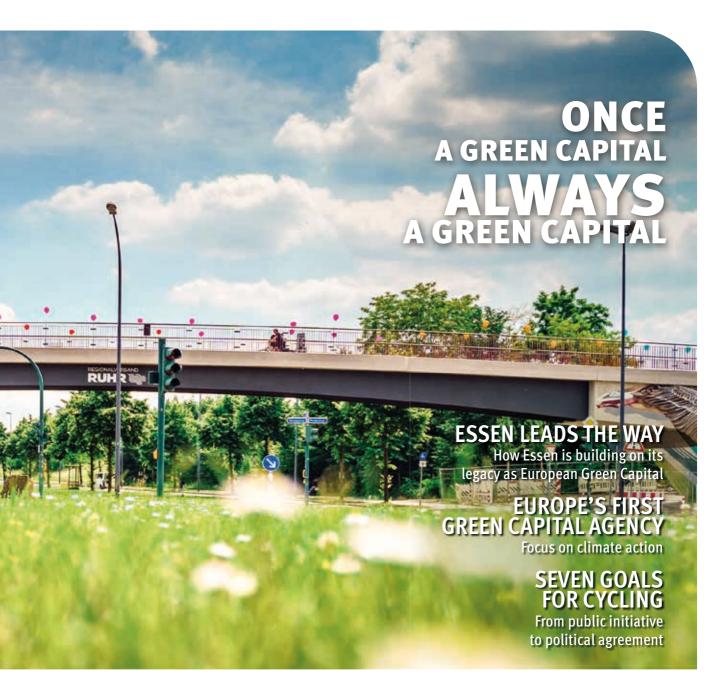
# HEIMATGRÜPECHAL

5 years on from EUROPEAN GREEN CAPITAL - ESSEN 2017











#### IMPRINT



#### **COVER STORY:** Bridge over Berthold-Beitz Boulevard forms part of the RS1 cycle path. Photo: RVR/Wiciok

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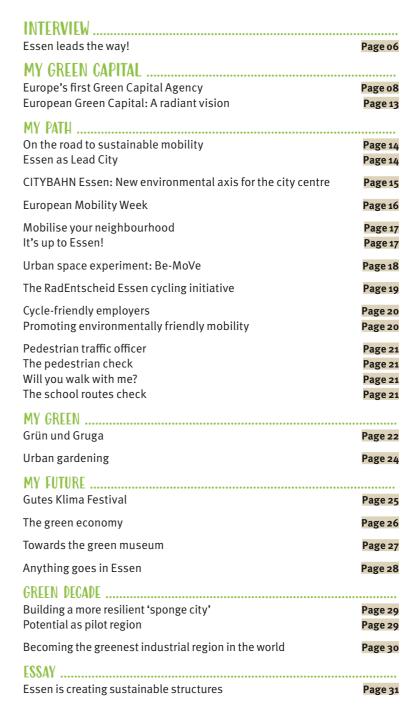
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Review:
An amazing year as
European Green Capital –
Essen 2017

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# IN ESSEN YOU CAN EXPERIENCE A "GREEN MIRACLE"!



Essen is a modern, green metropolis and an incredibly liveable city with a great quality of life. We have accomplished something truly impressive, turning a former mining city into the European Green Capital 2017 by developing and implementing strict environmental standards and striving to improve our environmental protection policies.

### OUR LAUREATE YEAR MARKED THE START OF A GREEN DECADE FOR THE ENTIRE REGION:

Many of the projects we launched in 2017 are still up and running and, thanks to the ESSEN.Neue Wege zum Wasser (English: ESSEN.New ways to the water) programme, well over 420,000 of Essen's residents can access the green network close to where they live. In 2023, the ecological renaturalisation of the Emscher River will be completed. Then, in 2027, the Ruhr Metropolis is hosting the International Gardening Exhibition.

We have our sights firmly fixed on our goal of making Essen a net-zero city by 2040 at the latest. The City of Essen's Green Capital Agency has taken a leading role in the region's ongoing environmental management process. It is at the heart of all climate policy initiatives, whether from municipal authorities, companies, or members of the community, and consistently implements our Green Capital goals.

Our city-wide Sustainable Energy and Climate Action Plan (SECAP) charts our course, sets targets and outlines measures to mitigate climate change and helps us adapt to the impacts of climate change.

Alongside the energy transition – where we are working with our regional hydrogen industry to promote the growth of the European hydrogen market – we are also committed to the mobility transition. By 2035, the people of Essen should be able to take an equal proportion of their journeys on foot, by bicycle, by public transport and by car. Investing heavily in the expansion of the city's cycling infrastructure and strengthening public transportation are two major components of our strategic plans.

### DEAR READERS,

Ever since being named European Green Capital, if not long before, Essen has been leading the transformation to a low-emission and climate-neutral future – both in the Ruhr Metropolis and beyond.

And together with the rest of the region, we want to continue to advance the "green miracle" that is already well underway, right here on our doorsteps.

Yours sincerely

### **THOMAS KUFEN**

Lord Mayor of the City of Essen







Time flies! Five years have gone by since Essen held the European Green Capital title in 2017. A title awarded since 2010 by the European Commission to honor the efforts from cities to become more sustainable and green and improve the quality of life of their citizens. With over 70% of European citizens living in urban areas, the title is now more pertinent than ever. Today, Essen continues to make a significant contribution to the wider metropolitan Ruhr area.

Located in the middle of Germany, Essen is situated in a heavy industrialised area not short of challenges, but also immense opportunities. It has successfully embraced transformation from a heavy industrial past towards a cleaner greener future. Essen is a showcase that long-term planning, building resilience and exchanging good practices can make a great difference. Now, the city is a role model of an industrial city in transformation. Essen has kept true to their motto "once a Green Capital – always a Green Capital".

The ambitious targets of the European Green Deal and the urgency of handling multiple crises need swift implementation. Our cities are instrumental in this green transition. The goal is to achieve urban spaces with clean air and water, more green spaces in the city, greater social inclusion, as a result having a place where people like to live and can live long and heathy life. Essen, like many other Green Capitals, is on its way to achieve that goal.

Essen's contributions and tireless participation at our Green Capital network, your exemplary cooperation with other cities at national and European level inspires and makes you a valuable example for all cities.

#### VIRGINIJUS SINKEVIČIUS

European Commissioner for Environment, Oceans and Fisheries

PHOTO (LEFT): SSASCHA KREKLAU FOR THE CITY OF ESSEN, PORTRAIT OF VIRGINIJUS SINKEVIČIUS. EUROPEAN UNION 2019 –

## ESSEN LEADS THE WAY!

The European Green Capital award also entails a great deal of responsibility as winners look to build on their year in the spotlight. It is both an attitude and a challenge. Simone Raskob, Deputy Mayor for Environment, Transport and Sport of the City of Essen, explains how the City of Essen is meeting this challenge.

INTERVIEW: Guido Schweiß-Gerwin

### Ms. Raskob, looking back, what was your personal highlight of the European Green Capital – Essen 2017?

**Raskob:** I don't really want to highlight a single event. We had the tremendous good fortune to be able to put together such a comprehensive programme that filled the entire year and was so incredibly inspiring to everyone in and around the City of Essen.

### Where are we today, five years down the line?

**Raskob:** In 2017, we declared a Green Decade that takes us up to the International Garden Show

(IGA) in 2027. This has allowed us to extend the work and programmes we launched as European Green Capital -Essen 2017. In terms of air and noise pollution, we have made great progress over the last few years. The biggest challenge is certainly mobility. Essen is still very much a car-centric city. In order to achieve our ambitious modal split target of 25% for each mode of transport, we still have work to do to strengthen the environmentally friendly trinity of cycling, walking and public transport. To this end, we formed a transport department in 2020 to link environmental and transport issues. Beyond that, the establishment of the Green Capital Agency under the leadership of Kai Lipsius and Olaf Poch is also well worth highlighting. The Agency now has a team of more than 20 employees and is still growing, which confirms just how committed the City of Essen is to its goal of achieving climate-neutrality by 2040 at the very latest.



### You mentioned the Green Decade. What does that involve over the next five years until IGA 2027?

Raskob: Essen City Council has enacted a sustainability strategy. In combination with a whole package of strategic measures, including the Mobility Plan and RadEntscheid (cycling referendum), we have drawn up our implementation roadmap. Our Sustainable Energy and Climate Action Plan (SECAP) provides us with significantly more resources for climate action. With a climate adaptation concept, we want to prepare the City of

Essen for the extreme weather events that will occur more frequently in the future, such as heavy rains. In this context, our 'sponge city' concept is an important component of our climate adaptation programme, as it relieves the burden on sewage systems in the event of heavy rain events, as well as improving the microclimate in our city in the long term.

Ruhrbahn's strategy of switching to hydrogen buses is an example of the fuel-switch strategy. The once-in-a-life-time CITYBAHN project strengthens public transport in the city centre and creates a link to the new Essen 51 district via the 101 and 108 lines. These and many other measures will bring the City of Essen considerably closer to the goal of becoming climate-neutral by 2040 at the very latest.

### The measures also include CITYBAHN Essen. What will the CITYBAHN improve for citizens?

**Raskob:** Public transport is the backbone of the transport transition. CITYBAHN itself should increase public transport's share of the modal split from 19% to about 21%. To avoid overcrowded buses and trains, we need to increase the frequency of service. The biggest challenge will there-

fore be to improve the service in the long term. However, that's one area where we currently have a financial shortfall.

