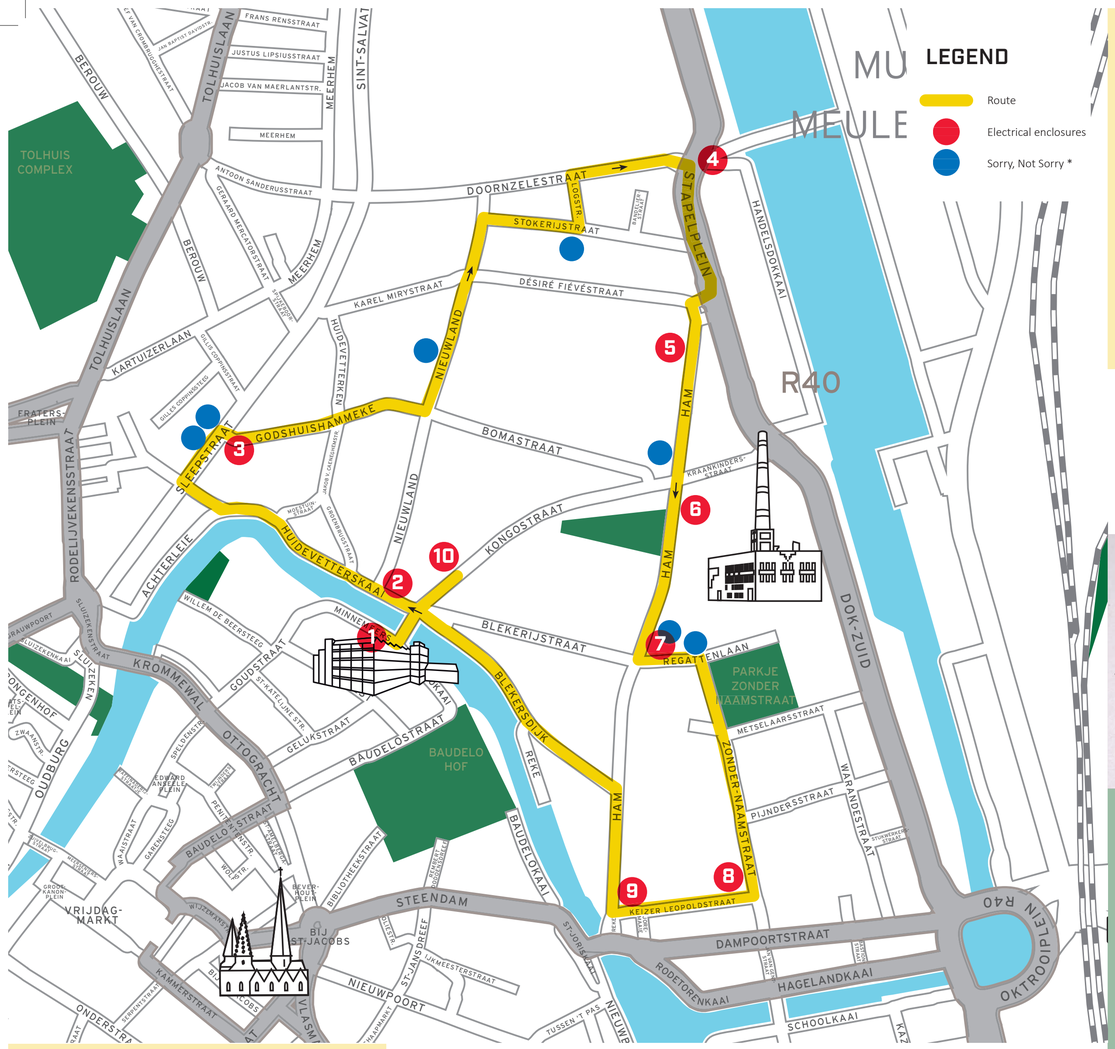


1 SIMON MANNAERTS

OUTDOOR ELECTRICAL ENCLOSURE AT MINNEMEERS 10, IN FRONT OF THE MUSEUM OF INDUSTRY

Simon Mannaerts or 'Simo' from Antwerp is a part-time bicycle mechanic, but also works full-time as a freelance artist. He also works on commission and makes murals, oil or acrylic paintings, drawings, portraits, etc. He tries to incorporate as many social or psychological themes as possible in his oeuvre, and focuses on the parts of our society that usually do not get that much attention. You can already see his work on outdoor electrical enclosures and walls across Belgium and the Netherlands. He'd rather not describe his work, because he thinks that people's interpretation without any prior knowledge about his works may be more valuable than the original meaning.

For this work, I was inspired by advertisement posters in the museum's collection. I have been **inspired by such old advertisement signs** throughout my career, because of their design, colour schemes, etc. The many light bulbs in all their shapes were also a source of inspiration. ”

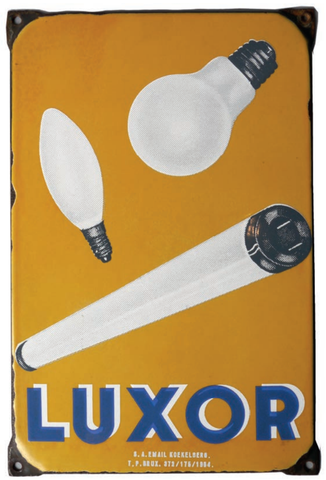
simonmannaerts

LIGHTING

For centuries, the moon, candles and oil lamps were the only sources of light in the darkness. From 1780 onwards, the regular oil lamp was improved in a number of ways over a short period of time. This was the start of a two-century-long search for ever-improving lamps and lighting methods. The Museum of Industry's lighting collection gives an overview of that search. The sub-collection consists of over 1,300 objects and a number of beautiful posters, advertisements and catalogues about lighting in all its forms.

Everyone wrongly believes that Thomas Edison is the inventor of the light bulb. Like many other inventions, this is in fact a historical process to which many inventors have contributed.

The invention of the light bulb did not mean that the world rose from the darkness overnight. The introduction of electric light was a lot more erratic than that, but the fascination created by the soft and mysterious light was a constant all this time. Even today, light is still a big part of the well-known Danish concept of *hygge* or cosiness.



