



Learning about UNaLab ICT tools for decision-making in water management and climate change adaptation

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Speakers

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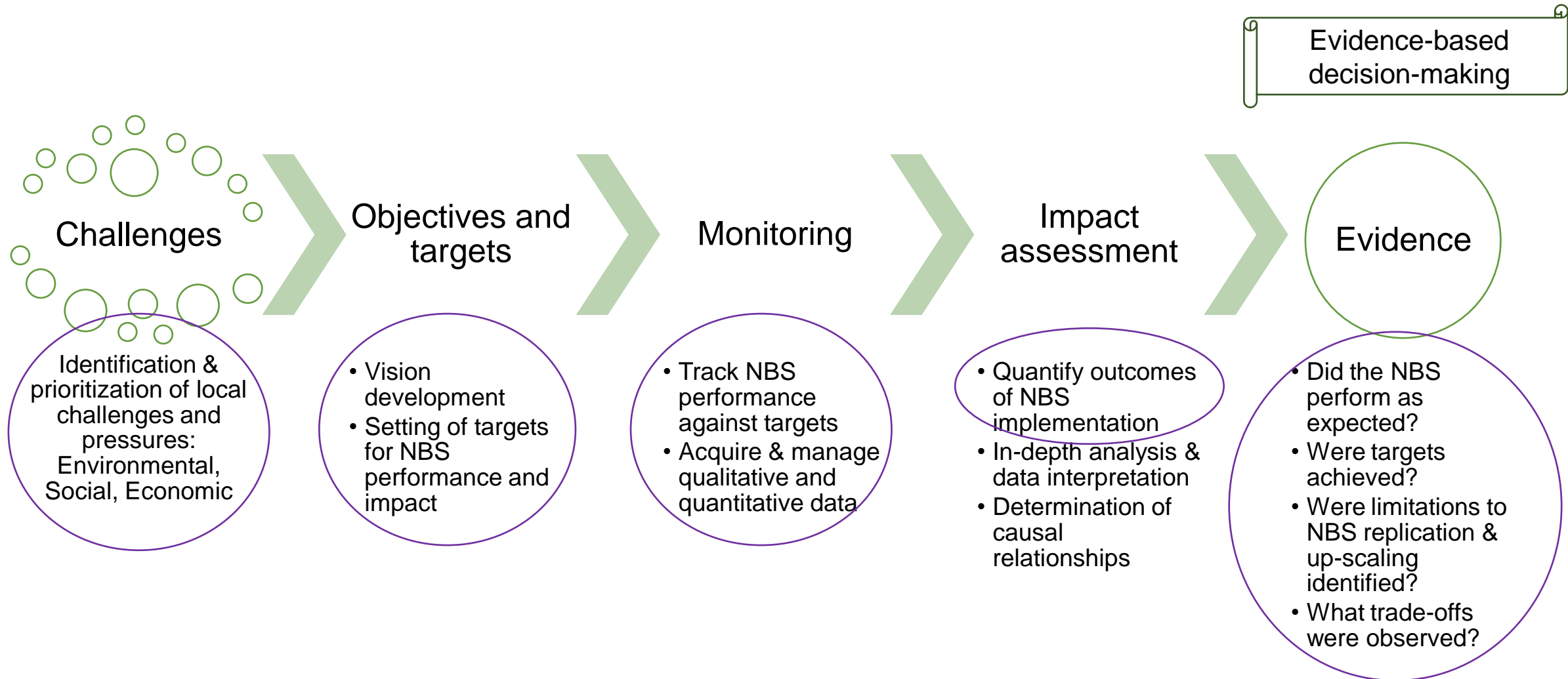
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UNaLab project has received funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 730052 | **Topic: SCC-2-2016-2017: Smart Cities and Communities Nature based solutions**