### The bicycle has a major role to play in the mobility transition. How well is Essen positioned as a cycling city?

Raskob: According to the last household survey in 2019, cycling had a 7% share of the modal split. Now, implementing the measures ratified by the cycling referendum, we are taking a huge step forward. There is still room for improvement in order to reach our 25% target by 2035. We are investing a total of EUR 220 million to improve our urban cycling infrastructure. Nationwide, we are already leading the way with 25 companies certified as "Cycle-Friendly Employers". At a total length of around 13 kilometres, the three cycle path axes strengthen the main cycle route network in Essen and in some cases connect entire city districts. Many de-

stinations are easy to reach by bike, even though Essen's network of bike paths still needs to be significantly expanded in order to implement the council's cycling policies. The Metropolradruhr rental system is well used by citizens and visitors and is becoming increasingly popular.

### The measures also include the Ruhr RS1 cycle path. How is that progressing in Essen?

**Raskob:** Since the RS1 runs on former railroad tracks, we have made relatively rapid progress in Essen. The cycle expressway is an attractive alternative for commuters, for example. To the west, the RS1 already runs via Mülheim an der Ruhr to near the Duisburg city limits. The Essen districts of Borbeck, Altendorf and Essen 51 are connected without intersections. Admittedly, we do face a few more challenges for expansion towards the east.

### Essen is committed to structural change and is aiming to become the greenest city in NRW. What benefits will this create?

**Raskob:** The issue of climate action has become much more relevant to society as a whole in recent years.

The results are initiatives such as Fridays for Future and the Letzte Generation. With the Green Decade and the goals of the Green Capital as a strategic roadmap, we are ahead of the wave. We launched coordinated measures earlier than many cities, which are now starting to feel the pressure mount. We see this, for example, in the recruitment of skilled workers. We also have many positions to

fill over the next few years due to age fluctuation. The Green Capital title certainly helps as a unique selling point. Applicants know that we are already a few steps ahead in this area.

"THE ISSUE OF CLIMATE PROTECTION HAS BECOME MUCH MORE RELEVANT TO SOCIETY AS A WHOLE IN RECENT YEARS [...] WE LAUNCHED COORDINATED MEASURES EARLIER THAN MANY CITIES, WHICH ARE NOW STARTING TO FEEL THE PRESSURE MOUNT".

Simone Raskob,
Deputy Mayor for Environment,
Transport and Sport of
the City of Essen

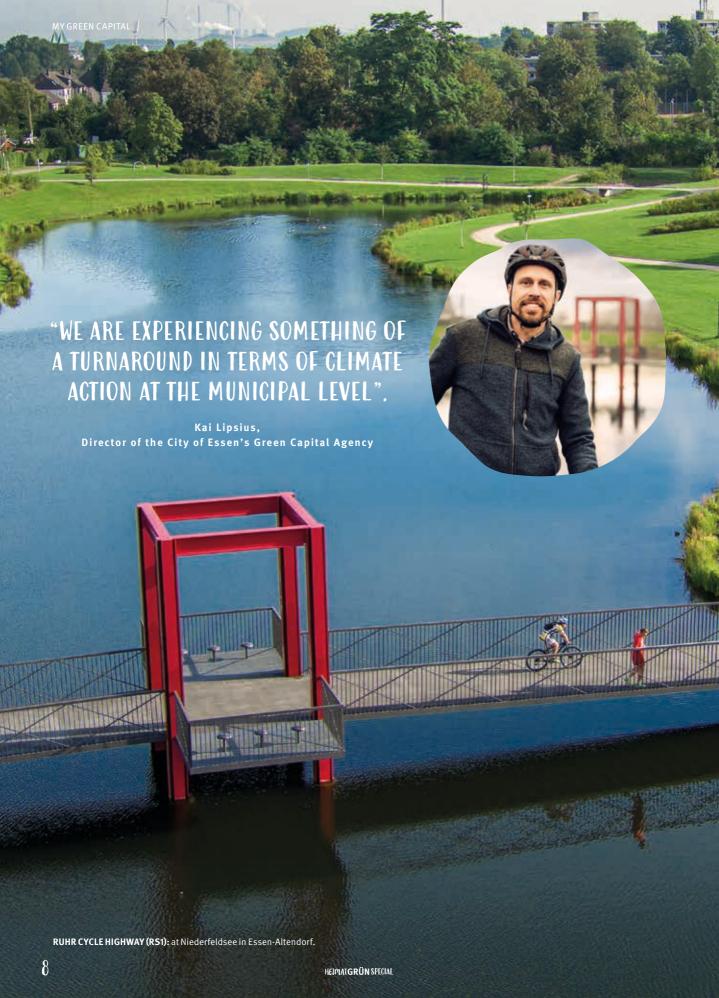
### In 2017, you said Essen was on the way to becoming a truly liveable city. In your view, what makes a liveable city?

Raskob: First of all, short distances. In Essen, we have efficient links from the districts to the city centre and between the districts. Our network of cycle paths in particular, improved as a result of the ESSEN.Neue Wege zum Wasser (English: ESSEN.New ways to the water) project, has really helped to ensure that leisure destinations and workplaces are easily accessible via climate-friendly means of transport. In addition, there is the quality of life in the city districts, which are very green. We know we have some catching up to do in the city centre, where we need more greenery, a higher

quality of stay and a better mix of amenities. Through temporary interventions, we are already creating green islands, seating areas and multifunctional urban squares.

### How can citizens and visitors tell that Essen is a Green Capital?

Raskob: No other European Green Capital has established a Green Capital Agency as a long-term follow-up organisation that updates the Council and the public with annual progress reports. With the "Citizen Ideas Exchange", which we launched in 2017, we are once again promoting civic engagement this year, and the Green Capital Volunteers continue to be active. At Europaplatz, the Green Capital flags fly alongside the flags of the European Capital of Culture RUHR.2010. The issues highlighted during our time as a Green Capital continue to shape urban society. Hence our motto: "Once a Green Capital, Always a Green Capital".



## EUROPE'S FIRST GREEN CAPITAL AGENCY

In the five years since its laureate year as
European Green Capital, the City of Essen continues
to make progress on achieving the goals it set
in 2017. The city set up a dedicated Essen Green
Capital Agency to track developments and oversee
strategies. Increasingly, the Agency's focus is
on climate action in particular.

TEXT: Sarah Meyer-Dietrich

■uropean Green Capital is much more than a one-year accolade. ■The City of Essen has taken the opportunity to declare a Green Decade up to and including 2027. The Essen Green Capital Agency, a unit within the Department of Environment, Transport and Sports of the City of Essen, is not only pivotal, it is unique: "We have set up the Agency to extend the legacy of the Green Capital", explains Kai Lipsius, Director of the Essen Green Capital Agency. "The Agency's explicit mandate is to monitor the Green Capital goals. No previous Green Capital has had a coordination office like this after their laureate year".

### INTERNALLY AND EXTERNALLY

In contrast to its role as project office during the Green Capital Year, the main task of the team around Kai Lipsius is not programme design, marketing and communication, but strategic coordination. "We work both internally and externally", he says. "On the one hand, we drive the administration by taking up innovative topics; on the other, we engage with stakeholders at all levels of society via cooperation projects".

Three practical examples of stakeholder involvement:

- 1) Together with various partners, the Essen Climate Pact was launched, in which companies commit themselves to climate neutrality (see Info Box).
- 2) The Be-MoVe project (see page 18) is running in collaboration with the Institute for Mobility and Urban Planning at the University of Duisburg/Essen.
- 3) The citizens' forum "Essen ist gefragt! Wie gelingt uns die Mobilitätswende?" (English: "It's up to Essen! How do we shape a successful mobility transition?") facilitated a dialogue around the Mobility Plan 2035 (see page 17).

Between 2030 and 2040, the City of Essen is aiming to become climateneutral. To achieve this net-zero goal, which involves removing enough CO, from the atmosphere to cancel out new emissions, the city needs the support of Essen's companies. After all, the most recent greenhouse gas balance sheet reveals that companies accounted for a full 37% of the city's total CO, emissions in 2018. In response, the City of Essen has launched the Essen Climate Pact in partnership with the Düsseldorf Chamber of Skilled Crafts, the Essen District Chamber of Skilled Crafts, Essen Craftsmen Association, Essen Economic Development Agency (EWG) and the Chamber of Industry and and Commerce (IHK) for Essen. Mülheim an der Ruhr and Oberhausen. As signatories to this framework, companies declare that they will align with the city's climate action targets and implement appropriate measures to achieve them. In return, the city's cooperation partners provide advice on how they can reduce their carbon footprints, access funding and subsidies, develop appropriate measures and design and implement corporate environmental management systems. Many companies from a variety of sectors have already signed the Letter of Intent to join the Essen Climate Pact.

www.essen.de/klimapakt



ESSEN CLIMATE PACT: signed by the City and local businesses.

temperatures, heavy rainfall: the impacts of climate change are hard to miss. Municipal authorities are preparing and developing strategies to mitigate the impacts of climate change.

Building blocks of the City of Essen's climate impact adaptation strategy include:

### • European Climate Adaptation Award (eca):

Under the leadership of the Environment Department, an interdisciplinary team has already developed 60 climate adaptation measures. These are to be implemented over the next few years.

### The City of Essen's climate analysis:

The analysis includes data on the urban climate, such as temperature, humidity and exposure to emissions, and was updated in an optimised form in 2022. As a basis for urban planning, it contains planning notes and impact analyses.

### Climate adaptation concept:

The concept includes in-depth, spatially aligned impact analyses on heat loads and cooling potential, drought and flooding hazards. On this basis, plans can be developed for redesigns at city, neighbourhood and building levels.

