

# #Cycling&Walking #PublicTransport #Inclusive



What will be the **three biggest challenges** for Rotterdam's mobility over the next ten years?

- 1 Implementing a mobility transition to promote active forms of transport such as walking and cycling
- 2 Redesigning the metropolis into a city with more public space for safe walking and cycling
- 3 Changing mobility culture by reducing short car trips

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

On our way to a healthy, clean, easy-to-reach city where people can walk and cycle safely. A future-proof Rotterdam.



## Rotterdam: More bicycle highways for commuters

### The project idea

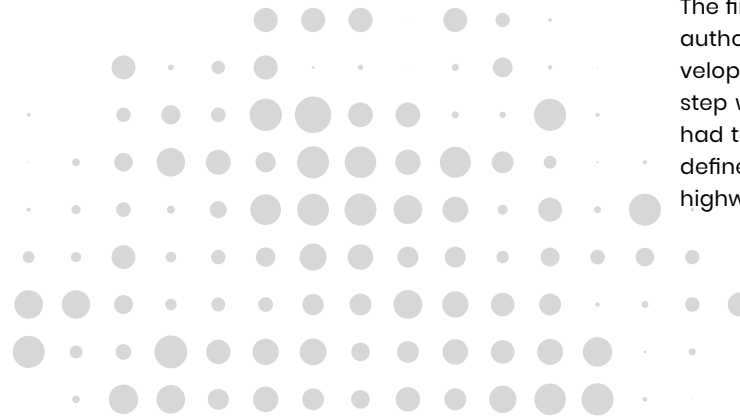
The goal is for a network of bicycle highways in the Rotterdam-The Hague metropolitan area to connect the most important economic and work hubs with various urban districts. These bicycle highways are to allow users to easily cross obstacles such as motorways, waterways and railway lines. To ensure safe and comfortable use, **the highways will be 4 to 4.5 metres wide, clearly marked with red asphalt and well lit.** In the city, the bicycle street, where cars are accepted as "guests", is to be a good alternative to the bicycle highway

### The implementation

The bicycle highways are to be an alternative first and foremost for work commuters. The City of Rotterdam is currently implementing six bicycle highways in the region. They will enable at least ten per cent more people to reach their place of work by bicycle within 45 minutes. **The travel times for cyclists will also be reduced. The aim is for around 1,500 people to use the bicycle highways.**

### The transfer

The first step was to establish collaboration with the regional parties and local authorities. With support from all those involved, a joint framework could be developed. It allowed scope for individual adjustments to local conditions. The next step was to analyse and plan potential routes. In parallel, additional partners had to be brought on board for funding, and the joint concept for the project defined. The final step focused on communicating the benefits of the bicycle highways and the city's innovation drive to the public.



# #Safe #Smart #Green



## Bicycle highway between Huilongguan and Shangdi

What will be the three **biggest challenges** for Beijing's mobility over the next ten years?

- 1 Developing a modern and integrated urban mobility system that meets the needs of the growing commuter flows in the Beijing metropolitan region.
- 2 Motivating citizens to switch to sustainable mobility to reduce dependency on cars, with a view to achieving intensive and green transport.
- 3 Meeting citizens' diverse and hi-quality mobility needs in the context of an ageing population and changing household structure, making transport safer, more convenient and comfortable.

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

A modern and integrated urban transport system that is green, safe and intelligent will take shape in Beijing. It will feature a world-class infrastructure network, transportation services, technologies and equipment, and comprehensive governance capability. We strive to build a truly reliable transport system of the highest standards that satisfies the needs of our people.

### The project idea

In the morning rush hour, an average of 11,000 people commuted between the urban residential area Huilongguan and the software park in Shangdi in northern Beijing every day. Though the direct distance in-between was just 3.8 kilometers, the connection was cut off by two expressways. To alleviate the huge press of commuter traffic, Beijing built a 6.5-kilometer bike-only lane. The new bicycle highway is intended to promote active mobility by providing an attractive and safe infrastructure. The six-metre-wide, three-lane cycleway runs at ground level and as a skyway. It has a total of ten entrances and exits.