Enamelled advertisement sign for various types of Luxor lamps, produced by Emaillerie Koekelberg, 1954. Museum of Industry collection

2 LINDERT STEEGEN

OUTDOOR ELECTRICAL ENCLOSURE NEAR NIEUWLAND 1

Lindert Steegen is from Limburg, where he grew up in Hoelbeek. But he has lived in Ghent for a couple of years now. He runs a studio there. He graduated as graphic designer, but is mainly known for his murals. His work is extremely colourful. He always aims to transform spaces or environments. His works can be found across Belgium, as well as in Amsterdam and Breda.

lindertsteegen

The Museum of Industry has a wonderful and unique collection filled with inspiring images, which is of course very rewarding for an artist. I felt immediately drawn to the posters designed as propaganda for light and electricity. In terms of design, I was mainly drawn to the image of a light bulb. I then put this image next tot that of a flower. This way, you get **the contrast between the human and the natural** world. These two contrasting images, with similarities, but also very obvious differences, create an interesting dialogue. The image raises various questions and it is up to the spectator to come up with an answer. ”

Decorative 1905 chandelier with a brass gas burner for an upright mantle. A gas mantle is a woven or knitted net that you place in a gas burner, around the upright flame in order to better distribute the light. The flower-shaped lampshade is made of semi-transparent yellow glass and transparent strips. Museum of Industry collection

Flower-shaped matte glass lampshade with a red edge. Museum of Industry collection

3 JANGO JIM

OUTDOOR ELECTRICAL ENCLOSURE NEAR GODSHUISHAMMEKE 2

Jango Jim is a visual artist from Antwerp, who tries to make the world a nicer and happier place through his colourful, happy and iconic illustrations, animations and murals. Driven by coffee and good food, he keeps his eyes and ears open for anything that can be inspiring whilst cycling around. He has already made illustrations for Vice, The Guardian, The Washington Post, Converse, Dr Martens, Apple, etc.

