

CO-CREATING ...

LIGHT
HOUSE

Experience in ...

... Smart Lighting and Smart Cities

Building sustainable innovation ecosystems

Ambition setting

Vision development

Roadmapping

Project portfolio



... VISIONS & ROADMAPS

Developing a shared strategy

Nowadays innovation is no longer an activity that takes place in closed research departments of companies. More and more companies are embarking on 'open innovation', in close collaboration with other companies.

More recently there is another trend: innovation driven from societal needs.

The aim is to use technology to develop meaningful solutions that contribute to quality of life. Such innovations require collaboration between various parties: public and private, large and small, for-profit and non-profit organisations and even end-users or citizens. To be successful in the longer term it is important that the different parties share a vision of the desired future scenario to enable a sustainable collaboration in the realisation of the strategy.

LightHouse has developed an approach to develop a shared strategy. The approach focuses on the creation of a shared vision and roadmap to initiate joint activities to spur development and implementation of innovative solutions.

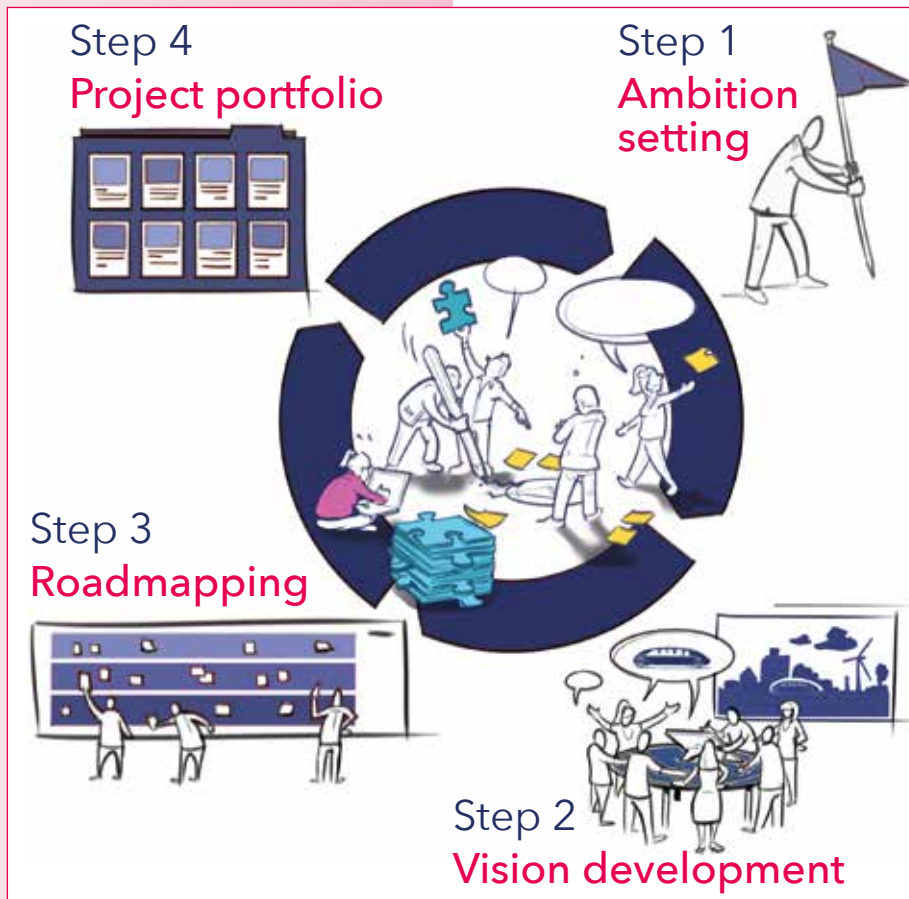
A four step process is applied:

