



Clarity

The climate impact assessment marketplace!
Data, tools and services for the efficient check of urban infrastructure!



NEWSLETTER N° 2 - 2019

CLARITY support for the mitigation and adaptation to the climate change

What next is coming in our technical framework?

Demonstration Use Cases: Naples pilot!

Events Corner

www.clarity-h2020.eu



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No730355.



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CLARITY support for the mitigation and adaptation to the climate change

If you are interested in CLARITY you must know about our [MarketPlace](#), as well. In this space, you can find specialised information dedicated to CLARITY Real Use Cases scenarios in four different cities around all Europe and find more technical details of our tool. Additionally, this site shows the opposite vision of CLARITY such a

project, it shows a more market vision of CLARITY. The final tool provided by the team can be used and useful for others and integrate with other technologies. In this space, you can find the proper information to solve your doubts in this regards.





What next is coming in our technical framework?

Some developments are planned and will come soon:

- Support for automated hazard/impact screening (Heat Wave Hazard Impact on Population) for 217 European cities for baseline climate period and 3 RCP and 3 future time periods
- Support for applying simple adaptation measures by changing land use categories
- Support for scenario analysis/ comparison on the basis of baseline, future climate and adaptation scenarios
- Better integration with marketplace

Next steps for the Scenario Transferability/Twins:

- Increasing number of hazards descriptions and depictions
- Further improving map visualisation of hazards

Supporting datasets for CLARITY Use Case sites:

- Creation of a Data Package for Linz according to the existing template/workflow

CLARITY Data Package specification has been improved in order to make it more flexible (and adaptable for

future requirements). E.g., resources can contain now references to additional external information such as links to the metadata records in catalogues, representation of the raw geospatial data as maps (from external WMS services). In addition, CLARITY provides now an online Data Package Builder tool supporting the creation of CLARITY Data Packages directly in the system (two versions are provided, one allowing to describe a data package with all possible properties and a simplified version to provide the minimum set of required properties necessary to have a valid data package).

Local Effects calculation automatization: preparation of the required data in order to perform the calculation/assessment of the local effects of a determined hazard in a city is a time and effort consuming task, not to mention repeating it for hundreds of cities at European level. The project is currently working on an tool that supports the semi-automatized preparation of this data (based on openly available Copernicus Urban Atlas datasets).

[Access to technical reports >>](#)



Demonstration Use Cases: Naples pilot!

The goal of the Metropolitan City of Naples is to evaluate the benefit of integrating alternative adaptation options in urban redevelopment/ retrofiting projects in order to reduce the aggravating factors due to urban and territorial conditions, able to strongly amplify the “local effect” of temperature and precipitation extremes.

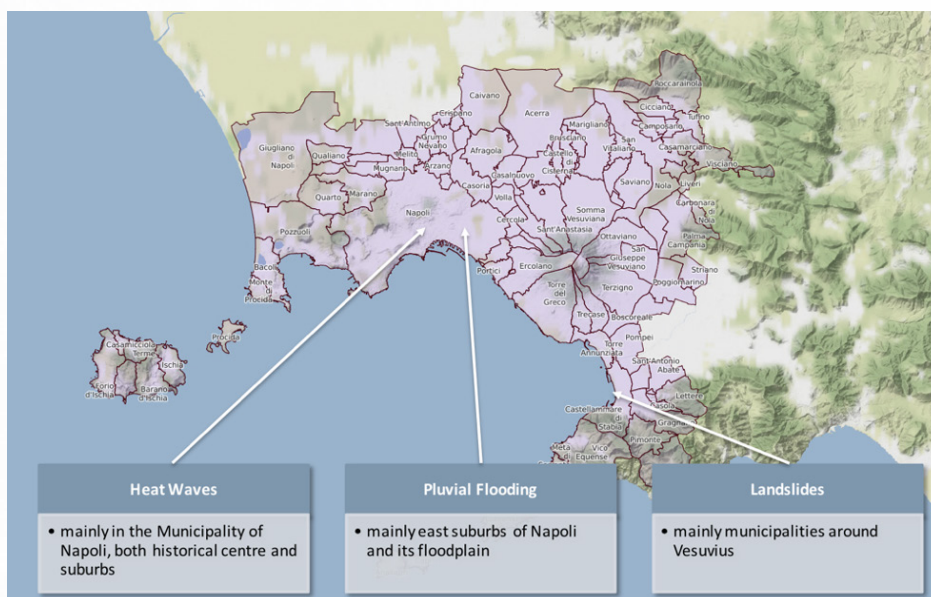
The key areas of DC1 are the Municipality of Naples for investigating heat and flood hazards and the Municipality of Castellammare di Stabia for a landslide.

