



CITY UNDER MICROSCOPE ROTTERDAM (The Netherlands)





Rotterdam is a young and dynamic city. Its passionate heartbeat can be felt at every turn. The city keeps reinventing itself at a rapid pace: redefining and expanding its already impressive skyline every time you visit, and presenting new cultural, artistic and architectural events to surprise and delight you. In a 24/7 economy, lighting is very important and contributes a great deal to the look and feel of the city.

We are very committed to achieving a clean, green and healthy city with a strong, sustainable economy – a showcase for sustainable innovation. I am convinced that Rotterdam's focus on energy efficiency and sustainable energy solutions will allow it to distinguish itself and set an example on the world stage. Innovative public lighting contributes to these goals.

I am very happy to welcome you to Rotterdam for the LUCI City under Microscope.

Once you are here, there will be light all around you and I will be glad to share this experience with you. Rotterdam lightens your world!

Alexandra van Huffelen
Deputy Mayor of Rotterdam for Sustainability,
the City Centre and Public Spaces



It is a pleasure to be in Rotterdam for the first LUCI City under Microscope of the year. This event will give us an exceptional opportunity to discover a city that has developed one of the most advanced lighting strategies in Europe.

On the basis of its lighting master plan, Rotterdam makes full use of the potential that urban lighting offers to cities in terms of sustainability and energy efficiency, for the enhancement of its architecture and public art, as well as for the development of its infrastructures such as its port – the largest in Europe. This engagement in the lighting domain brought Rotterdam to be one of the cities that led the elaboration of the LUCI Charter on Urban Lighting in 2010, today signed by over 40 cities worldwide.

With Rotterdam's extensive experience of the LUCI network, I am also looking forward to the learning and networking opportunities that the city will offer us during the programme. I am sure that this event will be another step forward in the way cities can exchange information and make LUCI a fruitful and constructive networking space.

I would like to warmly thank the City of Rotterdam for hosting the event and I wish an interesting and enriching LUCI City under Microscope to all participants!

Martine De Regge President of LUCI Deputy Mayor of Ghent



CITY UNDER MICROSCOPE ROTTERDAM (The Netherlands)

Wednesday March 5 9:00 LUCI Light & Art Commission meeting (for Commission members only) 17:30 LUCI Executive Committee meeting (for EC members only) 19:30 Welcome cocktail 21:00 Light excursion through Rotterdam city centre
Thursday March 6 9:00 Opening of the City under Microscope 9:30 The history of Rotterdam - rebuilding the city in the post-war era 10:00 The lighting plan of Rotterdam 11:00 Keynote speech: Innovation as a Dutch experience 12:00 Lunch 13:15 Visit to the Rotterdam Info Centre 14:00 - 17:00 Interactive workshops Rotterdam's lighting management system Lighting design in Rotterdam Winners of the Light Challenge 2013 Smart street Stratumseind Eindhoven Smart grids - self-healing grids 18:30 Light excursion to Broken Light and Wijnhaventunnel among other projects
20:30 Dinner and a tour on the River Maas
Friday March 7 9:30 The Port of Rotterdam - expanding the harbour and the lighting plan 10:15 Lighting public art and architecture 11:15 The Rotterdam Climate Initiative - the city's sustainability programme 12:00 Lunch 14:00 Lighting the Blijdorp Zoo using SSL - an EU funded project 14:30 Special lighting projects in Rotterdam 15:30 Rotterdam public lighting asset management and maintenance 16:00 LUCI announcements 20:00 Dinner with a view on the top of the Euromast Tower
Saturday March 8 (optional programme) 10:00 Visit of the new Maasvlakte 2 harbour site - Port of Rotterdam 12:00 Lunch 14:00 Visit of Museum Boijmans van Beuningen

Wednesday March 5

9:00 LUCI Light & Art Commission meeting (for Commission members only)

17:30 LUCI Executive Committee meeting (for EC members only)

19:30 Welcome cocktail / Rotterdam City Hall

Alexandra van Huffelen, Deputy Mayor of Rotterdam Martine De Regge, President of LUCI and Deputy Mayor of Ghent

21:00 Light excursion through Rotterdam city centre and its architectural and artistic highlights (on foot)

- Central Station
- Renovated Weena
- Westersingel international sculpture terrace

22:30 Return to the hotel

Thursday March 6

Moderator: Nynke Schaaf, Project Manager Economic Development, City of Rotterdam and Member of the Rotterdam Speakers Academy

8:30 Registration and coffee / Beurs-World Trade Centre

9:00 Opening of the City under Microscope

Martine De Regge, President of LUCI and Deputy Mayor of Ghent Alexandra van Huffelen, Deputy Mayor of Rotterdam

9:30 The history of Rotterdam - rebuilding the city in the post-war era

Prof. Dr. Paul van de Laar, General Director, Museum Rotterdam and Professor, Erasmus University

Almost completely destroyed during World War II, the centre of Rotterdam is well known for its ground breaking architecture. Paul van de Laar will show us how Rotterdam was rebuilt after the war and the choices that were made that make Rotterdam what it is now. The modern history of a modern city.

