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Growing Challenges for Sustainable Development: Can the UNECE Region Turn the Tide in 2023?

SUSTAINABLE DEVELOPMENT GOALS

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Growing Challenges for Sustainable Development: Can the UNECE Region Turn the Tide in 2023?

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Foreword

In September 2023, the SDG Summit will mark the mid-point of the period designated to fulfil the 2030 Agenda for Sustainable Development. This milestone is expected to lead to a new phase of accelerated progress towards achieving the Sustainable Development Goals (SDGs). However, with the reverberating impacts of the Covid-19 pandemic, the war in Ukraine, surging inflation and public debt, and the deteriorated short-term economic outlook, this will undoubtedly be challenging globally as well as in the UNECE region. In view of these concurrent crises, the United Nations Secretary-General has called for an urgent rescue effort for the Sustainable Development Goals.

It is clear that even in the midst of the crises, the Sustainable Development Goals are our future. Regional and international cooperation must be strengthened to meet the growing challenge of getting there, find the required solutions and promote those that work well. The key action of UNECE in this direction is the Regional Forum on Sustainable Development, which highlights the importance of the regional perspective for accelerated implementation of the Sustainable Development Goals. In 2023, the seventh Regional Forum will bring together all kinds of actors to promote action, solutions and peer learning to achieve the sustainability transformation in the UNECE region.

To inform the debate, it is essential to know where the region stands in fulfilling the 2030 Agenda, which targets are on track to be achieved and which are not. To provide this information, the UNECE Statistical Division has prepared the present regional SDG progress report, the fourth in our series of annual progress reports, using the latest data available in the United Nations Global SDG Indicators Database.

The report reveals some of the destructive impacts of the current crises on the achievement of SDGs. On the whole, the region is further away from fulfilling the 2030 Agenda today than it was a year ago when the previous assessment was conducted. The number of SDG targets that are on track to be achieved has decreased. But this is far from the full story. You can also read in the report about areas where development is on track or has improved since the previous assessment. One important improvement is in the availability of data, which has allowed the assessment to be more comprehensive this time.

Beside assessing progress on the basis of available statistics, this report presents stories by agencies, the United Nations country teams, led by the Resident Coordinators for the programme countries in the region, and, for the first time, from all UNECE programmes of work. Those stories illustrate concrete ways in which the international community is making change happen. They offer hope that by working together we can turn the tide and realize our sustainable future.

Olga Algayerova
United Nations Under-Secretary-General
UNECE Executive Secretary

Contents

Introduction 1

Progress in the UNECE region 2

How is progress assessed? 2
How many targets are on track? 2
Is the region on track to meet the Goals by 2030? 4

Stories 10

Key messages 10
A partnership promoting innovative solutions and community empowerment 13
Data on drinking water quality highlight the acceleration required to meet SDG targets in rural areas 17
Setting SDG targets and indicators under the Protocol on Water and Health in Portugal 21
First SDG dialogue "Green transformation in Azerbaijan" 26
Reducing energy costs of small food producing and processing businesses in rural areas of Georgia 30
Greening industries in the European Union's Eastern Partnership countries – the path towards circular economy in Georgia and Ukraine 35
Leveraging trade and innovation to enhance contribution of micro-, small- and medium-sized enterprises to sustainable development in Uzbekistan 38
Enhancing risk knowledge with the INFORM Subnational Risk Index for South-East Europe 41
Transport of dangerous goods 45
Promoting people-centred, smart and sustainable cities in countries with economies in transition 48
Preventing gender-based violence through innovation 51
Strengthening availability and disaggregation of SDG indicators through the new round of Multiple Indicator Cluster Surveys 54
Making progress in measuring progress – are we on track? 58

Technical notes on the progress assessment 60

Data 60
Assessment measure 60
Estimation and aggregation 60
Target values 61
Indicators used in the assessment 63

Figures

Figure 1 Food security and poverty rate in the Shirak region (Armenia) 14
Figure 2 Example of a planting scheme for a 100 square metre berry garden 15
Figure 3 Safely managed and basic drinking water services in rural areas in 2020, per cent of households covered 18
Figure 4 At least basic water services in rural areas in 2020, per cent of households covered 19
Figure 5 Rural progress towards universal access to safely managed drinking water services (2000–2020) among countries with less than 99 per cent rural coverage in 2020 20
Figure 6 Percentage of households located in the utility's intervention area with satisfactory evaluation in the indicator 'AR01 – Service coverage through sewerage networks', Portugal, 2016–2021 22
Figure 7 Affordability for drinking water supply at the national level in Portugal, 2017–2021 24
Figure 8 Geographical disparities in the affordability indicator for drinking water supply in Portugal 25
Figure 9 CO2 emissions and productivity in Azerbaijan, 2007–2018 28
Figure 10 Solid waste generation by households in Azerbaijan, 2000–2021 29
Figure 11 Proportion of population with primary reliance on clean fuels and technology in Georgia, 2000-2020, per cent 31
Figure 12 International financial flows to Georgia in support of clean energy research and development and renewable energy production, millions of United States dollars 32
Figure 13 Share of cumulative financial inflow by technology, 2001–2019, per cent 32
Figure 14 Investments to and savings from resource-efficient and cleaner production by selected companies in Georgia and Ukraine 37
Figure 15 Number of operation enterprises in Uzbekistan, 2016–2021 Despite the COVID-19 pandemic, entrepreneurship in Uzbekistan is booming 39
Figure 16 SFDRR and SDGs common reporting interlinkages 42
Figure 17 INFORM Subnational Risk Index SEE 2021, DRR component, contribution to Institutional risk, by administrative unit in Albania, Montenegro and North Macedonia 43
Figure 18 The performance of Bishkek against the Key Performance Indicators for Smart Sustainable Cities 50
Figure 19 Legal provisions on awareness about domestic violence in Armenia according to the Baseline Study On Gender Norms and Stereotypes 51
Figure 20 Perceptions of domestic violence and justice in the six countries of the EU Eastern Partnership, according to the Baseline Study On Gender Norms and Stereotypes 52
Figure 21 Perceptions of domestic violence and justice among Armenians according to the Baseline Study On Gender Norms and Stereotypes 53
Figure 22 School attendance and completion cascade, Serbia and Serbia Roma settlements, 2019 MICS 55
Figure 23 Attendance to education by age, Serbia and Serbia Roma settlements, 2010, 2014 and 2019 MICS 56

Introduction

The 2030 Agenda for Sustainable Development recognizes the pivotal role of **the regional dimension** in its implementation, follow-up and review. Actions at the regional level bridge the global and national levels, and provide the necessary focus for international exchanges of experience and peer learning. Every year, all five United Nations regional commissions organize regional forums for sustainable development. In the region of the United Nations Economic Commission for Europe (UNECE), which comprises 56 countries of Europe, North America and Central Asia, the Regional Forum on Sustainable Development will be held for the seventh time on 29 and 30 March 2023 in Geneva.

The 2030 Agenda cannot be fulfilled without relevant and timely **statistics** to track progress. Data are needed to enable us to understand the overall levels of progress, to design and monitor the results and impact of policy actions, and to identify areas, groups or regions that risk being left behind.

UNECE disseminates knowledge and data on the Sustainable Development Goals (SDGs) through its designated platforms – the Knowledge Hub, Dashboard and Database. Guidance for national statistical offices on how to manage a system for statistics and indicators for SDGs is contained in the UNECE Road Map[1]. Starting from 2020, the UNECE Statistical Division has prepared a yearly report[2] on the implementation of the 2030 Agenda for Sustainable Development in the UNECE region, to support the Regional Forum on Sustainable Development. This **fourth report** provides an assessment of progress as well as stories about the ways in which regional and country-level actions relate to sustainable development outcomes.

The **assessment** covers every goal and target for which there are data and for which it is possible to set a target value. The assessment looks at the trends at the regional level only. As shown in the 2020 report on the UNECE region, variation among countries is considerable in all areas and a trend in any individual country may differ from the general trend observed in the region. The regional assessment presented in the present 2023 report relies on the global indicator framework for SDGs[3] and the available data on UNECE countries in the United Nations Global SDG Indicators Database as of 16 December 2022. Technical notes on the progress assessment at the end of this report explain the methodology used.

The agencies and United Nations country teams participating in the Regional Coordination Group on Data and Statistics for Europe and Central Asia and, for the first time, all UNECE programmes provided **stories**. These stories are rich in information on how various regional and country level actions relate to sustainable development outcomes. Most of the stories pertain to goals 6 (clean water and sanitation), 7 (affordable and clean energy), 9 (industry, innovation and infrastructure), 11 (sustainable cities and communities) and 17 (partnerships for the goals) that are under in-depth review by the 2023 High-level Political Forum on Sustainable Development. The stories show concrete ways in which progress towards SDGs is made in the region.

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[1] UNECE (2022). Road map on statistics for Sustainable Development Goals – second edition. Geneva: United Nations.

[2] UNECE (2020). Towards achieving the Sustainable Development Goals in the UNECE region: a statistical portrait of progress and challenges. Geneva: United Nations.
UNECE (2021). Is the UNECE region on track for 2030? Assessment, stories and insights. Geneva: United Nations.
UNECE (2022). Halfway to 2030: how many targets will be achieved in the UNECE region? Snapshot and insights in 2022. Geneva: United Nations.

[3] United Nations (2022). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. Adopted by the General Assembly in A/RES/71/313 (Annex) in 2017. Changes and refinements 2018–2022: E/CN.3/2018/2, E/CN.3/2019/2, E/CN.3/2020/2, E/CN.3/2021/2, E/CN.3/2022/2.

Progress in the UNECE region

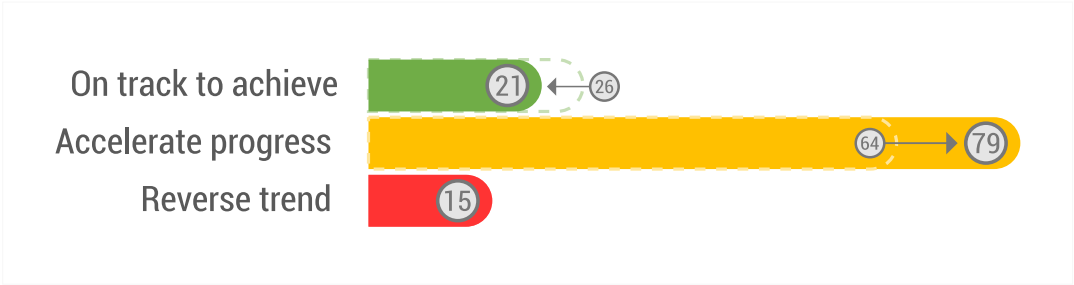
How is progress assessed?

Making use of all the available data, anticipated indicator values were estimated for 2030 for each country, based on the pace of progress thus far. These anticipated values were compared to the desired target values.

The results are presented at the regional level, based on the median indicator values across all countries. It is acknowledged that variation among countries can be significant and the situation in any individual country may differ from the assessment given to the entire region. For more information on the methodology, see Technical notes on the progress assessment.

Data availability for monitoring SDGs is improving. Progress for the UNECE region can be measured towards 115 of the 169 SDG targets, which is an increase from 105 targets in last year's assessment. The chart in the next page presents the anticipated progress in the region towards the 115 measurable targets. Each target is coloured according to the gap between anticipated and required progress. The colour is green if the pace of progress is sufficient to reach the target value by 2030; yellow if progress needs to accelerate to reach the target value; and red if the currently observed trend runs counter to the desired direction. If the target cannot be assessed it is shown in grey.

How many targets are on track?



Based on this assessment, **the region will achieve only 21 targets** (18 per cent of measurable targets) by 2030. This is down from 26 targets assessed as on track last year.

For 79 targets (up from 64 last year)**, progress has to accelerate**, and **for 15 targets** (as last year)**, the current trend needs to be reversed**.

Progress in the UNECE region **2023**

Which SDG targets are on track for 2030?

