



# Voluntary Local Review of the District of Fürstenfeldbruck 2023

Implementing the Agenda 2030 and the Sustainable Development Goals at the regional level



LANDRATSAMT  
FÜRSTENFELDBRUCK



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## Foreword

Dear readers,

For more than ten years now, the District of Fürstenfeldbruck has pursued its Vision for the Future, which charts a path for us in terms of policy and administration. The projects and measures derived from this vision shape many different areas of district development.

When updating this vision between 2019 and 2022, we made sure to take into account the current challenges faced in the district. The most recent version of the vision therefore incorporates existing plans and development strategies such as the local transport masterplan, the climate action masterplan and the spatial development strategy, as well as the findings of an analysis of strengths and weaknesses. The district's new Vision for the Future is aligned in its entirety with the 17 Sustainable Development Goals of the 2030 Agenda and provides us with targeted options for implementation at the local level.

By joining the Club of the 2030 Agenda Municipalities last year,

the district - together with more than 200 other German municipalities - is furthermore committed to supporting sustainable development at the local level. Membership of the club also indicates our willingness to do everything we can to take corresponding measures to implement and achieve the 17 Sustainable Development Goals.

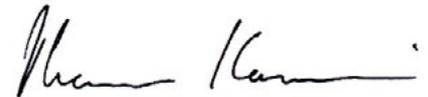
This Voluntary Local Review reports on the status of implementing the goals at municipal level, and marks yet another milestone for the district. Reviews are at the very core of identifying where we are at in terms of managing sustainability at the local level. We would like to take this opportunity to also analyse our district's progress in the area of sustainability and to highlight the corresponding challenges faced by actors engaged in sustainable local development.

Our first Voluntary Local Review also provides us with inspiration for stepping up and broadening

dialogue with other local government bodies around the globe and working together to come up with joint solutions for the challenges we face. And we want to encourage other district authorities to follow suit - you too have a leading role to play in implementing the SDGs. Preparing a voluntary local review can play a key role in involving members of civil society as well as the municipal authorities in your area.

I would like to thank all of the staff from the various units of the District Administration for their commitment and support as well as all those who played a dynamic role in compiling our first voluntary local review. Finally, I would like to extend my gratitude to the Service Agency Communities in One World which, with support from the Federal Ministry for Economic Cooperation and Development (BMZ), and together with the North Rhine-Westphalian Working Party on Agenda 21, enabled us to produce this report. By joining forces, we have set the District of

Fürstfeldbruck well on the path to becoming even more sustainable in the future.



**Thomas Karmasin**  
**District Administrator**

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# 01

## 1 Introduction

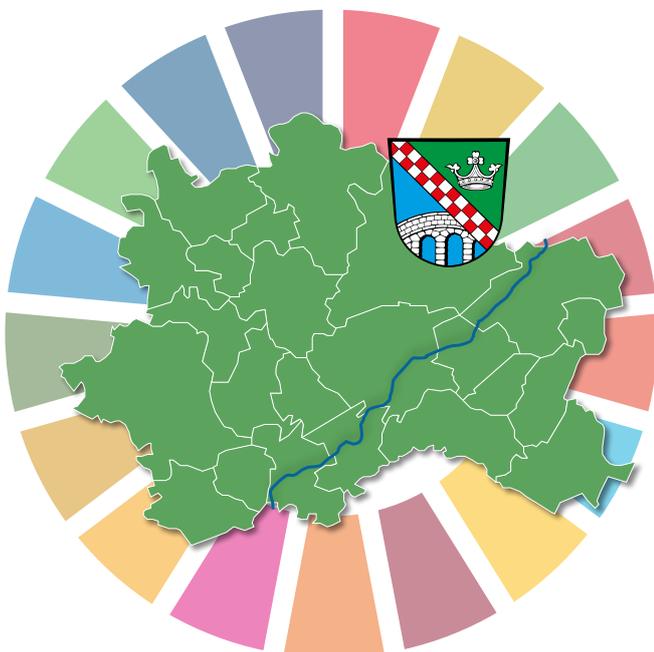
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Photo 1: The Zellhof near Schöngesing (Copyright LRA FFB/W. Weiss)

## 1.1 Voluntary Local Reviews in the context of the 2030 Agenda

Figure 2: Cover image of the updated mission statement of the Fürstentfeldbruck district (Copyright LRA Fürstentfeldbruck)



In 2015, the UN member states adopted the 2030 Agenda with its 17 Sustainable Development Goals (SDGs). In the 2030 Agenda, the global community agreed on a framework for a worldwide transition to sustainable development. The 17 SDGs (see Fig. 1) are translated into greater detail in 169 targets, covering the environmental, social and economic aspects of sustainability. The SDGs are universally applicable, addressing all UN member states in the Global South as in the North, and aim to bring about radical changes at political and societal levels. The outcomes of the Global Sustainable Development Report 2019 (to be updated in September 2023) make it clear that rigorous action will be needed during the ongoing UN Decade of Action 2020-2030 if the SDGs are to be achieved by 2030. As a universal framework of reference, the 2030 Agenda guides actions within Germany too, at federal, state and local levels.



# SUSTAINABLE DEVELOPMENT GOALS



Figure 3: The 17 Sustainable Development Goals

To render visible the progress made towards achieving the SDGs, the 2030 Agenda calls for regular reviews.<sup>1</sup> At national level this takes the form of Voluntary National Reviews (VNR). The VNRs are presented annually at the UN High-Level Political Forum, the central platform for the follow-up and review of the 2030 Agenda at the global level. Every year the Forum focuses on different SDGs. In 2023, for instance, the focus is on SDGs 6, 7, 9, 11 and 17. In 2016 and 2021 Germany presented a Voluntary National Review to the High-Level Political Forum (HLPF).

Municipalities have a particularly vital part to play in the successful implementation of the 2030 Agenda, since this is the level at which the stage will be set in

the most crucial way.<sup>2</sup> All 17 SDGs have targets that directly relate to local level responsibilities. Pertinent literature often points to the fact that at least 65 per cent of the 169 targets will only be achieved if municipalities are consistently involved in implementation and monitoring.<sup>3</sup> Accordingly, the 2030 Agenda underlines the key role to be played by local authorities and the importance of cooperation between different levels of action and actors.<sup>4</sup> Local actors are called on to identify and implement action required at local level based on the global goals. This is known as localising the Sustainable Development Goals. Three main areas of responsibility may be addressed: “at local level for local level” (measures that impact the municipality itself), “at local level for the

1 Reporting takes place within the framework of the 2030 Agenda review mechanism (“conduct regular and inclusive reviews of progress at the national and sub-national levels, which are country-led and country-driven”; UN, 2015 - paragraph 79). It is also indicated that the local level should be involved (“follow up and review at the regional and subregional levels can, as appropriate, provide useful opportunities for peer learning, including through voluntary reviews”; UN, 2015 - paragraph 80). By 2030 all UN member states are to have published a minimum of two national reports. Official requirements apply to the structure and content of reviews at nation state level.

2 See UCLG, 2021 and Gustafsson & Ivner, 2018.

3 See OECD, 2020.

4 UN, 2015 - Paragraph 45.

world” (local measures with a global impact), and “in and through other countries” (measures that are realised worldwide and in conjunction with other municipalities).<sup>5</sup> Municipalities thus play a pivotal role as trailblazers for change and as the level closest to citizens. Against this backdrop, over 200 German municipalities have already signed the specimen resolution “The 2030 Agenda for Sustainable Development: Building Sustainability at the Local Level” (Association of German Cities, German Association of the Council of European Municipalities and Regions (CEMR)).

As awareness grows of the importance of the local level for achieving the SDGs, an increasing number of municipalities around the world are reporting on their own individual contributions. In contrast to national reviews, local reviews of SDG implementation have no official status and thus no UN mandate with concomitant reporting requirements. Since 2018 (when New York and the three Japanese cities of Shimokawa, Toyama and Kitakyushu were the first to report on their progress), more and more municipalities have taken the initiative and reported voluntarily on the status of their local-level implementation of the SDGs. The reports are thus known as Voluntary Local Reviews, or VLRs. Local reporting has now become an extremely dynamic global movement, with several new VLRs published every year.<sup>6</sup> The first German municipalities to produce a VLR were Mannheim in 2019 and Bonn in 2020. In 2022, Dortmund, Düsseldorf, Hannover and Kiel followed suit. VLRs offer a huge potential to feed practical experience at local level into national and regional reporting, thus enhancing overall coordination, accountability and transparency. The dovetailing of the different levels (known as vertical integration) is pivotal. In this regard, the relevance of VLRs transcends mere monitoring, since VLRs accelerate localisation of the

SDGs and the transition to greater sustainability in the spirit of bottom-up processes, while also supporting reciprocal learning.<sup>7</sup> This is also reflected in the growing trend to firmly integrate the local level in the UN High-Level Political Forum (e.g. as part of the Local and Regional Governments Forum) and involve local actors in national reviews.<sup>8</sup>

Given that there have not so far been any uniform standards for the production of VLRs, it is not surprising that the reviews published around the world vary widely in terms of structure and content. A growing number of publications do, however, offer guidance (including for instance UCLG & UN-Habitat Guidelines for Voluntary Local Reviews, the European Handbook for SDG Voluntary Local Reviews, the UNDESA Global Guiding Elements for Voluntary Local Reviews of SDG implementation and, in German, Engagement Global’s Handreichung zu VLRs).<sup>9</sup> This VLR has taken account of the international guidelines in terms of the methodology used and the structure of the review.

5 See also the similar breakdown of measures in the German Sustainable Development Strategy.

6 For an up-to-date list of VLRs published to date see the Voluntary Local Review website of the UN Department of Economic and Social Affairs (UN DESA). Comparative analyses can be found in UN-Habitat & UCLG, 2021.

7 See also Deininger et al., 2019; Pipa & Bouchet, 2020 and Koch et al., 2019.

8 See German Institute of Urban Affairs & Bertelsmann Stiftung, 2021.

9 Cf. UCLG & UN-Habitat, 2020; Siragusa et al., 2020; UNDESA, 2020; Engagement Global, 2022; see also IGES, 2021 and UNESCAP, 2020.



## 1.2 Context, methodology and structure of this report

This Voluntary Local Review reflects the status quo in 2023 in terms of sustainable local development and provides a round-up of the progress made towards achieving the SDGs. The VLR has been produced within the framework of a project of Engagement Global's Service Agency Communities in One World on behalf of the Federal Ministry for Economic Cooperation and Development (Voluntary Local Reviews for Globally Sustainable Municipalities - Local-level support and advice on producing VLRs). In Germany, the Service Agency is the central contact point for local development policy. It enables municipalities to get involved in action for global sustainability and a more equitable world, as set out in the United Nations 2030 Agenda, with actions both at local level and in the Global South. During the project term from July 2022 to October 2023, six German municipalities (the City of Freiburg, the District of Fürstenfeldbruck, the Free and Hanseatic City of Hamburg, the City of Cologne, the Municipality of Bad Köstritz and the Municipality of Rottenburg am Neckar) were given support to help them draw up individual VLRs in German and in English. The municipalities involved could report on either all 17 SDGs or on the five focal SDGs to be addressed by the 2023 UN High-Level Political Forum (SDGs 6, 7, 9, 11 and 17). The VLRs were published to coincide with the HLPF in summer 2023. Alongside the ongoing support for the participating municipalities, inter-municipal exchange was important within the scope of the project, to encourage municipalities to learn from one another. Overall this has helped make German VLRs stronger and more uniform.

The individual municipalities put in place working groups to elaborate the VLRs. They conducted an extensive baseline survey to gather the information needed for the report. The process involved firstly forming a project team within the administration that brought together people from all relevant local

Photo 4: Exterior view of the Fürstenfeldbruck District Office from the south (Copyright LRA Fürstenfeldbruck)



divisions (e.g. planning, environment, transport, social affairs, international affairs, public health and economic development). The project team was managed by a coordinator or coordinators (one or two individuals), who were responsible for organising the process at local level. With the help of information provided by the members of the project team, a systematic baseline survey was conducted, covering both qualitative and quantitative elements. The qualitative analysis looked at all core activities of the municipality that help achieve sustainable development. This included guiding strategies and concepts, measures and activities, projects, permanent responsibilities, programmes, political decisions, specific goals, cooperation arrangements and networks, as well as organisational structures. Additionally, key achievements and outcomes in recent years were identified in the various thematic areas. To complement this, general information was gathered on overarching aspects of sustainability. The quantitative analysis evaluated firstly a fixed set of indicators (SDG indicators for municipalities) and then supplementary municipality-specific indicators. The set of fixed indicators was developed by the Bertelsmann Stiftung and other institutions.<sup>10</sup> The project aims to identify indicators capable of illustrating the implementation of the SDGs at local level in Germany. An online portal (the SDG Portal) provides data available from a number of centralised sources for all German municipalities with a population of at least 5,000. The six municipalities participating in the Service Agency project were able to supplement these indicators with their own indicators, particularly in areas where little data was available, enabling them to take account of the specific local context. These data were then provided by the municipalities themselves. Within the framework of the baseline survey, various source materials (Excel tables broken down by SDG and overarching questionnaires) were combined in the project. A draft report was drawn up on this basis, and discussed at various project team workshops and in local consultation processes. The draft was expanded accordingly and subsequently

finalised. Overall, this process surmounted traditional barriers within administrations, and allowed information to be compiled across departments and units. Given the thematic breadth and interconnected nature of sustainability issues, this horizontal integration was crucially important.

This VLR is broken down into two main sections. The first of these provides a general introduction to sustainability processes on the ground. Alongside a thumbnail sketch and a presentation of the main milestones in realising sustainability, this section includes an explanation of how sustainability is being mainstreamed at strategic and organisational level. The second part presents specific progress made towards achieving the individual SDGs in recent years. This includes both qualitative and quantitative elements, in line with the baseline survey. Firstly, all core activities undertaken to implement the SDGs are presented, and the individual activities indicated in the text. The indicators selected are then outlined (with illustrations for the key indicators). The indicators used map progress over the last decade, illustrating longer-term developments. At the start of each SDG section, all activities and indicators are summarised concisely. Every SDG section also contains an introductory text, which presents the SDG and its specific relevance for German municipalities.

<sup>10</sup> See Bertelsmann Stiftung et al., 2022.





# 02

## 2 The District of Fürstenfeldbruck in the context of sustainable development

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Photo 5: Landscape in Purk near Moorenweis (Copyright LRA FFB/W. Weiss)

## 2.1 Brief profile of the District of Fürstenfeldbruck

The District of Fürstenfeldbruck belongs to the administrative region of Upper Bavaria. It is part of the European Metropolitan Region of Munich and a member of its association EMM e.V. To the east and south-east, the district borders on the state capital and the administrative district of Munich, and to the south and south-west on the administrative districts of Starnberg and Landsberg am Lech. Other neighbouring administrative districts are Dachau to the north and north-east and Aichach-Friedberg to the north-west.

With a total surface area of just under 43,500 hectares and a population of around 219,000, the District of Fürstenfeldbruck is the second most densely populated administrative district in Bavaria, after Munich. The district has 23 municipalities. The district's location is characterised by its immediate vicinity to the city of Munich, which as a large conurbation has a decisive influence on the district's development.



In terms of its settlement structure, the district can be divided into two areas. While the eastern part of the district has a largely urban structure, the western district is largely rural. The majority of the district's inhabitants therefore live in the towns in the east - Germering, Fürstenfeldbruck, Olching and Puchheim. The western part of the district is divided into two administrative communities and is characterised by more rural structures, some of which have less than 100 inhabitants per km<sup>2</sup>. The district is characterised by large areas of moorland. The main rivers are the Amper, followed by the Maisach and other smaller rivers. There is therefore an abundance of local leisure facilities with countless hiking routes and a bikeway network that is approximately 700 km long.

In addition to the three *S-Bahn* light urban railway lines S3, S4 and S8, which help ensure easy access by public transport, expansion of the regional bus network in particular has been supported in recent years. With currently five express bus routes and 48 regional bus routes (including 14 tangential bus routes) operated by the City of Munich's transport authority MVV, two night bus routes operated by the Munich Transportation Corporation MVG and seven "dial-a-ride" routes, the district offers an attractive and comprehensive around-the-clock public transport service, seven days a week. The regional bus service in the district currently carries more than 10 million passengers a year, serving over 400 stops.

Fürstenfeldbruck's location in the prosperous Munich Metropolitan Region influences many aspects of life in the district. For example, a further increase in population growth is anticipated, along with strong ongoing settlement pressure in the future. This is accompanied by rising land prices and demand for affordable housing, large numbers of commuters and the associated mobility requirements, the desire for leisure and local recreational facilities, and the need for efficient land allocation and land use. In the future, finding a compatible and sustainable balance between the various usage demands of citizens - such as living and working, but also, for example, ag-

Photo 6: The invert ramp built in 2013 near Grafrath raises the water level of the Amper River and contributes to the rewetting of the Amper moss. (Copyright WWA-M)



riculture, local recreation and landscape and nature conservation - will be of decisive importance. Efficient land use is particularly important for the densely populated district in order to sustain quality of life in the long term and also leave development opportunities in place for future generations.

Every district is characterised by specific features. Some key opportunities and challenges associated with sustainable development in Fürstenfeldbruck are outlined below. Specific opportunities include in particular:

- Peatlands as carbon sinks: The Ampermoos, the Haspelmoor in the municipality of Altheim, the Wildmoos near Moorenweis, the Allinger Moos and the Fußbergmoos near Maisach are the largest peatlands and wetlands in the district. As ar-

reas that were once severely threatened by agricultural use, some of them are now protected and are being restored to a near-natural state through renaturing measures.

- Climate-friendly forest management: The Office for Nutrition, Agriculture and Forestry launched the Future Forest project to support forest owners in converting forest areas to a climate-change-appropriate land management method. Species-rich forests also capture large amounts of CO<sub>2</sub>.
- Large agricultural areas to secure the nutrition of the district's population: Direct marketing and the strengthening of regional and local value chains are gaining in importance and help producers to increase their profit margins. Consumers are in direct contact with producers, which ensures improved transparency in the food sector. There

Photo 7: View of the Ampermoos in the direction of Grafrath (Copyright WWA-M)



is an increasing shift in awareness in agriculture as regards the use and consumption of resources and the number of farms that use ecofriendly production methods is rising. Alternative methods, such as solidarity farming, solar fields and vegetable boxes can also be found in the district.

- Expansion of renewables: Plans for the construction of new (agri-) photovoltaic installations, biogas plants and wind farms are being discussed in municipalities and among the general public. Growing interest in alternative forms of energy and heat generation can be observed in the private sector too. There is growing demand for photovoltaic installations and heat pumps, for cogeneration plants and connection to heat networks. Two citizen energy cooperatives have also been established in the district.
- One quarter of the district's inhabitants have a migrant background. The district has an integration plan in place that sends a clear signal that it is taking diversity and the importance of an open society very seriously indeed. Work, education

and housing measures can create opportunities and leverage potentials to counteract the shortage of skilled labour in particular.

As regards addressing the specific challenges in the context of sustainability in the district, the following aspects are particularly noteworthy:

- Competition (especially as regards economic and cultural aspects) with both the district and the City of Munich
- Creation of jobs close to accommodation in the district and measures to counteract the migration of skilled labour to Munich/Augsburg
- Creation of climate-friendly, social and liveable housing, keeping urban soil sealing to a minimum
- Expansion of and support for local public transport plans, especially improving accessibility to municipalities in the east of the district
- Increase in motorised personal transportation
- Increase in pressure on local recreational areas, conflicts of use

## 2.2 Sustainability in the administrative District of Fürstenfeldbruck - introduction

**ÖPNV**, the **Local Public Transport Unit** was established in the district in late 1995. One of the unit's key tasks was to work together with the municipalities, the District Committees and a wide range of mobility stakeholders to expand and improve the operating times and frequency of the bus network and of the equipment it uses. The unit set up a taxi-sharing project for unscheduled bus journeys outside operating hours, i.e. in the evenings, at night and at weekends. The model, which was unique at the time, was so successful that it was awarded the **Bavarian Local Transport Prize** in 2000.

Photo 8: 25th anniversary of Agenda 21 in the district of Fürstenfeldbruck at the Lichtspielhaus Fürstenfeldbruck (Copyright LRA FFB)



In 1997, Fürstenfeldbruck was one of two **model districts** in a project set up by the Bavarian State Ministry for Regional Development and Environmental Affairs. Over a two-year period, an action programme was developed, working groups formed and a forum established. In all 23 municipalities in the district, there were Agenda 21 groups that developed projects on environmental protection, climate action and sustainability for their municipality. Many of the groups no longer exist, but some are still active in Grafrath, Gröbenzell, Kottgeisering, Olching und Schöngeising.

The **Office for Agenda 21**, which is located in and supported by the District of Fürstenfeldbruck, has been implementing a variety of sustainability initiatives since 1999. It also networks, coordinates and supports local Agenda 21 groups and regional initiatives in the field of education for sustainable development. One of the office's focal areas is coordinating the **Nutrition Advisory Council** for the district, which was founded in 2018, as well as developing and coordinating environmental education programmes on topics such as resource conservation, global justice, experiencing nature and climate action. Since 2011, the Office for Agenda 21 has been the brand owner of *Umweltbildung Bayern*, an environmental education strategy of the Bavarian State Ministry for Regional Development and Environmental Affairs.

The Fürstenfeldbruck energy transition initiative was publicly proclaimed in the **Fürstenfeldbruck energy resolution**. This lays down the goal that all energy supplies for the entire district will be derived from renewable energy sources by the year 2030. To achieve this, energy consumption is to be gradually reduced by 50 per cent% and energy efficiency increased, using all forms of renewable energy. **ZIEL 21** - the association for transitioning to innovative energies in the district - was established in 2001 to implement the energy transition at a practical level.

In 2010, the administrative district and its municipalities drew up a joint, **integrated climate action masterplan**, which was designed first and foremost

to show where the district is at on the path to the energy transition and map out the measures required to this end. In 2012, a political decision was made to implement the plan. The masterplan provides concrete recommendations for action that the district, its municipalities and communities need to take to achieve the energy transition.

The first **process** for implementing the **district's Vision for the Future** (*Leitbild*) was completed in 2013. The preamble to the vision's outcome document outlines the district's commitment to the principle of sustainability, with a view to improving quality of life for all - including future generations. This calls for increased intermunicipal cooperation in the district. The projects and measures outlined in the vision for various areas of district development have largely determined the strategic actions of the specialist units in the District Administration in recent years. At a workshop to mark 15 years of Agenda 21 in the district in 2013, the launch of **Eine Welt Zentrum e.V.** - a One World Centre - was initiated for the District of Fürstenfeldbruck.

A **Regional Management Unit** was set up in the district in 2014 to promote development throughout the state of Bavaria and drive regional development through project and networking activities. The aim is to compensate for existing weaknesses in the district, while developing strengths and promoting sustainable development.

Since 2015, the **Climate Action Management Unit** in the District Administration has been initiating, supporting and monitoring implementation of the projects laid down in the climate action masterplan and in the CO<sub>2</sub> action plan. Data on CO<sub>2</sub> emissions are to be routinely updated for monitoring purposes. The projects implemented by the Climate Action Management Unit cover the action areas of energy production and management, municipal development and mobility trends as well as PR and awareness raising.

In the area of **fair trade**, five municipalities in the district are already active members of the Fairtrade

Towns campaign and seven secondary schools have signed up to and continue to implement Fairtrade Schools. The District of Fürstenfeldbruck is also part of the Fairtrade Metropolitan Region of Munich, which was awarded certification in 2021, and the district intends to apply for certification itself based on a District Council resolution passed in April 2023.

Together with municipalities in the district and other specialist units of the District Administration, the Spatial Planning and Development Unit, developed RES 2040, **a spatial development strategy for the District of Fürstenfeldbruck**, which was published in 2017. It contains seven sub-strategies for sustainable development of the district. One of the essential innovative ideas of the strategy is that landscapes will define future municipal spaces.

Since mobility has always played a major role, especially in the Munich metropolitan area, a **cycling officer** position was created in 2017 in addition to the Local Public Transport Unit to promote cycling and significantly increase the number of cyclists. The first project managed by the newly appointed officer was coordination of the district's integrated bikeway plan for everyday and recreational use.

In order to take stock of the district's development status while considering current challenges, an **updated Vision for the Future** was published in 2022. It is aligned in its entirety with the 17 SDGs of the 2030 Agenda and provides targeted options for action for implementation at the local level.

To further pool resources to step up climate action, in 2021 a total of ten measures were selected from the 82 measures in the climate action masterplan, and incorporated into a **CO<sub>2</sub> action plan**, which has been updated annually since then. In this context, the administration cooperates closely with the public and the district's political committees. Since the start of this year, **climate impact assessments** are also being conducted to evaluate the effect of all political decisions on climate; in this way, political decision-mak-



ers will incorporate climate action into decision-making early on.

To reaffirm the district's commitment to sustainable further development (taking into account implementation of the SDGs in the region), a resolution is attached at the end of the Vision, a signed version of which represents the district's application to become a member of the **Club of the 2030 Agenda Municipalities**. At the end of 2022, the District of Fürstenfeldbruck was officially accepted into the club and received its certificate of recognition at a networking meeting in Hamburg at the end of September.

The establishment of the **Coordinator for Municipal Development Policy** post, with responsibility for raising awareness of the 17 goals of the 2030 Agenda and for the networking of development actors in the

district, marked an important step in the promotion of sustainability. In 2009, the District Administration adopted a **District Council resolution** to blacklist products manufactured using exploitative child labour. As **fair and sustainable procurement** had previously not been a priority, **training for employees** on sustainable local procurement was introduced at the start of 2022 and information on ecofriendly procurement distributed to provide further support.

At the end of 2022, the district set up a joint **Climate and Energy Agency** together with the neighbouring districts of Starnberg and Landsberg am Lech, in which the ZIEL 21 association and others are involved. The agency pursues the association's tasks and objectives too, while adopting a more overarching engagement strategy in the three districts.