In order to actively engage with public stakeholders, the city launched the Essen ClimateMap in August 2022.

www.essen.klimamap.de

### **AS THINGS STAND**

The Agency's primary focus is on the fields of action identified in the run up to Essen's laureate year as European Green Capital in 2017: climate change, local transport and mobility, urban green spaces, nature and biodiversity, air quality, noise pollution, waste production and management, water and wastewater management, the environmental economy, efficiency, and implementing an integrated environmental management system. In each of these fields, the City of Essen set quantitative targets as European Green Capital. The Essen Green Capital Agency is also responsible for monitoring these targets and documenting them in annual progress reports. At the halfway point of the Green Decade, Kai Lipsius offers the following assessment: "Overall, we have seen a broad range of improvements, although we do have to differentiate between sub-goals". According to the latest report, significant progress has been achieved in some areas. The increase in jobs in the environmental economy, for example, with Lipsius optimistic that an increase from 12,000 to 20,000 can be achieved by 2025. The City of Essen is also on the right track in terms of green footpaths. The same applies to air pollution control: "The limit values for air pollutants are now all within the applicable range, with the exception of one measuring point very close to the A40", Lipsius notes.

However, he does not conceal the fact that there are areas where progress has stalled. The recycling rate, for example, is still around 45%, just five percentage points off the 2012 baseline; the target was actually 65% by 2020. "Of course, the City of Essen is not solely responsible for this", explains Lipsius. "Overall social developments also play a major role".

### **FOCUS ON CLIMATE ACTION**

Other broad-based social developments certainly play into the cards for achieving the goal. "If you broaden your view, the Green Decade is ingeniously timed", says Lipsius, "because science is now always talking about the 'decisive decade' in terms of the years up to 2030". This is the decade that will determine whether we can achieve the transition to a thriving net-zero emissions economy. After all, "In recent years, it has become clear that climate change is coming faster than even the experts anticipated". Climate change mitigation and adaptation have quickly becoming major topics in the environmental field. "We are experiencing something of a paradigm shift in terms of climate action at the municipal level", says Lipsius. "Late last year, we adopted our climate neutrality strategy as one component of the city's Sustainable Energy and Climate Action Plan. This gives us access to a lot more resources. It also puts a lot more onus on municipal climate

"We are committed to creating a truly liveable city for everyone in Essen. That is our overall mission at Sparkasse



Essen. In this sense, we are naturally also committed to protecting Essen from the impacts of climate change – as a sustainable financial partner and as a climate-aware company with the goal of climate neutrality by 2035. Climate action starts locally. That's why we are part of the Essen Climate Pact".

HELMUT SCHIFFER
Chairman of the Board of
Management of Sparkasse Essen

action management". And it's necessary, too. "Because in terms of global environmental targets, Essen is not even halfway there yet", concedes the Director of the Essen Green Capital Agency.

The municipality's goal: climate neutrality by 2030 if possible, or 2040 at the very latest. In some sectors, however, this is virtually impossible,

explains Lipsius: "For example, achieving a net-zero building stock. To reach this target by 2030 would require a renovation rate of over 10% per year, which is entirely unfeasible, especially given the shortage of skilled workers". Nevertheless, Lipsius is confident of achieving climate-neutrality in other sectors as early as 2030. A corresponding sectoral differentiation is outlined in the Sustainable Energy and Climate Action Plan (SECAP), one of the Essen Green Capital Agency flagship projects. While, for example, for the City of Essen's sustainability strategy it is responsible for development and coordination, for the SECAP, it is also responsible for overseeing the implementation of the action plan.

### **FOCUS ON MOBILITY**

A core field of action is local transport and mobility. In its application for the title of European Green Capital, the City set itself the target of shifting the modal split, i.e. the percentage of total journeys attributable to individual modes of transport, towards more environmentally-friendly modes of transport. The aim is to achieve an equal distribution of 25% each

between private motorised transport, local public transport, walking, and cycling by 2035 – an ambitious goal. After all, in the last survey in 2019, motorised individual transport accounted for 55%. The share of local public transport and pedestrian traffic was 19%, and cycling 7% (an increase on the 5% share in the 2011 survey). Nevertheless, there is still a lot of room for improvement.

Zero-emissions on Lake Baldeney

A jaunt on the lake can be fun. And environmentally friendly. Since 2017, the passenger ship "Westenergie" has been sailing across Lake Baldeney powered by green electricity. In 2022, the "MS Stadt Essen" was converted and the zero-emission "Baldeney" is also due to set sail soon. The conversion of the "MS Stadt Essen" alone will save almost 56 metric tons of CO2 annually over the course of a decade – and that includes any emissions from battery production and conversion. The difference is clear for everyone to see: there's no smoke coming out of the ships' chimneys. The conversions were funded by a grant from the German Federal Ministry of Transport. In addition, conversion requires substantially fewer resources than building new ships. All the ships of Weisse Flotte Baldeney GmbH are scheduled for conversion by 2024.





radelnohnealter.de/essen/

Rollfiets, bicycles to which a wheelchair can be attached at the front. The idea behind "Radeln ohne Alter" originally comes from Copenhagen. In the run up to

Essen's year as European Green

Capital in 2017, the City became one of the first municipalities in Ger-

many to launch its own version of

the project. The project is organised

in close cooperation with Diakonie

Essen's NEUE ARBEIT and more

than 70 institutions for seniors.

#### WIDE RANGE OF MEASURES

In order to achieve the desired modal shift, the City of Essen is currently engaging with citizens to draw up a Mobility Plan 2035 (see page 17). Even if the next modal split survey still falls far short of the 25% split, it is important to remember: many of the major structural measures have yet to get off the ground and their impact will, in any case, be gradual. Like the RadEntscheid, for example, which started as a grass roots, citizens' petition before being adopted as an official political commitment (see page 19). "The underlying goal is significantly less car traffic", explains Kai Lipsius. "Ultimately, I think everyone would probably be happy if we achieved 25% car traffic and the other 75% was

somehow distributed between the environmentally friendly modes. However, improving access to low and zero-emission transport will not be enough on its own. You also need so-called push measures that make motorised individual transport less attractive". Plainly speaking, this means that lanes for car traffic must make way for cycle paths and pedestrian walkways. Parking fees must be levied and parking spaces reduced, with parking for residents also becoming more expensive. Neighbourhood parking garages, where cars are parked at the edge of the neighbourhood, are also possible. Reducing car traffic pays dividends not only in terms of achieving the traffic transition goals, but also when it comes to climate, air quality and noise reduction. Lipsius does not expect these measures to be implemented without resistance: "The major strategies and goals now enjoy broad support. Conflicts arise, however, when it comes to putting them into practice. As soon as we say, 'We want to get rid of these three parking spaces here', the fight for every parking space starts". •

www.essen.de/gha

### Sustainable school meals

The SchoolFood-4Change (SF4C) project promotes sustainable and healthy school meals at 1,000 educational sites across Europe, including in the City of Essen. SF4C introduces children and their families to diets that are not only healthier but also help reduce our greenhouse gas emissions. SF4C has been launched at several schools in Essen and is being implemented as part of the Horizon 2020 research and innovation programme and is coordinated by ICLEI (Local Governments for Sustainability). It brings all stakeholders in the fields of daycare and school catering together around one table: from students, parents and teachers to farmers, cooks, cafeteria staff and experts in sustainable food procurement.

www.essen.de/schoolfood4change

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# 99

### EUROPEAN GREEN CAPITAL:

### A RADIANT VISION



"The 'Baden in der Ruhr' (English: 'Swim in the River Ruhr') lighthouse project is coming along swimmingly. The Green



Capital title has also served as the springboard towards a green-blue, climate-friendly infrastructure. The Ruhr Regional Association is playing its part. As early as this year, we expect to generate exactly as much electric-al power from renewable energies as we need to operate our 800 water management facilities".

**PROF. NORBERT JARDIN**Chairman of the Executive Board of the Ruhr Regional Association

"Winning the title of Eurpean Green Capital came as a surprise, even to many in Essen, although we



were also continuing a long regional tradition. The international response within the framework of the Urban Transitions Alliance also showed how precedent-setting this actually was. Now, the entire region is on the path to becoming the 'greenest industrial region in the world' – the future is green!"

#### **SEBASTIAN SCHLECHT**

was the European Green Capital – Essen 2017 project manager and represented the City of Essen in the Urban Transitions Alliance. Today, he is Director of Green Cities & Regions at Baukultur NRW and is the founder of the lala.ruhr initiative. "The famous twin pithead frame, the Doppelbock, at the Zollverein UNESCO World Heritage Site is the iconic sym-



bol of the industrial age in the Ruhr Metropolis. At the same time, it is also a symbol of the future and the sustainable development of the region. With over 1.6 million visitors a year, we are well aware of our social and ecological responsibility. That is why the Zollverein site is to become climate-neutral by 2030."

#### PROF. HEINRICH THEODOR GRÜTTER

Director of Ruhr Museum and Member of the Board of Directors of Stiftung Zollverein

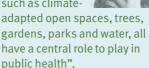
"Essen and Grenoble are walking the path to climate neutrality together, combining their ideas and in-



sights to shape change. The European Green Capital – Essen 2017 was the main source of inspiration for our 2022 title win, and our collaboration on sustainable food, cycling, energy and green spaces will be further intensified in the European Green Cities Dialogue project".

### ÉRIC PIOLLE

Mayor of the City of Grenoble, European Green Capital 2022 "In pursuit of our vision of a resilient, sustainable city, resources that promote health and well-being, such as climate-



### PROF. DR. SUSANNE MOEBUS

Head of the Institute for Urban Public Health at the University Hospital of Essen "As a result of the cooperation between the municipalities of Essen and Cochabamba (Bolivia), we have developed new ideas within the framework of the Municipal Climate Partnership and closely aligned them with the UN Sustainable Development Goals (SDGs), which have been included in our 'Forest Master Plan (2018-2028)' to create communal cross references on a scientific, economic, ecological and social level".

### **CLAUDIA FLORES COSSIO**

Member of the Cochabamba City Council in Bolivia

## ON THE ROAD TO SUSTAINABLE MOBILITY

The City of Essen is currently developing a Mobility Plan 2035 to encourage its citizens to use their cars for only a quarter of all journeys.

