

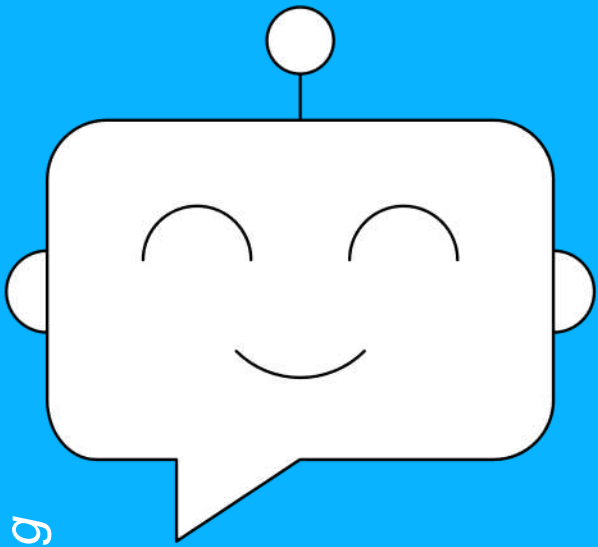
# Becoming a resilient Smart City

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**Denes Küçük | デネス キュジュック**  
Chief Digital Officer



*(Bundesinstitut für Bau-,  
Stadt- und Raumforschung  
2017, Smart City Charta)*




**» Smart cities are committed to sustainable and integrated urban development. Digital transformation offers cities, counties and municipalities opportunities on the path to sustainable development and aims to solve key urban development challenges in a resource-efficient, demand-driven way."**


 **BOCHUM**

 **2030**

# Die Bochum Strategie

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 **BOCHUM**  
Smart City



# Konzept

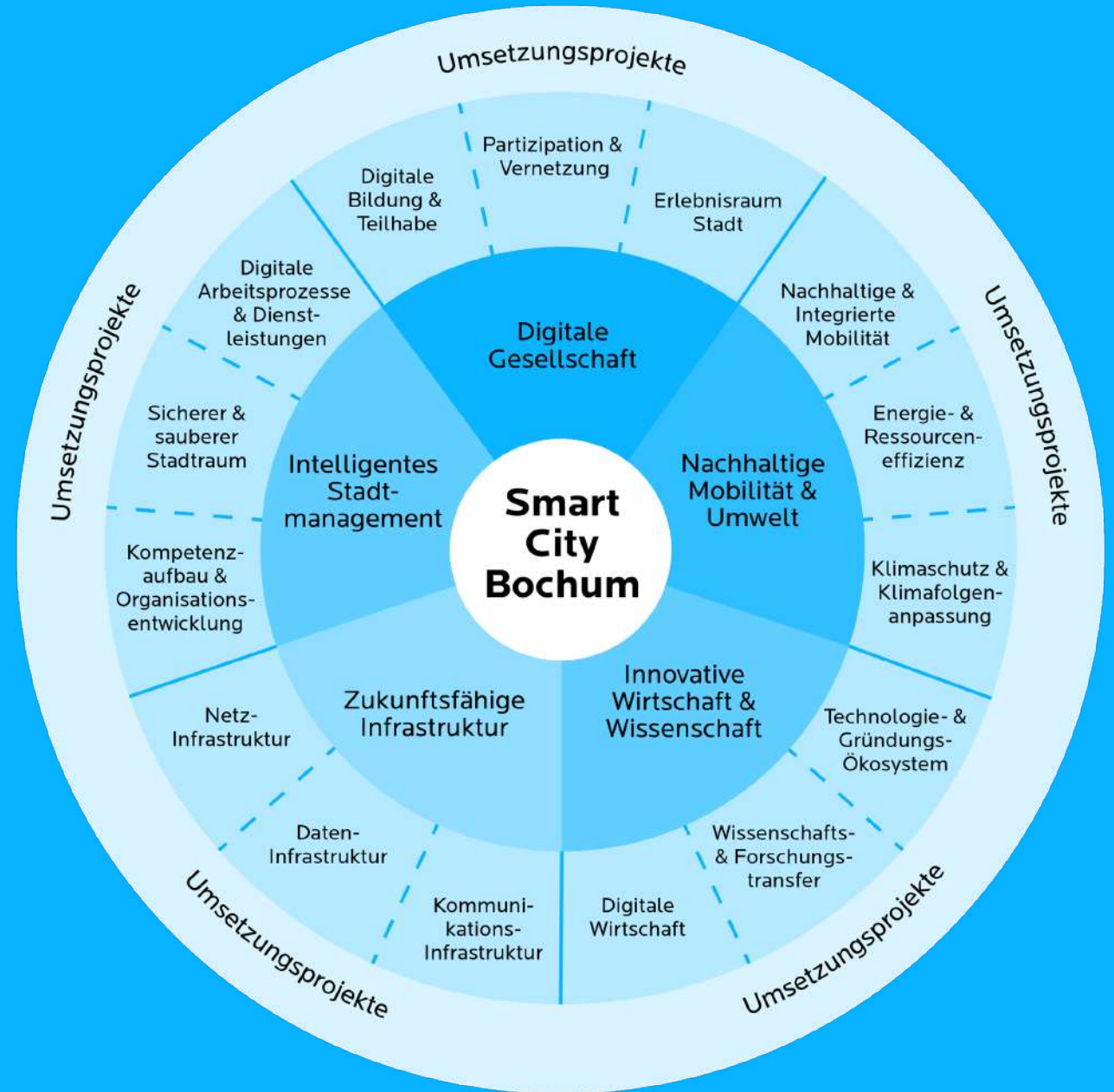
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Alles rund um die  
Smart City Bochum.