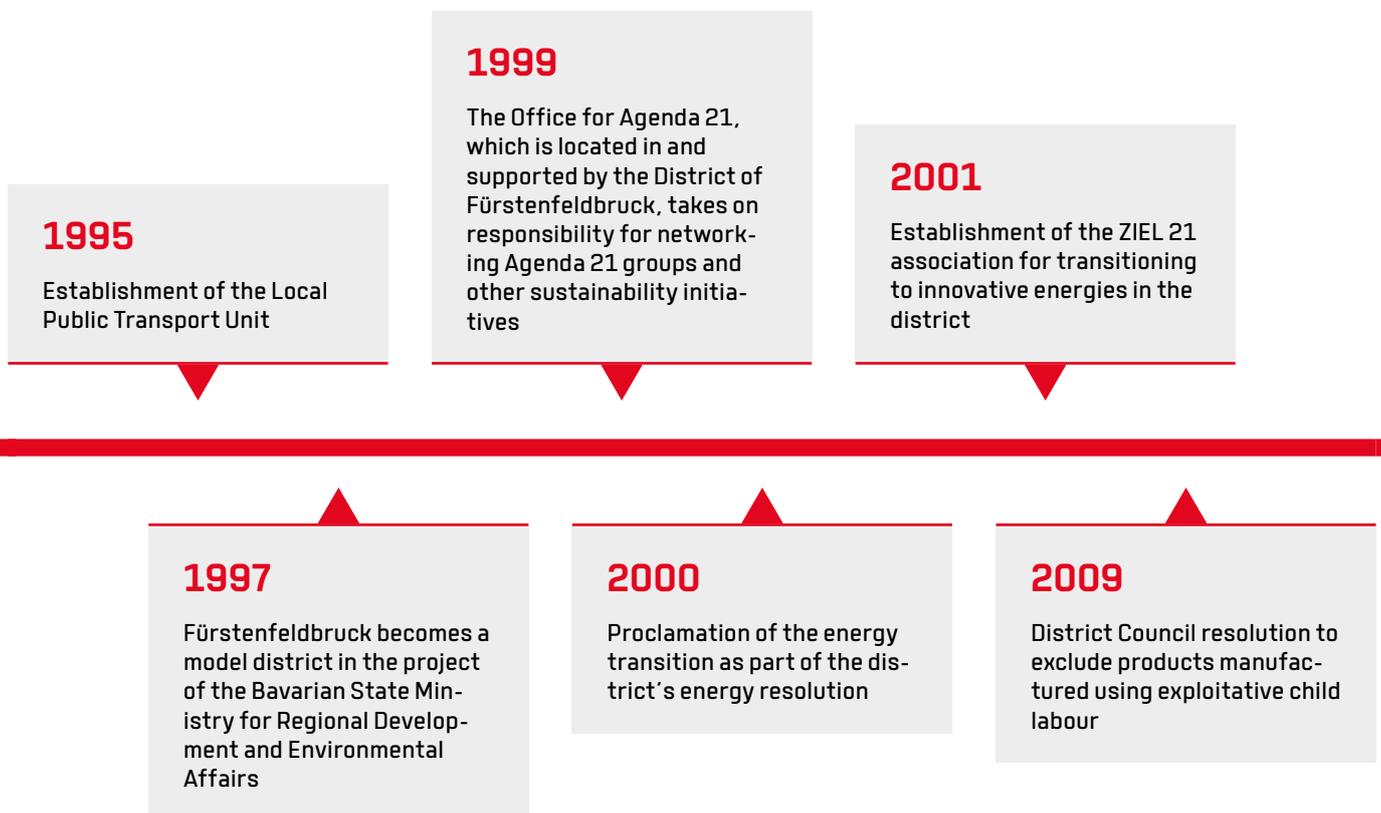




Photo 9: Certificate of membership of the district Fürstenfeldbruck in the club of Agenda2030 municipalities (Copyright LRA Fürstenfeldbruck)



Photo 10: District Administrator Thomas Karmasin accepts the membership certificate to the Club of Agenda 2030 Communities from Regional Manager Lajana Gebhard (Copyright LRA Fürstenfeldbruck)

<p><b>2011</b></p> <p>Preparation of the integrated climate action masterplan</p>	<p><b>2013</b></p> <p>Completion of the district's first process for implementing its Vision for the Future.</p>	<p><b>2014</b></p> <p>Establishment of a Regional Management Unit in the district</p>
<p><b>2011</b></p> <p>The Office for Agenda 21 becomes the brand owner of Umweltbildung Bayern, Bavaria's environmental education strategy</p>	<p><b>2013</b></p> <p>Establishment of Eine-Welt-Zentrum e.V., a One World Centre for the District of Fürstenfeldbruck</p>	<p><b>2015</b></p> <p>Establishment of a Climate Action Management Unit in the district</p>

**2017**

Establishment of the position of cycling officer

**2017**

Five municipalities in the District of Fürstfeldbruck have been certified as Fairtrade Towns

**2019**

The European Metropolitan Region of Munich is awarded certification as a Fairtrade Metropolitan Region (the District of Fürstfeldbruck is part of this region)

**2017**

Completion of RES 2040, the intermunicipal spatial development strategy for the district

**2018**

Establishment and launch of activities of the first nutrition advisory council in Germany with responsibility for a district

**2021**

Preparation of the CO<sub>2</sub> action plan by the Climate Action Management Unit

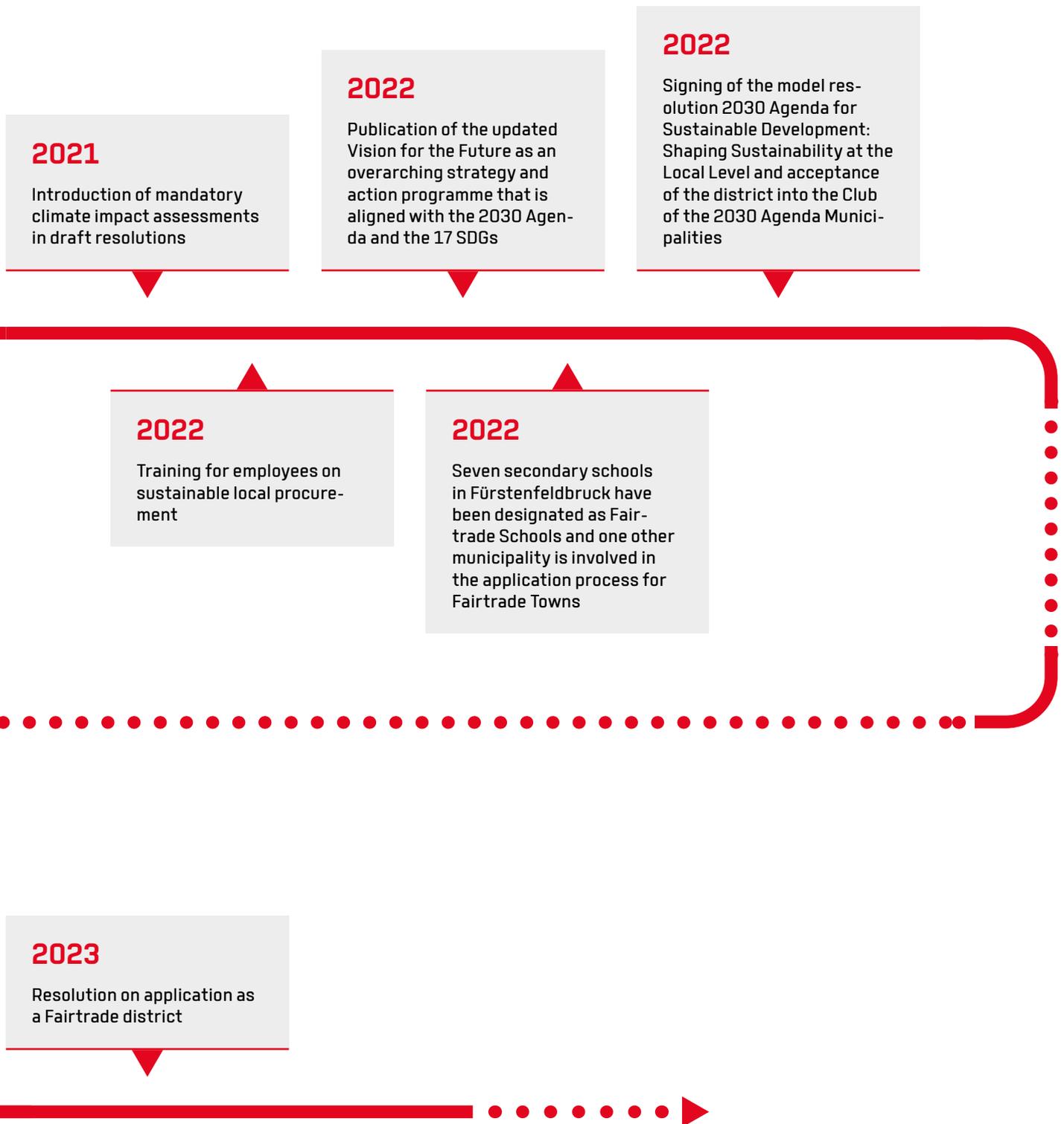
**2022**

Creation of the Coordinator for Municipal Development Policy post

**2022**

Establishment of the joint Climate and Energy Agency for the districts of Fürstfeldbruck, Landsberg am Lech and Starnberg





## 2.3 Strategic and organisational mainstreaming of sustainability

**Fürstentfeldbruck's Vision for the Future** published in 2022 serves as an overarching strategy and programme for action for the district. By adopting the vision, the district has signed up to achieving the Sustainable Development Goals (SDGs) of the 2030 Agenda. The document makes clear references to the 17 goals and their implementation at the regional level and provides targeted opportunities for action. It is perceived as a commitment within the framework of the SDGs and has been intentionally framed against the global context.

Photo 11: Presentation of the updated mission statement of the Fürstentfeldbruck district during the regional conference in May 2022 (Copyright Jessica Wiedemann)



The updated vision built on the process for implementing the original strategy (2011-2013). To take account of the current challenges faced in the district, one of the aims of the project on further developing the district's vision was to update the first version, based on a SWOT analysis (District of Fürstenfeldbruck, 2019) and with the involvement of subject specialists and members of the public. The three-year process to develop the new vision started in 2019. The district's Regional Management Unit coordinated the process in close consultation with other specialist units, and representatives of the District Administration, the municipal administrations, councillors and external institutions, as well as members of the general public were invited to participate in working groups and workshops. The broad-based participation process identified action areas that are relevant for further developing the district before working on these areas to identify meaningful goals and projects. In this context, the plans and development strategies developed in previous years were incorporated into the process along with the findings of the SWOT analysis. During several meetings, the working groups developed key objectives and goals for their areas, as a basis for further developing the district in a sustainable manner. The District Council took a final vote on the results of the process for implementing the vision in April 2022, and adopted them unanimously before presentation to the public for the first time at the regional conference in May 2022.

In the preamble to its vision, Fürstenfeldbruck commits to the principle of sustainability in accordance with the 2030 Agenda. It undertakes to shape regional development in a socially, ecologically and economically sustainable manner. The careful use of resources will create more sustainable prospects for future generations in the district and worldwide. The basic consensus provides a common understanding of objectives and values, whereby social, economic and ecological aspects are given equal priority, as they are closely linked and mutually dependent.

The vision includes key objectives and goals for the following areas:

- Family, children and youth, Education, Social affairs, Health
- Culture, Sport, Local recreation and tourism
- Business, Mobility, Population growth and municipal development.
- Agriculture and forestry, Climate action and energy, Protection of nature and the environment
- And, at an overarching level, the area of Public budgets and finance.

The following images depict the individual key objectives and goals for the 14 thematic areas, along with the relevant references to the SDGs.



## Family | children | youth

### Leitziel

We aim to make the district more attractive for families and to support them in a way that is appropriate for their particular situation.

- 1** Needs-based services are provided for children and young people, together with municipalities and relevant service providers.



- 2** There is a vibrant community spirit and good social interaction in the district.



- 3** People are aware of the range of services available for supporting families and young people and the different points of contact network well.





## Education

### Leitziel

We offer, and continue to expand, good-quality, inclusive education services, with broad-based participation. From birth, each individual has the right to develop their personality, and a right to be valued and respected, irrespective of their educational status.

- 1** Interest in learning among people from all age groups is supported, irrespective of their circumstances.


- 2** A diverse and holistic range of educational services is available in the district.


- 3** Educational offerings in the district are accessible to all.





- 4** Educational stakeholders in the district are well-networked.




## Social affairs

### Leitziel

The supply of basic social services and other offerings is being further developed in line with needs, against the backdrop of demographic trends in the district. Social participation by all citizens is ensured.

- 1** Social inequality is continually being reduced.



- 2** All citizens - including those from a migration background - live together in a thriving community.


- 3** Voluntary engagement is being supported to an increasing degree.



## Health

### Leitziel

Citizens in the district live in an environment that is conducive to their health.

- 1** Medical, therapeutic and health care services are available in the locality and are accessible to all.



- 2** The district clinic is owned by the municipality and develops its range of services in line with needs.


- 3** Sufficient preventative health-care services are available for the entire population, particularly in the areas of movement, food and nutrition, vaccinations, mental health and addiction.




## Culture

### Leitziel

We wish to raise awareness of and nurture an appreciation for the district's broad cultural diversity. Culture spans more than just different forms of art created by humans - it encompasses different forms of life, value systems and beliefs.

- 1** All citizens have equal access to art and culture.


- 2** There is a broad general awareness of the valuable role played by art and culture, particularly in times when in-person contact is restricted.


- 3** The creators of culture, particularly those in the area of youth culture, are supported and networked.




## Sport

### Leitziel

There is easy access to sport, for all sections of the population.

- 1** All citizens enjoy, have access to, and are able to participate in, sporting and athletic activities.



- 2** Sustainable support is provided for the required infrastructure and for simplifying the red tape that surrounds club sports organised on a voluntary basis.


- 3** Different popular sport offerings collaborate with each other and are well-networked.


- 4** Different popular sport offerings are networked and work together. They impart the various values that sport embodies, namely fairness, respect, willingness to perform, basic democratic values, social compatibility and health.




## Recreation and tourism

### Leitziel

The region is well known as a destination for day-trippers and holidaymakers alike. We believe that authentic experiences of wildlife, flora and fauna go hand in hand with consistent protection of nature and the environment. The high quality of our leisure and recreational services and offerings are of key importance for us and for our tourism partners.

- 1** Awareness of tourism offerings in the district is to be increased.



- 2** The district promotes and maintains sustainability in tourism and local recreational offerings.





- 3** Tourism infrastructure has been improved and expanded, taking into account the various tourism offerings that exist and the stakeholders involved.







## Business

### Leitziel

Our aim is to attract and retain innovative companies by fostering conditions that are conducive to developing business and industry. The efficient use of land is to be given particular consideration in this context.

<p><b>1</b> Intermunicipal cooperation is to be strengthened.</p>	  
<p><b>2</b> The district embraces the future through digitalisation and innovation.</p>	
<p><b>3</b> The number of people who travel to other towns and cities for work is to be reduced.</p>	   
<p><b>4</b> High-tech companies are to be supported. Efforts to attract start-ups should focus mainly on areas that are already sealed.</p>	 
<p><b>5</b> Support is being provided for attracting and retaining enough skilled labour.</p>	  
<p><b>6</b> At regional level, additional value is being generated and the circular economy is strengthened.</p>	   

## Population growth and municipal development

### Leitziel

We support the development of municipalities and open spaces and any associated construction measures by promoting climate action, social justice and the conservation of natural resources across all age groups. Planning processes are participatory and are undertaken in cooperation with other municipalities.

<p><b>1</b> The level of municipal development is moderate and is carried out in a way that protects the climate and natural resources, taking into account ecosystems and the natural landscape. Future spatial development is geared towards the requirements that brownfield development is preferential to greenfield development and that open spaces be preserved.</p>	    
<p><b>2</b> Town and village centres are to be strengthened through the (further) development of local identities and the creation of a needs-based infrastructure. The district supports a contemporary development culture that represents the local area and encourages citizens to identify with their locality.</p>	  
<p><b>3</b> The district supports a community-oriented, municipal land policy that takes into account the residential requirements of different sections of the population and local job creation.</p>	
<p><b>4</b> The district promotes innovative strategies for forward-thinking spatial development.</p>	   

## Mobility

### Leitziel

We advocate the development of mobility offerings that are sustainable, intermunicipal and user-friendly. In this context, the term 'sustainable' refers, among other things, to the use of land, environmental impacts and economic and social aspects. The term 'intermunicipal' refers to development that is cross-municipal, cross-district and regional.

- 1** The district's aim is to embrace carbon-neutral, climate-friendly mobility that is as holistic as possible.


- 2** Through education and awareness-raising measures, the district fosters mutual interaction among all participants in the traffic network and makes environmentally friendly modes of transport more attractive.


- 3** The district supports the networking of all forms of mobility, paying particular consideration to sharing systems.


- 4** The forms of mobility in the district should be barrier-free and safe.


- 5** The development of different forms of mobility takes into account affordability and cost-effectiveness.


- 6** A complete range of user-friendly, analogue and digital information channels is provided and maintained.


- 7** The supply-oriented development of the district's local public transport network is continued.


- 8** The district provides further support for cycling and pedestrianisation.


- 9** Good-quality, safe roads, streets and paths remain our goal.



## Agriculture and forestry

### Leitziel

We are committed to promoting transparent, environmentally sustainable and socially compatible agriculture and forestry sectors that protect natural resources, in order to boost value added in the region and preserve livelihoods. This will bring about a nutrition transition that leads to conscious dietary consumption at the regional level.

- 1** Forestry is to be adapted to climate change.


- 2** Agriculture is sustainable and needs-oriented, and protects resources. The protection of drinking water and soil is to be safeguarded, as are good animal husbandry practices that protect animal welfare.


- 3** Citizens' awareness is raised by making sustainable consumption and the costs of producing foodstuffs in the region more transparent.


- 4** Support is provided for meeting nutrition requirements through regional produce, and for artisanal food producers. Regional food alliances need to be strengthened.


- 5** People-centric, nature-based ecosystem services are supported, along with primary services.





## Climate action and energy

### Leitziel

The district fosters a future-oriented, responsible energy and climate policy. Adherence to limiting global warming to 1.5°C, the goal set down in the Paris Agreement, frames our actions. The district acknowledges the importance of the energy transition and of climate action as a key challenge of our times, and becomes a role model in this context.

- 1** The district endeavours to generate all of its energy requirements from renewable sources.


- 2** The district aims to stop emitting greenhouse gases and be carbon-neutral by 2045, in accordance with the national climate action goals.


- 3** The consumption of energy and the related requirements are to be reduced.


- 4** Intermunicipal cooperation is to be stepped up and mutual dialogue stimulated.


- 5** Intense climate-change-related PR activities educate citizens and raise their awareness in this regard. A broad awareness of climate action is to be fostered.


- 6** The creation of enhanced value at the regional level strengthens the local energy generation sector and safeguards the sustainable use of regional resources.


- 7** The district aims to generate energy from sources other than fossil fuels.


- 8** The district successfully plans and implements climate change adaptation measures.


- 9** The district's energy and climate change strategy is to incorporate incentives and appropriate offerings.



## Protection of nature and the environment

### Leitziel

Ecosystems and the natural landscape are to be protected in municipal and rural areas in the district, based on their intrinsic value and the vital role they play in securing livelihoods and protecting public health. Biological diversity and the performance and key functions of ecosystems are to be preserved, and the diversity, uniqueness, beauty and restorative value of habitats and the natural landscape are to be safeguarded, maintained, developed and restored in the long term. This should help mitigate climate change.

- 1** Biodiversity and habitat diversity, and their interaction, are protected, re-stored and improved in the long term.


- 2** The use and sealing of land are reduced to an absolute minimum.


- 3** The uniqueness, beauty and restorative value of the landscape is preserved and developed.


- 4** The interests of stakeholders from the areas of nature protection, agriculture, forestry and other sectors that harness nature and the landscape for financial purpose are managed so as to minimise potential conflict and leverage synergies.


- 5** The ecofriendly and environmentally sustainable use, management and design of soil and land used for agriculture and municipal development is supported.


- 6** Hazardous emissions that upset ecosystems or the landscape are minimised.



## Public finance and budgets

### Leitziel

When planning and managing municipal funds, the district and its municipalities take into account the interests of residents in the region and of future generations. The intergenerational justice of municipal budgets is reflected first and foremost in appropriate and necessary investment in municipal assets and in a stable level of municipal debt.

- 1** The level of debt is aligned with the approved maximum level.
- 2** Ongoing business activities must cover annual debt repayment requirements.

For each of the 14 thematic areas, appropriate project measures are derived from the key objectives and goals. Corresponding implementation steps and responsibilities are also identified for each project measure, along with the actors involved, scheduling, funding and specific indicators.

The Regional Management Unit is providing organisational support and steering inputs to help implement the project measures. The targets and measures will have a significant influence on the strategic actions of the relevant specialist units in the District Administration over the coming years. As political bodies for implementing the project measures, the Committee for Energy, Environment and Planning, the Regional Advisory Council and the Climate Action Advisory Council play an advisory role. The vision will also provide all residents of the district, as well as organisations, associations and companies with a guiding framework for future decisions in order to support the district in promoting sustainable development.

In order to document the implementation status of the project measures, the Regional Management Unit uses an evaluation form to request information from the participating specialist units. The resulting analysis of progress will be presented to the District Council annually as of 2023. This monitoring will allow progress of the targets and of project measures to be reviewed at regular intervals and facilitate tweaking where necessary.

As outlined in the previous section, in addition to the Regional Management Unit, some of the key organisational structures responsible for overarching implementation of sustainability measures in the district include the Office for Agenda 21, the Local Development Policy Coordination Unit, the Climate Action Management Unit and the Local Public Transport Unit.

## 2.4 Public participation for sustainability

The District of Fürstenfeldbruck hosts the **regional conference** On the Path to Sustainability every three years. The event aims to bring together the stakeholders that are relevant to development of the district, to facilitate joint dialogue and targeted discussions, and to involve citizens in shaping the district. Councillors, administrators, other municipal representatives, companies, various associations and initiatives and private individuals are invited to engage in dialogue and develop sustainable ideas for the district. Over 150 participants participated in the third regional conference in 2022. The involved specialist units at the District Administration - Office for Agen-





Photo 12: Poster of the regional conference to promote the event (Copyright LRA Fürstenfeldbruck)

da 21, Climate Action Management, Local Public Transport, Spatial Planning and Development, Regional Management, Tourism and Business Development - were able to present and reflect on the goals that have been achieved so far and set new impulses for sustainable and competitive development of the district. The next regional conference will take place in 2025.

When the district's new **vision** was developed, various citizens' workshops were held to facilitate participation by the general public to hear what projects they would like implemented and to broaden the vision's legitimacy. A total of two citizens' workshops and one youth workshop were held, each with 25 participants. A broad range of project wishes and ideas were collected and then integrated into the vision.

**Other formats** that have been used in recent years and are still being used now to involve the general public include:

Photo 13: Citizen participation during the regional conference in May 2022 at the Veranstaltungsforum Fürstenfeldbruck (Copyright Jessica Wiedemann)



- Involvement of young people within the framework of the Youth District Council (since 2019, young people have been able to express their views and wishes to the administration on various topics)
- Implementation of participatory workshops within the framework of the integration plan, with broad participation by different institutions and associations in the district and by individuals from a migration background (2022)
- Survey of the public's wishes and participation of mobility stakeholders and experts for the preparation of the local public transport plan (2018) and its update (2023)
- Regular plenary meetings of the Nutrition Advisory Council in which interested parties can become involved
- Establishment of a system for reporting any damage to or dangers on the bikeway network (since 2018)
- Involvement of citizens in the process to develop the spatial development strategy (RES 2040, 2017)
- Implementation of a climate action conference and of citizen events and workshops as part of the climate action masterplan (2012)
- Implementation of workshops to develop the action areas for the overall policy on senior citizens (2009) (further workshops are being planned to update the policy).

Photo 14: Citizen participation during the regional conference in May 2022 at the Veranstaltungsforum Fürstfeldbruck (Copyright Jessica Wiedemann)





# 03

## 3 Implementation of the Sustainable Development Goals (SDGs) in the District of Fürstentfeldbruck

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## 3.1 SDG 6 - Clean Water and Sanitation

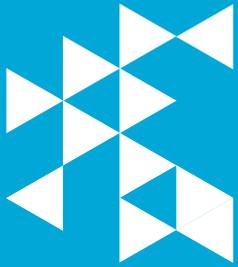
### 3.1.1 SDG 6 - Introduction and relevance for German municipalities

SDG 6 is designed to ensure availability and sustainable management of water and sanitation for all. It concerns access to drinking water and sanitation/hygiene for all. It also includes wastewater management, water protection, long-term water availability, efficient water use and the promotion of integrated water resources management. Groundwater is the major drinking water resource in Germany. However, water plays an important role not only for human supply, but also for instance in agricultural production and the preservation of ecosystems. To ensure the maintenance of natural and near-natural water cycles and water supply, water resources must be protected against pollution and overexploitation.

The key focus of implementing SDG 6 in Germany is therefore on improving water quality. However, the effects of climate change mean that seasonal/regional water scarcity will increase in the future. This also brings the responsible use of water resources into focus.<sup>11</sup> For German municipalities, the following themes are therefore especially relevant at the local level (please also compare these with the targets for SDG 6 in the annex):

- Ensuring water quality and avoiding water scarcity
- Protecting aquatic ecosystems
- Guaranteeing municipal sanitation and wastewater disposal.

<sup>11</sup> See Germany's Voluntary National Review to the High-Level Political Forum 2021 and the German Sustainable Development Strategy 2021.