MAINTAIN progress to achieve target | **ACCELERATE** progress to achieve target | **REVERSE** trend to achieve target | Insufficient data

GOAL 1 NO POVERTY
- 1.1 Extreme poverty
- 1.4 Access to basic services
- 1.2 National poverty
- 1.3 Social protection
- 1.5 Resources for poverty programmes
- 1.a Resilience to disasters
- 1.b Poverty eradication policies

GOAL 2 ZERO HUNGER
- 2.1 Undernourishment and food security
- 2.2 Malnutrition
- 2.3 Small-scale food producers
- 2.5 Genetic resources for agriculture
- 2.a Investment in agriculture
- 2.4 Sustainable agriculture
- 2.b Agricultural export subsidies
- 2.c Food price anomalies

GOAL 3 GOOD HEALTH AND WELL-BEING
- 3.1 Maternal mortality
- 3.2 Child mortality
- 3.3 Communicable diseases
- 3.4 NCD & mental health
- 3.5 Substance abuse
- 3.6 Road traffic accidents
- 3.7 Sexual & reproductive health
- 3.8 Universal health coverage
- 3.9 Health impact of pollution
- 3.a Tobacco control
- 3.b R&D for health
- 3.c Health financing & workforce
- 3.d Management of health risks

GOAL 4 QUALITY EDUCATION
- 4.a Education facilities
- 4.1 Effective learning outcomes
- 4.2 Early childhood development
- 4.3 TVET & tertiary education
- 4.4 Skills for employment
- 4.5 Equal access to education
- 4.c Qualified teachers
- 4.6 Adult literacy & numeracy
- 4.7 Sustainable development education
- 4.b Scholarships

GOAL 5 GENDER EQUALITY
- 5.b Technology for women's empowerment
- 5.1 Discrimination against women & girls
- 5.4 Unpaid care and domestic work
- 5.5 Women in leadership
- 5.2 Violence against women & girls
- 5.3 Early marriage
- 5.6 Reproductive health access & rights
- 5.a Equal economic rights
- 5.c Gender equality policies

GOAL 6 CLEAN WATER AND SANITATION
- 6.1 Safe drinking water
- 6.2 Access to sanitation & hygiene
- 6.3 Water quality
- 6.4 Water-use efficiency
- 6.5 Transboundary water cooperation
- 6.6 Water-related ecosystems
- 6.a Int. cooperation on water & sanitation
- 6.b Participatory water & sanitation mgmt.

GOAL 7 AFFORDABLE AND CLEAN ENERGY
- 7.1 Access to energy services
- 7.2 Share of renewable energy
- 7.3 Energy efficiency
- 7.a Int. cooperation on energy
- 7.b Investing in energy infrastructure

GOAL 8 DECENT WORK AND ECONOMIC GROWTH
- 8.b Strategy for youth employment
- 8.4 Material resource efficiency
- 8.5 Full employment & decent work
- 8.6 Youth NEET
- 8.8 Labour rights & safe working env.
- 8.9 Sustainable tourism
- 8.10 Access to financial services
- 8.a Aid for Trade
- 8.1 Per capita economic growth
- 8.2 Economic productivity & innovation
- 8.3 Formalization of SMEs
- 8.7 Child & forced labour

GOAL 9 INDUSTRY, INNOVATION & INFRASTRUCTURE
- 9.2 Sustainable/inclusive industrialization
- 9.4 Sustainable & clean industries
- 9.c Access to ICT & the Internet
- 9.3 Small-scale industries access to finance
- 9.5 Research and development
- 9.b Domestic technology development
- 9.1 Infrastructure development
- 9.a Resilient infrastructure

GOAL 10 REDUCED INEQUALITIES
- 10.c Remittance costs
- 10.2 Inclusion (social, economic & political)
- 10.4 Fiscal & social protection policies
- 10.5 Regulation of financial markets
- 10.7 Safe migration & mobility
- 10.a Special & differential treatment (WTO)
- 10.b Resource flows for development
- 10.1 Income growth (bottom 40%)
- 10.3 Eliminate discrimination
- 10.6 Inclusive global governance

GOAL 11 SUSTAINABLE CITIES AND COMMUNITIES
- 11.1 Housing & basic services
- 11.6 Urban air quality & waste mgmt.
- 11.b Disaster risk management policies
- 11.4 Cultural & natural heritage
- 11.5 Resilience to disasters
- 11.2 Public transport systems
- 11.3 Sustainable urbanization
- 11.7 Urban green & public spaces
- 11.a Urban planning
- 11.c Sustainable & resilient buildings

GOAL 12 RESPONSIBLE CONSUMPTION & PRODUCTION
- 12.2 Sustainable use of natural resources
- 12.4 Managing chemicals & wastes
- 12.5 Reduction in waste generation
- 12.c Fossil-fuel subsidies
- 12.b Sustainable tourism monitoring
- 12.1 Programmes on SCP
- 12.3 Food waste & losses
- 12.6 Corporate sustainable practices
- 12.7 Public procurement practices
- 12.8 Sustainable development awareness
- 12.a Support for R&D capacity for SD

GOAL 13 CLIMATE ACTION
- 13.1 Resilience & adaptive capacity
- 13.2 Climate change policies
- 13.3 Climate change awareness
- 13.a UNFCCC commitments
- 13.b Climate change planning & mgmt.

GOAL 14 LIFE BELOW WATER
- 14.6 Fisheries subsidies
- 14.b Small-scale artisanal fishing
- 14.1 Marine pollution
- 14.5 Conservation of coastal areas
- 14.7 Marine resources for SIDS & LDCs
- 14.a Research capacity & marine technology
- 14.2 Marine & coastal ecosystems
- 14.3 Ocean acidification
- 14.4 Sustainable fishing
- 14.c Implementing UNCLOS

GOAL 15 LIFE ON LAND
- 15.1 Terrestrial & freshwater ecosystems
- 15.2 Sustainable forests management
- 15.4 Conservation of mountain ecosystems
- 15.6 Utilization of genetic resources
- 15.8 Invasive alien species
- 15.a Resources for biodiversity & ecosystems
- 15.b Resources for forest management
- 15.5 Loss of biodiversity
- 15.3 Desertification and land degradation
- 15.7 Protected species trafficking
- 15.9 Biodiversity in national & local planning
- 15.c Protected species trafficking (global)

GOAL 16 PEACE AND JUSTICE
- 16.5 Corruption and bribery
- 16.1 Reduction of violence & related deaths
- 16.3 Justice for all
- 16.7 Inclusive decision-making
- 16.10 Public access to information
- 16.a Capacity to prevent violence
- 16.2 Human trafficking
- 16.6 Effective institutions
- 16.4 Illicit financial & arms flows
- 16.8 Inclusive global governance
- 16.9 Legal identity
- 16.b Non-discriminatory laws

GOAL 17 PARTNERSHIPS FOR THE GOALS
- 17.6 Science and tech int. cooperation
- 17.8 Capacity building for ICT
- 17.2 ODA commitment by dev. countries
- 17.4 Debt sustainability
- 17.7 Transfer of technologies
- 17.10 Multilateral trading system (WTO)
- 17.12 Duty-free market access for LDCs
- 17.17 Partnerships (public, private, CSO)
- 17.18 National statistics availability
- 17.19 Statistical capacity
- 17.1 Tax & other revenue collection
- 17.9 Capacity building for SDGs
- 17.13 Global macroeconomic stability
- 17.15 Respect country's policy space
- 17.3 Additional financial resources
- 17.5 Investment promotion for LDCs
- 17.11 Exports of developing countries
- 17.14 Policy coherence for SD
- 17.16 Global partnership for SD

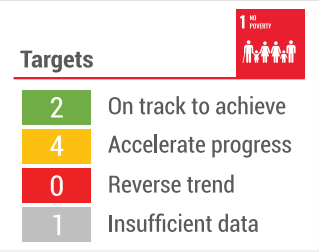
Progress in the UNECE region **2023**

Is the region on track to meet the Goals by 2030?

In recent years, the UNECE region has been shaken by the Covid-19 pandemic, the war in Ukraine, energy crisis and surging inflation. As previous UNECE reports showed, progress towards the SDGs was already too slow in the region before these crises.[4] The latest available data presented in this report reveal some of the related destructive impacts on the achievement of the SDGs.

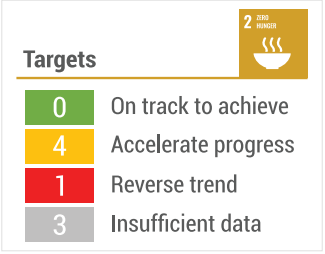
Data collected in 2020 or later make it possible to include trends since the onset of the Covid-19 pandemic for 125 out of the 156 indicators used in this assessment. Data collected since 2022 are not available for the majority of targets and indicators, and the impact of the war in Ukraine is therefore not reflected in this progress assessment.

The region is not on track to reduce poverty by half by 2030 (goal 1).



The share of people living in poverty according to national definitions is decreasing in most UNECE countries, but not quickly enough (target 1.2). In one third of countries with data, more than 20 per cent of the population still lives below the income poverty threshold (indicator 1.2.1). Measures of multidimensional poverty (indicator 1.2.2) consider various aspects of deprivation and indicate that the share of people experiencing poverty is higher than measured on the basis of income only. Those at the highest risk of poverty, such as persons with disabilities and families with young children, are well covered by social protections in the UNECE region (indicator 1.3.1), but not everyone who would benefit from this type of support is receiving it. Across UNECE countries, less than half of unemployed persons — a population that increased during the pandemic — receive cash benefits (indicator 1.3.1).

Progress on food security and diversity (goal 2) has been uneven.



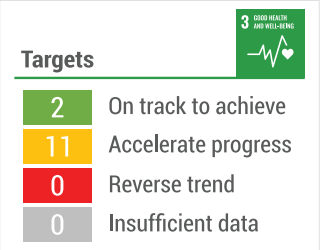
Access to sufficient and nutritious food (target 2.1) is not universal in the UNECE region. In 20 countries in the region, the share of adults experiencing moderate or severe food insecurity (indicator 2.1.2) has increased or remained the same since 2015. In some countries in the region, more than a quarter of all adults experience food insecurity. When it comes to children, most have enough to eat. Undernutrition (indicator 2.2.1) is rare. Food security and good nutrition concerns both the quantity and quality of food, however, and efforts to reduce childhood obesity (indicator 2.2.2) and anaemia in pregnancy (2.2.3) need to be accelerated.

The region must act to reverse trends on agricultural productivity and efficiency (target 2.a). Progress is made towards maintaining a diverse and nutritious food supply for future generations (target 2.5). The number of plant varieties and animal breeds for which genetic

[4] UNECE (2021). Is the UNECE region on track for 2030? Assessment, stories and insights. Geneva: United Nations. UNECE (2022). Halfway to 2030: how many targets will be achieved in the UNECE region? Snapshot and insights in 2022. Geneva: United Nations.

resources are stored is increasing (indicator 2.5.1), but progress has been slow. A high proportion of local breeds are at risk of extinction (indicator 2.5.2).

Comprehensive data for targets on health and well-being (goal 3) show that most areas require acceleration.



The region is set to achieve targets on child and maternal mortality (targets 3.1 and 3.2), but progress towards other targets has been slow. Even before the Covid-19 pandemic, the pace of progress on communicable diseases (3.3), premature mortality and mental health (3.4), and sexual and reproductive health (3.7) was sluggish. The prevalence of tobacco use (indicator 3.a.1) and the suicide mortality rate (indicator 3.4.2) have decreased only slightly in the last several years.

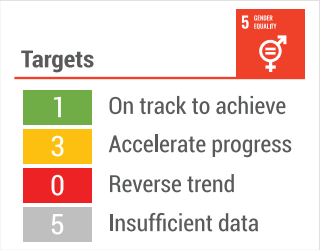
The share of the child population receiving recommended vaccinations (indicator 3.b.1) is high across the region, but the region is not on track to achieve universal access by 2030. Across the UNECE region, one quarter of women have an unmet need for modern methods of family planning (indicator 3.7.1).

Alongside other cost-of-living pressures, the relative cost of healthcare for households is increasing in most countries in the region (indicator 3.8.2). The pandemic put stress on health systems and highlighted gaps in public health capacities, an area where progress has been stagnant (target 3.d). A pandemic-driven improvement in health emergency preparedness across the region is not yet observed in available data.

The region must address disparities to achieve targets on education (goal 4).

Slow progress towards universal and quality education (target 4.1) is related to persisting inequalities between advantaged and disadvantaged students. Across the region, stark gaps in proficiency in reading and mathematics (indicator 4.5.1) exist between urban and rural students, the native-born and the foreign-born, and the rich and the poor. Though not yet reflected in the available data, disruptions to education due to the Covid-19 pandemic may have further exacerbated such inequalities.