### The implementation

Since it opened on 31 May 2019, the bicycle highway has played a significant role in persuading many commuters to switch to bicycles. Since the project's launch, the highway is used by **more than 4,000 to 6,000 people each day, with a maximum of 19,000**. The highway has emerged as the fastest, cheapest and healthiest way to commute between the two urban districts. Its users include many former subway commuters, but there are also considerable numbers of car drivers among them. In addition, the bicycle highway has become a place for weekend cycle training for residents.

### The transfer

The key to the project's success lies in connecting two places with a high rate of commuters and a short distance between them, but one that is difficult to cover by car or public transport. Prior to the implementation of the Huilongguan-Shangdi bicycle highway, extensive local studies were conducted over a period of one and a half years. They showed that safe and convenient bicycle highways with separate lanes for different directions of travel can be a means to reduce the actual travel time. Moreover, the project increases the overall attractiveness of cycling, thereby laying the foundation for implementing other cycleways and ultimately for realising sustainable urban mobility as part of a human-scale city.





# #Innovative #Sustainable #CitizenFriendly



What will be the **three biggest challenges** for Monheim's mobility over the next ten years?

- 1 Implementing the modal shift
- 2 Cutting emissions and achieving climate neutrality
- 3 Creating more areas for pedestrians, cyclists and open space

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Intelligent, zero-emissions/climate-neutral mobility for everyone!



## Fully automated bus fleet: The Old Town E-Bus

### The project idea

The mobility of the future is electric, autonomous and connected. It can already be experienced today in Monheim am Rhein in the Old Town e-bus – a fully autonomous, electric-drive and hence locally emissions-free bus line. By launching the **first fleet of fully autonomous vehicles in Germany**, the town of Monheim has become a pioneer in automated local public transport. It has expanded local public transport services in the Old Town with an environmentally friendly technology that meets today's needs. This has enhanced the town's sustainability and quality of life as well as its attractiveness for visitors and residents.

### The implementation

Since February 2020, the fully autonomous bus line – with only an operator on board in case of an emergency – has connected Monheim's bus station with the Old Town. The e-bus fleet is formed of five vehicles in total, all powered by 100 per cent green electricity. **The citizens of Monheim are able to experience the mobility of the future first-hand.** The fully automated buses are also well received as transport for tourists.

### The transfer

The project in Monheim and comparable studies are being extensively evaluated. Other towns planning similar projects can learn from it: How is the new service accepted by citizens? Are people changing their mobility behaviour? What does the operational and planning data reveal? The technical and legal framework for the operation of autonomous buses should also be discussed before their implementation.



# #timetochange yourhabit #tram #bikethecity



What will be the **three biggest challenges** for Liège's mobility over the next ten years?

- 1 Completing the infrastructure
- 2 Giving citizens a sense of belonging
- 3 Changing citizens' habits

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

It's the right time to change your mode of transportation.



## Liège: New tramway to foster multimodal mobility

### The project idea

More than 245,000 cars and 225,000 bus passengers travel through Liège every day. The Liège bus network covers more than 40 per cent of the traffic volume in the whole region and cannot carry any more passengers. Trams are the solution: They can transport twice as many people punctually to their destinations as the currently available buses. They also create an efficient connection between the economically and culturally important locations in the city. With the tramway, the City of Liège is sending a strong signal in favour of a more environmentally friendly (transport) policy: **A revolution has begun.**

### The implementation

Construction of the new tramway line began in 2019 and is scheduled to finish in 2022. It will completely transform the city's appearance across an area of almost 50 hectares around the tramway. Public space can be restructured across 70 per cent of this area to create more room for environmentally friendly and human-scale mobility. **The tramway will be the backbone of a vibrant and dynamic city.** It will be connected with a range of mobility options at multimodal interchanges: railway, ferry, bus, cycling infrastructure, park-and-ride and flexible sharing services. This multimodality can be achieved thanks to a universal ticketing strategy.

### The transfer

Connecting the new tramway line with other forms of transport via multimodal transport interchanges is the most important element of the project. To ensure such a project succeeds, a healthy balance needs to be found between the needs of different users of public space. Good communication in all phases of the planning and the implementation is vitally important for the project's acceptance. The project's planning and implementation should always be guided by a responsible approach to specific local characteristics on an urban planning, societal, environmental, cultural, social and economic level.