### 3.1.2 Overview of qualitative aspects and indicators

#### **Qualitative aspects:**

- Water body and water quality - Introduction
- Water body and water quality - Implementation in the District of Fürstfeldbruck

#### **Indicators:**

- Quality of watercourses
- Nitrate-polluted/eutrophicated areas
- Nitrogen surplus in agriculture
- Drinking water consumption - private households
- Wastewater treatment

### 3.1.3 Contributions of the District of Fürstenfeldbruck to the SDG

#### Water body and water quality - Introduction

Water is the foundation of all life. In addition to its general ecological importance, water is used for a variety of purposes, in particular for drinking and other general uses. It is therefore vital that we protect groundwater and water bodies in order to maintain the natural balance and protect the health of the population, preserve natural resources and foster business development.

While the supply of drinking water and sanitation in Germany comes under the umbrella of public services, there is still a great need to improve water quality. The basic requirements for the quality of surface water bodies (rivers, lakes, transitional and coastal waters) and for groundwater are stipulated in the EU Water Framework Directive, which aims to achieve a status of "good" for all surface waters and groundwater throughout Europe by 2027 at the latest. For surface waters, this means both good ecological and chemical status, and for groundwater, good chemical and quantitative status. Under the directive, "ecological status" refers to quality in terms of the structure and functioning of aquatic ecosystems. For surface waters, a status of good means the achievement of minimum requirements for various biological and chemical parameters. The chemical status is assessed as good if the limit values of certain nutrients and pollutants are met. In terms of good quantitative status, a balance between groundwater abstraction and recharge must be ensured. If the status of surface waters and groundwater is good overall, then structures are as close to their natural state as possible and pollution levels are low.

Photo 15: Six of the eight river water bodies do not achieve good ecological status according to the WFD. Often the water bodies are straightened or obstructed. (Copyright WWA-M)



In Germany, the Water Framework Directive is anchored in the Water Resources Act, the Surface Waters Ordinance and in the Groundwater Ordinance.

The EU Directive enables water protection to be carried out from the source to the mouth in the water catchment area. In Germany, ten river basin districts are designated for this purpose, which constitute the national planning areas in which the EU Directive is implemented. The core elements of water management planning are the management plans and programmes of measures that are drawn up for entire river basins or parts thereof. The management plans and programmes of measures - currently spanning 2022 to 2027 - are regularly updated.

Germany's Voluntary National Review to the High-Level Political Forum 2021 (report on implementation of the 2030 Agenda for Sustainable Development) states that all of the 9,800 surface water bodies and over a third of the 1,200 groundwater bodies in Germany have so far failed to achieve the overall status of "good". A report on the status of water bodies published in 2022 by the Federal Envi-

ronment Agency (UBA) and the Federal Environment Ministry (BMU) entitled "The Water Framework Directive. Water Bodies in Germany 2021. Progress and Challenges" provides detailed information on these findings. For example, only 9 per cent of all surface waters currently achieve good ecological status, and none of the surface waters achieve good chemical status (this is caused by substances that are distributed in all environmental media, such as mercury). For groundwater, 67 per cent of water bodies achieve good chemical status and 95 per cent achieve good quantitative status. In both groundwater and surface water, pressures from nutrients and pollutants occur across the board - especially from phosphorus, nitrogen and mercury (only 1 per cent of surface waters and 53 per cent of groundwater bodies in Germany are currently considered uncontaminated). The main reasons most surface waters do not achieve good ecological status, on the other hand, are construction, straightening of watercourses and the in-

Photo 16: A diverse watercourse structure with riparian woodland provides the basis for good ecological development. Both examples show the Maisach near Germerswang. (Copyright WWA-M)



errupted continuity of watercourses by transverse structures. Germany therefore plans to implement extensive corrective measures over the next few years. For surface water, the measures planned for the current management period (2022 to 2027) include restoration to improve habitats for animals and plants, and a reduction in nutrient and pollutant inputs. In groundwater, measures to reduce pollution in the agricultural sector predominate.

## Water body and water quality - Implementation in the District of Fürstenfeldbruck

Against the background described above, the district also supports measures to achieve a status of "good" in surface waters and groundwater in the region. At the district level, responsibilities are distributed as follows:

- Fürstenfeldbruck District Administration as the lower-level water rights authority: legal authority and enforcement
- Munich Water Management Office: Technical authority, official expert for water management issues and responsible for the maintenance of large and regionally significant water bodies (order I/II)

Photo 17: Drinking water in the Fürstenfeldbruck district is supplied via groundwater wells. On the surface, these often appear inconspicuous. However, the protection of drinking water starts at the surface. For example, areas with high nitrate contamination are designated as "red areas" and increased requirements for fertilization apply. [Copyright WWA-M]



- Municipalities: maintenance obligation for smaller water bodies (order III)
- Free State of Bavaria, transferred to the responsible Water Management Office: processing of grants in accordance with the guidelines governing grants for water management projects (RZ-Was). Areas: Planning and construction of flood protection and restoration measures on watercourses; new construction and rehabilitation of wastewater and drinking water facilities

Around 93 per cent of drinking water in Bavaria is obtained from **groundwater**. In most cases, the quality of the groundwater is so good that it can be fed into the supply network untreated. The Bavarian State Office for the Environment provides state-wide data on groundwater quality for selected parameters (e.g. nitrate, triazines). The Bavarian Ministry of the Envi-

ronment launched the project Water Future Bavaria 2050 to safeguard future supplies of top-quality water. In addition to water security, the project also addresses the areas of flood protection, ecology and social functions. As regards drinking water supplies, the plan of decentralised, local water supply has proven successful in Bavaria. In the district, a total of 13 water suppliers provide clean drinking water. The individual suppliers regularly test the water quality of the drinking water wells in the district. The wells must also be regularly regenerated, i.e. cleaned. To minimise drinking water losses due to corroded pipes, the municipalities are required to continuously rehabilitate the pipes and report the quantities lost to the District Administration and the Munich Water Management Office annually. The Fürstentfeldbruck Office for Public Health carries out sampling for lakes.

The individual municipalities - the parties responsible for maintenance (under Art. 22 of the Bavarian Water Act) - are responsible for measures to improve the **ecology of water bodies**. Against the backdrop that the management objectives for surface waters (section 27 (1) no. 2 Water Resources Act) target a good ecological and chemical status, every sewage treatment plant in the district has a permit in accordance with the Water Act. Under this permit, approval for the discharge of treated wastewater into a body of water is granted subject to the condition that the plant complies with various treatment parameters. The plant operator must report compliance with these parameters on an annual basis. The Munich Water Management Office also regularly monitors water bodies. The Bavarian Environmental Atlas provides information on the condition of selected water bodies and planned measures in the area covered by the office (for more information on the condition of bodies of river water in the region, see the Quality of watercourses indicator).

The river Amper - a watercourse that characterises the district - traverses the district from the south to the north-east. In order to further improve the river's condition, the **Amper Rhei project** was launched in 2018. The project aims to draft a holistic plan that takes into account the combined aspects of nature conservation, water ecology, hydropower utilisation and flood protection. The relevant authorities, municipalities, associations and hydropower operators from the districts of Fürstenfeldbruck, Dachau and Freising are involved. In 2018, 2019 and 2021, three dialogue and information sharing events known as the Amper forums were held to find solutions for the future of the river landscape together with all stakeholders. The forums culminated in the drafting of an overarching strategy for the river. According to this strategy, the Amper will be a river that shapes the landscape and can be experienced, with near-natural watercourse and floodplain dynamics, diverse habitats for animals and plants, and flood protection for settlements and infrastructure, with water being

Photo 18: Blick auf die Amper mit naturbelassenem Ufer



used as a sustainable energy source in a way that is compatible with nature. The strategy therefore encapsulates a sustainably intact river landscape for the Amper that is oriented to its natural conditions. In this context, the river and its floodplain landscape are to be revitalised and upgraded, existing habitats protected and new ones opened up, and the river's own dynamic development supported. For this purpose, it is important to work together on the building blocks of river and floodplain, flood protection, hydropower, leisure and recreation, and to develop appropriate solutions.

The District of Fürstenfeldbruck's **Vision for the Future**, which was published in 2022 (see the section Strategic and organisational mainstreaming of sustainability), also contains the following **key goals** that relate to SDG 6:

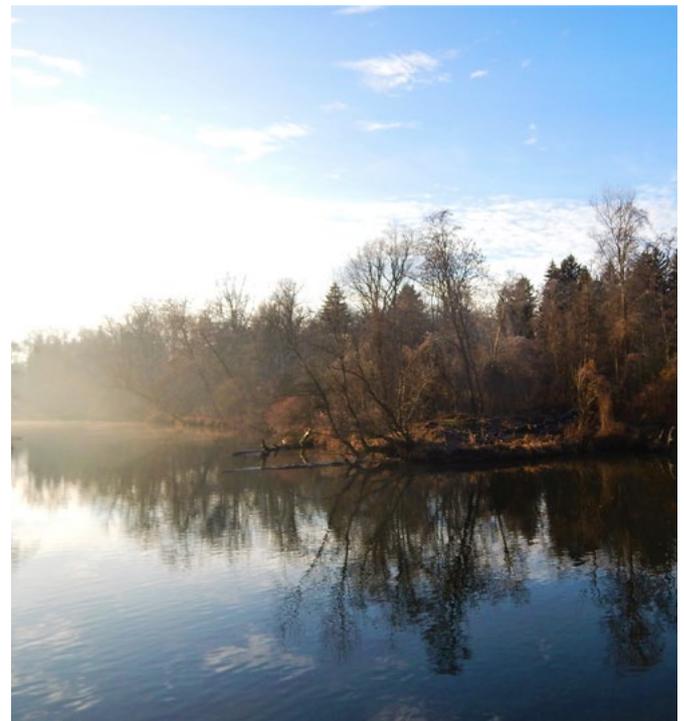
- Biodiversity and the diversity of habitats as well as their connectivity will be sustainably protected, restored and improved.
- Harmful inputs that upset the natural balance and the landscape are minimised.
- Agriculture will be sustainable and needs-oriented and will conserve resources. Above all, drinking water and soil will be protected and good animal husbandry practices that safeguard animal welfare will be ensured.

One of the **project measures** to achieve these targets is the expansion and optimisation of the biotope network and, in this context, the explicit restoration of water bodies.

Photo 19: In the course of the "Amper Rhei" project, old watercourses are to be connected to the Amper for near-natural watercourse and floodplain development, as already exists here near Emmering, for example. (Copyright WWA-M)



Photo 20: Decorative photo of the Amper river (Copyright WWA-M)



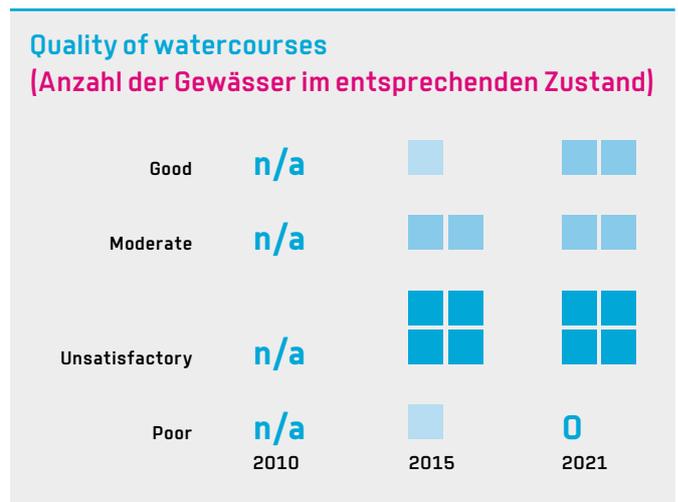
### 3.1.4 Indicators



#### Quality of watercourses

Ecological and chemical status of watercourses (watercourse bodies) (Source: [www.umweltatlas.bayern.de/Gewässerbewirtschaftung](http://www.umweltatlas.bayern.de/Gewässerbewirtschaftung))

In most cases, the inadequate ecological status of watercourses is due to an excessive nutrient load from agriculture, construction, and the straightening of watercourses. Water is usually assessed every six years. Of a total of eight river water bodies assessed in the district, only two achieved a good ecological status (target according to sections 27-35 of the German Water Resources Act, WHG) in 2021. These water bodies include the Amper, a watercourse that characterises the district. During the period under review, no significant change, with a tendency towards minimal improvement, can be observed for the remaining water bodies. The German Sustainable Development Strategy addresses the quality of watercourses in target 6.1.a. with “Not exceeding benchmark values for phosphorous for spe-



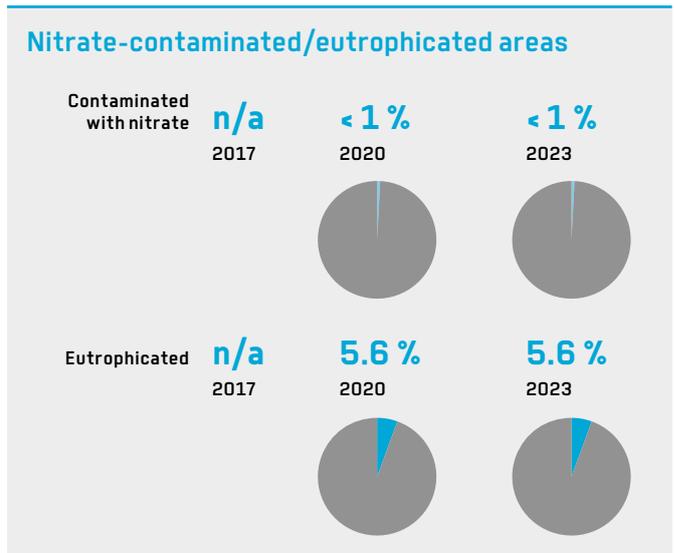
cific types of water bodies at all monitoring points (flowing waters)”.



### Nitrate-contaminated/eutrophicated areas

Proportion of area designated as a) nitrate-polluted and b) eutrophic in relation to total area of the administrative district (Source: section on Water protection- agriculture under Water management in the Environmental Atlas)

Groundwater is an indispensable basis of life for humans and for nature alike. To protect groundwater, areas with high nitrate pollution in the groundwater are designated nitrate-polluted areas (red areas). In addition to nitrate pollution, phosphorus in particular leads to excessive accumulation of nutrients in surface waters. This is known as eutrophication. This nutrient enrichment has adverse consequences for the aquatic ecosystems in these waters (e.g. through excessive algae growth). To protect surface waters, areas with eutrophication in rivers and lakes are designated eutrophic areas (yellow areas). The designation of areas is based on the implementation ordinance for the Fertiliser Ordinance (AVDüV) and the general administrative ordinance for the designation of eutrophicated areas and areas polluted with nitrate (AVV Gebietsausweisung - AVV GeA). In areas where nitrate pollution of groundwater is high (red areas) or where surface waters are eutrophicated with phosphate (yellow areas), additional require-



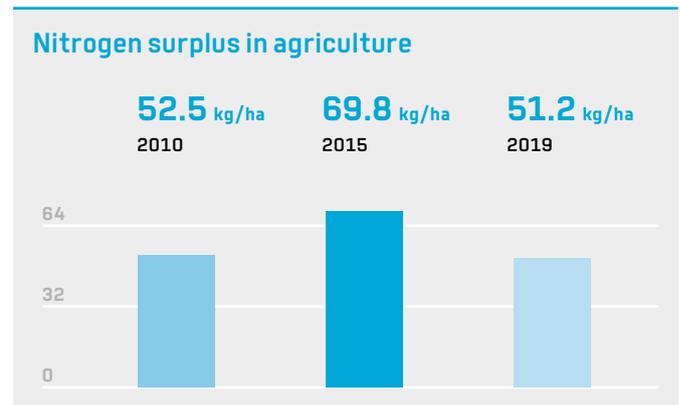
ments must be met when spreading fertiliser. In the district, less than 1 per cent of areas were polluted with nitrate and 5.6 per cent of areas affected by eutrophication (2023, most recent figures).



### Nitrogen surplus in agriculture

Nitrogen surplus in kg per hectare of land in agricultural use (Source: SDG Portal)

Excessive use of fertilisers in agriculture in particular is causing a wide range of environmental problems - we have already exceeded the global planetary pollution limit in this respect. Nitrogen surpluses also lead to acidification of surface waters, oceans and various terrestrial ecosystems as well as nitrate contamination in groundwater. This value tends to fluctuate in the district. In 2019, the nitrogen surplus for land in agricultural use was 51.2 kg/ha. No data are available for the federal level for that year. In Bavaria, the value was significantly higher overall, with a nitrogen surplus of 68.3 kg/ha in 2019. Nevertheless, these trends already contribute to target 2.1.a formulated in the German Sustainable Development Strategy "Reduction in nitrogen surpluses of



the overall balance for Germany to 70 kilograms per hectare of utilised agricultural area on an annual average between 2028 and 2032".

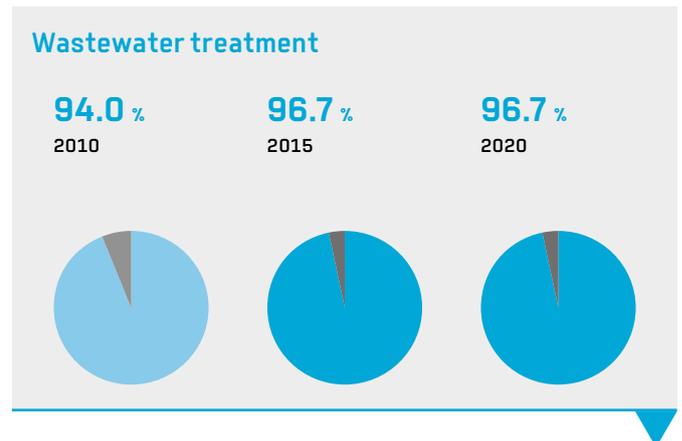
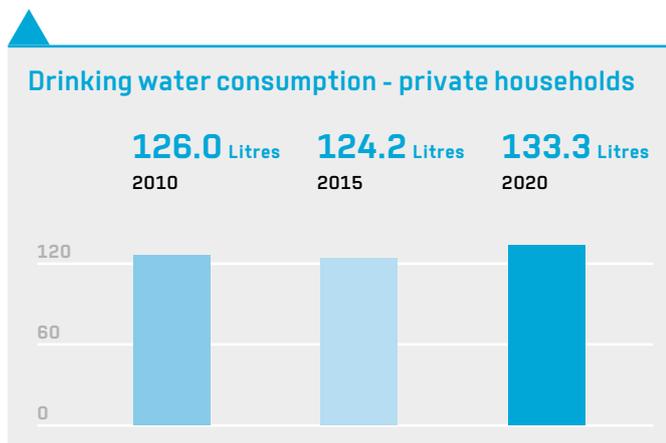


### Drinking water consumption - private households

Drinking water consumption in litres per capita per day (Source: SDG Portal)

Drinking water is one of the most precious resources, especially against the backdrop of increasing periods of drought and hot summers. Generally speaking, Germany is a country with ample supplies of water and direct consumption has remained largely constant in recent years. Supplies of drinking water are generally sufficient in the region around the district too. Supply is always linked with the use of en-

ergy and materials, however. In the district, drinking water consumption by private households increased slightly to 133.3 litres per capita in 2020, compared to 2015. This development is slightly above the average nationwide consumption (2020: 126.6 litres/person). The German Sustainable Development Strategy does not include any targets for drinking water consumption by private households.



### Wastewater treatment

Percentage of wastewater treated by denitrification and phosphorus elimination (Source: SDG Portal)



Wastewater refers to water contaminated from domestic, commercial or industrial use and can cause significant harm to humans, animals and nature if not properly treated. Denitrification and phosphorus elimination can remove nitrogen and phosphorus surpluses from wastewater, improving the quality of wastewater treatment. In the district, the percentage of wastewater undergoing additional denitrifica-

tion and phosphorus elimination treatment remained relatively constant over the period under review. In Bavaria, the corresponding value for 2020 is 82.2 per cent, the value for Germany as a whole is 92.9 per cent for 2020. The German Sustainable Development Strategy does not explicitly address wastewater treatment.



## 3.2 SDG 7 - Affordable and Clean Energy

### 3.2.1 SDG 7 - Introduction and relevance for German municipalities

SDG 7 aims to ensure access to affordable, reliable, sustainable and modern energy for all. A secure, environmentally sound and affordable supply of electricity and heat is key to social and economic development. It is also directly linked to environmental protection and climate action. Energy and heat security, environmental compatibility and affordability form a triad of energy policy goals. In Germany, climate and energy policy as part of the energy transition aims to decarbonise energy systems by promoting renewables, reducing energy consumption and increasing energy efficiency. This is designed to achieve the overarching goal of carbon neutrality. The trans-

formation towards a sustainable energy supply must be implemented in various sectors (energy and agriculture, industry, buildings and transport). Achieving digitalisation and innovation by investing in research and new technologies plays an important role in this.<sup>12</sup> When localising implementation of this SDG, German municipalities on the whole face the following thematic tasks (please also compare these with the targets for SDG 7 in the annex):

- Promoting renewable energy
- Increasing energy efficiency
- Ensuring access to an affordable and reliable energy supply.

<sup>12</sup> See Germany's Voluntary National Review to the High-Level Political Forum 2021 and the German Sustainable Development Strategy 2021.



### 3.2.2 Overview of qualitative aspects and indicators

#### Qualitative aspects:

- ▮ Energy and climate action - overarching goals, developments and activities in the District of Fürstenfeldbruck
- ▮ Institutional structures for implementing the goals
- ▮ Selection of specific projects

#### Indicators:

- ▮ Electricity from renewables
- ▮ Electricity from wind farms
- ▮ Electricity from photovoltaics
- ▮ Electricity from biomass
- ▮ Electricity from other renewable energy sources
- ▮ Completed residential buildings with renewable heating energy
- ▮ Cuts in greenhouse gas emissions through climate action projects
- ▮ Charging point infrastructure

### 3.2.3 Contributions of the District of Fürstenfeldbruck to the SDG

#### Energy and climate action- overarching goals, developments and activities in the District of Fürstenfeldbruck

With the Federal Climate Change Act (2021), the German Government has set itself the objective of reducing carbon emissions by 65 per cent by 2030, compared with 1990 levels. Germany is to achieve carbon neutrality by 2045, which means that the emission of greenhouse gases must there be balanced by their reduction.

In accordance with the national climate action goals, the District of Fürstenfeldbruck also set itself the goal in its 2022 **vision** of eliminating greenhouse gases and becoming **climate neutral** by 2045. In the section on climate action and energy, the vision states that the district's overarching key objective is to pursue a future-oriented and responsible energy and climate policy, with actions based on compliance with the 1.5 degree target set down in the Paris Agreement. The document also states that the district recognises the energy transition and climate action as a key challenge of our time and undertakes to consciously fulfil its role model function. Against this backdrop, in addition to the above-mentioned goal of climate neutrality by 2045, the following additional **key goals** have been set, all of which are directly related to SDG 7:

- The district aims to generate energy from 100 percent renewable sources.
- Demand for and consumption of energy will be reduced.
- Intermunicipal cooperation will be strengthened and mutual dialogue encouraged.
- Intensive PR work will be carried out to educate and raise the awareness of citizens as regards

climate change. The aim is to create a comprehensive awareness of climate action.

- Local energy production will be strengthened through regional value creation, with regional resources being used sustainably.
- Every effort will be made to achieve clean energy (i.e. generating energy without using fossil fuels).
- The district's energy and climate action strategy is characterised by incentives and relevant service offerings.

The following specific **project measures** have been derived from these key goals:

- Elaboration of a renewable heat generation plan and launch of its implementation
- Development of a renewable power generation plan
- Preparation of a renewable energy supply plan for municipal properties
- Sustainable construction (for municipal properties) and
- Increased implementation of PR measures

When implementing the goals and measures described above, the district can build on various structures, plans and activities that have been established for many years now. These are described in greater detail below.

As far back as the first **energy conference in 2000**, the district set itself the goal of implementing the energy transition by 2030. This is to be achieved primarily through reduced energy consumption, the use of renewables and the sustainable use of regional resources. In this way, climate change will be slowed down, regional value creation will be strengthened and the district will generate its own independent energy supply. In particular, three instruments have been launched in recent years to define and monitor measures: the climate action masterplan, regular CO<sub>2</sub> audits and the CO<sub>2</sub> action plan.

The **integrated climate action masterplan** for the district and its municipalities was published in 2012. It

is broken down into various work packages, such as the energy and a CO<sub>2</sub> audit (see below), a potentials analysis for wind energy, and the identification of CO<sub>2</sub> reduction potentials or scenarios. Relevant short, medium and long-term measures were allocated to the work packages, which were in turn reviewed to maximise mutual synergies. Four groups of measures were created as part of the range of measures identified: public relations and management, energy generation, local energy management, and local planning. An accompanying controlling plan was developed as part of the implementation strategy to manage the coordinated implementation of measures.

As part of the climate action masterplan, an **energy and CO<sub>2</sub>** audit (based on 2010 data) was prepared in 2012. In 2017, the district, together with 14 municipalities in the district, commissioned an update of the CO<sub>2</sub> audit (based on 2015 data). The resulting report, published in 2018, presents current trends in energy consumption in the areas of electricity, heat and transport as well as associated CO<sub>2</sub> emissions in the district. It also sets out solutions in the form of recommended measures. The district and its partner municipalities engaged in constructive cooperation when coordinating the results. Even the municipalities that were not directly involved supported the preparation of the audit by providing data and other information. The energy and CO<sub>2</sub> audit illustrates that absolute CO<sub>2</sub> emissions increased by 4.7 per cent between 2010 and 2015 emissions to just under 1.5 million tons of carbon dioxide (t CO<sub>2</sub>), primarily due to population growth and an increase in the district's workforce.