Currently, regarding heat wave, the element at risk (people) has been identified and the local effect

computed. Moreover, vulnerability functions, defined at the pan-European level, has been applied at expert scale in order to generate a first raw impact in terms of mortality and discomfort.

Concerning flooding, right now, the local effect has been generated and the elements at risk (buildings and roads) defined.

The future developments will consist in calculating the vulnerability and, consequently, the impact for the considered hazards. Finally, the adaptation options will be chosen on the base of impact assessments of the projects at hand, supporting users through multi-criteria and cost-benefit approaches in order to navigate alternative adaptation choices.



[Read more >>](#)



Events Corner

In our website you can follow all the [events](#) attended until today, CLARITY members team sum up what they saw there.

Recently, our partners attended the following events:

[Annual General Assembly of the European Geosciences Union \(EGU 2019\)](#) in Vienna (Austria) **7-12th April, 2019**. The EGU General Assembly 2019 gathered over 16,000 scientists from all over the world discussing the disciplines of Earth, Planetary and Space Sciences. The focus was on future ways of adapting to climate change. See more information on our [website](#).



[4th European Climate Change Adaptation conference \(ECCA 2019\)](#) in Lisbon, Portugal; **28-31th May**: Our team has been there presenting an [article](#), please more information about this amazing conference [here](#).



[European Week for Regions and Cities](#): In **October**, our colleagues from ZAMG & SCC were on the [agenda](#) leading a talk about climate actions for European municipalities.





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ABOUT OUR PROJECT

CLARITY is focused on the development, operation and dissemination of a digital marketplace providing services, contents, features and tools for the climate change impact assessment, which have been developed on the base of scientific data and meet the new European standards and regulations.

FACTS

Duration: 3 years

Participants: 17 companies & organisations

Geographical areas:

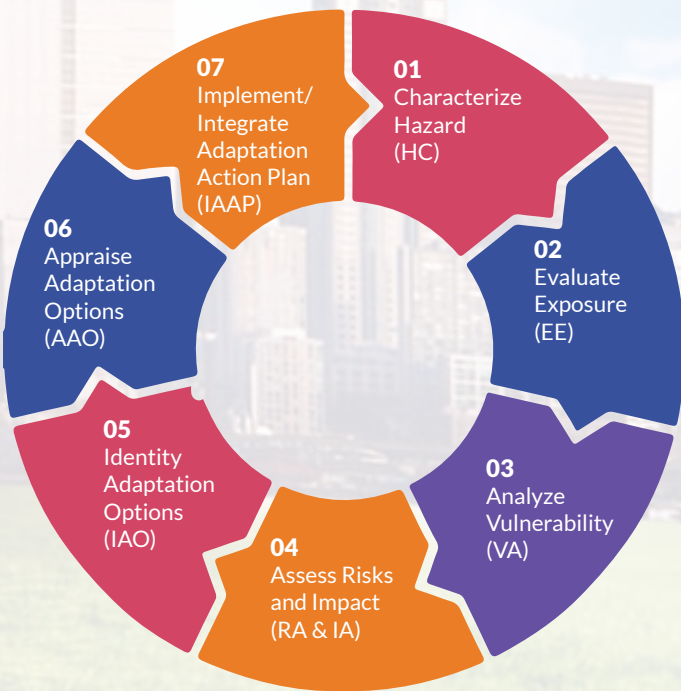
- Step 1: Austria, Spain, Sweden and Italy
- Step 2: rest of Europe

OUR APPROACH

CLARITY will allow end-users to explore resilience through alternative planning and!adaption scenarios considering:

1. variable local context
2. expert-based climate intelligence
3. customized risk analysis
4. varying impact scenarios
5. flexible adaption and alternative options
6. integration of data and model results into action plans

For more details about the EU-GL method please check:<http://climate-adapt.eea.europa.eu/metadata/guidances/non-paper-guidelines-for-project-managers-making-vulnerable-investments-climate-resilient/guidelines-for-project-managers.pdf>



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