# #MobileMetropolis #ZeroEmissions #MoreSpaceInThe Neighbourhood

C O L O G N E



HENRIETTE REKER, MAYOR © CITY KÖLN

What will be the **three biggest challenges** for Cologne's mobility over the next ten years?

- 1 Decarbonising: The transport sector contributes to climate neutrality
- 2 Transforming an urban environment designed for cars into a human-scale city
- 3 Addressing the growth in city logistics/e-commerce

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Mobile metropolis – future-proof infrastructure: sustainable mobility for a climate-neutral, innovative and human-scale Cologne.



Photography: UPS

## Multimodal city logistics

### The project idea

Package delivery, trade and express courier services combined with strong growth in supermarket deliveries during the coronavirus pandemic: The e-commerce boom has definitively conquered the city. The consequence is intense competition for delivery zones and parking spaces coupled with high local air and sound emissions. Each service provider drives his or her own vehicle – usually powered by an internal combustion engine – around the city. With three million euros of funding for the largest programme by a German local authority to promote the use of cargo bikes, the City of Cologne is creating strong incentives for adopting **environmentally friendly transport for goods and commercial traffic**. The programme will be supported by expanding the cycle path network, creating cargo bike parking spaces and implementing at least three provider-neutral city logistics hubs by 2022.

### The implementation

The programme is aimed at small, local businesses, associations and groups of private individuals. The programme is working, as an evaluation shows: Numerous tradespeople, service providers and delivery persons are switching from cars or vans to cargo bikes. To date, 35 per cent of the firms have got rid of a vehicle or use a cargo bike as their only means of transport. The cargo bikes cover an average of roughly 30 miles per week. **Car use has been reduced from an average of 75 miles to 48**, and mobility has improved due to shorter travel times.

### The transfer

The project's success lies in combining a variety of measures that are only truly effective together. They include funding for vehicle purchases, creating parking facilities, initiating a dialogue on the requirements and possible operator models for the logistics hubs at an early stage, and taking account of suppliers' delivery bottlenecks. Early digitalisation of the funding programme is helpful in tackling the high administrative workload during the implementation.

# #sustainable #safe #accessible



What will be the **three biggest challenges** for Paris's mobility over the next ten years?

- 1 Giving public space back to Parisians
- 2 Protecting residents' health
- 3 Promoting environmentally friendly mobility

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Sustainable, safe and accessible mobility for all!

## Paradigm shift in Paris The 15-minute city

### The project idea

The idea of the 15-minute city (Ville du quart d'heure) is based on a concept by Carlos Moreno: Everyone in Paris should be able to reach **all the places they need for daily life within a 15-minute walk or in less than two miles' cycle ride**. Employment opportunities, shops, health care, leisure, education, culture and sport – all of this is to be provided adequately in a decentralised form. This will be a boost to local retailers while simultaneously reducing delivery services and private car travel. By giving everyone access to the same quality of services near their homes, they will be able to “be healthy, learn and flourish”.

### The implementation

Since 2020, Mayor Anne Hidalgo has supported the plan to transform Paris into a 15-minute city and give it more “proximity, diversity, consistency and versatility”. To this end, **60,000 city centre parking spaces and traffic lanes are to be replaced** with green spaces, playgrounds, bus lanes and cycle paths. Some 170,000 new trees will be planted, and a cycle path network covering roughly 400 miles is to be built by 2024.

### The transfer

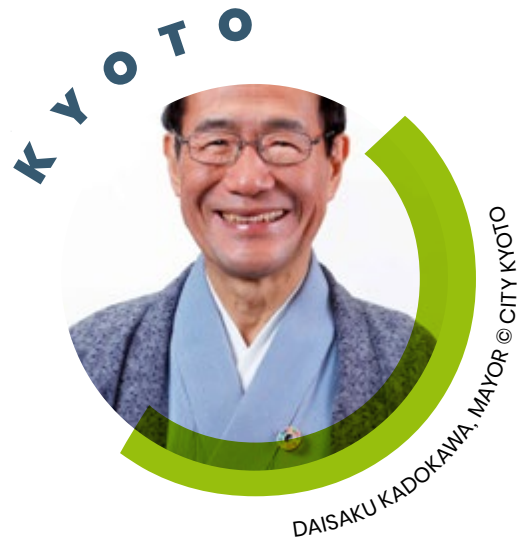
To implement a project of this scale successfully, all the stakeholders – the residents, businesses, cultural, sports and educational institutions and health care providers – must be actively involved in the process. Moreover, it is important to begin by identifying the specific characteristics of the individual districts and to tailor plans for them together with local stakeholders. Creating a safe, attractive and extensive infrastructure is the only way to promote walking and cycling.



