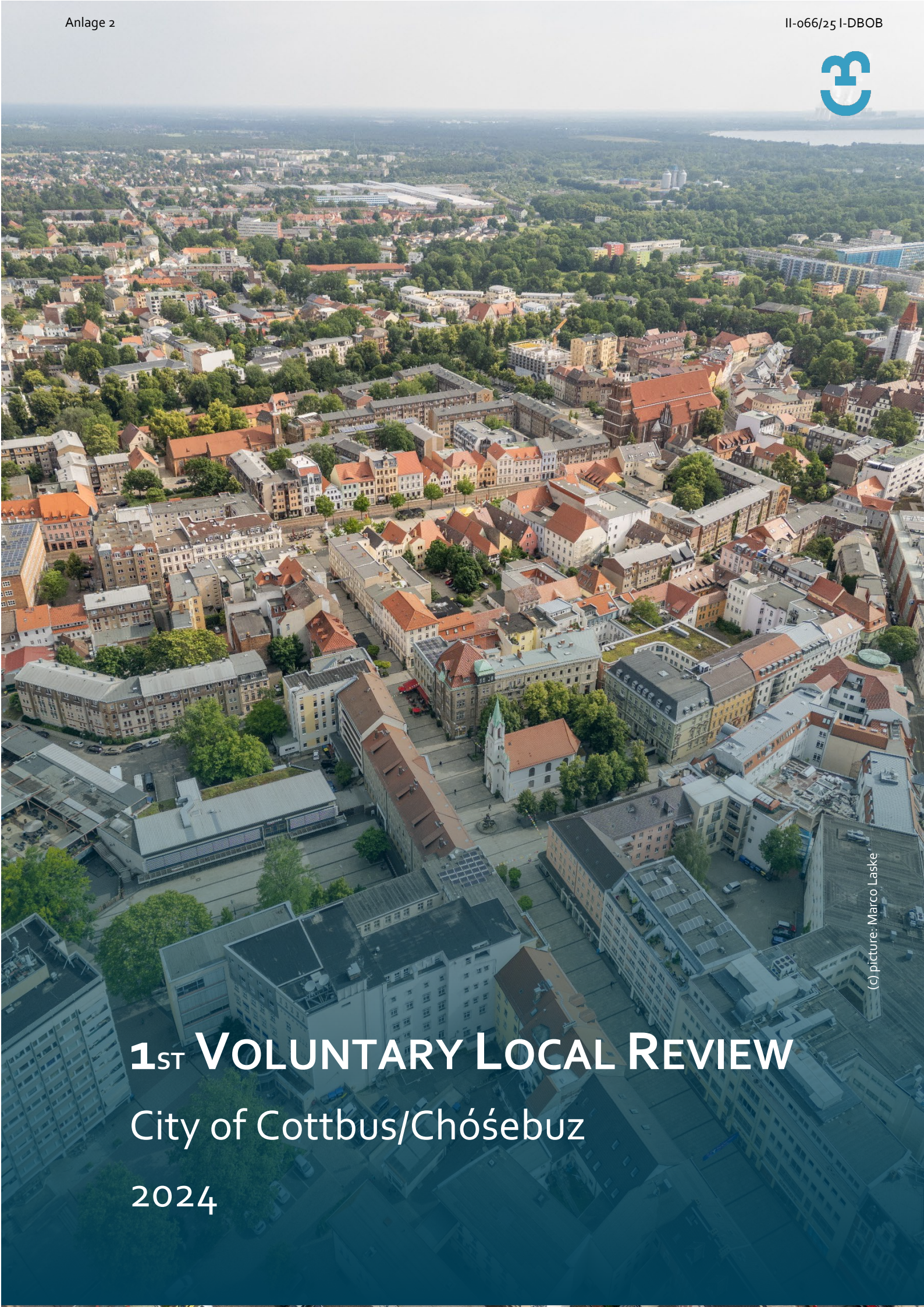

1st Voluntary Local Review

City of Cottbus/Chóśebuz

2024

(c) picture: Marco Laske

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PREFACE

Cottbus/Chóśebuz is a city in the midst of structural change. Situated in the former Lusatian lignite mining region, the German government's declared goal of ending coal-fired power generation and the associated energy transition will lead to a fundamentally new, sustainable development path. This path must be jointly and sustainably shaped by society, the economy, the administration and the voluntary sector, supported by a majority and resolutely pursued. Structural change provides the city of Cottbus/Chóśebuz and the Lusatia region with opportunities to fundamentally implement the concept of sustainability in all its complexity. With its 17 Sustainable Development Goals, the 2030 Agenda adopted by the UN member states in 2015 highlights the need for action in various areas in order to make the world fit for the future. In 2020, the city of Cottbus/Chóśebuz logically joined the 2030 Agenda by means of a council resolution and thus committed itself to the 17 Sustainable Development Goals of the United Nations.

Appropriate approaches and projects already exist in various parts of the administrative structure. However, the issue has not yet been dealt with in a coherent manner. In order to achieve concrete goals, it is necessary to find a comprehensible and coordinated approach that does justice to the complexity of the requirements. It is the task of the administration to develop an overarching sustainability strategy in the coming period and to implement this in the actions, planning and design within the administration and at the various levels of urban development. The implementation of an overarching, comprehensive sustainability strategy is a complex and lengthy process. The goal of making the city climate-neutral by 2045 is an ambitious one. Especially as a municipality in a region undergoing structural change, because the need for people, specialists, know-how, expertise and financial resources goes beyond the actual basic level of mandatory tasks and securing the provision of services of general interest for all other municipalities. Not all aspects of sustainability will always be achieved as an ideal, but the overall process must be optimized and accelerated as far as possible. This can only be achieved with the joint support of all those involved as well as by prioritizing and setting priorities.

Figure 1: Doreen Mohaupt, Mayor and Head of the Urban Development, Mobility and Environment Business Division, © Foto: Christiane Schleifenbaum

This Voluntary Local Review is intended to be a first step for the internal and external perception of current sustainability awareness. Starting with SDG 11 - Sustainable Cities and Communities - the conditions and activities in the city of Cottbus/Chóśebuz in other SDGs will also be reported on successively in the coming years. As Head of Urban Development, Environment and Mobility, I believe that our city is making good and sustainable progress in implementing the structural change towards a liveable and sustainable location in the Lusatia region and the goals of Agenda 2030.

Doreen Mohaupt

Mayor and Head of the Urban Development, Mobility and Environment Business Division

1 KEY FIGURES AND BACKGROUND INFORMATION ON THE MUNICIPALITY

General data:

Cottbus/Chóśebuz, an independent city in Lower Lusatia region, is the second largest city in the state of Brandenburg with around 100,000 inhabitants. As a regional centre in accordance with the central location structure of the state development planning and as a regional growth core in a predominantly rural region between Berlin and Dresden, Cottbus/Chóśebuz assumes an important anchor function and provides the surrounding area with a wide range of cultural, social, infrastructural and medical services. Cottbus/Chóśebuz plays a key role in regional development planning and drives regional development as a centre of science and higher education. As a university, park and sports city, the city on the River Spree offers a wide range of educational, social, cultural and leisure activities.

Demographic and structural data:

The population of the city of Cottbus/Chóśebuz has remained 'stable' at 100,000 for many years since the 2000s, with a slight downward trend (see Figure 1 below). Ageing is progressing, with the large and stabilising age group between 45-65 years shrinking significantly.

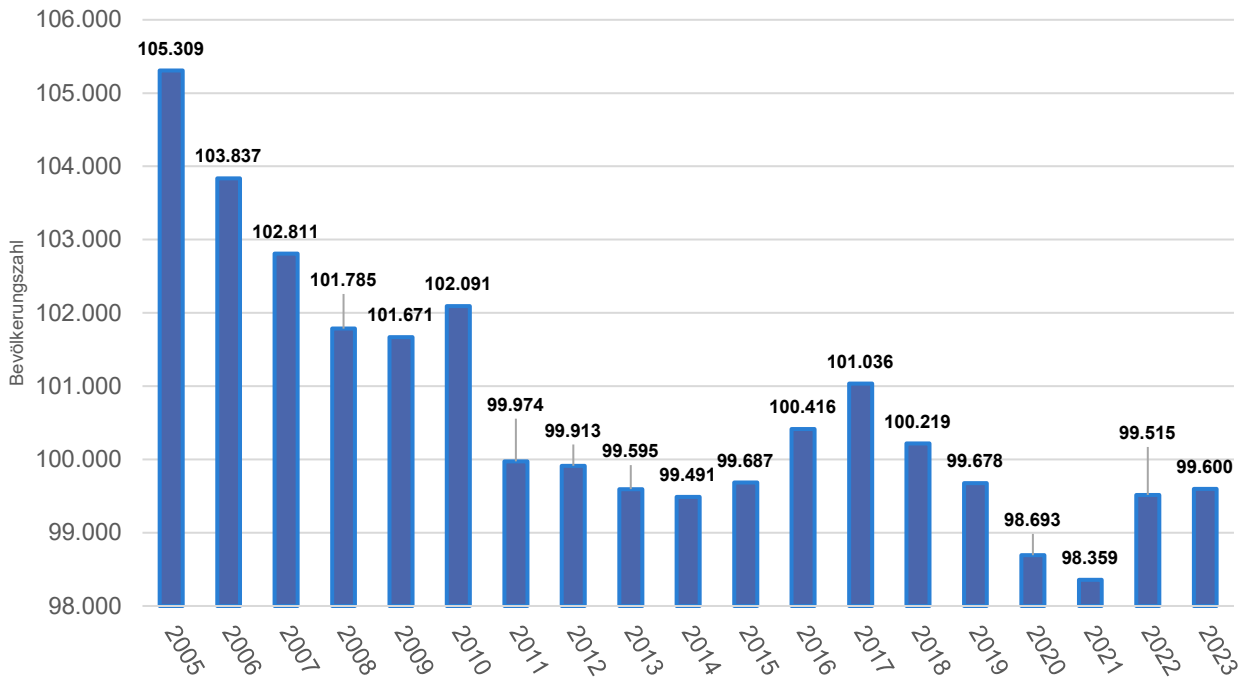


Figure 2 Population development Cottbus/Chóśebuz, city (Berlin-Brandenburg Statistical Office)

Cottbus/Chóśebuz is divided into 19 districts, 12 of which are rural in character.

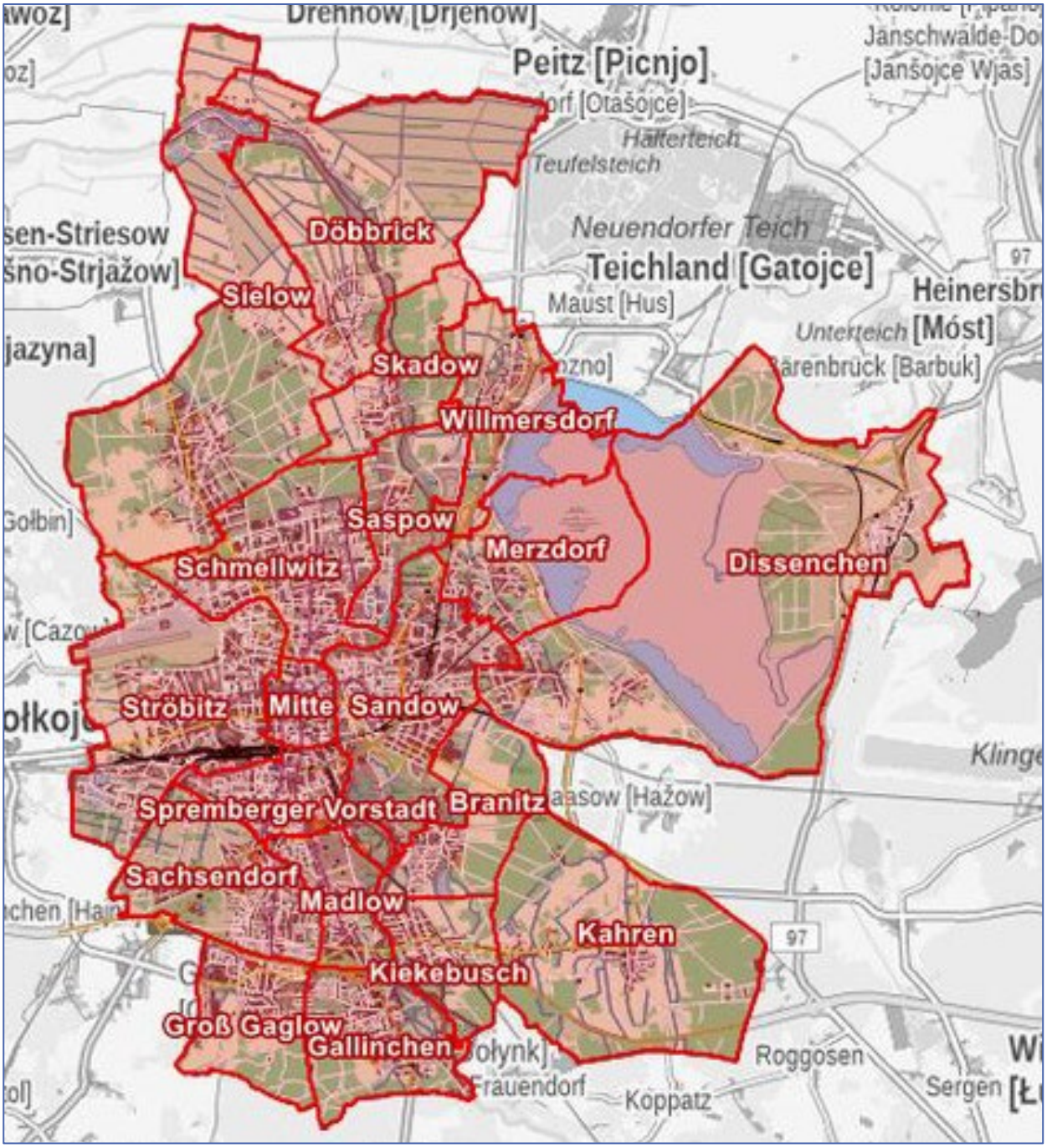


Figure 3 Districts of the city of Cottbus (City of Cottbus, 2022)

