



Stuttgart – a Livable City

The global Agenda 2030 at a local level

Baseline Study depicting the
Sustainable Development Goals (SDGs)
- Executive Summary -

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With participation of all divisions of the State Capital Stuttgart

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Greeting



Excellent implementation of Agenda 2030 on sustainable urban development in Stuttgart

On behalf of the German Association of Cities and our partners, I would like to congratulate the State Capital Stuttgart on your baseline study “Stuttgart – a Livable City; The global agenda 2030 at a local level”. As a pilot city, you have been exemplary in implementing our joint project “SDG Indicators for Municipalities”. We started this project in 2017 with our partners, the two other municipal umbrella organisations, the German Institute for Urban Studies, the Federal Institute for Research on Building, Urban Affairs and Spatial Development, the Service Agency Communities in One World and the Bertelsmann Foundation.

This project comprised the 17 Sustainable Development Goals (SDGs), and the 169 sub-objectives of the Agenda 2030 were transferred to the municipalities in Germany. The study showed whether the goals of the United Nations (UN) are relevant for German municipalities and to what extent the achievement of the objectives fall in their area of responsibility. The SDGs relevant for German municipalities, for example access to affordable housing or the reduction of CO₂ emissions, were lodged with a total of 47 indicators. Anyone – in the administration or a regular citizen – can use the SDG portal for municipalities (www.sdg-portal.de) and with a mouse click can see the SDG data available, also in comparison to the previous years and other municipalities.

However, the 47 SDG indicators are only part of what's on offer by the project partners. Every city can and should decide, on the basis of the local specific framework conditions and priorities, which indicators are suitable for depicting the SDGs. In Stuttgart, with the baseline study at hand, this has been implemented in a most exemplary way. The indicators were adapted to fit the conditions in situ, others added to the list and existing indicators improved. Modified or additional indicators are for example in the range of noise pollution in road traffic or energy consumption, differentiated according to the workforce or residents in Stuttgart.

Working together with you, we would like to play a part in making the SDG efforts made by the German cities visible on a worldwide basis. Without the participation of the cities climate protection simply cannot be a success worldwide. The SDG 13 “Measures for climate protection” calls for an implementation at a local level. It is therefore not enough to make “Nationally Determined Contributions” within the framework of state agreements. Instead it is the cities that have to bring these agreements to life – with measures for an ecological traffic shift, an energy-focused refurbishment of buildings, for the use of renewable energy or for urban development planning in line with climate protection criteria. That is why I'm delighted about the “Locally Determined Contributions” (LoDCs), the contributions from our SDG pilot, the State Capital Stuttgart, and I thank you very much for your dedicated service.

A handwritten signature in blue ink, appearing to read 'Helmut Dedy', written in a cursive style.

Helmut Dedy
Managing Director of the German Association of Cities

Foreword



Reinforcing the global objectives of Agenda 2030 with sustainable urban development in Stuttgart

The State Capital Stuttgart is a cosmopolitan, social city with heart and soul – easy to like and well worth living in – home to people with the most various backgrounds. Stuttgart is a strong business and innovation location in the heart of Europe and with worldwide connections. Stuttgart is a green and culturally rich city. Yet, at the same time, Stuttgart as an industrial city is, in the light of environmental impacts, economic transition and social issues, faced with enormous challenges.

The climate crisis is real. Weather extremes – heat and drought – are also posing us more and more problems here in Stuttgart. The call for action is clear if we want to meet the objectives of the climate change conference of Paris. No waiting until 2050, act now! The younger generation is right in demanding that of us. That is why I have now drawn up a programme of action for climate protection, which has aroused a great deal of interest throughout Germany. In the coming decades, politics, administration and urban society in general will have to focus on an energy and mobility turnaround, in particular questions as to participation and social solidarity. Cities worldwide are part of the current and future challenges, but they also play a central role in the solution.

The global Agenda 2030 with its 17 goals (Sustainable Development Goals, SDG) is our joint Agenda for a better world. It gives the municipalities a guiding framework to become part of a worldwide initiative to achieve the goals of social, economic and ecological sustainability. We want to assume and fulfil our responsibilities at a local level and implement the global goals with concrete measures.

This we declare with the approval of the municipal council on the resolution of “2030 Agenda for Sustainable Development: Sustainability at a Local Level” of the Association of German Cities and the German section of the Council of European Municipalities and Regions (CEMR). To support this resolution, a project office has been set up in my division, which will pick up on measures for sustainable urban development carried out so far, develop these further and initiate new processes. For instance, in the field of public procurement we have carried out a dialogue of bidders with a higher emphasis on eco-fair and social criteria.

For an economically, socially and ecologically sustainable development we not only need ambitious objectives and a joint framework, but above all, we need a dialogue, strong partnerships and a shared responsibility between politics, administration, civil society, business and the scientific community to strengthen sustainable action – at a global and local level.

Therefore, I very much appreciate the cooperation with the Bertelsmann Foundation and the German Institute for Urban Studies: we have seized the opportunity of being one of the first municipalities in Germany to take part in a pilot project and test the SDG indicators for municipalities developed by a body of experts. Future strategies and objectives of sustainable urban development in the State Capital Stuttgart can build on this current baseline study. And at the same time, we have also made a methodological contribution to the further development of the SDG indicators for other municipalities in Germany.

In this cooperative spirit municipalities can help one another to work together on finding solutions to the worldwide challenges.

A handwritten signature in black ink, appearing to read 'F. Kuhn'. The signature is fluid and cursive, with a long, sweeping underline.

Fritz Kuhn
Mayor of the State Capital Stuttgart

Contents

Introduction	7
I Project Description	9
1 Point of departure	9
2 Methodological approach	10
2.1 The nationwide project SDG indicators for municipalities.....	10
2.2 Selection and analysis of indicators	11
2.3 Delimitation.....	12
II Selected SDG Indicators for the State Capital Stuttgart	13
III Experiences and Recommendations	30
1 Selection and further development of indicators	30
2 Further development of the baseline study process	32
Bibliography	34



Introduction

The United Nations adopted the Agenda 2030 in 2015. This was a basis for the transition to a world in which economic efficiency, ecological compatibility and social justice can be in accord with one another. The Agenda 2030 addresses all states (“every country is a developing country”) at an international, national and, just as much, at a regional and local level. An essential component of Agenda 2030 are the 17 goals for a sustainable development (Sustainable Development Goals, SDGs). To achieve the goals of Agenda 2030 the focus is on partnerships between various actors from administration, politics, business and civil society.

In the further development of the Sustainable Development Strategy for Germany in 2017 the Federal Government oriented itself systematically towards the Agenda 2030 with the 17 SDGs. Many other German states also developed strategies geared towards the SDGs. In Baden-Württemberg the Advisory Council of the State Government prepared a proposal as to how the SDGs could be integrated into the state-specific guidelines for sustainable development. The municipalities, having a close relationship with the residents, play a particular role when it comes to implementing Agenda 2030.