Photography © Legnarde on iStockphoto



# #StreetGrid #PublicTransport #Walking



What will be the **three biggest challenges** for Kyoto's mobility over the next ten years?

- 1 Tackling the staff shortage facing public transport provision
  - 2 Developing and strengthening infrastructure and public transport in sparsely populated areas
  - 3 Relieving the pressure on road transport and improving tourist and commuter flows to final destinations
- .....

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Pedestrian-friendly city: Kyoto.

## Kyoto: Giving pedestrians more space

### The project idea

Increased motorisation and traffic congestion have impaired Kyoto's attractiveness, especially in the city's tourist areas. High carbon emissions contribute to faster global warming. Against this backdrop, a comprehensive transport strategy has been developed under the banner of "Pedestrian-friendly city: Kyoto" and implemented in several subprojects. This has also set in motion a social change from a car-oriented lifestyle to environmentally responsible mobility. The project aims **to bring more life into the city centre and to make it accessible for all**.

### The implementation

The pavements on one of the busiest streets in Kyoto, Shijo Street, have been widened to encourage strolling. Bus stops were redesigned to give those waiting more space and to make it easier to board and disembark from buses. This has improved the flows of pedestrians on the street. The pedestrian areas around Hachijo Gate Station were also enhanced. In addition, a terminal for sightseeing buses was built, and bus stops positioned closer together. This has boosted local transport connections, **created a pleasant environment for pedestrians** and made optimal use of the limited space.

### The transfer

Public transport plays a key role in urban planning and in citizens' daily lives. It is therefore crucial to reach an agreement between residents, transport companies and the government on transport planning projects. The local government should take the initiative in involving, informing and coordinating different stakeholders.



# #safety #sustainability #equity



What will be the **three biggest challenges** for Barcelona's mobility over the next ten years?

- 1 Guaranteeing the right to mobility
- 2 Ensuring people's health and safety
- 3 Resuming economic and commercial activities and fighting the climate crisis

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Everyone has the right to move in a safe, healthy, sustainable, equitable and smart way.

From a car-centric  
metropolis to a human-  
scale city: Superblocks  
in Barcelona

## The project idea

A city that is no longer dominated by cars – a “re-conquest” of public space. This is Salvador Rueda's idea. He wants to create “superblocks” (or superilles in Catalan) – residential neighbourhoods that are largely car-free. Four to nine residential blocks are to be joined to form a unit in which cycling and walking have priority. Local public transport is to be expanded, and streets will be transformed into an extension of the living room. Green spaces, public squares and seating facilities will create places where people can spend time: Air quality will be improved, noise reduced, and places for interaction created, allowing residents to start conversations: **“Each superblock is like a small city with its own character.”**

## The implementation

Since 2016, superblocks have formed part of the sustainable mobility concept developed by the City of Barcelona. The first superblock in the Poblenou district in 2017 laid the foundation stone for the **creation of a “post-car metropolis”**. The sustainable mobility concept envisages the construction of 503 superblocks in total. It also includes strengthening local public transport and non-motorised private transport as well as planning green spaces. With top speed limits of six miles per hour, traffic within the superblocks will be restricted to residents and deliveries only. A **budget of 38 million euros** is available for the construction work, which is scheduled to take place from 2022 to 2030.

## The transfer

To implement such a large-scale project successfully, all the stakeholders – the residents, businesses, tourist industry, transport planners and service providers – must be involved in the planning process from the outset. Precise planning is essential for a seamless implementation. While the individual superblocks are based on the same principles, their design is adapted to local needs and agreed with the local residents.





# #PublicTransport #Cycling #NoBottlenecks



What will be the three biggest challenges for Stockholm's mobility over the next ten years?