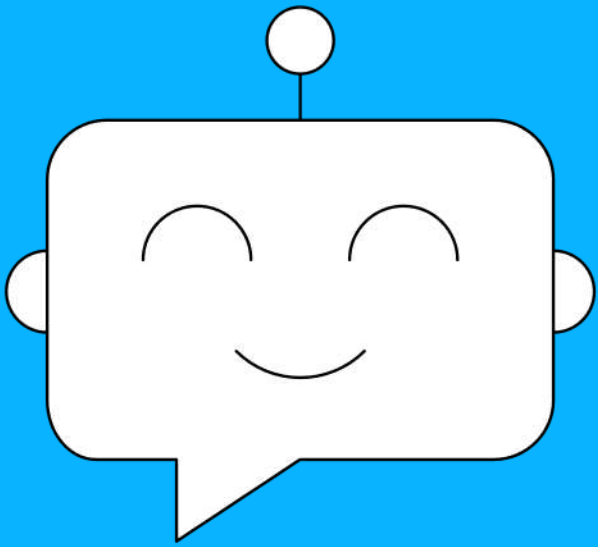


"We create technological and social innovations primarily in our focus areas of IT security, health and mobility.

"Bochum. Fit for the future. Close to the people." is fully in line with our Bochum formula "Knowledge. Change. we-feeling." and supports the goals of the Bochum Strategy."



Core objective for the  
guiding theme Intelligent  
Urban Management:



- **We offer our services digitally & easily accessible**
- **We consistently invest in the digital skills of our employees and actively involve them in cultural change**
- **We use digitization as an opportunity for modernization**
- **We review our internal processes and structures for efficiency and sustainability**
- **IT security and data protection are the basis of all our processes**
- **Using of Open Source as much as possible**

# Smart City Projects in Bochum

Working on different levels  
of resilience



# Bochum App

**Goal:** Bundling of Bochum services and offers from the city of Bochum and municipal utilities in a Bochum app.

Built on a Open Source core



# Smart benches in urban space:

**Goal:** 12 smart benches will be set up in Bochum's city districts and offer citizens the opportunity to charge their smartphones and e-bikes free of charge. In addition, environmental sensors and free and secure WiFi.

Showcase for energy self-sufficiency in the urban space.