Prof. Dr. Paul van de Laar studied economic and social history and received his PhD from the Tinbergen Institute, Graduate School of Economics of the Erasmus University. He is the General Manager at Museum Rotterdam and a Professor of urban history at the Erasmus University School of History, Culture and Communication. His research topics are urban visual culture, transnational cities and cultural heritage.





Thursday March 6

10:00 The lighting plan of Rotterdam

Annemieke Fontein, Head of Landscape Department, City of Rotterdam

The Lighting Plan is a guideline for all the lighting projects in Rotterdam. While most lighting plans focus primarily on beautification of the historical city centre, Rotterdam, in contrast, has developed a lighting scheme which integrates functional lighting with ambient lighting on a city-wide scale.



Annemieke Fontein has studied landscape architecture in Amsterdam and Ghent, and urban design in Copenhagen. She has worked for the City of Rotterdam for approximately 20 years. During the last 10 years, as the Head of Rotterdam's Landscape Architecture Department, she played a role in the "Rotterdam Style" guidelines which aim to improve the quality and sustainability of public space through better maintenance, design, urban furniture and light.

10:30 Coffee break

11:00 Keynote speech: Innovation as a Dutch experience

Daan Roosegaarde, Artist and Innovator, winner of the 2013 World Technology Awards



Daan Roosegaarde, Creative Director of the social design lab Studio Roosegaarde, delivers unimaginable technology to the world – in the most literal way. With studios in Rotterdam and Shanghai, he develops innovative, interactive landscapes that are accomplished through the objective of pulling technology "out of the screen" and integrating it into the real world.

In 2008 he developed the "Sustainable Dance Floor", an interactive dance floor that generates electricity through the motion of dancing. He is currently developing "Smart Highways" which are interactive and sustainable roads.

Daan Roosegaarde has won the Dutch Design Award, the Charlotte Kohler Prijs, the Design for Asia Award and China's Most Successful Design Award.

12:00 Lunch / Beurs-World Trade Centre

13:15 Visit to the Rotterdam Info Centre



Tim Bakker, Team Manager Infrastructure, City of Rotterdam

The City of Rotterdam has designed its own system to manage all data on public assets. This data determines the city's maintenance programmes. Tim Bakker will give participants some insights on how the system works on a daily basis in a city like Rotterdam.

Tim Bakker manages a team of specialists in the field of traffic management, data management of public assets and quality inspections of public assets. After receiving a Bachelor's degree in Civil Engineering he started his career at the Public Works Department of the City of The Hague. He continued his career at the Public Works Department of the City of Rotterdam, where he has held various positions over the past 8 years.

Lighting design in Rotterdam - challenges combining safety, sustainability and the quality of urban space

Onnie Tjia, Landscape Architect, City of Rotterdam

Having such a comprehensive lighting master plan with guidelines necessitates its implementation in all landscape designs as well. Onnie will show participants some lighting concepts and lighting solutions as worked out in certain projects in Rotterdam. These project examples will illustrate the opportunities and the pitfalls encountered by the city.

Onnie Tija studied landscape architecture at the Agricultural University of Wageningen. His work experience includes the planning and design of a wide range of projects in the Netherlands, Singapore and Indonesia. He started to work with the Municipality of Rotterdam in 1989, where he was involved in prestigious projects such as the Central Station and Lijnbaan in the city centre, and the prize-winning Afrikaanderpark. He was one of the key persons in the Lighting Plan Rotterdam taskforce.

Winners of the Light Challenge 2013 - innovation in street lighting

Student team from the University of Nijmegen

In 2013 the City of Heerenveen organised the "Light Challenge" in which eight teams of students competed to design new outdoor lighting concepts. The focus was on sustainability and cradle to cradle, and the design had to be created together with inhabitants of the streets in question. The winners, Yannick Brouwer, Ashwin van Dolder, Swayon Leung and Wouter van der Wal, students of Industrial Design at the Technical University Eindhoven, created the "Dare", a smart light with a completely new design, conceived for a street in the City of Nijmegen.