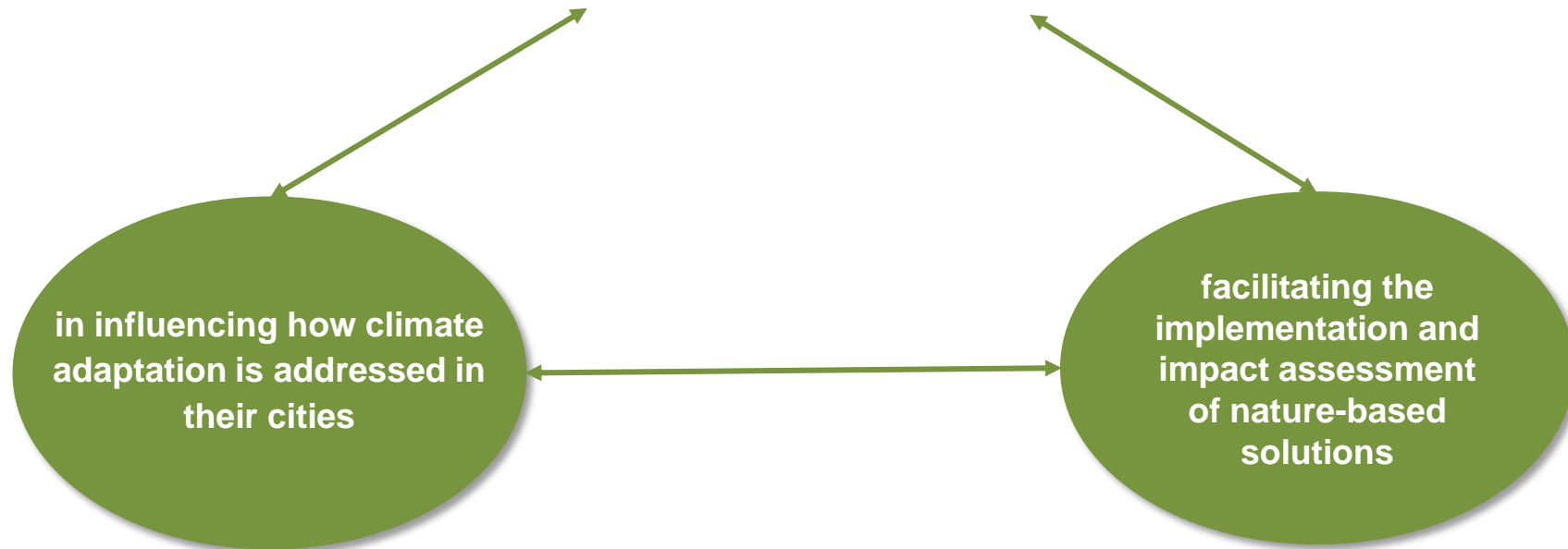


Enabling decision-making with ICT tools



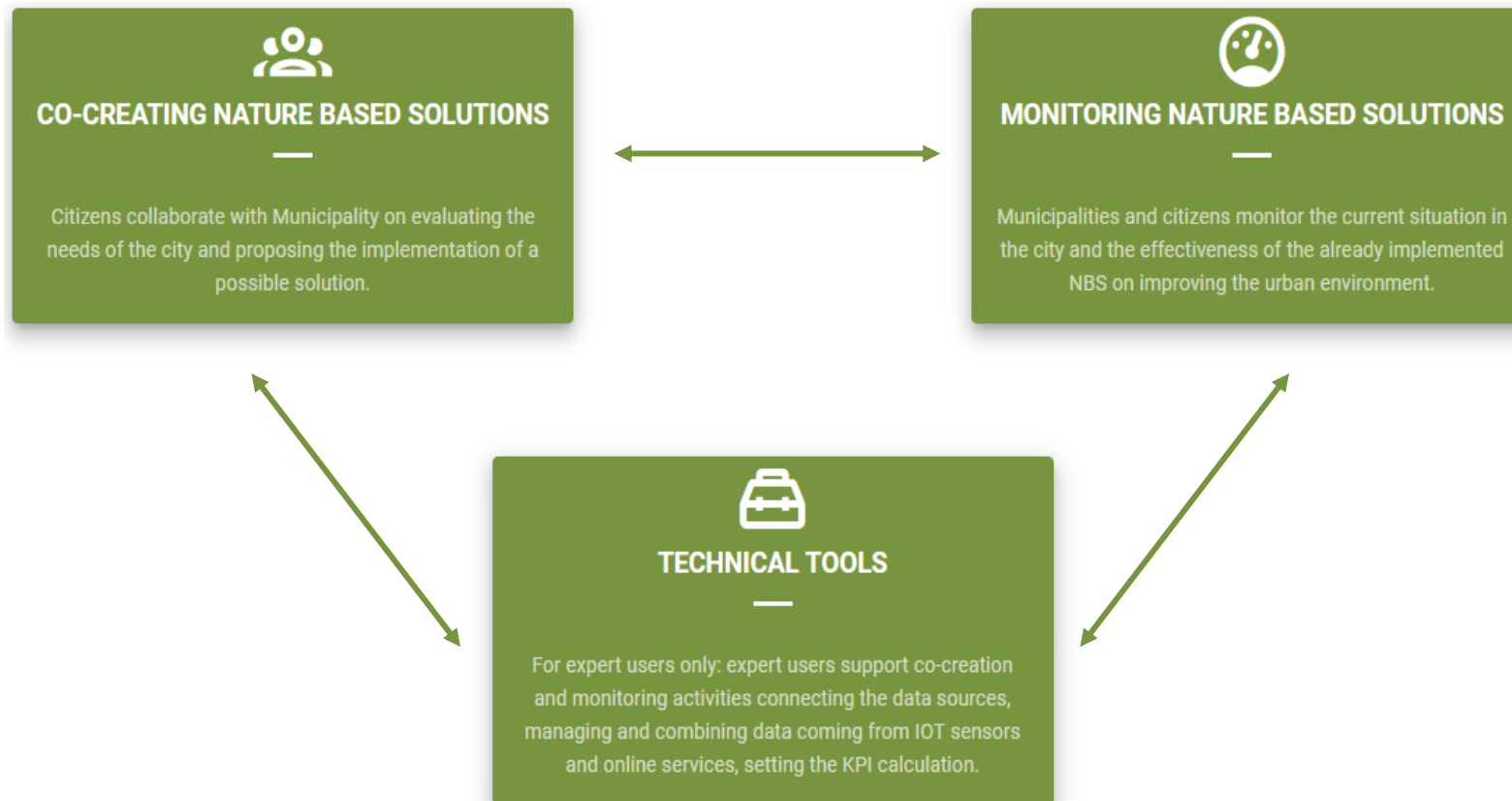
UNaLab ICT framework of tools

UNaLab ICT framework
helps municipalities, citizens
and key stakeholders



UNaLab ICT framework of tools

**UNaLab ICT framework supports NBS co-creation,
co-monitoring and adaptive management**



UNaLab ICT framework of tools

Open source licence
Standard technologies and protocols



CEF Digital
Connecting Europe



No vendor lock-in
No technological lock-in



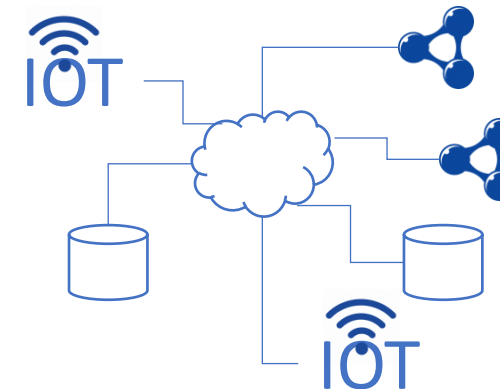
Powered by



Multimodal data visualisation



**Data management and
collection from heterogeneous
data sources**



Open Nature Innovation Arena (ONIA)