How can 75% of journeys be made by bike, public transport or on foot? This is a question the City of Essen is currently asking itself. The City statistically records how each mode of transport is used in its regular modal split reports. The car is the most frequently used mode of transport, accounting for 55% of journeys (as of 2019). But that is set to change. The plan was already formulated when Essen applied for the title of European Green Capital 2017: by 2035, mobility in Essen is to be evenly distributed between local public transport, cars, bicycles and foot traffic, at 25% for each mode of transport. The Mobility Plan 2035 is intended to pave the way for this modal shift.

### A CITY WITH A PLAN

In phase one, existing potentials are currently being analysed. This includes the mobility behaviour of different user groups as well as the spatial conditions in the city's districts. Based on this analysis, phase two will focus on generating ideas for measures to boost the use of cycling, walking and public transport. In phase three, the focus shifts again to implementing these measures. The Mobility Plan, including the concept of measures, is set to be published in 2024. Stakeholder engagement, including via the "It's up to Essen! How do we shape a successful mobility transition?" citizens' forum, is an important element in

the development of the plan. (See page 17 for more on this) •

www.essen.de/modalsplit



### ESSEN AS LEAD CITY

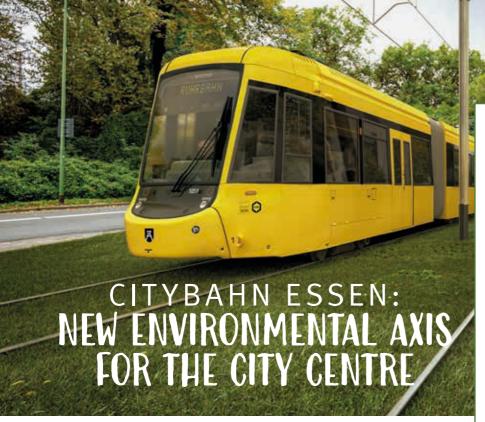
In 2018, the City of Essen was selected as one of five 'Lead Cities' to try out measures for cleaner air and low-emission mobility.

The air is clean(er) – a claim that can justifiably be made by more and more German municipalities. The European Green Capital 2017 can also point to significant progress in reducing air pollution. In recognition of its success in reducing particulate matter on the one hand and its high levels of nitrogen dioxide pollution on the other, the City of Essen was selected as a Lead City in 2018 as part of the federal "Saubere Luft 2017–2020" (English: "Clean Air 2017–2020") programme. This made Essen one of five model cities in

which measures to switch to low-emission mobility were developed and tested.

### SUCCESSFUL IMPLEMENTATION

Measures in Essen have included the rapid expansion of tram and bus services, more attractive ticket prices for local public transport and more designated cycle lanes. Coinciding with the launch of its new timetable on June 09, 2019, Ruhrbahn GmbH introduced its expanded services, which featured more frequent buses and better services along the city's main axes. And the measures have been a success: they have been very well received by passengers and have had a positive impact on air pollution in Essen. On the basis of the data gathered during the 'Lead City' project, the increased frequency on some lines has been established. •



CITYBAHN Essen's new overground trams aim to attract even more people to public transport from 2026. In particular, the new environmental axis running past Essen's main train station will provide much-needed relief in the city centre.

TEXT: Guido Schweiß-Gerwin

The CITYBAHN tram/light rail system is set to close a major gap in the City of Essen's local transport network and is an essential component of the local transport plan adopted in 2017. The new route is a good five kilometres long and is being built between the Bergmühle and Betriebshof Stadtmitte stops. The CITYBAHN route provides a zero-emission link between the new ESSEN 51 district and the city centre and connects the west of the city to the east, all the way into the Steele district. "The existing public transport service has reached its limits. It is impossible to further increase passenger numbers, especially given the limited capacities in the subway and tram tunnel at the main station", explains Michael Feller, Managing Director of Ruhrbahn. Urban Essen suffers from particulate matter and nitrogen oxide pollution. Capacities on the road

network's north-south axes are exhausted. "CITYBAHN Essen, which will run above ground, will provide relief. It will significantly improve the traffic situation", explains Feller.

### CLEAN AIR THANKS TO EMIS-SIONS-FREE PUBLIC TRANSPORT

CITYBAHN will connect the new ESSEN 51 district to the city centre in just 8.5 minutes. Best of all: the redevelopment plans for the former Krupp site included environmentally friendly tram access from day one. This will save 1,285 tons of greenhouse gases per year. "With an assumed volume of more than 14 million passenger kilometres per year, CITY-BAHN also delivers a total reduction of five tons of harmful nitrogen oxide (NO<sub>v</sub>) emissions per year", emphasises Feller. This calculation also includes the additional traffic volumes that will be generated by the new city A flexible combination of routes

Not every neighbourhood in Essen is as well connected to public transport as the new ESSEN 51 district, which is why Ruhrbahn is also focusing on flexible mobility. After opening its first two mobility stations in the Green Capital Year, the total increased to six by the end of 2022. Eight more mobility stations are planned for 2023. The stations offer an attractive selection of urban mobility options, including car, bike, e-scooter sharing and high-quality bike&ride offers. "Merging offers via urban mobility stations is the easiest way to provide convenient access to transport and uninterrupted mobility in an environmentally friendly network", says Michael Feller, CEO of Essen's public transport company Ruhrbahn. The on-demand shuttle Bussi complements the Ruhrbahn's service by offering a personalised range of rides in electrically powered vehicles. "Consolidating all services digitally via the Ruhrbahn's ZÄPP app is a key component of Essen's transition to networked mobility".

district. Residents and employees in ESSEN 51 will travel more than two million passenger kilometres a year by public transport, according to the forecast.

Modern trams consume less energy overall per passenger kilometre than buses and cars. They produce no air pollutant emissions, convert braking energy into electrical energy and provide significantly more space for passengers in urban traffic. Green tracks also bring fresh greenery into the city, reducing streetcar noise, lowering particulate pollution in the city and, on hot days, lowering the ambient temperature.

Since 2017, the City of Essen has been part of European Mobility Week, informing citizens about sustainable mobility. The European Commission's flagship initiative aims to raise awareness of both current projects and future developments.

eople who want to be sustainably mobile need to know how. Which is why the European Commission launched European Mobility Week in 2002. Over the last two decades, municipalities from all over Europe have participated in the event, which is held every year from September 16 to 22. The City of Essen, with Ruhrbahn GmbH as its official partner, took part for the sixth time in 2022. Under the motto "Better connected", 28 activities were implemented with a large number of partners. Highlights included the district festival "Dellwig bewegt sich" (English: "Dellwig is on the move") organised by FUSS e. V., the cycling day "Essen dreht das Rad" (English: "Essen spins the wheel") and the "Tag der älteren Generation" (English: "Day of elderly Persons"), organised by the seniors' department. With its engagement in European Mobility Week, the city aims to showcase current projects, look into the future of innovative mobility alternatives, and give citizens a chance to participate in a sustainable and versatile mobility development true to the title "My path".

### WITH US SINCE 2017

Essen took part in its first Mobility Week when it was European Green Capital in 2017. Under the motto "Gemeinsam nutzen bringt Dich weiter" (English: "Sharing takes you further") and with the support of 43 partners, a total of 62 initiatives took place. The focus was on the question of how different modes of transport can be shared. A major highlight in 2017 was the closure of a section of Altendorfer Straße for "Grün auf! Altendorf" (English: "Go green, Altendorf!"), which attracted 18,000 visitors. As permanent

measures, a second mobility station was opened in Essen-Steele, the German Bicycle Club (ADFC) developed a lending system for cargo bikes, funded by the Green Capital, and a methanol fuel cell-powered passenger ship, the MS Westenergie, was launched. The activities also included mobility consultations and the Ruhr Metropolis mobility conference. The city also participated in International Parking Day, which has gone on to become an integral part of Essen Mobility Week and sees public parking spaces temporarily transformed into seating, play and recreation areas, street cafés and stages for street concerts.



In 2018, the motto "Mix & Move – Be Flexible" highlighted multimodality, or mixing transport modes within the same journey or for different trips. In the following year, the slogan "Walk With Us" focused on safe walking and cycling. Despite the COVID-19 pandemic, Mobility Week also took place in line with official health and safety guidelines in the years 2020 to 2022.

This year, residents of Essen can look forward to a programme on the theme of "Saving Energy". On 15 September, on International Parking Day, and during European Mobility Week from 16 to 22 September 2023, citizens will be able to explore options for energy-saving mobility, both today and in the future. •



### 2020 MOBILITY FAIR AT BURGPLATZ:

L to R: Simone Raskob, Deputy Mayor for Environment, Transport and Sport, Claudia Kiso from the Federal Environmental Agency (UBA) and Georg Grindau, Mobility Manager at Ruhrbahn.



### MOBILISE YOUR NEIGHBOURHOOD

The agenda map of the "Beweg Dein Quartier" (English: "Mobilise Your Neighbourhood") project brings together sustainable mobility ideas that were developed for citizens in a participatory process.

he goal of "Beweg Dein Quartier" was to shape the mobility transition from within the community. Together with experts and municipal officials, citizens developed ideas and plans to promote sustainable mobility in the cities of Essen and Offenbach in 2020. Essen participated with the neighbourhoods City-Nord, Eltingviertel, Grüne Mitte and surroundings. A total of 13 key projects were selected, including a new bicycle crossing, the greening of Berliner Platz, a new pedestrian crossing and the expansion of bike-sharing services. These and many other ideas were then finalised in an agenda map and presented to municipal committees.



### ASSESSMENT OF POTENTIALS FOR SUCCESSFUL IMPLEMENTATION

Municipal officials assessed the chosen projects in the agenda map: Does the project have the potential to be implemented? If so, when and how could it be implemented? At the end of the participation process, the initiative had generated a selection of specific project proposals to improve mobility and quality of life. Implementation will be pursued through the usual local political decisionmaking channels. "Beweg Dein Quartier" was organised and financed under the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety's National Climate Protection Initiative. The project was coordinated by the Centre for Environmental Management, Resources and Energy (Ruhr University Bochum), experts on civic engagement in climate and infrastructure issues and the urbanista office for urban development. •

www.essen.de/agendamap

# IT'S UP TO ESSEN!

The digital citizens' forum "It's up to Essen! How do we shape a successful mobility transition?" in 2021 marked the start of a dialogue that accompanied the development of the Mobility Plan 2035.