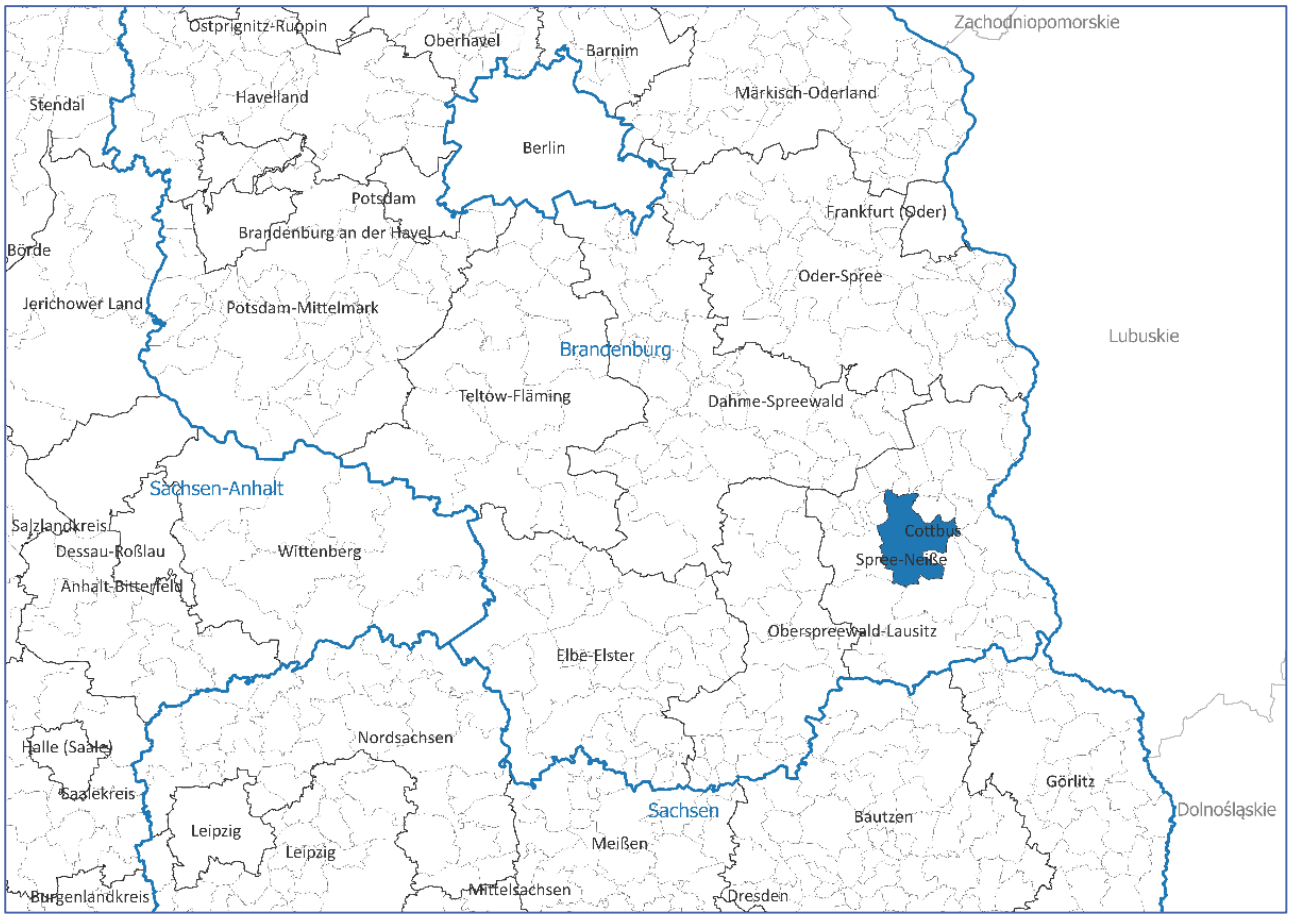


Figure 4 Cottbus and its surrounding districts (Head Office of Geodesy and Cartography, 2023 & Federal Agency for Cartography and Geodesy, 2024)

The total area of the urban area is 165.0 km² with the following characteristics: 25.4 km² buildings and open spaces, 35.6 km² forest area, 13.0 km² transport area, 8.9 km² sports and recreation area and 5.6 km² water area (excluding Cottbus Lake).

Transport:

The city is well connected via the A15 motorway, which runs from the Spreewald motorway interchange (A13 Dresden-Berlin) to the town of Forst (Spreewald) on the Polish border, where it joins the A18 towards Wrocław (Poland). The A15 motorway runs through the southern part of Cottbus/Chóśebuz and offers two junctions within the city limits. The distance to the Schönefelder Kreuz junction (A10 Berliner Ring) is around 92 kilometres, which means that Berlin city centre can be reached in around 90 minutes. The journey to Dresden takes around 90 minutes. The journey to Breslau (Wrocław) takes around 300 minutes.

The location of Cottbus/Chóśebuz is rather peripheral within Germany, but central in Europe. Although the A15 motorway is not yet a designated economic axis, it improves the city's accessibility.

In addition, the B97, B168 and B169 federal roads cross Cottbus/Chóśebuz in a north-south direction, with the B169 acting as the southern and eastern part of the city ring road and helping to relieve traffic in the city centre. A bypass to the east of the city is being developed to further reduce traffic congestion.

Cottbus/Chóśebuz main station is served by several regional express train (RE) and regional train lines. The most important connection is the RE 2 line, which connects Cottbus with Berlin hourly. There are also direct connections to Leipzig (RE 10) and Dresden (RE 18) every two hours. There are also six regional railway lines

to various regional destinations. There is a daily Intercity (IC) connection to Berlin, Hanover and Emden/Norddeich-Mole. Local public transport services include four tram and 44 bus lines. The nearest international airport is Berlin Brandenburg International Airport, which is about an hour's drive away.

The city and regional bus systems are highly interconnected in terms of function and operation, which means that some bus routes are operated both within and outside the city centre. The tram and city bus lines are the responsibility of the city of Cottbus/Chóśebuz, while the regional bus lines are the responsibility of the district of Spree-Neiße and in some cases the district of Oberspreewald-Lausitz. The city lines are operated by Cottbusverkehr GmbH, while the regional bus lines are operated by several operators, including Leo-Reisen and DB Regio Bus Ost. The public transport network covers the entire city area. In 2017, a total of 2,467,409 operated kilometres (km) were recorded in the city area, of which 1,001,046 train-km tram and 1,466,363 scheduled km city bus. In addition, there are 741,247 scheduled kilometres of regional buses in the urban area. In total, this corresponds to approx. 31.9 operated kilometres per inhabitant (City of Cottbus/Chóśebuz, 2019).

In addition to other modes of transport, the cycling infrastructure is also well developed. The city is currently working on the new 2035+ cycling concept with the aim of creating an improved and denser cycling network that connects all districts and is secured by clear quality standards. More safe, comfortable and sufficiently wide cycling facilities are planned, as well as marking solutions that can be implemented quickly. In addition, the network is to be expanded to include attractive cycle lanes and a higher number of parking facilities of standardised quality, particularly at public transport hubs. Key measures to promote cycling also include increased communication, public relations and mobility education (City of Cottbus, 2024).

Inbound and outbound commuters

The city of Cottbus/Chóśebuz has a significant surplus of commuters. A total of 22,992 people commute into the city every day, while 12,754 people commute out of Cottbus. In addition, there are around 25,000 so-called internal commuters within the city who have their workplace within the city limits. The balance, i.e. the difference between inbound and outbound commuters, is 10,238, resulting in a daily population of 109,753 people in Cottbus/Chóśebuz (Federal Employment Agency, 2023).

Economy and structural change:

Cottbus/Chóśebuz forms the centre of the so called 'Berlin-Lausitz innovation corridor' in the south of the capital region, analogous to the 'development axis' of the Brandenburg Regional Development Strategy (2023). Therein the Cottbus 'Lausitz Science Park' (LSP) is an important magnet for science and technology on a total area of 420 hectares. Together with the 'Berlin-Adlershof Technology Park', it is a catalyst for the successful and sustainable development of the region. The LSP is one of the pillars of structural change. It offers extensive settlement opportunities, creating additional jobs in research and in small and medium-sized enterprises. This will attract people to the region, but will also help to retain skilled labour in Lusatia.

The adoption of the 'Structural Strengthening of Coal Regions Act' by the German Bundestag and the Bundesrat on 3 July 2020 has opened up completely new development prospects for Lusatia, as one of the regions undergoing structural change, and in particular for the city of Cottbus/Chóśebuz. This dynamic is already manifesting itself today in the settlement of numerous large and small companies, federal authorities and research institutions and is leading to a fundamental change in the labour market situation.

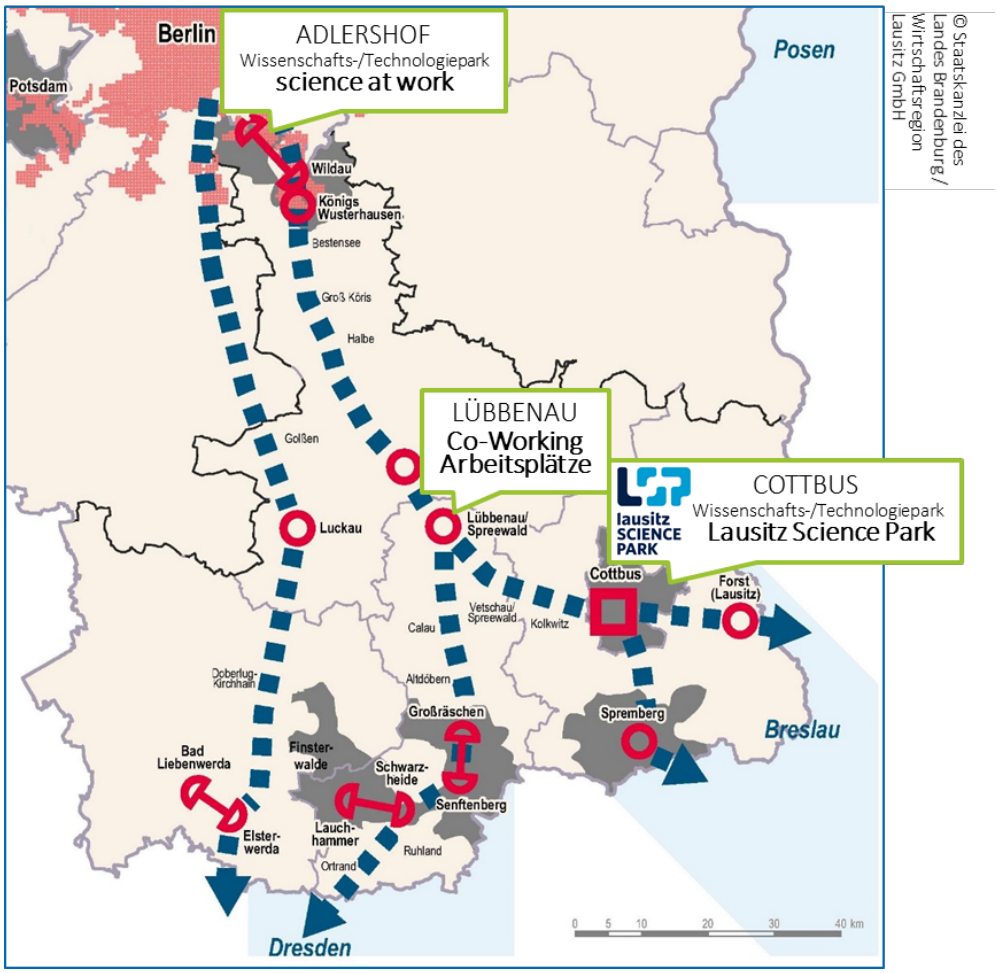


Figure 5 Berlin-Lausitz Innovation Axis (State Chancellery of Brandenburg / Economic Region Lausitz GmbH)

Regional structural transition, particularly marked by the Federal Government's 2020 decision to phase out lignite-fired power generation (Coal Phase-out Act) by 2038, is shaping the city's sustainability strategies to a significant degree. Future urban and structural development is recognized as an opportunity to develop and implement sustainable and innovative projects that promote social life and ecological balance. The city of Cottbus/Chóśebuz is evolving from a lignite-mining region into a model project for innovative green energy transition and sustainable urban development.