**Support for renewable energy** constitutes an important component of the climate action masterplan. In 2015, renewable energy installations in the district (photovoltaics, wind, hydropower, biomass) generated almost 30 per cent of the required electricity. Meanwhile, well over 8,000 **photovoltaic installations** on balconies, roofs and open spaces supply the district with green solar power. In 2019, electricity from photovoltaic installations accounted for 105 GWh or just over 17 per cent of the district's total electricity

consumption. In order to achieve the objective of switching the district's energy supply entirely to renewables, further expansion of photovoltaic installations and wind farms in particular is needed. With this in mind, the first agriphotovoltaic tracking system was constructed in 2020, allowing the use of pivoting photovoltaic modules and the simultaneous use of farmland and generation of electricity. The district provided additional support for the dissemination of photovoltaic installations in recent years by running a PV campaign entitled "My roof has one" to promote solar panels, which included expert lectures and free advice for interested parties on implementing photovoltaic installations (PV suitability check). As regards the use of wind energy, the Spatial Planning and Development Unit drafted an **intermunicipal partial land use plan for wind power** in 2014, based on the rough analysis conducted within the framework of the climate action masterplan. The plan shows concentration areas for wind energy. The

Photo 21: View of the two wind turbines of Mammendorf and Malching (Copyright Toni Fasching)



10-H rule introduced in the densely populated District of Fürstentfeldbruck stipulated that wind turbines could only be installed if municipalities set down shorter distances between wind turbines and residential buildings in zoning plans. As the Bavarian distance regulation meant there was no longer enough space left for a legally secure control instrument for wind energy use, the complex procedures of the partial land use plan had to be dropped in 2014 following early involvement of the public and of public interest groups. The introduction of new, amended legislation means that the construction of wind turbines will become significantly easier from 2023. The Spatial Planning and Development Unit supports the expansion of renewable in general, for example, by providing information and advice to municipalities and stakeholders and on the plans developed by the Munich Regional Planning Association.

EUPA, the committee for energy, environment and planning of the district, adopted the **CO<sub>2</sub> action plan** in 2020. Since then, it has provided a key basis for the district in achieving its climate targets in the coming years. The action plan pools the measures contained in the 2018 CO<sub>2</sub> audit with proposed measures from all political groups. It addresses the transition to 100 per cent renewable electricity and heat supply, the decarbonisation of housing stock in the district and support for green hydrogen, to name just a few examples. Approximately 44 per cent of CO<sub>2</sub> emissions throughout the district are generated by the use of thermal energy, with transport accounting for 36 per cent of emissions and electricity use for 20 per cent. The measures in the action plan therefore explicitly address reducing the emissions generated in these areas. This is to be achieved, among other things, by further expanding the generation of renewable electricity and heat and integrating them into hydrogen-based storage technologies. Other measures include further developing alternative mobility options, with a particular focus on walking and cycling. The CO<sub>2</sub> action plan contains the following specific measures:

- District heating plan



Photo 22: View of the Mammendorf wind turbine from above  
(Copyright Ute Kuhlmann)

Photo 23: Agri photovoltaic plant with sheep in Althegegnberg  
(Copyright Ute Kuhlmann)



- Plan for renewable electricity supply in the district
- Stepping up of advisory services/further training/PR work
- Further development of local transport plan/green transport/e-mobility
- Further development of cycling/pedestrian plan
- Green hydrogen plan
- Expansion/establishment of local energy management
- Renewable energy supply plan for municipal properties
- Freight transport

The district does not bear sole responsibility for implementing these measures. Other relevant actors (such as energy suppliers, grid operators, utilities, transportation planners, construction planners, and citizens) will therefore always be involved in implementation.

Implementation of the measures is being accompanied by a **climate check of draft resolutions** in the district. Since September 2021, all draft resolutions have been checked for their climate relevance - i.e. every draft resolution submitted to the District Council or one of the committees must include a climate impact assessment.

## Institutional structures for implementing the goals

Since 2015, the **Climate Action Management Unit** for the District of Fürstenfeldbruck has coordinated implementation of the presented goals and activities, in particular the CO<sub>2</sub> action plan as the main cornerstone.

The unit is the key point of contact, activates and networks the project partners and leads coordination with the specialist units at the District Administration and with the other stakeholders. It also reports regularly on the status of implementation of

the CO<sub>2</sub> action plan and acquires funding. Climate Action Management also organises regular network meetings with the climate action officers from the municipality administrations in the district. The meetings focus on climate action projects of the District Administration and municipalities as well as on current challenges, proposed solutions, new support programmes and (joint) project ideas. The unit is currently anchored in the District Administration and has 2.5 full-time equivalent positions. It is supported in an advisory capacity by the **Climate Action Advisory Council**. Members of the council are the District Chief Executive, representatives of the administration, the District Council and of the municipalities as well as representatives of the different areas in the field of climate action. The Climate Action Management Unit reports to the advisory council at regular intervals on implementation status of the measures and agrees on further procedure.

In order to pool resources, the District Councils of Fürstenfeldbruck, Starnberg and Landsberg am Lech passed resolutions in 2022 to establish a joint **Climate and Energy Agency**. The agency, the establishment of which was decided by the District Committees of the three administrative districts, is designed as a competence centre with a service role. It offers consultancy and strategic support in the areas of energy transition, climate action, climate adaptation and resource efficiency. The agency's constitutional purpose also includes the development of a greenhouse gas-neutral region. The new agency launched operations in September 2022, with an office in the district and will initially offer product-neutral and supplier-neutral advice for private households and homeowners (from saving energy, using solar energy and switching to fossil-free heating to e-mobility and grant programmes). The agency also supports municipalities in the form of strategic consultancy and process support for implementing

Photo 24: Starting signal for the new Climate and Energy Agency of the districts of Starnberg, Fürstenfeldbruck and Landsberg am Lech gGmbH: District Administrators Stefan Frey, Thomas Karmasin and Thomas Eichinger at the notarial certification (from right) (Copyright Starnberg District Office)



various climate action measures. While consultancy services for utilities are in the pipeline, educational work and awareness-raising have been integrated as a cross-sectional task right from the outset.

As an independent advisory body for municipalities, utilities and consumers, the Climate and Energy Agency will take over tasks performed for over 20 years by **ZIEL 21**, the **association for transitioning to innovative energies** in the district. ZIEL 21 was set up in the district in 2001. Since then, it has built up an extensive network of members comprising local and commercial operators. Established by the District of Fürstentfeldbruck, *BRUCKER LAND Solidargemeinschaft e.V.* and *Sparkasse Fürstentfeldbruck*, it has gradually attracted other organisations and utilities (*Bayerischer Gemeindetag, Stadtwerke Fürstentfeldbruck GmbH, Strom Germering GmbH, Energie Südbayern GmbH, Bund der Selbständigen Bayern e.V., Volksbank Fürstentfeldbruck, Stadtwerke Olching GmbH and KommEnergie GmbH*). One important task ZIEL 21 has carried out since 2001 has been to provide expert advice to private individuals, utilities and municipalities in the district. For example, in 2022, the association's dedicated experts conducted around 350 advisory sessions in each of the areas of photovoltaics and retrofit and heating. Over time, many of the association's long-standing activities have developed into annually recurring events, including energy bike tours that visit different locations (such as biogas plants, ground-mounted PV installations and wind turbines in the district). The association's range of tasks spanned a wide array of areas, from participation in local trade fairs, action days and energy and climate action promotion events to the implementation of larger PR campaigns. (For example, in 2022, three lectures on heat exchange systems/heat pumps were organised with 400 participants, as well as a lecture on using energy economically). Finally, the association also carried out extensive educational work in the form of themed events and energy training courses at primary and secondary schools in the district, underpinned by reports on its homepage and in municipal newsletters.

## Selection of specific projects

In this section, we present some further examples of specific energy and climate action initiatives in recent years. In the area of awareness-raising and supporting citizens in climate action, we have published an energy guidebook and a range of brochures on **climate action in everyday life** and run the STADTRADELN cycling campaign. As part of the Climate Action in Everyday Life campaign the district has published various checklists for climate-conscious living, including practical tips for integrating climate action into everyday life. The publications include checklists for a climate-friendly garden, shopping, the kitchen and even one for the bathroom. The district's 40-page **energy guidebook** on renovating, energy and climate action contains tips on all aspects of energy-efficient construction and renovation as well as information on funding and sustainability activities run by the district. The District of Fürstenfeldbruck has been involved in the **STADTRADELN** - Cycling for a Good Climate event for many years. 2022 was the district's ninth time participating in the event, which is planned and organised annually by the district's Climate Action Management Unit, the municipalities and the Fürstenfeldbruck local branch of the ADFC National Cyclists' Association. STADTRADELN is a nationwide team event organised by the Climate Alliance network for municipalities, districts, regions and their residents. The competition revolves around taking the climate-friendly option and doing as many everyday journeys as possible by bike for three weeks. Over 5,000 active cyclists took part in the district in 2022, cycling over 800,000 kilometres, and avoiding 124 tons of CO<sub>2</sub>. Here the event is accompanied by annual activities, award ceremonies and prizes for citizens and municipalities (e.g. a challenge cup for the municipality in the district with the most "cycled" kilometres per person).

### 3.2.4 Indicators



#### Electricity from renewable sources

2011	2015	2020
0.09 kW	0.12 kW	0.61 kW

Net installed nominal capacity of renewable electricity from biomass, solar energy, hydro and wind per capita (Source SDG Portal)

A sustainable energy economy relies primarily on renewables. This indicator provides information on the net installed nominal capacity of renewable electricity from biomass, solar energy, water and wind per capita in a municipality. In the district, the net nominal capacity of renewable electricity has risen continuously over the period under review and most recently (2020) stood at 0.61 kilowatts per capita.

The national average of 1.51 kilowatts per capita is somewhat higher. The continuous expansion of the installed capacity of renewable electricity in the District of Fürstenfeldbruck contributes to achievement of target 7.2.b. of the German Sustainable Development Strategy: "Increase the share of electricity from renewable energy sources in gross electricity consumption to at least 65 per cent by 2030".

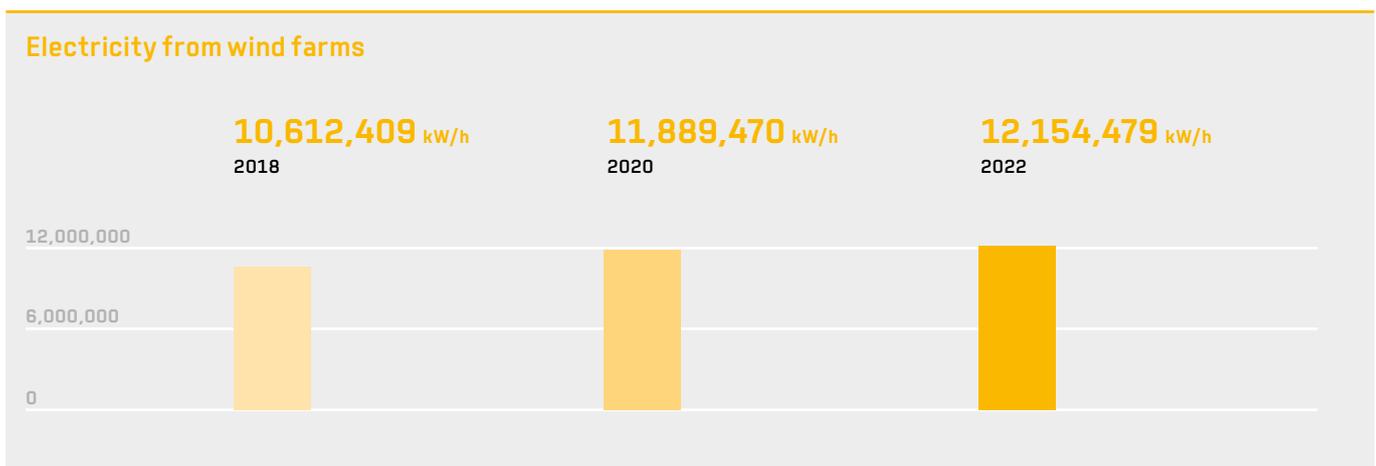


### Electricity from wind farms

Electricity generation in kilowatt hours per annum by one wind farm in each of the municipalities Malching and Mammendorf (Source: <https://www.stadtwerke-ffb.de/de/unternehmen/erzeugung/windenergie>)

Electricity from wind power accounts for a significant share of the German energy mix and is the most important source of renewable energy in terms of energy fed into the grid. This indicator provides information on the electricity generated in kilowatt hours by one wind farm in each of the municipalities of Malching and Mammendorf for the period 2018 to 2022. The percentage of installed capacity of wind turbines increased during this period from around 10,612,409 kilowatt hours in 2018 to 12,154,479 kilowatt hours in 2022. With these peak rates equating to 11 gigawatt hours on average, the turbines use wind to generate electricity for around 4,000 households each year, saving around 4,600 tons of CO<sub>2</sub> (compared to the German electricity mix in 2018). This is also a result of the continued very high tech-

nical availability, which exceeds the 97 per cent value promised by the manufacturer (97.63 per cent in Malching and 99.64 per cent in Mammendorf). The new Onshore Wind Energy Act (2 per cent of Germany's land area must be allocated to wind power by 2032 - for Bavaria, this means 1.1 per cent of its land area by 2027 and 1.8 per cent by 2032) further boosts momentum in the wind power sector. Munich's Regional Planning Association (RPV, region 14) has started to update the regional plan in cooperation with its administrative districts and municipalities. Some municipalities in the district are also actively pursuing plans to designate wind energy areas. The western municipalities in particular are cooperating with each other to this end.





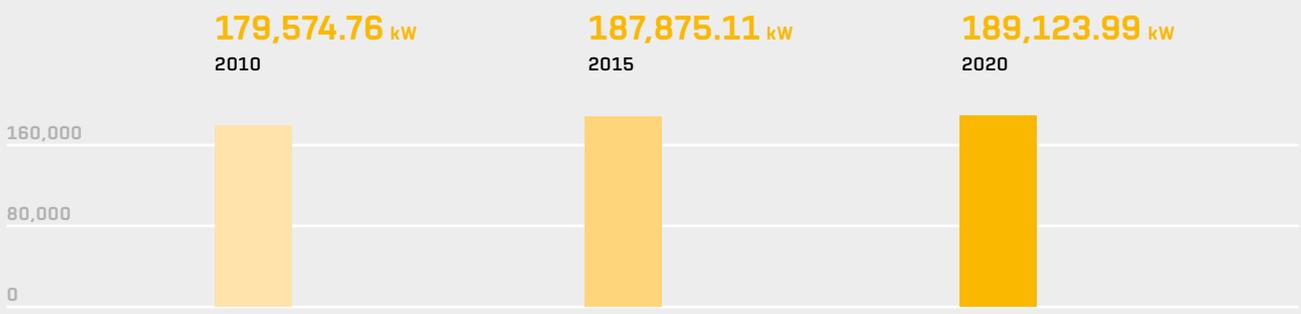
### Electricity from photovoltaics

Net nominal capacity in kilowatts per annum (Source Bundesnetzagentur, core market data register (MaStR), Bavarian Energy Atlas)

In addition to electricity generated by wind farms, electricity generated by photovoltaic (PV) installations is an important component of the renewable energy sector. In this context, the indicator provides information on the net nominal output in kilowatts from PV installations. Since January 2021, all power generation units connected to the general supply grid must be entered in the core market data register (MaStR). This also applies for the steadily growing number of PV installations in Germany. Other information about the PV installation - such as its orientation, inclination and capacity limits - is now also recorded in addition to the core data entered in the Renewable Energy Sources Act (EEG) data. When we

look at the new-build of installations as a percentage (in relation to the total number of added installations) per state, we see that most of the additions between 2001 and 2009 were built in Bavaria and Baden-Württemberg, ranging from 52 to 74 per cent during this period. By 2019, it had dropped to 43 per cent. The installed net nominal capacity in kilowatts in the district increased steadily between 2010 and 2020. Electricity generation from PV installations is one of the most important renewable energy sources in Bavaria, partly because PV installations can also be operated on small areas with low investment input. In 2020, solar power was able to cover the electricity requirements of 3.6 million Bavarian households.

### Electricity from photovoltaics

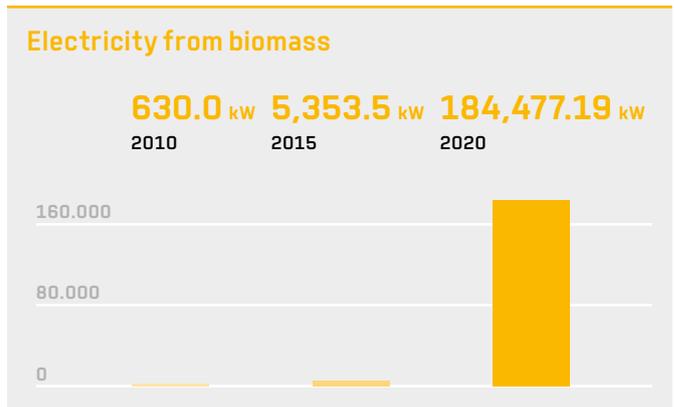




### Electricity from biomass

Net nominal capacity in kilowatts per annum (Source Bundesnetzagentur, core market data register (MaStR))

The use of biomass to generate electricity and heat is a controversial topic. Although bioenergy has a better carbon footprint than fossil energy, the production of biomass can have a negative impact on people and on the environment. Biomass and biogenic waste generated about 50.0 billion kWh of electricity nationwide in 2021. The main contributors to electricity generation from biomass are biogas (28.2 billion kWh), solid biomass (10.9 billion kWh), and biogenic waste (5.8 billion kWh). Throughout Germany, the installed capacity for the generation of electricity from biomass increased by about one per cent to 10,478 MW (10,478,000 kilowatts) in 2021. Between 2010 and 2020, there was a rapid increase in the net installed capacity in the biomass sector in the



district to 184,477.19 kilowatts. Currently, however, other energy generation installations are being expanded, especially ground-mounted photovoltaic installations.



### Electricity from other renewable energy sources

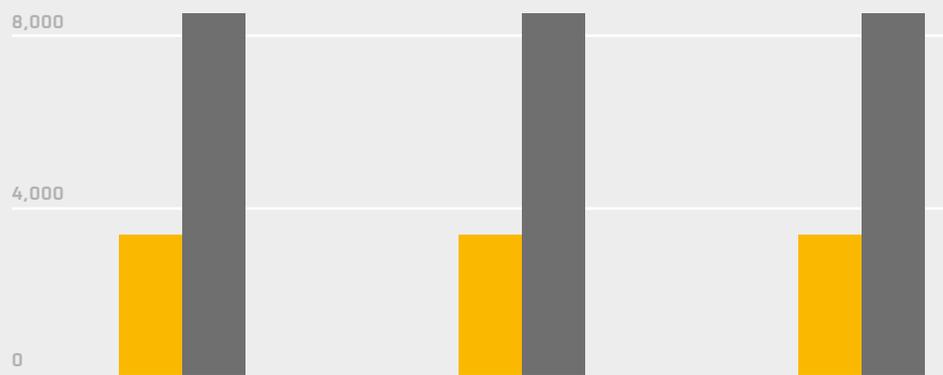
Electrical expansion capacity in kilowatts per annum  
(Source Bavarian State Office for the Environment)

Other components in the renewable energy sector are hydropower and non-biogenic waste (including household waste or municipal waste). In the district, there are four hydropower plants in operation on the River Amper and 11 smaller power plants on smaller water bodies. As the only public operator in the district, Stadtwerke Fürstentfeldbruck runs two hydropower plants on the Amper. According to the Atlas of Water Bodies, the electrical expansion capacity is 2,903 kW, with the four hydropower plants on the Amper generating 97 per cent of the electricity. In the area of hydropower, no further significant growth is

to be expected in the district, which is similar to the trend in Bavaria as a whole. Where hydropower is available, it is already fully used to generate energy (electricity). In the non-biogenic waste sector, there was also no further growth between 2010 and 2020. The net installed capacity in kilowatts has remained unchanged. In the future, other forms of energy generation must be further expanded in Bavaria: in the area of electricity - primarily wind power and solar energy, in the area of heat - primarily geothermal energy.

### Electricity from other renewable energy sources

Source	2016	2020	2021
Hydropower	2,903.0 kW	2,903.0 kW	2,903.0 kW
Non-biogenic waste	8,600.0 kW	8,600.0 kW	8,600.0 kW





### Completed residential buildings that use heat from renewable sources

Percentage of completed residential buildings with heat from renewables in newly constructed residential buildings (Source SDG Portal).

The use of heat from renewable sources in the construction sector can make a significant contribution to reducing CO<sub>2</sub> emissions. In addition, the use of heat from renewables has positive economic effects on fixed energy costs (e.g. lower investment costs or elimination of carbon pricing) in private households. In the district, the percentage of completed residential buildings that use heating from renewables has risen steadily over time. The most recent figure (2020) is 52.4 per cent, which is roughly in line with the most recent national average (2020) of 50.5 per cent. The German Sustainable Development Strategy aims to increase the share of renewables in gross final energy consumption (target 7.2.a). The District Fürstentfeldbruck contributes indirectly to achieving

### Completed residential buildings that use heat from renewable sources

43.6 % 2010      50.9 % 2015      52.4 % 2020



this target through its activities in the housing sector.



### Cuts in greenhouse gas emissions through climate action projects

2011	2015	2019
0.001 t	0.007 t	0.019 t

Potential greenhouse gas reductions over the period reviewed through completed investment-based funding provided under the municipal guideline within the framework of the National Climate Initiative in metric tons per capita (source SDG Portal).

Greenhouse gas emissions make a significant contribution to global warming. Avoiding the burning of fossil fuels where possible in order to reduce greenhouse gas emissions is one of the most important objectives in our quest to achieve climate neutrality. According to the most recent figures (2019), cuts in greenhouse gas emissions achieved by climate action projects in the district have risen steadily to

around 0.019 metric tons or 19 kg per capita. This figure is somewhat lower than the average for Bavaria (2019: 0.042 tons per capita). (No data available for the federal level). The greenhouse gas reductions achieved by the climate action projects contribute to the achievement of target 13.1.a "Reducing greenhouse gas emissions" of the German Sustainable Development Strategy.



### Charging point infrastructure

2016	2018	2020
0.0 Num	0.09 Num	0.43 Num

Number of publicly accessible normal and fast charging points from 3.7 kW per capita (Source SDG Portal).

Electrification, particularly of road transport, is essential for achieving climate targets. The expansion of electromobility therefore requires a consumer-friendly and reliable charging infrastructure. This indicator provides information on the number of publicly accessible normal and fast charging points in the municipal or district area. In the district, there were

most recently (2020) 0.43 publicly accessible normal and fast charging points from 3.7 kW per capita. The national average is lower, at 0.35 charging points per capita. Overall, developments in the district contribute to the achievement of target 11.2.b “Reduce final energy consumption in passenger transport” of the German Sustainable Development Strategy.

Photo 25: View of Bavaria’s second oldest run-of-river power plant on the Amper River in Schöngeising (Copyright LRA Fürstenfeldbruck)



Photo 26: Bavaria’s second oldest run-of-river power plant on the Amper River in Schöngeising (Copyright LRA Fürstenfeldbruck)





## 3.3 SDG 9 - Industry, Innovation and Infrastructure

### 3.3.1 SDG 9 - Introduction and relevance for German municipalities

SDG 9 aims to build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. These three elements touch on many areas - such as digitalisation, or information and communications technology. Innovation has the potential to make a key contribution to current challenges, such as climate action and resource conservation, or demographic change. Innovations also play an important role in promoting sustainable industrialisation, which aims among other things to achieve more resource-efficient and low-emission production. The term "infrastructure" includes both technical and social infrastructure (e.g. infrastructure for transport, energy and water/wastewater, as well as educa-

tion and health care). When planning and designing infrastructure, various requirements (for instance concerning health, climate change mitigation and adaptation, securing natural resources or equal participation) must be taken into account simultaneously.<sup>13</sup> For German municipalities, the following areas are therefore especially important for implementing this SDG (please also compare these with the targets for SDG 9 in the annex):

- Promoting innovation
- Supporting sustainable industrialisation and business start-ups
- Establishing sustainable infrastructure, especially for information and communications technology.

<sup>13</sup> See Germany's Voluntary National Review to the High-Level Political Forum 2021 and the German Sustainable Development Strategy 2021.



### 3.3.2 Overview of qualitative aspects and indicators

#### Qualitative aspects:

- Overarching goals in the district's Vision for the Future
- Sustainable business development
- Support for business start-ups
- Digitalisation
- Innovation
- Infrastructure

#### Indicators:

- Broadband services - private households
- Business start-ups
- Business takeovers
- Highly qualified professionals

### 3.3.3 Contributions of the District of Fürstenfeldbruck to the SDG

#### Overarching goals in the district's Vision for the Future

In Fürstenfeldbruck's **vision**, which was published in 2022, the section on business development in particular contains references to SDG 9. The key objective is defined as being to attract and retain innovative businesses by fostering conditions that are conducive to business growth. The efficient use of land is to be given special consideration in this context. Against this backdrop, the following **key goals** have been set that are directly related to SDG 9:

- The district gears itself up for the future through digitalisation and innovation
- Support will be provided for companies from high-growth scaling sectors, initiatives to establish new businesses should focus primarily on areas that are already sealed
- Support for covering regional demand for skilled labour
- Support for stepping up value creation and business activities in the region

To achieve these objectives, the following **project measures** have been integrated into the thematic area of business development:

- Series of events on digitalisation and innovation
- Introductory event on the economy for the common good
- Development of a plan for networking businesses and skilled workers

Photo 27: Logo Economic Advisory Board (Copyright LRA FFB)



## Sustainable business development

The district is a key business hub located between the important transport and commercial hubs of Munich and Augsburg. Thanks to a healthy mix of small and medium-sized enterprises (SMEs) spread across a broad range of industries, the district is keeping abreast with dynamic trends and strong competition from other districts and regions to attract new business. A healthy SME sector and the presence of companies with a sound international reputation are signs that the district's economy is thriving. High-tech and cutting-edge IT companies are well-established not just in the urban communities in the east of the district, but in the west too, which tends to be more agricultural. The availability of affordable commercial premises provides a basis for attracting successful, future-oriented companies across all industries.