- 1 ■ The first step sets the ambitions for the project. The ambitions of the participating parties are identified and shared. Activities in these steps involve interviews as well as workshops to develop a mutual understanding of the different ambitions of the involved parties.
- 2 ■ The second step is to develop desired scenarios for the future. In this step often the method Future Telling is applied to involve thought leaders from various perspectives (economic, social, technological, ecological, political) to obtain rich stories of possible futures. These stories are analysed to identify the drivers for change that will have the highest impact on the future. With these drivers for change and the stories a dedicated desired future scenario for the project is developed in co-creation with the various parties. A visualisation and rich description helps to clarify the desired future scenario, also for parties that join the project later on.
- 3 ■ During the third step the roadmap is created, existing and future technologies and other developments will be identified, which enable the realisation of the desired future scenarios. Opportunities and developments will be plotted on a time-line to provide insight in the required steps and milestones towards the favoured scenarios. This step involves various interviews with businesses and other organisations of different related domains to gain a broad understanding of relevant technologies that are available already and are expected to become available in the future. The resulting roadmaps often contain technologies, as well as required organisational developments that are needed to realise the desired future scenario.
- 4 ■ During the final and fourth step a project portfolio is generated with new projects and initiatives to reach the ambitions, visions and roadmaps. This portfolio provides an overview of individual and joint projects and includes a discussion on the realisation of an innovation.

Although the approach has proven to be applicable in a wide range of projects, a dedicated process is designed for each project: taking into account the number of stakeholders to be involved, their preferred way of involvement, required planning, available budget and complexity of the context.

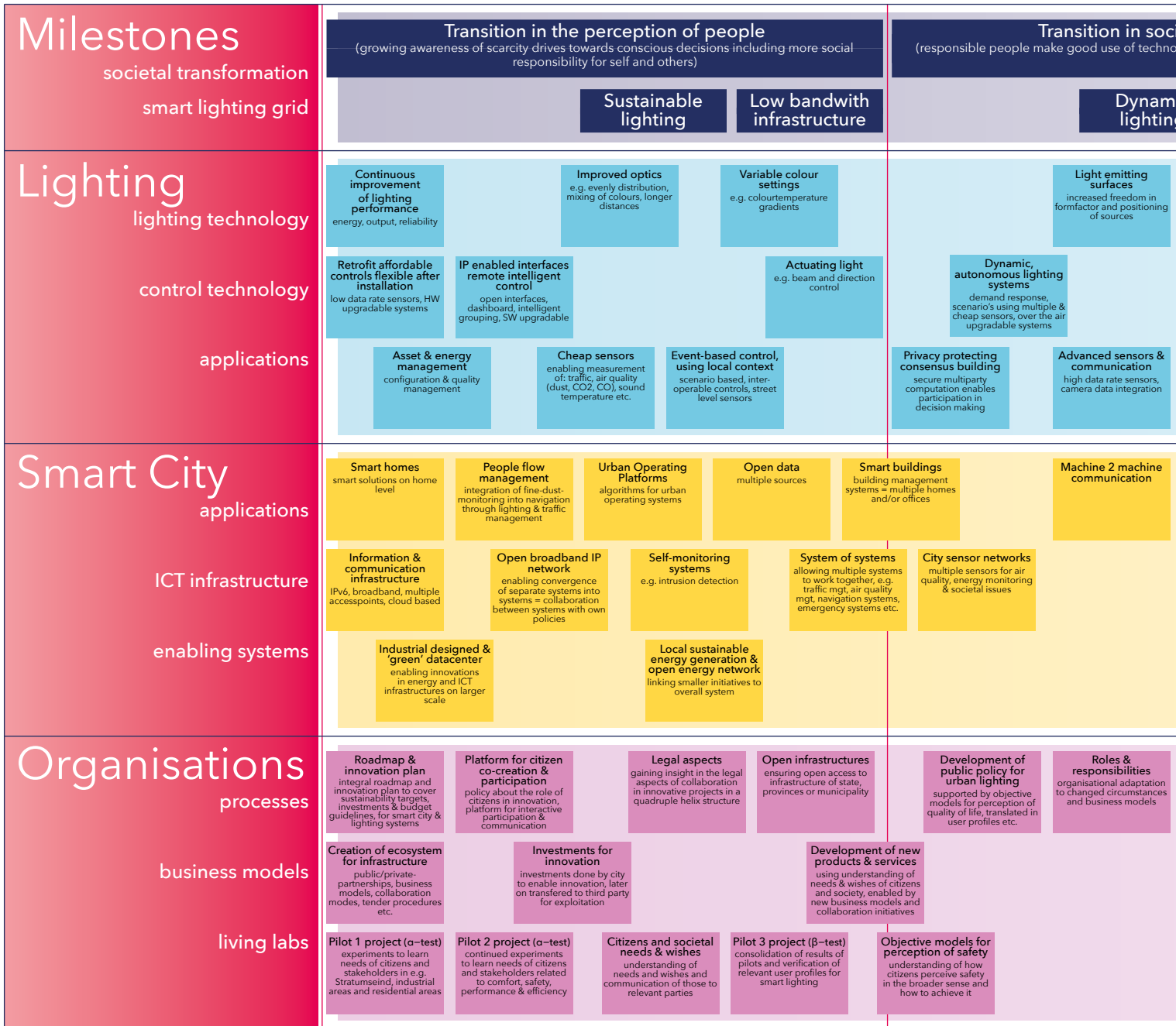
LightHouse designs an inclusive approach to engage key stakeholders, such as companies, citizens, public and private organisations and knowledge institutes, in co-creating a clear and well thought through implementation plan. In this approach, a stronger commitment is built through the joint effort for the actual implementation.