- 1 Combining sustainable mobility with cutting carbon emissions
- 2 Fostering active mobility and increasing transport safety for users
- 3 Avoiding congestion

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Making Stockholm fossil-fuel-free and promoting alternative forms of transport in the city centre to improve air quality.

## Congestion charge to promote environmentally friendly mobility

### The project idea

Stockholm's congestion charge aims to reduce commuter traffic in the city centre, cut emissions and improve the quality of the environment and of life. In a nutshell, the goal is to create a more sustainable transport system. The amount of the congestion charge varies depending on the time of entry to incentivise work commuters in particular to switch to local public transport. The income generated is used to build new roads and expand local public transport.

### The implementation

After a trial period in spring 2006, citizens voted in a referendum to introduce the congestion charge permanently in August 2007. Since then, it has enjoyed high approval among the population. Before the congestion charge was introduced, local public transport was expanded considerably to provide an attractive alternative to driving to the city centre: 14 new bus lines, more frequent services on 18 other bus lines, more and longer trains, and 2,500 new park-and-ride spaces sent a clear signal. The results speak for themselves: **Traffic volumes within the congestion zone have fallen by 20 per cent** while environmentally harmful emissions in the city centre are down by more than 10 per cent.

**Free-flow identification** is used to record congestion charge fees for monthly billing. This means there are no tollbooths, and no further action is required from drivers. The comparatively expensive transponders initially used were replaced with effective automatic number plate recognition.

### The transfer

A decisive factor in the acceptance of Stockholm's congestion charge was the early and extensive expansion of local public transport. This ensured that there was sufficient capacity to offer an attractive alternative to driving. The charges were designed to be high enough to create real incentives to reduce traffic. Transparency, traceability and social acceptance were further key aspects in the successful implementation.



Photography: agefotostock / Alamy Stock

# #Transition #Drama #Leading



What will be the **three biggest challenges** for Tel Aviv-Yafo's mobility over the next ten years?

- 1 Changing transport behaviour
- 2 Increasing safety
- 3 Coordinating all the transport, city and technology projects

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Change is on its way.

## The CityZone living lab: Supporting start-ups

### The project idea

Over the past five years, Tel Aviv-Yafo has evolved into a globally unique innovation and mobility hotspot in the start-up scene and is attracting businesses and investors from all over the world. With CityZone, a one-year support programme, Tel Aviv-Yafo has created a living lab in which residents, the local administration, research and businesses develop and promote innovative urban mobility solutions together. The foundation for Tel Aviv-Yafo's transformation is its leading role in developing cybersecurity and artificial intelligence (AI) technology. Both of these are key components for connected, autonomous, shared and electric vehicles. The lab was established as a cooperation between the Tel Aviv-Yafo Municipality, Tel Aviv University and Park Atidim Tel Aviv. CityZone targets Tel Aviv-Yafo's key mobility and transportation challenges around autonomous, sustainable and safe mobility, supporting the city's policy to tip the mobility pyramid, promoting walkability, shared micro mobility and public transportation, while reducing dependency on privately owned vehicles.

### The implementation

CityZone includes a **one-year programme for start-ups operating in the urban tech sector**. The programme focuses on market readiness, product validation and business scaling. Participants have the opportunity to develop, test and demonstrate their technology in Tel Aviv-Yafo's smart city beta and to receive feedback from the municipal administration and businesses. The programme offers subsidised desks and office space as well as mentoring from experts from Tel Aviv-Yafo's administration, the research community and the multinational companies that serve as CityZone's partners.

### The transfer

Israel is characterised by a strong start-up culture that seeks to shape the future with technology, courage, cooperations, networking, a rigorous market and customer orientation, and a pioneering spirit: **This concept is not tied to a particular place**. Start-ups choose their location based on the support they receive from national and local institutions. With the right instruments, cities can take a targeted approach to encouraging mobility start-ups to establish themselves locally and grow. Investment by different stakeholders and events such as economic summits have a positive impact on the local economy.



Photography © Gleb Smirnov



# #MobilityForAll #FirstMobilityAct #PriorityForEcomobility



What will be the **three biggest challenges** for Berlin's mobility over the next ten years?