Photo 28: Start-up consultation in the district office (Copyright LRA FFB)



Business development plays a key role as regards making the district a viable, future-oriented location to do business. Although business development is, in principle, a voluntary effort, it is indispensable for attractive living conditions and a prosperous economy. The Business Development Unit sees itself at the helm in terms of enabling other network partners (such as chambers, associations, institutions or the banking community) to carry out their tasks. The long term task of local business development in districts and municipalities is for public bodies to create optimal conditions, enabling companies to invest and to establish and safeguard jobs, for the benefit of the region in question. The fact that the tasks involved in business development are becoming more complex is not only due to advancing globalisation and a foreseeable lack of skilled labour, but also to a general shortage of workers and increasing competitiveness when it comes to innovation. Districts are taking an increasingly broader view of development in their area, especially against the backdrop of demographic change and growing competitiveness among business locations. This also means taking a comprehensive approach and, for example, looking at issues relating to the attractiveness of a location (child-care, residential environment, school structure, cultural and social infrastructure, etc.) in holistic terms, taking account of all relevant factors.

One important task of business development is to **secure skilled labour**. The shortage of skilled labour due to demographic change is also impacting on businesses in the district. Since 2012, securing skilled labour has therefore been a key area for rolling out targeted measures to help companies meet this challenge. Among other things, appropriate events are run to support them in finding skilled labour.

Various formats have been developed to provide companies with targeted support in finding young professionals. The **training compass** provides a comprehensive overview of the training landscape in the region and provides guidance on career choice. The brochure, a third edition of which was published for the 2022/2023 training years (with a fourth edition



Photo 29: Poster Founder/Young Entrepreneur Day 2022 (Copyright LRA FFB)

Photo 30: Logo foundation week of the BMWK (Copyright gruendungswoche.de)



in the pipeline for 2023/2024), includes an overview of the various occupations and training profiles as well as information on dual study programmes, seasonal jobs, internships and part-time training. The compass will be distributed to secondary schools and municipalities in the district, among others. The digital trainee event **#matchyourfuture** was also launched as a low-threshold placement service that links up potential trainees with companies offering training. The districts of Fürstentfeldbruck and Dachau have joined forces with *Merkur tz MEDIA* to offer this digital matching platform that enables companies and students to create a profile and get to know each other.

One of the current tasks of business development is to respond to ongoing developments in the business environment. **Crisis support for companies** has become increasingly important since the COVID-19 pandemic and the start of the war in Ukraine. In view of these and other challenges, companies are being kept up to speed and informed about potential supports and checklists (for example on gas and electricity shortages, supply bottlenecks, funding and other support, emergency plans and checklists).

Photo 31: Picture of the winners of the Young Entrepreneurs Fair 2019 (Copyright LRA FFB)



## Entrepreneurship support

The district's Business Development Unit provides support for business start-ups and business succession planning, along with assistance for existing and upcoming entrepreneurs.

The unit also provides support for sourcing locations in the region.

The district is an attractive location for start-ups and (young) entrepreneurs. Business start-ups offer many opportunities, but are also associated with risks. According to various studies, around one third of start-ups in Germany cease trading within five years. Against this backdrop, the district's Business Development Unit offers comprehensive **support for start-ups and young entrepreneurs**. This includes one-to-one advisory services and a wide variety of (networking) events. For example, one-to-one advisory services cover routine business start-up days at the District Administration, during which orientation and introductory advice are offered. Business start-up seminars on various topics as well as networking events also help in bridging the information gap in this field, reducing typical problems faced by new companies, thereby reducing risks. Regular (networking) events include the Young Entrepreneurs' Fair, an event organised by the district's Business Development Unit and Economic Advisory Council, held every two years to showcase the achievements of start-ups. At the fair, young entrepreneurs have the opportunity to present and raise the profile of their company at the district level and to network with other companies and with the general public. Every two years, the district's Business Development Unit also organises a Business Start-Up and Young Entrepreneurs' Information Day together with institutions, authorities and associations. It is aimed at anyone who has recently set up their own business, who has taken initial steps in this direction, or would like to launch a start-up in the future. The Information Day addresses issues that are of key importance for start-ups and young entrepreneurs. A wide range

of special talks aim to pave the way for self-employment. Since 2022, the District Administration has also been a partner of Start-up Week Germany, which is run by the Federal Ministry for Economic Affairs and Climate Action (BMWK). As part of the start-up week, various support opportunities are offered annually for start-ups as well as for those taking over businesses. Since the beginning of 2023, the district has also been a member of GründerRegioM e.V. (an initiative of *Wissenschafts- und Wirtschaftsregion München*) for the promotion of start-ups and companies. In the start-up ecosystem, it is primarily the university-related start-ups that develop forward-looking technologies, processes and solutions, among other things, and thus support the future viability of a prospering economy.

The Business Development Unit also provides **support for corporate succession and handover** and thus offers good opportunities for smart entry into entrepreneurship. Every year, entrepreneurs and companies decide to continue their business by handing it over to a family member or transferring or selling it to employees or external parties. Appropriate offers are also placed for this target group. In June 2023, for example, there was an information evening at the District Administration as part of the nationwide initiative Business Succession - Lessons from Practice for Application in Practice run by BMWK. For the Business Development Unit, support goes beyond the business start-up or handover/succession phase per se. Holistic support is offered, thus providing assistance to enterprises and to entrepreneurs in all enterprise phases and situations. In addition to its own offers for young and existing entrepreneurs, such as the regular entrepreneur information meeting and current specialist events, the Business Development Unit also acts as a guide to network partners. The annual business reception and the regional business evening also help promote networking. In addition, the district companies benefit from the district's membership in the European Metropolitan Region Munich e.V..

## Digitalisation

Digitalisation has had a profound impact on many areas of society over the past decades. It is continuing to advance at a steady pace and requires a powerful infrastructure. Digitalisation opens up new and faster areas of application for people, and the corresponding infrastructure has become an important basic need within society.

In 2013, 2016 and 2019, the district's Business Development Unit surveyed companies throughout the district to determine what requirements the companies had for Fürstenfeldbruck as a place to do business in the future. In addition to the availability of skilled labour, broadband connections for specific locations was highlighted as a crucial criterion. Against this background, companies in the district will increasingly benefit from modern broadband across the board. This is being continuously improved, as part of a **broadband initiative**, for example.

In this context, the Business Development Unit invited the Federal Gigabit Bureau, a competence centre of the Federal Ministry for Digital and Transport (BMDV), to Fürstenfeldbruck District Administration in April 2023. In addition to the **Gigabitmobil**, which provided information for citizens and companies, the Bureau also ran workshops for the housing industry and for schools.

The Fürstenfeldbruck District Administration has also become continuously more digitalised in recent years. All of the **administration's online services** have been expanded. This means that residents will be able to access almost all of the District Administration's services and offerings online (as of April 2023, 160 administrative procedures were available online). Most of the administration's 1,000 or so employees already work with the electronic system. The district's waste management service has also standardised this system and offers training courses for the area.

A comprehensive transition to the system will continue over the next few years. The changeover to digital administration will implement the requirements of the Online Access Act and of the Bavarian Digitalisation Act. Among other things, the Online Access Act requires that all administrative services be offered electronically. The Bavarian Digitalisation Act includes a section on digital administration, which is broken down into sub-sections on digital communication and services, digital administrative procedures, the Bavarian Portal Network, digital files and registers, and cooperation between authorities and data centres.

The BayernWLAN project, which aims to establish **freely accessible wireless internet** throughout Bavaria, is also helping to implement the Bavarian Digitalisation Act. In addition to fixed access points installed in and on the façade of buildings, support is also being provided for wireless internet access points in local public transport. With the help of funding from the BayernWLAN project, the district has, among other things, significantly expanded free wireless services on regional buses in recent years. The district also plans to equip all new regional buses with wireless internet so as to offer passengers this free, convenient service across the board.

The district also supports the **digitalisation of schools** in the region. A competence centre is to be set up to advise and inform municipalities on digitalisation of the 60 schools in the district. The Federal Government and the Free State of Bavaria also provide financial assistance (in the form of a digital pact and a digital budget for instance) to the municipalities for acquiring digital learning equipment. The Digital Schools Fürstenfeldbruck initiative (a not-for-profit association established in 2022 by representatives of the district, the municipalities and the Fürstenfeldbruck school authority) provided the impetus for the BayernWLAN project.

## Innovation

As part of the **BIODROM** project, the district plans to create a research and development centre that is the first of its kind in the world. On part of the Fürstentfeldbruck air base, it will establish a campus that closely interlinks research and teaching, the development and production of new diagnostic biomarkers and therapeutic agents, and a medical treatment centre. The name BIODROM is derived from the Greek words "bios", (meaning life) and "dromos" (for path). "Path" refers not just to the strategic orientation and goals pursued by the campus, but also the district's pursuit of an economically attractive and sustainable future, with many skilled, high-quality jobs and continued economic growth potential for present and future generations. BIODROM's strategic orientation is also unique because research and development, spin-offs and start-ups, medium-sized companies,

investors and universities benefit from each other. The key approach here is the establishment of a medical centre where the research and teaching of different disciplines (such as environmental medicine, nutritional medicine and prevention) are combined to provide a holistic medical approach and care services. BIODROM will also be home to the new discipline of theranostics (pairing of diagnostics and therapy) in the fields of radiopharmacy and nuclear medicine to support research into cancer, Alzheimer's and cardiovascular diseases.

**Cultural and creative industries** also play an important role in developing the region's innovative strength. This includes companies that deal with the generation, production, distribution and/or media dissemination of cultural or creative goods and services. Compared with the national average, the district punches above its weight in terms of the percentage of value, turnover, and employment this sector gen-

Photo 32: View of the gigabit mobile of the federal government (Copyright LRA FFB)



erates. In this context, the Business Development Unit provides support through targeted information and events to highlight the importance of the industry for the district. The Regional Management Unit is also currently implementing a project to support those working in arts and culture in the district.

## Infrastructure

Public infrastructure includes both technical infrastructure (e.g. for transport, energy, water/wastewater, information and communications technology, air pollution control and waste management) and social infrastructure (e.g. for education, healthcare, leisure and housing). Numerous infrastructure facilities and systems are addressed in the sections on SDGs 6, 7 and 11. Public tourism infrastructure (e.g. hiking trails, parks and rest areas, etc.) is another example of where support for this area is channelled. The **Tourism Unit** at the Fürstenfeldbruck District Administration provides the infrastructure the district needs as a popular local leisure destination. The aim here is to constantly create a broader awareness of the location's tourist attractions as a destination for excursions. For this reason, a SWOT analysis was carried out on local leisure and tourism amenities in the district in 2015, which identified the focus of the implementation and growth of a strategy to promote conference and convention tourism as well as 'soft day-trip tourism', which will prove decisive in developing the tourism sector in the district. The SWOT analysis also showed that activities should focus on the topics of culture, nature and sustainability.

Photo 33: Logo for business succession 2023 of the BMWK



Photo 34: The training compass of the district 2023 (Copyright ausbildungskompass.de)



Photo 35: Logo of the event #match your future



Photo 36: Logo of the GründerRegio M e.V.



### 3.3.4 Indicators



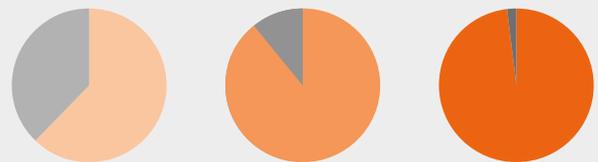
#### Broadband services - private households

Percentage of private households with a data speed of 50 Mbps (Source: SDG Portal)

Comprehensive broadband coverage for private households has an indirect impact on sustainability, as access to information and electronic services (such as e-medicine, e-government) or the ability to work remotely can relieve the burden on private households by saving time and money. Digital access to a wide range of educational and information services also promotes intergenerational equity. In the district, the percentage of private households with a data speed of 50 Mbps has remained constantly high. Most recently (2019), it was 98.2 per cent - significantly above the Bavarian average of 92.2 per cent in 2019 (there are not enough data available to facilitate a comparison at national level). Through further expansion, the district is helping to achieve target

#### Broadband services - private households

78.4 % 2010      89.3 % 2015      98.2 % 2020



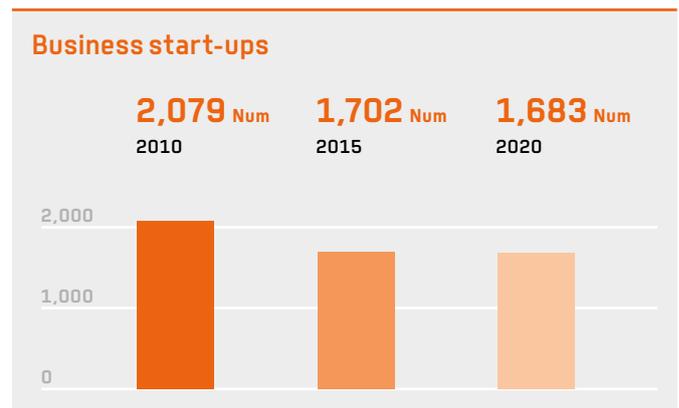
9.1.b of the German Sustainable Development Strategy "Rollout of broadband - share of households with access to gigabit broadband services."



### Business start-ups

Start-ups (new businesses) per annum (Source Bavarian State Office for Statistics)

Start-ups can help to create jobs and promote competition - and can also channel the spirit of an innovative, sustainable economic structure. This indicator provides data on the number of newly established commercial enterprises rather than information on the innovative content of the start-ups. It can therefore only provide limited insight into the actual degree of innovation in a municipality. The number of start-ups in the district has fallen over time - from 2,079 start-ups in 2010 to 1,683 in 2020, partly due to an uncertain business environment. If we look at this figure for Bavaria as a whole however, we see that Fürstentfeldbruck is one of the districts with the most start-ups. In its Sustainable Development Strategy, the German Government has anchored target 9.1a "Increase private and public expenditure on research and development - at least 3.5 per cent of



GDP per year by 2025". Examples of support provided in this context include tax breaks and economic stimulus packages for visionary, forward-thinking entrepreneurs who can boost the level of innovation within a municipality.

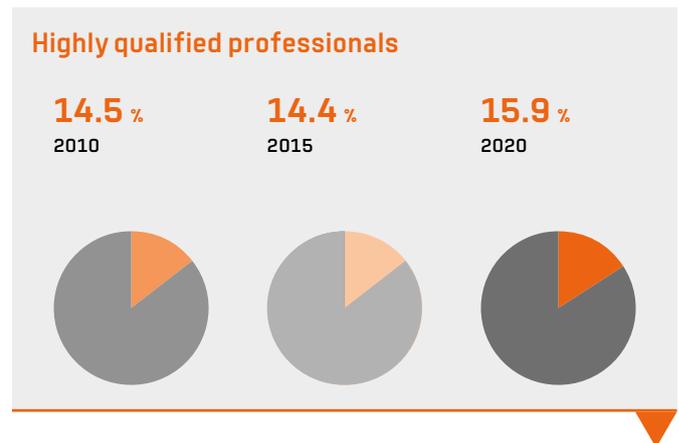


### Business takeovers

Business takeovers (start-ups) per annum (Source: Bavarian State Office for Statistics)

It will be possible to hand over about one third of all medium-sized businesses in Germany to a new generation in the coming years. This is due, for example, to demographic change and to the start-up generation of the 1950s and 60s, which is gradually retiring. Similar to start-ups, business takeovers can help secure jobs and offer certain advantages, such as the availability of an established location, existing

equipment or an existing customer base. Business takeovers in the district are on the decline, however. There were 90 takeovers in 2020, compared to 144 takeovers ten years previously. This development can also be explained by various uncertainties in the economic sector, such as COVID 19, supply chain problems, a shortage of skilled labour, inflation or volatility on global markets due to the war in Ukraine.



**Highly qualified professionals**

Percentage of employees subject to social insurance contributions who have an academic vocational qualification relative to all employees subject to social insurance contributions at the work location (Source: SDG Portal)



An increased level of highly qualified workers in a municipality has a range of positive impacts: In addition to increasing the economic performance, and therefore the future viability of (municipal) companies, the level of qualifications also has economic effects - for example, through a municipality's commercial tax revenue. However, the percentage of people with a high level of qualifications does not actually say any-

thing about the actual need for highly qualified staff or the required degree of specialisation at a location. The percentage of highly qualified workers in the district has risen steadily since 2015 to a recent high of 15.9 per cent (2020). This figure is only slightly below the national average of 17.4 per cent (2020). The German Sustainable Development Strategy does not contain any explicit targets for the indicator.



## 3.4 SDG 11 - Sustainable Cities and Communities

### 3.4.1 SDG 11 - Introduction and relevance for German municipalities

SDG 11 aims to make cities and human settlements inclusive, safe, resilient and sustainable. Municipalities must rise to face current challenges such as climate change, resource scarcity, demographic change and migration. Against this background, a sustainable, integrated urban development policy will combine social, economic and ecological goals and takes all relevant interests into account. Among other things, this involves promoting compact and green urban structures, socially balanced and mixed urban neighbourhoods, and affordable housing. Neighbourhoods are places where people reside and interact socially. They also form the space where people lead their everyday lives. This makes them especially important for sustainable development. The reduction of environmental pol-

lution by municipalities (e.g. air quality and noise abatement), and the promotion of sustainable mobility (e.g. by strengthening modes of eco-transport), are also key components of SDG 11.<sup>14</sup> In summary, for German municipalities the following themes play a particularly important role in implementing this SDG (please also compare these with the targets for SDG 11 in the annex):

- Implementing integrated urban development, promoting sustainable neighbourhoods and affordable housing, and reducing land take
- Promoting sustainable mobility
- Implementing comprehensive disaster risk management
- Promoting air quality and noise abatement.

<sup>14</sup> See Germany's Voluntary National Review to the High-Level Political Forum 2021 and the German Sustainable Development Strategy 2021.



### 3.4.2 Overview of qualitative aspects and indicators

#### Qualitative aspects:

- ▮ Spatial planning and development
- ▮ Housing
- ▮ Inclusion in spatial development
- ▮ Sustainable mobility
- ▮ Sustainable waste management
- ▮ Disaster management

#### Indicators:

- ▮ Land take
- ▮ New land take
- ▮ Intensity of land use
- ▮ Density of settlements in floodplains
- ▮ Local recreational areas
- ▮ Living space
- ▮ Rent prices
- ▮ Development of social housing stock
- ▮ Homelessness
- ▮ Households seeking housing
- ▮ The Wohnen für Hilfe homeshare initiative
- ▮ Availability of basic services nearby - Supermarkets
- ▮ Car density
- ▮ Public transport services operated by MVV, the transit authority of the city of Munich
- ▮ MVV passenger numbers
- ▮ Accessibility of stops/stations
- ▮ Victims of road traffic accidents
- ▮ Air pollution
- ▮ Quantities of waste

### 3.4.3 Contributions of the District of Fürstenfeldbruck to the SDG

#### Spatial planning and development

According to the Bavarian State Office for Statistics (Statistik kommunal 2022, as at 2021), the District of Fürstenfeldbruck has a total land area of 43,480 hectares. Of this area, vegetation accounts for 79.9 per cent, including 55.6 per cent agricultural land, and 21.6 per cent forests and protected areas. Settlements account for 13.4 per cent; 5.8 per cent of the areas are used for transport infrastructure, with water bodies accounting for 0.9 per cent.

The sustainable development of the municipalities in the district, but also of the district itself, is a central goal of politicians and of the administration. The district sees itself as the overall initiator, coordinator and moderator of development in the region. Municipalities are calling on the district to step into this role to an increasing degree, since many challenges and

Photo 37: View over the Emmeringer Leite near Eichenau towards the Alps (Copyright LRA Fürstenfeldbruck: Mr. Neider)





- The district promotes innovative plans for sustainable spatial development.
- Land usage and land sealing are kept at the absolute minimum necessary level.

To achieve these goals, the following **project measures** have been integrated into the vision:

- Raise awareness of current challenges in local planning and construction (such as reducing land take, infill development, innovative projects, the 15-minute city, climate neutrality, climate action and climate adaptation in urban development planning),
- Evaluation of the spatial development strategy (see below),
- New buildings and extensions constructed in the district take into account the quality requirements of the district's Vision for the Future (based on design competitions, for example),
- Planning and maintenance of municipal compensation areas (new and existing) by an expert service provider in the district.

The project measures are implemented by the relevant units at the District Administration. For example, the project measure on raising awareness of current challenges in local planning and construction is being implemented as part of an ongoing process of preparing opinions on urban development planning procedures and preliminary consultations. The 2022 regional conference (see section Public participation for sustainability above) also helped implement this project measure, and included presentations on the energy transition and heat networks.

The spatial development strategy RES 2040 elaborates further on statements in the Vision for the Future and in the climate action masterplan on municipal development, mobility and landscape.

The Spatial Planning and Development Unit initiated RES 2040, which was developed with other municipalities and adopted by the District Council in 2017 as a fundamental guideline to serve the municipalities in

managing spatial development in the areas of settlement, open spaces, mobility and business development. RES 2040 therefore provides a valuable basis for the future of the district itself and of municipalities too. Among other things, RES 2040 stipulates that:

- Sensitive landscape areas are considered taboo areas and cannot be touched, despite growing settlement pressure.
- Potential future residential areas are defined by the landscape.
- Settlements will be developed primarily along the S-Bahn light urban railway axes and within existing residential areas through compatible infill development.
- Alternatives to motorised personal transportation are being further developed to make them a more attractive option.
- Identity-forming features of townscapes and villagescapes are to be preserved and strengthened.
- The small-scale cultural landscape in the west is to be carefully developed.
- The density and attractiveness of areas in the east of the district are to be increased.
- The development of affordable, needs-based, and diverse housing is to be facilitated.
- An assumption is made that environmentally compatible population growth of no more than 1 per cent per annum (roughly 2000 residents) will be maintained.

The District Administration takes into account these informal planning objectives in consultations with the municipalities and in opinions on urban development plans. Although RES 2040 is not a legally binding requirement, by involving the municipalities in the process, it has been possible to increase the degree to which they identify with its objectives and incorporate them into the decisions they make as autonomous planning bodies.

Based on the RES 2040 spatial development strategy, a series of events on **housing of the future** was de-

veloped in 2018 to raise awareness of moderate, land-efficient and resource-conserving settlement development among political decision-makers, local building authorities and developers (one of the goals of both the Vision for the Future and the spatial development strategy, see above). Four events were held in all, presenting policymakers with different examples of innovative construction types, affordable housing and centrally located projects. Three excursions with visits to several practical examples in the region also offered the opportunity to examine exemplary housing projects and to exchange in dialogue with developers, planners and residents on the planning processes. Since then, the positive examples from the events have been used for deliberations by the municipalities prior to urban development planning processes being initiated.

Photo 39: The Jesenwang district of Bergkirchen with sunflower field (Copyright LRA FFB/Heininger)



## Housing

According to the planning association *Äußerer Wirtschaftsraum München*, there are 103,275 apartments in the district (as of 2020). 4,490 of those were built between 2015 and 2020.

Support for affordable housing is of key importance for social cohesion, the aim being to ensure that tenants spend no more than 25 per cent of their net family income on rent. In order to improve the supply of affordable housing for its citizens, the district participates in the **local housing association *Wohnungsbaugesellschaft im Landkreis Fürstenfeldbruck GmbH***, which was established in 2019 by 17 municipal shareholders. In addition to the district, the communities of Adelshofen, Alling, Althegehenberg, Egenhofen, Emmering, Gröbenzell, Hattenhofen, Landsberied, Mittelstetten, Maisach, Mammendorf, Türkenfeld, Schöngeising and the district towns of Fürstenfeldbruck and Germering belong to the limited liability company. The town of Puchheim participates in the local housing association *Wohnraumentwicklungsgesellschaft Puchheim mbH (WEP)*. The primary objective of the local housing association in Fürstenfeldbruck is to provide support for accommodation at the lowest possible overall rent. Using smart, space-saving floor plans, affordable housing is built for typical user groups such as older people, single parents and young families. The decisive factor in this context is the total rent per residential unit rather than the rent per m<sup>2</sup>. The goal of climate neutrality is also being pursued. The association started its operational phase in 2022 with the construction of state-subsidised apartments in Fürstenfeldbruck.

Through its ***Wohnen für Hilfe*** houseshare initiative launched in 2017, the Fürstenfeldbruck District Administration has also been facilitating houseshare partnerships between people who can provide free accommodation and housemates who provide day-to-day support in lieu of rent. The guiding principle is to provide 1 m<sup>2</sup> of living space for 1 hour of help per month. Utilities are covered by a monthly lump sum,

and care services are excluded. The background to the project is that senior citizens, families, single parents or disabled people often need someone to help them with everyday tasks such as housework, gardening, shopping, childcare or going to the doctor. On the other hand, many young people - usually students or trainees - need to find affordable housing. Houseshare partnerships benefit both sides and also strengthen values such as solidarity and respect. Fürstenfeldbruck's houseshare partnership is part of the nationwide houseshare initiative *Bundesarbeitsgemeinschaft Wohnen für Hilfe Deutschland*. During its first three years, the project was able to attract a growing number of houseshare partnerships. The number of inquiries and houseshare partnerships declined from 2020 however, due to the pandemic.

## Inclusion in spatial development

Social inclusion aims to ensure that everyone has equal opportunities and is able to participate in all areas of society to the same degree. The district conducts a range of different activities to promote social inclusion. The following sections outline two examples that focus on the dimension of inclusion in spatial development.

The district's ***local action plan for implementation of the UN Convention on the Rights of Persons with Disabilities*** was first published in 2017. It defines 34 measures and goals that span the areas of raising awareness, mobility/construction/housing, work, education and health/culture/leisure/sport and serve as guidelines for action. A specialised body known as an Inclusion Forum was set up to support the plan. By setting up working groups, for example, it develops measures to ensure inclusive mobility and barrier-free access to public spaces and areas. Activities to promote barrier-free access focus on people regardless of their origin, disability, age or circumstances. Almost all accessibility solutions benefit the entire population. Once they are up and running,

measures are routinely reviewed by people with disabilities to ensure relevance and sustainability.