Following a resolution by the German Bundestag and Bundesrat to financially support structural development in the lignite mining regions, the federal government has made over €10 billion available to the Brandenburg part of Lusatia until 2038. This is intended to facilitate the transformation from a former lignite mining region into a modern and innovative model region for climate protection and sustainable growth.

The most significant strategic developments and location decisions include Deutsche Bahn's ICE (High-speed train) maintenance depot, the establishment of the Lausitz Science Park as part of the Berlin-Lausitz innovation axis, and the new establishment of the former municipal hospital into the Lausitz Medical University – Carl Thiem. The re-use of the former Cottbus-Nord open-cast lignite mine into Germany's largest artificially created lake, which will serve as a nationally significant tourist attraction, is taking concrete shape with the flooding, which will be completed at the end of 2024.

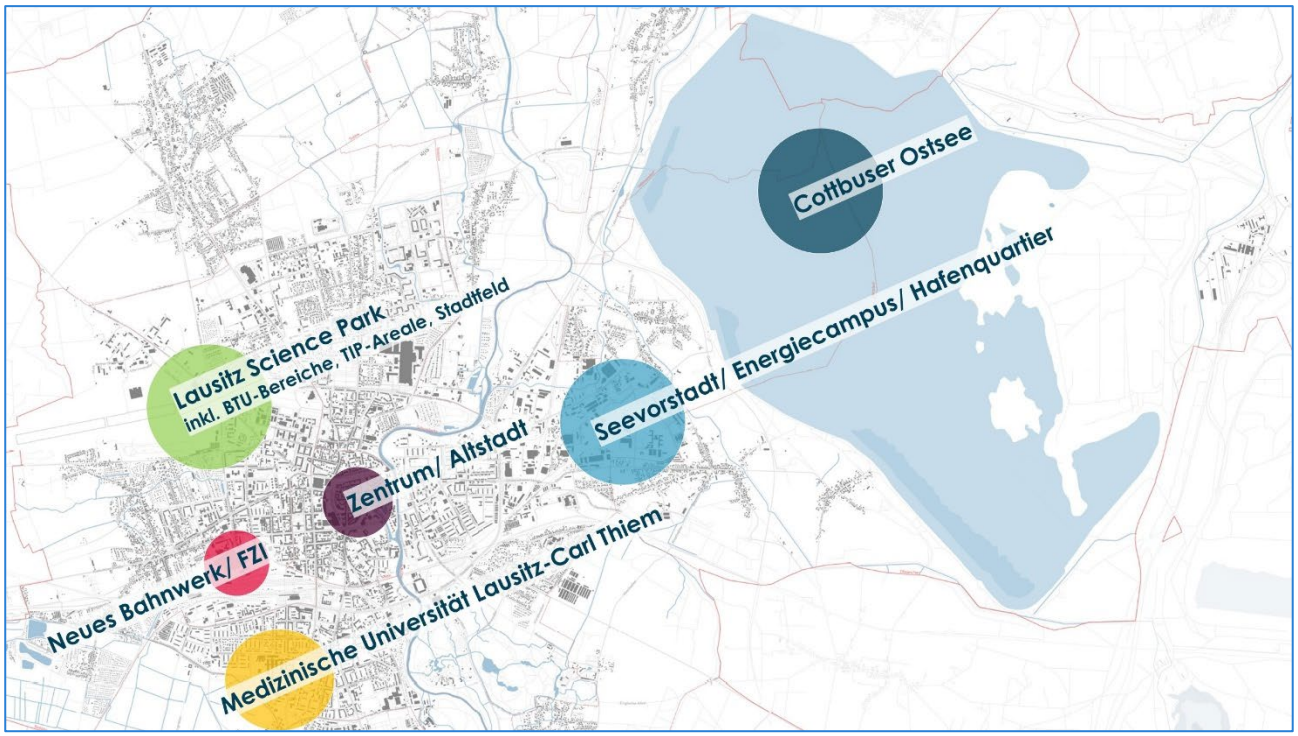


Figure 6 Development priorities of structural transition in Cottbus/Chóśebuz (City of Cottbus/Chóśebuz)

Research and education

The Brandenburg University of Technology (BTU) Cottbus-Senftenberg is an internationally recognized, innovation-oriented, and modern technical university. At its three locations in Cottbus, Cottbus-Sachsendorf, and Senftenberg, the BTU offers a wide range of study options to approximately 7,000 students. Approximately 44 percent of students come from abroad (from more than 120 countries). The largest national groups are India, Pakistan, Bangladesh, and Iran. The proportion of women among the total student population at the BTU is 43 percent.

In addition, there are the following educational institutions: two upper secondary schools, one second-chance colleges, eleven secondary schools (5 grammar schools, 2 comprehensive schools, 3 upper secondary schools, 1 Waldorf school), fourteen primary schools and two special needs schools.

2 SUMMARY AND HIGHLIGHTS

Process and Methodology:

Creation of the VLR: For the first time, a VLR (Voluntary Local Review) was prepared by the city of Cottbus/Chóśebuz. Internal and external activities related to sustainable development were recorded.

Coordination: The Cottbus/Chóśebuz city administration currently lacks a dedicated coordination office for sustainability issues, which is a challenge. Therefore, the Urban Development Department has taken the lead in preparing the first voluntary local review.

Focus: This report focuses on SDG 11 (Sustainable Cities and Communities). Additional SDGs will be addressed in the coming years. Eight indicators related to SDG 11 were selected, including rental prices, living space, car density, electric vehicles, traffic accidents, modal split, land consumption, and recreational areas.

Indicators and results:

Affordable housing (Target 11.1):

- Establishment quotas for subsidized housing in development planning procedures.
- Extensive use of urban development state funding.

Sustainable transport systems (Target 11.2):

- Introduction of on-demand minibus transport.
- Expansion of bicycle streets to promote cycling.

Land use and consumption (Target 11.3):

- Development of a new land use plan and landscape plan.

Preservation of World Heritage (Target 11.4):

- Striving for UNESCO status for the Prince Pückler Park in Branitz.

Reduction of natural disasters consequences (Target 11.5):

- Implementation of the sponge city approach and creation of a heat protection plan.

Reducing environmental pollution (Target 11.6):

- Creation of a solar power atlas and promotion of e-mobility through the expansion of e-charging stations.
- Introduction of emission-free buses and construction of a bicycle parking garage.

Access to green spaces (Target 11.7):

- Barrier-free expansion of public spaces and desealing of paved areas.

Special Highlights:

- Increase in living space per capita: Slight increase despite a monostructured housing market.
- Promotion of e-mobility: Share of electric vehicles has increased significantly.
- Road safety: Fluctuations in traffic accidents, no clear improvement evident.
- Green and recreational spaces: Increase in area per capita, improving quality of life.

3 SUSTAINABLE COMMUNITIES

The global challenges of our time must also be addressed locally. As early as the 1990s, cities joined international networks to work together toward a sustainable future. The Brundtland Commission's report was adopted by municipalities worldwide, and following Agenda 21, local implementation processes emerged in many places. (Servicestelle Kommunen in der Einen Welt (SKEW), 2022, S. 7). Today, municipalities around the world are involved in the processes of the 2030 Agenda and other sustainability strategies and are an essential pillar for achieving all sustainability goals.

The city of Cottbus/Chóśebuz committed itself to implementing the SDGs by signing the resolution "2030 Agenda for Sustainable Development: Shaping Sustainability at the Municipal Level" in 2020.

With the Voluntary Local Review (hereinafter referred to as VLR), the City of Cottbus/Chóśebuz aims to build on these efforts, outline areas for action, and at the same time clarify that local sustainable development activities are based on the fundamental understanding that global responsibility must be lived out in concrete terms at the local level. Municipalities, including Cottbus/Chóśebuz, are key partners in the implementation of the German Sustainability Strategy.

In accordance with the priority list agreed upon with the City Hall, the City of Cottbus/Chóśebuz is pursuing the following Sustainable Development Goals (SDGs) to improve sustainability at the municipal level:

- SDG 1: No poverty
- SDG 3: Health and well-being
- SDG 4: High-quality education
- SDG 9: Industry, innovation and infrastructure
- SDG 11: Sustainable cities and communities
- SDG 13: Climate protection measures

3.1 THE AGENDA 2030 IN THE CITY OF COTTBUS/CHÓŚEBUZ

The city of Cottbus/Chóśebuz, as a major centre in a former lignite mining region, is in the midst of structural transition. As the second-largest city in the state of Brandenburg, it embodies a particular important role in climate and environmental protection and reports on its current status and planned projects. As a liveable city, Cottbus/Chóśebuz stands for social justice, quality of life, and diversity – this report provides insight into a selection of current efforts. The city's economic attractiveness and reorientation should also be made visible to the public. With this report, Cottbus/Chóśebuz transparently demonstrates its own municipal commitment to implementing the Sustainable Development Goals (SDGs) and aims to encourage the city's community to actively participate and contribute.

VLRs are based on Voluntary National Reviews (VNRs). These serve as national reporting to the United Nations on the implementation of the 17 Sustainable Development Goals. This VLR is prepared by the municipality on a voluntary basis. Based on guiding principles, particularly quantitative indicators and time series analyses, it reports on existing successes and, where appropriate, future potential and needs for action to achieve the SDGs at the local level.

With this report, the City of Cottbus/Chóśebuz is preparing its first VLR, initially focusing on SDG 11, "Sustainable Cities and Communities," as urban development represents a central and comprehensive area of responsibility for the successful implementation of structural change. SDG 11 aims to "make cities and human settlements inclusive, safe, resilient, and sustainable." The structural transition process uniquely offers the city opportunities to achieve these goals. However, the City of Cottbus/Chóśebuz is also committed to pursuing in other SDGs. These efforts will be incorporated into subsequent reports.

3.2 INTEGRATION OF EXISTING SUSTAINABILITY INITIATIVES INTO AGENDA 2030 PROCESSES

The city of Cottbus/Chóśebuz has developed comprehensive strategies in advance of the implementation of the 2030 Agenda, expressing its commitment to the SDGs. Cottbus/Chóśebuz has numerous civil society actors who are involved in various sustainability-related areas or can be recruited for further initiatives. Within the city administration, there have been and continue to be numerous activities in which employees use their scope to improve sustainability. In addition to the Department of Education and Integration (Fachbereich Bildung und Integration), these include the Departments of Environment and Nature (Fachbereich Umwelt und Natur), Urban Development (Fachbereich Stadtentwicklung), and the Economics and Digitalization Staff Units (Stabstelle Wirtschaft und Digitalisierung).

The city's previous commitment is also reflected in its winning the Newcomer Award in the "Municipality Moves the World" ("Kommune bewegt Welt") competition in 2020 and its role as a model municipality for Education for Sustainable Development (ESD). In the same year, the city council overwhelmingly supported the model resolution and called on the mayor to sign it on behalf of the city of Cottbus. The mayor then signed the letter of interest in 2021.

An overall strategy to bundle all existing bilateral initiatives is currently being developed. The following section presents the municipal and topic-specific guiding principles already developed by the city of Cottbus/Chóśebuz. The focus lies particularly on concepts, programs, and strategies that are closely related to the content of the following chapters.