On 19 June 2021, as part of the digital citizens' forum "It's up to Essen! How do we shape a successful mobility transition?", more than 300 citizens discussed more environmentally friendly mobility. The participants were randomly selected according to the criteria of gender, age, city district and nationality to ensure that a crosssection of the population of Essen was represented. In small digital groups, they discussed the topics of "short distances", "parking", "commuting", "safe travel", "redesigning road space", and "networked mobility". Volunteer citizen editors and ambassadors presented the results in a report.

### DEVLOPING A COLLABORATIVE MOBILITY PLAN

The digital citizens' forum marked the start of a dialogue that is intended to provide information about people's mobility needs so that they can be integrated and further developed in the Mobility Plan 2035 (see page 14). In parallel, information on the possible measures will be made available to the citizens via this dialogue process, thereby ensuring transparency throughout the process to evaluate and select measures. The creation of the plan will continue with the engagement of the citizen ambassadors.



The Be-MoVe project is transforming two Essen neighbourhoods into living labs to test ideas for sustainable and active mobility.

ow would it feel to have more bikes and fewer cars in residential areas? And what impact does transforming parking lots into public spaces with seating have? These and similar scenarios are being tested in the Be-MoVe project in two downtown districts in Essen and Essen-Holsterhausen, which becoming living labs. Be-MoVe is all about the participation-based transformation of street spaces to see what influence they have on quality of stay, health and mobility behaviour. "It is a project that aims to promote pedestrian and bicycle traffic and provide an impetus for a better quality of stay in public spaces", explains Dr. Björn Ahaus, Project Manager at the Essen Green Capital Agency. "It is the next stage in pursuing the Green Capital – Essen 2017 goal of delivering sustainable and healthy mobility solutions that make people want to get around on their own strenghts".

### CITIZEN PARTICIPATION

Citizens' workshops were held to develop ideas to improve conditions for pedestrian and bicycle traffic and enhance the quality of stay in public spaces. Following up on this, project ideas were developed to be implemented as living labs. Moreover,

citizens are also able to submit funding applications for their own project ideas. The "City Terraces" pilot project is already implemented: four redesigned parking spaces and a right turn were turned into parklets for two months. Special bike racks were installed at another five locations. These mobile platforms can be used to specifically test demand for bicycle parking spaces in place of car parking spaces. This was also intended to test the use of mobility hubs that link bicycle parking with services such as car and bike sharing to reduce car traffic in residential areas.

### CITY TERRACES AND PARKLETS:

Attractive new spaces for people to sit, take a break, spend time and exchange ideas.





## THE RADENTSCHEID ESSEN CYCLING INITIATIVE

The City of Essen is investing over EUR 220 million in better cycling by 2030.

n 24 August 2020, the citizens' initiative RadEntscheid Essen handed over 23,693 signatures to the Mayor of Essen, Thomas Kufen, calling for a referendum of the same name. Two days later, the council of the City of Essen discussed the RadEntscheid Essen proposals and decided by a majority to fully support the citizens' referendum. The referendum had political approval, and municipal administrators had a mandate to organise the implementation of the RadEntscheid referendum.

RadEntscheid Essen tallies with the European Green Capital mobility goals. In conjunction with its successful application as European Green Capital – Essen 2017, the City of Essen has been working on the goal of achieving a modal split of 4x25% distributed among the four modes of transport (bicycle, walking, public transport and car) by 2035 since the beginning of the application process in 2014. Logically, this entails a massive promotion of cycling, with the aim of increasing its share of the modal split from 7% (2019) to 25%.

In March 2021, Essen City Council adopted an implementation strategy for RadEntscheid Essen. The start-up and ramp-up phases of RadEntscheid Essen run until 2024 – with a budget that rises each year, from EUR 0.75 million in 2021, to EUR 4.90 million in 2022, EUR 12.20 million in 2024. The main implementation phase starts in 2025 with an annual budget of EUR 30.47 million until 2030, resulting in a total budget for RadEntscheid Essen of over EUR 220 million

The seven goals of RadEntscheid Essen are to be implemented by 2030:

**Goal 1:** Create and expand a seamless network for everyday bicycle traffic.

**Goal 2:** Convert intersections so they are safer for cyclists.

**Goal 3:** Designate bicycle lanes and zones and open one-way streets for bicycle traffic.

**Goal 4:** Install safe bicycle lanes on major streets.

**Goal 5:** Upgrade existing bicycle lanes to create a seamless and consistent network.

**Goal 6:** Expand the provision of bicycle parking spaces.

**Goal 7:** Promote the mobility transition consistently and transparently.

A number of RadEntscheid Essen measures have already been successfully implemented. These include the bicycle lane on Promenadenweg in Kettwig and the bicycle lane on Wickenburgstraße in Frohnhausen. In March 2023, the second annual public dialogue on RadEntscheid Essen was held to update stakeholders on the status of implementation and provide a platform for discussions.

The implementation of RadEnt-scheid Essen is a vital component of the sustainable mobility transition, which can only succeed through the active engagement and participation of a committed urban population. Essen is certainly on its way to achieving its goals. •

www.essen.de/radentscheid

Another component of Be-MoVe is the development of a corporate mobility management system for Essen University Hospital with the aim of shifting more commuters to the environmental network (walking, cycling and public transport). Be-MoVe has also spawned a Ruhrbahn bonus programme: passengers who use the "bonus mobil" app are rewarded for journeys on foot and bike, as well as for using buses, trains or scooters.

### PART OF THE MOBILITY PLAN

Be-MoVe is aligned with the development of the Essen Mobility Plan 2035 (more on this on page 14) and is funded within the framework of the "MobilitätWerkStadt" (English Mobility-WorkshopCity) 2025 programme under the aegis of the German Federal Ministry of Education and Research's Research for Sustainability (FONA) scheme. In addition to the City of Essen's Green Capital Agency, the project team also includes the Institute for Mobility and Urban Planning at the University of Duisburg-Essen and the Institute for Urban Public Health at Essen University Hospital. •

www.essen.de/be-move



### CYCLE-FRIENDLY EMPLOYERS

The Green Capital Agency of the City of Essen supports companies' certification as a "Cycle-Friendly Employer" financially and through information workshops for employers.

Cycle-friendly employers make a major contribution to promoting the modal switch to cycling. For this reason, the European Green Capital – Essen 2017 and the Essen Economic Development Agency (EWG), together with the Allgemeiner Deutscher Fahrrad-Club (ADFC), launched workshops for companies in 2017 to provide information about the "Cycle-Friendly Employer" certification. As an incentive for certification, financial support of EUR 1,500 per company was made available.

Given the huge interest in the scheme, the project partners extended the project beyond the Green Capital Year. Ten workshops have now been held with 76 participants, giving interested employers the opportunity to find out more about bicycle-friendliness. Certification measures continue to be funded by the Essen Green Capital Agency with EUR 1,000 per company. The Essen Green Capital Agency and the EWG provide the necessary personnel to conduct the workshops and support interested companies.

Since 2017, as many as 24 companies in Essen have been successfully certified, including Ruhrbahn, Messe Essen, Stadtwerke and EWG. In 2021, the project helped the City of Essen win the "Climate-Active Community" competition, which is endowed with EUR 25,000 in prize money. In addition, the "Cycle-Friendly Employers in Essen Working Group" was formed, the only group of its kind in Germany, in which more than 40 members come together to exchange ideas and best practices. •

www.essen.de/fahrradfreundlicherarbeitgeber





CITY CYCLING

# PROMOTING ENVIRONMENTALLY FRIENDLY MOBILITY

Every year since 2012, the City of Essen has taken part in the nationwide "Stadtradeln" (English: "urban cycling") campaign.

Each year, cyclists across Germany join forces to promote environmentally friendly mobility and climate action with the "Stadtradeln" campaign. Over a period of three weeks, participants keep track of the number of kilometres they cycle and have the chance to win lots of exciting prizes. Most importantly, they take a stand for the mobility transition and highlight the importance of cycling.

In the City of Essen, both the number of participants and the total number of kilometres cycled have continually increased since the first year of participation. In 2022, 2,917 active cyclists completed a record 726,502 kilometres.

### SCHOOL CYCLING CATEGORY

In 2021, the campaign successfully launched a school cycling category. The campaign aims to better integrate bicycles into everyday school life and motivate students to get on their bikes. Over the last two years, lots of schools, including numerous primary schools, joined in and formed school teams consisting of students, teachers and parents. Clearly, schools are also keen to get involved and make an active contribution to climate action and the mobility revolutione. •



20

### A GREEN CAPITAL TARGET

Easy walking
Essen is making massive strides in the mobility transition. The goal: pedestrian traffic should account for 25% of total traffic volumes by 2035. Numerous projects are helping to promote the most sustainable form of mobility

"With the City of Essen's decision to increase the share of pedestrian traffic in the modal split to 25% by 2035, walking is com-



ing to the fore. The pedestrian protection association FUSS e.V. supports Be-MoVe projects because it is committed to safe and enjoyable pedestrian traffic and a higher recreational quality for the people of Essen".

WOLFGANG PACKMOHR Police Director (retired)

### PEDESTRIAN TRAFFIC OFFICER

In order to better represent the interests of pedestrians, the City of Essen appointed its first ever Pedestrian Traffic Officer in 2021. The officer's responsibilities include developing new pedestrian traffic concepts, recommending new measures and making statements on planning, for example with regard to accessibility. Another important task is responding to citizens' concerns and parti-

cipating in political committees. The position is housed within the Office for Roads and Traffic.

