

# Process

- Practice

The realisation of green-blue grids and a more circular city demands cross-sectoral collaboration, which is not always the case. Separating city design and city management on the one hand, and separating public services into sectors with their own budgets, such as green, waste, traffic, energy, housing, businesses, etc. on the other hand, make collaboration and integrated sustainable solutions difficult. Organising this collaboration is the key and the criterion for finding new integrated sustainable solutions for a circular, healthy and attractive city.

## Successful projects

EVA-Lanxmeer in Culemborg and Hammarby in Sweden are real-world examples of projects where working on sustainable urban development or redevelopment successfully involved all stakeholders and experts from all sectors and has led to unique results. The EVA-Lanxmeer project concerned a new urban area and Hammarby involved the restructuring and improvement of an existing urban location.

Many projects that are set up with good intentions with regard to sustainability do not reach their objectives. Causes for this are :

- Ambitions and plans are often too far removed from the people involved, not having been defined with the input of those people and not taking sufficient account of what is important to different people within a particular area or district.
- Insufficient administrative motivation for sustainable development. Conflicting interests often cause parties to revert to their traditional roles and seek out a sector-based approach.
- Cooperation structures for the stakeholders do not function well enough to realise high ambitions.
- Within the framework of the current division of services by sector: water boards, municipalities, the various municipal services and the corresponding funding streams, it is complicated to integrate work and development processes for spatial planning, water and urban design.
- In the absence of a clear-cut strategy and vision for the area that have a broad basis of support, the lack of a clear focus makes it difficult to distinguish primary issues from secondary issues.
- It is difficult to calculate the added value and synergy of integrated sustainable measures.
- Separating plans and calculations for developments from management and maintenance leads to impractical choices.

These failure factors can be largely overcome by starting area development processes with a workshop in which all stakeholders participate, as in a living lab.

Commissioned by the Dutch Ministry of Infrastructure and the Environment, the so-called living lab method (proeftuinmethode in Dutch) was used and researched to integrate climate adaptation and sustainability in area development processes.



### **LIVING LAB , CLIMATE STUDIO, MULTI-ACTOR WORKSHOP: ONE METHOD**

A living lab is a method to integrate water, climate and other sustainability issues at an early stage in a broader development or restructuring process. The method consists essentially of designing research with all stakeholders. This leads to coordination between the various stakeholders, common vision-forming and a strengthening of communication between stakeholders.

The most important feature of the living lab is that all stakeholders work together on a concrete challenge. It is about talking with each other about ideas and solutions rather than about or after each other. The living lab requires personal professionalism and creativity and is pro-active and multi-disciplinary. Urban planners, hydrologists, urban ecologists, project leaders, developers, architects, administrators, water boards, energy companies, and other stakeholders work together on an equal basis. It is an innovation room, not a negotiating table. Interests and frameworks are put aside – for the moment – to make room for ideas.

The living lab creates the conditions for a common vision which, with respect for individual interests, opens the door for sustainable choices for a location. Timing is essential: once opinions have been determined and which direction the solutions and measures should take, the living lab will be less successful.

It is not surprising that at the beginning of innovative, integrated, successful projects, work is usually conducted collaboratively, which resembles a living lab. In other sectors, such as ICT or industrial design processes, work is done in a similar manner.

#### **HOW DOES A LIVING LAB WORK**

Good preparation is half the work. A more-or-less proven format is working with two or more design sessions of between ten and twenty participants. The first full day or half-day session is followed by a second session with a break of preferably one to a maximum of four weeks. Of course each living lab needs to be tailor-made and local objectives and work culture will need to be considered.

#### **DEFINE THE AREA AND THE CHALLENGE**

Define the area; it can be a district or the entire city, a business district or a park, an existing developed area or an expansion location. Define the challenge: flooding from rain or seepage, flood risks, drought, subsidence, salinization, heat stress, creating more green, social themes such as integration and more input from citizens, creating a more circular use of raw materials, etc.

#### **DEFINE THE OBJECTIVES**

It is necessary to clearly define the objectives in advance and how they will be used in the process to stay focused. To make sure that the results will work at the end of the process, it is important that this project continues to match on-going investment programmes and policy plans. Make agreements about this beforehand, preferably also with administrators. Agree beforehand how, when and to whom the final results will be presented. Make sure that all results are documented and visualized.

### INVOLVE THE MOST IMPORTANT STAKEHOLDERS

“With the organisation of the living lab a special setting is created which can lead to valuable and innovative solutions. At least two things are of essential importance for a successful living lab. First is the participation of all of the area’s stakeholders. Only then can solution options be formulated that have enough support. A second condition is the presence of a ‘problem owner’. A living lab should not be an independent exercise but correspond to existing plans such as a restructuring or area development.” – quote from a living lab participant.