Together with production house Haptic, he created the international animation series Elvis & Benny for Flemish TV channel VTM and Spanish TV channel TV3. He also created real tattoo animations for a Black Box Revelation music video. He has painted murals from New York to Brussels and has had exhibitions from Los Angeles to Tokyo.

I was inspired by posters, advertisement signs and images from the museum and created a whole series of sketches. On the basis of that series, I made a selection for a final design with **a striking colour palette, to brighten up the streets.** I have also done some research into Ghent expressions to add a local touch. I hope that the final result makes people smile if they pass the outdoor electrical enclosure on the street. It clearly refers to energy sources such as gas and electricity, but it is also linked to themes such as optimism, enthusiasm and love. The cheerful colours and faces are very typical for my work, which has always been very much influenced by comics, cartoons and pop art. ”

jango_jim

GAS

The first experiments with gas as a light source were conducted in the mid-18th century. Architect Louis Roelandt established the first gas plant in Ghent in 1823. The plant initially served a few shops, factories and homes of wealthy citizens. At the time, gas lighting was an exclusive luxury product. The first public gas lighting in Ghent was introduced a few years afterwards. In April 1826, three gas lanterns were used on Kouter square and six chandeliers illuminated the throne room of the Ghent Town Hall a good six months later. The lanterns were lit manually by lamplighters. On the Tondelier site in Ghent – which is named after the Ghent word for lamplighter – two restored gas holders remind us of a time when gas was stored in large cylinders to be distributed around the city.

There was a clash between gas lighting and its electric counterpart for years. Long before the light bulb was introduced around 1880, electric lighting was already being used in the form of arc lamps: a regulated electric spark was kept going between the ends of two carbon rods. However, the system produced such an intense concentration of light that it could only be used in station and factory halls. So, gas lighting was rolled out in addition to this system. Gas lighting allows for a better distribution. By the turn of the century, gas lamps had developed into a stable, easily controllable and economical product thanks to the mantles. The light bulb could hardly compete with that initially.

Bakelite telephone with dial by the brand Bell, and square light switch in brown bakelite by the brand Niko. Museum of Industry collection

4 GIJS VANHEE

OUTDOOR ELECTRICAL ENCLOSURE ON STAPELPLEIN ACROSS FROM HOUSE NUMBERS 1-25

Gijs Vanhee from Mechelen is known for his narrative drawings, in which animals – often birds – play the leading role. The search for freedom, as well as the balance between nature and society, is the thread that connects all his works. Sometimes he uses ink on paper, sometimes he uses paint on walls. Sometimes his drawings are autobiographical, sometimes they are anecdotal. His drawings have a very distinctive style: they are usually in black and white or with limited use of colours. When he creates a mural, the elements or textures present usually play an important role in the work.

My main guidance was the surface that needed to be painted, so in this case, the outdoor electrical enclosure itself. It now represents a washing machine, with one of my characters in it. On the back, you can see that the character is installing an electrical network. Within this context, I use **details referring to the Museum of Industry collection**, such as the texture of bakelite, an old fuse box, old-fashioned buttons on the washing machine, etc. ”

gijsvanhee

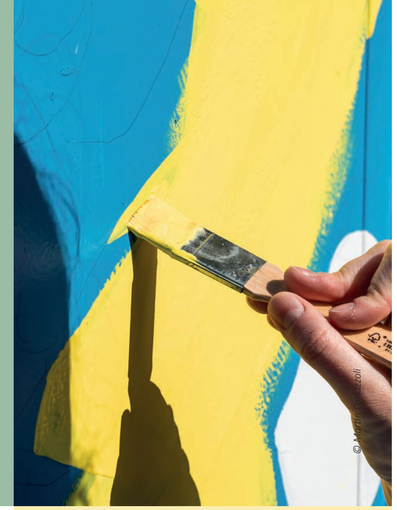
BAKELITE

From the second half of the 19th century onwards, increasing industrialisation and mass production and consumption stimulated the search for new materials that could replace or imitate expensive natural materials such as ivory, tortoiseshell or tropical woods.