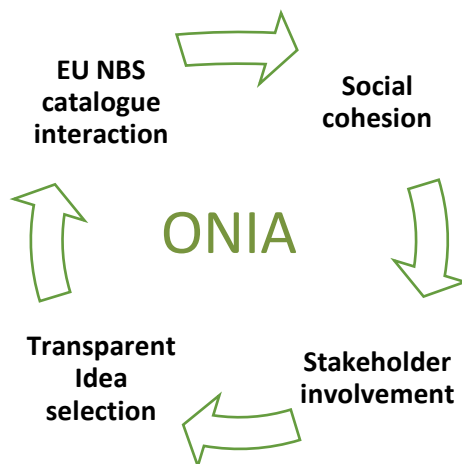
<http://onia.unalab.eng.it>



Makes Municipalities able to create **Challenges** as call for action



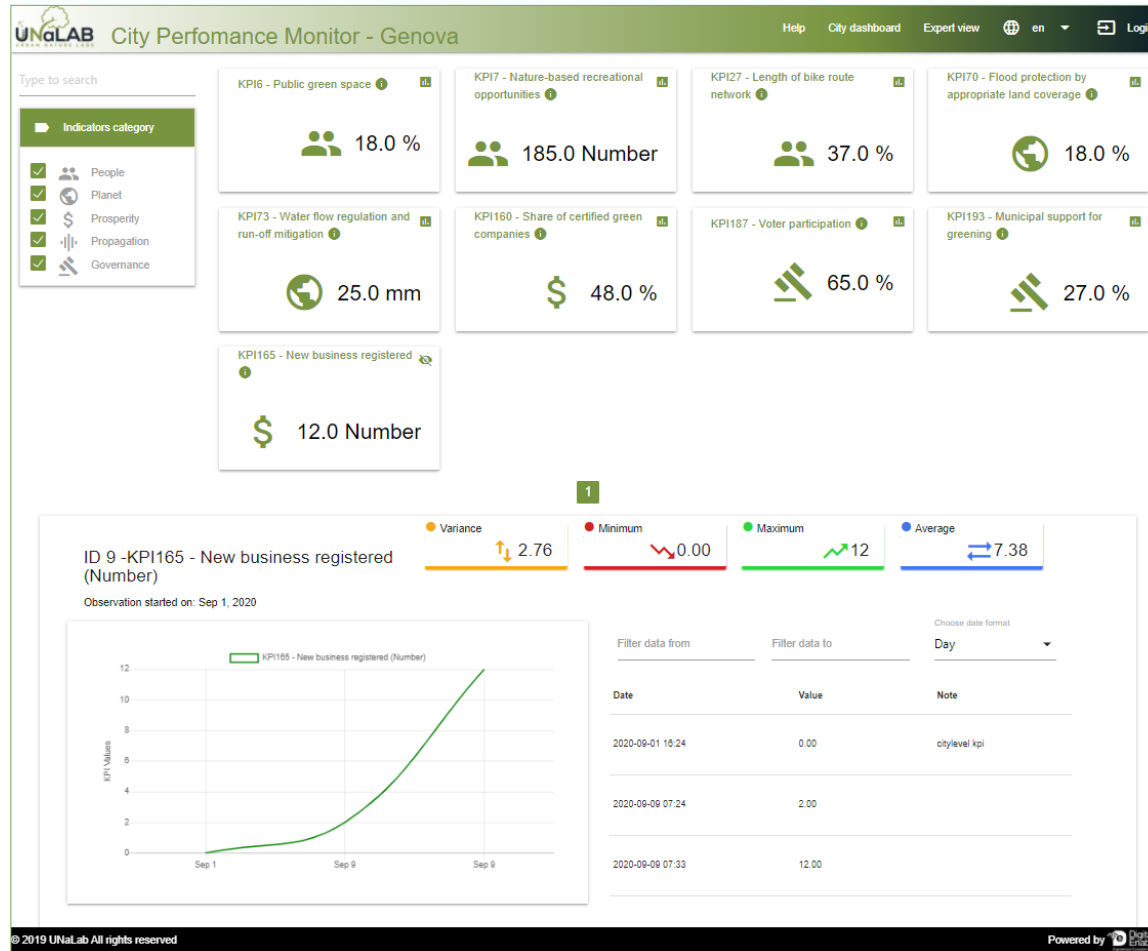
Makes the citizens able to submit **Problems** that affect their quality of life and submit **Ideas** of possible solutions