Differences across countries also impede regional progress towards education targets. Near-universal participation in early-childhood education (indicator 4.2.2) in many countries is offset by a downward trend in one quarter of countries in the region. Technology is widespread across classrooms in the region (indicator 4.a.1). Still, the share of youth and adults with information and communications technology skills is increasing slowly (indicator 4.4.1).



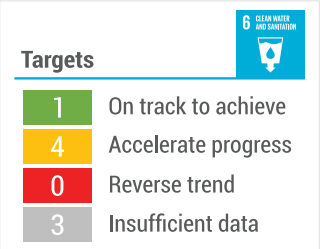
Data gaps limit the assessment of progress towards gender equality (goal 5).

Progress on gender equality can be measured for less than half of targets only. UNECE countries must work to provide better evidence on the experiences and outcomes of women and girls. Information gaps may contribute to slow progress in the region

on policy and legal frameworks that combat discrimination and support gender equality (target 5.1).

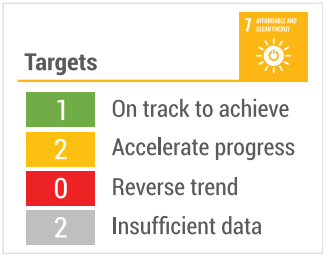
Data that are available indicate that the region must accelerate efforts to address gender disparities at home and in the public sphere. Progress towards shared responsibility within the household and family (target 5.4) is very slow. The share of women participating in political and economic life (target 5.5) is increasing in nearly every country in the region, but women remain underrepresented in leadership and decision-making positions.

Most water (goal 6) and energy (goal 7) targets are progressing too slowly to be achieved.



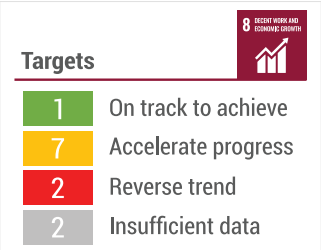
Access to safely-managed drinking water (target 6.1) is nearly universal in the UNECE region. Without an acceleration of progress, the region will come up short on other sanitation and water targets. On average, 21 per cent of the population of UNECE countries do not use safely-managed sanitation services (indicator 6.2.1).

The proportion of water bodies with potentially harmful levels of pollution is increasing in one third of countries with data (indicator 6.3.2). Water use across the region is becoming more efficient (indicator 6.4.1) and stress on freshwater resources is decreasing (indicator 6.4.2), but acceleration is needed to achieve 2030 ambitions. Transboundary water cooperation is strong in the region (indicator 6.5.2), but the rate of implementation of integrated water resources management (indicator 6.5.1) needs to increase.



Access to electricity is widespread, and most people in the region use clean fuels for cooking, heating and lighting (target 7.1). As measured before the current energy crisis, reliance on renewable energy was increasing (indicator 7.2.1) and energy efficiency was improving (indicator 7.3.1), but not quickly enough to meet 2030 targets. An acceleration of efforts is critical to ensure continued access to affordable and sustainable energy.

The region must work to overcome setbacks on inclusive economic growth and decent work for all (goal 8).

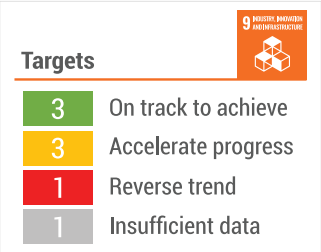


The economic impacts of the Covid-19 pandemic are evident across the region. The unemployment rate (indicator 8.5.2) has increased in three quarters of countries with data, interrupting steady downward trends across the region. Acceleration is therefore required to provide access to decent work for the region's labour force (target 8.5). Even before the pandemic, the rate of growth in the gross domestic product (GDP) per person (indicator 8.1.1) and per employed person (indicator 8.2.1) was slowing across the region and this is projected to continue.

Most countries in the region have implemented dedicated strategies for youth employment and this target is on track to be achieved (target 8.b). Nonetheless, the region must accelerate efforts to reduce the share of youth not in employment, education or training (target 8.6) which is still 10 per cent or higher in most countries. Countries must also

accelerate efforts around access to financial services (target 8.1), resource use efficiency (target 8.4), labour rights (8.8), sustainable tourism (8.9), access to financial services (8.10) and aid for trade (target 8.a) to achieve employment and economic growth that leaves no one behind.

Investments are required to meet targets on infrastructure, industrialization, and innovation (goal 9).

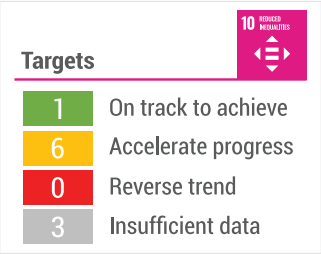


Higher-technology industries have been more resilient to Covid-19 impacts than low-tech industries.[5] The share of medium- and high-tech manufacturing value is increasing in the UNECE region (indicator 9.b.1), but not quickly enough. To accelerate progress, investments in research and development (target 9.5) are necessary and access to finance for small-scale industries (target 9.3) has to improve.

To achieve sustainable and inclusive economic development, the region needs to reverse trends on infrastructure development (target 9.1).

The region has progressed with inclusive and sustainable industrialization (target 9.2). The carbon-intensity of economic production (target 9.4) is decreasing, and access to information and communications technology (target 9.c) is widespread. If the current pace of progress can be maintained the region should achieve these three targets.

There is more work to do to reduce inequalities within and between countries (goal 10).

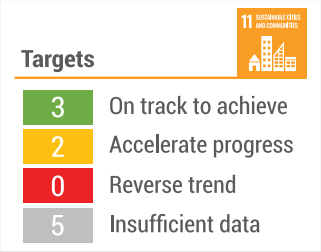


Many countries expanded the reach of social transfers during the Covid-19 pandemic, and available data point to positive impacts on income inequality. The share of individuals living at below 50 per cent of their country's median income level (indicator 10.2.1) decreased in 2020 in all countries with data. This shift has reversed the trend for the region since last year's assessment, but more data are necessary to determine whether such policy responses will have lasting impacts on economic well-being in the region. Continued financial instability in some countries (target 10.5) and slow growth in official development assistance (target 10.b) contribute to inequality within the region.

The region is on track to reduce the costs of remittances (target 10.c). Newly available data indicate that more work is needed to achieve safe migration and mobility (target 10.7), especially in light of the forced movement of millions of refugees across Europe.

[5] The Sustainable Development Goals Report 2022, United Nations.

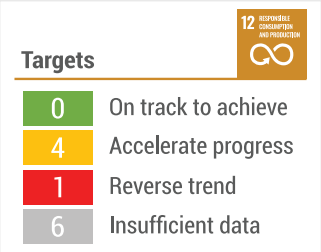
Progress towards safe and sustainable cities (goal 11) is mixed.

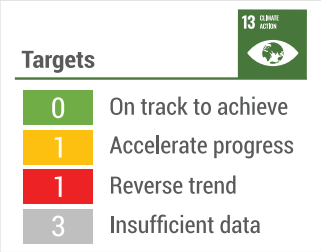


The region is set to achieve targets on access to adequate housing and basic services (target 11.1), reducing air pollution in cities (target 11.6), and adopting and implementing strategies for disaster risk reduction (target 11.b). The impact of such strategies is mixed. The economic impact of disasters is becoming less severe (indicator 11.5.2), but the number of people in the region affected by disasters (indicator 11.5.1) continues to increase. The region must accelerate efforts to strengthen resilience to climate-related hazards and natural disasters.

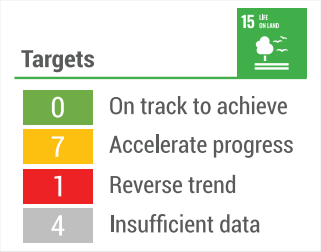
Newly available data show that efforts in the region to increase per capita expenditure on the preservation, protection and conservation of cultural and natural heritage (target 11.4) need to be accelerated.

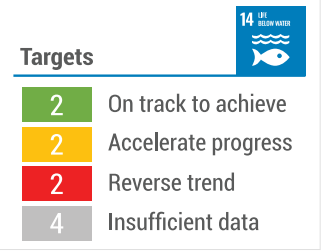
Urgent action is required to achieve climate and environmental targets (goals 12–15).[6]





Fossil fuel subsidies continue to increase in about half of countries with data (target 12.c), making it unlikely that the region will achieve its targets to cut greenhouse gas emissions by 2030 (target 13.2). The region must accelerate progress on the sustainable use of natural resources (target 12.2) and waste reduction and treatment (targets 12.4 and 12.5).





Recent data indicate that progress towards reducing marine pollution (target 14.1) and conserving coastal areas (target 14.5) has slowed. Previously on track to be achieved, these targets now require acceleration. The region must reverse trends around sustainable fishing (target 14.7) and research and development on marine technology (target 14.a) which are moving in the wrong direction. Every effort should be made to maintain the pace of progress on combating unreported and unregulated fishing (target 14.6), which is still on track.

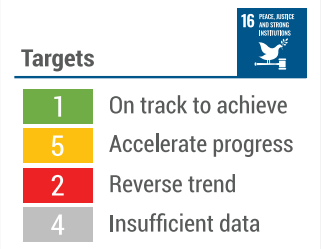
The region is progressing towards sustainable forest management and forest area is increasing in most countries in the region (target 15.2), but not quickly enough to reach the 2030 targets. The region is failing to halt the loss of biodiversity (target 15.5). Fewer than one third of countries have lowered species' extinction risk since 2015.

Countries must also work to fill data gaps: progress for more than 40 per cent of environment-relevant SDG targets cannot measured for the region. Without urgent action to

[6] For a list of climate and environment targets and indicators, see United Nations Environment Programme (2019). *Measuring Progress: Towards Achieving the Environmental Dimension of the SDGS*. Nairobi: United Nations.

improve data availability, the region may run out of time to respond effectively to climate challenges.

The region must address critical issues to improve peace and justice (goal 16).

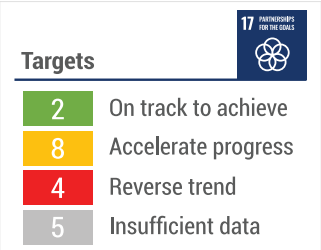


By all available measures, countries in the UNECE region are getting safer. Homicide is extremely rare in most countries (indicator 16.1.1) and robberies (indicator 16.1.3) are decreasing. Still, one quarter of people across countries with data do not feel safe walking alone after dark (indicator 16.1.4), and overall progress to reduce violence across the region is too slow (target 16.1).

The region is on track to reduce corruption and bribery (target 16.5) significantly by 2030. Access to justice (target 16.3) varies considerably across countries. The share of unsentenced detainees in the prison population (indicator 16.3.2) ranges from below 10 per cent to 50 per cent. The number of countries in the region with an independent national human rights institution in compliance with the Paris Principles (indicator 16.a.1) has remained unchanged at 31 since 2000. Decision-making bodies across the region are becoming more reflective of the populations they represent (target 16.7) but acceleration is needed to achieve proportionate representation of women and young people in parliaments and judiciaries by 2030.

Critically, the region must reverse trends in order to eliminate human trafficking (target 16.2) and strengthen public institutions (target 16.6).

Partnerships and evidence for sustainable development (goal 17) must be strengthened to achieve targets.



Macroeconomic stability (target 17.13) has deteriorated, and available data do not fully reflect the impacts of the multiple crises faced by the region. As they work to recover from the Covid-19 pandemic and combat the effects of war, inflation, and energy shortages within their own borders, countries have fewer resources to commit to international cooperation and support for the implementation of SDGs. The share of the domestic budget funded by domestic taxes (target 17.1) declined in 2020 in nearly every country with data. Progress towards development assistance to least developed countries (target 17.2), technology transfer (target 17.7), more open trade (target 17.10) and improved market access for developing countries (target 17.12) is slow. Financial and technical development assistance for SDGs (target 17.9) is decreasing, as is the use of country-owned results frameworks in development interventions in the region (target 17.15).