Against the backdrop of increasing demographic change, a future-oriented senior citizens' policy is another important goal. Statistical projections indicate that there will be strong population growth in the district to around 242,000 persons in 2035, with the over-65s representing by far the largest group. The district has an **overall strategy for senior citizens** in place. First developed in 2010, work recently started to update it to take into account social developments. A representative public consultation was conducted to determine needs, addressing topics such as access to public spaces, local public transport and poverty in later life. The key objective of the policy is to shape living conditions in the district so as to meet the needs of older citizens. The aim here is to ensure that senior citizens can live independently in

familiar surroundings for as long as possible. In this context, sustainable integrated local development includes well-functioning care structures, sustainable housing and neighbourhood strategies and effective networking of different support services. The overall strategy for senior citizens provides the framework for this and is implemented in the district's municipalities.

Photo 40: Convenient, comfortable and climate-friendly - being mobile with the MVV RegionalBuses in the Fürstentfeldbruck district (Copyright LRA FFB/W. Weiss)



## Sustainable mobility

In Germany, the modal split - an indicator used to show the percentage of travellers using a particular mode of transport compared to the ratio of all trips made - is still heavily dominated by car use. The transportation of passengers and freight, collectively referred to as transport services, has increased significantly in recent decades. The current transport system has a diverse range of impacts on climate, the environment and on health. To achieve sustainable mobility, we therefore need to address key challenges in the areas of climate action, air and noise pollution control, and the protection of green spaces and natural resources. As a general rule of thumb, it is important to promote the use of environmentally friendly modes of transport (walking and cycling, local public transport) and the more sustainable design of motorised personal transport.

As regards mobility, the district's **Vision for the Future** promotes the key objective of advocating the development of sustainable, intermunicipal and user-friendly mobility. In this context, the term "sustainable" refers, for example, to land use, environmental impact, and to economic and social aspects. The term "intermunicipal" refers to development at the cross-local, cross-district and regional level. The following **key goals** are derived from the key objective:

- The district's objective is to achieve near-zero emission mobility that is as climate-neutral as possible.
- Through education and awareness-raising measures, the district strengthens cooperation among all transport participants and increases the attractiveness of green transport.
- The district promotes the networking of all forms of mobility, with a special focus on sharing systems.
- The forms of mobility used in the district are safe and accessible to all.

Photo 41: Mobile by bus and train in the Fürstenfeldbruck district  
(Copyright W. Wilbert)



- ▮ Mobility development is geared towards financial attractiveness.
- ▮ A full range of user-friendly, analogue and digital information channels is being provided and maintained.
- ▮ The supply-oriented development of our local public transport in the district is being continued.
- ▮ The district continues to support cycling and walking.
- ▮ Good and safe roads and paths continue to be the targeted quality.

Against the backdrop of these key goals, the Vision for the Future includes the following **project measures**:

- ▮ Conversion of the public transport bus fleet to alternative drive systems
- ▮ Establishment of mobility stations
- ▮ Raising awareness of cycling

In recent years, the district has implemented a wide range of activities to promote sustainable mobility. It has continuously expanded public transport services in the region with MVV regional buses travelling 11.7 million kilometres in 2023 compared to just 3.3 million in 2006. Between 2006 and 2018 (when the last survey before the pandemic was conducted), passenger numbers increased from 5.3 million to over 10 million passengers per annum. Following a decline during the pandemic, initial passenger data from 2023 shows that, at the very least, pre-Corona levels have once again been reached. This underlines that services are being accepted and can therefore make an important contribution to strengthening green transport.

The **local transport plan** is the key point of reference for the area of local transport. First adopted in 2007 and subsequently updated in 2019, in 2022 the District Council decided it should be updated every five years to reflect dynamic developments. Most of the measures contained in the 2019 update have already been implemented, and the next version is in the pipeline, which will also include extensive forms of

Photo 42: Also easily accessible on the move - the main administration building of the Fürstenfeldbruck District Office (Copyright LRA FFB)



participation. The new plan is to be adopted and published in 2024. In accordance with Bavaria's local public transport act *BayÖPNVG*, the district is responsible for its public transport and is therefore required to put in place a framework for developing an attractive public transport system. The local transport plan therefore aims to document and evaluate the current expansion status of the local public transport system and on this basis, draft objectives and practice-oriented recommendations for future action. This will give everyone responsible the opportunity to continuously address the expansion of public transport services in a comprehensive and logical manner. New strategies and plans will be incorporated into the updated local transport plan (e.g. the bike-way plan, the CO<sub>2</sub> action plan and Fürstenfeldbruck's Vision for the Future). New technical standards for further developing local public transport services, such as the use of alternative drives, will also be included. Further expansion of existing services using mobility stations (see below) and other demand-oriented formats will also be examined.

In order to support the **conversion of public transport services to alternative drives**, since 2019 the district has been participating in a feasibility study by MVV, Munich's public transport authority to examine the best way to use alternative drives in local public bus services. Funding options are also being looked at. The focus is primarily on battery and fuel-cell electric vehicles. The aim is to have all lines converted by 2035 at the latest, in full compliance with the EU's Clean Vehicles Directive, which sets targets for the use of more sustainable vehicles in local public transport. In September 2020, the interim status of the feasibility study was presented to the District Councils in the *EUPA* Committee for Energy, Environment and Planning. The new version of the local transportation plan will incorporate the results determined by then, and the plan's general focus will be on conversion in accordance with the Clean Vehicles Directive. The results for the individual lines will be included in tender documents, which will then be discussed and decided on accordingly by the District Committees. This applies to all future tenders. For example, the tender has already been published for the first three lines, which will operate 16 electric buses, as of the

Photo 43: The S-Bahn as another climate-friendly alternative to the well-developed public transport system in the Fürstenfeldbruck district (Copyright W. Wilbert)





Photo 44: Innovative and climate-friendly on the road in the Fürstenfeldbruck district (Copyright LRA FFB/W. Weiss)

new contract period in 2024. The corresponding District Council resolution was passed in 2022.

In order to interlink the various modes of transportation more closely, the district is pursuing a one-of-its-kind project to establish a district-wide network of **mobility stations**. Mobility stations offer several green modes of transport and, in addition to local public transport services such as buses, dial-a-ride, light urban railway and regional trains, include new forms of mobility such as car and bike sharing (rentals) as well as infrastructure and services for personal (cargo) bikes. The project, which is being coordinated by the Local Public Transport Unit, is based on a resolution passed by the District Council in 2017. In 2022, the Federal Government notified the district that it had signed off on funding, and construction of the stations is to be completed by 2025. This will mean that a total of 63 locations in ten municipalities in the district will be optimally networked with a wide selection of green modes of transport. Fürstenfeldbruck, Germering, Grafrath, Gröbenzell, Landsberied, Maisach, Mammendorf, Olching, Puchheim and Schöngeising are participating in the project. The plan, which is adapted to the respective location, includes station-based bike-sharing at all stations as well as infrastructure for (cargo) bicycles. Stations with dense residential development in the pedestrian catchment area will also be equipped for location-based e-cargo bike sharing. These cycling services will be closely linked to local public transport services at all stations. Car sharing services will also be provided at key transportation hubs, along with marked parking spaces for e-scooter-sharing at specific stations. The network will be supplemented by five bike stations that do not have a public transport connection. Overall, the different forms of mobility will complement each other both intermodally and multimodally. Users will be able to access an environmentally friendly mode of transport across the entire travel chain. This is an exemplary project in that these measures are being implemented for the first time at the level of a district with both rural and densely populated urban areas.

To support cycling, the district has in recent years pressed ahead with preparation of a feasibility study on **fast cycling routes** and the implementation of a district-wide **bikeway plan**. Fast cycling routes are a new plan primarily geared towards everyday commuting routes of up to 25 kilometres, and offer huge potential to get more people cycling. Designed to guarantee quality (coherent, safe and attractive cycling with possible average speeds of approx. 20-25 km/h), they are embedded in the local cycling networks. Between 2019 and 2021, the district examined the feasibility of such a route along the S4 rail line from Fürstenfeldbruck to the district border with Munich, based on the findings of a potentials analysis conducted in 2015. The state capital is also conducting a feasibility study for a fast cycling route on the remaining stretch of the S4 line in the Munich area. The entire route is to run from Fürstenfeldbruck along the rail line to Munich's *Altstadtring* inner

ring road. Consultations with Deutsche Bahn AG on the details of expansion along the S4 line will play a key role in further potential investigations and plans, as these details will have a major influence on the routes and on individual hubs. Formal aspects of the feasibility study have been completed, and the findings were discussed in the District Council's technical committee in 2022. The district bears overall responsibility for liaising between the individual municipalities involved as the construction authorities.

An **integrated bike path plan for everyday and recreational use** has also been in place in the district since 2021. To prepare the plan, around 700 kilometres of cycling routes were tested and examined for road safety, condition, width, potential danger spots, obstacles, gaps in the network and signposting. This was accompanied by extensive public consultations

Photo 45: Good for climate and fitness - cycling in the district of Fürstenfeldbruck (Copyright LRA FFB/Udo Bernhart)



in 2018, during which suggestions for improving the bike path network could be submitted. When drafting the cycle path plan, particular attention was paid to the links to the neighbouring districts and to the state capital Munich. The bike path networks are designed to continue in neighbouring districts without gaps. Another component of the plan is ensuring that the paths are signposted in a manner that is compliant with the standards of the German Road and Transportation Research Association *FGSV*. Signage has already been erected and is being maintained. In all, around 540 kilometres of cycle paths in the district have been signposted. A package of measures for implementing improvements suggested in the integrated bike path plan will be successively rolled out in the years to come. A system for reporting defects has also been established, enabling citizens to directly flag any issues that need to be fixed.

## Sustainable waste management

The waste management company **AWB** is responsible for waste disposal in the district. As a municipal waste disposal company under public law, AWB is operated by the District of Fürstenfeldbruck and is mainly tasked with collecting, transporting and disposing of waste and recyclable materials at the local level. Small and large recycling centres have also been established throughout the district, even in sparsely populated communities, to ensure that all residents have access to disposal services in the immediate vicinity. Waste disposal services are thus available throughout all regions of the district. AWB also produces certified recycled construction materials at the demolition and construction waste site in Jesenwang. Together with the waste-to-energy plant in Geiselbullach, AWB operates a joint municipal waste management company, an institution of the districts of Fürstenfeldbruck and Dachau that is governed by public law. The waste-to-energy plant facilitates the orderly disposal of non-recyclable, combustible waste from the two districts, while simultaneously producing electricity and district heating. Recently, an agreement under public law was negotiated with

two further waste management companies (Starnberg and Dachau) with the aim of establishing a joint fermentation plant for biowaste.

As well as the tasks described above, a number of AWB's activities provide targeted support for sustainable development. In terms of energy and climate action for instance, the energy generated by recycling is used to produce electricity and district heating in various downstream processes. AWB obtains all of its green electricity from municipal suppliers, and air heat pumps are in use at two large recycling centres. The company also plays its part in nature conservation in the region, with backfilling prohibited in the southern area of the demolition and construction waste site in Jesenwang since 1991 in order to protect several amphibian species that have settled there. The protected amphibian biotope was included in Bavaria's biotope map. The Local Nature Conservation Authority at the District Administration is responsible for conservation and monitoring of the biotope. To compensate for construction of the large recycling centre at Egenhofen, the district also leased a biotope and restored it together with the National Association of Bird Protection in Bavaria. The plan to recultivate the Jesenwang demolition and construction waste site also stipulates the planting of specific seed mixtures such as bee-friendly grasses in some areas. Insect-friendly seed mixtures are already being used to recultivate the small recycling centres. These measures are to be stepped up in future. As a large employer in the region, AWB - together with Sprint e.V., an association that promotes social integration and resocialisation - also develops measures to reintegrate young people into society and allow them to complete community service. By subsidising paper collection by associations and not-for-profits and passing on specific recyclables to non-profit initiatives that further process the materials in inclusion workshops, AWB also contributes to local community development.



Photo 46: Example of a small recycling center in the Fürstenfeldbruck district (Copyright AWB FFB)

## Disaster management

In Fürstenfeldbruck, **the District** Administration also functions as the Local Disaster Risk Management Authority. The District Government of Upper Bavaria and the Bavarian State Ministry of the Interior are its superior authorities. The disaster risk management authorities are responsible for preparatory measures (such as the disaster risk management plan, drills, incident management control) and for the management and coordination of operational measures in the event of a disaster. Along with the municipalities, the district is obliged to provide disaster relief. This means that it must - at the request of the Disaster Risk Management Authority - implement support measures to prevent disasters (provided that this does not interfere with its own key tasks). Here, however, the District Administration does not bear sole responsibility for disaster management. Given their legal basis, municipalities retain certain obligations and powers (e.g. safety and security, police, fire and rescue services).

For more than 15 years, the district has operated an emergency storage facility for a wide variety of materials to manage major incidents and disasters (e.g. equipment for emergency shelters, materials for overland relief, flood protection, emergency power supply). The equipment is distributed across two locations - a rented hall in the large recycling centre in Eichenau and a noise protection hangar on the grounds of the Fürstenfeldbruck air base. Since both locations are stretched to capacity and the air base facility is not likely to be available beyond 2026, the district plans to **construct a new fire and disaster control centre** at another location, which will include a district operations and training facility, a central respiratory protection centre and the district fire inspection service. Efforts have been underway to identify a location since the District Council gave the project approval in principle in July 2022.

Flood protection falls under the jurisdiction of the officer responsible for developing watercourses and

relevant approaches have also been drafted together with other municipalities. For example, an **integral, intermunicipal flood protection plan** was drawn up on behalf of the municipalities of Olching, Puchheim, Gröbenzell, Eichenau and Alling and the association to protect the River Amper. The plan aims to prevent and mitigate against possible flooding on the Ascher, Gröben and Starzelbach rivers. Unlike the flood protection plan, **municipal flash flood management plans** deal with the prevention or mitigation of damage caused by local heavy rainfall. Such a plan was presented to Eichenau Municipal Council in 2021, providing a wide range of information and outlining diverse disaster risk reduction, mitigation and management plans. Similar plans are currently being developed by other municipalities too.

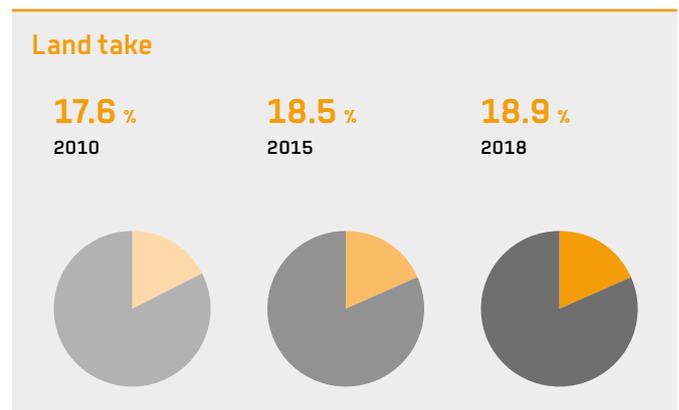
### 3.4.4 Indicators



#### Land take

Percentage of total land area occupied by built-up areas and transport infrastructure  
(Source: SDG Portal)

This indicator measures the percentage of the total land that is used for settlement and transport and is to be viewed in the context of the goal of focusing to a lesser degree on expansion and greenfield development and more on efficiency and brownfield development as part of increasing urbanisation. In the district, the indicator shows a slight increase to 18.9 per cent of total land area occupied by built-up areas and transport infrastructure. This increase can be described as moderate. The value of this indicator is therefore slightly higher in the district than the national trend (2020: 14.4 per cent of total area occupied by built-up areas and transport infrastructure). To achieve the targets 11.1.a “Reduction in expansion of settlement and transport area to under 30 ha on average per day by 2030” and 11.1.b “Reduction of



the loss of per capita open space area” of Germany’s Sustainable Development Strategy, trends would need to be reversed or brownfield development would need to be intensified.



#### New land take

2018	2019	2020
0.40 %	0.06 %	-0.20 %

Change in area occupied by built-up areas and transport infrastructure compared to the previous year, based on total area (Source SDG Portal)

Increasing land take often leads to an irretrievable loss of natural soils and open spaces, although the indicator alone can say little about sustainable urban development. According to the most recent figures (2020), there was a drop of -0.20 per cent in the area occupied by built-up areas and transport infrastructure in the district, compared to the previous year (2019), which means that less new land was used for this purpose than in the previous year. The aver-

age new land take nationwide was also down slightly, according to most recent figures (2020) at -0.05 per cent. At the overarching level, this trend can be assigned to targets 11.1.a “Reduction of expansion of settlement and transport area to under 30 ha on average per day by 2030” and 11.1.b “Reduction of the loss of per capita open space area” of the German Sustainable Development Strategy.



### Intensity of land use

2010	2015	2020
0.04 ha	0.04 ha	0.04 ha

Area occupied by built-up areas and transport infrastructure per person (Source SDG Portal)

The limited amount of land available in the municipality is a non-renewable resource that we need to protect for future generations. Our different needs, expectations and usage patterns often have conflicting goals that we must weigh up and reconcile - the efficient use of land can have positive economic and social benefits that do not result in expansion of use. It is important to note that this indicator only reflects the settlement and transport area compared against the number of inhabitants. It does not provide any qualitative information on usage. There have

been slight variations in the district over the years, but - as the figures are rounded to two decimal places - these are negligible. The overall figure has remained constant at 0.04 hectares occupied by built-up areas and transport infrastructure per person. According to most recent data (2020), the national average for this indicator was 0.06 hectares per person. The district contributes indirectly to achievement of target 11.1.b "Reduction of the loss of per capita open space area" of the German Sustainable Development Strategy.

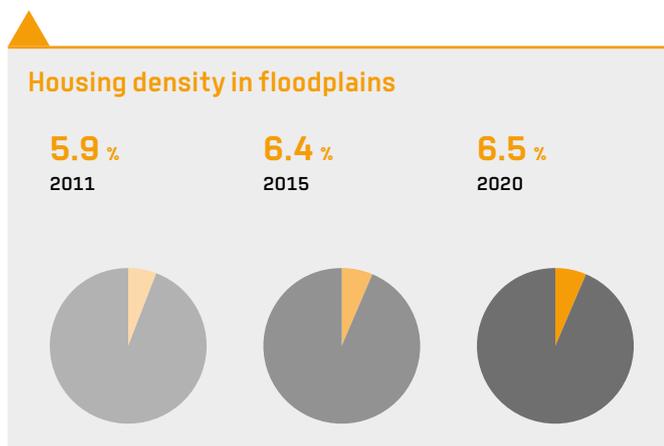


### Housing density in floodplains

Percentage of area in the officially designated floodplain that is occupied by built-up spaces and transport infrastructure (Source: SDG Portal)

The objective of designating floodplains on surface waters aims to reduce or even completely prevent damage caused by flood events (Section 76 of the German Federal Water Act - WHG). This indicator shows the percentage of built-up areas and transport infrastructure in a municipality that is located in an officially designated floodplain. Most recent figures for the district (2020) put this figure at 6.5

per cent, with a slight increase in the period under review from 2011 to 2020 (this increase may be due to a redesignation of the floodplains). This trend roughly corresponds to the national average of 6.4 per cent in 2020. The Federal Government's Sustainable Development Strategy does not contain any targets in relation to flood events or their prevention.



### Local recreational areas

Local recreational areas per person in m² (Source: SDG Portal)



Local recreational areas in a municipality include undeveloped areas (including green spaces, parks, allotments, sports fields and campsites) that are predominantly used for sports and recreation and are also home to animals or plants. They are therefore of high social and ecological value. In the district, the percentage of local recreational space per person increased slightly over the period under review to the

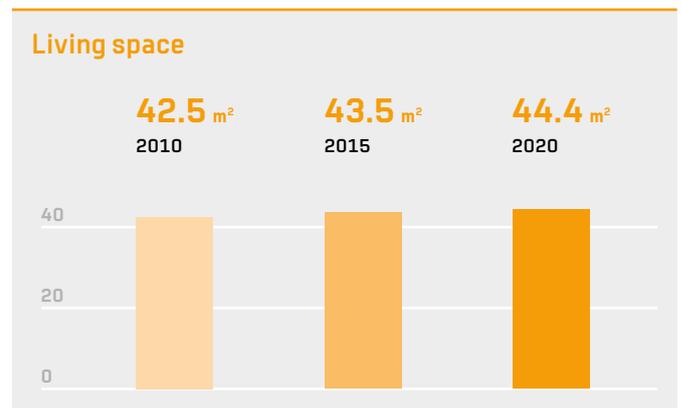
most recent figure of 35.37 m² per person (2020), which is low compared with the national average, which stands at 63.34 m² in 2020. In the state of Bavaria, the trend is more in line with the district's figures, with 42.68 m² of local recreational areas available per person in 2020. The German Sustainable Development Strategy does not contain any targets for this indicator.



### Living space

Available living space per capita (Source: SDG Portal)

The area of living space per capita has been on the rise in Germany over the years, partly due to a fall in the size of an average household. The district mirrors this trend. Whereas in 2010, the average living space per capita was still 42.5 m<sup>2</sup>, by 2020 it had risen to 44.4 m<sup>2</sup>, putting the district only slightly below the national average of 45.6 m<sup>2</sup> (2020). Although the German Sustainable Development Strategy does not state any explicit targets for living space, target 11.1.b does address the valuable asset of open space through the “loss of per capita open space area”, which also plays a huge role in housing construction.



### Rent prices

2011	2015	2020
7.00 €	8.00 €	11.00 €

Average net base rent without additional costs, per square metre (Source: SDG Portal)

Housing plays a key role in our daily lives and strongly impacts on our quality of living. Trends in many German municipalities are therefore very worrying indeed, with bottlenecks in the supply of affordable housing as a result of privatisation and capitalisation of the housing market combined with migration trends and the accompanying decline in housing quality. In the district, the average net base rent without

additional costs per square metre has risen continuously over the period under review to EUR 11.00/m<sup>2</sup> (2020, most recent figure). A comparison with national figures is not possible as no federal data are available. However, target 11.3 of the German Sustainable Development Strategy aims to reduce the proportion of people who are overburdened to 13 per cent by 2030.



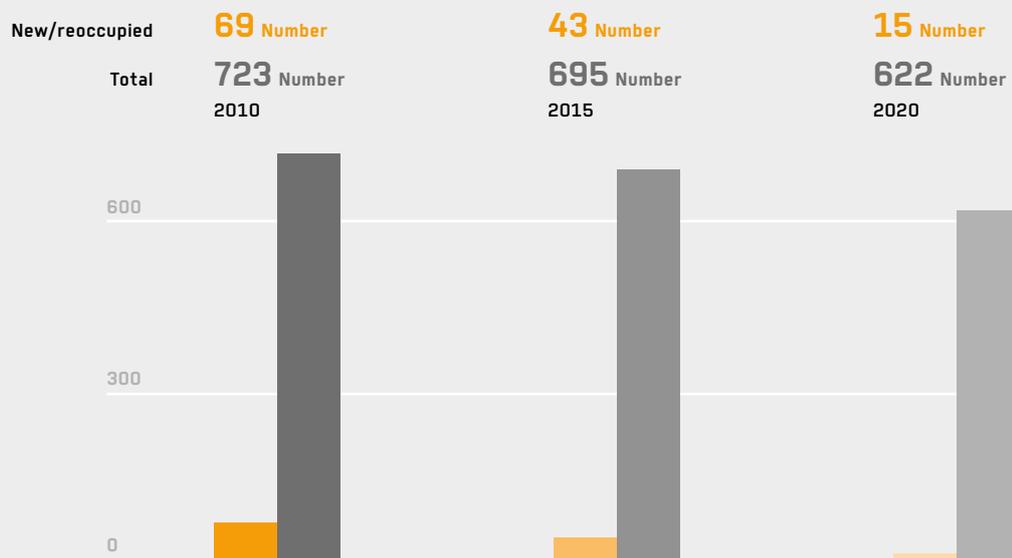
### Development of social housing stock

Total number of social housing units as well as the development of newly occupied or reoccupied social housing units per annum (Source: Office for Housing of the Fürstfeldbruck District Administration)

As people find it increasingly difficult to find affordable housing, subsidised accommodation is playing an increasingly important role. This indicator represents trends in the stock of social housing over a ten-year period. The number of available social housing units in the district (excluding the large district towns of Germering and Fürstfeldbruck) is declining. The drop from 723 units in 2010 to 622 in 2020 is due to the elimination of the statutory obligation to continue renting out accommodation as social

housing, which could only be partially compensated for by new construction. Furthermore, only 15 social housing units were reoccupied or newly built in 2020, which meant that it was only possible to allocate accommodation to one in 21 households on the housing list (supply rate of 4.85 per cent). The decline in numbers can also be attributed to the ongoing reduction in the number of units due to the end of social housing obligation referred to above and to the low level of turnover in housing stock.

### Development of social housing stock





### Homelessness

2010	2015	2020
n/a	n/a	0.069 %

Percentage of homeless residents housed  
(Source SDG Portal)

Although the reasons for homelessness are many and varied, they often go hand-in-hand with poverty and personal crises. Many people are also finding it increasingly difficult to find affordable and adequate housing, partly due to bottlenecks in the supply of affordable housing as well as migration trends and the accompanying decline in housing quality. Although the indicator under review provides information on the number of people being housed in

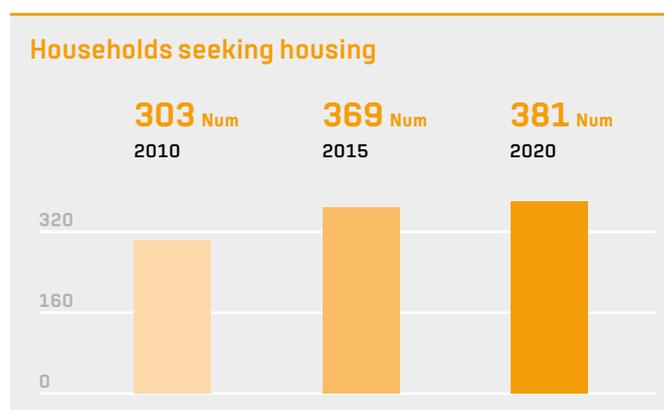
homeless shelters, it cannot provide any insight into actual homeless numbers in a municipality. The percentage of homeless residents being housed in the district in 2020 was 0.069 per cent (or approximately 150 people). No comparable data are available at the federal and state levels. The German Sustainable Development Strategy stipulates the relevant target 11.3 "Reduce the proportion of people who are overburdened to 13 per cent by 2030".