To map out the status of sustainable development on a quantitative basis of SDGs and at a local level, seven organisations started a nationwide project in 2017 “SDG indicators for municipalities” – proposals for SDGs at a local level: Association of German Cities, German County Association, German Association of Towns and Municipalities, German Institute for Urban Studies (Difu), Federal Institute for Building, Urban Affairs and Spatial Research, Service Agency Communities in One World of Engagement Global and the Bertelsmann Foundation.

As one of the first municipalities in Germany the State Capital Stuttgart took on the challenging task of pilot-testing the “SDG indicators for municipalities” from June to October 2018. A second phase between July and September 2019 saw the update of the data. The baseline study was carried out in cooperation with the Bertelsmann Foundation and Difu.

The SDG baseline study for the State Capital Stuttgart has two main objectives: first, to analyse the current status of the city on the basis of data in place as regards social, ecological and economic sustainability and to improve the possibilities of a target-oriented, strategic development of the city’s measures; second, with this SDG baseline study to make a methodological contribution to a target-oriented strategic, further development of SDG indicators for an appropriate and effective design for the SDG baseline-studies in municipalities. The different starting conditions make a comparison of cities neither possible nor envisaged – however, the municipalities will receive a toolbox so they can gauge their own development.

A qualitative depiction of selected programmes and measures of the State Capital Stuttgart complements the quantitative baseline study. These descriptions give an impression of the spectrum of the measures which can be taken with a view to sustainability. This should also address the issue in other cities and communities. Stuttgart sees itself here as an impulse-giver, but also as a learner, in a national and international network of local actors.

The SDGs offer a comprehensive target system for sustainability and, at the same time, they point out possible conflicts of interests. The implementation of strategic objectives requires continuous monitoring. The participative, cross-divisional process of the baseline study shows that the tried and tested SDG indicators for municipalities are a suitable instrument to be quantitatively supportive in realising the existing objectives and approaches of the State Capital Stuttgart for social, ecological and economic sustainability. It was constructive



to discuss the SDG indicators methodologically on a cross-sectoral basis, and to select and expand on issues to do justice to the distinctiveness of a municipality. This way, the cross-divisional knowledge management and the understanding of the correlations between the individual sustainability measures could be strengthened.

All divisions and departments of the City of Stuttgart worked with enormous commitment on this report.

Based on SDG indicators, this baseline study has for the first time developed a cross-sectoral instrument for a regular, all-embracing monitoring of correlations of social, economic and ecological sustainability. This forms an important basis for future recommendations and an effective action on the part of politics, administration and urban society which will help to serve the further development of municipal objectives and measures of implementing the SDGs in the State Capital Stuttgart.

The present executive summary provides an overview of the methodological approach, a compilation of the selected indicators as well as the main results with regards to the process and further development of SDG-indicators.

For the complete report (in German), including the time-series and description of developments according to each indicator as well as more than 40 best-practice examples please view:

<https://www.bertelsmann-stiftung.de/de/publikationen/publikation/did/lebenswertes-stuttgart-die-globale-agenda-2030-auf-lokaler-ebene/>

<https://www.stuttgart.de/stuttgart-international/nachhaltig> [last accessed: 12 December, 2019]



I Project Description

1 Point of departure

The political ambition of the State Capital Stuttgart is an ecologically reasonable, economically value-adding, socially just and a culturally varied use of urban spaces. Economic, social and ecological sustainability are systematically interlinked. Within the city administration many players are involved in various sub-divisions of sustainability policies, for instance in purchasing where measures are being taken to increase eco-fair and social public procurement, as regards environmental and climate protection, twin-town cooperation with projects promoting democratisation, in the social domain in the field of integration of migrants and refugees, or in the city districts supporting local social projects.

With its sustainable urban development, the State Capital Stuttgart wants to strengthen the global goals of the United Nations (UN) Agenda 2030. In its session of May 3rd, 2018, the municipal council resolved to follow the declaration of the Association of German Cities “2030 Agenda for sustainable development: sustainability at a local level”. By signing this declaration, the State Capital Stuttgart agreed to implement the covenants of the Agenda 2030 on social, economic and ecological development objectives with concrete measures at a local level.

To coordinate the global development objectives, in 2017 the City of Stuttgart set up a full-time job in the Department for International Relations for the “Coordination of municipal development policy”, which was extended for a further two years in 2019. The project is funded by the Federal Ministry for Economic Cooperation and Development (BMZ) via Engagement Global and co-financed by its Service Agency Communities in One World (SKEW).

The project creates conditions to strategically anchor the global goals of Agenda 2030 locally in the respective city administration and to implement them. For that purpose partnerships with business, civil society and the scientific community and national and international cooperations are expanded and intensified. In 2017 the cross-divisional working group “Global Development Goals” carried out a qualitative baseline study to allocate existing (sectoral) strategies, concepts and projects to the individual SDGs, to identify loopholes and develop new projects. The quantitative baseline study is built on the basis of the SDG indicators.



2 Methodological approach

2.1 The nationwide project SDG indicators for municipalities

Sustainability is a comprehensive concept of social development. Society should be so devised that the needs of today can be met without restricting the livelihood of future generations. The detailed definition and gauging of such an understanding of sustainability is an enormous challenge. Sustainability designates a general principle, a universal standard without highlighting specific objectives.¹

In contrast to previous United Nations agendas for ecological sustainability (Agenda 21, 1992) and developmental objectives (Millennium Development Goals, 2000), the general sustainability objective has been operationalised by the Agenda 2030, i.e. underlaid with concrete goals and development trends (169 sub-objectives).

In 2016 the United Nations also published proposals for indicators to quantitatively map out the status of the sustainable development as regards the SDGs. The United Nations indicator catalogue is to be used as a quantitative monitoring tool for the implementation of the SDGs at a national, regional and local level.

The assessment of just how close we can come to these goals and how to pursue these objectives calls for a rating of the present situation as regards the said goals. To enable the German municipalities to carry out such a rating, the project “SDG indicators for municipalities” was started, with the aim of identifying indicators with which global sustainable goals (SDGs) could be mapped out at a municipal level and the data made available nationwide in Germany.²

The project “SDG indicators for municipalities”, starting with the SDGs, identified the goals and sub-objectives relevant for municipalities and found concrete indicators underlaid with data at least at a district level. The 17 SDGs with their 169 sub-objectives were subject to a relevance check, i.e. a monitoring of their significance for German municipalities. From a large pool of 196 in principle relevant indicators, 47 key indicators were selected, which covered the important core features of global sustainability goals at a municipal level. This set of key indicators was recommended by the Association of German Cities and the other editors as an orientation for sustainability goals in municipalities. The indicators proposed in the project can be seen as a modular system, so that a selection can be made in such a way that, with regard to the SDGs, the baseline study of a municipality suits the particular features of the community.³ Further or completely different indicators can be more suitable and / or other data may be available.

