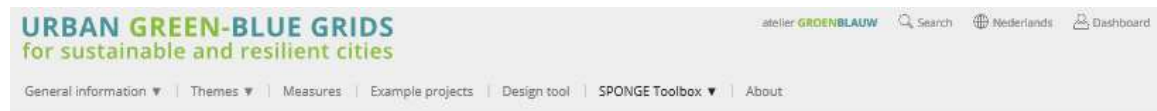
SuDS in Somerset



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Stage 8



PONGE Toolbox > Pilot projects > Essex SPONGE 2020 Pilot

Essex SPONGE 2020 Pilot



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Methods

- Awareness campaign using the (social) media
- Collaborative mapping – problems, opportunities and 'dream' scenarios
- Demonstration of sample design elements such as plants
- Design workshops/Climate studio**
- Data review and accessibility
- Face-to-face meetings with stakeholders
- Questionnaire
- Tour/site visit for consultation with stakeholders



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SPONGE Toolbox > 5 steps to stakeholder engagement and co-creation > Design workshops/Climate studio

5 steps to stakeholder engagement and co-creation

< all strategies

Design workshops/Climate studio



A design workshop is an intensive session in which a small group of participants explore topics related to a specific problem and redesign project features. All significant stakeholders should be invited to send a representative participant. A design workshop can also contribute to sharing information and increasing participants' understanding of the project.

To start, the designer presents principles that underpin the planning and design process for participants. Ideally all those present should be given opportunity to explain their wishes and demands. The group can then be divided into subgroups which discuss ideas and assess alternative solutions to design solutions already in place. Then each subgroup presents its result to the larger group. Ideas and alternative solutions can also be discussed in plenary sessions. The group then seeks consensus and tries to decide on a final resolution for the preferable approach. The result of the design workshop/climatestudio consists of the making a definitive version of the design, presenting the whole process and its outcomes.

Related pilots



Redevelopment of the River Scheldt left bank



Sint-Andries: working together towards a climate robust neighbourhood



Co-creating a garden street



Essex SPONGE 2020 Pilot



Climate adaptation measures at World Horti Center



Liermolensloot



Zuiderdokken - Pilot project for climate adaption in Antwerpen city centre



SuDS in Somerset



Green roofs on Leiden Station area



Leiden: Noorderkwartier- Oost

PILOTS ↓



STAKEHOLDERS ↓



Next steps

- Website will be online September 17 2019
- Extra projects will be added
- Dissemination of the toolbox to other professionals
- Official presentation at World Adaptation Week - September 2020 in Rotterdam

Thank you for your attention