- 1 Distributing public road space more fairly to create a human-scale city
- 2 Achieving Vision Zero in road traffic fatalities and severe injuries
- 3 Positioning mobility as a cornerstone of climate protection

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Our current campaign claim is  
#ChangeHowYouThinkChangeHowYouTravel.

Our mobility policy is to prioritise ecomobility and redesign a car-centric city into a human-scale city and thereby make people's needs the central focus.



## The Berlin Mobility Act: Prioritising local public transport, cycling and walking

### The project idea

The mobility transition may play a highly significant role in social policy, but it was not previously enshrined in any legislation. The Berlin Mobility Act addresses this problem: It not only defines the central areas for action and the goals, but also recognises how important the necessary change in this field is. The Berlin Mobility Act covers both cycling and general issues relating to mobility, local public transport and pedestrian and commercial traffic. The 2016 referendum on bicycle use in the city of Berlin, prompted by a people's initiative, was an important driver in launching the Berlin Mobility Act.

### The implementation

The Berlin Mobility Act marks the first time that a German federal state has enshrined the primacy of ecomobility – local public transport, pedestrian traffic and cycling – in law. The Mobility Act and the ongoing involvement of all the relevant stakeholders in Berlin's urban society have initiated a **broad debate about tomorrow's mobility**. Citizens were able to feed their ideas directly into the legislative process. This has led to greater acceptance of the general goals of the mobility transition and hence greater acceptance of the individual measures, including infrastructure changes. What is more, the Mobility Act sets clear goals and requirements for administering the implementation of the mobility transition, thereby triggering a paradigm shift.

### The transfer

A key factor in achieving high acceptance is a firm emphasis on involving the city's social and political stakeholders. In Berlin, this took the form of dialogues on the drafting of the individual sections of the Mobility Act and the establishment of a mobility committee.



Die Mobilitäts-  
wende kommt.  
Und zwar sicher.

Photography © City Berlin

# #More BeautifulByBike #GoodLocal Transport #MultimodalMobility

What will be the **three biggest challenges** for Hamburg's mobility over the next ten years?

- 1 Meeting the climate goals in Hamburg's Climate Action Plan (reducing greenhouse gas emissions by 55 per cent based on 1990 levels)
- 2 Staying mobile in a growing city with ecomobility accounting for 80 per cent of the modal split by 2030
- 3 Enhancing the city's attractiveness by improving quality of life and quality of ambience

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Mobile together for an even more beautiful Hamburg!



## Reallab Hamburg Digital Mobility (ReallabHH)

### The project idea

Testing tomorrow's digital mobility in real conditions – this is the goal of the project Reallab Hamburg Digital Mobility (ReallabHH), which was launched in April 2020. The extensive project with eleven subprojects and **32 partners from research and industry** can be traced back to the National Platform Future of Mobility (NPM) initiative. Studies will be conducted in Hamburg until the end of 2021 to determine which innovative digital mobility solutions prove successful in real-world conditions and are implementable. Transferability guidelines will enable other cities and local authorities to benefit from the findings.

### The implementation

The project goes live in summer 2021. This is when the first mobility solutions will be launched as living labs. The new applications are designed **to be experienceable hands-on in the streets of Hamburg**, first and foremost for the city's citizens. The solutions range from provider-neutral mobility platforms and autonomous shuttle vehicles to micro depots for reducing logistics traffic all the way through to a mobility budget and solutions for road traffic participants with special needs for protection. This strengthens the opportunities for new ideas and technologies for further developing mobility and raises awareness of them. At the same time, the barriers to everyday mobility and the related needs can be directly identified and addressed.

### The transfer

The ReallabHH living lab allows innovative mobility solutions to be tested in real conditions at an early stage and adapted during the project's time span. If they prove to be successful, they have great potential to initiate sustainable change – and this can extend beyond the specific case study if other towns and cities adopt them. The most important factors in its success include strong and active networking within the project and with similar projects, initiatives and living labs. Changes in the field of mobility take time: This factor must therefore be taken into consideration when planning, coordinating and implementing a living lab.





# #CityOfInventors #Polycentric Region#Local PublicTransport

What will be the **three biggest challenges** for Mannheim's mobility over the next ten years?