The versatile bakelite started to take over the market around 1920, after experiments with ebonite or vulcanite, parkesine, ivoride and the combustible celluloid. The synthetic material was created by Leo Baekeland, a native of Ghent who had emigrated to the United States, and who took out a patent for it in 1907. The insulating, non-conductive and heat- and moisture-resistant properties of the synthetic material were soon appreciated in the industrial sector.

Bakelite became known in the domestic context too as a safe and solid material for sockets, switches and all kinds of household appliances. Until the 1920s, electric switchboards, light switches and sockets were mainly made of marble, brass, wood and porcelain, but they are not the most ideal materials. Wood is combustible. Metal and brass conduct electricity. And marble and porcelain are fragile, making exposed wires a risk of electrocution. Bakelite alternatives are safer.

Thanks to the donation of late architect Ro Berteloot, the Museum of Industry has the largest collection of bakelite objects in Flanders!



DID THE WALK SPARK YOUR INTEREST IN LIGHT AND ENERGY? THEN VISIT THE MUSEUM OF INDUSTRY AND RETURN HOME WITH EVEN MORE FACTS AND STORIES!

Discover the industrial past … and the stunning view. The exhibition 'About people and machinery' will teach you everything you need to know about industrial revolutions through five chronological boxes filled with personal stories, groundbreaking machines and techniques. The exhibition 'Three centuries of graphic industry' tells the history of printing, with an active workshop full of printing and typesetting machines. And in the exhibition '100% Textiles' you follow the journey of cotton to finished product between roaring weaving machines and challenging assignments. Would you like to take a look in the textile workshop?

- Want to know more about the Museum of Industry collection? Make an appointment via **bibliotheek@industriemuseum.be.**
- Are you interested in street art or would you like to learn more about it? Let the **Sorry, Not Sorry street art map*** guide you. It provides a convenient overview of murals across Ghent and is available at **Visit Gent**.

5 MARION BEECK

OUTDOOR ELECTRICAL ENCLOSURE NEAR HAM 221

Marion Beeck was born in Mechelen, where she currently teaches visual art at the academy. She studied illustration at the KASK in Ghent, followed by a teacher training, and she still lives in the city today. So she is a teacher and illustrator, but she also works autonomously. In that case, she mainly creates collages, murals and tapestries. Her work can best be described as colourful, minimalist, playful, yet sensitive at the same time.

It all started with a visit to the Museum of Industry to fully immerse myself in the atmosphere. When I was walking home during blue hour - my favourite time of day I - was still thinking about how I was going to decorate the outdoor electrical enclosure. I was inspired by nightfall and the moment that all the lights are switched on in the houses during this blue hour. I also definitely wanted to incorporate the shape of the lights. One shape became male and another became female. In the front, you can see **evening between day and night**. The moment in between, when it is both yet neither at the same time. The moment the light fades outdoors and is turned on indoors. An atmospheric moment between two people or two lights, who are both yet neither at the same time. As if blue hour is an absurd, short non-moment. ”

marion_beeck

Electric lamp with a bayonet fitting and black-coated lamp glass (pear-shaped) of the brand Sigtay. Museum of Industry collection

DARK TIMES

A black-out lamp is a black-coated light bulb with a small, circular window. This window allows a directional beam of light to pass through. During World War II, light was not allowed to shine outside at night. The German occupier made it compulsory to darken ‘houses and fireplaces’ in order to protect themselves against air raids by the allies. As danger loomed across Europe, light bulb manufacturer Philips launched the black-out lamp under the apt name ‘the Protector’ in February 1938. People spoke almost poetically about ‘the dark light of Philips’.