"MANY CITIZENS TAKE WALKS - LONG OR SHORT - IN THE CITY, AND THE CITY OF ESSEN IS CONSTANTLY WORK-ING TO IMPROVE CONDITIONS FOR PEDESTRIAN TRAFFIC AND ACCESSIBILI-TY, AND TO BETTER CATER TO DIFFER-ENT REQUIREMENTS".

CORINNA WILMERS
Pedestrian Traffic Officer
of the City of Essen

### THE PEDESTRIAN TRAFFIC CHECK

In 2021, the City of Essen took part in the NRW Pedestrian Traffic Check. In the city centre and the district of Holsterhausen, measures were developed to improve traffic safety, accessibility, quality of stay and attractiveness, strengthen footpath networks and upgrade school mobility management. During walk-throughs and in a work-

shop, citizens, municipal employees and representatives from politics and interest groups identified deficiencies and points of conflict. In a final workshop, 40 proposed measures were presented. These will be progressively implemented following an evaluation process and political approval.

### THE SCHOOL ROUTE CHECK

Dangerous situations often occur on the way to school. The Essen School Route Check is intended to identify danger hotspots and potential for improvement and involves school and parent representatives, who work closely with the Department of Roads and Traffic, the Environmental Agency, the Essen Green Capital Agency and other departments of the city administration. As part of the Be-MoVe project (see page 18), the School Route Check is currently analysing routes to schools in Essen-Holsterhausen and Essen-Bergerhausen. Once the check is complete, measures will be implemented to enable safe walking to school. •

### WILL YOU WALK WITH ME?

Since 2012, the people of Essen have been asking "Will you walk with me?" Today, thanks to this project, 140 walking mentors in 36 neighbourhoods accompany a total of around 1,000 older citizens on walks every week. The walkers also make suggestions for improving walkability in their districts, which are then incorporated directly into the city's planning processes. The project was initiated by the Senior Citizens' Advisory Council, the Essen Health Conference and the Office for Social Affairs and Housing. The European Green Capital provided significant support for the project in 2017, including a brochure promoting the most beautiful walks in the city. •





### "GRÜN UND GRUGA"

In order to equip the City of Essen to face the challenges of climate change and to increase recreational opportunities, urban greenery is vital. To this end, "Grün und Gruga" (English: "Green and Gruga", that is City department for Green Infrastructure) currently has many active projects that are building on the Green Capital legacy throughout the city.

TEXT: Sarah Meyer-Dietrich

hen Melanie Ihlenfeld, Head of Department at Grün und Gruga of the City of Essen since 2018, was asked what needs to be done to advance the goals of the European Green Capital, she replied: "Networking is the be-all and end-all". True to this motto, she is working with different municipal departments and other municipalities to drive existing and newly launched projects and build on the Green Capital legacy throughout the city. One of these projects is ESSEN. Neue Wege zum Wasse (English: ESSEN.New ways to the water). Over the last 15 years or so, more than 500 subprojects have already been developed to better connect and improve a host of green and open spaces. Best of all: ESSEN. Neue Wege zum Wasser also helps equip jobseekers for the labour market. "Thanks to this project, more than 250 long-term jobseekers have been placed in the primary labour market", reports Ihlenfeld. "And the city's green infrastructure has been significantly upgraded. The goal of reducing distances to the green path network and green spaces in the city area to no more than 500 metres for all citizens has almost already been achieved". As one goal is achieved, new priorities are identified, such as water retention and boosting biodiversity.

### **ENTHUSIASTICALLY GREEN**

Biodiversity is already at the heart of all Grün und Gruga projects, including the 2029 park development concept, which is intended to ensure the Grugapark, one of the city's most important green spaces, is fit for the future on its hundredth birthday. The concept comprises action goals, strategies and specific projects and bears the title "Enthusiastically Green". "The park's existing qualities will be enhanced", says Ihlenfeld. The "green lung of the city" attracts more than a million visitors each year – and the aim is to raise awareness of environmental issues and inspire people to get involved.

One project that has long been pursuing this goal is the Schule Natur (englisch "Nature is the School") in the Grugapark. This "green classroom" offers school classes hands-on courses in biology, ecology and the environment. Every year, the hugely popular Schule Natur welcomes around 45,000 participants. "Course instructors who previously worked as freelancers are now permanently employed by the city", says Ihlenfeld. "This confirms our commitment to nature and education from an early age". Appropriate education not only helps to inspire children

PHOTOS: KNSY FOR GRUGAPARK ESSEN

and young people to pursue careers in the green sector, it also sensitises them to issues such as the climate crisis.

### RECOGNISED EXPERTISE

Trees play a prominent role in meeting the challenges posed by climate change. Which is one of the reasons that two of Grün und Gruga's scientific projects are dedicated to trees. The TreeCop project helps to monitor and evaluate water supplies to urban trees in order to optimise irrigation management and to identify optimal locations for new plantings. "Tree watering is tested and researched using sensor technology and satellite data", explains the Head of the Green and Gruga Department. A second project, BaumAdapt, has also helped the city establish itself as a tree management expert that is recognized throughout Germany. BaumAdapt examined how urban tree populations need to change, both in terms of location and species selection, in order to develop resilience to the effects of climate change. "What we discovered from the projects is being incorporated into urban and street planning", Ihlenfeld reports. "Standards are set that will then apply universally, whether to trees in parks, streetscapes or schoolyards". It's a good example of how urban greenery is integrated cross-departmentally. As in the Green Master Plan, which

### "WHAT WE DISCOVERED FROM THE PROJECTS IS BEING INCORPORATED INTO URBAN AND STRFFT PLANNING".

Melanie Ihlenfeld, Head of the Green and Gruga Department of the City of Essen

will serve as the basis for new development plans and is, in turn, based on the City of Essen's climate analysis: "This is about higher-level green development", Ihlenfeld reports. "What plans and concepts already exist? Do they address the issues of the future? And what do we need to do implement them across the city as a whole?" To answer these questions, Melanie Ihlenfeld and her team will continue to work closely with other departments and exchange ideas with other municipalities. •



GRUGA INSPIRES THE GREEN SPIRIT: The Park Development Concept 2029 was adopted by Essen City Council in 2022 and includes strategies and specific projects to ensure Grugapark is fit for the future by its 100th birthday in 2029. One goal is to further develop the park into a showcase for climate issues.





# PHOTO: MIKE HENNING FOR THE CITY OF ESSEN

### **URBAN** Gardening

As part of the Green Capital Year, new citizen-led initiatives and networks also emerged to help make Essen even greener. Watering can heroes and community gardens are two examples of how cooperation between citizens and city authorities is bearing fruit.

TEXT: Sarah Meyer-Dietrich



rün und Gruga Essen – the department responsible for the city's forests and green spaces – is supported by large numbers of committed citizens. One of them is Frank Münter, a member of the "Transition Town – Essen im Wandel" movement and co-initiator of the watering can heroes: Now in its third year, the project launched by Essen Environmental Initiatives makes sure that city trees get enough water in times of drought. By September 2023, a total of 550 water tanks will have been set up, and around 496 volunteer watering groups are currently using them to water the city's trees. In the meantime, the watering can heroes have even received inquiries from people who would like to transfer the concept to other cities.

### **WELL CONNECTED**

"The initiative is also so successful because it is supported by networks such as Together for Urban Change and the Round Table on the Environment," Frank Münter explains. "Sometimes it's not enough for everyone to do a little bit, it's better to join forces". Committed citizens organise themselves into initiatives, initiatives cooperate in networks and, in turn, new initiatives emerge — as was already happening in Essen before the Green Capital Year. But, Münter says: "The Green Capital Year provided the impetus for more people to get involved. Before that, the initiative landscape was not as large and dense as it is today".

Without the Green Capital Year, the community gardens would certainly not have established themselves on the same scale that can be found in Essen today: Before 2017, there were just one or two, now there are 19 gardens – provided by Grün und Gruga and maintained by committed

citizens. "The gardens are open to everyone, without the need for a long-term commitment", explains Münter, who is also heavily involved. "It costs nothing, the gardens are located in the heart of the city, and everyone can decide for themselves whether they want to help with the gardening or just be there".

### STILL A LOT OF POTENTIAL

Community gardens and watering can heroes – both are examples of successful cooperation between the city administration and citizens. Münter believes they also send an important signal to politicians: "Politicians often feel irritated or even attacked by active citizens. And of course, at least initially, citizens may grumble because so much needs to happen. But actually, we all want the same thing. As soon as politicians understand that, they have the chance to exploit the massive potential that exists among citizens". Münter already has a possible project in mind that could be implemented in this way: "Trees are at the heart of the climate change issue. Nevertheless, people are not replanting them consistently enough. That is completely incomprehensible in times of a climate crisis like we have today. I would like the City to support citizens who want to plant trees by saying: "We'll make a large campaign out of it and plant 2,024 new trees in Essen in 2024". It's an idea that he's sure will strike a chord among his networks. •

www.transitiontown-essen.de www.giesskannenheldinnen.de

The Watering Can Heroes project was developed and implemented in cooperation with the initiatives Gemeinsam für Stadtwandel, Runder UmweltTisch Essen and Ehrenamt Agentur Essen e.V.

The project's supporters include the Emschergenossenschaft, the future initiative Klima. Werk and the Ministry for the Environment, Nature Conservation and Transport of the State of North Rhine-Westphalia.

### GUTES KLIMA Festival

Into the streets, into diversity — that's the idea behind the "Gutes Klima Festival" (English: Good Climate Festival), which aims to raise awareness of the issues associated with climate action and highlights a range initiatives and ideas on the subject.