LightHouse practices a designerly approach, including a visual way of thinking and doing. A visual language is used to easily connect people with widely differing expertises, enabling them to create a mutual language, to share their main insights, and to inspire them to explore further than they first imagined.



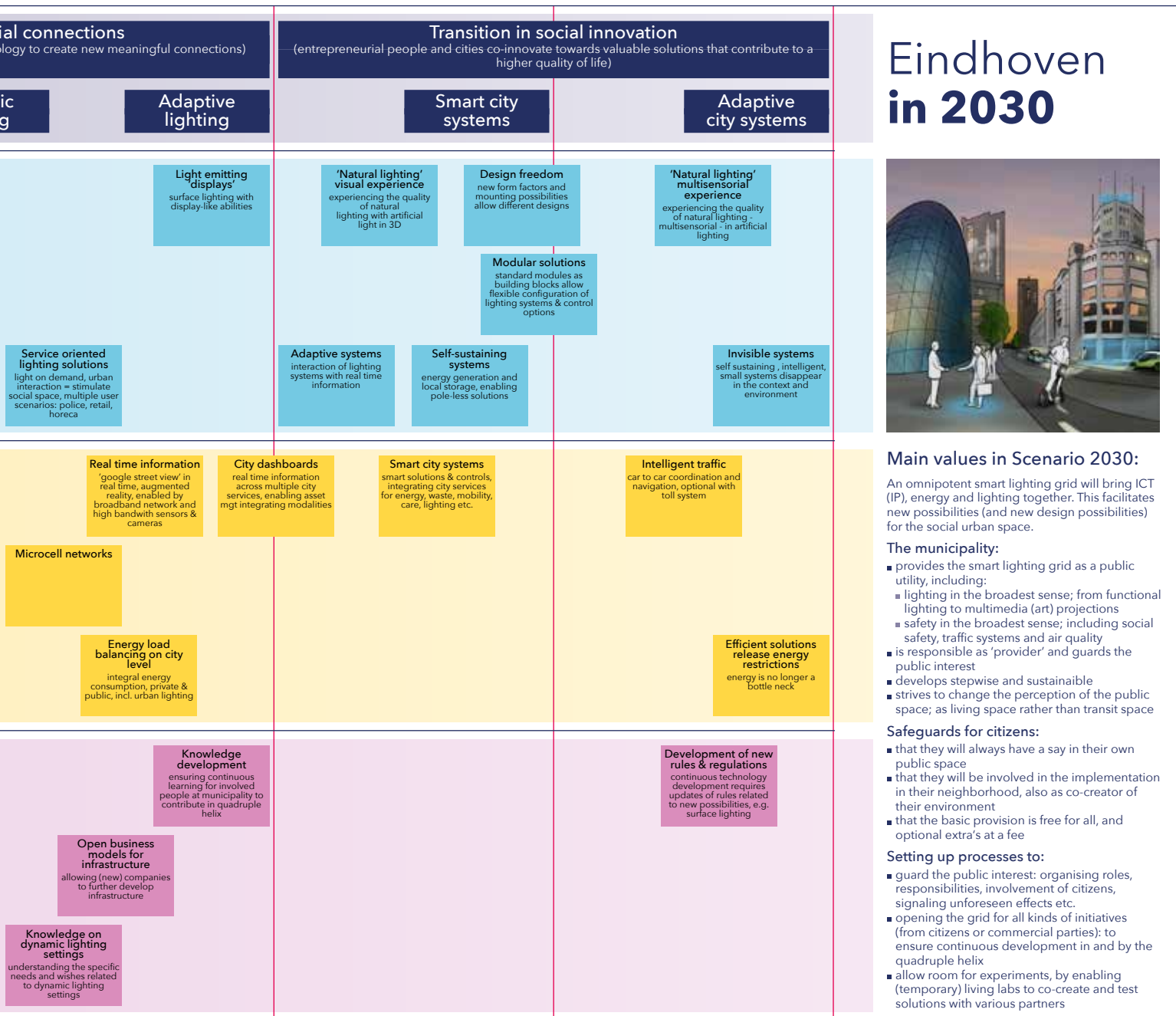
... PATHS TO THE FUTURE

Roadmap Eindhoven 2030



2012

2015



Eindhoven in 2030

Main values in Scenario 2030:

An omnipotent smart lighting grid will bring ICT (IP), energy and lighting together. This facilitates new possibilities (and new design possibilities) for the social urban space.

The municipality:

- provides the smart lighting grid as a public utility, including:
 - lighting in the broadest sense; from functional lighting to multimedia (art) projections
 - safety in the broadest sense; including social safety, traffic systems and air quality
- is responsible as 'provider' and guards the public interest
- develops stepwise and sustainable
- strives to change the perception of the public space; as living space rather than transit space

Safeguards for citizens:

- that they will always have a say in their own public space
- that they will be involved in the implementation in their neighborhood, also as co-creator of their environment
- that the basic provision is free for all, and optional extra's at a fee

Setting up processes to:

- guard the public interest: organising roles, responsibilities, involvement of citizens, signaling unforeseen effects etc.
- opening the grid for all kinds of initiatives (from citizens or commercial parties): to ensure continuous development in and by the quadruple helix
- allow room for experiments, by enabling (temporary) living labs to co-create and test solutions with various partners