Data availability for monitoring SDGs is improving. Progress for the UNECE region can be measured towards 115 of the 169 targets, which is an increase from 105 targets in last year's assessment. Still, the region needs to intensify its investment in statistical capacity (targets 17.18, 17.19). Nearly a third of targets cannot be measured for the region due to insufficient data or other measurement challenges. For four goals (5, 11, 12, 13), progress can be assessed for half or fewer targets. Sufficient national data to track change over time are available for 156 (63 per cent) of the 248 global monitoring indicators. Technical notes on the progress assessment, including a complete list of the used indicators, are presented in the end of this report.

Stories

The agencies and United Nations country teams participating in the Regional Coordination Group on Data and Statistics for Europe and Central Asia and, for the first time, all UNECE programmes provided stories. These stories are rich in information on how various regional and country level actions relate to sustainable development outcomes. Most of the stories pertain to goals 6 (clean water and sanitation), 7 (affordable and clean energy), 9 (industry, innovation and infrastructure), 11 (sustainable cities and communities) and 17 (partnerships for the goals) that are under in-depth review by the 2023 High-level Political Forum on Sustainable Development. The stories show concrete ways in which progress towards SDGs is made in the region.

Key messages

	**A partnership promoting innovative solutions and community empowerment** *WFP Armenia*	Climate sensitive and economically sustainable food systems strengthened resilience in the Lusakert community of the Shirak region and enabled men and women farmers to conserve up to 40 per cent more water than traditional methods of irrigation, thus helping them to overcome poverty and food insecurity.
	**Data on drinking water quality highlight the acceleration required to meet SDG targets in rural areas** *UNICEF Europe and Central Asia*	Many countries lack sufficient data to monitor progress towards safely-managed drinking water services in rural areas. The integration of water quality testing in national household surveys can help to address this data gap and to highlight inequalities in accessibility, availability and quality of drinking water services.
	**Setting SDG targets and indicators under the Protocol on Water and Health in Portugal** *UNECE Environment*	Countries can set SDG targets and indicators on water, sanitation, hygiene and health building using the framework of the Protocol on Water and Health.
	**First SDG dialogue "Green transformation in Azerbaijan"** *UN Azerbaijan*	Promoted by the dialogue "Green transformation in Azerbaijan", the country is building on a solid foundation of policies and regulations and is reflecting on new policy measures to accelerate a green transformation and progress towards SDGs. The State Statistical Committee has put in place an information platform for measuring and reporting on green growth.

	**Reducing energy costs of small food producing and processing businesses in rural areas of Georgia** *UNECE Sustainable Energy*	Reducing energy consumption can be achieved by improving efficiency of food production value chains. A joint project of UNECE, UNDP, FAO, ILO and UN Georgia recommended measures for application by Georgian food sector companies to decrease their energy consumption and environmental footprint, and to raise their level of competitiveness.
	**Greening industries in the European Union's Eastern Partnership countries – the path towards circular economy in Georgia and Ukraine** *UNIDO*	For industries all over the world, achieving efficient production in terms of material, energy, water and waste has shifted from being a good business strategy to a clear business imperative. The methodology of resource-efficient and cleaner production (RECP) has the potential to help enterprises increase the productive use of natural resources, minimize the generation of waste and emissions and foster green and sustainable goods and services.
	**Leveraging trade and innovation to enhance contribution of micro-, small- and medium-sized enterprises to sustainable development in Uzbekistan** *UNECE Economic Cooperation and Trade*	Traceability and transparency will remain critical requirements to demonstrate compliance with the environmental, social, and governance considerations, which have become increasingly important to global business along value chains.
	**Enhancing risk knowledge with the INFORM Subnational Risk Index for South-East Europe** *UNDRR Europe and Central Asia*	Achieving the goals and outcomes of the Sendai Framework for Disaster Risk Reduction (SFDRR) means that Member States must prevent the creation of new risks, reduce existing risks, and strengthen economic, social, health, and environmental resilience. The INFORM Subnational Risk Index for South-East Europe has proven to be effective in overall risk estimation and supporting high-level policy processes for the development of Disaster Risk Reduction strategies in North Macedonia and Albania at the national level, and in Montenegro at the local level.

	**Transport of dangerous goods** *UNECE Transport*	The Agreement concerning the International Transport of Dangerous Goods by Road (ADR) is a proven best practice United Nations instrument that has helped ensure the safe transport of hazardous substances for over 50 years. Incidents involving ADR vehicles carrying dangerous goods often result in no or minimum spillage, no or few people injured and even in many cases no significant damage to the cargo, people or the environment.
	**Promoting people-centred, smart and sustainable cities in countries with economies in transition** *UNECE Forest, Land Management, Housing*	Regular engagement with the local authorities, city governments and stakeholders, building on the approaches outlined in the "San Marino Declaration on principles for sustainable and inclusive urban design and architecture in support of sustainable, safe, healthy, socially inclusive, climate-neutral and circular homes, urban infrastructure and cities" ensures continuity, knowledge transfer and sustainable capacity-building of cities.
	**Preventing gender-based violence through innovation** *UNFPA Armenia*	UNFPA Armenia has addressed gender-based violence and harmful practices with a range of campaigns, interactive performances, educational programmes, communications materials and a mobile app. Where gender stereotypes prevail, such innovative, interactive methods have proven to be effective.
	**Strengthening availability and disaggregation of SDG indicators through the new round of Multiple Indicator Cluster Surveys** *UNICEF*	Multiple Indicator Cluster Surveys (MICS) currently allow the monitoring of 33 SDG indicators under 11 different goals. The new round of MICS, starting in 2023, includes technological innovation as well as additional modules on mental health, bullying, children's time use and inclusive education. This will further improve data availability for SDGs, including disaggregated data for monitoring the principle of leaving no one behind.
	**Making progress in measuring progress – are we on track?** *UNECE Statistics*	As recommended in the UNECE Road map on statistics for SDGs, 47 out of the 56 UNECE member States have a national reporting platform for SDGs. Yet, data availability remains a challenge. The present 2023 UNECE regional progress assessment found data on only 156 (63 per cent) of the 247 global monitoring indicators, which calls for further improvement in SDG data availability.

A partnership promoting innovative solutions and community empowerment

United Nations World Food Programme – Armenia

> Climate sensitive and economically sustainable food systems strengthened resilience in Lusakert community of Shirak region and enabled men and women farmers to conserve up to 40 per cent more water than traditional methods of irrigation, thus helping them to overcome poverty and food insecurity.

20 June 2022 - Lusakert, Armenia – WFP Armenia's beneficiary Gohar Nikolyan with WFP staff member at her backyard berry garden. *Photo credit*: WFP/Mariam Avetisyan

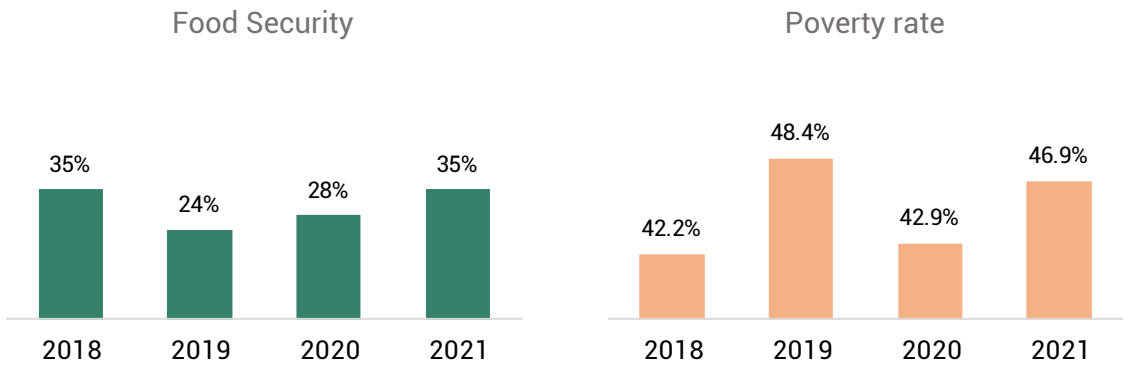
Thanks to the partnership with the Chinese government the World Food Programme's (WFP) project improved the effectiveness of water supply through an innovative irrigation system and helped farmers to conserve up to 40 per cent more water. At the same time, the 20 kW solar station not only helped the community to save around US$ 3,000 yearly for 25 years but also increased clean energy production in the settlement. WFP interventions under this project strengthened partnerships between the community and smallholder farmers and ensure a sustainable future for the community.

Lusakert village is located in the northern part of Armenia's Shirak region. Severe weather conditions throughout the year make it consistently difficult for families to grow enough food to eat. Water is becoming increasingly scarce, and they face recurrent droughts.

In this village, many people grew up thinking that small plots of lands were not enough to help families to run productive and profitable businesses while meeting the households' food needs. With a limited amount of both land and water, families were unable to grow a variety of crops on their small plots.

Lusakert occupies the north-western part of Armenia, with 78 thousand hectares agricultural land. The region has the highest rate of food insecurity (35 per cent) in Armenia and is among one of the poorest in the country[7].

Figure 1
Food security and poverty rate in the Shirak region (Armenia)



Source: Statistical Committee of the Republic of Armenia (2022). Social snapshot and poverty in Armenia, 2022. Part 1: Poverty profile in 2010-2021.

Main livelihood sources in Shirak are agriculture and work abroad. In upland communities, cattle and sheep breeding is more dominant, while population in the lowland communities is engaged in farming. Types of agricultural activities farmers are involved includes cultivation of grain, potatoes, and fruits. Main obstacles of agriculture development in Shirak include high prices for agricultural machinery and equipment, fuel, forage, and workforce.

Climate change has its implications on the agricultural development of the region, by frequent droughts and decrease in precipitation levels. According to the World Food Programme (WFP) Consolidated Livelihood Exercise for Analyzing Resilience (CLEAR), the impact of the climate change on the livelihood and food security in Shirak is high to moderate. Moreover, poor water resource management practices and outworn irrigation system impact on the water availability levels. At the same time, the region experiences a low number of productive breeds due to the lack of postures.

To strengthen resilience in the settlement, improve livelihoods of vulnerable populations as well as to increase the sustainability of the food and agricultural systems in the settlement, WFP started investing in food systems that are climate sensitive and economically sustainable. To help rural families fight poverty and food insecurity, WFP launched the Covid-

[7] Statistical Committee of the Republic of Armenia (2022). Social snapshot and poverty in Armenia, 2022. Part 1: Poverty profile in 2010-2021.

19 South-South and Triangular Cooperation (SSTC) Opportunity Fund in 2021, with technical support from China. Within the scope of this activity, "Green Energy for Productive Farming" project was launched aiming to assist in overcoming poverty and food insecurity in Lusakert.

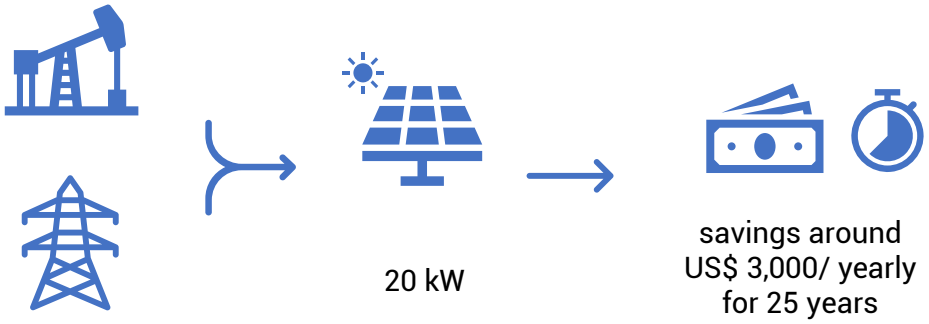
To address climate change implications in the face of decreased precipitation and limited availability of water resources, as well as to raise and stabilize food production, WFP supported 15 households in Lusakert with drip irrigation systems that enable farmers to conserve up to 40 per cent more water than traditional methods. Further, WFP provided them with four types of seedlings – raspberries, blackberries, currants, and goji berries – to help establish berry gardens (100m^2 for each household) to ensure more harvest from the same piece of land compared to other crops.

Figure 2
Example of a planting scheme for a 100 square metre berry garden

Note: The scheme can be adjusted according to the beneficiary's plot sizes and location. *Photo credit*: macrovector/FreePik

Additionally, WFP provided trainings on modern irrigation systems how they contribute to increase agricultural production. The drip irrigation system will help the farmers to save up to 40 per cent more water compared to the traditional methods. Farmers were taught the main principles of efficient agriculture, the care, and characteristics of high-value crops, and how to improve competitiveness in the diverse market of agricultural products.