Cottbus/Chóśebuz is one of Germany's greenest cities, with landscapes rich in lakes and high-level biotope and species diversity. So, the "Cottbus/Chóśebuz 2035 Mission Statement" („Leitbild Cottbus/Chóśebuz 2035", 2017) focuses on the further development and strengthening of existing natural areas. These include the many park ensembles and the Prince-Pückler-Park, as well as the Spree river landscape and the future Cottbus lake (Cottbuser Ostsee) as a representing site of landscape transformation.

The "Urban Redevelopment Concept of the City of Cottbus/Chóśebuz" („Stadtumbaukonzept der Stadt Cottbus/Chóśebuz", 2019) addresses the sustainable transformation of Cottbus/Chóśebuz's urban structures. It aims to make the city future-proof in response to demographic change and changing economic conditions. The focus is on reducing land use, increasing densification, and improving the energy efficiency of existing buildings in order to conserve resources and improve the quality of life of the citizens. Sustainability is a central aspect here, which is to be implemented through environmentally friendly construction methods and the strengthening of green spaces in urban planning (City of Cottbus/Chóśebuz, 2019b).

The "Integrated Urban Development Concept Cottbus/Chóśebuz 2035" („Integrierte Stadtentwicklungskonzept Cottbus/Chóśebuz 2035", 1st update, 2019) is committed to holistic and sustainable urban development that combines ecological, social, and economic aspects. It focuses on making the urban structure sustainable through energy-efficient construction methods and the preservation of green and open spaces. Particular attention is paid to improving mobility through the expansion of public transport and the promotion of pedestrian and bicycle paths. Furthermore, the Cottbus lake post-mining landscape at the city's gates plays a central role, not only as a leisure and recreation area, but also as a driver for sustainable economic development through innovative utilization concepts and renewable energies (City of Cottbus/Chóśebuz, 2019c). The City of Cottbus/Chóśebuz is currently preparing the 2nd update of the Integrated Urban Development Concept. The update was necessary due to the changed framework conditions and development impulses associated with the onset of structural transition, which have led to changed and new development perspectives.

The "Old Town Mobility Concept" („Mobilitätskonzept Altstadt", 2019) focuses on the development of a sustainable transport system in Cottbus/ Chóśebuz. It includes the promotion of local public transport, the expansion of the cycle path network, and the creation of incentives for low-emission mobility. The approach is to reduce carbon emissions and to improve the quality of life in the city. The mobility concept is an integral

component of sustainable urban development and contributes to making Cottbus more environmentally friendly and liveable (City of Cottbus/Chóśebuz, 2019).

The "Cottbus Lake Development Strategy" („Entwicklungsstrategie Cottbuser Ostsee", 2020) is strongly focused on creating a sustainable local recreation area. It includes measures to promote biodiversity, expand renewable energies, and develop environmentally friendly leisure activities. The Cottbus Lake is intended to serve as a key symbol of the region's successful structural transformation and, at the same time, as a model for sustainable urban development. Particular emphasis is placed on safeguarding the lake's long-term ecological and social functions for the city and its surroundings (City of Cottbus/Chóśebuz, 2019).

The "Lausitz Program 2038" (2020) represents a long-term development plan for the structural transition process in the region, which sees sustainability as a central pillar of the transformation. Its main objective is the development of "soft location factors" into a region with a high quality of life and cultural diversity. It also includes investments in sustainable technologies, education, and infrastructure projects designed to make the region fit for the future. The promotion of renewable energies and the development of green jobs are cited as key strategies for transforming Lusatia and Cottbus/Chóśebuz into a model region for sustainable development (State of Brandenburg, 2020).

The "Lusatia 2050 Development Strategy" („Entwicklungsstrategie Lausitz 2050", 2020) outlines clear perspectives and future fields in cross-border regional development for the Lusatia region as a place to live and work, and serves as a guide for the sustainable structural development of the city of Cottbus/Chóśebuz. The regional future guidelines, with their seven visions, are decisive. For the city of Cottbus/Chóśebuz, these include the following strategic approaches: making cities and villages more attractive, improving transport infrastructure and mobility, ensuring future-proof social services, digitization, and the energy industry (WRL, 2020).

The document "Sustainability in Structural Change - Impulses from Cottbus" (2022) describes structural transition as a key opportunity for the city's sustainable development. It emphasizes the need to implement all urban development and infrastructure projects with a clear sustainability commitment. This includes carbon neutral development, the use of renewable energies, the promotion of cycling and walking, and the integration of education for sustainable development. The paper sees structural transition as an opportunity to fundamentally redesign Cottbus/Chóśebuz in a sustainable manner in order to meet future challenges (City of Cottbus/Chóśebuz, 2022).

Cottbus/Chóśebuz is currently elaborating an Integrated Climate Protection Plan, which will outline a wide range of measures by 2030 to achieve the goal of climate neutrality by 2045. Development of the concept started in December 2022 with comprehensive data collection and analysis. A key component of this process is the involvement of citizens, who have been actively involved in the concept development through online participation and workshops. For example, stakeholder workshops were held in November 2023 and February 2024 to discuss specific topics such as buildings, energy, and mobility. The City of Cottbus/Chóśebuz attaches great importance to making the entire process transparent and continuously informing the city's community about progress. A website was established for this purpose (City of Cottbus/Chóśebuz, 2024).

4 PROCESS UND METHODOLOGY

This chapter describes the process, guiding principles, methodology and indicators for the preparation of this VLR for the city of Cottbus/Chóśebuz.

4.1 VLR CREATION PROCESS

With this report, the City of Cottbus/Chóśebuz is producing its first VLR. This also marks the first time that an internal administrative process has been initiated to identify, communicate, classify, and appropriately visualize the various bilateral activities that exist both within and outside the administration. It should be noted that the necessary data basis is not sufficient in all areas, both qualitatively and quantitatively, to reflect a wider selection and greater depth of the indicators presented in this report. This finding, along with the experience gained from the coordinated data collection, query, and compilation into a joint report, underscores the importance of a strategically coordinated and, above all, continuous approach. Since, at the time of the report's creation, the Cottbus/Chóśebuz City Administration did not have a representative or department specifically responsible for coordinating sustainability issues at the working level, the preparation of the report presented a particular challenge.

This report was coordinated and compiled under the leadership of the Department of Urban Development. The need for an overall strategy and the associated creation of a coordinating area of responsibility within the administration has been a topic of discussion for some time. The Departments of Education and Integration and Urban Development, in particular, have been striving for some time to pool relevant activities and develop strategies. There is a lively exchange of views on this topic at the working level. Furthermore, a strategic consultation has already been held with the town hall leadership.

This report initially focuses on activities and indicators related to sustainable urban development (SDG 11). Building on this, the report will be expanded to include additional SDGs in subsequent years.

4.2 GUIDELINES

Some of the topic-specific guiding principles are reflected in the respective development concepts (see also Chapter 3.2). These must be consolidated into an overarching, city-wide guiding principle in the context of developing a common sustainability strategy.

4.3 INDICATORS

This report uses so-called sustainability indicators. These are "indicators that describe the status and trends toward achieving the goal of sustainable development" (UBA 2025). It is sensible to use proven indicators that are typically also used in comparable municipalities. However, these should be supplemented, if necessary, by additional indicators that characterize a municipality quantitatively and qualitatively. In such cases, this report uses qualitative descriptions in some cases and, where necessary, supplements them with explanations of projects and measures related to a goal.

Building on these previous considerations, Cottbus has selected a total of eight indicators that correspond to the proposals of the 2022 publication "SDG Indicators for Municipalities – Indicator Mapping Sustainable Development Goals of the United Nations in German Municipalities" (Bertelsmann Stiftung et al., 2022). The selection of indicators refers to the thematic area SDG 11 "Sustainable Cities and Communities."

Only a limited number of indicators could be considered for this report. This is primarily due to the lack of local data, in some cases, and the lack of structured data collection and analysis for an overall strategic sustainability assessment. The presentation of additional indicators is expected in subsequent reports.

SDG	Target	Indicator	Source
11	1	**Housing – rental prices**	SDG Portal/ Bundesinstitut für Bau-, Stadt- und Raumforschung
11	1	**Housing – living space**	SDG Portal/ Amt für Statistik Berlin-Brandenburg
11	2	**Mobility – car-density**	SDG Portal/ Kraftfahrt Bundesamt und Amt für Statistik Berlin-Brandenburg
11	2	**Mobility – electric vehicle**	SDG Portal/ Kraftfahrt Bundesamt
11	2	**Mobility - Traffic accident victims**	SDG Portal/ Amt für Statistik Berlin-Brandenburg
11	2	**Mobility - Modal split**	TU Dresden
11	3	**Land use - share of settlement and traffic area in the total area**	SDG Portal/ Statistische Ämter des Bundes und Amt für Statistik Berlin-Brandenburg
11	7	**Recreational areas, square meters per inhabitant (proportion of publicly accessible open spaces)**	SDG Portal/ Amt für Statistik Berlin-Brandenburg

Figure 7 Overview of the selection of indicators

5 SDG 11

SDG 11 aims to make cities and communities inclusive, safe, resilient, and sustainable. Cities should be planned and managed to ensure that:

- they are accessible and safe for all residents,
- they are able to respond to challenges such as natural disasters, and
- they are environmentally friendly.

In terms of content, SDG 11 generally includes several objectives, including:

- Ensuring access to affordable housing and basic services.
- Improving sustainable and safe transport systems for all, particularly through expanding public transport.
- Increasing inclusive and sustainable urbanization and strengthening the capacity for participatory, integrated, and sustainable human settlement planning and management.
- Protecting and preserving World Heritage.
- Reducing the number of deaths and people affected by disasters, particularly by protecting the poor and vulnerable.
- Reducing the negative environmental impacts of cities, including paying special attention to air quality and waste management.

  Providing safe, inclusive, and accessible green spaces and public spaces.

The global relevance of SDG 11 arises from the rapid urbanization worldwide. Over half of the world's population now lives in urban areas, and this number is expected to continue to grow. Urban areas are often economic centres that present significant opportunities, but also challenges, such as social inequality, environmental pollution, and infrastructure bottlenecks. Making cities more sustainable can ensure that urban development contributes to a better quality of life for all residents while reducing the ecological footprint. SDG 11 emphasizes the importance of planning and managing urban spaces to ensure a sustainable future and meet the challenges of the 21st century.

5.1 SDG 11 IN DETAIL

To improve the quality of life, the city of Cottbus/Chóśebuz must become more inclusive, safer, more energy-efficient, and more climate-friendly. Together with its municipal partners, the city is already actively developing and implementing measures. Other potential approaches with development potential and targeted impacts are also being considered:

Target 11.1 – Affordable housing
=> Establish a quota for subsidized housing in development planning procedures (idea)
=> Urban development funding is already being used intensively

Target 11.2 – Sustainable transport systems
=> Cottbusverkehr: „claudio" on-demand-service by minibuses (Demand-responsive transport for serving rural areas)
=> Expansion of bicycle streets to create a bicycle-friendly community

Target 11.3 Land use
=> Land use planning (new plan in preparation)
=> Landscape plan with open space development concept (analogous to land use plan in preparation)

Target 11.4. - Cultural and natural heritage
=> Achievement of UNESCO status for the Prince Pückler Park in Branitz

Target 11.5 – Reducing natural disasters
=> Sponge city approach (continuous implementation by municipal partners)
=> Heat protection plan (carried out as part of the Climate Adaptation Concept)
=> Integrated Climate Protection Concept including development path and action plan (decision expected in 2025)

Target 11.6 – Reducing of environmental pollution
=> Target and action plan for solar energy expansion (local solar concept has been approved)
=> Municipal heat planning (in development process)
=> Promoting e-mobility to improve air quality => Expansion of numbers of e-charging stations (in development)
=> Mobility model: Expansion of emission-free buses => Conversion to hydrogen buses (in process)
=> Construction of a bicycle parking garage in the northern station district (implementation from 2025)
=> Principle Directive on climate protection and climate adaptation measures in urban land-use planning (decision expected in 2025)

Target 11.7 – Ensuring access to public green spaces/areas
=> Accessible public space expansion (Example: Cottbus/Chóśebuz Sports Center)
=> Removal of paved surfaces (implementation will be project-specific)

5.2 SDG 11 ACTUAL STATE ANALYSIS

Cottbus/Chóśebuz is a major entre in the Lusatia region, which is facing significant structural challenges, primarily due to the planned phase-out of carbon-based energy. This transformation requires sustainable urban development in accordance with SDG 11 - Sustainable Cities and Communities, to promote social, economic, and ecological sustainability. Neighbourhoods, as essential places of daily life, play a crucial role in this transition. They should offer a high quality of life while prioritizing environmental protection and the efficient use of resources. Given the currently stagnating population growth (forecast currently being developed), Cottbus/Chóśebuz must ensure affordable housing while simultaneously fostering an inclusive community. The provision of infrastructure, including access to utilities, green spaces, and cultural offerings, is essential to ensuring the participation of all citizens in social life and their quality of life.