2020

2020

2030

LightHouse is founded to disclose the knowledge on smart lighting and smart cities of the Eindhoven University of Technology for society. LightHouse has close ties to the research programs related to smart urban lighting and smart cities.

LightHouse cooperates intensively with the TU/e strategic areas Mobility and Energy and the research programs in the Intelligent Lighting Institute (ILI), the Data Science Centre Eindhoven (DSCe) and the Smart City Centre Eindhoven (SCCe). LightHouse executes knowledge intensive projects starting from needs or questions from society and organisations as part of the valorisation activities of TU/e Innovation Lab, where it also holds office.

We apply the knowledge, methods and designs from the different departments of the university in practical applications and viable, sustainable lighting and smart city solutions. We co-create solutions with cities as well as multinationals, smaller companies and start-ups. We add value to the TU/e by bringing in best practices and societal needs to inspire new research and education programs.

Projects

- Vision & roadmap urban lighting Eindhoven 2030
- Vision & roadmap energy-neutral Eindhoven 2045.
- Vision & roadmap healthy urban living, with Breda, Eindhoven, Helmond, 's-Hertogenbosch, Tilburg
- R4E - Roadmaps for Energy, with Eindhoven, Forli, Istanbul, Newcastle, Murcia, Palermo, Sant-Cugat and Tallinn.
- Smart Urban Mobility for The Dutch Ministry of Infrastructure and Water Management.
- UNaLab for climate and water resilient cities, with Stavanger, Cannes, Castellon, Basaksehir and Prague.

For more information, please visit:

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