Apart from the drip irrigation system, within the framework of the food value chain project for poor communities, WFP has also taken steps to transition away from reliance on natural gas and electricity towards solar power, by installing 20 kW solar station allowing the settlement to save around US$ 3,000 yearly for 25 years.



While the solar energy is the most affordable energy source in the country that helps farmers to save money and reinvest in agriculture, it also increases clean energy production.

WFP interventions under this project strengthened partnerships between the community and small holder farmers which are key to overcoming the vulnerability and building a pathway to a sustainable future.

Data on drinking water quality highlight the acceleration required to meet SDG targets in rural areas

UNICEF Regional Office for Europe and Central Asia

> Many countries lack sufficient data to monitor progress towards safely managed drinking water services in rural areas. The integration of water quality testing in national household surveys can help to address this data gap and to highlight inequalities in accessibility, availability and quality of drinking water services.

Safely managed drinking water is defined as use of an improved source that is accessible on premises, available when needed and free from contamination. When the SDGs were established in 2015, many countries lacked data on the availability and quality of drinking water. Recent data collection efforts have highlighted the challenge of meeting SDG targets, especially in rural areas.

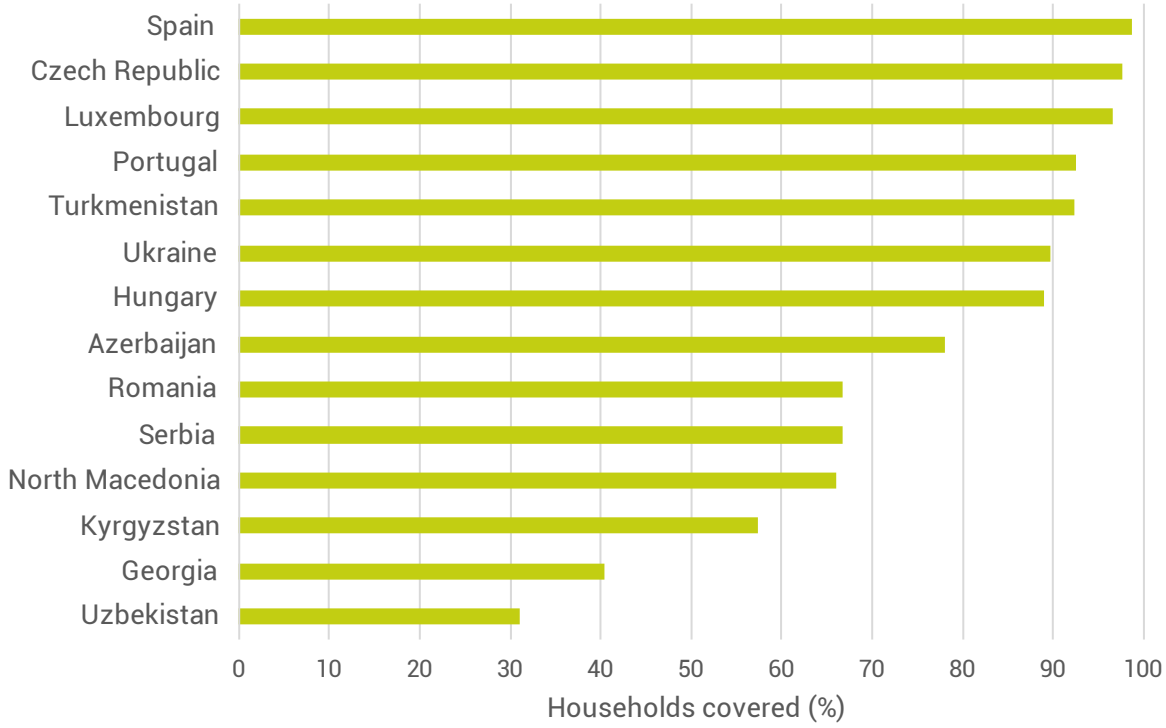
Field teams test household drinking water for faecal contamination (E. coli) during the 2018 Multiple Indicator Cluster Survey in Georgia. *Photo credit*: WHO/UNICEF JMP/Rick Johnston/2018

By 2020, five years into the SDG period, almost all countries in the UNECE region had estimates for basic drinking water services (improved source with collection time ≤30 minutes), but few had estimates for safely managed drinking water services (SDG indicator 6.1.1) in rural areas. While 48 countries had data on accessibility on premises, only 16 had data on availability when needed, and just 14 had data on whether rural water supplies were free from contamination[8].

Only 14 out of the 56 countries of the UNECE region had estimates for safely managed drinking water in rural areas in 2020.

Figure 3

Safely managed and basic drinking water services in rural areas in 2020, per cent of households covered

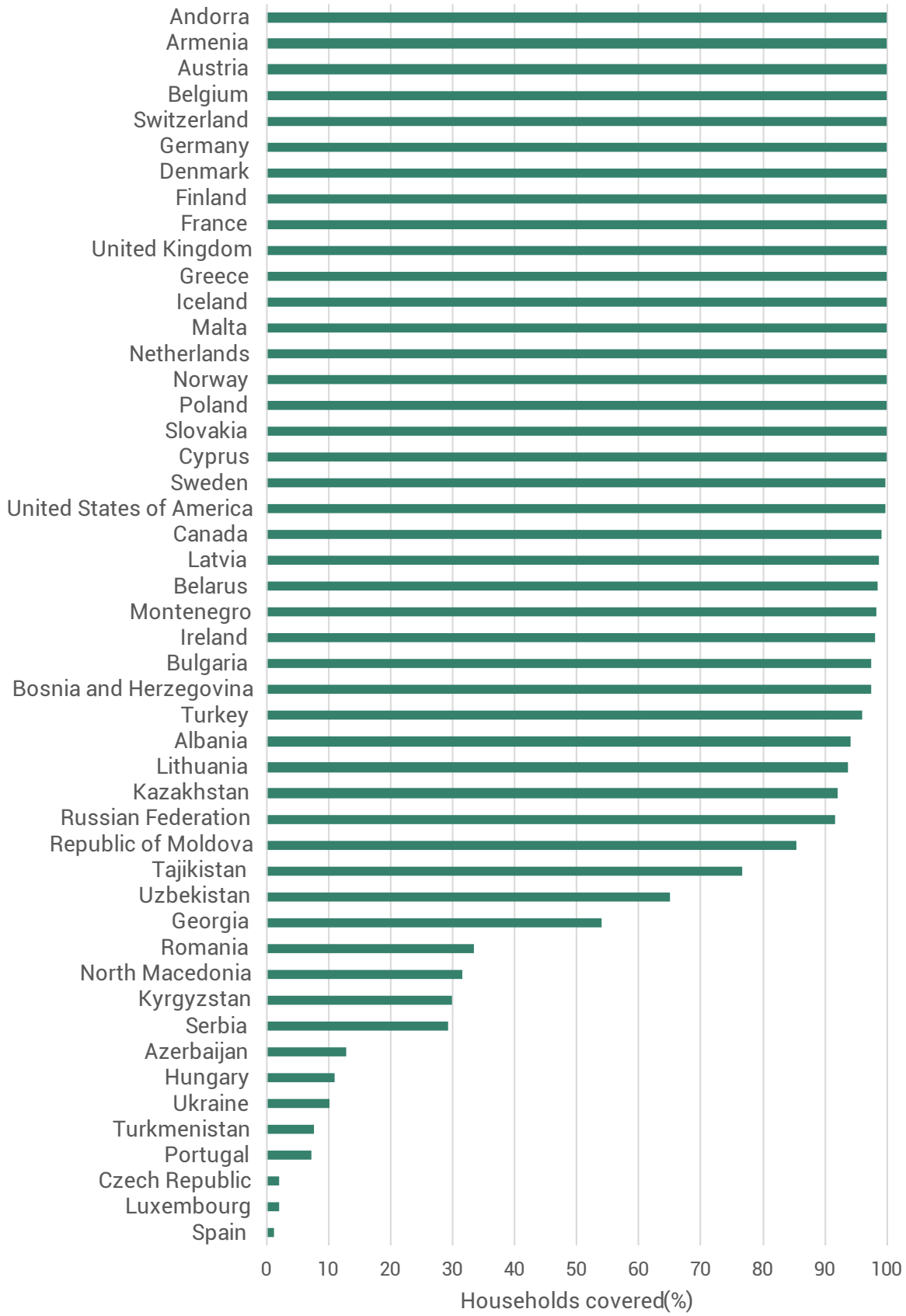


Source: WHO/UNICEF Joint Monitoring Programme (2021).

Data on the quality of drinking water are often only available for urban populations connected to piped networks. To address this data gap the WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene collaborated with UNICEF Multiple Indicator Cluster Survey (MICS) programme to develop a module for testing drinking water quality household surveys. The integration of water quality testing into national household surveys has enabled the collection of data representative of the entire population, including those in rural areas and those who are not served by utilities or covered by regulators. Since 2015 the module has been implemented in over 40 countries enabling many to report on SDG 6.1 for the first time.

[8] WHO/UNICEF JMP (2021) estimates for Uzbekistan did not include results from the 2021/2022 MICS survey.

Figure 4
At least basic water services in rural areas in 2020, per cent of households covered



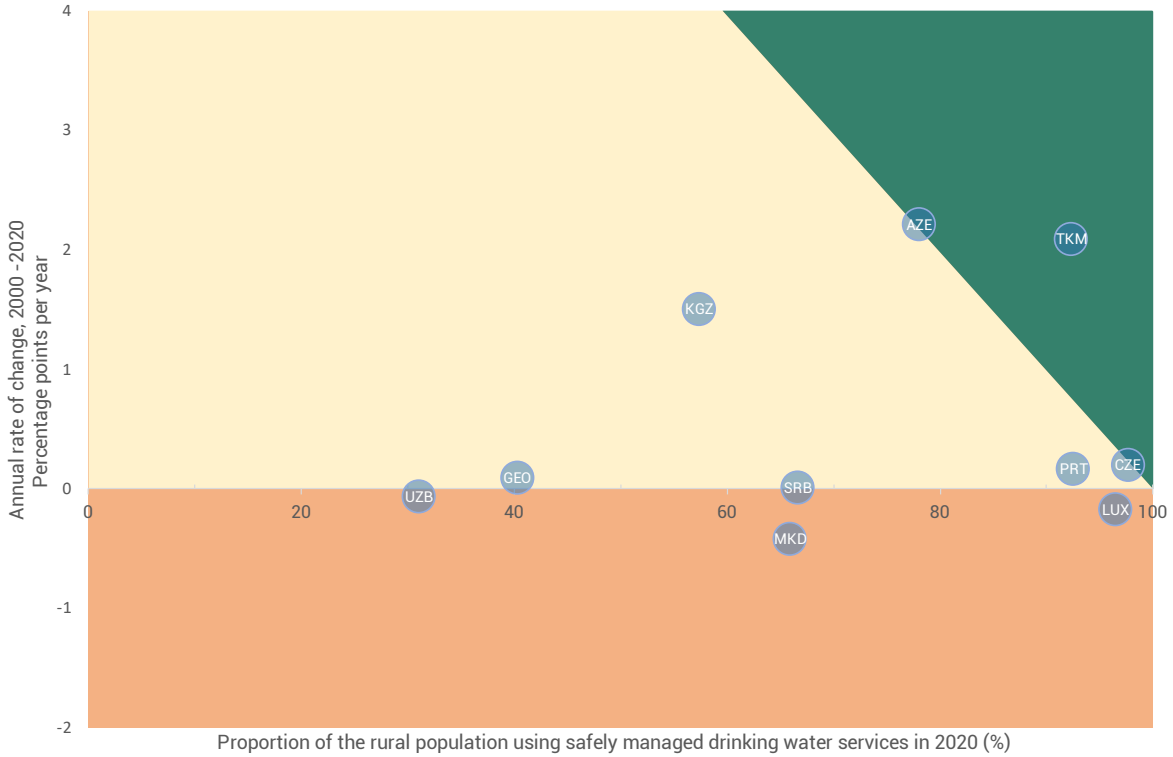
Source: WHO/UNICEF Joint Monitoring Programme (2021).