5.2.1 Target 11.1

Target 11.1: "By 2030, ensure access to adequate, safe and affordable housing and basic services for all and rehabilitate slums."

5.2.1.1 Indicator rental price

Local significance:

The housing market in Cottbus/Chóśebuz has stabilized over the past decade due to positive overall economic momentum and a reversal in population growth. Quantitatively, the housing market is largely balanced. Due to the highly mono structured housing market as a whole, as well as its spatial concentration (predominantly prefabricated buildings), qualitatively speaking, there is a coexistence of housing surpluses on the one hand and high-demand housing on the other.

The challenges for social housing arise from both the current situation and the structural change process and thus the city's growth target.

Classification and definition:

The "Rent Prices" indicator illustrates the development of rent prices in a municipality and, in combination with other indicators, can provide information about housing affordability, for example. It helps assess the

impact of policy measures in the housing market and identify areas where action is needed. For example, rising rent prices can signal the need to create additional housing or fund social housing. Ultimately, monitoring rent prices contributes to improving the social and economic conditions of residents and achieving SDG Goal 11.1.

Calculation basis:

– SDG-Portal/ data source: Federal Institute for Research on Building, Urban Affairs and Spatial Development

Chart:

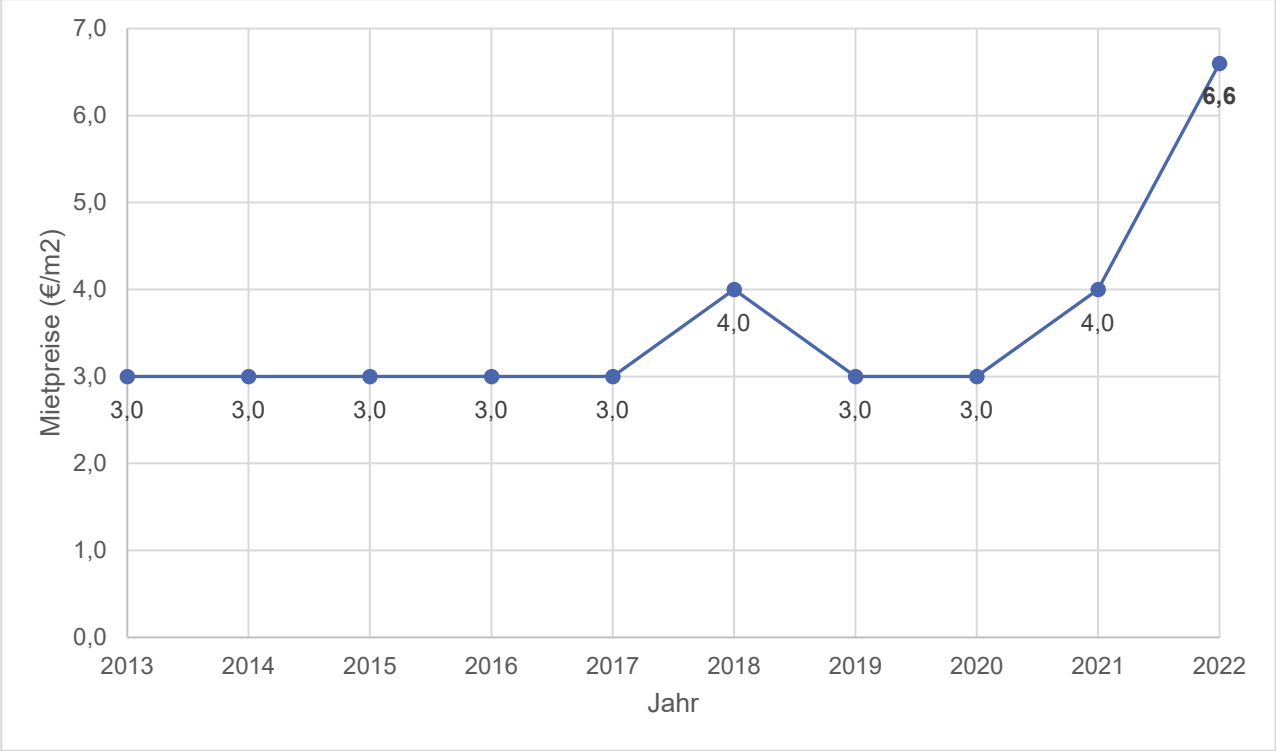


Figure 8 Rent price development (net rent per square meter) (Data source: SDG Portal/ Federal Institute for Research on Building, Urban Affairs and Spatial Development)

Description of the data:

The "Rental Prices (€/m²)" indicator is ideal for mapping access to affordable housing. In Cottbus/Chóśebuz, rents have increased significantly during the period under review. Although rents are below the state average, Cottbus/Chóśebuz is experiencing a steeper growth curve. With an average net cold rent of €6.60 per square meter in 2022, rents in Cottbus have increased by 120%, or €3.60, compared to 2019. This puts Cottbus/Chóśebuz above the average net cold rent in Brandenburg of €5.60 per square meter in 2022, but also below the average for Frankfurt (Oder) of €6.30 per square meter (Federal Statistical Office (Destatis), 2024).

In Cottbus/Chóśebuz, the rent burden ratio was 24.7% in 2022, just below the figure for Brandenburg as a whole (25.3%), but slightly above the national average (24.5%). Compared to 2018, when the ratio in Cottbus/Chóśebuz was 22.5%, this represents an increase of 2.2 percentage points (Federal Statistical Office (Destatis), 2024a; Berlin-Brandenburg Statistical Office, 2019 and 2024).

Discussion:

Rent price trends are highly relevant for regions undergoing structural change, such as Cottbus, as they influence both the attractiveness of new residents and economic development. Socially acceptable rents can be a decisive factor in attracting individuals and companies seeking lower personnel costs.

Since the "series of figures" is currently still very short and the rent index has a more detailed structure, it should be noted that municipalities with more than 50,000 inhabitants are now required to compile a rent index as of July 1, 2022. Therefore, this indicator must be reviewed regularly, or a municipal rent index must be compiled. Data will be available and used in the update of the VLR report.

5.2.1.2 Indicator living space

Local significance:

Due to the mono structured housing market, there are a large number of prefabricated three-room apartments with approximately 56m². Larger apartments for families are rather scarce, so this can lead to underoccupancy in terms of size for families.

Classification and definition:

The "living space in m² per capita" indicator is a key measure for assessing access to adequate housing under SDG Target 11.1. Increased living space per capita can improve quality of life by providing more personal space, comfort, and opportunities for social interaction. This has a positive impact on well-being and mental health and increases overall living standards (UN-Habitat, 2020).

At the same time, per capita living space is a complex indicator, as larger living spaces can lead to higher energy consumption and a larger ecological footprint. This negatively impacts the ecological sustainability of housing, as more resources are required for heating, cooling, and lighting, and more land is sealed. Therefore, it is important to find a balance that considers both improving quality of life and minimizing negative ecological impacts.

Calculation basis:

- (Living space) / (Number of residents)
- SDG-Portal/ Data source: Berlin-Brandenburg Office for Statistics

Data source:

- Berlin-Brandenburg Office for Statistics

Chart:

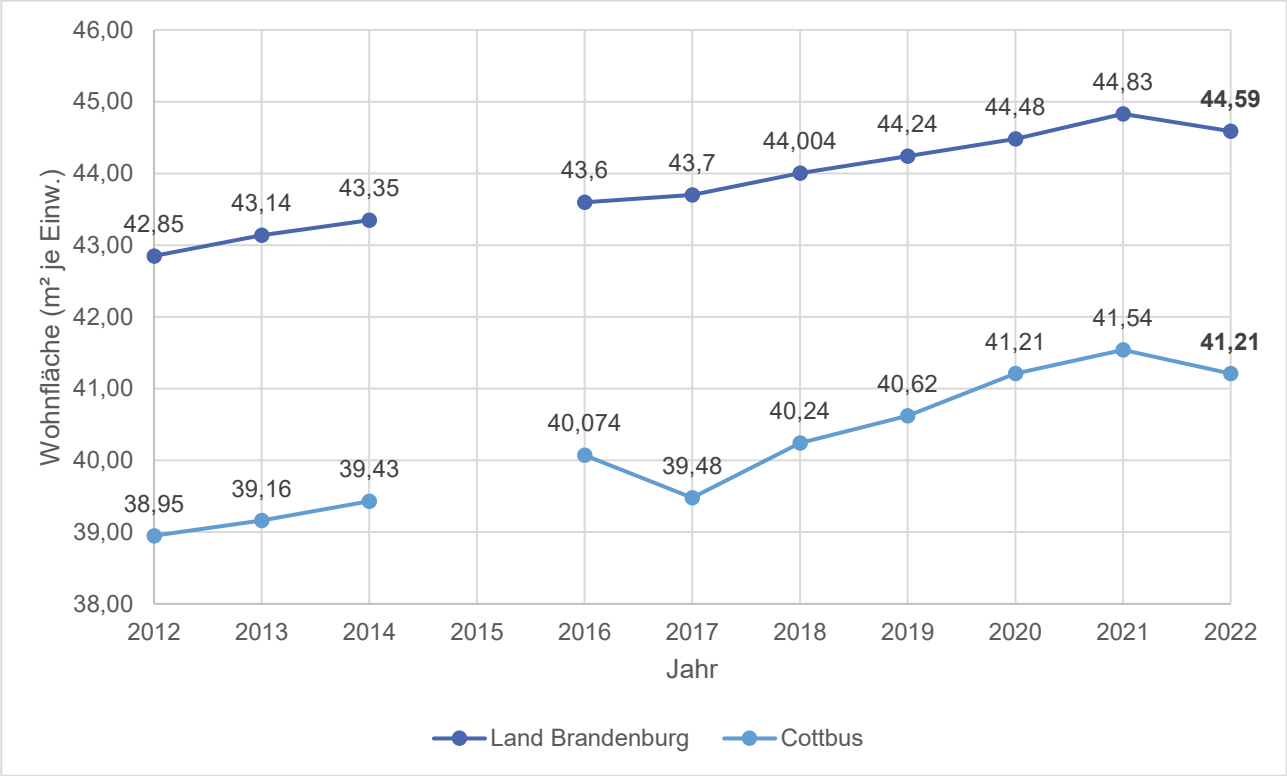


Figure 9 Living space in square meters per inhabitant (data source: SDG Portal/ Berlin-Brandenburg Office for Statistics)

Description of the data:

The city of Cottbus recognised a slight increase in living space (m² per inhabitant) during the period under review, with a slight decrease between 2021 and 2022. This development is not conspicuous and does not show any strong deviations from the federal state of Brandenburg data, where the per capita living space is on average higher than that of Cottbus.

Discussion:

The housing market in Cottbus/Chóśebuz is gaining momentum in light of structural change. A lot of movement is expected here in a short period of time, particularly the creation of higher-quality housing options to meet the desired influx of skilled workers. Particularly in the city centre, but also throughout the entire city, areas with potential for residential development have been identified and quantified as part of the revision of the land use plan.

5.2.2 Target 11.2

Target 11.2: "By 2030, ensure access to safe, affordable, accessible and sustainable transport systems for all and improve road safety, in particular through the development of public transport, with particular attention to the needs of people in vulnerable situations, women, children, persons with disabilities and elderly persons."

To this end, the Integrated Transport Development Plan (InVEPl) for Cottbus/Chóśebuz 2020 was developed in 2011. Its overarching approach is to improve and maintain the quality of life in the city. This is to be achieved through a series of measures aimed at sustainable and environmentally friendly transport development.

The **InVEPl's transport policy principles** include: The people in the city have priority, and transport must become more environmentally friendly, socially acceptable and safer.

Specifically, the following objectives are formulated in the InVEPl:

- **Reduction of pollutant emissions and noise:** Measures such as promoting public transport, cycling and walking, as well as optimising traffic flow, are intended to reduce air and noise pollution.
- **Increased road safety:** Improved infrastructure and adapted traffic management should reduce the number of accidents.
- **Improving accessibility:** The transport infrastructure should be designed so that it is easily usable by all people, regardless of their physical limitations.
- **Promoting public transport:** Public transport should be made more attractive to convince more people to switch from private cars.
- **Expansion of the cycling and pedestrian network:** The creation of safe and comfortable cycling and pedestrian paths is intended to increase the share of these modes of transport in total traffic.
- **Strengthening the economy:** A well-functioning transport infrastructure is an important site factor for companies. Targeted transport planning is intended to strengthen the city's economic viability.
- **Improving the quality of life for pedestrians and cyclists:** By giving these road users higher priority, the quality of life in the city should be improved.

