Second Voluntary National Review of the Slovak Republic on the Implementation of the 2030 Agenda for Sustainable Development

Foreword by the Minister of Investments, Regional Development and Informatization of the Slovak republic
Table of contents

1. Highlights 6

2. Introduction
   2.1. International development of sustainability 9
   2.2. National development of sustainability 10

3. Methodology and process for preparation of the review
   3.1. Source documents and involvement of stakeholders 14
   3.2. External assistance 15

4. Policy and enabling environment
   4.1. Ensuring ownership of Sustainable Development Goals and VNR 16
   4.2. Integration of Sustainable Development Goals into national frameworks, Integration of the economic, social and environmental dimensions 18
     4.2.1. National priorities of 2030 Agenda implementation 18
     4.2.2. Vision and Development Strategy 2030 19
   4.3. Regional dimension 28
   4.4. Leaving no one behind 29
     4.4.1. Older Persons and the Policy of Active Ageing 30
     4.4.2. Persons with disabilities 32
     4.4.3. Social Inclusion of Roma 34
     4.4.4. Protection of children 35
     4.4.5. Human Rights 37
     4.4.6. Youth and UNESCO 38
     4.4.7. Non-governmental organisations 39
     4.4.8. SDGs and space 40
   4.5. Institutional mechanisms 41
   4.6. Systemic issues and transformative actions 42
5. Progress on Goals and targets and evaluation of policies and measures taken so far

5.1. Interlinkages of SDGs in general 45
5.2. Interlinkages relating to the war in Ukraine 58
5.2.1. Biophysical interlinkages 58
5.2.2. Social interlinkages 59
5.2.3. Economic interlinkages 60
5.3. Interlinkages analysis in the Slovak context 61

Goal 6: Clean Water and Sanitation 62
Goal 7: Affordable and Clean Energy 78
Goal 9: Industry, innovation and infrastructure 86
Goal 11: Sustainable cities and communities 102
Goal 17: Partnerships for the Goals 116
5.4. External dimension of the implementation of the 2030 Agenda 124

6. New and emerging challenges

6.1. COVID-19 pandemic 126
6.2. War in Ukraine 134
6.3. Energy crisis 136

7. Means of implementation 139

8. Conclusions and next steps 141
2023 marks the mid-term of the implementation of the 2030 Agenda for Sustainable Development, launched by the United Nations General Assembly in September 2015. Slovakia decided to highlight this important milestone by presenting its second Voluntary National Review (VNR), which aims to assess our country’s progress towards achieving the Sustainable Development Goals (SDGs).

Since its first VNR in 2018, Slovakia has made significant efforts to develop a wider systemic framework for sustainable development, following the principles of policy coherence. As a part of this endeavour, the Vision and Development Strategy of the Slovak Republic until 2030 was adopted, paving the way towards an integrated, whole-of-government implementation of the 2030 Agenda. We also dived deeper into monitoring progress towards the SDGs and produced two monitoring reports grounded in the Sustainable Development Indicators. These advances could never have materialised without the active engagement
of multiple stakeholders and partners, representing civil society, the academia, and international organisations. Notably, we are grateful for the unrelenting support of the Organisation for Economic Co-operation and Development (OECD), which has provided us with valuable guidance since the onset of 2030 Agenda implementation in Slovakia.

The recent years were also marked by several setbacks and obstacles for sustainable development in Slovakia and globally. They are, of course, well known to all of us – the war in Ukraine, the COVID-19 pandemic, the climate crisis, and the regressing trust in democracy coupled by the polarisation of society, extremism and disinformation. The permanent state of crisis we have found ourselves in is all but conducive to long-term strategizing, which is inevitable for ensuring sustainable development for current and future generations.

The VNR represents a rare opportunity to stop for a moment, and consider some of the underlying systemic issues we need to address over the long term. In addition to this reflection, we would like to use our Slovak VNR to call for transformative action in three main areas.

The first is a call for honesty. Over the years, VNRs have tended to paint an overtly rosy picture of the state of sustainable development on our planet. The recently launched Secretary General’s annual SDG progress report does the stark opposite, warning that several SDGs are severely off track and calling for fundamental shifts in commitment, solidarity, financing and action. We are convinced that openly recognising problems is the first step towards solving them. Therefore, in Slovakia’s second VNR, we committed to highlight not only progress but also shortcomings, and to single out not only good practices but also persisting challenges.

The second is a call for more intergovernmental cooperation at the expert level. This VNR is purposefully technical in nature – to demonstrate the complexity of sustainable development, and the difficulty of measuring it. Both the implementation and the monitoring of such a broad and complex global agenda requires international coordination that goes beyond the framework of VNRs. We commend the establishment and the active work of the European Union Working Party for the 2030 Agenda, which facilitates the important exchange of experiences and good practices. Similar working-level structures should be developed at the UN regional level as well, aiming in particular to boost implementation.

The third is a call for peace. War and conflict is incompatible with sustainable development. In our VNR, we repeatedly show the multiple interlinkages and negative implications of the war in Ukraine on the SDGs, as a reminder of how volatile our progress towards well-being and sustainability is in the face of armed conflict.

With this, I wish you inspiring reading and a renewed impetus for action towards the 2030 Agenda.

Minister of Investments, Regional Development and Informatization of the Slovak Republic

PETER BALÍK
1. Highlights
There are two main ideas behind the Slovak way of implementing the 2030 Agenda for Sustainable Development:

- The implementation of the 2030 Agenda goes hand in hand with building Slovakia’s **strategic planning** framework,

- The **interlinkages** between Sustainable Development Goals (SDGs) are as important as the SDGs themselves.

The concept of building the strategic planning framework is shown in Picture 1. The inverted pyramid shows how the broad Sustainable Development Goals of the 2030 Agenda are embedded in the long-term vision of society and then narrowed down to national development strategy, sectoral and regional strategies, and finally to a project level.
As for the interlinkages between SDGs, these are demonstrated in detail in chapter 5. Chapter 5 describes interlinkages in general, in connection with the war in Ukraine and in the Slovak context.

Concerning interlinkages at a programme level, Slovakia took the path of integration. It integrated the 17 SDGs into six national priorities for the implementation of the 2030 Agenda, which were then associated with national priorities of regional development. This process was described in the first Voluntary National Review undertaken in 2018. The process of integration then led to the preparation of Slovakia’s Vision and Development Strategy until 2030. Chapter 4.2 provides more information on this.

The current state of SDG implementation is shown in chapter 5. Chapter 6 presents a summary of the impacts of the COVID-19 pandemic as well as of the crisis triggered by the war in Ukraine.

2. Introduction
2.1. International development of sustainability

Sustainability is an issue.


- Rio Declaration on Environment and Development
- United Nations Framework Convention on Climate Change
- Convention on Biological Diversity
- Declaration on the principles of forest management
- Agenda 21

The initial aim of Agenda 21 was to achieve global sustainable development by 2000, i.e. by the beginning of the 21st century, by means of a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations System, Governments, and Major Groups in every area in which there are human impacts on the environment.
In 2000, the adoption of the United Nations Millennium Declaration and its 8 Millennium Development Goals (MDGs), amongst them the goal 7 „Ensure environmental sustainability“, was the right step towards sustainability. Progress towards the 8 MDGs was measured through 21 targets and 60 official indicators. However, the final Millennium Development Goals Report of 2015, besides appraisal of the progress made, also stated: “The post-2015 development agenda will pick up where the MDGs left off. The remaining gaps must be filled in order to eradicate poverty and hunger and promote sustained and inclusive economic growth, allowing people everywhere to thrive.”

On 25 September 2015, the UN General Assembly adopted the resolution: “Transforming our world: the 2030 Agenda for Sustainable Development”\(^2\). This document defined the new universal development agenda of the international community as a set of 17 mutually interlinked Sustainable Development Goals (SDGs), covering all three pillars of sustainable development: economic, social and environmental. The SDGs are broken down into 169 targets. The 2030 Agenda recognizes eradicating poverty in all its forms and dimensions, including extreme poverty, as the greatest global challenge and an indispensable requirement for sustainable development.

The 2030 Agenda is complex and aims at building democratic institutions, governance and respecting human rights in order to deliver well-being to all. By adopting the 2030 Agenda, UN member States adopted a political commitment to react to global challenges in an integrated manner.

At the national level, the first milestone for sustainability was the elaboration of the “National Strategy of Sustainable Development”\(^3\) in 2001, as a response to the UN Agenda 21. This document was prepared in 1999-2000 with assistance from the United Nations Development Programme (UNDP), using a bottom-up approach. Experts from different sectors, including academia and non-governmental organisations, participated in drafting the strategy as a document accepted by the whole society.

### 2.2. National development of sustainability

---


\(^3\) [https://www.enviroportal.sk/rozvoj-zivotne-narodna-strategia-trvalo-udrzuatelnho-rozvoja](https://www.enviroportal.sk/rozvoj-zivotne-narodna-strategia-trvalo-udrzuatelnho-rozvoja)
Given the timing of the development of this strategy, its first strategic goal referred to the integration of Slovakia into the EU and NATO. This meant a co-ordination of Slovak efforts with those of the European Union, which significantly helped Slovakia to accommodate the concept of sustainable development at the national level. Another goal of this strategy emphasized the importance of the rule of law and democracy as well as building transparent and politically independent public institutions. Equally, the role of regional and local authorities was underlined. The 2001 National Strategy of Sustainable Development was meant to be implemented through action plans of line ministries. This turned out to be a weak point of the endeavour and we realized that sustainable development without a proper legal and institutional framework, mainly a whole-of-government approach, cannot be achieved.

Therefore, when taking on board the implementation of the 2030 Agenda for Sustainable Development, an effort was made to improve the legal and institutional framework in combination with strategic planning. Nevertheless, challenges remain.

**Sustainability is still an issue.**
The main aim of conducting this second Voluntary National Review is to report on Slovakia’s advances towards achieving the SDGs and highlight the new systemic approach that was introduced to support progress in this direction. Slovakia’s approach is in line with the principles of policy coherence for sustainable development, as elaborated by the OECD in three pillars:

I. Vision & Leadership

1. Political Commitment and Leadership
2. Strategic Long-term Vision
3. Policy Integration

The elements of strategic long-term vision and policy integration are cornerstones of Slovakia’s Vision and Development Strategy until 2030 and guiding principles for the ongoing work on the Vision and Development Strategy until 2050. More details are available in chapter 4.2.2.
II. Policy interactions

4. Whole-of-Government Coordination
5. Subnational Engagement
6. Stakeholder Engagement

Horizontal and vertical coordination across government, as well as stakeholder participation are key elements of the coordination mechanisms established to implement the 2030 Agenda in Slovakia. These mechanisms are described in chapter 4.5.

II. Policy interactions

A regulatory impact assessment framework is in place in Slovakia to assess the policy and financial impacts of plans and programmes. The Slovak Republic also follows the obligations enshrined in the EU’s Strategic Environmental Assessment Directive, aiming to integrate environmental considerations into the policy making and programming process.

As for monitoring, a biannual monitoring framework is in place to assess and report on progress towards the 2030 Agenda. To date, two monitoring reports have been developed and adopted by the Government. The Second Monitoring Report on Progress in the Implementation of the 2030 Agenda was prepared in close cooperation between the Ministry of Investments, Regional Development and Informatization and the Statistical Office of the Slovak Republic on one hand, and stakeholders involved in the Working Group for the implementation of the 2030 Agenda (more details in chapter 4.1) on the other hand.

III. Impact

7. Policy and Financing Impacts
8. Monitoring, Reporting and Evaluation
3.1. Source documents and involvement of stakeholders

The structure and content of this VNR is in line with the suggestions made in the Secretary-General’s Voluntary common reporting guidelines for VNRs.

The following documents served as the main source of information for this VNR:

- **Vision and Development Strategy of the Slovak Republic until 2030**⁴ (detailed description in chapter 4.2.2)

- **The Second Monitoring Report on Progress in the Implementation of the 2030 Agenda**⁵

- **United Nations Department of Economic and Social Affairs (UN DESA) SDG Indicators Database**⁶

In order to reflect the situation and opinion of vulnerable groups of society, contributions to the VNR were also made by the Office of the Plenipotentiary of the Slovak Government for Roma Communities, representatives of persons with disabilities, older persons, youth, and child protection authorities. Special contributions include input from the Slovak Space Office, member of the European Space Agency, and the non-governmental organisation Servare et Manere, which was awarded a special consultative statute with ECOSOC in 2022.

---

3.2. External assistance

We gratefully acknowledge the support and input of the Organisation for Economic Co-operation and Development (OECD), which was provided within the framework of a joint project between the Ministry of Investments, Regional Co-operation and Informatization of the Slovak Republic and the OECD. The project, approved by the Co-ordination Committee for the Activity of Slovakia in the OECD, chaired by the Ministry of Foreign and European Affairs, also included assistance in drafting the VNR.

Under external assistance, we also acknowledge with thanks the global workshops organised by UN DESA in Turin (6-7 December 2022) and in Sofia (4-5 April 2023).

4. Policy and enabling environment
4.1. Ensuring ownership of the Sustainable Development Goals and the VNRs

A whole-of-society approach to decision making is a prerequisite for sustainable development. This means that all segments of society need to be involved in the process of implementing the 2030 Agenda, i.e. besides the public sector also non-governmental organisations, the academic community and private sector. Participation has been one of the guiding principles of 2030 Agenda implementation since the early stages of the implementation process. The list of stakeholders involved has been gradually expanded over the years.

![Quadruple helix](Picture 2: Quadruple helix)
The main coordinating body for the implementation of the 2030 Agenda in Slovakia is the Government Council of the Slovak Republic for the 2030 Agenda for Sustainable Development, founded in 2017. Members of the Government Council include key line ministers, representatives of other relevant state institutions, regional administration, cities and municipalities, employers, trade unions, academia, non-governmental organisations and relevant government advisory bodies. The Government Council is chaired by the Minister of Investments, Regional Development and Informatization, who is in charge of the internal dimension of 2030 Agenda implementation. The Minister of Foreign and European Affairs of the Slovak Republic is the Deputy Chairman and is responsible for the external dimension of the 2030 Agenda. Other members of the Government Council include:

- Ministers (Finance; Economy; Transport; Education, Science, Research and Sport; Health; Labour, Social Affairs and Family; Agriculture and Rural Development; Environment; Interior; Justice),
- Plenipotentiary of the Government for Roma Communities,
- Plenipotentiary of the Government for the Development of Civil Society,
- representatives of the Office of the Government and the Ministries of Culture and Defence,
- representative of the National Parliament,
- representative of the Judicial Council,
- President of the Statistical Office,
- Representative of the Association of Towns and Municipalities,
- President of the Union of Towns and Cities,
- President of the Slovak Rectors’ Conference,
- President of the Slovak Academy of Sciences,
- Director of the Department for the Prevention of Corruption of the Office of the Government,
- representative of the Platform of Non-governmental Development Organisations,
- representative of the Chamber of Non-governmental Non-profitable Organisations,
- representative of the National Union of Employers,
- representative of the Federation of Employers’ Associations,
- representative of the Federation of Slovak Industrial and Transport Associations,
- representative of the Confederation of Trade Unions,
- representative of the Association of the Self-governing Regions,
- representative of the Government Council for the Rights of Seniors and for the Adjustment of Public Policies to the Population Ageing Process,

The working body of the Government Council is the Working Group for the Implementation of the 2030 Agenda for Sustainable Development, which consists analogically of the representatives of the above institutions.
4.2. Integration of the Sustainable Development Goals in national frameworks, Integration of the economic, social and environmental dimensions

4.2.1. National priorities of 2030 Agenda implementation

In a highly democratic participatory process, Slovakia built the first stage of the pyramid of strategic planning (see chapter 1 Highlights) by integrating the 17 SDGs into six national priorities of the 2030 Agenda approved by the Government (resolution 273/2018). Integration is not just a simple grouping of the SDGs, as each national priority contains national elements and at the same time, some of the SDGs are incorporated in several of the six national priorities:
The participatory process was unique and deserves a special mention. The process was carried out in co-operation with the Plenipotentiary of Government for the Development of Civil Society in order to respect all principles of open government, i.e. representatives of regional and local authorities, academia, business associations and non-governmental organisations were invited to present their ideas on how to transpose SDGs to the Slovak internal environment. The Slovak approach to the implementation of SDGs was appreciated in the study of the Policy Department of the European Parliament “Europe’s approach to implementing the Sustainable Development Goals: good practices and the way forward”.

The six national priorities were presented in detail in Slovakia’s first Voluntary National Review in July 2018.

4.2.2.
Vision and Development Strategy 2030

The concept of integration continued during the building of the second and the third stage of the pyramid of strategic planning (see chapter 1 Highlights), whereby the six national priorities of 2030 Agenda implementation became the basis for
the “Vision and Development Strategy of the Slovak Republic until 2030”. Adopted in January 2021, it is the executive document of SDGs in Slovakia. Again, a highly democratic participatory process was used to draft this document because the stakeholders involved in the definition of the national priorities of the 2030 Agenda continued working on the Vision and Development Strategy 2030. Therefore, we can claim that the Vision and Development Strategy 2030 is the document of the whole of society, adopted by the whole of government (resolution 41/2021). In this document, the integrated approach became even deeper, thanks to the integration of the priorities of the National strategy for regional and territorial development, prepared independently from the above mentioned six national 2030 Agenda priorities:

1. Sustainable competitive environmentally oriented economy of regions

2. Improvement of the quality of life and the development of nature and human capital

3. Integrated (regional and territorial) development and infrastructure
The Vision 2030 as such is based on the key principle that quality of life is more important than economic growth and is defined as follows:

Slovakia is a country with a high standard of living, good-quality public services and a healthy environment for all citizens. Slovakia’s development is based on vibrant regions with educated and productive human capital, a functioning economy and good-quality infrastructure. Economic development is based on innovation and high value-added industries, leading to an increase in the living standards of the population and a sound work-life balance.