¹ The current sustainability concept was mainly defined in the Brundtland Report of the World Commission of Environment and Development of the United Nations (Hauff, Volker (Edit.), 1987: Our joint future. The Brundtland Report of the World Commission of Environment and Development. Greven). For discussion on the concept cf. Grunwald, Achim and Kopfmüller, Jürgen, 2012: Nachhaltigkeit. Frankfurt/M.

² The United Nations Organisation, the European Union and the Federal government of Germany have all proposed indicators. However, in most cases these refer to a national level and are not always relevant for municipalities and only partly available as data.

³ For details of the procedure see: Assmann, Dirk, Honold, Jasmin, Grabow, Busso and Roose, Jochen, 2018: SDG-Indikatoren für Kommunen – Hrsg. Bertelsmann Stiftung, Bundesinstitut für Bau-, Stadt- und Raumforschung, Deutscher Landkreistag, Deutscher Städtetag, Deutscher Städte- und Gemeindebund, Deutsches Institut für Urbanistik, Engagement Global. Gütersloh.



The proposals set out in the project “SDG indicators for municipalities” for a local level in Germany form the starting point for the SDG baseline study of the State Capital Stuttgart in cooperation with the Bertelsmann Foundation and the Difu. The indicators have been adapted and supplemented, on the one hand to fully and appropriately meet the requirements of the City of Stuttgart and also to use additional access to data within the municipal administration.

2.2 Selection and analysis of indicators

The selection and analysis of indicators are complex processes which require detailed knowledge from all specialist departments and knowledge of cross-sectoral correlations. For the entire range of topics experts have to make assessment on the significance of indicators, the accessibility of data, as well as the level of data collection.⁴ The State Capital Stuttgart therefore selected a participative process to bring together this knowledge from the various departments, offices, staff units and the city’s in-house operated enterprises. In a series of cross-divisional workshops and direct decision-making processes between June and October 2018 the nationwide project “SDG indicators for municipalities” was presented, the selection of the indicators for the State Capital made, the fundamental structure of the baseline study specified and the description of the data graphically prepared and analysed by Difu discussed.

The criteria of the SDG indicator selection for Stuttgart defined together were the appropriate coverage of SDGs, the relevance for the State Capital and the availability of current data for the report period (as a rule 2007 – 2018, depending on data availability). The number of indicators was to remain manageable. Therefore, indicators were chosen which cover several SDGs. The graphics form an excerpt of time series developments in selected areas. At the forefront was gaining new knowledge as regards the starting point of the State Capital, as opposed to comparisons with other municipalities.

In the selection for Stuttgart first of all the 47 key indicators for the nationwide project were discussed as to their suitability and data availability. In the case of 30 of these 47 key indicators centrally collected data from official or other statistics, which are at least available at district level – therefore also for the State Capital – were used. Representatives from the city administration viewed the definitions and data sources of all indicators of the nationwide project. This way, the most appropriate indicators could be selected and the availability and quality of data secured.

A total of 77 indicators were selected for the Stuttgart SDG baseline study. They are comprised as follows: 43 indicators of the 47 key indicators (54 single indicators) of the nationwide project were included in the Stuttgart SDG baseline study – on top of this, 17 indicators from a list of 196 basically suitable indicators from the nationwide project. The State Capital proposed a further 17 indicators which had not yet been considered in the nationwide project. These indicators were in part newly developed.

The 77 indicators selected for the Stuttgart SDG baseline study are listed in the following chapter. As a further methodological contribution on the part of the State Capital Stuttgart for future baseline studies or for other

⁴ Data collection in this case is often the research and integration of data available at various places (for instance offices at various levels or in-house operated municipal enterprises), which have to date not been systematically collected and prepared.



municipalities additional indicator proposals are listed in the complete version of the baseline study alongside other proposals from the nationwide project “SDG indicators for municipalities”.

The data acquired for the indicators to illustrate the time series required assessment and interpretation. The methodological and content-related informative value of the data had to be determined. Therefore, the indicators graphically prepared with basic information by Difu were analysed in detail in a cross-sectoral process to assess the quality and significance of the data and state possible reasons for changes observed over the time series.

2.3 Delimitation

The data on the selected 77 indicators present a detailed but not an exhaustive insight into the implementation of the Agenda 2030 in the State Capital Stuttgart. The analyses of the individual SDGs illustrate how selected fields of social, economic and ecological sustainability have developed since 2007. The indicators used are a good starting point for an integral baseline study. The relevance of many indicators for several SDGs make the information available more dense than the 77 indicators at first suggested.

An indicator-based approach to gauging the objective achievement for sustainability, as specified in the SDGs, has the advantage of clearly and understandably showing the situation and development with facts and figures. In many cases the indicators made aspects transparent (for instance, the proportion of people living in poverty while receiving state assistance). The indicators also give information on selected sub-aspects, which allow us to draw conclusions on the overall picture. This is a starting point for a more in-depth analysis and up-dated observations in the respective areas.

Many sustainability objectives are inter-dependent and interact reciprocally, some are even in a conflict of objectives. Key sustainability-related developments in Stuttgart have an impact on changes in other parts of the world.

This report focuses on the description of the development of sustainable aspects over the period 2007 – 2018 (as a rule, depending on the data availability) in the State Capital Stuttgart. The development portrayed will be expanded by information for reasons known on certain phenomena. However, there is not an explanation for every development, insofar as there are notable changes. Sometimes the causes are very varied and it is difficult to find a direct correlation, and in other cases the reasons are simply unknown.

The SDG baseline study provides information on what has changed or stayed the same in the State Capital Stuttgart in the period considered. The specific municipal influence on certain developments was not systematically calculated. This would have required a comprehensive analysis of various impacts (EU, the German Federation etc.) at a local level for the various sustainability dimensions. Alongside the representations of the quantitative indicator values, selected targets, strategies and measures are also described for an effective sustainability at a local level (cf. best-practice examples in the complete report). Detailed single reports (e.g. social monitoring, educational monitoring etc.) are not replaced by this. However, the spectrum of the State Capital Stuttgart approach for sustainable development is made transparent in this baseline study.



II Selected SDG Indicators for the State Capital Stuttgart

The SDG baseline study for the State Capital Stuttgart is carried out using 77 selected indicators (see table below; with allocation to the relevant sub-objectives). These include 43 key indicators from the project “SDG indicators for municipalities”, however, in part in modified form.⁵ A further 17 indicators originate from an extensive list of 196 conceivable indicators from the project “SDG indicators for municipalities”. 17 indicators were introduced in the cross-sectoral discussion process in the State Capital Stuttgart.⁶ Indicators which could not be taken into consideration in this report are listed in the Annex of the complete report and can be taken into account for reports of other municipalities or for later reports.