5.2.2.1 Indicator Car density

Local significance:

Cottbus/Chóśebuz recognizes traffic not as an end in itself, but as an expression of urban living conditions, human communication, and a networked economy based on the division of labor. Nevertheless, car traffic in particular is associated with various problems, which the city of Cottbus/Chóśebuz has identified through various analyses and traffic surveys.

Classification and definition:

High car density, measured as the number of cars per 1,000 inhabitants, is an important measure of progress toward sustainable transport systems within the framework of SDG Target 11.2. This indicator can indicate inadequate public transport infrastructure, which conflicts with the goals of sustainable mobility. Reducing car density in favor of public transport and environmentally friendly modes of transport is essential to improving air quality and reducing emissions in urban areas.

The link between this indicator and Target 11.2 is established by the decline in car use and the increase in alternative and environmentally friendly means of transport.

Calculation basis:

- (Number of passenger cars) / (Number of residents) * 1,000
- Federal Motor Transport Office and Berlin-Brandenburg Statistical Office

Chart:

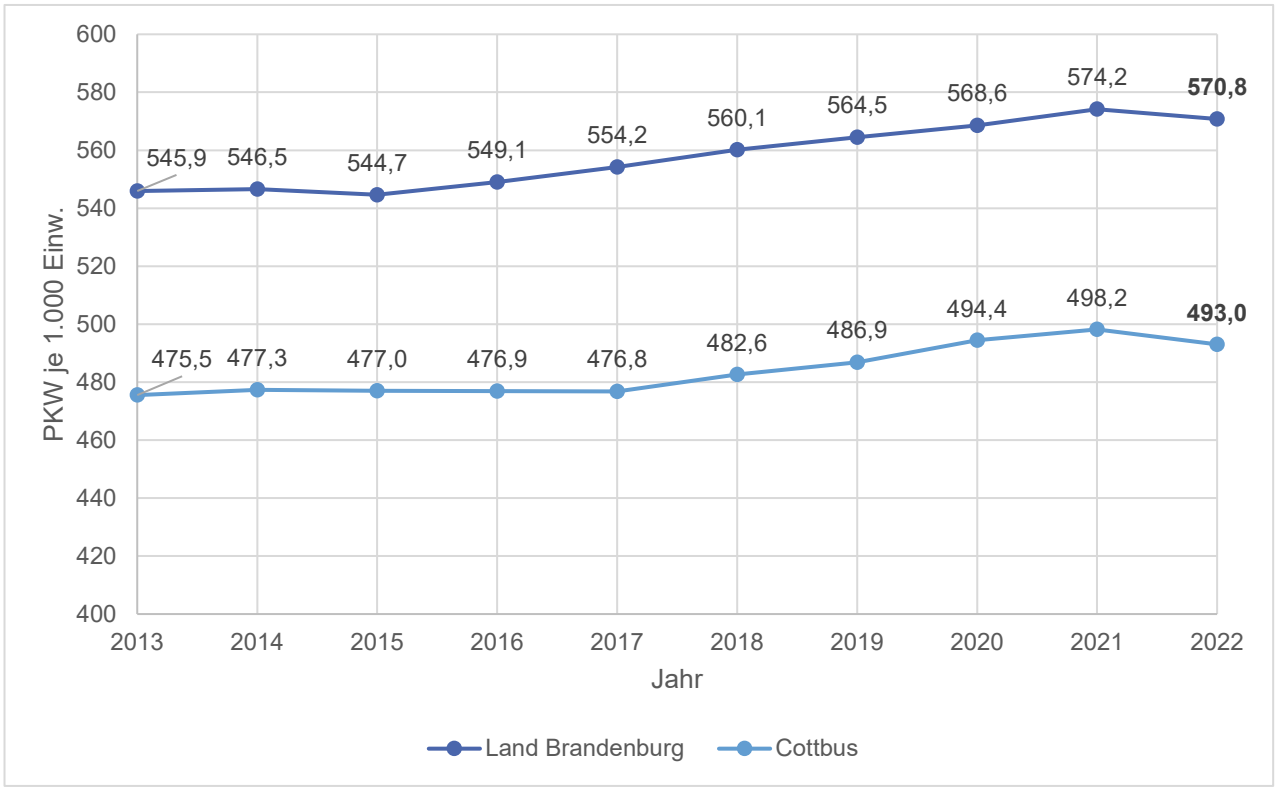


Figure 10 Car density per 1,000 inhabitants (data source: SDG Portal/Federal Motor Transport Office and Berlin-Brandenburg Office for Statistics)

Description oft he data:

Overall, car density increased slightly during the observed period. Hardly any changes were recorded between 2013 and 2017. However, a slight increase was recorded between 2017 and 2021. Between 2021 and 2022, however, car density fell again to 493 cars per 1,000 inhabitants, below the 2020 level. At the state level, the average is significantly higher at 571 cars per 1,000 inhabitants, but the density trend follows a similar pattern.

5.2.2.2 Indicator Electric vehicles

Local significance:

Alternative drives to meet residents' mobility needs have been a recurring topic in local political discourse for years – and not just in private transport. In Cottbus/Chóśebuz, public transport is well underway thanks to the existing tram network and the conversion of the Cottbusverkehr bus fleet to hydrogen drive. In the private transport sector, emission-free and low-noise drive systems contribute to improving quality of life and air quality. However, the still insufficient network of charging stations on public streets in Cottbus/Chóśebuz is a hindrance. This represents a significant obstacle to choosing a (purely) electric vehicle, particularly for car users who do not own property or are dependent on their landlords' offers. Corresponding draft resolutions and initial concepts, such as the mobility concept for the historical city centre of Cottbus/Chóśebuz, address this issue.

- Mobility concept for the historical city centre of Cottbus:
  - See p. 87 „Elektromobility (MIV)"
    - Here are some critical words: p. 88: "(...) Avoiding sustainable structural interventions**: Given the questionable establishment of e-mobility as the "final" drive technology,** as well as long-term uncertainties regarding demand and charging technology, non-reversible structural interventions, such as installing inductive charging plates in the ground, should be avoided. Instead, subsequently removable elements, such as wall-mounted charging boxes, are preferable."
- Integrated Urban Development Concept Cottbus/Chóśebuz 2035
  - Electromobility has a positive impact on the main objectives of "reducing pollutant emissions to keep air clean" and "reducing noise pollution to reduce noise"

Classification and definition:

Indicator 11.5 "Electric cars (%)" measures the share of electric vehicles in the total number of cars and is relevant for SDG Goal 11, and in particular Target 11.2. A higher share of electric vehicles reduces air pollution and greenhouse gas emissions, improves air quality in cities, and reduces dependence on fossil fuels. This contributes to achieving sustainable and environmentally friendly mobility.

Calculation basis:

- (Number of registered electric passenger cars (including plug-in hybrids)) / (Number of registered passenger cars) * 100
- Data source: Federal Motor Transport Authority

Chart:

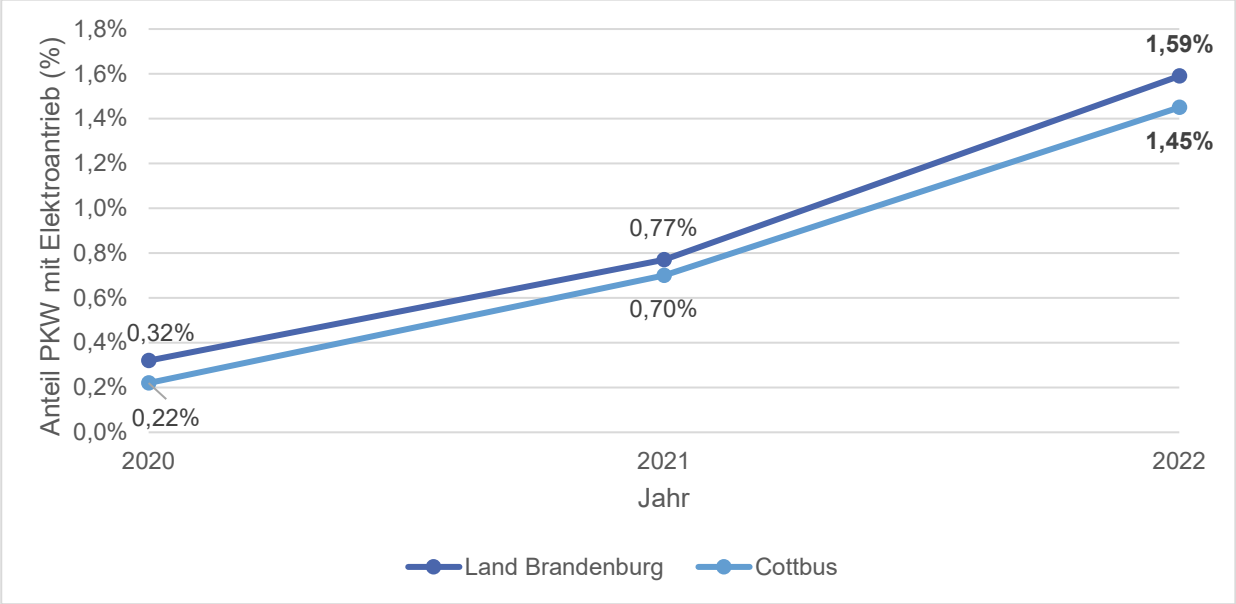


Figure 11 Share of electric cars (including plug-in hybrids) in registered cars (data source: SDG Portal/Federal Motor Vehicle Authority)

Description of the data:

Although the share of registered electric passenger cars among all registered passenger cars increased more than sevenfold between 2020 and 2022, it remains at a low level at 1.45%.

Discussion:

Appropriate charging infrastructure is a prerequisite for increasing the share of electric mobility. Activities in this area are expected from the local municipal utilities and other providers in the city in the coming years. The climate protection concept currently being developed (decision expected in the first quarter of 2025) also presents increasing the share of electric mobility in total traffic as one of the prerequisites for achieving the goal of climate neutrality for the city of Cottbus/Chóśebuz by 2045. Appropriate foundations must be created for this and also legitimized by local politicians.

5.2.2.3 Indicator traffic accident victims

Local significance:

Demographic developments and the noticeable structural transition that is beginning to emerge pose new challenges for transport planning due to a changing distribution of residents within the urban area, changing mobility requirements (e-mobility, greater use of eco-mobility, etc.) of different age groups, and technological developments. These include, among other things, restructuring of local transport networks, local demolition and reconstruction measures in the secondary road network and in public and private parking spaces, as well as structural changes in street spaces and adjustments to network structures.

A key aspect of this is also improving road safety. In the 2020 Integrated Transport Development Plan for the City of Cottbus/Chóśebuz, one of the three main objectives is "improving road safety." The mobility concept for Cottbus's Old Town discusses various measures to improve road safety. For example, in the preferred scenario (Level 3), these include:

- Creating barrier-free routes
- Low-conflict routing for cyclists and pedestrians
- Expanding the range of bicycle parking facilities.

The reduction of traffic accidents, especially in vulnerable population groups (children, senior citizens, cyclists), is addressed in the transport development plan through appropriate measures to increase road safety.

Classification and definition:

The indicator measures the number of road traffic accidents resulting in personal injury per 1,000 inhabitants and is relevant to SDG 11, particularly Target 11.2, as road safety is also recognized as an aspect of sustainable mobility. A high number of road traffic accidents indicates safety deficiencies in the transport system and requires measures to improve road safety, such as the expansion of safe infrastructure.