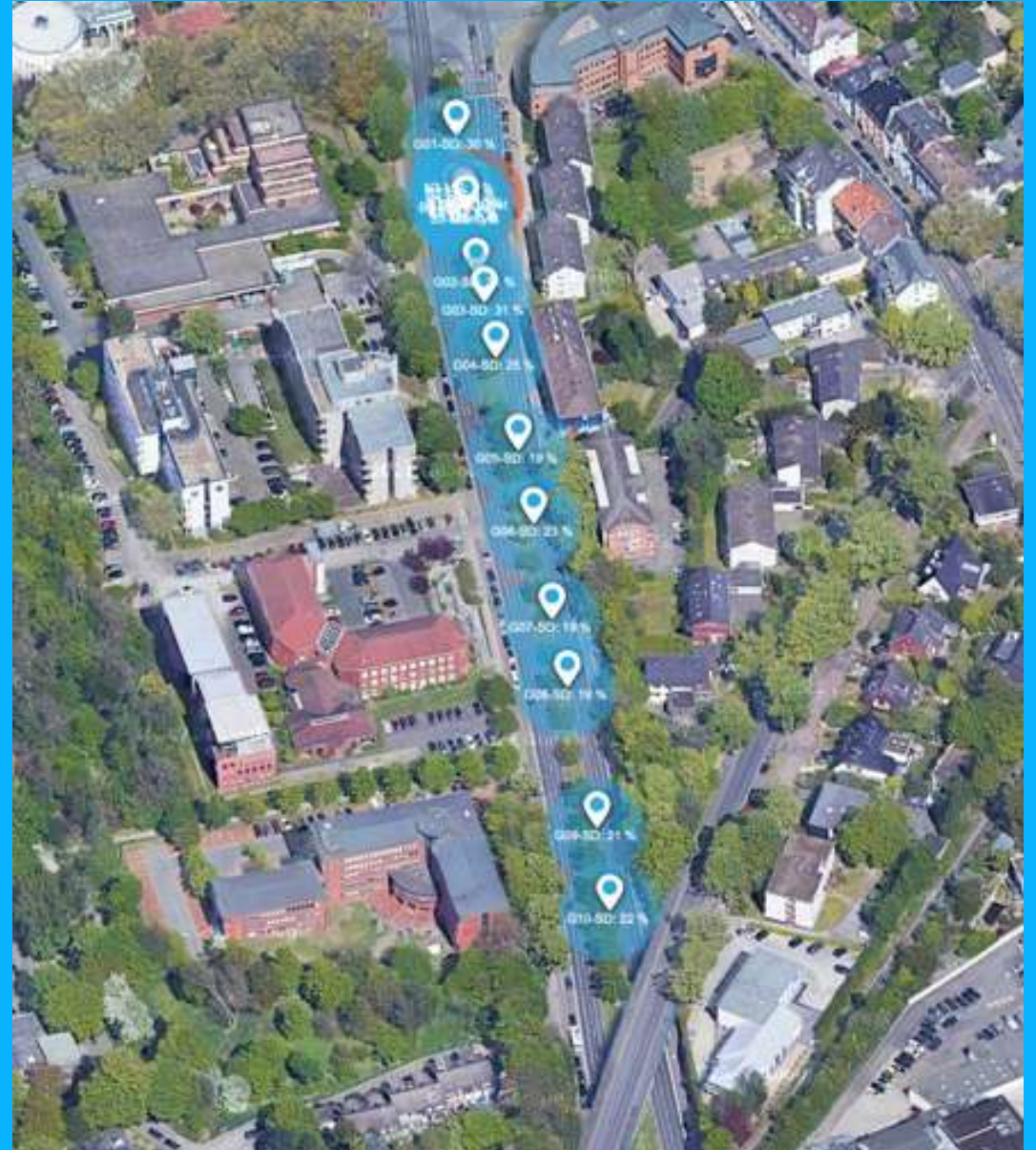


# Understanding climate change

## Goal:

Gain a better understanding of climate change and derived consequences for the city.

Among other things, soil moisture measurement of trees, water sensor technology for quality monitoring and much more.



# Digital civic participation

**Goal:** Enabling citizen participation digitally as well.

Using a platform to enable all departments in the city to easily carry out digital participation formats.



The screenshot shows the website for digital civic participation in Bochum. At the top left is the BOCHUM logo. At the top right are buttons for 'Anmelden' and 'Registrieren'. Below the header is a navigation menu with links: 'Projekte', 'Bochum Strategie', 'Vorhabenliste', 'Veranstaltungen', and 'So funktioniert's'. The main content area features a large illustration of diverse people interacting with digital devices and symbols like a lightbulb and a speech bubble. Below the illustration is the heading 'Gestalten Sie unsere Stadt mit' followed by a paragraph of text.