<p>Manager Eindhoven - AdminEindhoven</p> <div> <p>I would suggest to implement some NBS similar to the solution already implemented in Budapest https://oppla.eu/node/18003</p> </div> <p>Associated to Challenge How to solve the pollution in the city</p>	<p>Manager Eindhoven - AdminEindhoven</p> <div> <p>Limit impact of peak rain by stimulating storage by Citizens in their own garden. See also http://www.bbc.com/news/magazine-17839818 Buy a water butt from your water company, gardening or DIY centre Fit a water butt</p> </div> <p>Associated to Challenge Prevent landslides</p>	<p>Manager Eindhoven - AdminEindhoven</p> <div> <p>A possible solution could be the usage of drains in order to canalize the rain and reduce the water absorption of the soil</p> </div> <p>Associated to Challenge Prevent landslides</p>
<p>Green Roofs</p> <p>Use of trees to prevent landslides</p> <p>Submitted by Danilo Trombino</p> <p>* Extensive for large flat-roof</p> <p>Creation Date: 21/11/2017 Ratings: ☆☆☆☆</p> <p>Manager Eindhoven - AdminEindhoven</p> <div> <p>A green way to approach this problem could be using trees to reinforce the mountain soil and prevent landslides occurrence. A high number of studies has confirmed the value of this solution, as you can see in this article made by</p> </div>	<p>Rehabilitation & Restoration</p> <p>self-driving mower</p> <p>Submitted by Juan Aiello</p> <p>* Water cleaning system</p> <p>Creation Date: 20/11/2017 Ratings: ☆☆☆☆</p> <p>Manager Eindhoven - AdminEindhoven</p> <div> <p>I propose to buy a lot of self-driving mower. They will be able to cut the lands autonomously. You have only to refuel them.see this article: http://best-lawn-mower-review.com/best-robot-lawn-mower/2017/</p> </div>	<p>Green Roofs</p> <p>Goats to be employed to cut meadows</p> <p>Submitted by Filippo Giuffrida</p> <p>* Extensive for large flat-roof</p> <p>Creation Date: 20/11/2017 Ratings: ★★★★★</p> <p>Manager Eindhoven - AdminEindhoven</p> <div> <p>Rather than using mowers, some goats could be used to cut the meadows. This solution allows a a remarkable savings in terms of pollution. Indeed, unlike the lawn mowers, the goats do not need fuel.This solution has been already</p> </div>

City Performance Monitor (CPM)

http://unalab.eng.it/cpm_v2



Facilitates the **monitoring and understanding of key indicators** for citizens and non-expert users via employing **interactive dashboards**



Leverages the **actual values** from the data sources

Easy to understand representation of urban conditions in terms of **performance, challenges and impacts**

Makes **automatic KPI calculations** & allows for **manual input of data**

NBS Simulation Visualisation Tool (NBS SVT)

http://unalab.eng.it/nbssvt_v4/

Increases the **awareness** about
the **urban environment**
conditions and the **effectiveness**
of the **NBS** implemented