This means:

**Country** – a quality space to live, a state that effectively performs its functions, and a public sector with good-quality and affordable services

**Citizens** – equal opportunities for everyone, equal treatment of everyone

**Communities** – responsibility, cooperation, solidarity

**Regions** – space meeting the expectations and needs of its citizens

**Development** – improving quality of life

**Sustainability** – using resources while also preserving them for future generations

**Environment** – preservation and sustainable development of the natural environment and cultural heritage as a prerequisite for a healthy and fulfilled life

**Security** – resilience and preparedness of the state for external and internal threats

**Fulfilled life** – life lived in good health, work-life balance, sufficient opportunities for education and cultural activities

Slovakia is a country of successful regions developing in a sustainable way and offering a good-quality and safe environment for a healthy and fulfilled life of all its citizens.
As for the Development Strategy 2030, first of all, it is important to underpin that the integrated approach was used as a tool to break silos or isolation. This logic led to the drafting of three integrated development programmes:

1. **Protection and development of resources**
2. **Sustainable use of resources**
3. **Development of communities**

These programmes are described more closely in chapters 4.2.2.1., 4.2.2.2 and 4.2.2.3.

The **fourth and the fifth stage of the pyramid of strategic planning** (see chapter 1 Highlights) represents the implementation of SDGs in real life and is, clearly, the greatest challenge, especially in a country that is heavily reliant on funding from the European Union (EU). This reliance implies programming, budgeting and eventually investing along the lines of EU legislation and official procedures. EU legislation on structural and investment funds defines a special methodology for programming, setting priorities and specific objectives as well as indicators. The key document in this respect is the Operational Programme Slovakia 2021 – 2027. A direct link of its priorities to SDGs is difficult to establish but an indirect link is shown in table 1:

### Relevant SDGs

<table>
<thead>
<tr>
<th>Operational programme</th>
<th>Relevant SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slovakia 2021 – 2027</td>
<td></td>
</tr>
</tbody>
</table>

**Priority 1P1:**
Science, Research and Innovation

**Priority 1P2:**
Digital connectivity

**Priority 2P1:**
Energy efficiency and decarbonisation
Priority 2P2: Environment

Priority 2P3: Urban mobility

Priority 3P1: Transport

Priority 4P1: Adaptable and accessible labor market

Priority 4P2: Quality and inclusive education

Priority 4P3: Skills for better adaptability
<table>
<thead>
<tr>
<th>Priority 4P4: Youth Employment</th>
<th>Priority 4P5: Active Inclusion and Accessible Services</th>
<th>Priority 4P6: Active Inclusion of Roma communities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority 5P1: Modern regions</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority 8P1: Just Transformation Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Priority 4P8: Food and Material Deprivation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
At the regional level, the 2030 Agenda is referred to in the Methodology for the Programme of Economic and Social Development, which is prepared by regional and local authorities. The involvement of regional and local authorities is indispensable for a successful implementation of the 2030 Agenda. The capital city of Bratislava is strongly dedicated to SDGs and is preparing its first Voluntary Local Review (see chapter 4.3 Regional dimension).

4.2.2.1 Integrated Development Programme I – Protection and development of resources

Growth and qualitative development of population with special emphasis on education, health, culture, development of civil society and rule of law and protection and sustainable management of natural resources.

Key change

Promoting the protection and development of human and natural resources as an overriding public interest by enhancing the resilience of the state and society focusing on the following areas:

- Population growth and health
- Education and social development
- Rule of law and security
- Protection and enhancement of natural and cultural resources

Challenges

- Stopping the decline of the population and increase the proportion of the economically active population
- Improving the availability and quality of education and training of the population and match them to the expected demand of the labour market
- Improving the health and active life expectancy of the population
- Ensuring the full application of the rule of law principles and increase the security of the state and society
- Ensuring efficient and sustainable management of natural resources
- Ensuring efficient and sustainable management of cultural resources
Transforming the Slovak economy into a sustainable one, with its competitiveness based on innovative and efficient use of resources, providing good wages and prosperity.

4.2.2.2

Integrated Development Programme II – Sustainable use of resources

Goal

Transforming the Slovak economy into a sustainable one, with its competitiveness based on innovative and efficient use of resources, providing good wages and prosperity.

Key change

Transformation of the national economy towards:

- Harnessing innovations for sustainable development and unlocking of the regions’ potential
- Creating high added value with the support of good-quality infrastructure
- Environmental and social sustainability

Challenges

- Supporting the development of strong innovation-based regional economies
- Completing the infrastructure of an innovation-based green economy
- Improving the sustainability and resilience of national and regional economies
Integrated Development Programme III – Development of communities

**Goal**

Developing communities and enhancing quality of life for all social groups by bringing governance closer to citizens, social inclusion, and accessible, top-quality and efficient services.

**Key change**

- Increasing support for the development of civil society and the participation of citizens, socio-economic partners and other stakeholders in the design, implementation and oversight of public policies. Reinforcing the territorial principle as a basis for defining development policies, harmonising and integrating sectoral policies and policies of different levels of hierarchy in public administration for the benefit of the citizens, communities and their sustainable development.

- Creating a system of state administration and local government based on the distribution of powers, responsibilities and resources in line with the principle of subsidiarity, partnership cooperation and synergies between individual levels and sectors of public administration in order to effectively respond to the citizens’ needs.

- Ensuring availability, operating effectiveness and sustainable development of the infrastructure for healthy and cohesive communities, creating conditions for a fulfilled life of the inhabitants of each region of Slovakia, regardless of their socio-economic background or disadvantage.

**Challenges**

- Enhancing the accessibility, transparency and efficiency of public administration.
- Strengthening the economic sustainability of communities within towns, municipalities and regions.
- Ensuring the availability and sustainability of good-quality, modern and efficient infrastructure, services and housing for a healthy and fulfilled life of communities.
4.3. Regional dimension

A high-quality, inclusive strategy is the basis for the implementation of a city’s vision and for channeling limited resources into impactful actions. This idea guided the development of the strategic plan of the capital city of Bratislava, called Bratislava 2030. The result is a comprehensive plan which aims to make Bratislava more human, accessible and resilient, a city ready to face future challenges.

Source: Metropolitan Institute of Bratislava

Bratislava 2030 considers sustainability as a core value and therefore it aims to establish a connection to the global 2030 Agenda. Cities worldwide are key stakeholders in creating sustainable development and Bratislava seeks to join this global effort. Therefore, Bratislava, represented by the Metropolitan Institute of Bratislava (MIB), joined the network and strategic partnership of 19 European cities, funded through the European Territorial Cooperation program URBACT III, in order to ensure the implementation and fulfilment of the SDGs in Bratislava.

The pilot city network called Global Goals for Cities (GG4C), running from March 2021 to January 2023, focused on localising Sustainable Development Goals and developing integrated action plans in order to accelerate progress towards achieving the SDGs. Through a thorough participatory process, it was possible to define a vision and missions for Bratislava 2030 and connect a set of specific objectives with SDGs, targets and indicators. Thanks to this new set of indicators, it is possible to monitor the performance of the municipality and sustainability at a local level, as well as to compare Bratislava with other cities worldwide.

Bratislava was also engaged in a special collaboration with the EU Joint Research Center between 2020 and 2021 and participated in the URBAN2030-II project, focusing on the research of relevant and available indicators for monitoring SDGs in six different European cities.

The above activities will lead to the elaboration of the first Voluntary Local Review of Bratislava in the near future. It will also help to bring the 2030 Agenda and SDGs more into public spotlight.

The following sections underlines the relevance of the 2030 Agenda for vulnerable groups of the population and the contributions of various stakeholders to sustainable development.
4.4.1. Older Persons and the Policy of Active Ageing

For more than two decades, the Slovak Republic has been implementing active ageing policies that address global development trends (e.g. demographic ageing, changes in family structure, transformation of the labour market and workforce requirements in the digital age, etc.). Following the completion of the first national document focusing on the protection of older people, the National Program on Active Ageing (hereinafter referred to as “NPAA”) for the years 2014-2020 was approved in 2013, followed by the NPAA for the years
2021-2030, approved by the Slovak Government in November 2021. The vision of the NPAA is a sustainable society built upon the valuable potential of people of all ages and supporting them as they age. The overall objective of the NPAA is to create optimal resources and institutional conditions for the fulfilment of this vision. With its vision and overall objective, the NPAA is anchored in values, knowledge and political frameworks of a transnational nature, especially in the Madrid International Plan of Action on Ageing and the Regional Implementation Strategy (MIPAA/RIS, 2002); and in the tasks arising for Slovakia from the 2030 Agenda for Sustainable Development (2015), which is reflected in the Vision and Development Strategy 2030.

The principle of sustainability is captured in the definition of the target group of the NPAA, which is “… all persons actively preparing for active ageing or persons of older age, especially those who, due to their age, could be disadvantaged in any way in some area of life, social relations and limited in access to public resources” (NPAA, 2021, p. 5). The broadly defined target group is also reflected in the nine domains of the NPAA, which are further elaborated in operational goals and measures, implicitly in line with the SDGs:

- **D1**: Support for active ageing from a family perspective (SDG 3),
- **D2**: Support of human resources from a life-course perspective (SDG 4),
- **D3**: Health care supporting active ageing (SDG 3),
- **D4**: Support of economic activity from a life-course perspective (SDG 8, 9),
- **D5**: Promotion of social participation and inclusion of older people (SDG 3, 4),
- **D6**: Income security in old age (SDG 1, 8),
- **D7**: Supporting the dignity and quality of life of older people (SDG 3, 11),
- **D8**: Active ageing policies closer to citizens and their management (SDG 16, 17),
- **D9**: Awareness raising, data and research (SDG 17).

In order to ensure the coordinated action of stakeholders towards the fulfilment of the goals and related measures of the NPAA, a coordination mechanism was established at the Ministry of Labour, Social Affairs and Family of the Slovak Republic in 2022. Its task is to continuously monitor and evaluate progress in active ageing policies in Slovakia, inform actors about comparative international experiences and initiate the update of the document in accordance with changing conditions and needs over time.


Policy and enabling environment
4.4.2. Persons with disabilities

The aim of the state social policy in relation to persons with disabilities is primarily focused on the elimination of restrictions and disadvantages that persons with disabilities encounter in their everyday life, and to create basic conditions for their independent life and integration into society.

A significant milestone in this field was the approval of the UN Convention on the Rights of Persons with Disabilities. It is the first international convention on human rights and freedoms of persons with disability ratified by the European Community. For the Slovak Republic, the Convention and its Optional Protocol entered into force on June 25, 2010.

The “National Program for the Development of Living Conditions of Persons with Disabilities for the years 2014-2020” was the first comprehensive programming document, which defined the obligations of society towards persons with disabilities and their families in the Slovak Republic. The substantive areas of the Program were primarily based on the articles of the UN Convention on the Rights of Persons with Disabilities. The basic goal of the National Program was, through defined tasks and measures, to ensure progress in the protection of the rights of persons with disabilities recognized by the UN Convention and progress in utilising these rights. The Program was evaluated within two years.

The “Report on the implementation of measures resulting from the National Program 2014-2020 and a proposal for its update” was the first summary report on the implementation of tasks resulting from the National Program, documenting the implementation of tasks in the period 2014-2015. At the same time, the Report incorporated the final recommendations of the UN Committee on the Rights of Persons with Disabilities, which were sent to the Ministry of Labour, Social Affairs and Family following the presentation of the initial version of the report in April 2016.

The “2nd Report on the implementation of measures arising from the National Program” evaluated the implementation of measures made in the period 2016-2017. In order to provide comprehensive information on the state of implementation of measures in the period of 2018-2019, the “Final report on the implementation of measures of the National Program was prepared.

The new “National Program for the Development of the Living Conditions of Persons with Disabilities for the years 2021-2030” was prepared in cooperation with non-governmental organizations and in accordance with the UN Convention, and it was approved by the Government on February 24, 2021. The new program is to be evaluated annually. The Report on the implementation of measures resulting from the new Program has a new structure, according to the requirements of NGOs and includes new measures as well as a table with measurable indicators. The Report is divided into several areas as shown in table 2 (implicit relation to SDGs is also shown in table 2):

### Table 2: Report on the implementation of measures resulting from the National Program for the Development of Living Conditions of Persons with Disabilities for 2021 and a proposal for its update

<table>
<thead>
<tr>
<th>Area</th>
<th>Relevant SDGs</th>
<th>Access to justice</th>
<th>Risk and humanitarian situations</th>
<th>Accessibility</th>
<th>Equality and non-discrimination</th>
<th>Independent way of life and integration into society</th>
<th>Education</th>
<th>Health</th>
<th>Freedom of expression and belief and access to information</th>
<th>Habilitation and rehabilitation</th>
<th>Work and employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality and non-discrimination</td>
<td>1, 5, 10</td>
<td>1, 10</td>
<td>9, 11, 16</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 16, 11</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
<tr>
<td>Accessibility</td>
<td>7, 9, 16</td>
<td>1, 10</td>
<td>9, 11</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 11, 16</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
<tr>
<td>Risk and humanitarian situations</td>
<td>9, 11</td>
<td>1, 10</td>
<td>9, 11</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 11, 16</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
<tr>
<td>Access to justice</td>
<td>1, 5, 10</td>
<td>1, 10</td>
<td>9, 11</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 11, 16</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
<tr>
<td>Independent way of life and integration into society</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>9, 11</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 11, 16</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
<tr>
<td>Freedom of expression and belief and access to information</td>
<td>9, 11</td>
<td>1, 10</td>
<td>9, 11</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 11, 16</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
<tr>
<td>Education</td>
<td>4, 10</td>
<td>1, 5, 10</td>
<td>9, 11</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 11, 16</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
<tr>
<td>Health</td>
<td>3, 16</td>
<td>1, 5, 10</td>
<td>9, 11</td>
<td>7, 9</td>
<td>1, 5, 10</td>
<td>9, 10, 16</td>
<td>1, 10</td>
<td>16</td>
<td>9, 10, 11, 16</td>
<td>10, 11</td>
<td>10, 16</td>
</tr>
</tbody>
</table>

In order to fulfill the goals of the UN Convention, a main contact point was established in the Ministry of Labour, Social affairs and Family. The task of the coordination mechanism (a focal point in every ministry) is to create optimal conditions for the implementation of the UN Convention, including the institutional provision of the process of its implementation and monitoring.
On 7 April 2021, the Government of the Slovak Republic approved the *Strategy for Equality, Inclusion and Participation of Roma by 2030* (hereinafter referred to as the “2030 Roma Strategy”). This strategic framework document is a commitment of the Government of the Slovak Republic to promote equality and inclusion of Roma and defines the direction of public policies in order to achieve visible changes in this field.

The 2030 Roma Strategy was developed on the basis of a request for a conceptual material that takes into account the development of the situation and the experience of the previous 8 years since the adoption of the Strategy of the Slovak Republic for Roma Integration up to 2020. Its content contributes to the fulfilment of the Government’s intentions in relation to the improvement of the status and situation of the Roma, as stated in the Programme Declaration of the Government of the Slovak Republic for the period 2020-2024, and also reflects the objectives of the Vision and Development Strategy 2030.

The 2030 Roma Strategy represents a set of starting points and goals that aim to stop the segregation of Roma communities and wish to achieve a significant positive turnaround in the social inclusion of Roma as well as non-discrimination in priority areas – education, housing, employment and health. Particular emphasis is placed on stepping up interventions to combat anti-Roma racism and promote Roma inclusion.

The following overarching goals of the Roma Strategy are in line with specific SDGs:

- Ensuring equal access for Roma, specifically marginalised Roma communities (MRCs), to quality mainstream education from birth to employment, with an emphasis on the application of desegregation and inclusive measures in the educational process at all levels of education (SDGs 4, 10),

- Eliminating inequalities between members of marginalized Roma communities and the majority population of Slovakia in housing and combating the discrimination of Roma in access to housing, including the elimination of residential segregation (SDGs 6, 9, 10, 11),

- Improving the employability and increase the Roma employment, specifically for MRCs, by creating opportunities leading to their employment (SDGs 1, 2, 5, 8, 10),

---

4.4.4. Protection of children

Since 2014, the Slovak Republic has been implementing the policy of protecting children against violence through the National Cooperation Centre (NCC) for Resolving the Issue of Violence Against Children. Since then, there two major documents regarding this issue have been elaborated and implemented: the National Strategy for Protecting Children against Violence and the National Conception for Protecting Children in the Digital Environment. The two documents are subject to revisions and their implementation is evaluated on regular bases.

Effective implementation of the 2030 Roma Strategy requires a cross-ministerial approach and active participation and cooperation of all levels of the government. The whole process is coordinated by the Office of the Plenipotentiary of the Government for Roma Communities, which is also in charge of monitoring progress and the achievement of the set goals and targets.

- Reducing health inequalities (in all areas) among the Roma, specifically the MRC, and the general population of the Slovak Republic (SDGs 3, 10),

- Eliminating anti-Roma racism, promoting anti-discrimination and participation, and increasing the protection of the most vulnerable groups and individuals (SDG 5, 10, 16, 17)

https://detstvobeznasilia.gov.sk/dokumenty/strategicke-materialy#dokumenty
The National Cooperation Centre is also a coordinating body for the European Child Guarantee in Slovakia, aiming to resolve problems connected with poverty and the exclusion of children in education, healthcare, nutrition, housing, and early childhood education and care.

