

AMSTERDAM

# smart citizens lab



In March 2015, Waag Society and partners have established the Amsterdam Smart Citizens Lab. It empowers citizens to crowd source and share data about their environment with the aim to understand the workings of the city and enhance the quality of their lives. Therefore, we embrace the idea of Smart Citizens, who use open technology to build engagement, and share knowledge, and trust. Apart from helping citizens, it will help existing measurement bodies (like GGD Amsterdam and RIVM) to extend their data gathering networks, and possibly come up with innovative solutions that can scale across Europe (possibly beyond).

### **Promise**

Combining the data from a network of low-cost sensors greatly enhances the insight people have about their local environment. When citizens have the power to reflect on data and act upon it, this has a positive and healthy impact on the city and their lives. By integrating bottom-up data with data from official measurement networks, the accuracy increases. This provides citizens, city officials, and politicians with even better tools to make the decisions that shape the city. It will also form meaningful dialogues between citizens and governments, enhancing mutual understanding and cooperation.

### **Smart Citizen Kit pilot Amsterdam**

In 2014, one hundred citizens in Amsterdam were equipped with low-cost, open source sensor kits, measuring temperature, humidity, light, sound, carbon monoxide, and nitrogen dioxide. Over several months, these kits measured environmental data, which were sent to an online platform and the Amsterdam City Dashboard. Meanwhile, meetings were held where participants learned about the hard & soft science of air quality measurements as well as the politics behind them. In this way, a network of citizens and partner institutes was established.



[waag.org/smartcitizenslab](http://waag.org/smartcitizenslab)

## Activities

Building on the results from the pilot, the Amsterdam Smart Citizens Lab (ASCL) will enhance the engagement of citizens and policy making for sustainability. It will establish a community that investigates and transforms the environment based on the data acquired by public sensor networks.

The ASCL targets both communities of interest (e.g. in noise, air quality, environmental pollution, or health) and communities of practice (e.g. about digital sensing, digital fabrication, and IoT - the Internet of Things).

Its activities consist of:

### 1. (Online) community building

The ASCL will use an open membership model. An online interactive platform will be launched for events to be announced and experiences to be exchanged. Anyone is free to join the online community. The events will have an entrance fee.

### 2. Smart Citizen events

Gathering the community of practice and community of interest with the aims: to meet like-minded people; plan joined actions / interventions; discuss the interest with several stakeholders, e.g. scientists, activists, policy makers and hackers; present data, interpretation and impact from interventions; try out inexpensive tools and set the agenda for further activities.

### 3. Technology & workshop development

In order to establish ourselves as experts, we need to gain more insights and experience in the use of DIY and low cost sensing techniques. Two interns will run the "ACSL Team" that will develop and test new and existing Open Source hardware projects, and assist community members in developing their own tools. The outcomes will be shared online through open platforms.

### 4. Fablab open days & Open Wetlab open evenings

Apart from the dedicated Citizen Science events, we will have frequent opportunities for community members to meet, build, and share. Special announcements will be posted online calling on anyone interested in the ASCL to meet during the open days and open evenings.

### 5. Public outreach

The ASCL community needs its own identity to give the members a sense of belonging. It will also make clear that the events are not single events, but actually part of a program.

## Planning

The first phase will run from March till November 2015. In this period, we will dive into the topics of air quality, water quality, and sound pollution. The preliminary planning is as follows:

### Dates

13 May 2015	Public kick off – topical barcamp
21 May 2015	Making sensors and tools
3 Jun 2015	Making sensors and tools
10 Jun 2015	How to collect & analyze data?
Jul – Aug 2015	Sensing & collecting data
9 Sep 2015	Analyzing and visualizing data
7 Oct 2015	Final event: taking action

### Partners

Waag Society runs the ASCL in conjunction with Gemeente Amsterdam (CTO), HvA, RIVM, SenseMakers, Alterra, AMS, Amsterdam Economic Board, Fablab Amsterdam, and the Open Wetlab; and internationally with Fablab Barcelona, Microgiants, FutureEverything, Dundee University, and others.

Want to know more? Contact us via [ascl@waag.org](mailto:ascl@waag.org) or telephone 020 557 9898.