For example, the water quality testing module was included in the 2018 MICS in Georgia. The survey found that while 97.5 per cent of the population used an improved drinking water source and 91.6 per cent were accessible on premises, just 77.5 per cent were available when needed and 75.1 per cent were free from faecal contamination (*E. coli*). Only 56.2 per cent of the population had drinking water services meeting all of the SDG criteria and coverage of safely managed drinking water was much higher in urban areas (70.3 per cent) than in rural areas (35.4 per cent). The survey also revealed significant disparities between sub-national regions and socio-economic groups.

In 2020, only 10 countries in UNECE had sufficient data to estimate trends in rural coverage of safely managed drinking water and only 2 of them are on track to achieve universal access by 2030. Coverage ranged from 98 to 31 per cent and annual rates of change also varied widely. For example, Azerbaijan has increased rural coverage by 2.21 percentage points per year rising from 34 per cent in 2000 to 78 per cent in 2020. It is therefore on track to achieve universal coverage by 2030 (shown in blue). But the majority of countries are progressing too slowly (shown in yellow) and in some countries rural coverage has decreased (shown in orange).

Figure 5

Rural progress towards universal access to safely managed drinking water services (2000–2020) among countries with less than 99 per cent rural coverage in 2020



Source: WHO/UNICEF Joint Monitoring Programme (2021).

Note: Does not include countries (1) that already had universal (more than 99 per cent) coverage in 2020, (2) with no estimates for rates of changes, i.e. missing data for at least one of the years, and (3) with zero (at two decimal digits) or no trend.

Setting SDG targets and indicators under the Protocol on Water and Health in Portugal

UNECE Environment Division

> Countries can set SDG targets and indicators on water, sanitation, hygiene and health building on the framework of the Protocol on Water and Health.

Water, sanitation, hygiene and health are key to the achievement of the 2030 Agenda for Sustainable Development. In addition to having a dedicated Goal with targets and indicators, they also relate to the achievement of almost all other SDG goals and targets, including in relation to poverty eradication, good health and well-being, gender equality and climate action.

Photo credit: Adobe Stock

The UNECE-WHO/Europe Protocol on Water and Health provides a framework that allows countries to set, monitor and regularly review intersectoral targets, accompanied by indicators and measures for implementation. Portugal integrated this framework with SDGs target setting processes, aligning its international commitments and attaining concrete advantages for measuring progress.

For instance, when setting a target **on access to sanitation** under the Protocol, Portugal aligned the indicator with that proposed for monitoring SDG target 6.2, as follows:

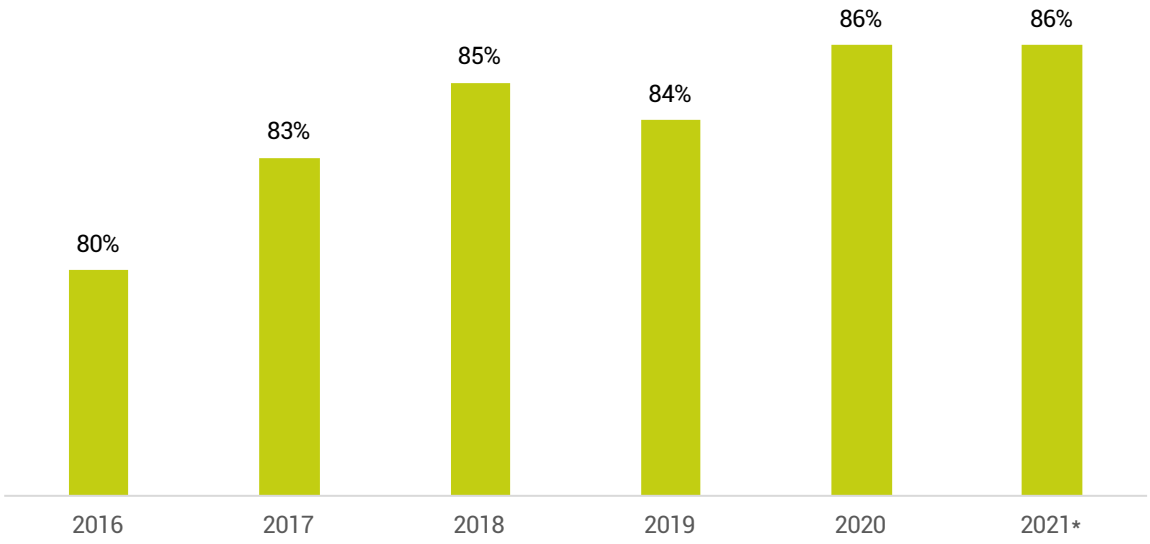
> 6.2.1.a "Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water", using a proxy indicator based on EU statistics on income and living conditions; and
>
> 6.2.1.b "Proportion of dwellings served by wastewater drainage (%) by geographical location (NUTS, 2013)", assuming that all households with service coverage through sewerage networks have safely managed sanitation services, including a hand-washing facility with soap and water.

The data used for monitoring both the Protocol and SDG indicators is collected by the Portuguese Water and Waste Regulation Authority (ERSAR) based on the indicator "Percentage of households located in the utility's intervention area with satisfactory evaluation in the indicator 'AR01 – Service coverage through sewerage networks'".

Furthermore, in 2016 Portugal included an additional indicator for the target set under the Protocol to cover **on-site sanitation**, namely: "d.2: Increasing the level of service coverage through controlled on-site systems". Under this indicator, data is collected for cases where municipalities collect and safely dispose of wastewater from on-site sanitation systems. Cases where private operators manage the collection and disposal of wastewater are not covered by this indicator; however, the indicator increases understanding and supports improving safely managed on-site sanitation systems.

Figure 6

Percentage of households located in the utility's intervention area with satisfactory evaluation in the indicator 'AR01 – Service coverage through sewerage networks', Portugal, 2016–2021



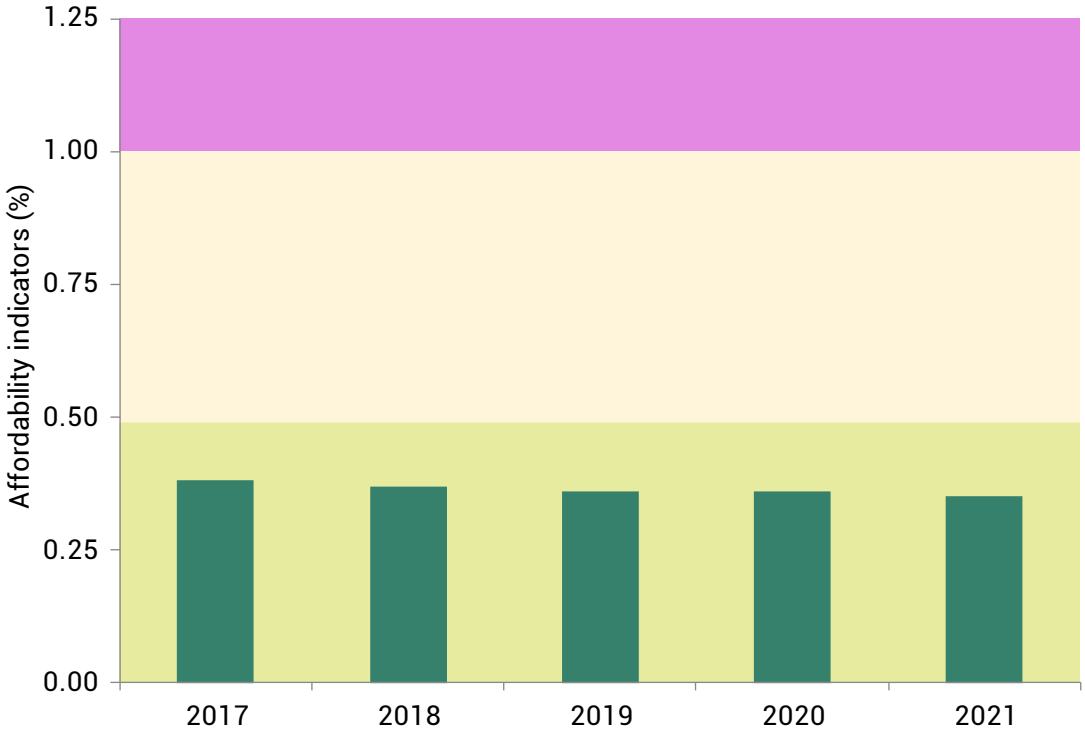
Source: Portuguese Water and Waste Regulation Authority (ERSAR)

Photo credit:
Portuguese Water and Waste Regulation Authority (ERSAR).

The indicator presented, in general, a favourable evolution over the years. Although the indicator did not reach the target set for 2020, it should be noted that the analysis of its evolution should be complemented with the information reported under indicator "d.2: Increasing the level of service coverage through controlled on-site systems", since access to sanitation services can also be attained through mobile means. Indicator d.2 has shown an increasing trend since 2018, although with reduced percentages. Considering these results, in the new water strategic plan for the water and sanitation (PENSAARP 2030) and in the new generation of quality-of-service indicators (4th generation), the mobile services (septic tanks) are included in the revised indicator, which is now named "Physical accessibility of the service through fixed networks and mobile means". Thus, the growing trend in recent years confirms the improvement of safely managed on-site sanitation systems.

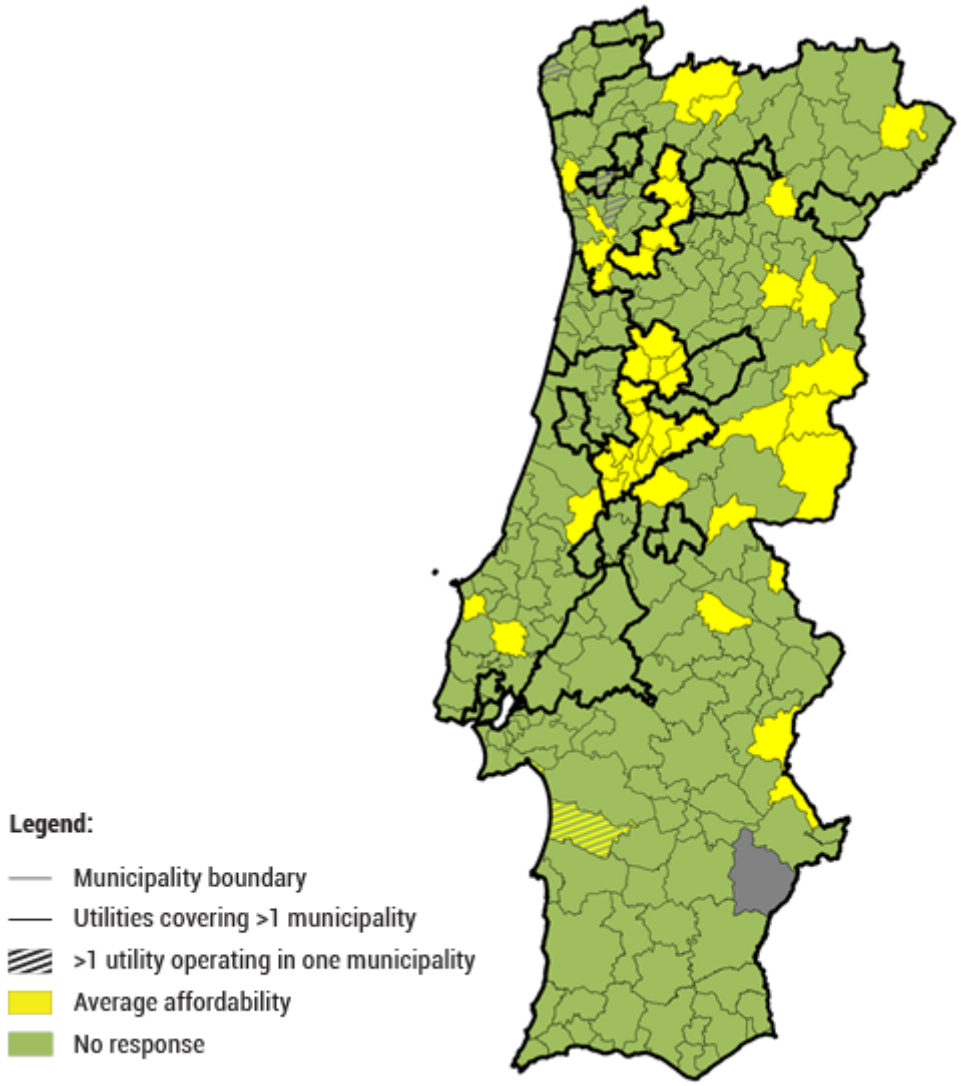
In addition, Portugal is collecting data on the affordability of water, sanitation and solid waste services, based on **affordability indicators**. The water affordability indicator is defined as the (weighted) average charge for the consumption of 120 m3 per year in a water and sanitation system's service area divided by the average disposable household income in that service area. Affordability is considered good when the average bill for a service represents less than 0.5 per cent of average household income, average when it is between 0.5 and 1 per cent, and poor when it more than 1 per cent of average household income. When looking at the national level, water provision is classified as having a consistently good level of affordability over the last five years, but this masks geographical differences in affordability. A more fine-grained analysis, applying the indicator at the service area level, shows that for several service areas the affordability of water provision is only average.