The complete time-series description and analysis as well as the description of over 40 best-practice examples are available in the complete version of the baseline study.

Table: Selected indicators to illustrate the SDGs in the City of Stuttgart

Indicator	Definition	Source of the indicator
SDG 1: No poverty (end poverty in all its forms everywhere)		
SDG 1.3: Implement nationally appropriate social protection systems and measures for all, and by 2030 achieve substantial coverage for the poor and vulnerable		
SGB II-/SGB XII income support	(Number of benefit recipients pursuant to SGB II and SGB XII) / (Number of residents) * 100	Key indicator, SDG indicators for municipalities

⁵ The individual key indicators are summarised in the catalogue of the nationwide SDG indicators for municipalities, in part as composite indicators. This applies concretely for poverty among children, young people and senior citizens who are summarised under the indicator “Poverty”, for the care of children under 3, as well as the 3 – 5 year-olds, who are summarised under the indicator “Children’s day care”, for households with a low, middle or high income, summarized under the indicator “Income distribution”, and for the greenhouse gas emissions for industry, trade, commerce and services, traffic as well as private households, which – in a modified form – as CO₂-emission for various emission sources. In comparison to the breakdown of the SDG indicators for municipalities 43 of the 54 defined individual key indicators are used in identical or modified form.

⁶ Throughout indicators were defined in such a way that they can also be applied for other municipalities. For instance in the new extended indicator “Trees in public spaces” the number of trees was not chosen as an indicator, but the number of trees in relation to the total area.



Indicator	Definition	Source of the indicator
Poverty – child poverty	((Number of benefit recipients pursuant to SGB II or SGB XII under 15 years) + (number of persons under 15 years in a community of dependence with benefit recipients pursuant to SGB II or SGB XII)) / (number of residents under the age of 15) * 100	Key indicator, SDG indicators for municipalities
Poverty – poverty among adolescents/young adults	((Number of benefit recipients pursuant to SGB II/SGB XII between 15 and 17) + (number of persons between 15 and 17 in community of dependence with benefit recipients pursuant to SGB II or SGB XII)) / (number of residents between 15 and 17) * 100	Key indicator, SDG indicators for municipalities
Poverty – poverty of the elderly	(Number of benefit recipients pursuant to SGB XII 65 years and older) / (number of residents 65 years and older) * 100	Key indicator, SDG indicators for municipalities
Poverty – poverty of single parents	(Number of single parents with income support pursuant to SGB II) / (number of single parents) * 100	Supplement of the City of Stuttgart
Households with low income	<i>Refer to SDG 10</i>	
SDG 2: No hunger (end hunger, achieve food security and improved nutrition and promote sustainable agriculture)		
SDG 2.2: By 2030, end all forms of malnutrition, including achieving by 2025 the internationally agreed targets on growth inhibition and emaciation in children under five years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women, and older persons		
Children with overweight	(Number of children at school enrolment with overweight) / (number of all examined children of a school year) * 100	Key indicator, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
SDG 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters, and that progressively improve land and soil quality		
Ecological agriculture	(Area under ecological agricultural use) / (area under agricultural use in total) * 100	Key indicator, SDG indicators for municipalities
Nitrogen surplus	(Nitrogen surplus in kilogramme) / (area under agricultural use in hectare) * 100	Key indicator, SDG indicators for municipalities
Soil index	<i>Refer to SDG 15</i>	
SDG 3: Good health and well-being (ensure healthy lives and promote well-being for all at all ages)		
SDG 3.4: By 2030, reduce by one-third pre-mature mortality from non-communicable diseases (NCDs) through prevention and treatment, and promote mental health and well-being		
Suicide mortality	(Suicides of men) / (number of residents) * 100,000 (Suicides of women) / (number of residents) * 100,000	Supplemental indicator proposal, SDG indicators for municipalities
SDG 3.6: By 2020, halve global deaths and injuries from road traffic accidents		
Traffic casualties	<i>Refer to SDG 11</i>	
SDG 3.8: Achieve universal health coverage (UHC), including financial risk protection, access to quality essential health care services, and access to safe, effective, quality, and affordable essential medicines and vaccines for all		
Premature mortality	(Number of fatalities among persons under 65 years) / (number of residents) * 1,000	Key indicator, SDG indicators for municipalities
Physicians and number of physicians	(Number of general practitioners, doctors without specialisation) / (number of residents) * 100,000	Key indicator, SDG indicators for municipalities
Places in nursing homes	(Number of available places in nursing homes) / (number of residents over 65 years) * 1,000	Supplemental indicator proposal, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
SDG 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and pollution and contamination of air, water, and soil		
Air quality	Nitrogen dioxide pollution: NO ₂ µg / m ³ Fine particulate pollution: Days on which the statutory threshold of PM ₁₀ > 50µg per m ³ was exceeded	Key indicator, SDG indicators for municipalities (modified)
Noise pollution	Day/evening/night noise index over 24 hours: (number of residents with total street noise exposure above 65 dB(A)) / (residents) * 100 Night-time noise index: (number of residents with night-time traffic noise pollution above 55 dB(A)) / (residents) * 100	Supplement of the City of Stuttgart
Contaminated sites	<i>Refer to SDG 15</i>	
SDG 4: Quality education (ensure inclusive and equitable quality education and promote lifelong learning opportunities for all)		
SDG 4.2: By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education		
Childcare – childcare for under 3-year-olds	(Number of children under 3 years in day-care centres) / (number of children under 3 years) * 100	Key indicator, SDG indicators for municipalities
Childcare – childcare for 3 to 5 year olds	(Number of 3 to 6 years old children in day-care centres) / (number of 3 to 6 years old children) * 100	Key indicator, SDG indicators for municipalities
SDG 4.3: By 2030, ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university		
(Technical) Baccalaureate diploma	(Number of school leavers with matriculation standard or advanced technical college certificate) / (total number of school leavers) * 100	Supplemental indicator proposal, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
<p>SDG 4.7: By 2030, ensure all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture's contribution to sustainable development</p>		
<p>Educational offers related to ecological sustainability</p>	<p>(Number of schools participating in at least one ecological school programme, which are able to present environmental certificates or are involved in ESD projects) / (total number of schools) * 100</p> <p>Allocation of programmes</p>	<p>Supplemental indicator proposal, SDG indicators for municipalities</p>
<p>SDG 5: Gender equality (achieve gender equality and empower all women and girls to self-determination)</p>		
<p>SDG 5.1: Eradicate all forms of discrimination against women and girls everywhere</p>		
<p>Employment rates of women and men – full-time employment rates of women and men</p>	<p>((Number of female employees subject to social security contributions between 15 and 64 years at the place of residence) / (total number of women between 15 and 64 years) * 100)) / ((Number of male employees subject to social security contributions between 15 and 64 years at the place of residence) / (total number of men between 15 and 64 years) * 100)) * 100</p>	<p>Key indicator, SDG indicators for municipalities</p>
<p>Employment rates of women and men – percentage of women in part-time employment</p>	<p>((Number of female employees subject to social security contributions between 15 and 64 years at the place of residence in part-time employment) / (total number of women subject to social security contributions between 15 and 64 years at the place of residence) * 100)) / ((Number of male employees subject to social security contributions between 15 and 64 years at the place of residence in part-time employment) / (total number of men subject to social</p>	<p>Supplement City of Stuttgart</p>



