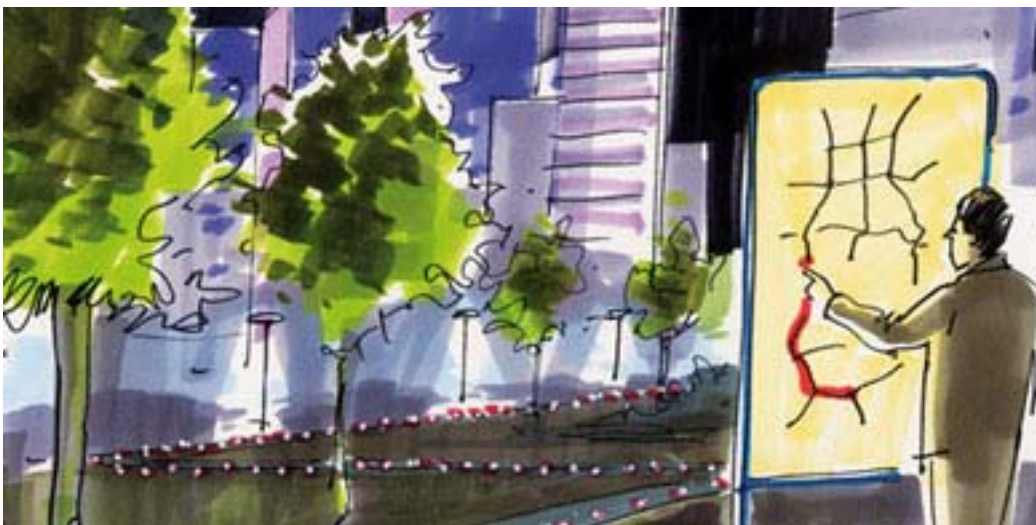


## Article

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### Revolutionary public lighting

*A former Philips industrial site in the city center of Eindhoven, The Netherlands, recently began the first phase of its transformation into a 'creative community'. Over the next 10 years or so, the area's historical buildings, together with new developments, will become home to a unique, inspirational blend of commercial, residential and recreational facilities.*



#### Strategic lighting vision

Park Strijp Beheer, a private public partnership between Eindhoven City Council and development company Volker Wessels, invited Philips Design to develop a strategic vision that encapsulated the key role lighting would play in helping determine and enhance the character of this former industrial site. There had already been contact between the Council and Philips Design through the 'city.people.light forum', the international platform for innovative future public lighting concepts.

"Strijp-S is going to be a dynamic and vibrant area," says Lorna Goulden, Creative Director for Strategic Future Design at Philips Design. "Different types of activities will take place in the area during the day, in the evening and at night - and lighting can help change the identity of the area to reflect these changes. It can also be used to emphasize seasonal changes and special occasions. For instance, if a festival was taking place you would want a totally different atmosphere than if it was just a regular working day. Lighting is the perfect tool for this because it offers more flexibility than physical structures."

#### Designing for the flow of people

"In 2008 we put together a book called 'Creating a public lighting experience'," says Lorna. "As well as outlining and explaining the vision, it also included typical scenarios showing how lighting could enhance people's experiences when, for instance, arriving in the area, navigating their way around, eating out or just strolling around. We were very conscious of designing for the flow of people throughout the area. This is a different approach to conventional urban lighting planning. We put the emphasis on the people in the space and how they experience it, as an additional layer to the functional street lighting and the decorative lighting for adjacent architecture."

### **Inspirational yet implementable**

Another important aspect of the plan is that, while reflecting the unique character of the area and exploring completely new ways of illuminating public spaces, it wasn't too abstract. "It had to be inspirational yet implementable," she adds. "I'm now working together with Philips Lighting to create the plans that are being used as the basis for implementation."

To give an impression of the kind of ideas being considered, we will look at two examples. The first is an animated pedestrian crossing. The advanced public transport system, the Phileas, effectively a tram on tyres, is due to be routed through Strijp-S this year. One potential hazard associated with these quieter running vehicles is that people are less likely to hear them coming. "We came up with the idea of an enhanced pedestrian crossing in which lighting gives a much clearer indication of when it is safe to cross," says Lorna. "At the same time we want the lighting to be attractive as well as functional." The result was a proposal in which LEDs embedded into the tarmac at the crossing create the effect of a colored wave - either green, orange or red depending on whether you should walk or stay put - that pulses across the surface of the road.

The second example is also linked to the buses. The trunks of the lampposts, as well as the pavements, would have integrated LED points creating an animated line along the route through the area. The intensity and color of the LEDs will alter depending on the location of the bus; as it approaches the lighting will get brighter and also change color. Once the bus has passed the lighting will again adapt accordingly. In addition to the obvious aesthetic appeal of this ebbing and flowing light, it would let you see from a distance - as well as from the buildings adjacent to the road - whether a bus was due to arrive.

### **Sustainability**

Something central to all the concepts is sustainability. All of the public lighting used will be LED, and intelligent solutions will be used wherever possible to dim or even switch off lighting when no one is around. But the ideas expand beyond just the lighting itself. For example, there is talk of an on-site solar farm on some of the buildings' flat roofs so that the lighting is powered by local, renewable energy. Or light-guiding materials to channel light from one place to another to reduce the need for artificial illumination. "We suggested holding creative workshops with architects to inspire them on the relationship between natural and artificial light and related technologies and materials," says Lorna. "So our vision is about much more than just putting up a few lampposts."

The regeneration of the area will be carried out in phases. The first is already underway, and subsequent phases are scheduled to last up to 2020. "The lighting plan will therefore develop over time as well," she adds. "10 years from now there will undoubtedly be new lighting solutions available, so we have to make sure that we build in enough flexibility to take such developments into consideration. And the area will be used a test bed for new innovations, so prototypes can be tested during the various stages of development."

### **Wow!**

The ambition of the Eindhoven city council is that when you visit the area you should have the feeling that you are somewhere special. "They are aiming extremely high; they really want it to be a landmark development," says Lorna. "That also applies to the lighting. So it's up to us to make sure that we come up with something extra special to help make it unique. Our main challenge is to use design to translate the high-level ideas into reality, without losing the original vision and quality. I suppose you could say that our brief is to make sure that when people experience this public lighting their reaction is; 'wow!'".

[+ Listen to Lorna talking about the project in the film 'A few words with...'](#)