The activities of the National Cooperation Centre can be linked to the following SDGs and their targets:

- **SDGs 1, 2, 3, 4** – these goals are generally considered in the European Child Guarantee
- **SDG 5, especially target 5.2** – eliminate all forms of violence against girls, and target 5.3 – eliminate harmful practices (child marriage, female genital mutilation)
- **SDG 16, especially target 16.1** – significantly reduce all forms of violence and related death rates everywhere, and target 16.2 – end abuse, exploitation, trafficking and all forms of violence against and torture of children

Activities related to child protection require a multistakeholder approach, therefore NCC coordinates the activities of all relevant subjects: ministries, public agencies, NGOs, research institutions, universities, etc. In addition, the multistakeholder approach is also present in regions; the National Project Support for Protecting Children against Violence supports more than 50 regional coordinators active in all regions of Slovakia. These coordinators are methodologically supervised by NCC. The complexity of activities is also visible in the functioning of the National Helpline for Children at Risk, also methodologically supervised by NCC.
It is possible to note progress on a variety of human rights and rule of law issues falling under the scope of SDGs in the Slovak Republic in recent years. The human rights situation in the country is not without challenges, however.

Several SDGs have direct relevance for the human rights agenda. SDG 10 (reduce inequality within and among countries) and SDG 16 (promote peaceful and inclusive societies, provide access to justice for all and build effective, accountable and inclusive institutions) are relevant in the context of antidiscrimination laws and their implementation in practice, but also other rule of law and human rights issues.

With respect to the topic of antidiscrimination, it can be concluded that while the legislation is largely satisfactory in terms of grounds of discrimination and areas covered, challenges with implementation in practice persist, which may partly stem from insufficiently deterring sanctions for discrimination. The broader cultural and social context of the country is another factor that needs to be considered in this regard, taking into account that context shapes the views – and prejudices – of those with competencies in this field. Hence, there is a need to sensitize society and relevant authorities more, so that the victims of antidiscrimination practices are met with the empathy they deserve. In this context, improvement and progress in the protection of the rights of LGBTI+ persons, Roma or persons with disabilities, occur only slowly.

In the context of broader rule of law issues falling under the scope of SDG 16, it is relevant to mention the reform of the judicial system, which is one of the flagship reforms supported and financed by the EU’s post-COVID-19 Recovery and Resilience Plan. The reform seeks to improve access to justice by means of improving the quality and effectiveness of the court system. This involves changes in the structure of the court system, including the partial dissolution and merger of some courts into bigger units. The judicial reform also aims to create conditions and environment enabling the specialization of judges. These amendments should speed up decision-making, benefiting all citizens. It is notable to mention that a new Supreme Administrative Court was established as part of the reform in 2021. The judicial reform is a continuous process and is being implemented in stages.

Additionally, an amendment to the Act on Victims of Crime was adopted, which changed the philosophy of compensating victims of violent crimes and enabled to create a network of intervention centres. Special attention has been paid to the prevention and elimination of all forms of violence, especially violence against women and children. Furthermore, the Government issued a formal apology to women for involuntary sterilization (SDG 5).
4.4.6.1

National Institute of Education and Youth (NIVAM)

One of the flagship initiatives aiming to promote the 2030 Agenda among youth and supporting the implementation of the SDGs is the United Nations Youth Delegate Slovakia programme, implemented by the National Institute of Education and Youth (NIVAM), an organisation of the Ministry of Education, Science, Research and Sport. Each year, one delegate is selected in a competitive selection process that also considers candidates’ views and actions on the 2030 Agenda. The delegate is then involved in awareness-raising activities, such as campaigns, lectures and workshops in schools and non-formal education settings. The delegate is also invited to represent the young people of Slovakia in some key events. For example, the Slovak UN youth delegate participated in the 2022 United Nations Climate Change Conference in Sharm el-Sheikh, Egypt, accompanying the President of the Slovak Republic.

4.4.6.2

Slovak Commission for UNESCO

The Slovak Commission for UNESCO, established within the Ministry of Foreign and European Affairs, has been actively contributing to awareness raising among youth on the United Nations and the 2030 Agenda, and has supported the implementation of SDG 4 on education with its projects and initiatives.

The network of Slovak UNESCO affiliated schools was further expanded (currently 25 schools operate under the UNESCO brand), and several projects/activities aimed at primary/secondary school pupils/students were organised or supported. For example, the successfully established Human Rights Olympiad competition offers an opportunity to spread awareness about the importance of the human rights agenda. Environmental education and youth awareness of current topics in the field of environmental protection and sustainable development are strengthened through the ECOLYMPIAD competition.
In 2022, the City of Trnava became the first Slovak representative in the UNESCO Global Network of Learning Cities. This happened on the basis of the activities of the “Learning Trnava” project, the concept of which was created by a team of young people from NGO “Lifestarter” back in 2020. For the third year, the aforementioned project has been creating of networking events and conferences for teachers, school principals, representatives of universities, and other actors from the field of education who are interested in a systematic change of education in Slovakia. The project team includes people who work directly for the City of Trnava at the Department of Education, as well as teachers of Trnava universities and directors of various educational and cultural institutions. The city of Košice is the representative of Slovakia in the UNESCO Creative Cities Network.

SR has a long-standing cooperation with the UNESCO World Heritage Centre and regularly makes voluntary financial contributions to specialised funds for the preservation of cultural heritage around the world.

4.4.7.
Non-governmental organisations

Slovakia has an active civil society which plays an indispensable role in contributing to the achievement of each of the 17 SDGs.

To mention only one interesting example, the Slovak NGO Servare et Manere, which was awarded a special consultative statute to ECOSOC in 2022, focuses on promoting international friendship through the initiative „Tree of Peace“. The initiative joins together two important issues of our time, the first being peace and the second the climate crisis. As a part of the initiative, 32 Trees of Peace have been planted so far in 19 countries on 4 continents.

Source: Servare et Manere
It might come as a surprise to mention space in relation to SDGs but we believe the time for this is ripe. Space technology is an important enabler and contributor when it comes to the implementation of a wide range of SDGs. Satellite data are indispensable in addressing important issues on Earth, including those related to climate, protection of life on land as well as below water, increasing efficiency and sustainability of agriculture, water management, or clean energy production.

Over the past years, a variety of unique projects have emerged in Slovakia covering a wide range of relevant topics. These include, for example, infrastructure and land deformation monitoring,
solar radiation monitoring, forest disturbance mapping and monitoring, meteorological forecasting and modelling, natural habitat monitoring, or early warning systems. The space downstream and the Earth observation sectors in particular, have grown into a strong part of the Slovak space economy and also draw a significant interest from young entrepreneurs and researchers, as it was seen during the last two hackathons organised by the industry branch of the Slovak Space Office (SARIO). The CASSINI hackathon focusing on environmental solutions protecting the Arctic was held in November 2021 and the ActInSpace hackathon with several of the 13 teams focusing on environmental topics was held in November 2022. SDG-related topics have also been represented in the first Slovak space start-up incubator operating since December 2021 under SARIO.

As an EU member state and the newest associate member of the European Space Agency (ESA) (since October 2022), Slovakia has an excellent precondition for European collaboration in the area of utilisation of space technologies for supporting the SDGs. Several projects focusing on topics related to environmental protection, sustainable cities, or sustainable energy have already been developed by Slovak companies and researchers through the previous stages of the country’s collaboration with ESA. SARIO also has an active ongoing collaboration with Eurisy (European association of space agencies), international organizations, research institutions and private businesses involved in space-related activities with a particular focus on the use of space technologies on Earth. In 2022, among several other joint activities, they organized together an international webinar on space data for sustainable cities.

Through SARIO, Slovakia is also one of the most active members of the Space for Climate Observatory (SCO), an international initiative led by the French Space Agency CNES aiming to gather public and private entities involved in the Earth observation sector in order to make the best use of satellite data and digital technologies for climate action.

At a political level, the Government Council for the 2030 Agenda and its Working Group represent a basic institutional framework for the co-ordination of issues related to the 2030 Agenda. This is a standard approach in Slovakia that can be seen also in other fields. Detailed description of the composition of the Government Council is provided in chapter 4.1.
4.6. Systemic issues and transformative actions

Strategic planning and an integrated approach at the national level is a prerequisite for the successful implementation of the 2030 Agenda. In Slovakia, this recognition led to the definition of the national priorities of the 2030 Agenda and the elaboration of the Vision and Development Strategy 2030.

However, further effort is necessary to fully mainstream SDGs into sectoral, national and sub-national policies and strategies. In addition, financial regulation and budgeting need to be better aligned with declared long-term objectives. Last but not least, broad stakeholder participation has to become an inseparable part of policy and decision making. In order to implement these transformative measures, introducing a more integrated multi-level governance model seems inevitable. To this end, a project focusing on SDGs and strategic communication will be implemented in 2023 – 2024 in co-operation between Slovakia and the OECD.

Further efforts should be made at the international level as well and the SDG mid-term review in 2023 presents a good opportunity, looking back at SDG implementation in general and from a strategic perspective as well. Eight years on from the adoption of the 2030 Agenda, with many of its targets still far from reach, the question needs to be raised whether it is sufficient to implement global goals at a national level without wider co-ordination at an international level. The VNRs have been designated as the UN’s monitoring tool, however, they are by essence voluntary and their presentation bears lots of political features (this was pointed out by the participants of the VNR preparatory workshop organised by UN DESA in Turin, 6-7 December 2022). Between setting ambitious
goal and reporting on them there is a long chain of important steps, such as drafting strategic programmes with specific objectives and indicators, aligning legal and institutional frameworks, building capacities etc. These steps would deserve international co-ordination as well.

Moreover, the VNRs are normally presented with a positive tone at the HLPF, since they are understood as the presentation of a particular country and its political leadership. The sum of the national VNRs should then logically imply positive result in global SDG progress reports. This is not the case, however. Global reports do not confirm this trend, quite the opposite, they point out a significant gap in SDG implementation and call for intensifying efforts: Progress towards the Sustainable Development Goals (Report of the UN Secretary-General, July 2020)18, The Short and Winding Road to 2030, MEASURING DISTANCE TO THE SDG TARGET (OECD 2022).19

Indicators are also appearing to be a weak point. Different international agencies use different methodologies to evaluate SDG indicators, and countries use national indicators to complete missing ones in the UN global database. This leads to the question to what degree the various methodologies and data actually reflect the original definitions of SDG targets and indicators as adopted at the UN level in 2015. The 2025 Comprehensive Review of the global indicator framework for the 2030 Agenda should remedy some of the outstanding issues, however, the question arises whether, with only five years left for implementation, it will not be too late and an effort in vain. To avoid such situation, some degree of utilisation of this thoroughly elaborated indicator framework for any post-2030 global development agenda should be considered. Bearing in mind all the above-mentioned shortcomings, a project of co-operation with the OECD on the “Monitoring Framework of Sustainable Development in Slovakia” will be implemented in 2023 – 2024.

Aside from monitoring, more pronounced UN co-ordination of SDG implementation would be much welcome, for example by establishing standing working bodies for 2030 Agenda implementation in the UN Regional Commissions. For Europe, the UN Economic Commission for Europe (ECE) in Geneva would be ideally positioned for this. The European Union can serve as an inspiring example, since it established an EU Council Working Party for the 2030 Agenda, which has proved to be a very useful platform not only for member States but also for stakeholders. The Working Party has monthly meetings and is held at an expert level bringing together representatives of line ministries responsible for 2030 Agenda implementation in the respective EU member countries. Stakeholders are regularly invited to these meetings and they provide inspirative suggestions for SDG implementation.

The above proposals are supported by several statements made at the EU level: Europe Sustainable Development Report 2022, Achieving the SDGs: Europe’s Compass in a Multipolar World: “[To implement the SDGs] the EU should push for a major reform of global governance and international institutions including the United Nations, the World Bank and the IMF”.20

European Economic and Social Committee: “As for VNRs, there is a need to go beyond simple “box to check” and use a cross-cutting approach rather than SDG by SDG”.21

---

18 https://digitallibrary.un.org/record/3865828
20 https://eu-dashboards.sdgindex.org/
21 Presentation made at the meeting of the EU Working Party on the 2030 Agenda for Sustainable Development on 17 November 2022.
Progress on Goals and targets and evaluation of policies and measures taken so far
For the purposes of this VNR, 5 SDGs will be presented in detail:

These 5 SDGs were selected by the United Nations for in-depth review at the 2023 High-level Political Forum on Sustainable Development. In order to underline the integrated and indivisible nature of the SDGs, the chapter opens with an analysis of interlinkages between the SDGs. Detailed information on progress made towards the other twelve goals of the 2030 Agenda can be accessed in the Second Monitoring Report on Progress in the Implementation of the 2030 Agenda. 22

5.1. Interlinkages of SDGs in general

On the next few pages, an overview of the interlinkages between the SDGs under detailed review in 2023 and the other Sustainable Development Goals is presented, which clearly demonstrates that the 2030 Agenda can only be achieved in an integrated manner, following the principles of policy coherence for sustainable development.

Universal access to water and sanitation is a prerequisite for eliminating poverty. SDG 1 calls for universal access to basic services, which include water and sanitation (6.1, 6.2) among others.

Water resources are necessary to produce food. Agriculture is the largest water user, accounting for around 70% of global freshwater demand. Access to safe water and sanitation helps to improve nutrition and food security. Irrigation with contaminated water damages and reduces productivity of pasture and crops, contaminates soil, and impacts on livestock health and production.

Ensuring water and sanitation services underpins health targets. It helps to alleviate diarrhoea and malnutrition, which are leading causes of death among children under five.

Polluted water is the world’s largest health risk. Associated with this are health service costs, decreased life expectancy and emergency health costs related to major pollution events.
Water is an important input for economic activity and an important growth factor. Water, sanitation and wastewater treatment supports a healthy workforce. Enough educated people are needed to ensure reaching the water-related targets. Access to water and sanitation in the workplace is a core component of decent work with positive impact on workers’ productivity. Vocational training including for women is essential to ensure enough professional input and management. Career opportunities for women in the sector are crucial. Moving from unpaid to paid, from unsafe working conditions to safe conditions.

Industry relies on water resources and infrastructure. Tools like water stewardship standards need to be spread world-wide and implemented.

SDG 6 and its targets can help reduce inequalities by ensuring essential water and sanitation services are available to all.

In many communities, women and girls bear the burden of collecting water and caring for relatives made sick by lack of water and sanitation services. Economic activities of women are impeded by lack of access to water or lack of decision-making power in allocation of water. The role of women in managing water use in agriculture, health care, facility management is essential and not acknowledged and facilitated enough.

Water supply and sanitation are key factors in improving student health, thus affecting school attendance and educational outcomes. Adequate water supply is a critical factor for girls in poor rural areas, who spend large parts of each day fetching water, to attend school.

Water is needed for energy production, fossil-fuel extraction and irrigation of feedstock for biofuels. Water provision needs to be made less (fossil fuel) energy dependent; energy provision needs to be less water dependent. Renewables and energy efficiency can reinforce targets related to water access, scarcity and management by lowering water demands and negative impacts on water flows e.g. for energy production. Renewable energy solutions need to prevent negative impacts on water availability and use.
Cities rely on water supply and sanitation. In several countries urbanisation has contributed to water pollution and scarcity. Improving water quality, wastewater treatment, rainwater collection and treatment, efficiency in water use is a prerequisite to sustainable cities and communities.

Sustainable and efficient use of water resources is fundamental to avoid overexploitation of surface and groundwater.

Climate change will alter the intensity, frequency, seasonality and amount of rainfall, aspects which impact surface water flows and groundwater recharge, as well as temperature. Robust water management is a precondition for mitigation.

Improving water quality and waste water management can help improving aquatic and marine ecosystems by reducing the pollution load.

Ensuring sufficient water to cover ecosystems’ needs supports the conservation and restoration of water-related ecosystems. Pressures on ecosystems increase water risks, including water shortages, excesses, pollution, and other risks to freshwater systems (rivers, lakes, aquifers).

Achieving the water goal and targets is critical to reducing conflicts within and between countries, and aim for transboundary benefit sharing in river basins.

International co-operation is essential to manage shared water resources; disaggregated data collection and sharing are needed to make adequate analysis and made-to-measure policies.
Energy is a basic service, therefore universal energy access reinforces the achievement of SDG 1.4 related to access to basic services.

Providing electricity access can enhance agricultural productivity through irrigation, mechanisation and refrigeration.

Energy is the main source of air pollution linked to severe human health impacts. Efforts to provide energy access, expand renewables, and promote energy efficiency will lead to simultaneous reductions in air pollutant emissions.

Ensuring energy access in countries where access to reliable energy services may be lacking can therefore reinforce education goals.
Water is needed for energy production, fossil-fuel extraction and irrigation of feedstock for biofuels. Renewables and energy efficiency can, in most instances, reinforce targets related to water access, scarcity and management by lowering water demands for energy production (compared to a less-efficient fossil energy supply system).

Design, manufacture, and installation of renewables and energy efficient technologies can create conditions for new and higher paying jobs.

Retrofitting existing infrastructure to make it energy efficient as well as building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation are pre-conditions for achieving the SDG 7 targets on access to energy services, increasing the share of renewables in the energy mix, and increasing energy efficiency.

Ensuring energy access and increasing the share of some types of renewable energy (such as agriculture and forest-based bioenergy) can enable educational, health and employment opportunities for the rural poor, with positive effects on income and equality.

Energy is central to urbanisation; energy allows cities to grow and perform. Clean, efficient energy systems, in particular, create the conditions for cities and human settlements to be inclusive, safe, resilient, less-polluting, and more sustainable.