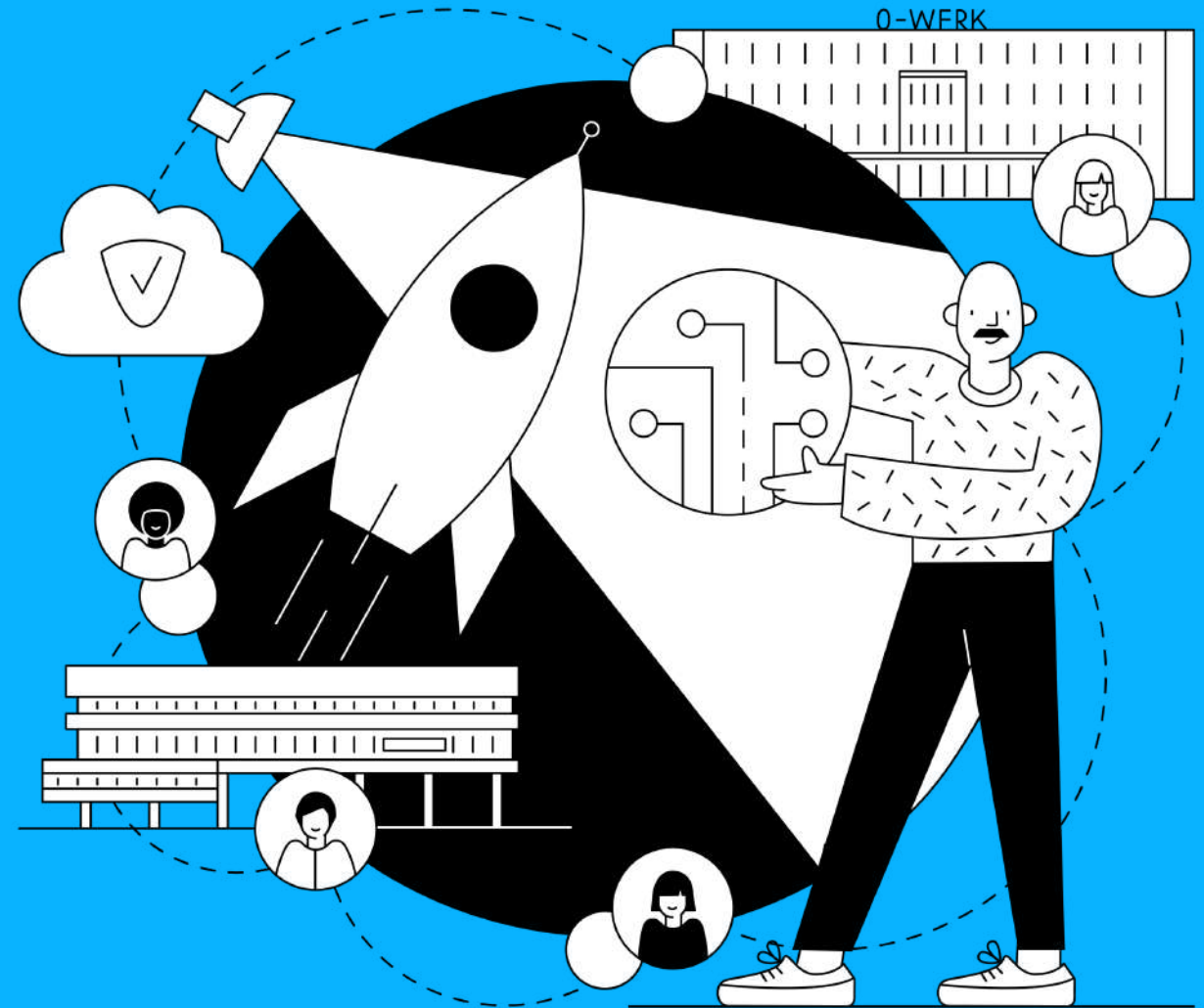
## Gestalten Sie unsere Stadt mit

Bürgerbeteiligung in Bochum ist vielfältig: Es gibt Bürgerversammlungen, Befragungen, digitale Angebote und viele Möglichkeiten mehr, um sich einzubringen. Diese will die Stadt Bochum nach und nach auf dieser Plattform zusammenführen. Hier können Sie sich über die einzelnen Projekte informieren, darüber diskutieren und eigene Vorstellungen einbringen. Die Umsetzung Ihrer Wünsche kann die Stadt Bochum zwar nicht immer garantieren – sehr wohl aber, dass Ihre Ideen und Anregungen sorgfältig geprüft und in die Überlegungen einbezogen werden. Wie freuen uns auf Ihre Mitwirkung!

# Smart City and IT Security

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Pulling together



**IT Security has never been so important as today. In bochum we are fully aware of this.**

- Mandatory IT security training for all employees
- security by design for all processes
- active lifecycle management for the entire infrastructure
- Server location secured according to BSI (German Cyber Security Agency) guidelines
- Working with IT security experts



# A fire department for IT security: „Cyberwehr“

- The small or medium-sized enterprise (SME) dials the toll-free number of the cyber defense emergency call center: 0800 1191112.
- A brief telephone assessment follows
- If it is indeed a cyber attack, an official Cyberwehr partner is assigned to provide first aid directly and free of charge, either on-site or remotely
- The Cyberwehr partner makes an inventory and gives the SME a recommended course of action - from here, the paid reconstruction of the system begins
- The Cyberwehr proceeds transparently at all times
- At the start, Cyberwehr is active in Bochum, Essen and Gelsenkirchen

# Together we make Bochum smart and digital! And secure.

Kontakt:

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