Calculation basis:

- (Number of people injured or killed in traffic accidents) / (Number of residents) * 1,000
- Data Source: Berlin-Brandenburg Office for Statistics

Graph:

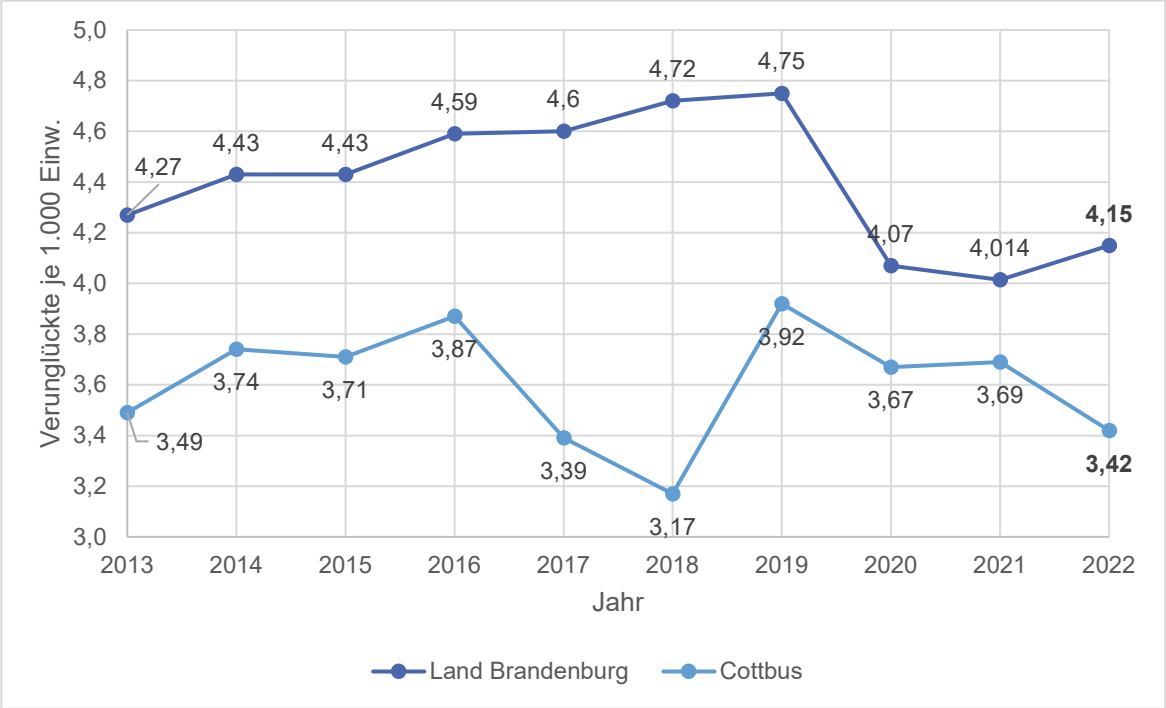


Figure 12 Number of people injured in traffic accidents per 1,000 inhabitants (data source: SDG Portal/ Berlin-Brandenburg Office for Statistics)

Description of the data:

Fluctuations in the number of injured or killed persons per 1,000 inhabitants can be observed between 2013 and 2022. However, no clear trend regarding a decrease or increase in road safety can be observed, suggesting that no significant improvement or deterioration in road safety has occurred.

Discussion:

In the city of Cottbus/Chóśebuz, many different committees have been working for years to coordinate efforts to improve road safety and eliminate accident hotspots. Changing connections and traffic patterns naturally create new areas where conflicts arise. However, it is positive to note that the total number of road users killed in Cottbus/Chóśebuz remains at a low level. The coronavirus pandemic has significantly improved accident rates due to an external change that could not be influenced and whose effects cannot be replicated by any measures.

However, it can be clearly stated that the majority of serious traffic accidents are caused by the injured person's disregard of traffic rules, with non-motorized road users being particularly frequently affected.

5.2.2.4 Indicator modal split

Local significance:

Every five years, the city of Cottbus/Chóśebuz participates in the representative traffic survey system (SrV) of the TU Dresden. In this context, the modal split is calculated, among other benchmarks.

Classification and definition:

Bertelsmann Stiftung et al. (2022): "The modal split describes the distribution of transport volumes among the different modes of transport (usually walking, cycling, local public transport (LPT), and private motorized transport (MIT)). The indicator thus provides a picture of mobility behavior within the municipality. In

the long term, the shares of non-motorized transport (i.e., walking and cycling) and public transport should be increased to ensure the sustainability of transport systems. According to the principle of global responsibility, the sustainability relevance derives from the ecological perspective of a local contribution to reducing greenhouse gas emissions and the associated mitigation of climate change. This also follows intragenerational justice. Aspects such as the redistribution of urban public space and reduced pollution levels for the population also have an impact on the social and economic dimensions in the sense of holistic sustainability."

Calculation basis:

– (Pedestrian, bicycle and public transport volume) / (Total traffic volume) * 100

Graph:

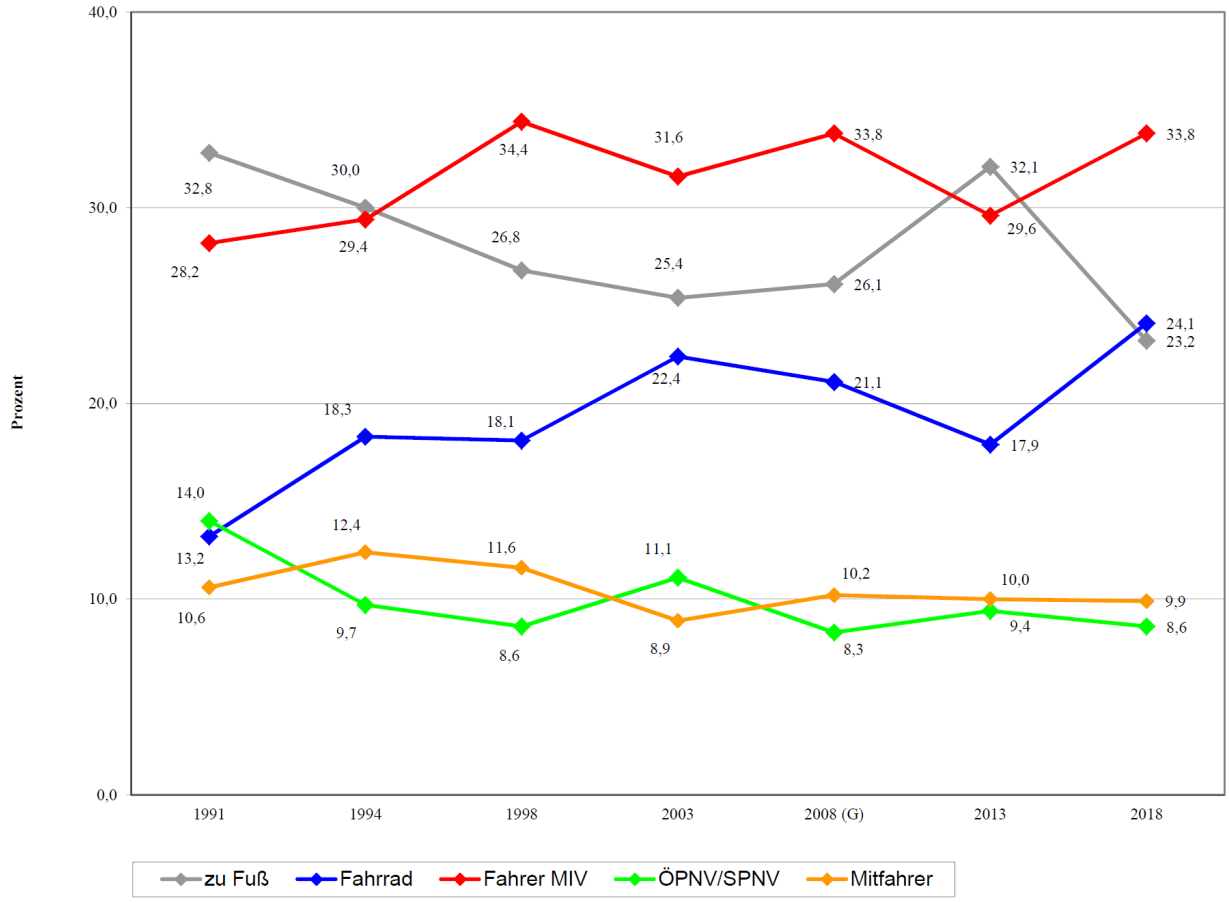
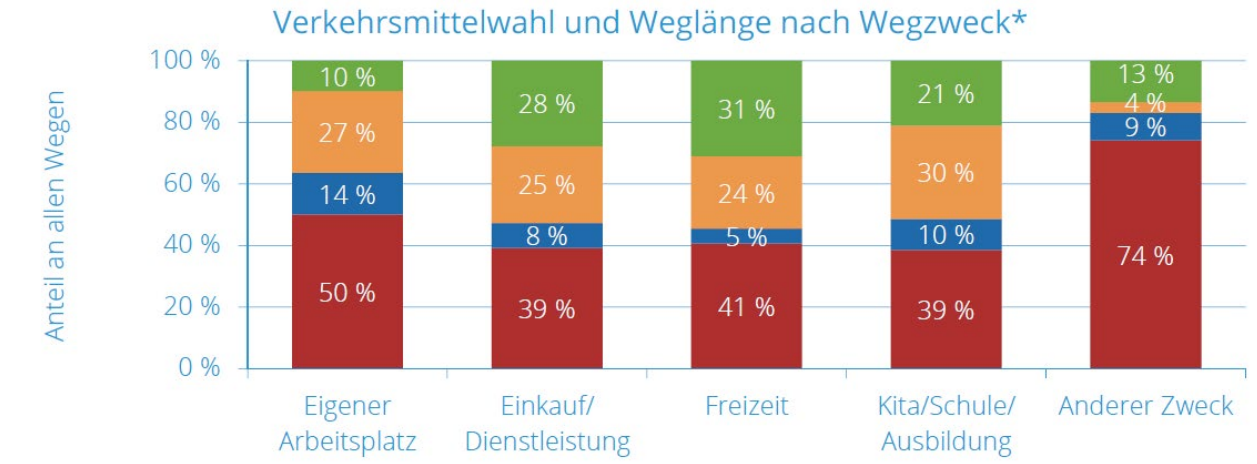


Figure 13 Distribution of traffic by main mode of transport (modal split) (City of Cottbus/Chóśebuz, 2019d)

The preceding figure shows the development of the modal split in Cottbus/Chóśebuz since 1991. In 2013, the TU Dresden introduced a new calculation method. Therefore, the values before 2013 are not comparable with the values from 2013 onwards. Nevertheless, a high private transport share of 33.8% in 2018 is evident, which has remained relatively stable over the years. Including passengers, approximately 44% of all trips in Cottbus/Chóśebuz were made by car in 2018. Bicycle traffic increased significantly at the expense of walking, from 17.9% in 2013 to 24.1% in 2018. Walking traffic decreased by the same amount. Thus, the desired shift from private transport (cars) to environmentally friendly modes of transport was not achieved. This is also shown by the development of the public transport share, which is well below the 10% mark (City of Cottbus/Chóśebuz, 2019d).



Weganteil Zweck	20 %	32 %	27 %	14 %	7 %
Mittlere Weglänge	10,9 km	3,6 km	5,7 km	3,7 km	12,9 km

**Hinweis: Wegen zur eigenen Wohnung wurde der Zweck der vorangegangenen Aktivität zugeordnet.*

Figure 14 Choice of means of transport and journey length according to journey purpose (TU Dresden, 2018)

The second figure clearly shows that even journeys under 4 km still have a very high proportion of car travel. These journeys should be replaced by environmentally friendly modes of transport in the future (TU Dresden, 2018).

Discussion:

Implementing measures to promote eco-mode transport is very costly and personnel intensive. Many of the necessary measures in the InVEPI and district-specific concepts can only be implemented in the medium to long term. The effects of strengthening eco-mode transport will therefore be delayed accordingly. Communities need significantly more support to implement these measures.

5.2.3 Target 11.3

Target 11.3: "By 2030, make urbanization more inclusive and sustainable and strengthen capacities for participatory, integrated and sustainable human settlement planning and management in all countries."

5.2.3.1 Indicator land use

Local significance:

The city of Cottbus/Chóśebuz strives to reduce land use for sustainable urban development to the necessary minimum and to limit it accordingly. To this end, it pursues a strategy of internal development over external development. Due to the changing framework conditions in recent years, triggered by structural transition and the associated positive developments, demand has increased significantly, particularly in the areas of residential and commercial space, public services, and supply. This affects the entire urban area. A particular spatial focus lies on the eastern part of the city, which stretches between the future Cottbus Lake and the city centre and is expected to provide significant impetus for overall urban development. Innovative solutions such as flexible spatial concepts and multifunctional area developments should be given priority in order to achieve long-term qualities that are sustainable and usable, rather than purely quantitative growth.

Classification und definition:

The land use indicator is intended to reflect the achievement of SDG target 11.3. This sets the goal of inclusive and sustainable urbanization and strengthening capacities for participatory, integrated, and sustainable human settlement planning and management in all countries. The indicator has a high degree of validity

because it expresses the goal of sustainable urbanization. However, reducing settlement and transport areas alone cannot guarantee sustainable urbanization.