Phasing out inefficient, wasteful, and market-distorting fossil fuel subsidies – in a way that minimises counteracting adverse side-effects on the poor – could reinforce attempts to deploy renewables and energy-efficient technologies and consumption patterns.
Effective, accountable and transparent institutions are needed at all levels of government for creating the conditions necessary to be able to ensure universal energy access, increase the share of renewables and increase energy efficiency.

Upscaling of renewables and energy-efficient technologies and consumption patterns can help decrease ocean acidification (via lower carbon emissions).

Land-use changes involved in extensive renewable energy production such as hydroelectric dams may conflict with targets aimed at protecting terrestrial ecosystems, halting deforestation, and preventing biodiversity loss.

Ensuring access to affordable, reliable, sustainable and modern energy for all, requires that all countries are able to mobilise the necessary financial resources and willing to disseminate knowledge and share innovative technologies.

Energy is the main source of global greenhouse-gas (GHG) emissions. Decarbonising energy systems through an up-scaling of renewables and energy efficiency is a necessary but not sufficient condition for combatting climate change. Less fossil energy means lower CO2 emissions.

Energy is the main source of global greenhouse-gas (GHG) emissions. Decarbonising energy systems through an up-scaling of renewables and energy efficiency is a necessary but not sufficient condition for combatting climate change. Less fossil energy means lower CO2 emissions.

Energy is the main source of global greenhouse-gas (GHG) emissions. Decarbonising energy systems through an up-scaling of renewables and energy efficiency is a necessary but not sufficient condition for combatting climate change. Less fossil energy means lower CO2 emissions.
Developing infrastructure is indivisible from ensuring access to economic resources, services, etc. Promoting inclusive industrialisation reinforces reduction of poverty.

Better and accessible infrastructure reinforces access to food and farmers’ access to markets. Also, enhancing science, technology, and innovation enables agricultural productivity and incomes of small-scale food producers.

Developing infrastructure reinforces access to health care services by reducing cost and time of travel.

Developing infrastructure reinforces education through reducing travel time to schools, establishment of learning, possibility to study at night, etc. Also, enhancing science, technology and innovation can be enabled by quality technical, vocational, and tertiary education.
Developing infrastructure for transport and providing public infrastructure means enables participation of women in the work force and in political life.

Tools like water stewardship standards are important to be spread worldwide and implemented to regulate using water in industry and infrastructure.

Retrofitting existing infrastructure to make it energy efficient as well as building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation are pre-conditions for achieving the SDG 7 targets on access to energy services, increasing the share of renewables in the energy mix, and increasing energy efficiency.

Enhancing science, technology and innovation is indivisible from productivity increases, as in the long-term innovation is key source of productivity growth. Also, promoting inclusive industrialization reinforces economic growth through improving productivity in the economy.

SDG9 and its targets can help reduce inequalities by providing universal access for services and promoting inclusive industrialisation in developing countries.

Developing sustainable, inclusive and resilient infrastructures is a prerequisite to build sustainable cities and communities. Also, it is essential to facilitate sustainable infrastructure development for developing countries to build sustainable cities and communities on a global level.

Sustainable management and use of natural resources including plants, fish, fungi, water, soil, and minerals can help in developing sustainable, inclusive and resilient infrastructures through managing the distribution of resources and mitigating the depletion risks. Also, the introduction of a circular economy would stimulate more sustainable and resilient infrastructure.
Effective, accountable and transparent institutions are needed at all levels of government for creating the conditions necessary to be able to maintain management of sustainable infrastructure and to facilitate sustainable infrastructure development for developing countries.

Ensuring access to better infrastructures for all, information and communication technologies and financial services requires that all countries are able to mobilise the necessary resources and willing to disseminate knowledge and share innovative technologies.

Infrastructure development is responsible for the vast majority of greenhouse gas emissions worldwide, estimated at 79 per cent of total emissions, with most associated with energy, buildings and transport. These originate from various stages of the infrastructure lifecycle which results in a rapid acceleration of global anthropogenic climate change and unequivocal warming of the climate system in recent decades. Thus, developing sustainable and resilient infrastructure at its different lifecycle stages is a prerequisite for supporting climate actions of mitigation and adaptation.

Boosting industrialisation and industry’s share of GDP can be an enabler for ocean and fisheries management by reducing emphasis on primary resource extraction in the economy. However, industrial activities in coastal areas need to be regulated to prevent marine pollution and protection of coastal ecosystems.

SDG9 imparts the importance of new innovations in the sustainable development of different types of life on land (i.e., water management, forestry management, combat desertification, reduce degradation of natural habitat, etc.). Also, SDG 15 is directly integrated with building sustainable and resilient infrastructure and using resources efficiently.

Source: OECD
Providing affordable housing, accessible transport systems and accessible public services can help in eradicating poverty and providing equal rights to ownership, basic services, technology and economic resources. Also, building the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events can enhance inclusive and sustainable urbanization.

Developing sustainable solutions to provide universal access for safe and nutritious food through production processes and regulating agricultural practices is a prerequisite for building sustainable cities and communities.

Ensuring access to safe and affordable housing and basic services can reduce the impact of communicable diseases and maternal and children mortality through increasing security and safety and improving access to adequate sanitation and clean drinking water.

Quality education provides the appropriate tools to ensure the monitoring of waste management and air quality. It prepares communities to manage their resources properly and tackle climate change. Through participatory approaches, communities are engaged in discussions and in planning activities for the improvement of their own cities.
Ensuring access for all to adequate safe and affordable housing and basic services and upgrading slums can help eliminating all forms of violence against all women and girls in the public and private spheres. Moreover, enhancing inclusive and sustainable urbanisation and capacity for participatory human settlements planning and management can ensure women’s full and effective participation and equal opportunities for leadership at all levels. Also, supporting least developed countries through financial and technical assistance to build sustainable and resilient cities can help undertaking reforms to give women equal rights to economic resources, as well as access to ownership and control over properties.

Ensuring access to safe and affordable housing and basic services can increase security and safety and improve access to adequate sanitation and clean drinking water. Also, water-sensitive/resilient urban design would lead to a better water management including for storm water, groundwater and wastewater management and water supply.

Promoting access to research, technology and investment in clean energy as well as expanding services for developing countries can result in increased renewable energy usage and, consequently, providing sustainable solutions to build sustainable communities and cities for all. Also, it helps providing access to safe, affordable, accessible and sustainable transport systems for all.

Diversifying, upgrading and innovating for economic productivity and achieving economic growth are essential to build safe cities (though upgrading slums and ensuring safe, affordable, and accessible housing), inclusive cities (through providing safe, affordable and accessible public services for all and protecting cultural and natural heritage), and sustainable cities (through supporting positive social, economic, and environmental links between urban, peri-urban and rural areas).

Investing in technology, research, and innovation is important to achieve upgrades in infrastructures (such as sustainable transport systems and improved drainage and flood protection). Also, providing access to small-scale industrial and other enterprises to financial services can support least-developed countries through financial and technical assistance in building sustainable and resilient cities and communities.

Reducing inequalities and empowering the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, and religion is a prerequisite to build sustainable cities and communities. This can be achieved, for instance, physically through including people with disabilities in urban planning, economically through diversity and equality in providing job opportunities, or socially through governing rural-to-urban migrations.
Efficient use of natural resources and waste reduction through enabling circular economy can reduce the adverse per capita environmental impact of cities, improve air quality and other municipal and waste management. Also, a change in production and consumption must be achieved to reduce and prevent cities becoming vulnerable to climate change and natural disasters.

Strengthening resilience and adaptive capacity to climate-related hazards and natural disasters can reduce the number of people affected and decrease the direct economic loses relative to global gross domestic caused by disasters.

Water-sensitive/resilient urban design would lead to a better water management. Coupled with solid waste management, can prevent water related ecosystem to be contaminated by hazardous chemicals, and prevent pollution to marine ecosystems originating from urban settlements.

Developing solutions for reducing the adverse per capita environmental impact of cities and for improving air quality can restore degraded land and soil including land affected by floods, as well as ensuring the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services.

Inclusive and sustainable urbanization and capacities for participatory human settlement planning and management can help promoting the rule of law at the national and international levels and ensuring equal access to justice for all.

Fostering structured partnerships between local authorities to focus on peer-to-peer exchanges to jointly find innovative solutions for shared urban challenges and to help refining the overall engagement strategies with local actors in all relevant policy areas is essential to enhance economic, physical development, social and environmental management, and urban governance systems.

Source: OECD
5.2. War is incompatible with sustainable development.

Interlinkages relating to the war in Ukraine

5.2.1. Biophysical interlinkages

The ongoing war in Ukraine has brought about immense human suffering, and has direct negative influence on the prospects for achieving the Sustainable Development Goals not only in Ukraine but also beyond its borders. The below demonstration of interlinkages between the war and the SDGs serves as a reminder of how volatile is our progress towards well-being and sustainability in the face of armed conflict.

- Lack of drinkable water (6.1)
- Destruction of infrastructure (sanitary and water treatment (6.2 and 6.3)
- Water related ecosystems degradation (6.6)
- Destruction of infrastructure and habitats (13.1)
- Inability to implement policies regarding climate change (13.2)
- Educational system severely disrupted (13.3)
- Black sea pollution (14.1)
- Marine biodiversity reduction (14.2)
- Coastal protected areas degradation (14.5)
- Ecosystems degradation (15.1)
- Increasing deforestation due to wildfires (15.2)
- Increase of land degradation (15.3)
- Biodiversity loss and natural habitats destruction (15.4 and 15.5)
5.2.2. Social interlinkages

1. **No Poverty**
   - Increase the poverty due to unemployment and inflation (1.1; 1.2)
   - State protection reduction (1.3; 1.4; 1.5, 1.a; 1.b)

2. **Zero Hunger**
   - Famine increase (2.1; 2.2)
   - Destruction of agriculture exploitations and harvests (2.3)
   - Increase food production to ensure food security (2.4)
   - Destruction of seed banks and silos (2.5)
   - Investment on agriculture disrupted (2.6)
   - Agricultural trade blocked/disrupted (2.7; 2.8)

3. **Good Health and Well-being**
   - Increase of pregnant woman mortality and children under the age of 5 (3.1; 3.2)
   - Increase of diseases incidence (3.3; 3.4; 3.5; 3.a)
   - Lack of capacity to attend and finance all pathologies treatment (3.7; 3.8; 3.c; 3.d)
   - Increase of air, soil and water pollution (3.9)

4. **Quality Education**
   - Destruction of education institutions, population displacement and learning process degradation (4.1; 4.2; 4.3; 4.4; 4.5; 4.6; 4.7; 4.a)

5. **Gender Equality**
   - Evidences of girls and young woman suffer extreme violence (5.1; 5.2)
   - Increase of the number of men that are conscripted to war and woman’s are responsible for house and family (5.4)
   - Woman exclusion from decision making (5.5; 5.c)
   - Destruction of health facilities (5.6)

6. **Affordable and clean energy**
   - Infrastructure destruction and energy prices increase (7.1; 7.3)
   - Urgency to access conventional energy sources (7.2)
   - International cooperation and collaboration disruption (7.7)

7. **Sustainable cities and communities**
   - Residential areas, infrastructure and green areas destruction (11.1; 11.2; 11.7; 11.b)
   - Urban population displacement (11.3)
   - Cultural heritage sites destruction (11.4)
   - Increasing the population vulnerability to disasters due infrastructure destruction (11.5)
   - Pollution increase due shelling (11.6)

8. **Peace, Justice and strong institutions**
   - Increase of violence, human trafficking and child abuse (16.1; 16.2)
   - Rule of law is threaten (16.3)
   - Potential increase of arms smuggling and corruption (16.4; 16.5)
   - War affects institutions normal function and increase corruption (16.6)
   - Governance reforms interruption (16.7)
   - Reduction of fundamental freedoms in Russia and Ukraine (16.10)
   - Enhancing cooperation for war crimes and crimes against humanity and aggression investigation (16.a)
5.2.3. Economic interlinkages

- Global recession and GDP loss (8.1)
- Sanctions imposed decrease the economic upgrading (8.2)
- Disruption of business development and unemployment increase (8.3; 8.5; 8.6)
- Coal power plants reactivation (8.4)
- Human trafficking risk (8.7)
- Civil targets reduce labor safety (8.8)
- Tourism reduction (8.9)
- Domestic financial institutions disrupted (8.10)

- Infrastructure destruction and inflation (9.1)
- Economic crises reduce industry development and employment (9.2)
- Financial markets disruptions and high risk in credit (9.3)
- Short-term investment in pollutant energy sources (e.g., coal) to meet the demand (9.4)
- Sanctions reduce industry capability (9.5)
- Financial crisis (9.a; 9.b)

- Reduced economic growth (10.1).
- Increasing the inequalities and repression (10.2) increasing the difference between the poor and the rich (10.3)
- Evidence of forced children and adults mobilization to Russia (10.7).
- Financial crisis (10.b)

- Increase for de demand of fossil fuels (12.2)
- Pollution and waste generation increase (12.4; 12.5)
- Economic crises may reduce the establishment of sustainable practices (12.6)

- Economic crisis can reduce resources for developing countries and the GDP (17.1; 17.2; 17.3; 17.4; 17.5; 17.6; 17.19)
- The war affected the trading environment and macroeconomic stability (17.10; 17.13)
- The army movement by Russia in a sovereign country (17.15; 17.a)
- War broke the global partnership between countries (17.16; 17.17)

Source:
5.3. Progress on the goals under review

This section provides a qualitative and quantitative description of the five SDGs under HLPF review in 2023. It looks at the interlinkages between these SDGs and the state of play as well as progress achieved on them in the Slovak Republic. Detailed information on progress made towards the other twelve goals of the 2030 Agenda can be accessed in the Second Monitoring Report on Progress in the Implementation of the 2030 Agenda.  

Framework for analysis

- Political commitment and leadership
- Strategic long-term vision
- Policy integration
- Whole-of-government coordination
- Sub-national engagement
- Stakeholder engagement
- Policy and financing impacts
- Monitoring, reporting and evaluation

2030 Vision

- National priorities
- Global commitments (e.g., 2030 Agenda, Paris Climate Agreement)
- EU legislation/directives/plans (e.g., NRRP, EU Green Deal)

2030 National priorities

- Education for a life in dignity (SDGs 4, 8, 10),
- Transformation towards a knowledge-based and environmentally sustainable economy in the face of changing demography and global context (SDGs 7, 8, 9, 10, 12),
- Poverty reduction and social inclusion (SDGs 1, 2, 10),
- Sustainable settlements, regions and countryside in the face of climate change (SDGs 6, 7, 11, 13, 15),
- Rule of law, democracy and security (SDGs 5, 16),
- Good health (SDGs 3, 10).

PCSD as a means of implementation

Source: OECD

---


24 Policy Coherence for Sustainable Development
Goal 6
Clean Water and Sanitation
Equal access to clean water and sanitation forms one of the necessary basic needs for the quality of citizens’ lives, the sustainability of urban and regional development, as well as the socio-economic stability of regions. Furthermore, access to clean water helps adapting human settlements and the countryside to the adverse effects of climate change, and maintaining stable and healthy ecosystems.

Just as each Sustainable Development Goal, goal 6 is closely interlinked with other SDGs. The following sections maps some of these interactions in the Slovak context and points out potential synergies, trade-offs and transboundary effects. The specific implications of current global crises on SDG 6 will also be touched upon.

Interactions with SDG 6

Water is needed for energy production; fossil-fuel extraction and irrigation of feedstock for biofuels. Water provision needs to be made less (fossil fuel) energy dependent; energy provision needs to be less water dependent. Renewables and energy efficiency can reinforce targets related to water access, scarcity and management by lowering water demands and negative impacts on water flows e.g. for energy production. Renewable energy solutions need to prevent negative impacts on water availability and use.

Industry relies on water resources and infrastructure. Tools like water stewardship standards need to be spread and implemented.

Although the surface water and groundwater resources of Slovakia, including the Danube River and the Poprad and Dunajec river basins, are rich enough to ensure current and prospective water needs, some challenges might affect water availability for manufacturing and industry.

1. Globally, climate change is projected to affect rivers’ runoff between 5% and 40% in 2030 and 5% and more than 40% in 2075, compared with the reference period 1951-1980.
2. In Slovakia, there is a high prevalence of individual sanitation systems (highest in the EU) and non-compliance with the Urban Wastewater Treatment Directive (UWWTD), particularly in rural areas and small agglomerations.
3. In Slovakia, there is a large finance gap and high reliance on EU funding for drinking water, sanitation and flood protection infrastructure.

Cities and urban areas rely on water supply and sanitation as one of their basic needs and services provided. In several countries, urbanisation has contributed to water pollution and scarcity. Improving water quality, wastewater treatment, rainwater collection and treatment, and efficiency in water use are prerequisites for sustainable cities and communities.

Source: OECD
Possible trade-offs, synergies and transboundary policy impacts

The previous considerations are essential for an integrated approach to implementing the 2030 Agenda. At the same time, it is also important to acknowledge potential trade-offs, synergies and transboundary impacts that may arise as a part of the implementation process. These include, for example:

- Limiting the impacts of domestic water use on other countries’ access to water (SDG 6.1)
- Minimising cross-border impacts of domestic water pollution (SDG 6.3)
- Limiting the import of water-intensive products that externalise water footprint to exporting countries (SDG 6.4)

War in Ukraine

- As described in the chapter 6.2., about one million Ukrainian refugees have entered Slovakia, with thousands of them remaining in the country. This sudden increase in population might cause a challenge for building an efficient urban infrastructure, accommodating refugees, and providing basic needs for all. This includes pressure on water infrastructure (water treatment and sanitation SDG 6.2 and 6.3).