Figure 7
Affordability for drinking water supply at the national level in Portugal, 2017–2021



Source: Portuguese Water and Waste Regulation Authority (ERSAR)

Figure 8
Geographical disparities in the affordability indicator for drinking water supply in Portugal



Source: Portuguese Water and Waste Regulation Authority (ERSAR)

ERSAR has included the affordability indicators in its annual sector report since 2011 and it also included them in the National Strategic Plan for the Water and Sanitation Sector for the period from 2014 to 2020 (PENSAAR 2020). The findings of the affordability indicators can be used to inform the work of service providers, municipalities and ERSAR, particularly as future tariff reforms progressively catch up with the fact that a number of service providers do not yet invoice some of the services or bill them below the cost of provision. In 2021, the affordability indicator was revised to include other factors not previously included (e.g. some taxes) and an additional indicator for social tariffs is also included in this new generation of indicators (4th generation). Furthermore, ERSAR's recommendation on social tariffs (from 2018) was revised during 2022, aiming to promote a discussion on the criteria for a harmonised implementation of social tariffs.

First SDG dialogue “Green transformation in Azerbaijan"

United Nations – Azerbaijan

Promoted by the dialogue “Green transformation in Azerbaijan", the country is enacting on a solid foundation of policies and regulations and is reflecting on new policy measures to accelerate on green transformation and progress towards SDGs. The State Statistical Committee has put in place the information platform for measuring and reporting on green growth.

On 2 November 2022 the first SDG dialogue “Green transformation in Azerbaijan" brought together over 100 representatives of the government agencies, the United Nations (UN), international financial institutions (IFIs), the diplomatic community, the private sector, civil society and academia.

Photo credit: Deposit Photos

The participants of the event, organized by the National Coordination Council on Sustainable Development of Azerbaijan, the Ministry of Economy, the UN and the World Bank, reviewed

Azerbaijan's progress towards achieving the green growth indicators and reflected on additional policy measures to accelerate the country's green transformation and progress toward the SDGs.

The analysis of Azerbaijan's progress was based on green growth indicators developed in 2016. Namely, country progress on 38 green growth indicators were analyzed under five categories: (i) socio-economic efficiency; (ii) environmental and resource efficiency; (iii) natural asset base; (iv) environmental dimension of quality of life; and (v) indicators of economic opportunities and policy response. Most of these indicators are aligned with the national SDGs and contribute to measuring 16 national SDG indicators of the total of 119.

The analysis has shown that a strong foundation of policies and regulations pursuing green growth have been built up in Azerbaijan, creating a conducive ground for accelerated green transformation in the country. "Azerbaijan 2030: National Priorities for Socio-Economic Development"[9] and the "Strategy of Socio-Economic Development in 2022-2026" identified a clean environment and country of "green growth" as one of the five priority directions of the country's development up to 2030. Under the Paris Agreement on climate change the country has committed to a 35 per cent emission reduction target by 2030 compared to the base year of 1990.

At the COP26 in Glasgow, Azerbaijan announced its intention to reduce emissions by 40 per cent by 2050 as a voluntary commitment and to create a "Net Zero Emission" zone in the regained territories. The Government has recently stepped-up efforts to promote energy efficiency and renewable energy. Two new laws on (i) rational use of energy resources and energy efficiency; and (ii) the use of renewable energy sources in the production of electricity were adopted in 2021.

However, the country's green growth progress has been mixed, with faster progress in the early 2000s, slowdown after 2010 and stagnation or reversal of progress on some of the indicators in the period post 2015.

The energy intensity of Azerbaijan's economy, measured as a ratio of total primary energy supply to the unit of GDP, has reduced between 2007 and 2010, but then it was stagnant until gaining an upward trend starting 2015. The CO2 productivity, measured as the unit of GDP produced per kg of CO2 emitted, remains largely unchanged over the past 10 years (Figure 9), implying the need for further actions to effectively de-couple the GDP growth from CO2 emissions growth. The share of renewables in electricity production has reduced from 18.4 per cent in 2010 to 5.8 per cent in 2021[10]. Meanwhile, the adoption of the Law on renewable energy coupled with large scale renewable energy projects that are now in progress, are expected to significantly boost the share of renewables in the coming years.

The Ministry of Energy has set a target to increase the installed capacity of renewable energy to 30 per cent in the country's overall energy balance by 2030[11]. For this purpose, it is planned to create a total of 1,500 MW of new generation capacities, including 440 MW in 2023, 460 MW in 2023–2025, and 600 MW in 2026–2030, at the expense of renewables. The real game-changer, however, could be Azerbaijan's offshore wind potential of 157,000 MW. On 3 June 2022, the Ministry of Energy of the Republic of Azerbaijan, the World Bank, and the

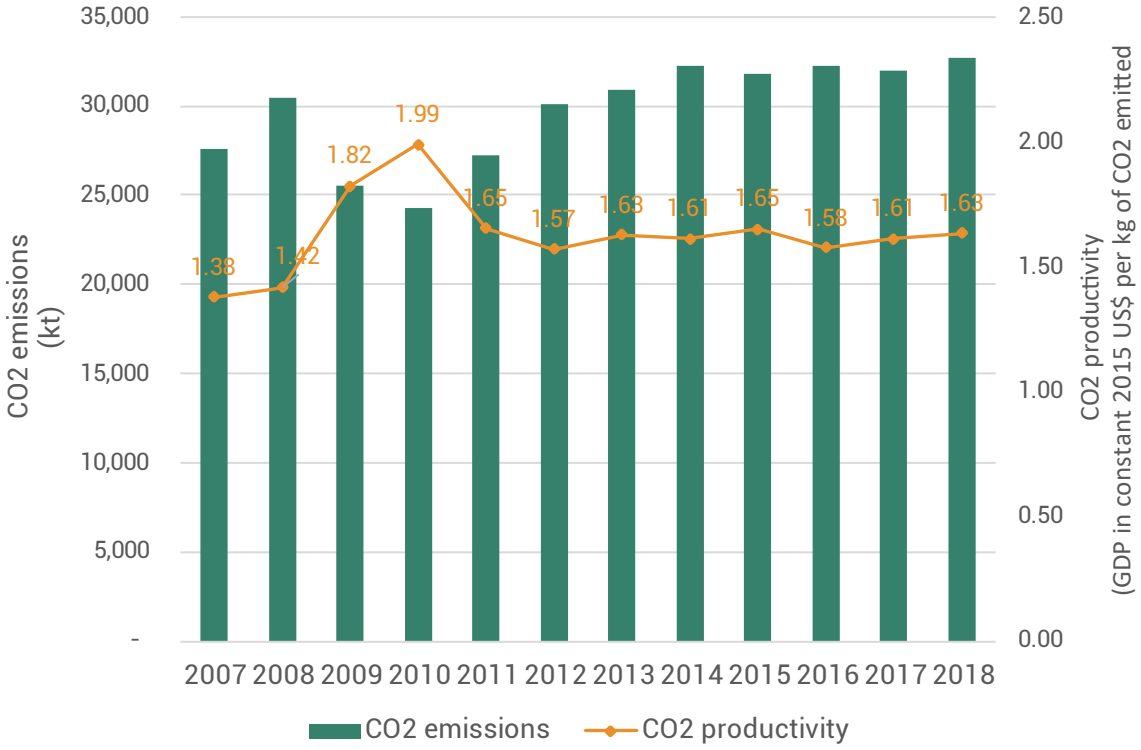
[9] Order of the President of the Republic of Azerbaijan on approval of "Azerbaijan 2030: National Priorities for Socio-Economic Development", February 2021

[10] State Statistical Committee of Azerbaijan: environmental protection

[11] According to the "Strategy of Socio-Economic Development in 2022-2026"

International Finance Corporation (IFC) published a new roadmap indicating the possibility to install 7GW of offshore wind power by 2040.

Figure 9
CO2 emissions and productivity in Azerbaijan, 2007–2018



Source: The World Bank. World Development Indicators

The official data also indicates the increased levels of PM2.5 air pollution in the three major cities of the country: Baku, Ganja and Sumgayit, where the PM2.5. concentration was 27, 28 and 22 micrograms per cubic meter respectively in 2021.[10] According to the WHO standards, PM2.5. concentration above 15 mcg/m3 is considered harmful for health and may increase the risk of serious respiratory and lung diseases.

As to waste management, what is notable is that the total and per capita volume of household solid waste has been increasing at an accelerated pace since 2018 (Figure 10). Household solid waste is a source of methane gas emission, through decomposition of waste at landfills. More attention and investments in solid waste management might be therefore required.

Looking ahead

The central question to fostering green growth is about how to de-couple the economic growth from environmental degradation and GHG emissions. As the international expertise indicates, the answer to this question rests on the ability of countries to change the traditional linear model of production – consumption – waste to the circular model, which puts resource efficiency, recycling, and environmental regeneration at the centre. Switching to circular models will require strong institutions, which oversee and implement integrated policies and create effective incentives for green transition. Greening the demand side will also play a crucial role for successful green transformation. Without the change of

behaviours both by firms and households it will be difficult to significantly improve the resource efficiency and reduce waste and pollution.

Figure 10
Solid waste generation by households in Azerbaijan, 2000–2021

Source: State Statistical Committee of the Republic of Azerbaijan.

As to the financing of green growth, continuing investments in old, brown technologies would be a missed opportunity, therefore highlighting the need for expanded green finance schemes. Success of leapfrogging to green and developed economy will depend on innovations and absorption of modern technologies. These in turn require increased investments in skills building, research and development and scaling up of green finance and investments in green sectors.

Measuring and reporting on green growth progress is instrumental to guide the decision-making process. Reporting on green growth progress in Azerbaijan has already been put in place by the State Statistical Committee. This information platform needs to be continuously improved, and shared with policy makers and general public, to both inform the decision making, as well as promote collective green behaviour change.

Reducing energy costs of small food producing and processing businesses in rural areas of Georgia

UNECE Sustainable Energy Division

> Reducing energy consumption can be achieved by improving efficiency of food production value chain. A joint project of UNECE, UNDP, FAO, ILO and UN Georgia recommended measures for application by Georgian food sector companies to decrease their energy consumption and environmental footprint, and raise their level of competitiveness.