One of the success factors in a living lab is a broad mix of group participants. Create a good mix of knowledge experts, stakeholders, designers and strategists. Different disciplines should be represented from the city, the water board, etc.

By involving all stakeholders in the process from the beginning, promising proposals can rise to the surface, which can also count on support.

It is not always sufficient to just send participants an invitation. To be sure that everyone will come, contact by telephone or personal contact is also necessary. Explain why it is important to participate in the living lab and how it will benefit them.

### THE FIRST DESIGN SESSION

In the first session the participants get to know each other and the area.

Important aspects in a successful living lab are:

- An inspiring location for the living lab, preferably at or near the area location
- Begin with a visit to the location
- Provide an inspiring presentation by an expert familiar with the project
- Provide good mapping material: aerial photographs, maps with property lines, water systems, buildings and vegetation, soil types, etc.
- Allow the most important stakeholders to briefly state their interests and wishes. They will then feel included and can state their own expectations about the outcome of the living lab.

A group size of 6 to 10 people for the subsequent work sessions is ideal; larger groups can be divided in two. During brainstorming and drawing the possibilities for an area can be investigated and possible synergies researched. If there are too many ideas after the first design phase, priorities can be made. The most relevant ideas can be worked out further in subsequent sessions. Remaining questions can be assigned as ‘homework’ to the stakeholder or expert concerned.

The external designer works out the results in drawings from the first session and incorporates them in a presentation to be held at the beginning of the second session.

### HOW TO HANDLE RESISTANCE

*“Professionals from all of the organisations involved can get out from behind their desks and let their voices be heard... you hear all concerns and together you make a plan which includes all of the viewpoints. Creating drawings instead of writing invoices allows room to dream and to share your dreams with others. You are used to fighting and negotiating. Now you are successful together without resistance. That’s much more fun. The opposition becomes supporters and maybe even ambassadors. The ‘fun factor’ is especially important. The result? A wide range of good ideas. The challenge now is to get the organisations in line behind the design process participants.”* – quote from a living lab participant

Resistance does not have to be negative; it can even be a good sign that someone is making clear that an interest is being overlooked. Flexibility is necessary, as well as good listening skills and asking questions to get to the heart of the matter.

Resistance occurs when someone or a group feels that their interests are not being respected. Give this person the space to express the concern and show respect without judgement. Figure out how this concern can be integrated into the whole. The resistance will usually disappear.

By respecting everyone's interests, the living lab is the perfect way to overcome resistance and apply it in a productive way. Often people with resistance are very committed people! Obviously this will not work all the time; later in the process conflicts of interest can also arise.

### THE SECOND DESIGN SESSION

The designer gives a visual report of the results from the first session. There is an opportunity to provide additional information from stakeholders, for example as a result of the "homework" and new insights.

In the second design session participants will work in groups, depending on the number of participants. Ideas from the first session can be expanded upon or work can be done on a new focus, depending on the established objectives. The goal is a cohesive and presentable final product.

### EMBEDDING AND TRANSFERRING TO ADMINISTRATORS

At the end of the second session the ideas developed are summarised and presented to the relevant administrators, unless they have participated in the process. These administrators can then indicate what they plan to do with the results.

Agreements are made for the further implementation of the ideas, for example which person or combination of participants will be the leader for certain ideas developed in the living lab. How the results can be anchored in the regular planning process should be discussed, for example in the zoning plan, environmental impact assessment, or master plan.

### CONCLUSION: VISUAL REPORT AND ACTION PLAN

*"The living lab has value if everyone can carry on individually with a follow-up activity."* – quote from a living lab participant.

Following the living lab, a written report, enhanced with sketches, is put together by the process leader together with the designer. The report is a summary of all the ideas developed and a presentation about them that can be used by the various stakeholders to convey the results back in their organisations.

The final results of the two sessions demonstrate how the challenge for space, climate and sustainability in conjunction with one another can result in new chances. If the process goes well, the result is clear, adequate and realistic. It creates enthusiasm to continue to develop ideas or even to eventually realise them.

### WHAT DOES A LIVING LAB PRODUCE?

*"The added value of a living lab is the open character. People speak more freely, are more creative, put their own interests aside in favour of the greater concern."* – quote from a living lab participant.

A living lab delivers a shared vision, concrete measures and process agreements for the follow-up, and implementation alliances.

Another important advantage is that project employees from different departments and organisations get to know each other, learn new forms of working together and get to know new subjects that cross over disciplines. That is often the feeding ground for good collaboration in the future and for other projects.

For more information about living labs, see [www.handboekproeftuinen.nl](http://www.handboekproeftuinen.nl).

See also <http://www.ruimtelijkeadaptatie.nl/en/bibliotheek-ruimtelijke-adaptatie>