# Ecological Momentary Assessment

By Prince Michael Amegbor & Clive Sabel, Aarhus University. REGREEN 3rd Newsletter, Dec. 2021

You may have heard green and blues spaces in urban areas have the capacity to improve mental health and wellbeing. Is that true for all urban residents – irrespective of their sociodemographic background – and do all types of NBS provide this perceived benefit? In REGREEN, we are designing a smartphone App to capture the momentary restorative (mental health) benefits of different types of urban natural environments on urban residents in the three EU and three Chinese ULLs. Up to 10 NBS environments per ULL in Europe have been selected to reflect a range of the following diverse purposes:

- Urban nature of historical or tourist purpose
- Water-based urban nature e.g. wetlands etc.
- Urban nature or NBS for biodiversity conversation
- Urban nature or NBS in suburban areas or deprived areas in the cities
- Urban nature or NBS of mixed purpose (leisure, biodiversity)
- Greenspace in the cities for leisure activities e.g. urban parks, sports fields etc.
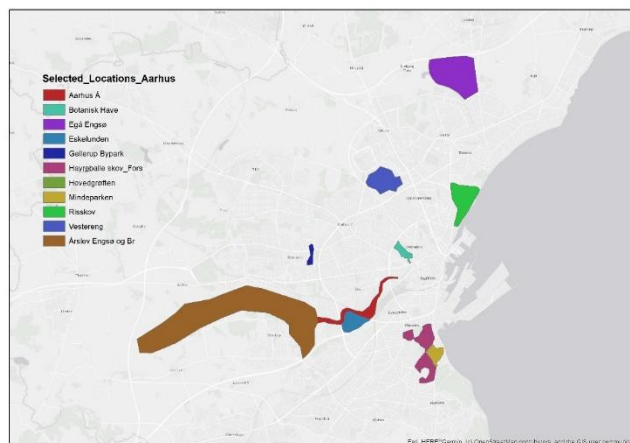
Selected locations in Aarhus, Denmark
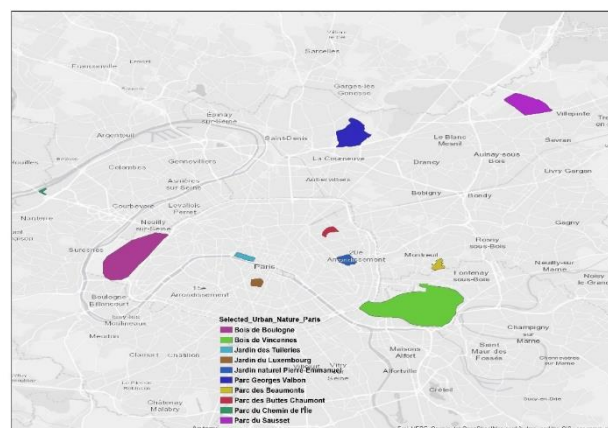
Selected locations in Paris region, France

In order to capture the immediate (momentary) effect of the different urban environments, we set a virtual fence (a geofence) around the selected urban natural environments. The app recognises when a user gets in the selected areas and prompts the user to answer a series of questions, which takes under 30 seconds to answer. The app provides information on the frequency and duration of visits to these urban natural environments and the positive and negative emotions felt during the time spent in these locations.

The app is currently available on Google PlayStore for Android devices.

REGREEN aims to roll out a pilot study in the three European cities (Aarhus, Paris and Velika Gorica) in winter 2021/2022 (between December 2021 and February 2022) to test the functionalities of the app. The main study will be carried out in summer 2022 (May to August).