### Households seeking housing

Number of households looking for housing  
(Source: Office for Housing of the Fürstenfeldbruck District Administration)

Housing has been a hot topic at local level in Germany for many years now. The social debate revolves mainly around a lack of living space, high rents and increased real estate prices. The provision of sufficient affordable housing therefore presents a major challenge. This indicator provides information on the number of households looking for housing that are registered with the district's Office for Housing (excluding data from the large district towns of Germering and Fürstenfeldbruck). Increasing numbers of applicants awaiting accommodation and the number of available apartments - which is decreasing by comparison - highlight the inadequate supply of affordable housing. The growing list of approved applicants is due on the one hand to the decades-long housing



shortage in the Munich metropolitan area, and on the other, to the refugee crisis, which has been ongoing since 2015.



### The Wohnen für Hilfe homeshare partnership

	2018	2019	2020
Requests from homeshare providers	36	35	12
Requests from homeshare seekers	91	88	56
Homeshare placements	10	14	4

Behaviour of participants in the homeshare project in absolute figures (Source: Office for Housing of the Fürstentfeldbruck District Administration)

The homeshare placement initiative is based on the idea of bringing together people from different generations who have different needs. Senior citizens, families, single parents or people with disabilities who run their own households and are looking for company, support and safety provide living space to students or trainees who assist them with everyday tasks in return. A growing number of homeshare partnerships were arranged during the first three

years of the initiative. This indicator also clearly shows, however, that the number of requests from homeshare seekers significantly outstrips the number of offers from providers. There was a sharp fall in the number of requests and homeshare placements from 2020 onwards, due to the COVID-19 pandemic. Many senior citizens were no longer willing to take in housemates for fear of infection. Interest in the initiative has still not picked up.



### Availability of basic services nearby - Supermarkets

2010	2017	2020
n/a	758.0	n/a

Resident-weighted distance to the nearest supermarket or discount retailer as the crow flies (Source SDG Portal)

Food supply is a basic human need and an important aspect of regional development. The nearest supermarket should therefore be within quick and easy reach. Nevertheless, there is a growing trend towards large-scale, relatively remote supermarkets that are difficult to reach on foot, particularly in rural areas. The statistical data (at municipal and federal

level) on the resident-weighted distance to the nearest supermarket or discount retailer as the crow flies are not sufficient to allow any valid statements on this trend, however. An average value is only available for 2017 (758.0 metres for the district and 962.0 metres at the national level). The German Sustainability Strategies does not address this issue.

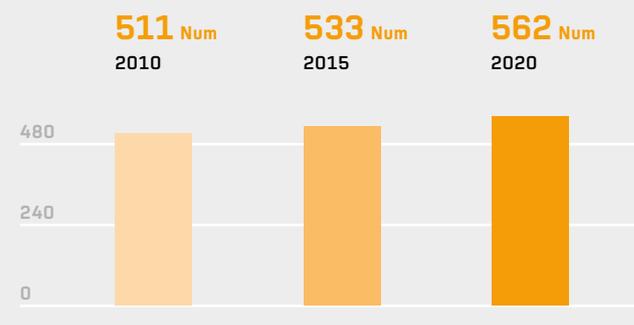


### Car density

Number of registered passenger cars in the district per 1,000 inhabitants  
(Source: Bavarian State Office for Statistics)

Private motorised transport has diverse impacts in terms of land take, the consumption of non-renewable resources, exhaust emissions that are harmful to the climate and to our health, and noise pollution. Data are available for the district up to 2020 (562 passenger cars per 1,000 inhabitants). There has been a continuous rise in motor vehicle density in the district since 2010. This figure is increasing steadily at the national level too, and is even higher than the trend in the district. There was an average of around 574 passenger cars per 1,000 residents in 2020. This trend contradicts the following targets of the German Sustainable Development Strategy: “3.2.a. Reduction of emissions of air pollutants”, “3.2.b. Reduction of the share of the population with excessive

### Car density



exposure to PM<sub>10</sub> fine particles” and “11.2.b. Reduction of final energy consumption in passenger transport”.



### MVV passenger numbers

2009	2015	2018
6.6 Mio.	7.8 Mio.	10.2 Mio.

Number of passengers (in million) on MVV regional bus services in the district per annum, based on actual earnings power (Source: MVV)

If buses are to gain traction as a means of sustainable mobility and be regarded as part of the mobility transition, potential users must be placed at the heart of all considerations so that use of the network is as accessible and efficient as possible. Frequent services and connectivity as well as a transparent and easy-to-use (e.g. digitalised) ticket systems can help make buses more attractive. The local public transport service in the district is not only being

expanded, passenger numbers are also steadily increasing, with 10.2 million people using MVV regional bus services in the district in 2018. MVV collects the data every three years, based on actual earnings power. Data collection stopped during the COVID 19 pandemic. Due to the fixed intervals at which data were collected, annual values were declared as they became available.

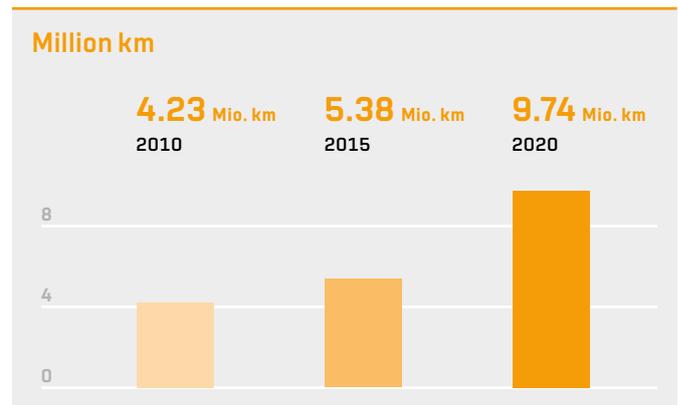
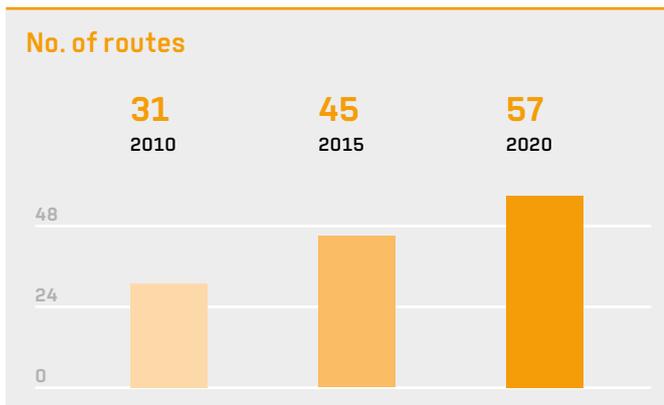


### Public transport services operated by MVV

Number of scheduled services operating in the district (including inbound and outbound services, not including regional rail transport) and kilometres travelled (in millions) (Source: MVV)

Buses are an environmentally friendly means of transport, especially when operating at full capacity. They transport a lot of people using comparatively low energy resources and are therefore more environmentally friendly than many other modes of transport. Buses therefore have the potential to contribute to green mobility provided certain requirements are met, such as the provision of frequent services, connectivity with other areas of the local public transport system and a network that covers as much of the district as possible. This indi-

cator shows the number of scheduled MVV services and the distance travelled in millions of kilometres over a ten-year period. There has been significant increase in the number of routes, from 31 in 2010 to 57 in 2020, with the distance travelled also increasing exponentially to 9.74 million km in 2020. Not only did the number of bus routes and the total number of kilometres travelled increase, so too did the different services offered. For example, the number of express bus routes jumped from zero in 2010 to 5 in 2020.



### Proximity of stops/stations

Addresses in the district that are within the catchment area of a stop or station (Source: MVV (2007 and 2017), Pro-Rail Alliance (2020)).

Year	Percentage
2007	96.02 %
2017	97.43 %
2020	99.36 %

In addition to accessibility, the proximity of bus stops and stations plays a key role in the use of bus transportation, and in ensuring mobility for all. This indicator provides information on addresses in the district that are within the catchment area of a bus stop or station. Use of the MVV regional bus service has developed quite positively in recent years. There

has also been a significant increase in the number of passengers using local public transport services because stops and stations are within close proximity. In 2020, 99.36 per cent of all addresses in the district were in the catchment area of a bus stop or train station, putting the district first in this category in Bavaria, and an impressive second nationwide.



### Victims of road traffic accidents

2010	2015	2020
4.2 Num	4.3 Num	3.7 Num

Number of people injured or killed in traffic accidents per 1,000 inhabitants (Source SDG Portal)

This indicator helps us assess road safety in general, without distinguishing between the different modes of transport. Pedestrians and cyclists are not just the more frequent victims of car accidents, they also tend to sustain more serious injuries - the likelihood of drivers sustaining such injuries is very low by comparison. The indicator does not adequately represent

this imbalance. In the district, the number of people injured or killed in traffic accidents per 1,000 inhabitants is declining, with most recent data putting this figure at 3.7 people (2020). The nationwide trend is slightly higher, at 4.0 people in 2020. The German Sustainable Development Strategy does not contain any targets for this indicator.



### Air pollution

2012	2016	2020
13.34 $\mu\text{g}/\text{m}^3$	11.32 $\mu\text{g}/\text{m}^3$	10.77 $\mu\text{g}/\text{m}^3$

Annual mean level of particulate matter ( $\text{PM}_{10}$ ) per cubic metre (Source: SDG Portal)

The air pollution levels indicator describes the impact of disruptive factors on people or the natural environment. Particularly high levels are emitted by energy generation, road traffic, agriculture and industry. Particulate matter (PM) is considered particularly harmful to health and is a factor primarily in densely populated areas. Limit values are set by the European Union and the World Health Organization. In the district, the average concentration of fine dust

particles in the air with a maximum diameter of 10 micrometres ( $\text{PM}_{10}$ ) was  $10.77 \mu\text{g}/\text{m}^3$  in 2020. No comparative values are available at the federal or state level. Target 3.2.b of the German Sustainable Development Strategy aims for "WHO particulate matter guideline value of  $20 \text{mcg}/\text{m}^3$  for  $\text{PM}_{10}$  to be adhered to as widely as possible by 2030". The district fell below this value on average in 2020, although some particularly polluted areas still exceed it.

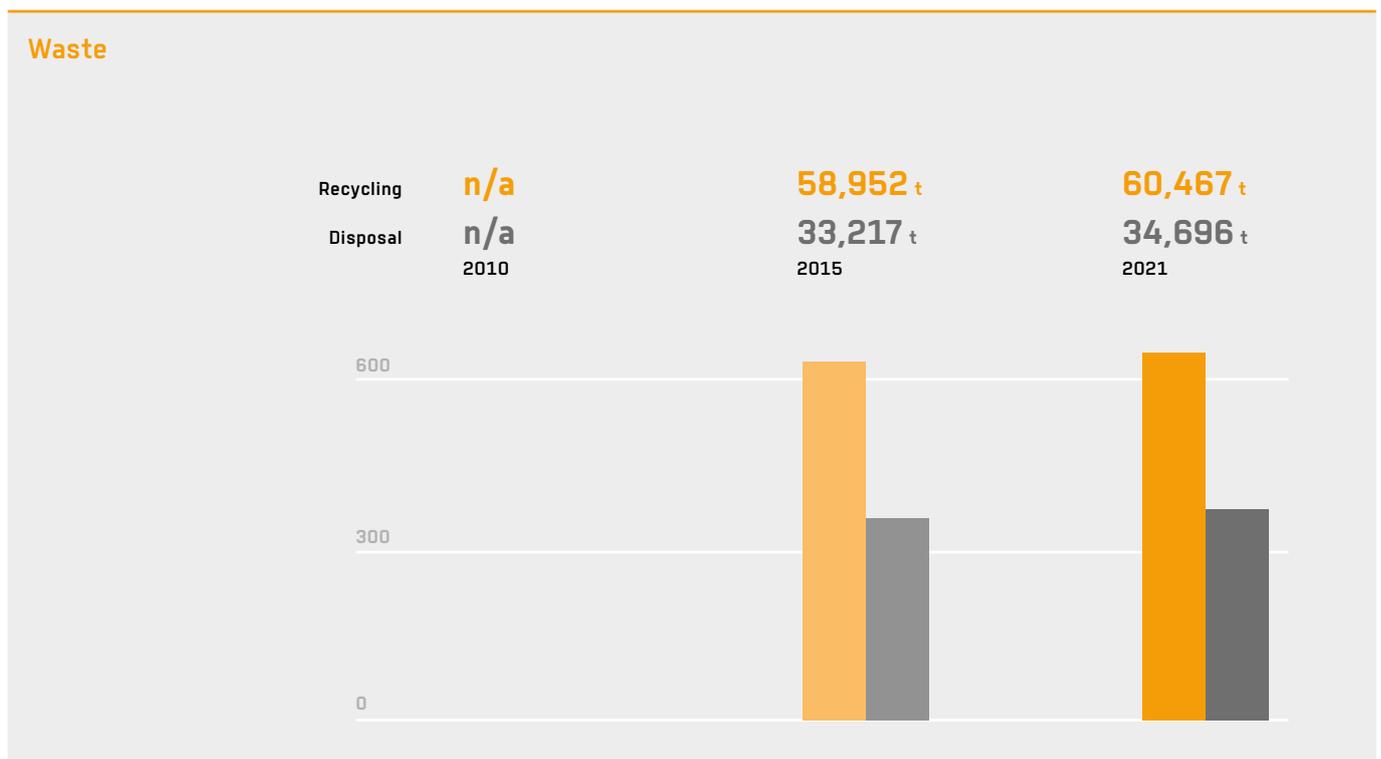


### Waste

Waste for recycling and for disposal (incl. bulky waste) from households in tonnes  
(Source: Fürstentfeldbruck district's waste management company AWB)

The decisions we as individuals make with regard to consumption can directly influence the amount of waste generated in a municipality and the resulting need for disposal services. Over time, per capita waste disposal figures can be used to draw conclusions about the urgency of waste prevention and the extent to which it is required. The amount of waste for recycling and disposal in the district increased

slightly between 2015 and 2021. We are unable to draw a comparison with national figures as a different calculation basis is used at that level. In the German Sustainable Development Strategy, target 12.1.ba aims at a "steady reduction in the global environmental impact by private household consumption - use of raw materials".





## 3.5 SDG 17 - Partnerships for the Goals

### 3.5.1 SDG 17 - Introduction and relevance for German municipalities

SDG 17 calls on the world to strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development, with respect to all the SDGs. These can only be achieved through strong partnerships at multiple levels. Politics, civil society, academia and business must work together to implement the goals - locally, regionally, nationally and globally. This means that multi-actor partnerships between public, private and civil society partners are key. The core principle of “leave no one behind” describes the special responsibility to include all people on the path to sustainable development. In particular, the needs of the poorest and most disadvantaged should be taken into account -

both within a society and in the context of the global community. Accordingly, the 2030 Agenda calls for the countries of the Global North to support the countries of the Global South, e.g. in capacity building for sustainable development.<sup>15</sup> For German municipalities, the following themes are therefore especially relevant for implementing this SDG (please also compare these with the targets for SDG 17 in the annex):

- Forming and supporting partnerships and cooperation arrangements
- Promoting global justice
- Implementing local development policy and cooperation.

<sup>15</sup> See Germany's Voluntary National Review to the High-Level Political Forum 2021 and the German Sustainable Development Strategy 2021.



## 3.5.2 Overview of qualitative aspects and indicators

### Qualitative aspects:

- The District of Fürstentfeldbruck as a member of the Club of 2030 Agenda Municipalities
- Local development policy
- Support for school education in countries of the Global South
- Commitment to fair trade
- Partnerships and cooperation arrangements
- Support for networking among civil society
- Activities carried out by associations and civic engagement

### Indicators:

- Fair Metropolitan Region
- Fairtrade Schools

### 3.5.3 Contributions of the District of Fürstenfeldbruck to the SDG

## The District of Fürstenfeldbruck as a member of the Club of 2030 Agenda Municipalities

Implementation of the 2030 Agenda and its Sustainable Development Goals (SDGs) can only succeed in Germany if administrative districts and their municipalities actively engage in the rolling out process at local level. By signing the **specimen resolution on The 2030 Agenda for Sustainable Development: Building Sustainability at the Local Level** of the Association of German Cities and the German Association of the Council of European Municipalities and Regions (CEMR), the administrative districts and municipalities can commit to implementing the 2030 Agenda with its 17 Global Sustainable Development Goals. The adoption of the district's new Vision for the Future in 2022 simultaneously represented the district's application for membership of the nationwide Club of 2030 Agenda Municipalities. The district received its certificate of recognition at a networking meeting on achieving the SDGs in times of crisis. Engagement Global's Service Agency Communities in One World and the cooperation partners Association of German Cities and the German Association of the Council of European Municipalities and Regions invited around 100 local representatives to the meeting, an annual exchange of expertise and lessons learned. During the event, the district was recognised as one of now more than 200 members of the Club of 2030 Agenda Municipalities. The district's Vision for the Future marks a significant step in implementing and achieving the 17 SDGs, as the most recent 2022 edition makes clear reference to the 2030 Agenda and its implementation in the region (see section Strategic and organisational mainstreaming of sustainability above). The Regional Management Unit, together with the Local Development Policy Coordination Unit, is also increasingly committed to educating civil so-

Photo 47: District Administrator Thomas Karmasin and Coordinator for Community Development Policy Margit Einsiedler at the opening ceremony of an exhibition on the SDGs at the Fürstenfeldbruck District Office in December 2022 (Copyright LRA Fürstenfeldbruck)



ciety about the SDGs. To this end, various activities and events are carried out to raise public awareness of the objectives and opportunities of the 2030 Agenda. One example is the district's flyer on the 17 SDGs, which provides a clear overview of the individual themes and the activities that will be carried out in 2023 to promote sustainability. On the district's website, the **Coordinator for Municipal Development Policy** also provides detailed information on the 2030 Agenda and the importance of implementing it in the region.

## Municipal development policy

In keeping with the spirit of the 2030 Agenda to shape implementation at the local level, the Fürstentfeldbruck District Administration appointed the Coordinator for Municipal Development Policy in early 2022, which will run for two years. The funding programme "Coordinators for Municipal Development Policy" is an initiative of Engagement Global's Service Agency Communities in One World. Since 2016, it has awarded grants for human resources for municipalities' engagement for development using funding from the German Federal Ministry for Economic Cooperation and Development (BMZ). The district used the grant to create a Coordinator for Municipal Development Policy post. The coordinator reports to the Regional Management Unit at the District Administration. Ninety 90 per cent of the position's funding comes from the German Federal Government. One focus in the current two-year project term is to support the district on its path to sustainability and consolidate its ongoing efforts in this context. The unit is thus committed to increasing awareness of sustainability issues in the context of development both within the administration itself and among civil society, and also to raising the profile of the 17 SDGs in the district. Activities include disseminating information on social sustainability in global supply chains, on conscious and sustainable consumption and on healthy, regional and fair nutrition. The coordinator is also the first point of contact for all initiatives and associations in the district that deal with themes related

to development cooperation, fair trade and North-South issues or would like to do so in the future. Measures to strengthen the structures of the existing Fairtrade municipalities and Fairtrade schools in the district are also in the pipeline and the project 1000 Schools for our World is to be continued (more information below).

## Support for school education in countries of the Global South

Since 2019, the district has been supporting the **1,000 Schools for Our World** project, which uses donations to fund school construction projects in poorer regions of the world. The project is a joint initiative of Germany's leading associations for local government. Together, the Association of German Cities, the German County Association and the German Association of Towns and Municipalities want to promote low-threshold development cooperation at local level in Germany. The initiative aims to give people a future in their home country through education and to create prospects locally by building as many schools as possible in the countries of the global south. Following a resolution of the District Committee, three actors have been committed to supporting different school buildings in several countries in Africa since 2019. *Kolping Family Olching e. V., Aktion*

*PiT - Togohilfe e. V.* and *Zoe Supporters' Circle Türkenfeld* have already launched school construction projects in Uganda, Togo, Kenya and the Congo. In this context, the most important tasks the actors carry out are to maintain contact with the project partners on site, to collect donations in the district, and provide organisational support for the construction projects, such as obtaining permits, transporting building materials and coordinating volunteers. Sustainability also plays a major role, as the construction material is obtained in the area where possible and cooperation between a wide range of trades is supported locally. These activities also aim to strengthen people's connection with the new school buildings and encourage further commitment to successful operation and maintenance. Overall, the project has had a very promising start in the district, having successfully launched eleven construction measures, with more school and preschool projects in the pipeline. A number of trips have been organised to forge mutual contact and pave the way for further cooper-

Photo 48: School building in Bomongo in Congo made possible by the initiative "1000 Schools for our World" by the Kolping Family Olching (Copyright Kolping Family Olching)



ation in this area. For example, the Congolese bishop visited the Fürstentfeldbruck District Administration in December 2022.

Photo 49: Poster on school construction projects of the Fürstentfeldbruck district as part of the initiative "1000 schools for our world" (Copyright LRA Fürstentfeldbruck)

Photo 50: School building in Illico in Togo made possible by Aktion PiT - Togohilfe e.V. as part of the initiative "1000 Schools for our World" (Copyright Aktion PiT - Togohilfe e.V.)



Photo 51: Press conference on the occasion of the visit of Bishop Toussaint Iluku Bolumbu from Congo as part of the initiative "1000 Schools for our World" in December 2022 with District Administrator Thomas Karmasin (Copyright LRA Fürstentfeldbruck)



## Commitment to fair trade

The district is part of the **Fair Munich Metropolitan Region**, a title conferred in 2021 that comprises several districts, cities and municipalities. Certification as a Fair Metropolitan Region recognises the Munich Metropolitan Region's engagement in fair trade at the municipal and economic level. The project aims to network actors from civil society, politics and business who work together locally to promote fair trade and sustainable procurement. The first meeting of the Fair Munich Metropolitan Region took place in 2022.

The district also supports efforts to strengthen and expand the structures of Fairtrade municipalities and Fairtrade schools in the district through information events and networking meetings. Five municipalities in the district have already been designated **Fairtrade Towns**, with another municipality deciding to participate at the end of 2022. Fairtrade Towns promote fair trade at the municipal level and are the result of successful networking between relevant actors from civil society, politics and business who work together at the local level. In Germany, the international Fairtrade Towns campaign is supported by the association TransFair. The title of Fairtrade Town is conferred for two years. To receive it, a municipality must fulfil five criteria that prove its commitment to fair trade at various municipal levels. In addition to the adoption of a council resolution, a local steering group must be set up to coordinate activities. Other criteria relate to the sale of fair trade products, information and educational activities that involve civil society, and appropriate media and PR work. Schools can also be certified as Fairtrade institutions. Seven schools in the district have been certified as **Fairtrade Schools**, the first as far back as 2014. Another school is currently working its way through the application process. The topic of fair trade is incorporated into lessons and everyday school life and awareness of global justice is raised. The district also plans to apply to become a **Fairtrade district**.

The district is also increasingly promoting fair trade in the context of **public procurement**. In addition to implementing the 2009 District Council resolution to exclude products manufactured using exploitative child labour, a key goal here is to continue informing and raising the awareness of district administration staff about the huge potential public procurement offers in terms of ecological and social sustainability. For example, staff training sessions on sustainable municipal procurement were held at the start of 2022. Some municipalities in the district have also already initiated initial procurement and tendering processes that take account of ecological and social criteria, and there is a lively intermunicipal debate on the topic.

## Partnerships and cooperation arrangements

As part of the Munich Metropolitan Region, the district is networked with other members of the **association European Metropolitan Region Munich (EMM e.V.)**. Representatives from politics, administration, economy, science and society are engaged in EMM e.V. on a voluntary basis. In addition to 22 districts (Landkreise), six "independent" cities that form their own local government entity (kreisfreie Städte) and more than 50 municipalities that form part of the aforementioned districts (kreisangehörige Kommunen), almost 170 companies, six chambers of commerce and 27 organisations from society and the scientific community currently contribute to the region's success. EMM e. V. organises a metropolitan conference once a year at different venues in the region. Each year, the focus is on a topic that is relevant to the region's future. The district hosted the conference in 2017, which focused on digitalisation and the associated opportunities and challenges.

Other examples of **intermunicipal cooperation** in the district include the joint climate and energy agency established in 2022 by the districts of Fürstentfeldbruck, Starnberg and Landsberg am Lech, the launch and maintenance of the climate action network in the district (see the section on SDG 7 for more information) and cooperation with the district of Dachau as part of the #matchyourfuture campaign (see section on SDG 9). The 2022 version of the district's Vision for the Future states that the key goal of networking is to further strengthen intermunicipal cooperation.