Indicator	Definition	Source of the indicator
	security contributions between 15 and 64 years at the place of residence) * 100)) * 100	
Relative poverty among women	((Number of benefit recipients pursuant to SGB II and SGB XII) / (number of women)) / ((number of benefit recipients pursuant to SGB II and SGB XII) / (number of men))	Supplement City of Stuttgart
SDG 5.5: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life		
Women in the Stuttgart municipal council	(Number of women with a seat in the municipal council) / (total seats in the municipal council) * 100	Key indicator, SDG indicators for municipalities
SDG 6: Clean water and sanitation (ensure availability and sustainable management of water and sanitation for all)		
SDG 6.3: By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally		
Wastewater treatment	(Wastewater quantity treated by denitrification and the elimination of phosphorus) / (total wastewater quantity) * 100	Key indicator, SDG indicators for municipalities
Quality of running water	(Running waters with at least class II in km) / (total running waters in km) * 100	Key indicator, SDG indicators for municipalities
Renaturation measures running waters	<i>Refer to SDG 15</i>	
SDG 6.6: By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes		
Consumption of drinking water	<i>Refer to SDG 12</i>	



Indicator	Definition	Source of the indicator
SDG 7: Affordable and clean energy (ensure access to affordable, reliable, sustainable and modern energy for all)		
SDG 7.2: Increase substantially the share of renewable energy in the global energy mix by 2030		
Share of renewable energies in the final energy consumption	(Supply of energy by renewable energies) / (gross final energy consumption (climatically adjusted)) * 100	Key indicator, SDG indicators for municipalities (modified)
Production of renewable energy in the urban area	Heat and power generation from renewable energy sources in the urban area (GWh/a)	Supplement City of Stuttgart
Final energy consumption – final energy consumption by industry, commerce, trade and services	(Consumption of final energy by industry, commerce, trade and services (climatically adjusted)) / (number of employees subject to social security contributions)	Supplement City of Stuttgart
Final energy consumption – final energy consumption by traffic	(Consumption of final energy by traffic (climatically adjusted)) / (number of residents)	Supplement City of Stuttgart
Final energy consumption – final energy consumption by private households	(Consumption of final energy by private households (climatically adjusted)) / (number of residents)	Supplement City of Stuttgart
Final energy consumption – city as a whole	Consumption of final energy by the city as a whole (climatically adjusted)	Supplement City of Stuttgart
SDG 7.3: Double the global rate of improvement in energy efficiency by 2030		
Energy productivity	(Gross domestic product) / (primary energy consumption)	Supplemental indicator proposal, SDG indicators for municipalities
SDG 8: Decent work and economic growth (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all)		
SDG 8.1: Sustain per capita economic growth in accordance with national circumstances, and in particular at least 7% per annum GDP growth in the least-developed countries		
Gross domestic product	(Gross domestic product) / (number of residents)	Key indicator, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
SDG 8.2: Achieve higher levels of productivity of economies through diversification, technological upgrading and innovation, including through a focus on high value added and labour-intensive sectors		
Highly-qualified people	<i>Refer to SDG 9</i>	
Start-ups	<i>Refer to SDG 9</i>	
Energy productivity	<i>Refer to SDG 7</i>	
SDG 8.4: By 2030, improve progressively global resource efficiency in consumption and production, and endeavour to decouple economic growth from environmental degradation in accordance with the 10-year framework of programmes on sustainable consumption and production with developed countries taking the lead		
EMAS-certified sites	<i>Refer to SDG 12</i>	
Amount of waste	<i>Refer to SDG 12</i>	
Supply with drinking water	<i>Refer to SDG 12</i>	
SDG 8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value		
Unemployment – total unemployment	$(\text{Unemployed persons}) / ((\text{total civilian labour force}) + (\text{unemployed persons})) * 100$	Supplemental indicator proposal, SDG indicators for municipalities
Unemployment – youth unemployment	$(\text{Unemployed persons under 25 years}) / ((\text{all civilian unemployed persons under 25 years}) + (\text{unemployed persons under 25 years})) * 100$	Supplemental indicator proposal, SDG indicators for municipalities
Unemployment – female unemployment	$(\text{Female unemployed persons}) / ((\text{all female civilian unemployed persons}) + (\text{female unemployed persons})) * 100$	Supplemental indicator proposal, SDG indicators for municipalities
Unemployment – male unemployment	$(\text{Male unemployed persons}) / ((\text{all male civilian unemployed persons}) + (\text{male unemployed persons})) * 100$	Supplement City of Stuttgart
Long-term unemployment – total long-term unemployment	$(\text{Unemployed persons with a duration of unemployment of } > 1 \text{ year}) / ((\text{total civilian labour force}) + (\text{unemployed persons})) * 100$	Key indicator, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
Long-term unemployment – long-term youth unemployment	(Unemployed persons under 25 years with a duration of unemployment of > 1 year) / ((total civilian labour force younger than 25 years) + (unemployed persons under 25 years)) * 100	Supplemental indicator proposal, SDG indicators for municipalities
Long-term unemployment – long-term unemployment of women	(Unemployed women with a duration of unemployment of > 1 year) / ((total female civilian labour force + (unemployed women)) * 100	Supplemental indicator proposal, SDG indicators for municipalities
Long-term unemployment – long-term unemployment of men	(Unemployed men with a duration of unemployment of > 1 year) / ((total male civilian labour force + (unemployed men)) * 100	Supplemental indicator proposal, SDG indicators for municipalities
Employment rate	(Number of employees subject to social security contributions at the place of residence between 15 and 64 years) / (number of residents between 15 and 64 years) * 100	Key indicator, SDG indicators for municipalities
Employment rates of women and men	<i>Refer to SDG 5</i>	
“People increasing earnings”	(Number of employed benefit recipients of ALG II [<i>German unemployment benefit</i>]) / (total number of benefit recipients of ALG II) * 100	Key indicator, SDG indicators for municipalities
SDG 9: Industry, innovation and infrastructure (build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation)		
SDG 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities		
Energy productivity	<i>Refer to SDG 7</i>	