TEXT: Sarah Meyer-Dietrich

ood music, delicious food and a full programme on 26 August 2023, the "Gutes Klima Festival" will return for the third time. On the Zeche Carl site in the north of Essen, citizens benefit from hands-on and informative offers on a broad range of climate, environmental protection and sustainability topics. "In the beginning, there was the idea of engaging with Essen's urban community on the subject of climate change", reports Christiane Gregor, who is organising the festival with Kristina Wendland, Tonja Wiebracht and Pia Murrau as part of the network Gemeinsam für Stadtwandel Essen (English: Together for Urban Change Essen). "We think it's important to show that we can only achieve such a massive transformation if the urban community, in all its diversity, stands firmly together", says Gregor. And Kristina Wendland adds, "There are still too many people who think climate action is a special interest topic".

### **SUPPORT FROM THE GREEN CAPITAL**

The concept is working: 2,400 visitors attended the festival in 2022 – and more are expected this year. The Essen Green Capital Agency and many other municipal institutions support the project, including financially. However, much of the work is done on a voluntary basis. Not only by the initiators, but also by about 450 volunteers who get involved in various ways and help organise up to 100 activities within the framework of the festival. Nature conservation organisations are represented, as are various civic initiatives, artists, schools and daycare centres. The organisers are convinced that we can only move forward together.

#### AN ENGAGING PROGRAMME

"It was important for us to create a low-threshold offer", says Kristina Wendland. "We want people to have fun, try things out and do things themselves". At the beginning, people kept saying: "Citizens in northern Essen have other things to worry about". But that did not deter the network. On the contrary, the location was chosen with care: "Those who are particularly affected by the effects of climate change are those who are already worse off", says Gregor. "People who live in densely packed residential areas with few trees, in the inner city, possibly in an apartment under the roof. And that's exactly why they benefit most from good climate action". And so, the festival brings together people from different parts of Essen: experienced climate activists, people who are just beginning to take an interest in the topic, long-established Esseners, and members of the migrant community. Several Essen communities participated in the 2022 Open Mosque Day, which took place under the motto "Scarce resources, great responsibility". Gregor adds: "We hope that perhaps our festival also helped encourage people to get involved. Such developments are, after all, soups with many ingredients. We just put our spice into it as well". •

www.gutesklimafestival.de www.gemeinsam-fuer-stadtwandel.de



### THE GREEN ECONOMY

EWG — Essener Wirtschaftsförderungsgesellschaft mbH — focuses on green. Its strategy with regard to the environmental economy is based on four central pillars: sustainable land development, support for existing companies, attracting skilled workers, and positioning Essen as a driver of the energy transition.

TEXT: Sarah Meyer-Dietrich



ssen is green! Not only do parks, nature reserves, forests, lakes and other open spaces make up almost half of the city's area, Essen's economy also relies on ecological and resource-saving processes and business models. To take things even further, Essen's economic development is building on four pillars. The first comprises land development: "For a long time now, we have been careful not to seal any new areas and have focused on reusing brownfield sites", explains EWG Managing Director Andre Boschem. One successful example is Grüne Mitte Essen, a modern urban quarter with high-quality residential and office buildings – combined with climate-friendly green spaces and water areas – on a former industrial site.

### LONG-TERM SUPPORT

The second pillar involves advisory services for companies. "One example of applied environmental protection is ÖKO-PROFIT. In the course of this project, 109 companies in Essen have so far received support to help them use resources more sustainably. And the advice has been successful: they save a total of around EUR 8.8 million annually", says Boschem. The advice also includes online seminars on photovoltaics and integration into the Greentech.Ruhr network. It goes without saying that EWG has signed up to the Climate Pact, in which companies and institutions commit to supporting the climate goals of the city of Essen.

#### ATTRACTIVE FOR PROFESSIONALS

The third pillar relates to skilled workers. "Companies and institutions from environmental industries are struggling to cope with the shortage of skilled workers. We want to counteract this with the first Essen Skilled Workers Conference and a major campaign. Last but not least, with Junior Uni Essen we are engaging with children and young people and getting them excited about a professional future in the sector", says Boschem. Essen is an attractive location for skilled workers and companies from the environmental sector: The Green Capital title certainly boosted the City's image as an active pioneer in the sector.

### **EUROPE'S ENERGY CAPITAL**

Speaking of image: The fourth pillar concentrates on positioning Essen as a driving force in the energy transition. With companies such as E.ON and RWE, as well as the E-world energy & water trade fair, Essen is regarded as "Europe's energy capital", and is also a major player in the field of hydrogen. "We established a clear position early on and drew up a hydrogen roadmap. This sets out the City of Essen's H2 strategies, primarily in the area of mobility". In addition, the City of Essen acts as an H2 think tank: "A lot of thinking and technological advances are taking place in Essen. This is where the threads from pioneering hydrogen projects throughout Europe come together", says Boschem.

### **FERTILE GROUND**

Essen offers the perfect breeding ground for start-ups in the environmental sector – for Unigy, for example. The winner of the NRW Founder's Prize in 2022 supports municipal utilities and regional suppliers in buying and selling electricity from renewable energies at the best price. Another innovative start-up is Greenlyte, which works on recovering  $\mathrm{CO}_2$  from the atmosphere. Essen's economic development agency has also brought the Tech Tour Sustainability start-up fair to the city. Good prospects for further growth in the environmental sector.  $\bullet$ 

www.ewg.de





**SUSTAINABILITY AND ART:** Professor Peter Gorschlüter, Director of the Museum Folkwang, and Simone Raskob, Deputy Mayor for Environment, Transport and Sport, take a look at the colourful perennials planted to mark Museum Folkwang's centenary.

# Towards the GREEN MUSEUM

As a public building, Museum Folkwang has a big impact on the city and its visitors. Sustainability and art are not mutually exclusive.

TEXT: Guido Schweiß-Gerwin

# "AT MUSEUM FOLKWANG, SUSTAINABILITY HAS BEEN AN IMPORTANT TOPIC FOR MANY YEARS AND PERMEATES ALL AREAS OF THE BUILDING".

Professor Peter Gorschlüter, Director of Museum Folkwang

n 2019, when the Federal Cultural Foundation invited the museum to calculate its carbon footprint together with other national cultural institutions, the director jumped at the chance. "At that time, we were able to collect data for the first time on where and how much CO<sub>2</sub> the museum generates and identify measures to reduce our carbon footprint". The results were sobering at first. The natural gas used for air conditioning and heating accounted for 94% of the museum's CO<sub>2</sub> emissions. In response, the museum switched to green electricity for cooling – a saving of about half of its greenhouse gas emissions. "Our goal is to become completely free of natural gas", Gorschlüter continues.

"We want to be a green museum". To this end, the team around the director has already set many wheels in motion with the property management company GVE and Stadtwerke Essen. These include a 1,500-square-metre photovoltaic system on the roof of the museum, which went online in autumn 2022. The amount of electricity produced can supply around 50 households for a year.

Small steps can also help improve the museum's ecobalance. A sustainability working group has taken a close look at all organisational processes – from the optimisation of art transport to waste separation and avoidance, water consumption and staff travel. "We want to improve everything we can within the museum and also act as a role model to the outside world", says Gorschlüter. That's why the focus is also on visitor mobility. An e-charging station in the multi-storey car park, plus combined tickets for travel by local transport for selected exhibitions, have been on offer for some time. As a high-profile event, a perennial planting also improves the biodiversity around the museum.

The museum still has to take the largest step towards becoming a green museum: switching to a heat pump. Once that happens, the museum's energy supply will be completely carbon-neutral. "When we have achieved this step, we as a museum will be a pioneer for the cultural landscape across Germany", Gorschlüter concludes. •

### ANYTHING GOES IN ESSEN

A city of 600,000 inhabitants as a hiking destination? The apparent contradiction quickly vanishes when you take a look at the tourist highlights on offer in the greenest city in North Rhine-Westphalia.

TEXT: Guido Schweiß-Gerwin

"We have accepted our role as a European Green Capital and want to continue to drive the topic forwards", says Richard Röhrhoff, Managing Director of Essen Marketing GmbH. In his opinion, Essen's green credentials are particularly visible in the tourism sector, especially when it comes to hiking. "Urban hiking is closely aligned with the spirit of our day and age", he says. In addition to ZollvereinSteig, which opened just a few months ago, Kettwiger Panorama-Steig and BaldeneySteig have been around for some time. The latter was created as part of the European Green Capital – Essen 2017 campaign and is already one of the most popular hiking destinations in North Rhine-Westphalia. DeilbachtalSteig is about to be added as the next hiking trail. Once that happens, there will be four hiking trails that start in the Essen city area. "A hiking region is taking shape", says Röhrhoff, proudly.

The City's motto "Anything goes in Essen" is reflected everywhere, including in the mix of industrial culture and nature. As a city of short distances, experiencing nature and urbanity is never far away. "This appeals especially to our Dutch neighbours, the biggest source of visitors to Essen. The Dutch want to experience the best of both worlds: the winding Doppelbock tower at the UNESCO World Heritage

site at Zollverein, and the beautiful view of Lake Baldeney from the Korte Klippe. And preferably on the same day", says Röhrhoff. From conversations with tourism experts, he knows that the title European Green Capital is a seal of quality. Many guests are also aware of this. In addition, high sustainability standards, including green electricity and reusable containers at events, contribute to visitors' sense of well-being.

The marketing expert sees untapped potential in the city centre. "The city centre needs to work on the way it looks and feels", he says. Areas need to be unsealed. "The population – and certainly our guests – want a greener centre with more water and shady spots", Röhrhoff continues. Not all squares, however, are suitable for such transformation. Central areas, such as Kennedyplatz and Willy-Brandt-Platz in front of the main railway station, are built over multi-storey car parks and underground tunnels and therefore cannot be planted with trees. Green roofs and wall gardens, however, could contribute to a greener city centre. "Holidays and recreation should be sustainable. People want to manage the environment and resources sensibly", summarises Röhrhoff. As a European Green Capital, Essen is very well positioned on this topic.