Smart street Stratumseind Eindhoven - combining lighting with sensor technology for crowd management

Tinus Kanters, Project Manager Department Economy and Culture, City of Eindhoven

The City of Eindhoven is ambitious in addressing safety and ambience in Stratumseind, a unique pub street that is over 400 metres long with more than 50 bars and 10 restaurants. Together with Philips and the University of Eindhoven, the City of Eindhoven is experimenting with a "living lab" in this area.



Thursday March 6



With sensor technology, social media monitoring and remote controlled lighting, they are trying to find the right balance in light intensity, colour, etc. to positively influence safety, ambience and economic development.

Tinus Kanters is a Project Manager specialised in crowd management with experience in organising and managing big events and working with young people. He has been working for the City of Eindhoven for more than 12 years. He now uses his experience in managing crowds to lead a special project on analysing the social behaviour of young people and the influence of light on that behaviour.

Smart grids - self-healing grids

Marko Kruithof, Senior Manager Sustainability and Renewal, Stedin

Self-Healing Grids refer to the development of a technological solution which enables us to electronically find the location of a disruption in the network. The grid will automatically switch to alternative power connections to keep the effect of a disruption as small as possible.



Marko Kruithof has over 25 years of experience in the energy distribution sector. He has been in charge of asset management and control during the past 10 years. For the last 5 years he has been responsible for the continuity and safety of electricity and gas distribution for over 2 million customers.

17:00 Free time



18:30 Light excursion to various sites (departure from the hotel)

- Broken Light project (2nd prize winner of the city.people.light award 2011)
- Wijnhaventunnel (pedestrian and cycle tunnel)
- Veerhaven historical port

20:00 Dinner and a tour on the River Maas / "de Majesteit" paddle steamer

23:15 Return to the hotel

Friday March 7

Moderator: Nynke Schaaf

9:00 Registration and coffee

9:30 The Port of Rotterdam - expanding the harbour and the lighting plan

Judith Vles Katz, Advisor Executive Relations and Protocol, Port of Rotterdam

One of the largest ports in the world and a major industrial hub of Europe, the port of Rotterdam requires special lighting conditions for its round-the-clock activities. The port develops continually, and this includes a specific lighting strategy to ensure sustainability and safety 24/7. This presentation will feature the development of the latest land reclamation project, Maasvlakte 2.

Judith Vles-Katz has worked in various functions within the Rotterdam Port Authority as well as the port itself since March 1998. In her present capacity, she is one of the "storytellers" of the Rotterdam Port Authority. Together with her immediate colleagues she informs thousands of visitors per year about the Rotterdam Port Authority as well as the Rotterdam Port & Industrial Complex.

10:15 Lighting public art and architecture

Siebe Thissen, Public Art Director, Centre for Arts Rotterdam

In this presentation Siebe Thissen will discuss several traditions of Enlightenment and how they reveal themselves in the illumination of art works and monuments in the city.

Siebe Thissen studied history and philosophy, and writes about (popular) culture and the urban condition. His PhD research focussed on the Dutch Enlightenment.



Friday March 7

10:45 Coffee break

$11:15 \ \ The \ Rotter dam \ Climate \ Initiative - the \ city's \ sustainability \ programme$

Paula Verhoeven, Director Sustainability and Climate Change, City of Rotterdam

As a low-lying delta city with Europe's largest international port, Rotterdam takes its responsibility seriously in creating a sustainable city. It has a unique approach which deals with both the causes and consequences of climate change, improving air quality and reducing noise. The ambitions and results regarding the environment, climate, energy and water contribute to a green, clean, healthy and economically strong city and make Rotterdam one of the most sustainable ports in the world. In the Rotterdam Climate Initiative, the City of Rotterdam has established strong partnerships with the port and industries, as well as universities and knowledge institutes, focusing on decisiveness, innovation and co-creation.



Paula Verhoeven was appointed as the first Municipal Director of Climate Affairs in the Netherlands in 2009. In her current role, her key objectives are to ensure that Rotterdam's CO2 emissions are reduced by 50% in the year 2025, that the city becomes fully climate proof, and that because of this sustainable approach, significant economic growth is achieved.

12:00 Lunch / Beurs-World Trade Centre



Nico Leeuwenstein, Managing Director and Owner of NL+ Engineering BV

Blijdorp houses an extensive collection of plants and animals in a biotope garden that re-creates their natural environment. The high energy consumption of such a concept was one of the reasons behind Blijdorp's "Energy plan" project. Besides several sustainable solutions such as solar technologies, Blijdorp also invests in specially developed LED lights with colour temperatures that fit the needs of plants, animals and visitors. Together with initiatives in Ireland, Italy, Denmark and Lithuania, Blijdorp is now part of the EU project "Illuminate". The project will develop a general approach to overcome obstacles in LED application in high quality urban areas, buildings hosting expositions and museums, where light quality is a critical requirement.