Indicator	Definition	Source of the indicator
SDG 9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, particularly developing countries, including by 2030 encouraging innovation and increasing the number of R&D workers per one million people by x% and public and private R&D spending		
Start-ups – total start-ups	(Number of new establishment of commercial enterprises) / (number of residents) * 1000	Key indicator, SDG indicators for municipalities
Start-ups – start-ups by women	(Number of new establishment of commercial enterprises by women) / (total number of new establishment of commercial enterprises) * 100	Supplemental indicator proposal, SDG indicators for municipalities
Highly-qualified people	(Number of employees subject to social security contributions with an academic degree at the place of work) / (total number of employees subject to social security contributions at the place of work) * 100	Key indicator, SDG indicators for municipalities
SDG 10: Reduced inequalities (reduce inequality within and among countries)		
SDG 10.2: By 2030, empower and promote the social, economic and political inclusion of all irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.		
SGB II /SGB XII benefits	<i>Refer to SDG 1</i>	
Poverty – child poverty	<i>Refer to SDG 1</i>	
Poverty – Poverty among adolescents/ young adults	<i>Refer to SDG 1</i>	
Poverty – poverty of the elderly	<i>Refer to SDG 1</i>	
Poverty – poverty of single parents	<i>Refer to SDG 1</i>	
Relative poverty rate among foreigners	((Number of benefit recipients pursuant to SGB II and SGB XII without German citizenship) / (total foreigners)) / ((number of benefit recipients pursuant to SGB II and SGB XII with German citizenship) / (total German citizens)) * 100	Key indicator, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
Relative employment rate of foreigners	((Number of foreign employees subject to social security contributions at the place of residence between 15 and 64 years) / (total number of foreigners between 15 and 64 years)) / ((total number of employees subject to social security contributions at the place of residence between 15 and 64 years) / (total number of residents between 15 and 64 years)) * 100	Supplemental indicator proposal, SDG indicators for municipalities
Employment rates of women and men	<i>Refer to SDG 5</i>	
Meeting points for citizens	(Number of meeting places for citizens (meeting points for citizens, multi-generation meeting points, etc.)) / (number of residents) * 1,000	Supplemental indicator proposal, SDG indicators for municipalities (SDG 16)
Income distribution – households with low income	(Number of households with a total net income of less than 25,000 Euro per year) / (total number of households) * 100	Key indicator, SDG indicators for municipalities
Income distribution – households with medium income	(Number of households with a total net income between 25,000 and 50,000 Euro per year) / (total number of households) * 100	Key indicator, SDG indicators for municipalities
Income distribution – households with high income	(Number of households with a total net income of more than 50,000 Euro per year) / (total number of households) * 100	Key indicator, SDG indicators for municipalities
SDG 11: Sustainable cities and communities (make cities and settlements inclusive, safe, resilient and sustainable)		
SDG 11.1: By 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums		
Rents	Quoted rents (net rent) per sqm for initial letting and re-letting	Key indicator, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
Accommodation service for social housing	Accommodation service for social housing: (Number of placed households) / (total number of households registered in the municipal planning file) * 100 Waiting list: Average time in the planning file for an apartment – itemised by household size and citizenship	Supplement City of Stuttgart
SDG 11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons		
Modal Split (choice of transport)	(Number of transport users on their way to work or training place as pedestrians, using their bicycle, e-bike, public transport or moped) / (total number of transport users on their way to work or training place) * 100	Key indicator, SDG indicators for municipalities
Accessibility of public transport	(Stops equipped for the disabled) / (all stops) * 100	Supplemental indicator proposal, SDG indicators for municipalities
Traffic casualties	(Number of persons injured or killed through traffic accidents) / (number of residents) * 1,000	Key indicator, SDG indicators for municipalities
SDG 11.3: By 2030, enhance inclusive and sustainable urbanisation and capacities for participatory, integrated and sustainable settlement planning and management in all countries		
Land use	Annual land use: area used for settlements and transport in ha – area used for settlements and transport in ha of the previous year	Key indicator, SDG indicators for municipalities
Recreational areas	(Green areas and leisure space / (total space)	Key indicator, SDG indicators for municipalities
Energy productivity	<i>Refer to SDG 7</i>	
Biodiversity	<i>Refer to SDG 15</i>	



Indicator	Definition	Source of the indicator
SDG 11.6: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality, municipal and other waste management		
Air quality	<i>Refer to SDG 3</i>	
Noise pollution	<i>Refer to SDG 3</i>	
Waste volume	<i>Refer to SDG 12</i>	
Greenhouse gas emissions industry, commerce, trade and services, traffic and private households	<i>Refer to SDG 13</i>	
SDG 11.7: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities		
Crimes	<i>Refer to SDG 16</i>	
SDG 12: Responsible consumption and production patterns (ensure sustainable consumption and production patterns)		
SDG 12.2: By 2030, achieve sustainable management and efficient use of natural resources		
Consumption of drinking water	(Annual consumption of drinking water (households and small business)) / (number of residents) * (days per year)	Key indicator, SDG indicators for municipalities
Amount of waste – total	(Total amount of waste in kg) / (number of residents)	Key indicator, SDG indicators for municipalities
Amount of waste – share of recyclable material	(Amount of recyclable material in kg) / (total amount of waste in kg) * 100	Supplement of the City of Stuttgart
Wastewater treatment	<i>Refer to SDG 6</i>	
Final energy consumption	<i>Refer to SDG 7</i>	
Energy productivity	<i>Refer to SDG 7</i>	
SDG 12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse		
Amount of waste	<i>Refer to SDG 12</i>	



Indicator	Definition	Source of the indicator
SDG 12.6: Encourage companies, especially large and trans-national companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle		
EMAS-certified sites	Number of EMAS-certified sites	Key indicator, SDG indicators for municipalities
SDG 12.7: Promote public procurement practices that are sustainable in accordance with national policies and priorities		
Sustainable procurement of consumables	(Quantity of recycling paper used in municipal institutions) / (total quantity of paper used in municipal institutions) * 100	Supplemental indicator proposal, SDG indicators for municipalities
SDG 12.8: By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature		
Educational programmes with reference to ecological sustainability	<i>Refer to SDG 4</i>	
SDG 13: Climate action (take urgent action to combat climate change and its impacts)		
SDG 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries		
Forest area	(Forest area) / (total area) * 100	Supplemental indicator proposal, SDG indicators for municipalities
Trees in public spaces	(Number of trees in public spaces / (total public space)	Supplement of the City of Stuttgart
SDG 13.2: Integrate climate change measures into national policies, strategies, and planning		
Greenhouse gas emissions – industry, commerce, trade and services	(Emission CO ₂ equivalents of industry, commerce, trade and services) / (employees subject to social security contributions in industry, commerce, trade and services)	Key indicator, SDG indicators for municipalities (modified)
Greenhouse gas emissions – traffic	(Emission CO ₂ equivalents by traffic) / (number of residents)	Key indicator, SDG indicators for municipalities (modified)