Calculation basis:

- (Residential and traffic area) / (Total area) * 100
- Data source: Federal Statistical Office and Berlin-Brandenburg Statistical Office

Description of the Data:

According to the Federal Environment Agency's "municipal land use calculator," the city of Cottbus/Chóśebuz recorded an average annual land use of approximately 12.9 hectares, or 1.3 m² per inhabitant, between 2009 and 2018. Compared to the Lausitz-Spreewald planning region (approx. 8.3 m²/inhabitant/year), the state of Brandenburg (approx. 5 m²/inhabitant/year), and Germany (approx. 3.2 m²/inhabitant/year), Cottbus/Chóśebuz managed with significantly less land use. This is also due to shrinkage processes and suburbanization. The Federal Environment Agency's land use calculator proposes a continuous reduction for Cottbus/Chóśebuz as a quota to achieve the national land use targets. Regardless of the historically low values for Cottbus/Chóśebuz (12.9 ha/a), the area calculator statistically allocates a quota of approximately 20.3 ha/a starting in 2020. This quota will be reduced to 11.8 ha/a by 2030. The land use plan for the city of Cottbus/Chóśebuz itself is based on the following principles for sustainable settlement development:

- Prioritization within the existing settlement structure. Inner development must take priority over outer development.
- Preferential development of previously developed areas (e.g., brownfields) instead of previously undeveloped open spaces or agricultural land.
- Preservation of unsealed areas as far as possible.
- Conversion and reuse of existing buildings instead of demolishing old buildings and constructing new ones.
- Utilization of vacant lots, building in the second row, etc., to enable densification and utilize space more efficiently.
- Cost- and space-saving development, e.g., economical utilization of existing development.
- Retention of reserve areas: In large, redeveloped areas, reserve areas should be kept free and secured for future development.

According to the 2024 draft land use plan (FNP) for Cottbus/Chóśebuz, an increase in building land share of a maximum of 5.6% compared to the existing area is planned for 2040. A further reduction may be expected in a second draft. Furthermore, land use plans can never be fully implemented. It can therefore be assumed that the increase in settlement area for Cottbus/Chóśebuz over the next 15 years will be well below 5%, even with economic growth and influx of residents.

Discussion:

Urban development law provides a comprehensive set of tools that not only promote the reduction of land use but also support climate-friendly and climate-adapted planning. The development planning toolkit offers Brandenburg's municipal planning authorities a practical tool. This tool enables them to effectively use the provided tools within the framework of their urban development planning and thus contribute to sustainable urban development (Ministry of Infrastructure and Regional Planning of the State of Brandenburg, 2022 & Ministry of Agriculture, Environment and Climate Protection of the State of Brandenburg, 2023). The implementation of climate-friendly or climate-adapted development planning beyond the minimum requirements prescribed by the legal framework is in many cases still dependent on the willingness of third parties in the corresponding development planning procedures. The city's hands are tied in this regard, as it

does not develop its own projects. Initial approaches to more far-reaching requirements are being tested within the framework of concept contracts for the sale of municipal land. Furthermore, a draft resolution on the topic of "Climate protection and climate adaptation in urban development planning" is currently being prepared, which will empower the administration to enforce more stringent and specific requirements in the future in terms of sustainable construction.

5.2.4 Target 11.7

Target 11.7: "By 2030, ensure universal access to safe, inclusive and accessible green spaces and public spaces, in particular for women and children, older persons and persons with disabilities."

5.2.4.1 Indicator recreational areas

Local significance:

To ensure healthy housing and living conditions, a sustainable balance between developed and undeveloped land use must be ensured. A particular challenge is the increasing competition for desirable green and open spaces. Enhancing quality of life and diversity is a top priority for a resilient society.

Cottbus/Chóśebuz is a park city. In addition to Branitz Park, the city boasts large recreational areas, particularly along the Spree River, which runs from south to north through the city. These areas are easily accessible to residents. These areas enhance the quality of life and are being gradually developed for recreational use.

Classification und definition:

Local recreation areas include undeveloped areas primarily used for sports, recreation, or to display animals or plants. These areas include, among others, green spaces, parks, allotment gardens, sports fields, and campsites, as well as areas for compensatory and replacement measures.

Calculation basis:

- (Recreational area) / (Number of residents)
- Berlin-Brandenburg Office for Statistics

Graph:

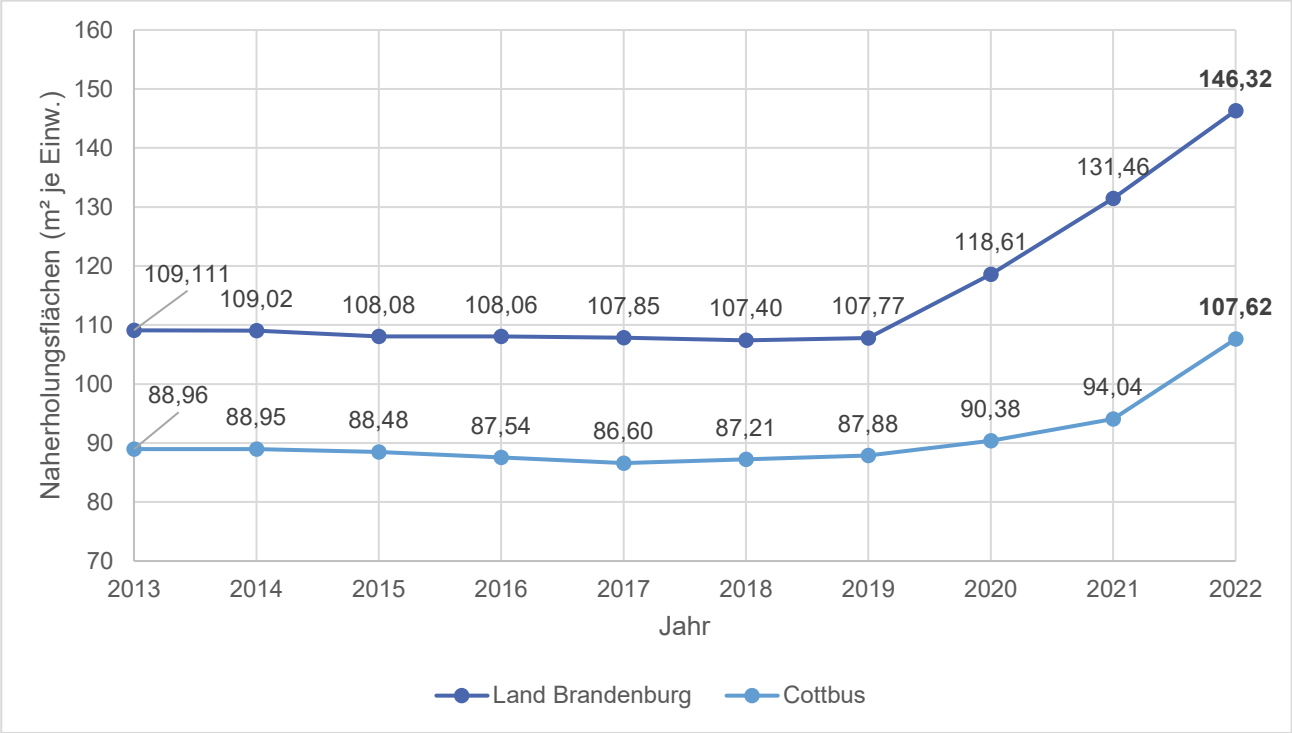


Abbildung 15 Naherholungsflächen in Quadratmeter pro Einwohnendem (Datengrundlage: SDG-Portal/ Amt für Statistik Berlin-Brandenburg)

Description oft he data:

After a constant level of just under 90 square meters of local recreational space per inhabitant between 2013 and 2019, this figure has been steadily increasing in recent years. The current figure is 107.62 square meters per inhabitant (2022), approximately 20% higher than the 2019 figure.

Discussion:

Recreational areas fulfill important social, ecological, and economic functions. Recreational areas have high recreational value, can reduce stress, and serve as meeting places for different social classes. Recreational areas also have high ecological value, as they can improve air quality through climate regulation and air filtration, particularly in urban areas.

Green spaces and recreational areas represent a significant local plus for the city. The Spree riverbanks, in particular, are to be made more attractive to more people in the coming years by creating diverse recreational spots and venues for sporting activities, as well as improving accessibility. A concept (City on the River) is currently being developed with broad participation from residents.

Due to current developments (structural transition), the trend of which will continue in the coming years, priority must be given to improving the existing public open spaces and the residential environment of stable settlement areas in terms of design and use-oriented qualities. Furthermore, the development or improvement of structural and network-complementary measures is necessary to better connect the consolidated settlement areas to the existing or potential green spaces and landscapes and to interconnect the open spaces.

6 OUTLOOK – OPPORTUNITIES, CHALLENGES

Opportunities

From the perspective of the city of Cottbus/Chóśebuz, the structural transition (with the end of coal-fired power generation and the energy transition) in itself is one of the most important sustainability strategies. A successful structural transition will not be achieved entirely without any land use the growth of population and jobs. And at the same time, the opportunity for growth must also be understood as an opportunity to implement urban development in all its facets in a fundamentally and holistically sustainable manner. Every new construction project, every access road, every new school building, and every cycle path, as well as all concepts for neighbourhood design and urban renewal, must culminate in a comprehensive concept of sustainability. **The opportunity to rethink the city and take consistent action is now**.

Only structural transition itself creates the opportunity for municipalities and the region to fundamentally implement the concept of sustainability in all its complexity. A sustainable urban development approach with a distinct identity and architectural signature for Lusatia should be part of the sustainability requirements. Therefore, the objectives of sustainable urban development for the city of Cottbus/Chóśebuz are:

- The structural transition process, with its economic focus, must be accompanied in a socially acceptable and ecological manner according to known indicators; support is required for this.
- Sustainability in structural transition represents added value for the process.
- The urban community should be continuously informed about the specific challenges and progress of the projects, including sustainability aspects – successful public relations and marketing work is required in parallel. The achievement of sustainability goals through structural transition projects, which have an impact on the entire region, should be communicated as a beneficial value and model region.
- The climate impacts of structural transition projects, both in urban planning and in the development of new locations, must be considered, and their impacts optimized.
- Sustainability is a fundamental requirement of the entire process – the performance of administrations and stakeholders must be considered here – research support is ideal to ensure suitable criteria with appropriate prioritization.
- Feasibility should be measured and monitored based on selected/priority SDGs and criteria.
- When considering the overall situation, the capacity of the stakeholders to act and the timescale for the coal phase-out must be considered decisively – approximately €5 billion will be invested through projects related to the city of Cottbus/Chóśebuz – processes for establishing criteria and monitoring must not jeopardize this process, but at best support it.
- Education with a holistic approach and the securing of jobs and skilled workers during structural transition will represent a significantly value-enhancing and accelerating component, which in turn will benefit the overall management of sustainability.

Challenges

Action is urgently needed to achieve SDG 11. This requires comprehensive public relations and communication efforts both within the city of Cottbus/Chóśebuz and its administrative structure (and the City Council), as well as intensive efforts to persuade the city's community to jointly pursue and implement the goals. This requires an overall strategy, which still needs to be developed in the future and authorized by the administration management.

The city of Cottbus/Chóśebuz recognizes the potential challenge of additional costs that will arise during the implementation of the projects. These costs cannot be met by the city alone, without subsidies. Unless there is coercion or requirements for implementation, it will be difficult to achieve the goals. In addition, there are

the personnel capacities required for implementation and monitoring, as sustainability is not treated as a mandatory task, but rather as an "additional task." Resources are lacking within the administration.

Implementing the defined goals and measures also presents challenges for municipalities in individual cases. A separate sustainability strategy (based on the city's goals) must be developed for each project, which is part of both the building permit and development plan processes. The implementation of a specific number of goals or impacts is mandatory! The Urban Development Department of the city of Cottbus is developing a policy resolution at the urban land-use planning level to be able to set higher standards for sustainability, climate protection, and climate adaptation in future developments.

Fundamental challenges in achieving all sustainability goals:

- *Sustainability is an interdisciplinary cross-sectional task in implementation.*
  This needs to be coordinated and managed
- *Long coordination processes are often necessary*.
  These must be bundled in a targeted and efficient manner.
- *Extensive implementation costs*.
  This requires financial support from the state and federal governments

The city of Cottbus/Chóśebuz intends to expand, consolidate, and coordinate better its sustainability activities in the coming years. The objective is to include additional sustainability goals in the report in addition to SDG 11. A follow-up report is planned in two years.

7 ANNEX

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8 IMPRINT AND CONTACT

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