6 SARAH YU ZEEBROEK

OUTDOOR ELECTRICAL ENCLOSURE ACROSS FROM HAM 157-161, RIGHT IN FRONT OF DE CENTRALE

Sarah Yu Zeebroek is a visual artist, illustrator and musician. She studied at the Gerrit Rietveld Academy in Amsterdam and LUCA School of Arts in Ghent. Sarah makes both free work and work on commission. She creates illustrations for newspapers and magazines, and also regularly produces artwork for bands and (musical) theatre companies. Her work shows the rich imagination that is part of her day and night dreams. Often interspersed with surreal scenes, sometimes with a humorous twist, but never centred around the joke itself. Sarah is also active as a musician in her own band Hong Kong Dong and in the band L. Jacobs.

I was inspired by the shapes – both in photographs and in drawings – of the different types of lamps in the museum collection.I wanted to create a prehistorical figure made entirely of lamp shapes. In the end, it became a figure to which some fleshly components were added. The figure has **an intestine and a tongue, large feet and a guardian bird on its shoulder.** Behold the Homo Lucerna! ”

sarahyuzeebroek

Aerial view of the Ham municipal power station, located in the Sluizeken-Tolhuis-Ham district. In the centre, you can see the power station and the now demolished Ham site. In the foreground, you can cee the old coal-fired power plant with its four chimneys and on the left, the Handelsdok dockyard. Museum of Industry collection

HAM POWER STATION

The first batteries saw the light of day around 1800. Yet, electricity remained a mysterious phenomenon for a long time, reserved for science and laboratories. It was not until the second half of the 19th century that the industry caught on and the first practical applications followed. Whereas until then the steam engine had supplied the mechanical energy necessary to power machines, it now increasingly powered a generator to produce electricity. Flexible cables distributed that power to the machines.

Unlike large factories, private individuals could not generate their own electricity to power their light bulbs. To allow citizens to enjoy the new miracle, the City of Ghent built its first power station in 1904 in Bomastraat, a street nearby. The electricity that is produced in that station is brought to the general public through a public grid, powering appliances in living rooms, street lamps and the electric tram that crossed Ghent. Due to increasing electricity consumption, the Bomastraat power plant proved too small by the early 1920s. The construction of a new plant started in 1924. The plant’s first turbines are still exhibited in the Art Deco machine hall that is now part of the intercultural music centre De Centrale.

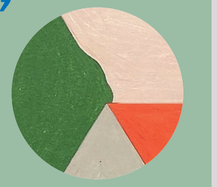
7 JANA VASILJEVIĆ

OUTDOOR ELECTRICAL ENCLOSURE ACROSS FROM HAM 68

Jana Vasiljević is a multidisciplinary artist with a background in storytelling, illustration and community arts. She is the daughter of a Serbian father and a West Flemish mother, and those different cultural backgrounds and experiences have always had a major impact on her work, both in terms of design and content. In her work, Jana alternates between individual projects – which have often to do with personal stories – and collaboration projects. She is, for example, part of the collectives Tieten Met Haar (TMH), Les VoiZines and Garden Of Delights (G.O.D.).

When I decided to participate in this project, there was a lot of talk about the increase of gas and electricity prices. I often had conversations with friends or my partner about how dependent we are on those raw materials and on gigantic **networks that sometimes seem complicated and almost magical** to us and bring resources to us from the other side of Europe. Resources that provide heating, charge our phones and turn the lights on. We dream of our own home that we can decorate the way we like, and where we can raise a family. A home where all the fittings, all water and gas pipes, electrical wires, etc. will be ours. And of energy that will hopefully be transported to us in more ethical and sustainable ways. A dream home. This is my dream home. ”

jana_tmh



TELEPHONY

After the success of the telegraph, which transmitted coded messages over long distances, researchers such as Antonio Meucci, Elisha Gray and Philipp Reis studied the possibility of transforming the sound of human voices into an electric signal. Each of them claimed to have invented the telephone, resulting in fiercely contested court cases. But Alexander Graham Bell was the first one to take out a patent in 1876. The Belgian Official Gazette described the invention as a ‘talking telegraph’ in the same year.