Indicator	Definition	Source of the indicator
Greenhouse gas emissions industry, commerce, trade and services private households	(Emission CO ₂ equivalents by private households) / (number of residents)	Key indicator, SDG indicators for municipalities (modified)
Greenhouse gas emissions – entire city	Emission of all sectors in CO ₂ equivalents	Key indicator, SDG indicators for municipalities (modified)
Share of renewable energies in the final energy consumption	<i>Refer to SDG 7</i>	
Energy productivity	<i>Refer to SDG 7</i>	
Final energy consumption – industry, commerce, trade and services, traffic and private households	<i>Refer to SDG 7</i>	
SDG 14: Life below water (Conserve and sustainably use the oceans, seas and marine resources for sustainable development)		
SDG 14.1: Conserve and sustainably use the oceans, seas and marine resources for sustainable development.		
Quality of running water	Refer to SDG 6	
Wastewater treatment	Refer to SDG 6	
Greenhouse gas emissions – industry, commerce, trade and services	Refer to SDG 13	
Greenhouse gas emissions – traffic	Refer to SDG 13	
Greenhouse gas emissions – private households	Refer to SDG 13	
SDG 15: Life on land (Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss)		
SDG 15.1: By 2020, ensure conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements		
Soil index	(Soil area) * (quality level)	Supplement City of Stuttgart



Indicator	Definition	Source of the indicator
Contaminated sites	Number of contaminated sites with need for action	Supplement City of Stuttgart
Renaturation measures running waters	Renaturation measures running waters: (Length of renaturalised running waters) / (length of originally built and piped running waters) * 100	Supplement City of Stuttgart
Nitrogen surplus	<i>Refer to SDG 2</i>	
Quality of running waters	<i>Refer to SDG 6</i>	
Land usage	<i>Refer to SDG 11</i>	
Forest area	<i>Refer to SDG 13</i>	Supplement City of Stuttgart
Trees in public spaces	<i>Refer to SDG 13</i>	Supplement City of Stuttgart
SDG 15.2: By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests, and increase significantly global afforestation and reforestation		
Forest area	<i>Refer to SDG 13</i>	Supplement City of Stuttgart
SDG 15.5: Take urgent and significant action to reduce degradation of natural habitat, halt the loss of biodiversity, and by 2020 protect and prevent the extinction of threatened species		
Biodiversity	Biodiversity A: Wild bee species according to endangered status pursuant to the Red List Baden-Württemberg Biodiversity B: Locust species according to endangered status pursuant to Red List Baden-Württemberg	Key indicator, SDG indicators for municipalities (modified)
SDG 16: Peace, justice and strong institutions (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels)		
SDG 16.1: Significantly reduce all forms of violence and related death rates everywhere		
Crimes	(Number of crimes known to the police) / (number of residents) * 1,000	Key indicator, SDG indicators for municipalities



Indicator	Definition	Source of the indicator
SDG 16.6: Develop effective, accountable and transparent institutions at all levels		
Total municipal debt	(Debt of the municipality in all departmental budgets) / (number of residents)	Key indicator, SDG indicators for municipalities
SDG 16.7: Ensure responsive, inclusive, participatory and representative decision-making at all levels		
Participation of adolescents	Boroughs with youth councils: (Number of boroughs with a youth council) / (total number of boroughs) * 100 Participation in youth council elections: (Number of voters in the youth council election) / (total number of eligible voters in the youth council election) * 100	Key indicator, SDG indicators for municipalities (modified)
Percentage of women in the Stuttgart municipal council	<i>Refer to SDG 5</i>	
Meeting points for citizens	<i>Refer to SDG 10</i>	
SDG 17: Global partnerships for the goals (Strengthen the means of implementation and revitalise the global partnership for sustainable development)		
SDG 17.16: Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilise and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries		
SDG 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships		
Twin towns in the global south	(Funds for the cooperation with twin towns in the so-called global south) / (free project funds budget of the Department for International Relations) * 100	Supplement of the City of Stuttgart

Sources: Bertelsmann Foundation (Wegweiser Kommune), State Capital Stuttgart.



III Experiences and Recommendations

The SDG indicators for municipalities were developed by a group of partners (Bertelsmann Foundation, Federal Institute for Building, Urban Affairs and Spatial Research, German Association of Rural Districts, German Association of Cities, German Association of Towns and Municipalities, German Institute for Urban Studies and Engagement Global), to depict the global sustainability goals (SDGs) at a municipal level in Germany.⁷ Between June and September 2019 the State Capital Stuttgart tested the SDG indicators for municipalities in a two-phase, participative pilot project. Based on this experience and the results of the SDG baseline study, it became by and large apparent that the indicators are a conceivable and expedient instrument for an integral baseline study of social, ecological and economic sustainability at a municipal level.

1 Selection and further development of indicators

77 indicators were selected and tested for Stuttgart. These included 43 key indicators, as well as 17 other indicators from the set of SDG indicators recommended by the nationwide project. Some of these indicators were in part modified by the State Capital. Moreover, the analysis also includes 17 indicators proposed and further developed by the State Capital. A number of other possible indicators, which were not included in the baseline study, were also discussed, however, documented only as proposals, so that they can be picked up by other municipalities.

The Bertelsmann Foundation “Wegweiser Kommune” [*Municipal Signpost*] currently has 30 key indicators available, however, only a part of these data were actually used. In many cases the State Capital Stuttgart used its own sources with more accurate and common data. For some SDGs, including SDG 17, there are also indicators not supported by data in the portal.

Sometimes the data from the information sources differed, which was due to various definitions and measuring methods. However, on a case-by-case basis it was decided which data source probably had the best data quality. For instance, such a decision was in the case of the population figures of Stuttgart, which are incorporated in many indicators.⁸ Here the population figures as always updated by the city itself were taken, as opposed to the “official” population figures.

The availability of data also has an impact on the definition and measurement of indicators. Depending on the generation of data and their processing, certain definitions were included in this report, although another definition can represent the facts more accurately. For instance, immigration background can be of interest for a phenomenon. Since the data source only differentiated between Germans and non-Germans, this comparison could only be used as an approximation, not as a precise depiction. Using quantitative indicators means a necessary restriction to individual, selected aspects, which can neither represent an overall picture, nor reveal the multiple connections and diverse interactions of the individual aspects. This situation reflects among other things the need to collect and process additional data (e.g. for the field of municipal developmental

⁷ Cf. Assmann, Dirk; Honold, Jasmin; Grabow, Busso und Roose, Jochen, 2018: SDG-Indikatoren für Kommunen – Indikatoren zur Abbildung der Sustainable Development Goals der Vereinten Nationen in deutschen Kommunen. Hrsg. Bertelsmann Stiftung, Bundesinstitut für Bau-, Stadt- und Raumforschung, Deutscher Landkreistag, Deutscher Städtetag, Deutscher Städte- und Gemeindebund, Deutsches Institut für Urbanistik, Engagement Global. Gütersloh.