Climate change

- Manifestations of climate change with relation to water include an increased occurrence of periods of drought but also more frequent extreme weather events causing heavy rain, snow, flash floods or flooding.
Financing the expansion of, and maintaining existing, and ageing, water supply and sanitation infrastructure in the face of climate change will be an ongoing challenge for Slovakia.

Overall, Slovakia is performing well on SDG 6, and although shortcomings persist, the trend is improving. Drinking water (6.1) is widely available and of high quality, and access to safe sanitation (6.2) is also high. Connectivity to public sewerage systems remains a challenge and although there is an upward trend, regional and socioeconomic disparities remain significant. The amount of discharged wastewater and the pollution contained in it (6.3) has a decreasing tendency and water quality in rivers and groundwater is also showing a favourable trend. Water use efficiency (6.4) has increased in Slovakia considerably, and the simultaneous decline of water withdrawals and rise of GDP testifies to the decoupling of economic productivity from water use.

In the Slovak national implementation framework of the 2030 Agenda, SDG 6 contributes primarily to the fourth national priority of “Sustainable settlements, regions and countryside in the face of climate change”. This national priority also incorporates SDGs 7, 11, 13, and 15.

Detailed information on indicators pertaining to goal 6 is presented below. These are supplemented by national data, as appropriate, to provide a more comprehensive picture of the status of SDG 6 implementation in Slovakia.
6.1

By 2030, achieve universal and equitable access to safe and affordable drinking water for all

6.1.1

Proportion of population using safely managed drinking water services

In the case of SDG indicator 6.1.1, according to data from the UN database, Slovakia has consistently reached almost the highest possible level, i.e. 99%. The dominant source of drinking water for the population in Slovakia is water supplied by public water supply systems. The trend in the supply of drinking water to the population through public water supply systems in the Slovak Republic is upward. Since 2005, the share of the population supplied has increased from 85.4% to 89.81% (as of 31.12.2018). The remaining share of the population living in houses uses individual domestic wells as a source of water, the construction of which is subject to the control of the relevant state water authorities. Problems with access to drinking water may occur sporadically, e.g. in the case of marginalised Roma communities (MRC). According to a specialised survey on the income and living conditions of MRC households, called EU SILC_MRK, conducted in 2020, more than a quarter (28%) of people from MRC households have no connection to a drinking water source, and therefore they use external sources - a public well, a dispenser, a creek or water from relatives/acquaintances.

In 2021, the Development Plan for Public Water Supply and Public Sewerage Systems for the territory of the Slovak Republic for

EU SILC_MRK, conducted in 2020, more than a quarter (28%) of people from MRC households have no connection to a drinking water source, and therefore they use external sources - a public well, a dispenser, a creek or water from relatives/acquaintances.

2021-2027 was approved. According to the plan, the construction of public water supply systems should be undertaken in parallel with the construction of public sewerage systems and on the proportion of the population supplied with safe drinking water needs to be increased, especially in those districts which currently do not even reach the national level. The development plan also foresees the reconstruction and improvement of technologies to reduce water losses, improve energy efficiency and remove pollutants and disinfect the water supplied.

The quality of drinking water supplied to public water supply networks is high in the Slovak Republic. The proportion of drinking water samples complying with hygiene limits reached 99.72% in 2020. The quality of water in domestic wells is more unfavourable. According to available data, approximately one third of domestic wells do not meet drinking water requirements.

Although the territory of the Slovak Republic has sufficient resources to ensure safe drinking water for all inhabitants, cases of extreme weather fluctuations in recent years (e.g. frosts, droughts, floods) have in some cases led to a reduction in drinking water supplies or the need to provide alternative supplies.

### Goal 6: Clean Water and Sanitation

#### 6.2

By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

#### 6.2.1

Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water
Safe sanitation and handwashing facilities with soap and water are widely accessible in the Slovak Republic. However, people at risk of poverty and social exclusion who do not have access to adequate housing may be in a more unfavourable situation.

In the Slovak Republic, the Water Act obliges agglomerations of more than 2,000 inhabitants to discharge urban waste water only through public sewers. Where the construction of a public sewerage system does not benefit the environment or involves disproportionately high costs, individual systems or other appropriate systems may be used which achieve the same level of environmental protection as public sewerage. Such systems are in particular watertight cesspools or small sewage treatment plants. Municipal waste water from agglomerations of more than 2,000 inhabitants must undergo treatment before being discharged into the environment. Overall, there is an upward trend in the number of inhabitants connected to public sewerage systems in the Slovak Republic.

The proportion of the population living in houses connected to the public sewerage system reached 70% in 2020. In terms of municipal facilities, out of a total of 2,890 independent municipalities, 1,152 municipalities (i.e. 40% of the total number of municipalities in the Slovak Republic) had public sewerage systems in 2020. Despite the upward trend, the development of public sewerage systems lags behind the development of public water supply systems and the level of municipal wastewater disposal varies considerably from one region to another.
Only half of people from marginalised Roma communities have a connection to public sewer system in their household. Often, establishing access to utility networks is problematic because only 54% of MRC households have a legally settled relation to their dwelling. The national project *Support for the settlement of legal relations to land in municipalities with the presence of Marginalised Roma Communities* is aiming to address this issue. The project, implemented by the Office of the Government Plenipotentiary for Roma Communities, helps the target group or the municipality to acquire legal title to the land under dwellings and enable the implementation of measures aimed at improving the standards of housing hygiene of the local inhabitants, e.g. to establish access to utility networks.

Measures are being adopted to increase connectivity to the public sewerage system in the overall population as well. The development plan for public water supply and public sewerage systems for the period 2021-2027 assumes that by 2027 priority will be given to the development of sewerage systems for agglomerations above 2,000 equivalent inhabitants, the construction of wastewater treatment plants in agglomerations up to 2,000 equivalent inhabitants, and the development of sewerage networks in agglomerations up to 2,000 equivalent inhabitants located in protected water management areas where there are large-scale groundwater sources.
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.

6.3.1

Proportion of domestic and industrial wastewater flows safely treated

The amount of discharged wastewater and the pollution contained in it has a decreasing tendency in the Slovak Republic, which is related to the gradual completion of networks of urban wastewater treatment plants (WWTP), the decline in production in some industrial areas, the tightening of requirements for compliance with environmental quality standards and the introduction of new cleaner technologies.

The total amount of wastewater discharged to surface waters decreased by 28 percent between 2005 and 2020, and the proportion of untreated wastewater to total wastewater also decreased significantly.

Despite the gradual improvement in the discharge and treatment of urban wastewater, domestic wastewater remains a significant source of mainly organic and nutrient pollution.
Municipal wastewater management in the Slovak Republic is regulated mainly by the Water Act, which, in agglomerations of more than 2,000 equivalent inhabitants, imposes the obligation to discharge municipal wastewater through public sewers and to treat it before discharging into the environment. In agglomerations of less than 2,000 inhabitants equivalent which do not have a public sewerage system, or in sparsely populated areas outside agglomerations, the disposal of urban waste water may be dealt with by other appropriate systems, in particular watertight cesspools and, for sparsely populated areas, small sewage treatment plants, so as to achieve the environmental objectives for surface water and groundwater. Where municipal waste water is not discharged by public sewers but is accumulated in watertight cesspools, it must be regularly removed and disposed of in a sewage treatment plant.

With regard to water quality, available Eurostat data on rivers and groundwater show a positive tendency.

The concentration of nitrate (NO₃) in groundwater is stably less than 20 mg NO₃/L in Slovakia. This is well below the EU drinking water standard limited to 50 mg NO₃/L to avoid threats to human health.
6.4

By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

6.4.1

Change in water-use efficiency over time

An alternative indicator is water productivity, which aims to quantify the relationship of economic activities to water use and their environmental impacts. It is expressed as a proportion of the gross domestic product of the Slovak Republic at constant prices and of total surface and groundwater withdrawals.
Water withdrawals in the Slovak Republic have been following a steadily downward trend in all user groups. The overall decline in water withdrawals (surface and groundwater) between 2000 and 2020 was 49.1%. Gross Domestic Product (in constant prices) increased by 103.9% over the same period. The divergence of the environmental burden (water withdrawals) and economic output (GDP) curves clearly demonstrates a decoupling of economic productivity from water use. Overall, water productivity between 2000 and 2020 increased by 315.5%.

6.4.2

Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

The Slovak Republic is a country rich in water resources. This is also reflected in relatively low levels of water stress. However, the distribution of water resources in space and time is not even and their availability is not always a given. Where demands exceed the capacity of available water resources and their renewability, or threaten the existence of water-dependent ecosystems, water use may become unsustainable. This risk is currently increasing, particularly in the context of the negative impacts of climate change.
In order to adapt society’s demands on water withdrawals to the real possibilities and potential of the territory, it is necessary to optimise withdrawals, manage water efficiently, reuse rainwater and treated wastewater, as well as promote the use of water-saving technologies and practices. Climate change and its adverse effects make these measures particularly urgent.

Groundwater should continue to be used primarily for drinking purposes. At the same time, ecological flow values should be set for watercourses, complemented by minimum groundwater levels. In addition, watercourses and water bodies in general need to be considered as water users or consumers, and have a guaranteed right to an ecologically sufficient quantity of water.

6.5

By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

The prevention of water scarcity and rational use of water is the subject of several conceptual and strategic documents (e.g. Water Plan of Slovakia, Strategy for Adaptation of the Slovak Republic to the Adverse Effects of Climate Change, Action Plan to Address the Consequences of Drought and Water Scarcity).
Transboundary cooperation is an important element of water resources management. Slovakia shares waters with five countries (AT, CZ, HU, PL, UA), with which it has concluded interstate agreements. Under these treaties Transboundary Water Commissions are functioning, providing an umbrella of expert working groups for individual areas of joint management of transboundary waters. Over years, cooperation has significantly improved in the area of exchanging information and water monitoring results. Gaps remain in operational procedures in the area of joint assessment. According to the UN database, as of 2020, the proportion of transboundary basins (river and lake basins and aquifers) with an operational arrangement for water cooperation stood at 80.9 per cent.

According to the UN database, the degree of integrated water resources management declined slightly in recent years, from 65.8 per cent in 2017 to 61 per cent in 2020.

The degree of integrated water resources management is measured by collecting questionnaires from key stakeholders. It has to be noted that this degree is significantly influenced by the composition of survey respondents. In addition, it reflects the effects of new strategies and legislation only with a certain delay, therefore caution must be applied when it is used to describe the current state of play.

There are 66 habitat types of European importance in Slovakia, of which 24 are classified as dependent on the aquatic environment. These habitat types are of high natural value. They allow the existence of a large number of native plant and animal species, many of which are rare. They represent the most valuable parts of nature in terms of biodiversity. The habitats which are directly dependent on the water environment are rare elements of our nature due to their local occurrence, endangerment, sensitivity and specific character. In Slovakia, they cover about 0.5% of land area. Among the 642 national sites classified as Special Aras of Conservation (part of the EU Natura 2000 network), 493 sites have been identified as crucially water-dependent.
Measures for the protection of wetlands and water-dependent ecosystems are addressed in a number of conceptual documents, e.g. the Updated National Strategy for Biodiversity Conservation up to 2020, the Strategy for Adaptation of the Slovak Republic to the Adverse Effects of Climate Change, the Orientation, Principles and Priorities of Water Management Policy of the Slovak Republic up to 2027, the Water Plan of Slovakia, the Flood Risk Management Plan, the Strategy for the Development of Tourism up to 2020 and the Strategy for Environmental Policy up to 2030.

Inter-sectoral cooperation remains a challenge for the protection of wetlands. The Ramsar Convention emphasises the need for cooperation between a variety of fields, such as environmental conservation, water management, agriculture, forestry, tourism, energy, and water transport, to achieve the best joint results. Nature knows no administrative borders, therefore international cooperation is essential as well (e.g. among Danube countries, as part of the Carpathian Wetlands Initiative).

Particular attention should be paid to wetlands, which are the subject of the Ramsar Convention on Wetlands of International Importance Especially as Waterfowl Habitat. The Slovak Republic has so far included 14 Ramsar sites in the List of Wetlands of International Importance, covering an area of 39,249 ha.
6.a

By 2030, expand international cooperation and capacity-building support to developing countries in water and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.

The Slovak Republic is an active party to the UNECE (United Nations Economic Commission for Europe) Convention on the Protection and Use of Transboundary Watercourses and International Lakes. In addition to the payment of compulsory contributions, the Ministry of Environment has been involved in cooperation through joint projects and has strengthened the participation of Slovak scientists and academics in UNESCO hydrological programmes. The Slovak Republic actively participated in the preparations for the UN Groundwater Summit and in the 9th World Water Forum.

In 2020, a water security project was successfully implemented in Turkana, Kenya, in cooperation with UNESCO, providing sustainable access to clean and safe water, improving livelihoods as well as promoting sanitation and personal hygiene for target groups.

In November 2021, the Slovak Hydrometeorological Institute organised a training session on hydrometeorological services and water management for representatives of partner hydrometeorological institutes in Central Asia. Slovakia is also part of the international Water Family platform.
Goal 7
Affordable and Clean Energy
Access to affordable and reliable energy is essential for modern standards of living. Moreover, sustainable energy is indispensable to our efforts to counter climate change, one of the biggest threats of our times. Sustainable energy technologies include, in particular, renewable energy as well as technologies to improve energy efficiency.

Interactions with SDG 7

Water is needed for energy production, fossil-fuel extraction and irrigation of feedstock for biofuels. Renewables and energy efficiency can, in most instances, reinforce targets related to water access, scarcity and management by lowering water demands for energy production (compared to a less-efficient fossil energy supply system).

In Slovakia, water energy is the most widely used renewable energy source for electricity production. Thus, it is crucial to ensure the continued availability of clean water as well as quality wastewater management, which remains a major challenge in environmental policy planning.

Retrofitting existing infrastructure to make it energy efficient as well as building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation are pre-conditions for achieving the SDG 7 targets on access to energy services, increasing the share of renewables in the energy mix, and increasing energy efficiency.

Energy is central to urbanisation; energy allows cities to grow and perform. Clean, efficient energy systems, in particular, create the conditions for cities and human settlements to be inclusive, safe, resilient, less-polluting, and more sustainable.

Source: OECD
Possible trade-offs, synergies and transboundary policy impacts

**Trade-offs**

- Increasing the production of bioenergy (as part of SDG 7.2) may increase deforestation (SDG 15.2)

**Synergies**

- Reducing the number of deaths and illnesses from air pollution (SDG 3.9) can be enhanced through facilitating access to clean energy technologies (SDG 7.a)

**Transboundary impacts**

- Limiting the adverse impacts on other countries from domestic reliance on energy-intensive imports (SDG 7.2)
- Ensuring that domestic biofuel subsidies (SDG 7.2) do not lead to higher food prices in developing countries
The impact of current global crises

War in Ukraine
- Russia’s military aggression against Ukraine caused a strong energy supply shock and a sharp rise in energy and commodity prices. The resulting high production costs and reduced household purchasing power has negatively affected growth rates.

COVID-19 Pandemic
- The COVID-19 pandemic led to a temporary decrease in energy demand across the European Union, and contributed to a decline in energy harnessed from non-renewable sources.

Climate change
- There is a wide range of climate hazards having different impact levels on the energy sector: changing temperature, wind conditions, precipitation patterns, heat or cold waves, storms, drought, floods, snow and ice loads as well as landslides. Due to warming, a reduction in energy intensity can be expected in the winter months due to a reduction in heating requirements. However, this can also result in deteriorating energy efficiency due to oversized district heating systems. At the same time, warming would lead to an increase in energy intensity in the summer months due to increased demand for air conditioning. A change in wind conditions can endanger the produced output of existing wind power plants. Fluctuations in the flow volume of watercourses can have a negative effect on the operation of hydropower plants. Droughts can lead to increased need for irrigation which implies rising demands for electricity production and distribution capacity. Wind storms, snow loads, floods or landslides can cause faults and damage to equipment, increased complications in repairs, power outages, and damage caused by power outages.
National implementation framework and progress made

Providing affordable and clean energy for all contributes to the second national priority of “Transformation towards a knowledge-based and environmentally sustainable economy in the face of changing demography and global context”, through supporting an environmentally sustainable and low-carbon economy built on the principles of sustainable energy. SDG 7 also contributes to the fourth national priority of “Sustainable settlements, regions and countryside in the face of climate change”, through ensuring access to basic services and resources and reducing the pollution and contamination of all environmental elements significantly.

Slovakia’s overall performance on SDG 7 is positive, although the currently ongoing energy crisis may put progress in peril. Modern energy with reliable connection (7.1) is widely available in Slovakia, although its affordability is worsening due to increasing energy prices. There has been a considerable increase in the share of renewable energy (7.2) in the total energy mix and energy intensity (7.3) is showing a gradually decreasing tendency.
Electricity is widely accessible in Slovakia, although people at risk of poverty and social exclusion and people who do not have access to adequate housing may face difficulties accessing it. According to the EU_SILC_MRK survey, 6% of people from marginalised Roma communities live without electricity in their homes, and for an additional 15% the connection is inadequate/failing.

In the current situation of rising energy prices, energy poverty may affect an increasing proportion of the Slovak population.

According to the UN Global Database of SDG indicators, 95 per cent of the population relies on clean fuels and technology. Slovakia is among the countries with a medium-high per capita income, which according to the UN methodology are automatically assigned this rate. However, people at risk of poverty and social exclusion, inhabitants of Marginalised Roma Communities, and people who do not have access to adequate housing are more heavily exposed.