We hope that insight from this study can enhance current knowledge on the mental health benefits derived from different urban NBS and that the findings will further our understanding of how people of diverse socioeconomic background interact with urban natural environments and how socioeconomic vulnerability affects such interactions and perceived benefits.
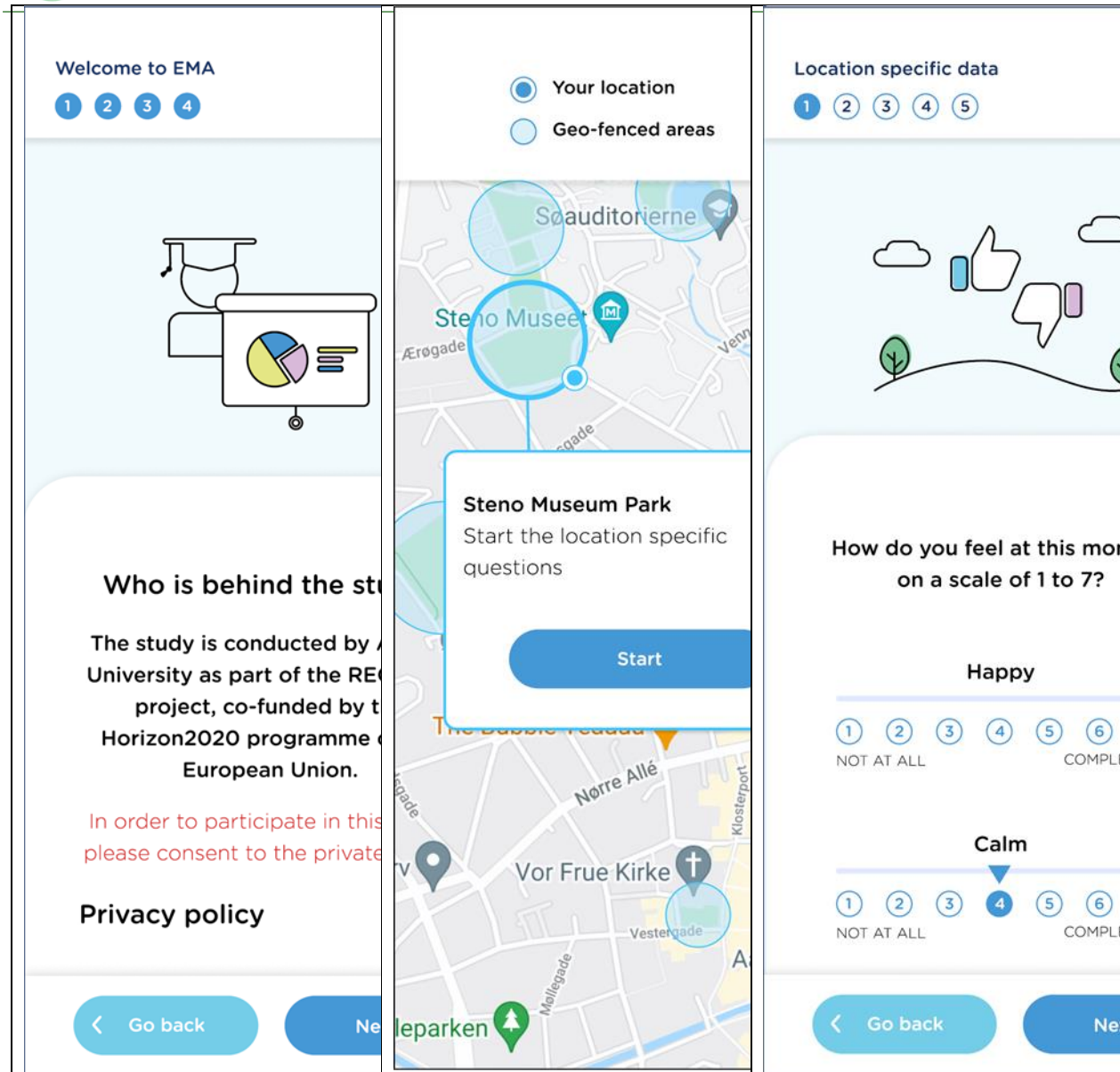
Samples of the App User Interface and questions

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