"Since the year of the Green Capital 2017, the City of Essen has been a trendsetter in Germany for a new kind of leisure activity: urban walking. With the advantages of urban infrastructure, the city can be explored in a new way on walking routes. It's worth trying out, there's a lot to discover".



RALPH KINDEL
is a freelance Project Manager and was
Project Team Leader with European Green
Capital – Essen 2017. He has a passion for
seeking out hiking routes on his own doorstep.



A VIEW OF LAKE BALDENEY: Nature and urbanity rub shoulders in Essen.



### Building a more RESILIENT 'SPONGE CITY'

TEXT: Guido Schweiß-Gerwin

specially in densely built-up regions like the Ruhr Metropolis, extreme weather events such as heat and heavy rainfall have serious consequences. The sponge city is intended to solve at least one of the problems of climate change. The principle of the sponge city is simple: It can store a lot of water and slowly release it again during dry periods. Evaporation has a cooling effect. These processes rely on unsealed surfaces that are disconnected from the sewage system. Rainwater seeps through onsite storage systems and is subsequently and slowly allowed to evaporate.

"Our common goal is sustainable, water-conscious urban development

that can noticeably reduce the negative consequences of climatechange", says Andreas Giga, Head of Service Organisation of the Future Initiative Klima. Werk at the Emschergenossenschaft. The network is a joint initiative of the cities along the Emscher and the Emschergenossenschaft; the Ruhr Regional Association and other water associations are also on board as partners. In many cities in the Ruhr Metropolis, sponge city measures have already been implemented in recent years - with new water reservoirs including infiltration trenches, climate-friendly car parks, green facades, infiltration troughs and flooding "The goal is not to drain rainwater -

**CHANCELLOR OLAF SCHOLZ** 

planted the first vine for a new vineyard on the River Emscher to mark the completion of the Emscher conversion.

Fascination.

**Transformation** 

For over a century, the River Emscher served as an open sewer, straightened and enclosed in concrete shells. In a once-in-a-generation project, the Emschergenossenschaft is transforming the river, which runs through the heart of the Ruhr region, and its tributaries into a near-natural body of water. The River Emscher has been free of wastewater since 2021.

www.eglv.de/emscher/der-umbau/

a valuable resource - into the sewage system, but to feed it into the natural water cycle", Giga continues.

The Future Initiative was founded back in 2014. In recent years, the importance of making the region more resilient and climate-friendly has increased noticeably. "Unfortunately, many climate impacts can no longer be avoided", Giga says. "It is therefore all the more important that we make our cities climate resilient and protect our citizens. The Future Initiative Klima.Werk focuses on climate impact adaptations for a liveable, blue-green Ruhr Metropolis". •

www.klima-werk.de

### POTENTIAL AS PILOT REGION

With initiatives such as the European Green Capital, the Ruhr Metropolis has shown its potential to become a pilot region for the transformation to a green industrial region. This is also the assessment of the Wuppertal Institute for Climate, Environment and Energy in a recent study. Green industrial regions combine economic power and high quality of life through climate-friendly transformation of the economy. According to the Wuppertal Institute, there are seven fields of action and 35 individual indicators that play a key role. These include per capita greenhouse gas emissions, the ecological quality of water bodies and the share of renewable energies in final energy consumption.

The Ruhr Metropolis has pioneering potential in many indicators, for example in the area of the environmental economy. The number of people employed in this sector increased by 12.4% between 2010 and 2019. The region is also leading the way in creating green spaces and recreational areas. The Wuppertal Institute proposes exemplary measures to accelerate the transformation to a green industrial region. For example, the Ruhr cycle path, which is already under construction and soon to be about 100 kilometres long, could be expanded into a 1,000kilometre network of cycle paths. This would include the reallocation of some lanes on main roads for cycling.



**KRUPP-PARK IN ESSEN:** Downtown parks are hubs for a wide range of green infrastructure functions.

# GREENEST INDUSTRIAL REGION IN THE WORLD

The history of the Ruhr Metropolis has been shaped by heavy industry. All the more astonishing that today it is greenery, of all things, that links the region's cities.

TEXT: Sarah Meyer-Dietrich

t's not something you'll find in London or Paris: "74% of the Ruhr Regional Association's territory is open space", says Nina Frense. "Even in the core area, the figure is as high as 53%". As far as the Regional Association Ruhr's councillor for the Environment and Green Infrastructure is concerned, these open spaces are one of the region's most valuable growth drivers. "Of course, to deliver growth, they still need to be further enhanced", observes Frense. "We need to strike the right balance

between economic and tourist use, together with ecological aspects, such as the preservation of biodiversity".

#### **GREEN INFRASTRUCTURE OFFENSIVE**

All of this depends on the Ruhr Regional Association's Green Infrastructure Offensive. One component of the offensive is a funding programme that, among other things, unseals land and promotes biodiversity. The Green Infrastructure Charter is also a key element of the offensive. Five overarching themes were developed during a comprehensive civic engagement process. These set the goal of creating a liveable, climate-friendly, circular, species-rich and climate-adapted Ruhr Metropolis. "Within the framework of the Ruhr Parliament, the goal was unanimously endorsed by all elected political representatives in the region", explains an enthusiastic Frense. Now the mayors and district councillors have picked up the baton and are ensuring the Charter's vision for the future and declaration of intent are endorsed at the municipal level, too. "The next step is to set very specific goals for action, both quantitatively and qualitatively", the alderwoman adds. "And ultimately to develop measures with which the goals can be achieved". A broad base of stakeholders will be involved throughout this process. And, of course, it is also important to involve the Ruhr Metropolis's 5.1 million citizens. Frense is optimistic that this will succeed: "Wherever a slag heap is made accessible, for example, committed citizens immediately contribute ideas for its rehabilitation – be it as a mountain bike track or a meadow orchard". The International Garden Exhibition Ruhr Metropolis 2027 (IGA2027) also engages citizens as co-designers: "IGA2027 will be the largest green infrastructure project in urban areas, from on-site participatory projects that create a common identity, to show gardens with international appeal. This abundance will enhance quality of life in the Ruhr Metropolis well beyond 2027".

### **GLOBAL ROLE MODEL**

European Green Capital - Essen 2017, Green Infrastructure Charter, IGA2027 - these are all milestones on a path that is far from over. "Of course, we need to develop green infrastructure beyond 2027", says Frense. "For example, through the revitalisation of brownfield industrial sites, where living, working and greenery can be combined to improve the quality of life in the region. According to a study by the Institute of German Business, the Ruhr Metropolis ranks second among seven German metropolitan regions in terms of access to green spaces from home: on average, 80% of the region's residents here can reach green spaces in 181.7 seconds by bike and less than ten minutes on foot. So, we are certainly heading in the right direction. Our goal now is to become a role model as the greenest industrial region. To become somewhere that other regions around the world can learn from". •

www.grueneinfrastruktur.rvr.ruhr www.iga2027.ruhr

## Essen is CREATING SUSTAINABLE STRUCTURES



thit its application to become the European Green Capital 2017, the City of Essen has taken a significant lead. Throughout the application process, Essen, as a city in the heart of the Ruhr region, intentionally focused on the topic of transformation, conceding openly that its transformation process is by no means complete.

The fact that Essen was chosen, against such a strong field of bidders, is clearly recognition of the region's immense transformation efforts, a good 50 years after Willy Brandt outlined his vision of blue skies over the River Ruhr. However, Essen's selection is also due to the fact that the City has set itself ambitious goals in the twelve areas of action – and made it credibly clear how the goals, some of which are very ambitious, are to be achieved. The City was clear from the outset that this is a long-term process, not a one-year action plan.

Five years later, it is certainly fair to say that these were not empty promises. Progress has clearly been made and sustainable structures have been created. The Essen Green Capital Agency, which also ensures institutional continuity, has undoubtedly played (and is playing) a key role in all of this.

Since 2017, significant measures have been implemented in all twelve areas of action. One example is climate action, with the City Council's groundbreaking resolutions to develop an action-oriented, Sustainable Climate and Energy Action plan. The focus is now on activation, which is the key to maintaining momentum in implementing the plans measures. The Climate Pact for Business and the Join-in Campaign for Climate Action are another two prime examples.

Nevertheless, the past five years have also shown what challenges need to be overcome on the way to achieving the City's ambitious goals. It is clear, for example, that Essen will not be able to achieve many of its goals on its own. The City depends on advantageous framework conditions and on state and federal governments, as well as the European Union, creating both new opportunities and the necessary scope for action. Of course, the diverse nature of the goals also poses a challenge. This applies to the twelve original areas of action defined in the context of the City's year as European Green Capital. But it applies even more so to the even broader goal of shaping a liveable, healthy and socially engaged city. Achieving this goal will require a holistic approach to implementation and a focus on integrated solutions that take both the potential for conflict and the benefits of synergies into account. Finally, the multiple crises of recent years have made it abundantly clear that flexibility, adaptability and robustness - in short, resilience - are key objectives.

As the cause of extensive environmental damage, cities have perhaps a singular responsibility to contribute to solutions. Thankfully, as creative hubs, they are also in a unique position to do so and can play a pioneering, multiplier role. As the European Green Capital, the City of Essen has embraced this challenge. •

### MANFRED FISCHEDICK

President and Scientific Director of the Wuppertal Institute for Climate, Environment and Energy gGmbH; Professor at the Faculty of Economics at the University of Wuppertal; Chairman of the Scientific Advisory Board of the European Green Capital – Essen 2017.

The Essen Green Capital Agency coordinates the City of Essen's climate action and sustainability strategies.

We liaise with stakeholders from regional and municipal government, business, and civil society and are your point of contact for anything and everything connected with sustainability, climate action, the energy transition, solar energy promotion, refurbishment, the mobility transition, and much more.

Contact us!

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