7.1
By 2030, ensure universal access to affordable, reliable and modern energy services

7.1.1
Proportion of population with access to electricity

Electricity is widely accessible in Slovakia, although people at risk of poverty and social exclusion and people who do not have access to adequate housing may face difficulties accessing it. According to the EU_SILC_MRK survey, 6% of people from marginalised Roma communities live without electricity in their homes, and for an additional 15% the connection is inadequate/failing.

In the current situation of rising energy prices, energy poverty may affect an increasing proportion of the Slovak population.

7.1.2
Proportion of population with primary reliance on clean fuels and technology

According to Eurostat, Slovakia achieved a total share of energy from renewable sources of 17.4% in 2021. There was a significant improvement in the share of renewable energy in total energy consumption between 2018 and 2019, by 5 percentage points, primarily due to the inclusion of small sources of heating and cooling of households from renewable sources.

7.2
By 2030, increase substantially the share of renewable energy in the global energy mix

7.2.1
Renewable energy share in the total final energy consumption

According to Eurostat, Slovakia achieved a total share of energy from renewable sources of 17.4% in 2021. There was a significant improvement in the share of renewable energy in total energy consumption between 2018 and 2019, by 5 percentage points, primarily due to the inclusion of small sources of heating and cooling of households from renewable sources.
Measures taken by the Ministry of Economy of the Slovak Republic have contributed to this development. Between 2011 and 2018, an average of 0.4% of GDP was directly spent annually on support for renewable energy sources, while indirect support instruments have included, for example, the guarantee of the same purchase price for smaller renewable energy producers for 15 years, or a minimum share of biocomponents in motor fuels.

In the transport sector, a subsidy scheme has been in force for battery electric vehicles and plug-in hybrid vehicles that cost up to 50,000 euros ($56,000). In addition to cars, light-commercial vehicles/vans up to 3.5 tons qualify for the subsidy with no vehicle price restrictions. To further encourage electric vehicles, motor vehicle tax is exempt for such vehicles.

As for the building and construction sector, from the beginning of 2021, all new buildings are required to be ‘nearly zero-energy buildings’, meaning buildings that have a very high energy performance. Households are supported through the “Green to Households” initiative, which supports the use of small renewable resources in single-family homes and apartment buildings, and thus contributes to increasing the share of renewables in energy consumption as well as to reducing greenhouse gas emissions. Heat generators covering the buildings’ electrical energy demand, heat pumps, biomass boilers and solar collectors are entitled to support from this scheme.

In view of the inconsistency between UN and Eurostat data in case of this indicator, we recommend alignment with the European Commission’s methodology.
7.3
By 2030, double the global rate of improvement in energy efficiency

7.3.1
Energy intensity measured in terms of primary energy and GDP

Slovakia’s energy intensity shows a positive, gradually decreasing tendency. This means that, each year, the country needs less energy to produce one unit of output. While the decline was more dynamic in the first half of the period under review, the rate of decline has slowed down in recent years. Overall, between 2000 and 2018, energy intensity decreased by 4.41 MJ/USD, a drop of 51.46%. This trend is adequate, as the country is en route towards reaching the 2030 Agenda target of 3.99 MJ/USD by 2030.

Between 2000 and 2018, the most significant contributors to the decline in final energy consumption were the services sector (by 37 thousand TJ, a decrease of 40.2%) and the household sector (by 22.1 thousand TJ, a decrease of 20.4%). On the contrary, the transport sector recorded the highest growth in final energy consumption (by 55 thousand TJ, an increase of 92%), which is related to the sharp increase in the volume of goods transported by freight and the increase in the number of registered vehicles. The largest energy consumer, industry, increased its consumption by 6,7 thousand TJ. However, its final consumption per euro of nominal output fell by almost four-fifths in the period under review.

This change is due both to new technologies and to targeted measures such as improving the energy performance of privately and publicly owned buildings and compulsory energy audits for large enterprises. A change in the structure of industry, with a greater focus on industries with higher GDP growth, is also contributing to the reduction in energy intensity.
Goal 9
Industry, innovation and infrastructure
Recent crises and disasters have repeatedly accentuated the importance and benefits of building resilient infrastructures, as well as sustainable and diversified industries. In particular, higher-technology industries are showing better performance and faster recovery, providing a strong example of how important it is to foster innovation and technological progress.

Retrofitting existing infrastructure to make it energy efficient as well as building resilient infrastructure, promoting inclusive and sustainable industrialisation and fostering innovation are pre-conditions for achieving the SDG 7 targets on access to energy services, increasing the share of renewables in the energy mix, and increasing energy efficiency.

Industry is responsible for the largest share of Slovakia’s GHG emissions, with 21% of total emissions coming from industrial processes and product use and 16% from manufacturing industries and construction. On the other hand, Slovakia will stop supporting coal mining and electricity production from coal by the end of 2023. The Nováky lignite power plant will be shut down in 2023, and the Vojany hard coal power plant in 2025. The Nováky plant is the country’s second-largest GHG emitter, with reported emissions of 1.5 Mt CO2 in 2019. To secure future electricity supply, two additional reactors are under construction for the Mochovce nuclear power plant, doubling its capacity. With the new nuclear capacity, Slovakia expects to become a net electricity exporter.

Developing sustainable, inclusive and resilient infrastructures is a prerequisite to build sustainable cities and communities.

Source: OECD
Possible trade-offs and synergies

Transboundary impacts

- Ensuring that the high productivity of large-scale industrialization does not have liquidating effects on small-scale industrial and other enterprises abroad.

Trade-offs

- Promoting industrialization (SDG 9.2) must not contradict climate change measures (SDG 13.2)
- Increasing transport opportunities (SDGs 9.1 and 11.2) must not compromise health outcomes (SDGs 3.6 and 3.9)

Synergies

- Resilience to disasters (SDGs 11.5, 11.b and 13.1) can be enhanced through developing quality, reliable, sustainable and resilient infrastructure (SDG 9.1)

The impact of current global crises

War in Ukraine

- The fallouts of the war in Ukraine to the global economy negatively affect industry development, with ramifications for employment.

COVID-19 Pandemic

- The impact of COVID-19 on SDG9 has been dependent on the type of the affected industry. Some sectors, such as the tourism and manufacturing industries, experienced harder impacts due to large-scale social and mobility restriction. Other industries that involve export and import activities were disrupted by lockdown policies worldwide which restricted global trade.
Climate change

- In industry, the effects and consequences of climate change may pose a potential threat to business continuity, cause major industrial accidents, or pose a risk to human safety and health. It is therefore in the interest of businesses to take steps to identify and foresee the risks presented by climate change.

- Extreme weather events cause serious complications for almost all modes of transport. They manifest themselves immediately, intensively and with significant negative consequences: they lead to an increase in transport time for the transport of goods, an extension of travel time and an increase in the probability of accidents and damage to transport infrastructure.

Slovakia’s performance on SDG 9 is uneven and requires increased attention as well as investment. With respect to transport infrastructure (9.1), freight volume has been steadily rising over the past two decades, with road freight transport strengthening its dominant position over rail freight transport. Passenger transport was heavily affected by COVID-19 related travel restrictions and shifts in passenger preferences towards individual transport, the long-term effects of which remain to be seen. Industry’s share of GDP (9.2) has seen an upward trend in the past twenty years, although manufacturing was hard hit by the recent pandemic. Industrialization has favoured large-scale industries more, with a declining trend in the proportion of small-scale industries (9.3) in total industry value added.

National implementation framework and progress made

SDG 9 contributes to the second national priority (transformation towards a knowledge-based and environmentally sustainable economy in the face of changing demography and global context). This can be achieved through supporting change the objective of economic development from an economy-based on low wages and taxes to a knowledge-based economy which is grounded on higher wages, well-adjusted taxes and innovations, as well as moving from the current economic model to an environmentally sustainable economy while minimising undesirable externalities.

Goal 9: Industry, innovation and infrastructure
Some progress was made towards decarbonisation (9.4), although zero emissions from industry are still far ahead. The R&D and innovation sector (9.5) has been lagging behind EU average and Slovakia also needs to pay special attention to better maintain and attract talent.

9.1
Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.

9.1.2
Passenger and freight volumes, by mode of transport

Freight volume is one of the indicators assigned to target 9.1. Freight volumes are measured in tonne-kilometres and are broken down by mode of transport. In Slovakia, road freight transport is dominant, followed by rail freight transport. Inland waterway and air freight transport is used to a negligible extent, given the size of the country.

Road freight transport in Slovakia has shown a sharp increase in total transport performance in recent years. The year-on-year increase in tonne-kilometres between 2002 and 2020 averaged 4.6%. The highest performance of 36.1 billion tonne-kilometres was achieved in 2016. In the last two years, there has been a decline in freight transported, primarily due to the COVID-19 pandemic.
Rail freight transport performance is very volatile and its volume as well as its share of inland freight transport is gradually decreasing mainly in favour of road freight transport.
Passenger volumes are measured in passenger-kilometres. Road passenger transport is the most popular mode of transport and accounts for 89% of total passenger transport performance. Over the course of years a gradual shift of passengers from public road transport (buses and public transport) to individual car transport can be observed, which is an undesirable trend from the point of view of sustainable mobility.

Passenger rail transport is the most used mode of transport after road transport. Since 2015, it experienced a sharp increase in performance, mainly due to the introduction of trains free of charge for students and pensioners. Together with air passenger transport, rail transport has been the hardest hit by the COVID-19 pandemic, with performance falling by up to 46.7% in 2020.
Passenger air transport performance in Slovakia was growing rapidly until 2008, thanks also to SkyEurope Airlines, based in Bratislava. Following its financial problems and subsequent collapse in 2019, passenger numbers fell significantly. Due to the limited offer, a substantial part of passengers from Bratislava use the nearby Vienna airport in Schwechat.
Goal 9: Industry, innovation and infrastructure

9.2
Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry’s share of employment and gross domestic product, in line with national circumstances, and double its share in least developed countries

9.2.1
Manufacturing value added as a proportion of GDP and per capita

Source: UN DESA, SDG Indicators Database
The value added of industrial production in Slovakia has been experiencing an upward trend. In the first half of 2020, there was a significant drop in foreign demand due to the pandemic. The industrial production sector was therefore hit harder than the rest of the economy, resulting in a decline in the share of value added in this sector in total GDP as well as per capita.

According to the UN database, manufacturing employment as a share of total employment (%) has remained roughly stable over the long term (between 23 and 27 per cent). The automation of production processes has led to two phenomena with opposite effects on employment: (1) robotic technologies are replacing tasks that were originally performed using human labour; and (2) automation is increasing the overall productivity of companies. Process (1) reduces the demand for certain occupations that were automated, while process (2) increases the demand for specialised labour that enables firms to better use robotic technologies. The relatively low fluctuation in manufacturing employment shows that greater use of automation in specific tasks is not necessarily leading to the disappearance of jobs, but rather to the reprofiling of workers.

9.3
Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets
National data show a declining trend in the proportion of small-scale industries in total industry value added, in particular in the first half of the past decade. There are several reasons behind this fact. The first is the high percentage growth in the number of large enterprises, which has increased the denominator in the indicator in question. Between 2010 and 2018, the number of enterprises with more than 250 employees saw an increase of 18.1%, the highest among all categories. As large enterprises tend to have the highest value added per enterprise, and as they normally also have higher productivity, almost three-quarters of the growth in value added during this period was generated by large enterprises.

The second reason is the slower growth of value added per enterprise in smaller enterprises than in medium and large ones. While value added grew by 10.6% in enterprises with up to 10 employees between 2010 and 2018, it grew by 41.8% in enterprises with more than 250 employees. Large enterprises, especially those with foreign owners (roughly two-thirds of enterprises with over 250 employees have foreign owners), have shown significantly higher productivity than small, domestic companies over the long term. Thus, knowledge spillovers from large multinationals to smaller companies are still limited.

To reverse this negative trend, there is a need to increase the capacity of smaller domestic companies to innovate and adopt new technologies. To this end, the Ministry of Economy and its subordinate organisations support activities aimed at innovation, international cooperation, education and increasing competitiveness. A number of support instruments from the state budget aimed specifically at small companies (e.g. innovation vouchers or international cooperation in the field of industrial research and experimental development) are implemented to increase the innovation capacity in small and medium-sized enterprises. In addition, support for SMEs is provided in the form of individual and group counselling aimed at developing entrepreneurial skills.
9.3.2

Proportion of small-scale industries with a loan or line of credit

Drawing on data from the register of financial statements, the proportion of small-scale industries with a loan or line of credit shows an increasing trend. The share of small enterprises in manufacturing with 0 to 19 employees that had a loan increased from 26 % to 35 % between 2012 and 2020. This development is in line with the evolution of interest rates over the same period, which was characterised by a relaxation of credit standards in general, as well as for small and medium-sized enterprises.

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, with all countries taking action in accordance with their respective capabilities

9.4.1

CO2 emission per unit of value added

In 2020, the Ministry of the Environment of the Slovak Republic prepared the “Low-carbon strategy for the development of the Slovak Republic until 2030 with a view to 2050”. The strategy cuts across all sectors of the economy, which must implement policies in a coherent manner in order to meet the set goal of completely decarbonising Slovakia by the middle of the century.

To reach this ambition, Slovakia will need to step up existing efforts significantly. Although carbon dioxide emissions from fuel combustion saw a decline over the past two decades, total decarbonisation is still a long way ahead. Progress has been achieved mainly through the EU Emissions Trading System (EU ETS), as the largest CO2 emitters are part of this scheme and are incentivised to decarbonise, by increasing the share of
renewable energy, by introducing less emission-intensive technologies in energy production and by increasing energy efficiency. Measures are planned and implemented under various EU schemes, including the Modernisation Fund, the Recovery and Resilience Plan - Decarbonisation of Industry component, the Upper Nitra Coal Region Transformation Action Plan and the Fit for 55 Package.

Source: UN DESA, SDG Indicators Database
The change in the structure of the economy has not contributed to a reduction in the emission intensity of production between 2011 and 2019 (on the contrary, it has increased it), despite a sharp increase in the share of the low-emission automotive industry in gross value added (from 13% to 25%). In fact, the automotive industry did not gain share at the expense of high-emission industries, but rather at the expense of other low-emission industries such as machinery or the food industry. In contrast, the share of high-emission industries in gross value added slightly increased.

9.5
Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending.
9.5.1

Research and development expenditure as a proportion of GDP

R&D expenditure as a % of GDP has been stagnating since 2012 at 0.8-0.9% of GDP, except in 2015, when total expenditure was affected by the drawdown of EU Structural Funds. By comparison, the EU average has risen continuously from 2.1% to 2.3% of GDP between 2012 and 2019, and all surrounding countries have seen sharp increases.

The private sector accounts for almost half of R&D spending in Slovakia, lagging behind the EU average, where the proportion of expenditure between private and public funding is 3:2. On the positive side, the private sector is gradually increasing its R&D activity. In contrast, the government and higher education sectors are stagnating.

The Recovery and Resilience Plan is an opportunity for improvement, introducing a number of reforms and more funding for research, development and innovation (€630 million). The proposed measures aim to strengthen international cooperation, private-public collaboration, support for outstanding science and researchers as well as thematic support for all R&D and innovation phases in the areas of digitisation and decarbonisation of the economy. In addition to national resources, the Recovery and Resilience Plan funds will be complemented by EU Funds with an estimated value of €1.3 billion.
Development based on innovations requires a creative and productive workforce, therefore, Slovakia needs to pay special attention to improving its capacity to maintain and attract talent.

Although the trend in the number of researchers per million inhabitants has progressed considerably since 2000, the professional capacity for research and innovation is still insufficient. The Slovak Republic employed significantly fewer R&D staff than comparable countries throughout the period under review and, although the number of R&D staff has increased over time, growth has been slower than in EU countries. Slovakia has also seen a decline in the number of young researchers. While in 2006 there were 11 thousand PhD students studying at Slovak universities, in 2019, there were only 6.6 thousand (a decrease of 40%). Studying in Slovakia is unappealing for young researchers due to the lack of scholarships, grants, support for research activities and research infrastructure. The low level of internationalisation of the Slovak research environment is indicated by the fact that foreigners account for only 2% of all academic staff at Slovak universities.

9.b Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities

In the field of development cooperation, the Slovak Republic supports innovative solutions for the development needs of partner countries with a potential for wider use in society. An example is the joint special-purpose fund of the Slovak Republic and UNDP, called the “Slovak Challenge Fund”, which supports innovative interventions of Slovak business entities in the Republic of Moldova and in North Macedonia.

The supported innovations cover a number of areas, including medicine and public health, environmentally sustainable agriculture, energy efficiency and renewable energy, and smart digitisation of cities. In Moldova, the Slovak Republic also supports the development of education and training in information and communication technologies through development cooperation.
Goal 11
Sustainable cities and communities
Cities are home to the majority of the world’s population. They are drivers of economic growth and hubs of innovation and culture. However, they also account for more than 70 per cent of global greenhouse gas emissions and they are marked by increased air pollution. To make urban development sustainable and to turn cities into places of inclusive prosperity, careful planning and management are inevitable.

Interactions with SDG 11

Ensuring access to safe and affordable housing and basic services improves access to adequate sanitation and clean drinking water. Also, water-sensitive/resilient urban design contributes to better water management, including for storm water, groundwater and wastewater management and water supply.

Research and investment in clean energy as well as expanding clean technologies can result in increased renewable energy usage and provide solutions for building sustainable communities and cities for all. Affordable and clean energy is also essential in providing access to safe, affordable, accessible and sustainable transport systems for all.

