

‘Intelligent lighting is all about quality of life’

Interview | Mary-Ann Schreurs interviewed by Michiel de Boer of Moesasji

“Do you know what's so great about lighting? It is everywhere! And the moment you convert lighting systems into a smart grid, it means that you have created a smart public space,” says Mary-Ann Schreurs, Vice-Mayor of Innovation and Design, Sustainability and Culture at the Municipality of Eindhoven. “Ledification and digitalization of lighting brings unprecedented possibilities. We aim for a deployment of lighting that enhances the quality of life.”

By the end of 2016, the Municipality of Eindhoven contracted the consortium Philips Lighting / Heijmans for the further development of Eindhoven as a smart society. The consortium will build on the ‘Roadmap Smart City Lighting Eindhoven 2030’, which was developed in collaboration with the Technical University of Eindhoven and ILI. The city wants to be on the forefront of developments in the field of intelligent lighting. “Our approach is to work in co-creation with numerous stakeholders, including the public. We are developing, so hardly anybody can or should predict the actual outcomes. By co-creating, co-designing and co-decision-making we will be able to develop lighting solutions that add real value. We already gained experience with this living-lab methodology at for instance Stratumseind, with great results.” The popular entertainment area Stratumseind is a living lab for the research on the influences of different light scenes on public behavior.

Testing grounds

As a first implementation, the parties involved have designated five areas in Eindhoven as testing grounds for smart public lighting: the traffic route John F. Kennedylaan-Eisenhowerlaan, the traffic route Ring and the residential areas of Gijzenrooi, Schrijversbuurt and Woenselse Heide (West). The testing grounds will be equipped with led lampposts, controllable in a smart grid. The consortium will collaborate intensively with all testing grounds, together with the Municipal Council, TU/e, entrepreneurs and the public. The experiences gained at the testing grounds will deliver input for the further development of the complete smart city lighting system in 2030.

Schreurs: “Of course there is a lot of unknown territory to explore. For example: we participated in a lighting solution for recovering patients. Near a small lake at the outskirts of Eindhoven, some physiotherapists went for walks with the patients. For their recovery it is important to walk consistently at a certain speed. The idea emerged to develop a lighting system to guide these patients. Once the system was put in place it showed promising first results. That’s what I mean with: we cannot predict the outcomes. And that’s precisely why we are setting up testing grounds: to explore the benefits of the technology at hand and to generate new ideas. The methodology that we use, makes sure that you get a kind of total inventory which touches, in addition to lighting, - other aspects of public space as well.”



Identity

“Our future smart city solutions will be locally rooted, resembling our identity. After all, light perception is a cultural phenomenon. In China, for example, people like flashy, intense, almost circus-like lighting. Within the framework of my activities as chair of

LUCI (Lighting Urban Community International) I recently visited Copenhagen. I was amazed by the dimmed, low-intensity street lighting situation. When I referred to this, people gazed at me, quite puzzled. They didn’t perceive it as such; to them this was a completely accepted phenomenon. So, lighting and a wider public space need to fit the cultural identity of a city.

We have put a lot of energy in the preparation of our activities. TU/e and ILI have created a clear and realistic roadmap based on extensive research and current trends. The first line considers the developments in digitalization and the role that gathering and sharing information will play in our lives. The second line is the development of lighting technology, in which ILI plays a major role. In short, ILI is exploring what’s possible and what’s next. The third line is all about social change. This is specifically important for the public domain. In what way will technology influence our lives and what do we want from technology? Now and by 2030. That’s why we entered into a 15 year partnership within the consortium. To be able to truly explore and achieve great results together.

It is good to know that – following the philosophy of co-creation - we are also exporting our design process approach to other cities in Europe. Cities with less technological expertise can benefit from our approach and develop their own unique smart city solutions.”

Light connects people

“So we cannot give a very specific answer to the question, “What will Smart City Eindhoven look like in 2030?” And we don’t have to. I think that we’re entering a new era, the do-democracy, and a time in which companies, citizens, scientists and governments join forces and develop together. Will we succeed in developing a great lighting system and smart public space together? I don’t doubt that. The program is designed to suit our core competences: technology and design. And remarkably enough, it is again light(ing) that unites our efforts. We return to the values of our Philips Lighting heritage. Collaborating, creating knowledge and sharing knowledge is what makes us enthusiastic. Co-creating will deliver new systems and structures that improve our quality of life.”