The first telephones had a carbon microphone. The voice’s sound vibrations cause the fine carbon powder, which is located in a closed space behind a membrane, to compress more or less. That change of resistance between the carbon particles is transformed into an electric signal, which is then transmitted to the receiver via the telephone cable. A vibratory plate in the receiver of the other telephone transforms the electric vibration back into the original voice.

During the very first experiments, only two telephones were connected to each other, but as soon as multiple users or subscribers were connected to the same network, switchboards were used. The vertical panel of the wooden unit has a series of sockets or jacks. The horizontal table has switches and telephone lines with plugs. To prevent the lines from tangling, lead weights are hung on them under the table. A clerk or operator makes the right connection manually by taking the telephone line from the table and plugging it in the right jack on the panel.

Old telephone exchange of the Atea brand, usually designed for companies or hotels, early 20th century. Museum of Industry collection

8 BART SPITAELS

OUTDOOR ELECTRICAL ENCLOSURE ACROSS FROM KEIZER LEOPOLDSTRAAT 64

Bart Spitaels was born in Mechelen and graduated from the LUCA School of Arts in 2012. He makes drawings, instal-lations, murals and paintings in which architectural elements often flourish. He invents strange constructions that seem to have been erected from the remains of a late capitalist ruin. He creates a peculiar world that shelters, tranquillises and encourages reflection with a limited number of graphic lines and well-considered coloured areas.

For Bart, the industrial design language is an almost inexhaustible source of inspiration. Switch plans, electrical wires, steam turbines and tube structures from electricity generating stations or the iron structures of high-voltage stations are all elements that fit in his distinctive visual language. The design is simultaneously reminiscent of the content of the outdoor electrical enclosures themselves and of the network that unrolls outside the boxes.

bartspitaels

A lot of attention was paid to the design and aesthetic of a switchboard in the past.The machine hall and the switchboard were often the showpieces of a plant. Look at the marble panels, the brass fuses and switches, the decorative lights, etc. This switchboard, which was produced by the Ghent Company Neyt & De Smedt, is exhibited on the top floor of the Museum of Industry.

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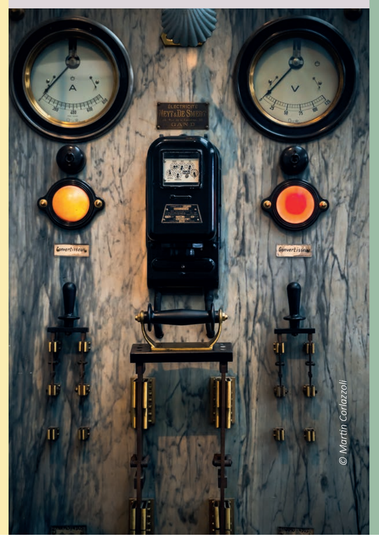


9 EMMELINE GEIREGAT

OUTDOOR ELECTRICAL ENCLOSURE NEAR HAM 1

Born and raised in Ghent, Emmeline Geiregat is an art director, illustrator and graphic designer. Her works are usually colourful, harmonious, energetic, powerful, euphoric, festive, dancing, hopeful, etc. One chunk of positivity, basically. She noticed that she herself got a lot of energy from colourful works and she wants to bring that energy to other people as well. She feels like she has succeeded if someone looks at her work and instantly feels warm inside or if her work sends a burst of energy through its surroundings. For this work, she mainly drew inspiration from old posters in the museum collection, which clearly show that the technologies presented were still innovative.