- 1 Climate neutrality and alternative drives
- 2 Rhine crossings
- 3 Digitalisation

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Climate-neutral, reliable, safe and digitally connected mobility for a human-scale city.



## Model city for smart grids and energy efficiency

### The project idea

Previously, issues relating to energy supply and mobility in Mannheim's neighbourhoods were addressed largely as independent issues in separate departments. In 2012, a former US military base covering over 510 hectares presented an opportunity to address long-term future issues in urban development and to transform the area into a model neighbourhood for electromobility, energy efficiency and smart grids of transregional significance. The rise of electromobility allows these spheres to be systematically linked at the local level for the first time. Covering roughly 140 hectares, the former Benjamin Franklin Village in the disused military base served as the starting point for intelligent, energy-efficient urban development in Mannheim. As early as the following year, concepts and solutions for smart grids and electromobility in other districts of the city were brought together in the Blue City Mannheim strategy concept.

### The implementation

The measures in the Blue City Mannheim strategy concept cover an immense range of fields in urban mobility: Around 100 charging points were installed in the city, and a **bus line with inductive charging technology was put to the test**. As part of the SQUARE flagship project, two existing buildings in the Benjamin Franklin Village were developed into environmentally friendly model homes, creating **48 climate- and energy-optimised housing units** with a total living area of 4,300 square metres.

### The transfer

Various stakeholders are involved in realising the measures at the intersection of energy and mobility. However, it is the city's citizens who are to subsequently use the services. For such projects to succeed, intense citizen participation right from the brainstorming stage and making sure plans dovetail closely with those of key stakeholders outside the city administration – including municipal utility companies, mobility service providers and universities – are crucial. The power of the process gives the inconceivable concrete form. It is therefore vital to lend innovations the scope to evolve and to not just think of the end result.

# #LoveBike #TrueToTradition #GetThereQuick

OLDENBURG



JÜRGEN KROGMANN, MAYOR © TORSTEN VON REEKEN

What will be the **three biggest challenges** for Oldenburg's mobility over the next ten years?

- 1 Ensuring all sections of the population have access to mobility to enable participation in society
- 2 Connecting all the different mobility providers and providing the right infrastructure
- 3 Reconfiguring the road space to give all traffic participants equal rights

How would you sum up your concept for the design of **tomorrow's mobility** (2030) in your city in a slogan?

Connecting. Intelligently and cleanly.



Photography © City Oldenburg

## ENaQ – The energy-efficient neighbourhood of Fliegerhorst in Oldenburg

### The project idea

The energy-efficient neighbourhood of Fliegerhorst in Oldenburg (ENaQ) aims to intelligently connect the electricity, district heating and mobility sectors at the neighbourhood level so that the energy generated in the neighbourhood can be used almost entirely locally. Connected electromobility is a crucial component of this. The idea of testing and presenting a wide range of new technologies in a living lab is based on Oldenburg's Smart City Vision. It was given concrete form by the master plan adopted by the council for Fliegerhorst Oldenburg and a mobility concept that is distinct in many respects from the plan for other districts of Oldenburg.

### The implementation

The aim is for the whole of the Fliegerhorst district to be a low-traffic neighbourhood. Cars are to be parked in special designated car parks, including some underground facilities, instead of on the street. This will be complemented with parking facilities for cargo bikes. A subplot with 110 housing units will see the implementation of an energy concept that brings together the electricity, district heating and mobility sectors to create a cross-sector supply grid. The goal is to meet most of the local **energy demand from locally generated energy by connecting different sectors**. The concept includes smart street lights equipped with sensor technology, a digital service platform for intelligent load and procurement management for decentralised energy generators and consumers at the neighbourhood level, and involving the residents as energy producers and consumers via a community portal. Diverse participation formats, such as workshops, interviews and idea competitions, were applied right from the planning phase in order to actively involve relevant stakeholders such as the city administration, public institutions, businesses and research institutions. Further opportunities for participation are planned for the implementation phase: Neighbourhood residents are to play an active role in designing the solutions, or in using and testing implemented solutions.

### The transfer

Mobility is an emotional issue. Citizens have very different perceptions of, and views on, new measures. It is essential to communicate innovations and ideas as a positive challenge and opportunity. Citizens' needs must be the starting point for developing digital services in the field of mobility.