Nico Leeuwenstein studied marine engineering and worked for 10 years in the offshore industry. He later became the Head of the Technical Department of the Zoo of Rotterdam, Blijdorp. He has contributed to the transformation of Blijdorp from a traditional zoo to a modern zoo, by creating specific biotopes for several groups of animals. 5 years ago, Nico started his own company, NL+ Engineering, focused on sustainable techniques.

14:30 Special lighting projects in Rotterdam

Sander van Beurden, Head of Public Works Department, City of Rotterdam

An overview of the lighting projects that the City of Rotterdam is especially proud of:

- Schiebroek, the first urban area in Rotterdam with large scale LED replacements
- Tunnel lighting projects in Rotterdam combining art and functionality
- Hoek van Holland solar and wind energy powered streetlights
- Groene Hilledijk and the first LED streetlight fixture by Dutch designer Friso Kramer

Sander van Beurden has a Master's degree in Law and practiced law at the start of his career. He has broad experience in public management. He was the Head of the Lighting and Traffic Management Department in The Hague. For the last 4 years he has been the Head of the Public Asset Management Department in Rotterdam as well as the Project Director of the renovation of the monumental "Maastunnel".

15:00 Coffee break





Friday March 7

15:30 Rotterdam public lighting asset management and maintenance

Joop Polfliet, Team Manager Infrastructure, City of Rotterdam

The City of Rotterdam focuses on ensuring high quality lighting in every street. A good asset maintenance programme is essential to maintaining this quality. This presentation will reveal the maintenance strategy of Rotterdam and will also give an insight into the future maintenance plans for Rotterdam's urban lighting.

Joop Polfliet manages a team of specialists in the field of public lighting, roads, parks and playground management. He started his career 12 years ago at the City of Rotterdam after getting a Bachelor's degree in Business Engineering. He has had several management positions in the Public Works Department.



15:00 LUCI announcements

Alexandre Colombani, General Manager, LUCI Association

Presentation of upcoming events (City under Microscope Albertslund, Annual General Meeting Dubrovnik) and EU projects that LUCI is involved in (ENIGMA, SSL-erate).

17:00 Free time

19:45 Departure from the hotel

20:00 Dinner with a view of Rotterdam's nightscape / the Euromast Tower

23:15 Return to the hotel

Optional programme

Saturday March 8

9:30 Departure from the hote

10:00 Visit of the new Maasylakte 2 harbour site - Port of Rotterdam

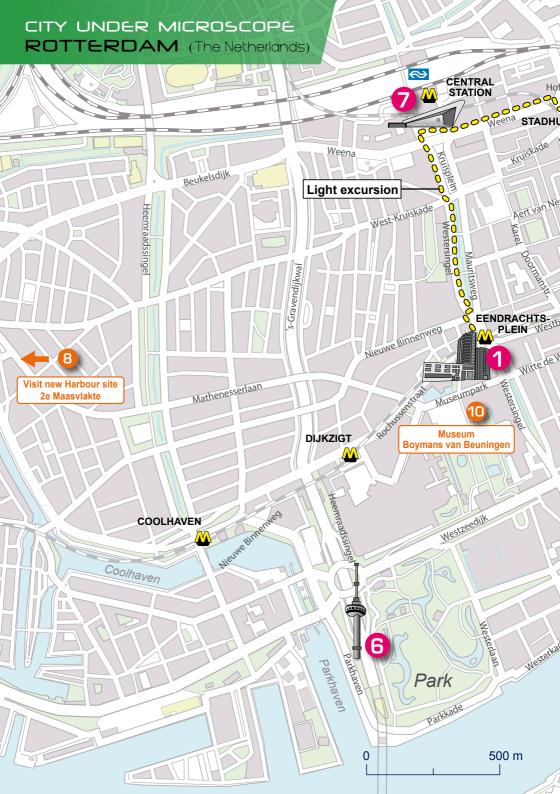
12:00 Lunch / Hotel New York

14:00 Visit of Museum Boijmans van Beuningen

A visit to Museum Boijmans Van Beuningen is a journey through the history of art. Dutch and European masterpieces provide a comprehensive survey of art from the early Middle Ages to the 21st century, from Bosch, Rembrandt and Van Gogh to Dalí and Christo









LUCI (Lighting Urban Community International) is an international network of cities on urban lighting bringing together over 60 municipalities across the world. It creates spaces for exchange of knowledge and good practices, and helps cities develop an appropriate and sustainable use of urban lighting.

Organised twice a year, the LUCI City under Microscope events enable participants to discover the lighting strategy of a member city over a two day period.

A chance to see a city in its best light!