⁸ In many cases details on population numbers are given to take into consideration the changing requirements as regards an increase or a possible decrease in population.



policy, see below). In many cases completely different information could be of interest and importance, but that cannot be determined at costs and efforts that are acceptable. The baseline study possibilities have their limits here.

The specific indicators were examined in the individual departments of the State Capital Stuttgart and also in a cross-sectoral working group “Global Development Goals”.

Examples for the indicators modified and further developed in the discussion process include: the quality of care as regards staffing, traffic noise pollution (EU guideline and impact study) or energy consumption in relation to the users (e.g. differentiation according to employees subject to social security contributions and other residents).

In the course of the discussion process some indicators were cancelled. For instance, a closer examination and discussion of the data situation on the indicator school drop-out rate proved that the data available on the result did not reflect the circumstances accurately enough, and therefore the indicator was deleted. The fact that a pupil in any one year leaves school without final examinations is not a reliable indication that this person will enter the labour market with no qualifications, since such qualifications can be attained at a later date or at another school.

Differences were also partly evident in the assessment of individual SDG sub-objectives for municipalities in Germany. For instance, the SDG sub-objectives 3.3 (Measles infection per mill) and 4.1 (Mathematical basic education) were considered less relevant due to the circumstances in Germany (immunisation and compulsory school attendance).

A specific need for the further development of the SDG indicators is seen for SDG 17 “Partnerships” and international cooperation.

Excursion: SDG indicators for municipal development policy

As a result of the discussion and testing of the indicators, the following aspects have proven to be relevant for the further development of SDG indicators for municipal development policy:

- Unlike other fields, here the current proposals from the nationwide project refer greatly to monetary benefits in relation to the overall budget. In the light of the expenditure volume of municipalities for international projects, this reference value is, in comparison to e.g. social expenditure, only of limited significance.
- A purely quantitative evaluation of expenditure is also only of limited significance insofar as the investment amount does not tell us anything about the quality or impact of the work. Likewise, an increase in external funds has little or no informative value as to the work done, at best about the ability (personnel resources and competence) of the administration to acquire third-party funds.
- The international work in the municipalities is often organised decentrally, i.e. different sectoral divisions deal with international measures (e.g. environment, business development etc.); the data pertaining to these measures are as a rule not collected centrally, i.e. data records have to be first generated via queries in the individual divisions of the administration.



- The indicators for SDG 17 so far proposed by the nationwide project are not comprehensively available and would have to be collected by the respective municipalities themselves. Generally speaking, in the project “SDG indicators for municipalities” there is a preference for uniform and centrally available data.
- There is no uniform definition as to details of developmental measures to be considered in possible indicators, for instance, whether domestic educational work on sustainable development counts here, whether third-party funding is taken into separate account etc.

Proposals to date have primarily considered input indicators (e.g. expenditure for developmental measures). A stronger focus must be put on the development of impact indicators. The State Capital Stuttgart, as a model community, appropriately puts forth its methodological and practical recommendations into the nationwide project for municipal development policy of the Service Agency Communities in One World and the Bertelsmann Foundation launched in 2019.

Another area which has to date been insufficiently addressed by the indicators for SDG 11 by the nationwide project (and also the entire Agenda 2030) is culture. Here further development of the SDG indicators for municipalities is required.

2 Further development of the baseline study process

In this large-scale SDG baseline study all strategies, concepts and measures of the State Capital Stuttgart to promote sustainability could not be and should not be illustrated exhaustively. Quantitative indicators only always cover a certain section. Their selection alone represents a certain weighting.

It became clear how difficult it was, in many fields categorised by the publishers of the SDG indicators for municipalities and also by the State Capital as important, to define any indicators – often due to the lack of any data or relevant data. The other indicator proposals documented in the complete version of the baseline study indicate the potential there is for further possible indicators.

At the start of the process it could be seen that many features of a municipality’s sustainability measures cannot be measured or illustrated quantitatively, but rather qualitatively. Therefore, the quantitative SDG baseline study of the State Capital Stuttgart was supplemented by illustrating selected best-practice examples which can serve as an example for other municipalities. This way, the divisions are, with their specific measures, reflected appropriately in the report.

This supplement of the quantitative baseline study carried out by the State Capital Stuttgart demonstrates for other municipalities that the local situation can be described by the persons or institutions involved, if no or no reliable data can be identified for establishing indicators. Concrete guidelines for the description could in such cases play an important part in standardised and objective reporting.

In many cases in the interpretation of the indicators a comparison at a regional or nationwide level makes sense to be able to categorise one’s own local position. The approach of masking out the national comparison deliberately selected for this pilot project can be valued as a positive experience. The concentration on the local situation with the specific perspective on temporal changes and trends enables a focused assessment of the initial situation at hand. Here an example: the comparison of cities shows that Stuttgart is the city with one



of the highest levels of income and prosperity in Germany. However, also here there are people living in precarious situations. Firstly, it is important for the city to establish how the development has been in a chronological comparison. Comparisons with other cities can also furnish with further helpful information on the evaluation of the status quo.

The preparatory work for the report provided first practical results regarding the future additional data collection, e.g. the number of disabled accessible bus and tram stops.

A particular added value is the cross-sectoral cooperation in drawing up the SDG baseline study. The discussions and analyses by the working group “Global Development Goals” led to a better comprehensive understanding of the sustainability correlations between the individual divisions of the administration.

An important supplement to this baseline study based on quantitative SDG indicators would be an additional baseline study with possibly new or other data based on the participation of the citizens in the compilation and interpretation of the statistics. This contribution could also be used for mobilising a more sustainable behaviour among the various actors in urban society.

The State Capital Stuttgart pilot SDG baseline study in cooperation with the German Institute for Urban Studies and the Bertelsmann Foundation based on SDG indicators integrally incorporates various dimensions of sustainability. On this footing, loopholes and conflicts of interest can be identified on a regular basis and advanced recommendations developed for politics and administration.

The experience gained in the discussion and analysis processes in the State Capital Stuttgart can be used methodologically and content-wise to make future SDG baseline studies in municipalities more rational and effective. A regular monitoring based on the SDG baseline study will consolidate the implementation and anchoring of the Global Agenda 2030 with the SDGs at a local level.



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