Investing in technology, research, and innovation is important to achieve upgrades in infrastructures (such as sustainable transport systems, green infrastructure and improved drainage and flood protection). Also, providing access to small-scale industrial and other enterprises to financial services can support building sustainable and resilient cities and communities.

Source: OECD
Possible trade-offs, synergies and transboundary policy impacts

- **Trade-offs**
  - Urbanization (SDG 11) might negatively impact waste reduction efforts (SDG 12.5).
  - Reducing the number of deaths and illnesses from water pollution and contamination (SDG 3.9) can be achieved through upgrading informal settlements (SDG 11.1) and improving access to safe and affordable drinking water (SDG 6.1).
  - Sustaining per capita economic growth (SDG 8.1) can be achieved through enhancing inclusive and sustainable urbanisation (SDG 11.3) and transport systems (SDG 11.2).

- **Synergies**
  - Minimising the ecological footprint of a city on its surrounding regions.

- **Transboundary impacts**
  - War in Ukraine
    - The sudden increase in population due to arrivals from Ukraine might cause an uneven distribution across the country and, consequently, an increased pressure on some residential areas, public services and parts of the country’s infrastructure.
    - The increase in commodity and energy prices and, consequently, the return to conventional energy sources might negatively affect the country’s progression towards sustainable cities and communities and the ability to provide clean energy for industry and households.

The impact of current global crises
COVID-19 Pandemic

- Reduced mobility during the pandemic due to the large-scale social restrictions led to a decrease in greenhouse gas emissions from public transportation. People tended to commute more in their private vehicles to avoid crowds, a phenomenon which may drag beyond the pandemic and increase the collective emissions from passenger transport. Furthermore, since the pandemic, the rise in medical waste and plastic packaging has been a major concern for the environment, as people have increasingly turned to disposable packaging to prevent the spread of the virus. Dangerous and hazardous waste poses a serious threat to the achievement of both SDG 11 and SDG 12 (Responsible Consumption and Production).

Climate change

- Manifestations of climate change in the urban environment include an increase in the number of tropical days and the occurrence of heat waves in summer; uneven temporal and spatial distribution of precipitation; more frequent occurrence of extreme precipitation causing heavy rain, snow, flash floods or mud flows; more frequent occurrence of droughts causing a decrease in the capacity of water resources; and the occurrence of other extreme weather situations (storms, windstorms, tornadoes).

- At present, half of Slovakia’s population lives in cities (approximately 53% of the total population). The impacts of climate change in Slovakia, as elsewhere, are the most noticeable in urban areas, which are characterized by high population density, a high proportion of built-up area and impermeable, paved surfaces and a high concentration of economic activity and infrastructure (so-called “soil sealing”). A relatively high proportion of buildings in Slovakia is designed in accordance with technical standards created mainly in the second half of the 20th century on the basis of past climate conditions, technical possibilities and quality of construction. At the same time, buildings make a significant contribution to energy consumption. These facts bring buildings and their management to the forefront of climate adaptation and mitigation efforts. To mention only a few, measures aimed at improving the energy efficiency of buildings, expanding greenery around buildings, vegetation roofs, and the appropriate spacing and height zoning of buildings are essential.

SDG 11 contributes to the fourth national priority (Sustainable settlements, regions and countryside in the face of climate change) as a tool for limiting the adverse effects of climate change through a combination of mitigation (notably by reducing greenhouse gas emissions) and adaptation (notably through urban planning).
Slovakia’s performance on SDG 11 is more difficult to evaluate than in the case of other SDGs under review. This is due to the complex nature of targets and indicators assigned to this goal, and especially the limited availability of data in the UN Global Database. In some cases, proxy indicators were used, however, data collection efforts in this area need to be stepped up significantly.

Adequate housing (11.1) is generally accessible and the housing deprivation rate has been declining in past years. Some population groups, notably people living in marginalized Roma communities and people at risk of poverty, are more likely to suffer from inadequate housing than the overall population. Sustainable transport (11.2) remains a challenge, as the share of public transport in all passenger transport is well below values from the beginning of the 21st century. COVID-19 also dealt a heavy blow to public transportation. Road safety, on the other hand, is showing a steady positive trend. Spending related to cultural heritage (11.4) has been slowly increasing, although it did not always translate into desired outcomes. There has been a significant progress in recycling municipal waste (11.6), on the negative side, however, the amount of municipal waste generated per capita continued to increase. Air quality as measured by the concentration of fine suspended particles (PM2.5) has been steadily improving in Slovakia, nevertheless, it is still above the maximum level for safety set by WHO. Safety in public spaces (11.7) continued to be highly rated. Finally, there has been some progress in strengthening national and regional development planning (11.a), thanks to the adoption of Slovakia’s Vision and Development Strategy until 2030.
11.1
By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums

11.1.1
Proportion of urban population living in slums, informal settlements or inadequate housing

According to Eurostat data, the share of the population living in a dwelling which is overcrowded and has poor amenities (i.e. leaking roof, no bath/shower and no indoor toilet, or too dark) saw a gradual decline in Slovakia over the past two decades.

However, data on the overall population mask the more difficult situation of people living in Marginalised Roma Communities (MRC). According to EU SILC_MRK, 88% of people in MRC live in households that are considered overcrowded according to the Eurostat definition. Regarding the availability of sanitation facilities, 35% of MRC persons live in households that do not have a shower/bath or flush toilet inside their dwellings.
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.

11.2.1

Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities

When it comes to road safety, developments are more favourable. The death rate due to road traffic injuries declined significantly in the past 20 years.

Data on the proportion of population that has convenient access to public transport is not currently available, however, related indicators can shed some light on the progress achieved in target 11.2. According to Eurostat data, the share of public transport (buses and trains) in inland passenger transport has somewhat increased in recent years. This is mainly due to the introduction of trains free of charge for students and pensioners in 2015, which led to a sharp increase in passenger rail transport performance. The drop in 2020 is attributable to the COVID-19 pandemic. In comparison with the year 2000, when the share of public transport on passenger transport was 35.6 per cent, values in more recent years have been very low, posing a challenge for sustainable mobility.
Despite this positive trend, the number of victims is still high. When converted into the number of days, approximately 33 road accidents occur every day in Slovakia, and on average two people die on our roads every three days. (Source: Slovak Traffic Police) Therefore, the innovative project “Front Brake Light” aims to further improve road safety, in particular for pedestrians. Thanks to the front brake light, pedestrians will be able to see whether an approaching driver sees them when crossing the road and whether the driver reacts by braking. The project originated in Slovakia and testing is being conducted under the auspices of the University of Žilina. Currently, more than 3,000 vehicles are involved, including 6 service vehicles of the Ministry of Investments, Regional Development and Informatization of the Slovak Republic.
11.4

Strengthen efforts to protect and safeguard the world’s cultural and natural heritage

11.4.1

Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>$192,501,174</td>
<td>$144,133,274</td>
<td>$152,991,563</td>
<td>$179,659,268</td>
<td>$204,010,819</td>
<td>$206,370,141</td>
<td>$208,730,467</td>
</tr>
<tr>
<td>State / capita</td>
<td>$35,49</td>
<td>$26,54</td>
<td>$28,13</td>
<td>$32,98</td>
<td>$37,40</td>
<td>$37,80</td>
<td>$38,32</td>
</tr>
<tr>
<td>Regional</td>
<td>$100,727,114</td>
<td>$111,509,414</td>
<td>$116,911,893</td>
<td>$126,409,149</td>
<td>$141,851,102</td>
<td>$140,002,792</td>
<td>$148,556,560</td>
</tr>
<tr>
<td>Regional / capita</td>
<td>$18,57</td>
<td>$20,53</td>
<td>$21,49</td>
<td>$23,21</td>
<td>$26,01</td>
<td>$25,65</td>
<td>$27,27</td>
</tr>
<tr>
<td>Local</td>
<td>$6,291,627</td>
<td>$9,344,749</td>
<td>$7,634,480</td>
<td>$2,799,617</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local / capita</td>
<td>$1,16</td>
<td>$1,71</td>
<td>$1,40</td>
<td>$0,51</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public Total</td>
<td>$293,228,288</td>
<td>$255,642,687</td>
<td>$269,903,455</td>
<td>$312,360,044</td>
<td>$355,206,670</td>
<td>$354,007,414</td>
<td>$360,086,643</td>
</tr>
<tr>
<td>Public Total / capita</td>
<td>$54,06</td>
<td>$47,07</td>
<td>$49,62</td>
<td>$57,35</td>
<td>$65,13</td>
<td>$64,85</td>
<td>$66,10</td>
</tr>
</tbody>
</table>

Source: Ministry of Culture of the Slovak Republic
Slovakia has a rich cultural heritage infrastructure, including 16 UNESCO heritage sites and elements of the intangible cultural heritage. The estimated total public expenditure on the preservation, protection and conservation of cultural heritage in Slovakia has risen from $54 per capita in 2015 to $66 per capita in 2021, expressed in PPP. According to the Cultural Spending Review concluded in 2020, public spending per capita is comparable to other EU countries, however, public policies aimed at museums, libraries, monuments, or intangible heritage that relies on heavy regulation and supporting schemes, are not delivering the desired results for the public. Slovakia is ranking below the EU average in per-capita attendance of museums and registration rate in libraries. In addition, as many as 25% of monuments are in a bad or desolate structural and technical condition, which is hard to compare, but unsatisfactory. Therefore, the efforts to safeguard cultural heritage should not be measured in monetary terms only, but also in terms of the efficiency and results of policies.

11.6
By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management

11.6.1
Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities

![Recycling rate of municipal waste chart](Source: Eurostat, online data code: SDG_11_60)
Available data from Eurostat demonstrate a positive trend in recycling municipal waste. Recycling includes material recycling, composting, preparing for re-use and anaerobic digestion. Municipal waste consists mostly of waste generated by households, but may also include similar wastes generated by small businesses and public institutions and collected by the municipality. The recycling rate of municipal waste gradually increased from 14.9% in 2015 to 48.9% in 2021.

At the same time, the amount of municipal waste generated per capita has been increasing in Slovakia, pointing to the prevalence of unsustainable production and consumption patterns. The amount of municipal waste increased from 348 kg/inhabitant in 2015 to 497 kg/inhabitant in 2021.

The concentration of fine suspended particles of less than 2.5 microns in diameter (PM2.5) has been steadily declining in Slovakia, and reached 16.6 micrograms per cubic metre in 2019 (population-weighted average mean concentration). Nevertheless, this value is still above the maximum level for safety set by WHO of 10 micrograms per cubic metre.
The decline is the result of legislative adjustments, decommissioning of high-emission, unprofitable technologies, but also technological progress and changes in the structure of the economy. In recent years, however, progress has been sluggish, with even a slight upward trend in PM2.5 emissions in the domestic heating sector, linked to the increased combustion of solid fuels, especially biomass. A number of measures are proposed in this regard, aiming, for example, at the reduction of the energy intensity of buildings through better insulation and other measures. Forthcoming new legislation should give local authorities stronger competences in the management of local air quality and control of small combustion plants burning solid and liquid fuels.
11.7

By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

11.7.2

Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months

According to Eurostat data, the share of the population who reported that they face the problem of crime, violence or vandalism in their local area was 4.3 per cent in 2020. This constitutes a significant improvement from 10.2 per cent in 2010 and is also one of the lowest values among the EU countries.
Goal 11: Sustainable cities and communities

11.a

Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning

11.a.1

Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space

To ensure sustainable development in cities as well as in the countryside, quality integrated territorial and strategic planning is necessary, respecting the principles of partnership and participatory creation and implementation of public policies in order to resolve challenges affecting progress towards SDG 11. These challenges include the prospect of unfavorable demographic changes, internal migration and uneven distribution of the population across the country; affected also by the war in Ukraine. These factors significantly affect the overall economic structure, the quality of the environment, as well as the availability of basic public services for citizens (e.g., transport accessibility, length of commuting time to work and school, availability of health care) and the cost of providing these public services in individual regions.

Integration, policy coherence and participation are some of the key principles of Slovakia’s Vision and Development Strategy until 2030, which also serves the purpose of National Strategy of Regional Development.
Goal 17

Partnerships for the Goals
Goal 17 comprises the necessary tools to implement the 2030 Agenda in all countries and for all people across the world. It includes a range of means of implementation (such as financing, technological progress, capacity-building, trade, policy coherence, multi-stakeholder partnerships and data, monitoring and accountability) and therefore it is difficult to summarise progress achieved in implementing it. Below is a summary of some of the key indicators for which data are available.

Domestic resource mobilisation shows a stable trend and official development assistance expenditures have slightly increased. Nevertheless, to achieve the goal of providing 0.33% ODA/GNI by 2030, the growth of ODA spending needs to be accelerated considerably. Access to the Internet, as an important tool for access to public information, has been steadily increasing and is close to being universal.
17.1

Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection.

17.1.1

Total government revenue as a proportion of GDP, by source

The decline of the indicator after 2015 is due to the end of the 2nd programming period of EU funds and the slow start of the 3rd programming period. A gradual increase is expected until 2023, when the drawdown of funds from the 3rd programming period is due to be completed. Total government revenue as a proportion of GDP increased slightly in 2020, as the decline in the performance of the economy caused by the pandemic was more pronounced than the decline in tax revenues, which hardly declined at all. The usually pro-cyclical corporate tax collection did not fall during the pandemic, thanks to stable revenues from powerful sectors (trade, energy, finance) that account for the majority of value added in the economy. Despite the pandemic and a slight decline in employment, wages grew and sustained labour tax revenues, which also contributed to stable household consumption.
17.1.2
Proportion of domestic budget funded by domestic taxes

This indicator helps to understand the extent to which countries’ current and capital expenditures are covered by domestic resource mobilization in the form of taxes. The proportion of domestic budget funded by domestic taxes increased between 2000 and 2020, but progress has been uneven, reflecting the evolving economic situation.

Source: UN DESA, SDG Indicators Database
17.2

Developed countries to implement fully their official development assistance commitments, including the commitment by many developed countries to achieve the target of 0.7 per cent of gross national income for official development assistance (ODA/GNI) to developing countries and 0.15 to 0.20 per cent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 per cent of ODA/GNI to least developed countries.

17.2.1

Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors’ gross national income (GNI).
The Slovak Republic has been a net provider of Official Development Assistance since 2003, when it was removed from the list of countries eligible to receive development assistance maintained by the Organisation for Economic Co-operation and Development due to exceeding the per capita national income level.

The Slovak Republic is not among the countries bound by the commitment to provide at least 0.7% of gross national income for official development assistance (ODA/GNI) and 0.15% to 0.20% of ODA/GNI to least developed countries, but it respects this target as a collective commitment of the Member States of the European Union and of the OECD Development Assistance Committee, where Slovakia is also a member.

The current Medium-Term Strategy for Development Cooperation of the Slovak Republic for 2019-2023 contains a non-binding financial plan for achieving 0.33% ODA/GNI by 2030. This indicative plan envisages a nominal annual growth of ODA in the range of 6% - 14%. The actual nominal growth of ODA over the last seven years with available data (2014-2020, i.e. during the last two Medium-Term Strategies for Development Cooperation) averaged 7.2%.
17.6

Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.

17.6.1

Fixed Internet broadband subscriptions per 100 inhabitants, by speed

Significant progress has been made over the last twenty years in the area of fixed broadband subscriptions per 100 inhabitants. The ambition is for all households, whether rural or urban, to have access to an internet connection of at least 100 Mbit/s by 2030, with the possibility of upgrading to gigabit speeds.
17.8

Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology.

17.8.1

Proportion of individuals using the Internet

The Internet is becoming an increasingly important tool for access to public information, which is an important means of protecting fundamental freedoms. Access to the internet has changed the way people live, communicate, work and do business. The number of internet users in Slovakia has increased significantly over the last decade from less than 1 in 10 people in 2000 to almost 9 in 10 in 2020.
5.4. External dimension of the implementation of the 2030 Agenda

In accordance with the Concept for the Implementation of the 2030 Agenda in an International Environment, approved by Government Resolution 5/2017, Slovakia has been actively participating in the implementation of the 2030 Agenda beyond its borders, including through cooperation with the international community and foreign partners. The co-operation takes place under three headings:

- initiating and engaging in activities at a global level aiming to address the 2030 Agenda and its goals,
- working with partner/developing countries to meet the goals of the 2030 Agenda,
- applying international experience and best practice in the implementation of the SDGs in Slovakia.

The activities of the Slovak Republic related to the external dimension of the 2030 Agenda are concentrated in particular within the following international organizations and groups: United Nations, OECD, European Union and Central European Initiative.

In recent years, the Slovak Republic has continued to make voluntary financial contributions to international organisations. The Slovak Republic has been active in partner countries in the framework of official development cooperation (ODA) through dozens of bilateral projects annually.

The total amount of ODA provided by the Slovak Republic reached approximately EUR 142 million in 2021. For the period 2018-2020, the Ministry of Foreign and European Affairs / Slovak Aid Agency launched 39 calls for grant applications, supporting 169 projects for a total amount of more than EUR 12.5 million. In 2018-2020, the Slovak Republic also funded the deployment of 69 volunteers to developing countries, provided financial contributions through its embassies (microgrants) totalling approximately EUR 1.64 million and carried out 37 activities under the CETIR/Sharing Slovak Expertise programme. Although Slovakia is continuously committed to the international target of 0.33% of ODA to GNI by 2030, it is lagging behind meeting this target (0.15% of GNI in 2022).
As part of its development cooperation activities, the Ministry of Foreign and European also supports global development education, which includes raising awareness on the 2030 Agenda among students and teachers.