Calling your partner to tell them how much you love them. Swinging along to that one song on the radio. Turning on the light when it gets dark so you can continue reading your book. These are things we take for granted now, but they **must have been magical** for the people who first encountered them. Those scenes and that magic were brought together in my work. ”

emmeline_geiregat

10 TOYKYO

OUTDOOR ELECTRICAL ENCLOSURE NEAR KONGOSTRAAT 7

TOYKYO is a multidisciplinary design studio from Ghent. The studio was founded in 2006 and arose from a shared passion for visual culture. Creativity, positive energy and originality are the core values that TOYKYO designers use during their design process. The joy of designing is their biggest motivation. Their designs are therefore created in a playful way. During this process, the boundaries between graphic design, illustration and set design blur. It is their aim to evolve and to transcend, but mainly, to have fun.

The museum focuses on the evolution of energy, electricity and lighting by means of the past. For this outdoor electrical enclosure, we thought it would be interesting to focus on the future. The quest for harmony between the production of energy and nature is one of the greatest challenges of our time. When we were thinking about this topic, a light bulb went on and we thought of bioluminescence, or the production of **light by living organisms**, which is the ultimate synergy of light and nature. With our work, we show how this phenomenon would manifest itself in the TOYKYO universe. ”

toykyo

HOUSEHOLD APPLIANCES

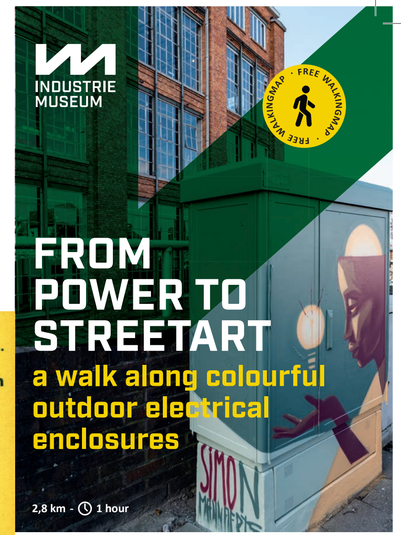
In the 1920s, using electricity in households was no great success yet. Electricity producers wanted more connections and subscribers, but the cost of an installation was high and the general public was not yet convinced of the advantages. The development of all kinds of electric appliances was therefore strongly supported. In addressing men, the emphasis was on comfort and a certain level of prestige. Housewives, on the other hand, were convinced of the time-saving benefits of electric appliances. The first electric household appliances were fans, curling irons, blow dryers, a toaster, electric radiators and two models of electric stoves. But the iron was the most successful product. Can you imagine life without all those appliances?

Museum of Industry collection

THE LIGHT BULB

The invention of the light bulb at the end of the 19th century creates a completely new industrial sector. Producing light bulbs is a very labour-intensive process due to the many manual actions. The sector set high standards for the craftmanship. However, the majority of the light bulb’s supplied energy was emitted in the form of useless heat. It produced more heat than light, which caused the bulb to be branded as environmentally unfriendly. It was banned in the European Union. In Belgium and the Netherlands, hundreds of jobs were lost in the lighting industry and a number of lamp plants closed their doors. Nevertheless, old light bulbs remain prime examples of craftmanship. Some really are aesthetic gems full of character.

Light bulb of the brand Osram. Museum of Industry collection



FROM POWER TO STREETART

a walk along colourful outdoor electrical enclosures

Thanks to a creative collaboration between Cultuur Gent and the Museum of Industry, ten drab outdoor electrical enclosures in the vicinity of the museum have been transformed into colourful pieces of art that will brighten up the streets around the museum from now on. The walking loop on this map connects the ten artworks with one another. The theme of each artwork? Light, electricity and energy. This is no coincidence, as energy has played an important role here, across the river Lys, for decades. All artists were directly inspired by posters, objects and photographs from the Museum of Industry collection. We will gladly introduce them to you along the way and reveal small pieces of their art in public space.

Thousands of our collection pieces are hidden away in repositories. So when you visit the Museum of Industry, you will see **only part of our collection.** Temporary exhibitions are a way for us to display some of those hidden pieces, but artistic projects like this one also give us extra opportunities to put a larger part of our collection in the spotlight. ”

Ann Van Nieuwenhuyse, manager of the Museum of Industry