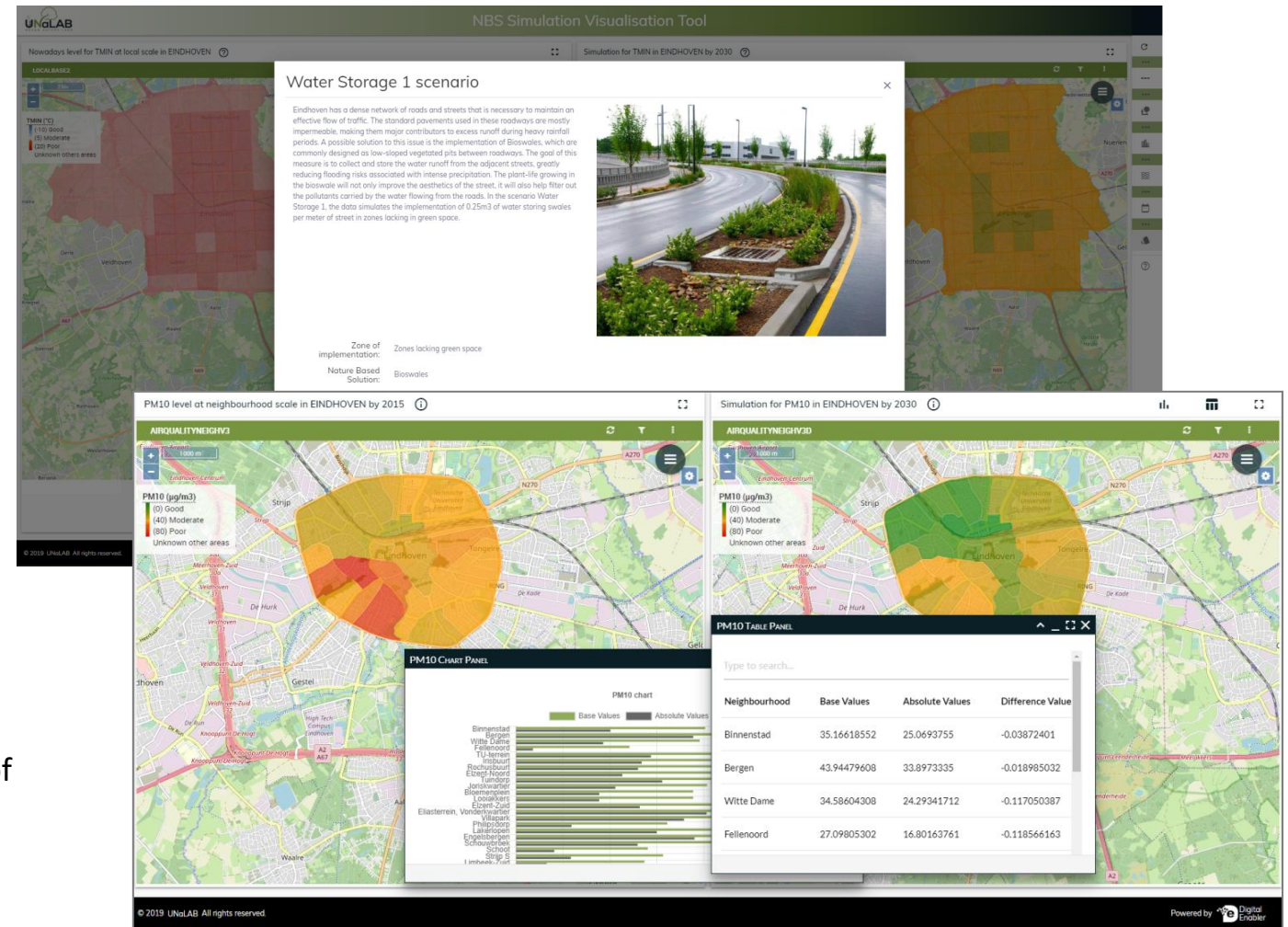


Facilitates the
understanding for **citizens**
and **non-expert users**

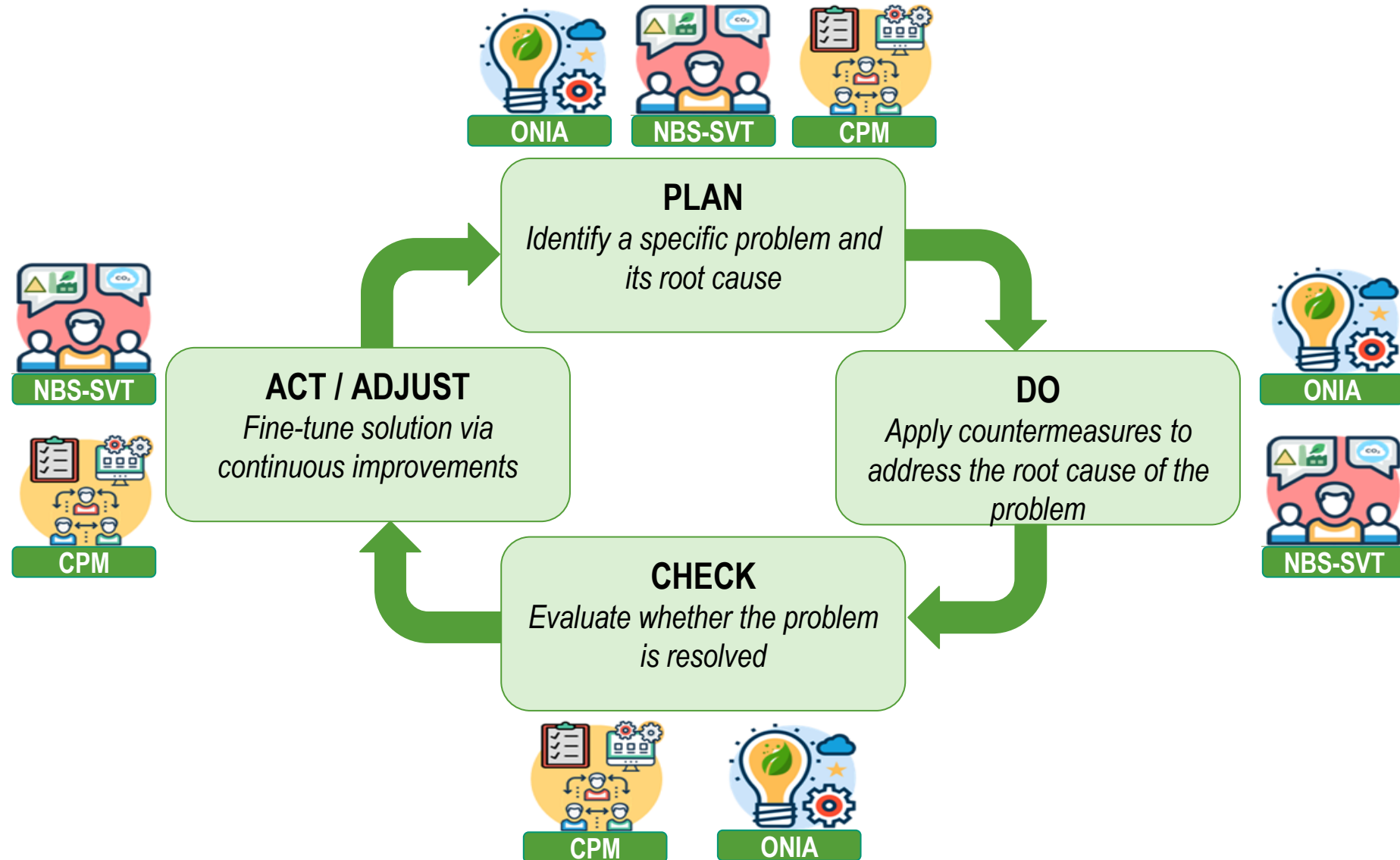
Allows to **compare** the
current situation in the city
with possible **pre-defined**
NBS implementation
scenarios

Facilitates **collaboration**
between different kinds of
stakeholders

Fully developed for Eindhoven city.
Tampere and Genova nearing completion.
Co-developed with University of Aveiro (UAV).



UNaLab adaptive management cycle





Questions and answers



Contacts

To learn more

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Project Partners



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