The Medium-Term Strategy for Development Cooperation of the Slovak Republic for 2019-2023 focuses on six sectoral priorities, in line with the six national priorities for the implementation of the 2030 Agenda in the Slovak Republic. Through multilateral and bilateral ODA, Slovakia thus contributed to the implementation of the 2030 Agenda in partner countries, in the case of bilateral ODA primarily in programme countries (Kenya, Georgia, Moldova) and in priority regions and countries (Western Balkans, Eastern Partnership, Eastern Sub-Saharan Africa, Middle East, Afghanistan). Details of this contribution relative to the 5 SDGs under review in 2023 have been incorporated under each of these goals in chapter 5.3. Information on the remaining goals is available in the Second Monitoring Report on Progress in the Implementation of the 2030 Agenda.28

6. New and emerging challenges

6.1. COVID-19 pandemic

Labour market during quarantine

The economic crisis caused by the COVID-19 pandemic manifested itself in Slovakia through the fastest increase in unemployment since the 2009 global financial crisis. While in 2009 the number of unemployed increased by 36% in June compared to January, in 2020 this was up to 47% (Chart 1). These developments suggest that the sudden interruption of economic activity caused by quarantine measures may have comparable consequences for the labour market as the 2009 global financial crisis. On the other hand, the better situation in the labour market just before the crisis contributed to the fact that, in absolute terms, the increase in unemployment in the first six months was lower than in 2009 (Chart 2).
When it comes to occupational risk, the professions most exposed to COVID-19-related risk were employees in health care, police, and fire protection. These essential occupations could not be halted during the pandemic, on the contrary, employees were constantly on call and were exposed to a higher risk of contagion.

Chart 1: Increase in unemployment in the first 6 months of 2020 was the fastest since the 2009 global financial crisis (Index, January = 100)

Chart 2: In absolute values the increase in unemployment in the first 6 months of 2020 was lower than in the crisis year of 2009 (thousands of people)
After the outbreak of the COVID-19 pandemic, Slovakia introduced measures aimed at maintaining jobs through the so-called First Aid mechanism. Participation in the mechanism peaked in May 2020, when schemes to maintain employment supported 408,000 workers (19.8% of employees) (Chart 3). Compared to the crisis year of 2009, the state – through active labour market policies – financially supported the retention of 38,000 jobs. The First Aid in Slovakia constituted an investment of almost 2.2 billion euros by December 2021, of which 481 million euros in the first wave of the pandemic.

The extent of aid was close to the EU average and similar to that in Germany or the Czech Republic (Chart 4).

**Chart 3:**
**Number of supported employees in thousands of people**
Chart 4: Support of employees was average compared to the developed countries (data from April or May 2020, in %)

Source: OECD
Industry

Slovak industry experienced a historic decline in activity during the first wave of COVID-19. The main cause was industry’s dependence on car production, nevertheless, quarantine measures also contributed. The summer months of 2020, with a positive epidemiological development, favoured industrial activity, which was mainly driven by the rapidly recovering automotive sector. The result was a faster recovery in manufacturing than during the 2009 global financial crisis. In the first months of COVID-19, the Slovak industry suffered the most of all EU countries. As a result of the decline in foreign demand, disruption of supply chains and quarantine measures, production fell in most industrial sectors, which was reflected in industrial production data as well as sales. Industrial activity bottomed out in April 2020, when it was 42% lower year-on-year, which represented the worst decline in the history of independent Slovakia (Chart 5). In May, with the gradual reopening of the economy, industry began to recover, which was largely supported by the favourable development of our largest business partners. Thanks to robust month-on-month growth, the industry sector already erased three-quarters of the slump caused by COVID-19 by June 2020. From the point of view of sales, the production of pharmaceutical products, chemicals and food was the most successful during the pandemic crisis (Chart 6).

Chart 5: Evolution of industrial production and revenue (SA, 100 = 2015)
EU funds interventions

Slovakia made use of the EU funds to:

- **Implement the measures to combat the COVID-19 pandemic in the amount of 1.1 billion EUR, aimed to:**
  - maintaining employment: 410.2 mil. EUR,
  - health care system: 204.3 mil. EUR,
  - small and medium-sized enterprises: 330.2 mil. EUR, later increased to 480.32 mil. EUR,
  - components of the integrated rescue system: 51 mil. EUR,
  - other measures to mitigate the impact of COVID-19: 109.3 mil. EUR.

- **Eliminate the impacts of the COVID-19 pandemic (REACT-EU) in the amount of 745 mil. EUR, aimed to:**
  - maintaining jobs,
  - provision of social services to citizens,
  - resilience of the healthcare system,
  - distance education at schools,
  - financing of green activities (cycling routes),
  - insulation of apartment buildings,
  - increasing the capacities of primary schools and the level of vocational education,
  - financial support for paramedics, police officers and firefighters,
  - provision of food packages for the most vulnerable persons.
EU funds delivered:

- Purchase of 419 lung ventilators,
- 219,516 employers and 564,215 persons were supported under the “kurzarbeit” schemes,
- Provided 7540 bridging and 8 convertible loans for SMEs, purchased 15,294,540 tests for diagnosis and testing for COVID-19,
- Purchased 1,664,515 vaccination doses against COVID-19,
- Supported more than 80 thousand employees in the front line of providing assistance (paramedics, police officers, firefighters),
- Exceptional temporary support for 166 micro, small and medium enterprises in the field of agricultural processing.

The strongest EU tool for fighting the COVID-19 pandemic impact is the Recovery and Resilience Plan (RRP). RRP consists of 18 components. Although a direct link of RRP to SDGs is difficult to show, an indirect link is displayed in table 3.

Table 3: Recovery and Resilience Plan of Slovakia

<table>
<thead>
<tr>
<th>Component</th>
<th>Relevance to SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Renewable sources of energy and energy infrastructure</td>
<td><img src="image1" alt="Image" /> <img src="image2" alt="Image" /> <img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>2 Rehabilitation of buildings</td>
<td><img src="image1" alt="Image" /> <img src="image2" alt="Image" /> <img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>3 Sustainable transport</td>
<td><img src="image1" alt="Image" /> <img src="image2" alt="Image" /> <img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>4 Decarbonisation of industry</td>
<td><img src="image1" alt="Image" /> <img src="image2" alt="Image" /> <img src="image3" alt="Image" /></td>
</tr>
<tr>
<td>5 Climate adaptation</td>
<td><img src="image1" alt="Image" /> <img src="image2" alt="Image" /> <img src="image3" alt="Image" /></td>
</tr>
</tbody>
</table>
### EDUCATION

<table>
<thead>
<tr>
<th>Component</th>
<th>Relevance to SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Availability, development and quality of education at all levels</td>
<td></td>
</tr>
<tr>
<td>7 Education for 21st century</td>
<td></td>
</tr>
<tr>
<td>8 Improvement of performance of universities</td>
<td></td>
</tr>
</tbody>
</table>

### SCIENCE, RESEARCH, INNOVATIONS

<table>
<thead>
<tr>
<th>Component</th>
<th>Relevance to SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 More efficient management and strengthening of financing of science, research and innovations</td>
<td></td>
</tr>
<tr>
<td>10 Attracting and keeping talents</td>
<td></td>
</tr>
</tbody>
</table>

### HEALTH

<table>
<thead>
<tr>
<th>Component</th>
<th>Relevance to SDGs</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Modern and available health care</td>
<td></td>
</tr>
<tr>
<td>12 Human, modern and available mental care</td>
<td></td>
</tr>
<tr>
<td>13 Available and quality long-term social-health care</td>
<td></td>
</tr>
</tbody>
</table>
Humanitarian aspects

Slovakia supported Ukraine since the very beginning of the Russian aggression, covering immediate help to refugees, granting residence permissions, employment, health and social subsidies etc.

As of 1 March 2023, the number border crossings from Ukraine since the beginning of the war on 24 February 2022 reached 1,214,135.29 98,095 Ukrainians applied for temporary refugee status.30

Civil society and NGOs had a major share in Slovakia’s humanitarian response to the war in Ukraine. In 2022, Slovak NGOs collected EUR 16.8 million for humanitarian aid to Ukrainian refugees in Slovakia and people in Ukraine. In addition, material aid reached the value of EUR 22 million.31

---

29 This figure reflects cross-border movements (and not individuals). Source: UNHCR https://data.unhcr.org/en/situations/ukraine
30 Source: Ministry of Interior https://www.minv.sk/?docasne-utocisko
31 Source: Ambrela – Platform for Development Organisations
Inflation and the war in Ukraine

Prices in Slovakia and abroad began to rise sharply during the COVID-19 pandemic. The increase was initially driven mainly by supply-side factors related to a shift in demand from services to goods, which led to bottlenecks in global industry and logistics. While significant inflation growth was initially expected to moderate during 2022, the war in Ukraine is delaying return to pre-crisis inflation rates. The war has caused a further increase in prices, mainly through the increase in energy prices, but also through the extension of the duration of problems in the supply chains. A significant increase in prices represents a risk for low-income households and especially for people dependent on social benefits, which are adjusted for inflation only with a delay.

Employing Ukrainian refugees

The refugee crisis due to the Russian invasion of Ukraine has also affected the Slovak economy. The employment of refugees has increased the production capacity of the labour market. At the end of 2022, there were 15,000 economically active Ukrainian citizens in Slovakia, which may further increase in 2023. In particular, jobs are being filled that locals cannot fill in the long term. Apart from higher investments and exports, it is expected that thanks to the higher consumption of goods and services by employed refugees, Slovakia’s GDP growth will increase by additional 0.2 percentage points in the coming years. Supported economic activity should also be returned to the state in the form of taxes and levies in the amount of 0.1% of GDP every year. The positive effects of refugee employment on public finances are expected to be of a more permanent nature, while the initial fiscal costs of up to 0.3% of GDP (partially reimbursed by the EU) will almost completely disappear after 2023. However, the overall positive impact of employing refugees on the Slovak economy and public finances can still be increased. Eliminating unnecessarily long waiting times, redundant confirmations, or reducing fees would contribute to a higher number of employed refugees as well as foreigners in our economy.

Further information on impact of the war in Ukraine can be found in chapter 5, which describes interlinkages between SDGs.
Russia’s military aggression against Ukraine has created a new geopolitical reality that has radically disrupted the global energy market. One of the responses is the European Commission’s new REPowerEU plan aiming to support the reduction of dependence on fossil fuels, the diversification of fossil fuel imports and the acceleration of the transition to renewable energy sources. Given the unprecedented rise in energy prices and the associated inflationary pressures, immediate temporary measures are also necessary to mitigate the negative impact of rising energy prices on businesses and households. An overview of such measures adopted by the Slovak government is included in the below table.

<table>
<thead>
<tr>
<th>Consumer groups</th>
<th>Energy type</th>
<th>Measure</th>
<th>Length of measure</th>
<th>Estimated costs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Households</strong></td>
<td>Electricity</td>
<td>Price freezing of electricity supplies at the level of 2022</td>
<td>2023</td>
<td>0 (Electricity will be supplied in a general economic interest)</td>
</tr>
<tr>
<td></td>
<td>Electricity</td>
<td>Price freezing of regulated charges at the level of 2022</td>
<td>2023</td>
<td>400 mil. EUR</td>
</tr>
<tr>
<td></td>
<td>Gas</td>
<td>Increase of end price by 15%</td>
<td>2023</td>
<td>1,69 bln. EUR</td>
</tr>
<tr>
<td></td>
<td>Heat</td>
<td>Maximal price increase by 20 EUR/MWh incl. VAT compared to the level of 2022, Maximal price 199 EUR/MWh incl. VAT</td>
<td>2023</td>
<td>395 mil. EUR</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy of the Slovak Republic
<table>
<thead>
<tr>
<th>Consumer groups</th>
<th>Energy type</th>
<th>Measure</th>
<th>Length of measure</th>
<th>Estimated costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected vulnerable consumers*</td>
<td>Electricity</td>
<td>Price freezing of electricity supplies at the level of households of 2023</td>
<td>2023</td>
<td>105 mil. EUR</td>
</tr>
<tr>
<td></td>
<td>Electricity</td>
<td>Price freezing of regulated charges at the level of 2022</td>
<td>2023</td>
<td>100 mil EUR</td>
</tr>
<tr>
<td></td>
<td>Gas</td>
<td>Price freezing of gas supplies for households at the level of 2023</td>
<td>2023</td>
<td>245 mil. EUR</td>
</tr>
<tr>
<td>*Institutions of social services, institutions of social and legal protection of children and social guardianship, houses owned by municipals dedicated to social living, rent houses supported by state, house boilers,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consumer groups</th>
<th>Energy type</th>
<th>Measure</th>
<th>Length of measure</th>
<th>Estimated costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small consumers**</td>
<td>Electricity</td>
<td>Electricity supply for 199 EUR/MWh</td>
<td>2023</td>
<td>235 mil. EUR</td>
</tr>
<tr>
<td></td>
<td>Gas</td>
<td>Gas supply for 99 EUR/MWh</td>
<td>2023</td>
<td></td>
</tr>
<tr>
<td><strong>Annual electricity consumption up to 300 MWh, Annual gas consumption up to 100 MWh,</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Consumer groups | Energy type | Measure | Length of measure | Estimated costs
--- | --- | --- | --- | ---
**Other subjects*** | Electricity | Reverse compensation of 80% of costs for the supply of electricity above 199 EUR/MWh | 1stQ 2023 | 180 – 300 mil. EUR

**Other subjects**** | Gas | Reverse compensation of 80% of costs for the supply of gas above 99 EUR/MWh | 1stQ 2023 | 180 – 300 mil. EUR

### Consumer groups | Energy type | Measure | Length of measure | Estimated costs
--- | --- | --- | --- | ---
**Other subjects*** | Electricity | Reverse compensation of 80% of costs for the supply of electricity above 199 EUR/MWh | 08-09 2022 | 77,1 mil. EUR

**Other subjects**** | Gas | Reverse compensation of 80% of costs for the supply of gas above 99 EUR/MWh | 08-09 2022 | 77,1 mil. EUR

---

***Maximal compensation for electricity and gas together at the level of 200 thousand EUR per economic unit

****Maximal compensation for electricity and gas together at the level of 500 thousand EUR per economic unit

Source: Ministry of Economy of the Slovak Republic
7. Means of implementation
7.1. Financing

No direct financial strategy to finance SDGs has yet been elaborated. Slovakia covers most of its investment needs from EU funds. Table 1 (page 22) demonstrates the interrelations between EU funded programmes and the SDGs. In addition, table 3 (page 132) shows a link between the Recovery and Resilience Plan and the SDGs. As for the external dimension of the 2030 Agenda, ODA is an established mechanism to finance SDGs implementation beyond Slovakia’s borders.

7.2. Capacity development

Slovakia has been actively collaborating with the OECD in issues related to 2030 Agenda implementation and monitoring from as early as 2017. This cooperation has been greatly beneficial for building national capacities on the indicator framework, strategic planning and strategic foresight, to mention only a few. Two new cooperation projects are currently in the pipeline, focusing on the measurement framework for SDGs and on the topic of strategic communication.

7.3. Data needs

As it was elaborated in chapter 4.6. Systemic Issues and Transformative Actions, data continue to be a serious challenge. The UN SDG Indicators Database had to be on several occasions complemented by data from Eurostat or national sources in order to be able to provide at least a partial account of the state of play and progress made on respective SDGs. Throughout the VNR report a number of indicator/data points were highlighted.
Since its last VNR in 2018, Slovakia has made a significant step forward in the form of the adoption of the Vision and Development Strategy until 2030, in line with the 2030 Agenda. Policy integration is a strong positive feature of this document, which also further solidifies the existing institutional framework for the implementation of the 2030 Agenda based on multi-stakeholder participation. On the other hand, when it comes to means of implementation, the strategy falls short of aligning the national budget with SDGs, and it also does not address some of the systemic transformations in governance structure which are necessary for more the effective implementation of policies.

The Vision and Development Strategy of the Slovak Republic until 2050, currently under preparation, aims to remedy these shortcomings. Similarly to the national priorities for the implementation of the 2030 Agenda, the 2050 Vision and Development Strategy will be based on a whole-of-society participation process.

Since the very beginning of Slovakia’s efforts to implement the 2030 Agenda, we have collaborated intensively with the OECD and received valuable guidance and support, notably in the domains of strategic governance and indicators. This joint work has allowed us to map the existing state of policy coherence for sustainable development (PCSD) in the country, which is a fundamental precondition for the achievement of the Sustainable Development Goals. PCSD principles have been streamlined in the 2030 Vision and Development Strategy as well as the 2023 VNR, and the 2050 Vision and Development Strategy will be no exception.

Through these advances, Slovakia aspires to add its share to global efforts leading towards the implementation of the 2030 Agenda for Sustainable Development. This VNR and its chapters detailing the progress made, testify that Slovakia is well aware not only of its successes but also of its shortcomings. In several cases, indicators are reminding us of considerable gaps and the need to speed up implementation. Globally, the picture is not much rosier, as gaps have been exacerbated by multiple crises, among which climate change, COVID-19 and the war in Ukraine are the most prominent. As we describe in detail in chapter 4.6, uneven progress in the past eight years has demonstrated that, in addition to setting ambitious global goals and establishing worldwide monitoring mechanisms, a more intensive international coordination of implementation is also inevitable. At the mid-point of the implementation of the 2030 Agenda, it may not yet be too late to refocus all our attention on the ambition of achieving the SDGs. Therefore, we call on the United Nations and its Regional Commissions to take on a more active role in coordinating implementation efforts and facilitating meaningful exchanges of experience at political and expert level, to make sustainable development by 2030 a reality.