The individual municipalities in the district maintain special relationships with more than 20 towns in different countries. In these **twinning partnerships**, joint activities are implemented, meet-ups between the citizens of the individual municipalities in the district and the twin towns are organised and measures conducted to get to know different cultures and ways of life and foster mutual understanding. The 20 twinning arrangements have developed over

time, mainly with towns and municipalities in neighbouring European countries, especially France. There is an intercontinental twinning arrangement with the city of Wichita Falls in the USA, and since 1992, another arrangement outside the EU with Vyshhorod in Ukraine. A few years ago, together with the municipality of Eichenau, Vyshhorod - which is situated in the Kyiv oblast - successfully applied to Engagement Global's Service Agency Communities in One World for funding for a partnership project to complete the energy-efficient renovation of its municipal building. In addition to the building's general refurbishment, it was important to set up a municipal energy management system for thermo-modernisation work to the building, in order to gradually monitor and reduce energy consumption. Despite the difficulties caused by the war in Ukraine, the joint project was completed on schedule by the end of December 2022. The municipality of Alling also has a long-standing partnership with the municipality of Lannach in Styria, Austria that aims to do everything in its power to promote peace and understanding among Europe's different ethnic groups. The initial focus was on facilitating dialogue between the Styrian action alliance *Energieland Schilcherland* and *ZIEL 21*, the district's association for transitioning to innovative energies. As for Fürstenfeldbruck itself, it officially still has a partnership with what we now know as the district of Greiz in the German state of Thuringia. This partnership was established in 1991 with the then independent district of Zeulenroda. The partnership is no longer actively supported however, as the group Friends of Fürstenfeldbruck-Zeulenroda was dissolved in 2013.

## Support for networking among civil society organisations

The district also supports civil society networking through different activities, which include civic engagement. Almost one third of the district's population do some form of voluntary work. In 2017, the Regional Management Unit recognised the need for an agency to manage supply and demand for voluntary work and it set up a **Volunteer Forum**, together with the District Administration's Department for Civic Engagement and the Community Foundation for the District of Fürstfeldbruck. The forum consists of a digital online platform where requests can be posted quickly and easily as well as a face-to-face counselling centre that is operated by the Community Foundation. The underlying idea is to quickly and easily match institutions that need volunteers with people who want to carry out such work. Clubs, associations and organisations can use it to advertise for suitable volunteers.

The District Administration also has a full-time integration officer that is the first point of contact for volunteers who need information, support or training on integration and migration. The District Council's decision at the end of 2020 to develop the district's first **integration strategy** and launch corresponding project activities, sends a clear signal that the district is taking diversity and the importance of an open society very seriously indeed. The strategy is currently being drawn up with a wide range of institutions and associations in the district, with the involvement of people from a migration background. The project's core team comprises the integration officer and a district integration advisor, as well as representatives of the Fürstfeldbruck branches of the workers' welfare association *AWO* and *Caritas*. Full-time and voluntary staff have been working in various projects and working groups since 2021. The strategy is to be presented to the District Council for approval in mid-2023. The objectives that have already been approved by the council include strengthening the self-determined participation by citizens

who need integration support and fostering peaceful coexistence between residents, irrespective of whether they come from a migration background.

## Associations' activities and civic engagement

In addition to the activities that the district administration supports to help shape civil society networking, such as the Volunteer Forum and the integration strategy, there are also a large number of individuals in the district who help to achieve the Sustainable Development Goals by becoming involved in associations and initiatives.

The range of voluntary engagement is as diverse as the areas where help is required.

The ongoing war in Ukraine is just another example of the importance of peacebuilding - which cannot be taken for granted even in Europe - at the municipal level too. Since the beginning of the war in Ukraine, the municipality of Eichenau, for example, has been making an important contribution to supporting local civil society. With support from Eichenau municipal administration, the association **Freundeskreis Partnerschaft Wischgorod e.V.** has already organised several aid convoys to Vyshhorod, to provide food and other commodities for local citizens as well as items needed by the local hospital. Emergency response support was also offered in the form of suitable accommodation and provisions for Ukrainian refugees. As a token of thanks for Eichenau's support, Ukrainian refugees living there took part in a voluntary clean-up campaign, collecting waste from public spaces. The **Brucker Helfen der Ukraine** initiative run by the not-for-profit *Kurz mal Helfen e.V.* has also been working voluntarily since the start of the war to help Ukrainians in need. In addition to donations and aid convoys, the initiative is also involved in education and has provided furniture and sanitary equipment to renovate a kindergarten near Kyiv and also expanded an air-raid shelter there.

The **North-South Forum Fürstentfeldbruck**, which has been in operation for 35 years, is an informal coalition of associations, groups and individuals in the district that work to promote development, sustainability and human rights and eradicate injustice. The Forum aims to raise awareness of global democracy among the general public and to work towards a just socioecological transition. Since its establishment in 2013, the One World Centre **Eine Welt Zentrum e.V.** has brought together a number of groups, organisations, associations and committed individuals in the district who are also committed to these principles. They are engaged in promoting social cohesion and advancing the environmental, social and cultural agenda.

For many years now, a number of different associations in the district have also been actively involved in development cooperation and in encouraging collaboration between industrialised and emerging economies to sustainably eliminate socioeconomic differences and create a more equitable and inclusive global society with better living conditions for

all. Their projects focus mainly on Africa, spanning a vast array of areas. For example, **Help Liberia - Kpon Ma e.V.**, an association founded in Mammendorf in 2007, focuses on improving medical care for the Liberian population. It provides support mainly through donations to improve the knowledge of local medical staff, fund equipment for small local clinics and provides urgently needed medicines. Another is **Aktiv für Afrika e.V.**, established in the district in 2008. It focuses on sustainable energy and drinking water supply and support for vocational training for young people. It assists projects in Ghana that aim to help people to help themselves. In close cooperation with the local population and village councils of elders, the association supports activities to sustainably improve living conditions and employment opportunities for people in rural regions of Ghana and provide better prospects for young people. **Aktion PiT - Togohilfe e.V.** is one of the longest established associations in the field of development cooperation in the district. It has been involved in healthcare, education, sustainable village development and activities to support children since 1980. Together

Photo 52: Commissioning of one of the water dispensers in Kwanjarko with Mrs. Schneider-Ortmann and Lothar Ortmann from the association Aktiv für Afrika e.V. (Copyright Marianne Schneider-Ortmann)



with *Aimes-Afrique*, for example, the association organises medical missions in rural regions to provide free treatment and surgery for the poor and impoverished. In several model villages throughout Togo, the association also wants to improve schooling for all children in cooperation with *Aimes-Afrique*, and with intensive participation by the population, and to promote awareness for environmental protection and sustainability through village clean-up competitions. Associations in the district are also engaged in development cooperation activities in other parts of the world. **Campo Limpo - Solidarität mit Brasilien e.V.**, an association founded in 1975, focuses on cooperation with Brazil, for example. Together with local partners, the association supports projects to strengthen democratic structures, promote social justice and foster sustainable business practices. *Campo Limpo* also supports partnerships with grass-roots organisations to improve the living conditions of children and increase awareness of respect for human dignity and human rights for poor and indigenous population groups in Brazil.

### 3.5.4 Indicators



#### Fair Metropolitan Region

2010	2015	2021
n/a	n/a	1

Number of new/repeat awards for Fairtrade (Source: District of Fürstenfeldbruck)

Certification as a Fair Metropolitan Region recognises the Munich Metropolitan Region’s engagement in fair trade at the municipal and economic level. The project aims to network actors from civil society, politics and the business community who work together at the local level to promote fair trade and sustainable procurement (of goods bought at fair minimum prices for producers). In this context, the region must meet certain criteria (existing resolution, establishment of a steering group, fair trade products in the range offered by local retailers, involvement of civil society and ongoing PR activities). Certifica-

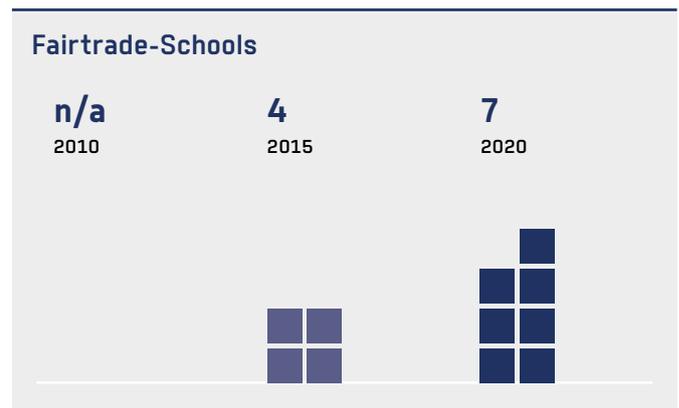
tion must be renewed every two years. The district is part of the Fair Metropolitan Region of Munich, which achieved certification in 2021. Five other municipalities in the district have already been designated Fairtrade Towns, and one more decided to participate at the end of 2022. The district itself plans to apply for Fairtrade certification in the future. The German Sustainable Development Strategy does not include any fair trade targets.



### Fairtrade Schools

Percentage of schools designated as Fairtrade Schools (Source: SDG Portal)

Certification as a Fairtrade School is awarded by Fairtrade Deutschland e.V. in recognition of a school's commitment to fairly traded products (bought at fair minimum prices for producers). Any type of school in Germany can obtain certification, provided it establishes a school team, compiles a Fairtrade Compass, offers fair trade products, integrates fair trade into classes, and runs events and PR activities on fair trade. Certification must be renewed every two years. 10.17 per cent of schools in the district are already certified as Fairtrade Schools, well above the Bavarian average of 5.63 per cent. No data is available for the federal level. The German Sustainable



Development Strategy does not include any targets on fair trade.



# 04

## 4 Outlook



Photo 53: Cereal and rapeseed fields between Germering and Puchheim (Copyright LRA Fürstenfeldbruck)

This Voluntary Local Review (VLR) takes a comprehensive look at the implementation status of the Sustainable Development Goals (SDGs) in the District of Fürstenfeldbruck, in both qualitative terms (setting out activities to foster sustainability) and in quantitative terms (analysing indicators). The presentation of the individual SDG-related activities and indicators demonstrates the important contribution the district is making to realising the 2030 Agenda at local level. While local reporting on sustainability in Germany has often focused more on quantitative indicators to date, the VLR aims to take a holistic approach to presenting local sustainability. It thus illustrates how the global framework of reference provided by the 2030 Agenda can be localised in both qualitative and quantitative terms to help achieve the SDGs.

This first Voluntary Local Review (VLR) is the first sustainability report compiled by the district. It provides a starting point for developing the district's sustainability and VLR reporting in the years to come, and putting these on a more permanent footing. Reporting is thus seen as an ongoing process, in which the findings of this VLR will serve as the basis



for future reports. In addition to activities relating specifically to the selected SDGs 6, 7, 9, 11 and 17, the district is undertaking various other activities that contribute to the remaining SDGs. Using this as a foundation, the VLR can be expanded in future to cover all 17 of the Sustainability Development Goals and thus present the efforts of the district in full.

Essentially this international sustainability report has three distinct purposes. Firstly it allows us to reflect on progress made towards achieving sustainable development. Central activities (strategies and plans to guide actions, measures, projects, political decisions, specific objectives, cooperation arrangements and networks, and organisational structures) can be presented together, developments rendered tangible with the help of indicators, and action required identified. Secondly, reporting helps communicate information about the sustainability status quo at local level to policy-makers and interested parties, establishing transparency and generating more attention. Finally, reporting is a central steering element in the ongoing cycle of local sustainability management and for the future alignment of local planning. The degree of objectives achievement can be considered, mechanisms set in course where objectives were not attained, and new priorities set in the interests of continually improving action.

This VLR is part of the ever-growing, worldwide VLR reporting movement, and indicates that municipalities can play a key part in realising the 2030 Agenda. Local contributions were found to all SDGs addressed. The contributions presented here cover many of the 169 targets. In this regard the VLR supports the assumption found in much literature that at least 65 per cent of the SDG targets will only be achieved if municipalities are consistently involved in implementation and monitoring (see Introduction). The VLR report offers huge potential to supplement national and regional reporting to the UN High-Level Political Forum for Sustainable Development, by adding the dimension of local practical experience. For the successful implementation of the 2030 Agenda, it is crucially important that the various levels (inter-

national, national, regional, local) be dovetailed. This VLR has been drawn up with five others under the auspices of a Germany-wide process. This fosters inter-municipal exchange in Germany, and worldwide, on various aspects of reporting (e.g. regarding procedures and structures) as well as encouraging mutual learning through innovative beacon projects.

Within the District Administration of Fürstenfeldbruck, the process of elaborating the VLR has strengthened inter-office exchange. The process illustrated the wide spectrum of relevant issues and the importance of cooperation to drive forward sustainability as a challenge for all. Against this background, we hope that this VLR will encourage other municipalities to report on their own activities to realise the SDGs. The most recent United Nations programme reports on achieving the Sustainable Development Goals indicate a need for urgent action if the 17 SDGs are to be achieved by 2030 (half the time available since the 2030 Agenda was adopted in 2015 has already elapsed). Local realisation gives municipalities a special responsibility to drive forward sustainable development within the UN's Decade of Action (2020-2030). It is designed as a starting point for expanding and consolidating sustainability reporting over the coming years.

The District of Fürstenfeldbruck therefore plans to continue on its path toward improving sustainability over the coming years based on implementation of the objectives and projects presented in our 2022 Vision for the Future (see the section "Strategic and organisational mainstreaming of sustainability" above). Key steps towards promoting sustainability in the district that will be implemented in the near future include:

- Raising awareness of environmental and social criteria in the administration's procurement processes
- Engaging in dialogue with municipalities in the district on sustainable procurement (best practices)
- Raising awareness of current challenges faced in the context of municipal planning procedures and

construction measures as regards sustainability, for example

- Submitting the district's application for Fairtrade certification
- Establishing multimodal interfaces in public transport
- Revising the overall strategy for senior citizens
- Developing and implementing an integration plan
- Establishing an interdistrict energy agency
- Expanding activities in the area of nutrition education (Nutrition Advisory Council for Fürstfeldbruck).





# 05

## 5 Annex

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## 5.1 Summary of the 169 SDG targets (adapted)

### SDG 1 - End poverty in all its forms everywhere

- 1.1 Eradicate extreme poverty
- 1.2 Reduce relative poverty
- 1.3 Implement social protection systems and measures, achieve substantial coverage of the poor and vulnerable
- 1.4 Equal rights to economic and other resources (access to basic services)
- 1.5 Build resilience of poor people (to environmental, economic and social shocks/disasters)
- 1.a Ensure mobilisation of resources for developing countries to implement programmes /policies to end poverty
- 1.b Create policy frameworks at regional, national and international levels to eradicate poverty.

### SDG 2 - End hunger, achieve food security and improved nutrition and promote sustainable agriculture

- 2.1 End hunger, ensure access to food
- 2.2 End all forms of malnutrition
- 2.3 Double agricultural productivity and incomes of small-scale food producers
- 2.4 Ensure sustainable food production and implementation of resilient agricultural practices
- 2.5 Maintain the genetic diversity of seeds, cultivated plants, and farmed and domesticated animals (and their related wild species)
- 2.a Investment to enhance agricultural productive capacity in developing countries
- 2.b Correct and prevent trade restrictions and distortions in world agricultural markets
- 2.c Adopt measures to ensure the proper functioning of food commodity markets and facilitate access to market information

### SDG 3 - Ensure healthy lives and promote well-being for all at all ages

- 3.1 Reduce maternal mortality
- 3.2 Reduce neonatal and infant mortality
- 3.3 Combat communicable diseases
- 3.4 Reduce premature mortality from non-communicable diseases, promote mental health and well-being
- 3.5 Strengthen prevention and treatment of substance abuse
- 3.6 Halve the number of global deaths and injuries from road traffic accidents
- 3.7 Ensure access to sexual/reproductive health care (family planning, information and education)

- 3.8 Achieve universal health coverage / access to health-care services and essential medicines/vaccines for all
- 3.9 Reduce deaths and illnesses from chemicals and pollution of environmental assets
- 3.a Strengthen the WHO Framework Convention on Tobacco Control
- 3.b Support research and development and access to vaccines and medicines (developing countries)
- 3.c Increase health financing / education and training of the health workforces in developing countries
- 3.d Strengthen early warning, risk reduction and management of national and global health risks

#### **SDG 4 - Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all**

- 4.1 Ensure completion of free and quality education for all children
- 4.2 Ensure access to quality early childhood education and care
- 4.3 Ensure access to affordable and quality technical, vocational and tertiary education
- 4.4 Ensure sufficient skills for employment, decent jobs and entrepreneurship
- 4.5 Ensure equal opportunities and equal access to all levels of education and training
- 4.6 Minimise the number of illiterates
- 4.7 Improve knowledge and skills to promote sustainable development (learners - ESD)
- 4.a Build and upgrade safe, inclusive and effective education facilities that are child-, disability- and gender-sensitive
- 4.b b Increase the number of scholarships available to developing countries for enrolment in higher education
- 4.c Increase the supply of qualified teachers in developing countries

#### **SDG 5 - Achieve gender equality and empower all women and girls**

- 5.1 End discrimination against women/girls
- 5.2 Eliminate violence against women/girls
- 5.3 Eliminate child, early and forced marriage, and female genital mutilation
- 5.4 Recognise and value unpaid care and domestic work (promote shared responsibility within the household and family)
- 5.5 Ensure participation and equal opportunities for women in leadership roles at all levels
- 5.6 Ensure access to sexual and reproductive health and rights
- 5.a Undertake reforms to give women equal rights to economic and other resources
- 5.b Enhance the use of enabling technologies to promote the empowerment of women
- 5.c Strengthen sound policies/legislation for gender equality and the empowerment of women

## **SDG 6 - Ensure availability and sustainable management of water and sanitation for all**

- 6.1 Achieve access to safe and affordable drinking water for all
- 6.2 Achieve access to adequate sanitation and hygiene for all
- 6.3 Improve water quality
- 6.4 Increase water use efficiency, reduce water scarcity
- 6.5 Implement integrated water resources management
- 6.6 Protect and restore water-related ecosystems (mountains, forests, wetlands, rivers, aquifers and lakes)
- 6.a Expand international cooperation and support for developing countries in the area of water and sanitation
- 6.b b Strengthen the participation of local communities in sustainable water management and sanitation

## **SDG 7 - Ensure access to affordable, reliable, sustainable and modern energy for all**

- 7.1 Ensure access to affordable, reliable and modern energy services
- 7.2 Increase the share of renewable energy
- 7.3 Increase energy efficiency
- 7.a Enhance international cooperation to facilitate access to clean energy research and technology
- 7.b Expand infrastructure/upgrade technology in developing countries for supplying sustainable energy services

## **SDG 8 - Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all**

- 8.1 Sustain per capita economic growth (GDP)
- 8.2 Achieve higher levels of economic productivity through diversification, modernisation and innovation
- 8.3 Promote development-oriented policies that support / create decent jobs, entrepreneurship and innovation (small businesses)
- 8.4 Improve resource efficiency in consumption & production, endeavour to decouple economic growth from environmental degradation
- 8.5 Achieve full and productive employment and decent work for all (including women and men with disabilities) as well as equal pay for work of equal value
- 8.6 Reduce the proportion of youth not in employment, education or training
- 8.7 Take measures to eradicate forced and child labour, slavery and human trafficking
- 8.8 Protect labour rights and promote safe working environments
- 8.9 Devise and implement policies to promote sustainable tourism
- 8.10 Strengthen the capacity of domestic financial institutions to expand access to financial/ insurance services
- 8.a Increase Aid for Trade support for developing countries
- 8.b Develop a global strategy for youth employment and implement the Global Jobs Pact

## **SDG 9 - Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation**

- 9.1 Develop resilient and sustainable infrastructure to support economic development and human well-being
- 9.2 Promote sustainable industrialisation and increase industry's share of employment and GDP
- 9.3 Increase the access of small-scale industrial and other enterprises to financial services
- 9.4 Upgrade infrastructure and retrofit industries to make them sustainable
- 9.5 Enhance research and upgrade the technological capability of industrial sectors
- 9.a Facilitate sustainable infrastructure development in developing countries
- 9.b Support domestic technology development, research and innovation in developing countries
- 9.c Increase access to information and communications technology and provide access to the Internet

## **SDG 10 - Reduce inequality within and among countries**

- 10.1 Achieve income growth among the poorest
- 10.2 Empower and promote the inclusion of all
- 10.3 Ensure equal opportunity and reduce inequalities
- 10.4 Adopt policies for greater equality (wage policy, social protection)
- 10.5 Improve regulation and monitoring of global financial markets and institutions
- 10.6 Strengthen the voice of developing countries in decision-making in global economic and financial institutions
- 10.7 Facilitate orderly and safe migration and mobility, implement well-managed migration policies
- 10.a Implement the principle of special and differential treatment for developing countries (in accordance with WHO agreements)
- 10.b Encourage official development assistance and financial flows to developing countries
- 10.c Reduce transaction costs for migrant remittances

## **SDG 11 - Make cities and human settlements inclusive, safe, resilient and sustainable**

- 11.1 Ensure access for all to affordable, safe and adequate housing and basic services
- 11.2 Provide access to sustainable transport systems for all, improve road safety
- 11.3 Enhance sustainable urbanisation, implement participatory, integrated sustainable settlement planning and management
- 11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- 11.5 Improve disaster risk management
- 11.6 Reduce the environmental impact of cities (air quality, waste)
- 11.7 Provide universal access to green and public spaces
- 11.a Support economic, social and environmental links between cities and rural communities by strengthening national and regional development

- 11.b Adopt and implement integrated policies and plans for sustainable urban development (inclusion, resource efficiency, climate change mitigation, adaptation and holistic disaster risk management)
- 11.c Support developing countries in building sustainable and resilient buildings

### **SDG 12 - Ensure sustainable consumption and production patterns**

- 12.1 Implement measures for sustainable consumption and production patterns
- 12.2 Achieve sustainable management and use of natural resources
- 12.3 Halve food waste and reduce food losses
- 12.4 Achieve the environmentally sound management of waste and chemicals
- 12.5 Reduce waste generation
- 12.6 Encourage companies to adopt sustainable practices and reporting
- 12.7 Promote sustainable public procurement
- 12.8 Ensure that people everywhere have the relevant information and awareness for sustainable development
- 12.a Support developing countries in moving towards sustainable patterns of consumption and production
- 12.b Develop and implement tools to monitor the impacts of sustainable tourism
- 12.c Reduce fossil fuel subsidies, taking into account the specific needs of developing countries

### **SDG 13 - Take urgent action to combat climate change and its impacts**

- 13.1 Strengthen resilience and adaptive capacity to climate change
- 13.2 Integrate climate measures into national policies
- 13.3 Improve education and human and institutional capacity on climate change mitigation and adaptation
- 13.a Provide financial support for climate action in developing countries
- 13.b Raise capacity for climate change-related planning and management in developing countries



## **SDG 14 - Conserve and sustainably use the oceans, seas and marine resources for sustainable development**

- 14.1 Reduce marine pollution
- 14.2 Sustainably manage and protect marine and coastal ecosystems
- 14.3 Reduce ocean acidification and address the impacts
- 14.4 Implement sustainable fishing mechanisms
- 14.5 Contribute to the conservation of coastal and marine areas
- 14.6 Prohibit forms of fisheries subsidies that lead to overcapacity and illegal fishing
- 14.7 Increase economic benefits for developing countries through the sustainable use of marine resources
- 14.a Increase scientific knowledge in order to improve ocean health and enhance biodiversity
- 14.b Provide access for small-scale fishers to marine resources and markets
- 14.c Enhance the conservation and sustainable use of the oceans and their resources

## **SDG 15 - Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss**

- 15.1 Ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems
- 15.2 Promote the sustainable management of all types of forests
- 15.3 Combat desertification and neutralise land degradation
- 15.4 Conserve mountain ecosystems
- 15.5 Reduce the degradation of natural habitats, halt the loss of biodiversity
- 15.6 Promote fair and equitable sharing and appropriate access to genetic resources
- 15.7 End poaching and trafficking of protected species of flora and fauna
- 15.8 Prevent the introduction of invasive alien species
- 15.9 Integrate ecosystem and biodiversity values into local planning/policies
- 15.a Increase financial resources to conserve biodiversity and ecosystems
- 15.b Increase financial resources for sustainable forest management and provide incentives for developing countries to adopt such management
- 15.c Combat poaching and trafficking of protected species

## **SDG 16 - Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels**

- 16.1 Reduce violence and related death rates
- 16.2 End violence against children
- 16.3 Ensure equal access to justice
- 16.4 Combat organised crime, reduce illicit financial and arms flows
- 16.5 Reduce corruption
- 16.6 Develop effective, accountable and transparent institutions
- 16.7 Ensure participatory decision-making at all levels
- 16.8 Strengthen the participation of developing countries in the institutions of global governance
- 16.9 Provide legal identity for all
- 16.10 Ensure access to information and protect fundamental freedoms
- 16.a International cooperation: prevent violence and combat terrorism and crime
- 16.b Promote and enforce non-discriminatory laws and policies

## **SDG 17 - Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development**

### **Finance**

- 17.1 Strengthen domestic resource mobilisation to improve domestic tax collection capacity in developing countries
- 17.2 Fulfil ODA commitments
- 17.3 Mobilise additional financial resources for developing countries
- 17.4 Assist developing countries in managing debt
- 17.5 Implement investment promotion regimes for developing countries

### **Technology**

- 17.6 Enhance cooperation for knowledge transfer (North-South) in the field of science, technology and innovation
- 17.7 Promote the development, transfer and dissemination of sustainable technologies in developing countries
- 17.8 Establish systematic cooperation for science, technology and innovation; introduce global technology capacity-building mechanism

### **Capacity development**

- 17.9 Enhance international support for capacity building in developing countries

### **Trade**

- 17.10 Promote an open, equitable and rules-based world trading system
- 17.11 Increase the exports of developing countries
- 17.12 Implement duty/quota-free market access for developing countries

**Systemic issues**

- 17.13 Enhance global macroeconomic stability
- 17.14 Enhance policy coherence for sustainable development
- 17.15 Respect each country's sovereignty in the implementation of policies for sustainability
- 17.16 Expand global (multi-actor) partnerships for sustainable development
- 17.17 Encourage and promote the formation of public, public-private and civil society partnerships
- 17.18 Enhance capacity-building support for developing countries to increase data availability
- 17.19 Develop measurements of progress on sustainable development, and support statistical capacity-building in developing countries

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