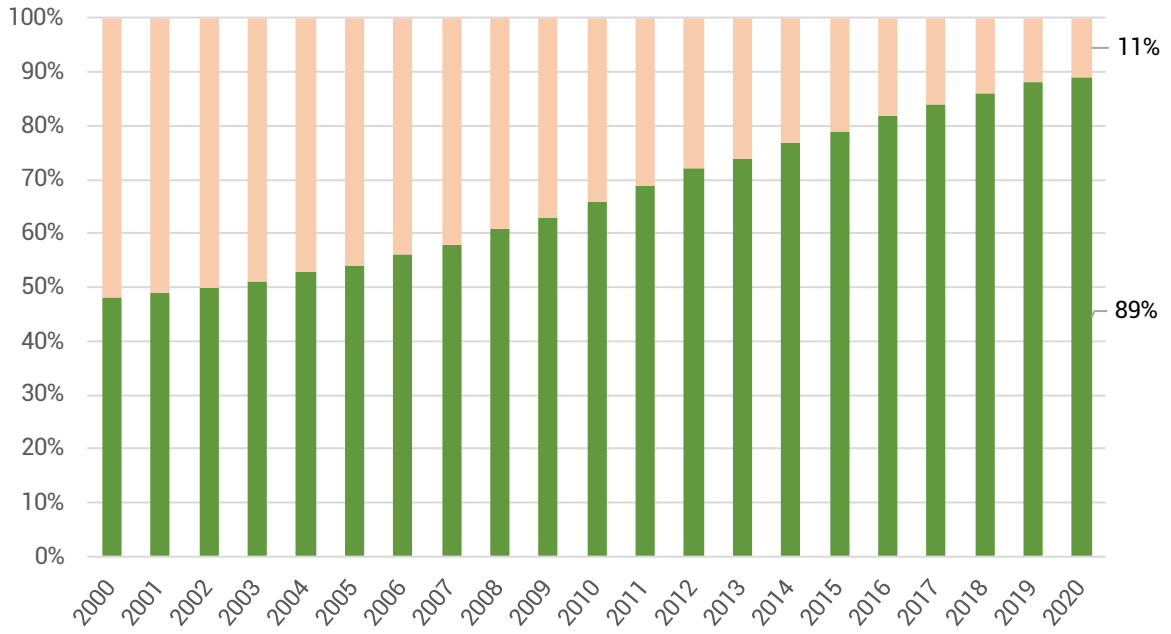
UNECE, jointly with UNDP (lead agency), FAO, ILO, and the UN Resident Coordinator in Georgia (overall coordination), is implementing the project "Response to the global crisis on food, energy, finance in Georgia" under the Joint SDG Fund Development Emergency Modality to support energy efficiency (EE) and renewable energy (RE) development in Georgia and improve food production efficiency in rural areas. The project addresses food, energy and finance interlinkages and contributes to the implementation of SDG 7 (targets 7.1, 7.2, 7.3, and 7.A) and supports SDGs 1, 2, 10, and 13.

Photo credit: iStock Photos

Background

In Georgia, which has a diverse energy mix, including imported natural gas and oil (representing around 68 percent of total primary energy supply), hydropower, renewables, and coal, over 99 per cent of households have access to electricity, with a clear trend since 2000 towards increased primary reliance on clean fuels and technologies that reached 89 per cent in 2020.[12]

Figure 11
Proportion of population with primary reliance on clean fuels and technology in Georgia, 2000-2020, per cent



Support to clean energy research and development and RE production in Georgia totalled 625 million United States dollars over 2001–2019, of which almost $417 million (66.7 per cent) were allocated to hydropower development.

Energy consumption by agriculture and food sector in Georgia

As Georgia plans to seek self-sufficiency of domestic food production to meet anticipated food demand growth by 2050 (estimated to grow by 60 per cent compared to 2006–2007 levels according to FAO), access to affordable, reliable, sustainable, and modern energy plays a crucial role in boosting agricultural productivity and food security. At the same time, energy price increases are having a negative impact on production capabilities and costs for producers, especially from rural areas, and may result in their lower competitiveness and higher vulnerability.

[12] "Clean" is defined by the emission rate targets and specific fuel recommendations as provided by the WHO guidelines for indoor air quality: household fuel combustion. See metadata for indicator 7.1.2 in the United Nations SDG indicators metadata repository.

Figure 12
International financial flows to Georgia in support of clean energy research and development and renewable energy production, millions of United States dollars

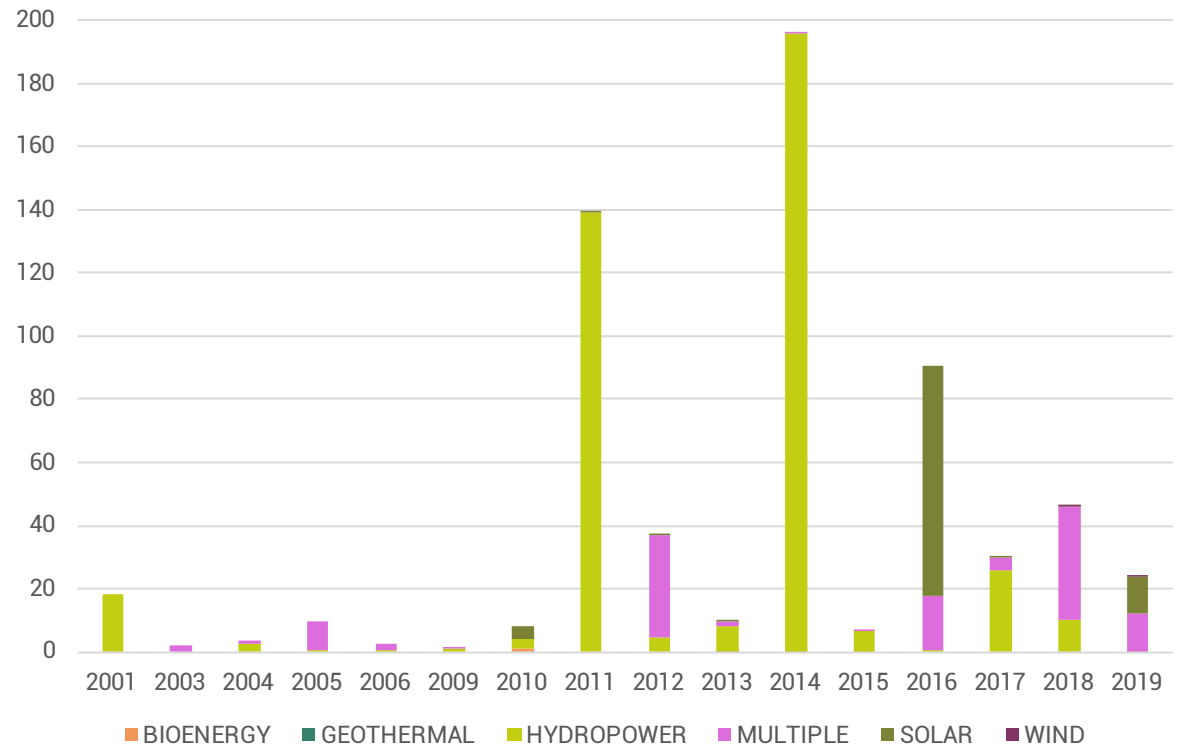
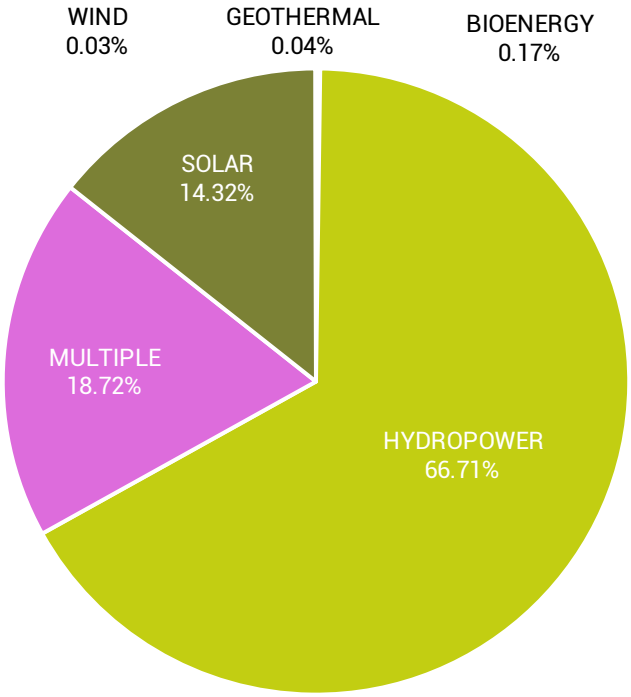


Figure 13
Share of cumulative financial inflow by technology, 2001–2019, per cent



The analysis suggests that there is a lack of education, information and technical expertise, insufficiency of trained personnel – especially in rural areas – for installation, operation and maintenance of RE and EE equipment, limited capacity of local research institutions, and lack of strategies and policies for EE projects. Georgian businesses, largely motivated by productivity, have minimal understanding or awareness of energy-saving measures and techniques.

Efforts on EE and RE development are still insufficient, constrained, and connected to specific clean energy projects that benefit from dedicated but insufficient credit lines, including subsidized loans and technical assistance in project development. This is due to commercial banks' lack of experience in financing EE and RE projects, not considering their possible economic and environmental benefits. This is compounded by the absence of fiscal and tax incentives of innovative financial instruments, especially for small businesses, making scaling up not feasible.

Recommendations on optimizing energy consumption and reducing energy costs for small agricultural and food sector businesses

Reducing energy consumption can be achieved by improving efficiency of food production value chain. Food producers and processors can ensure food safety while being energy-wise and reducing their carbon footprint. EE can be implemented in different agricultural sub-sectors and in various ways: by introducing energy-efficient processes and technologies and their regular maintenance (steam generation and distribution, pumping and lighting systems, industrial refrigeration and cooling and furnaces, kilns and ovens); by saving energy in lighting, air-conditioning, and heating; and by changing behaviours and practices, e.g. composting instead of largely relying on inorganic fertilizers and using residues generated from crop production and livestock as a source of bioenergy.

The measures outlined in Table 1 could be recommended for application in the sector to enable Georgian companies to decrease energy consumption and their environmental footprint, raising the level of competitiveness of local businesses in domestic and international markets.

The analysis conducted also suggests actions on:

- Auditing and assessment of EE potential of small businesses, implement procurement of energy-efficient equipment, and assist in the definition of concrete measures to improve energy and environmental performance.

- Data collection mechanism for the assessment of EE potential of the components of various food production value chains, create sub-sector energy performance benchmark indicators to define appropriate support mechanisms.

- A platform for knowledge sharing and information exchange among experts, small business owners, and sector associations, including training and coaching.

Table 1
Energy efficiency practices applicable to field crop production

Type of energy use	**Recommended energy efficiency technologies and behavioural practices**
Fertilizer use	Use of cover crops and manures (nitrogen-fixing crops in rotations, composting, and integrated pest management)
Irrigation (and fertigation)	Efficient irrigation pumps including variable speed motors (using gravity where possible, varying irrigation rates by using automatic regulation control systems, proper pump-sizing, and more efficient irrigation systems)
Lighting	Maximize natural daylight by utilizing translucent materials, use energy saving lighting technologies, efficient automatization of lighting, and clean reflective surfaces of light fixtures)
Refrigeration (cold storage)	Precooling with cold water, improving insulation of cold storage areas and piping, reducing air leaks, leakage detection, and utilizing energy-efficient compressors, heat exchangers, and refrigerants, ensuring refrigerators are full but not overloaded
Crop drying and other storage	Use energy-efficient dryers, including solar dryers, and high-quality humidity control
Machinery and farm vehicles	Using fuel-efficient vehicles and machinery, variable speed drives, efficient automation, proper vehicle and equipment sizing, route optimization, and reduced idling

Greening industries in the European Union's Eastern Partnership countries – the path towards circular economy in Georgia and Ukraine

UNIDO

> For industries all over the world, achieving efficient production in terms of material, energy, water and waste has shifted from being a good business strategy to a clear business imperative. The methodology of resource-efficient and cleaner production (RECP) has the potential to help enterprises increase the productive use of natural resources, minimize the generation of waste and emissions and foster green and sustainable goods and services.

Stopping climate breakdown is directly linked to curbing the inefficient use of natural resources, as the latter remains a key contributor to biodiversity loss and environmental degradation. This issue is especially critical in the industrial sector, where the high costs related to resource depletion have only increased the burdens on small and medium-sized enterprises (SMEs).

As a response to these challenges, in the Eastern Partnership (EaP) region of the European Union (EU), programmes such as the EU-funded EU4Environment Action are helping countries preserve their natural capital and unlock opportunities for greener growth. The EU4Environment Action is implemented by a consortium of partners, including the Organisation for Economic Co-operation and Development (OECD), the United Nations Economic Commission for Europe (UNECE), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO) and the World Bank. Here, amongst other initiatives, UNIDO is promoting the RECP methodology as a stepping stone to achieving circular economy and green industry (SDG targets 6.a, 6.3 and 12.5).

The introduction of RECP has been a central task for UNIDO's work in Georgia since 2014 and Ukraine since 2007 by implementing RECP demonstration projects and establishing RECP clubs in two selected regions of each country. In line with the UN 2030 Agenda for Sustainable Development, these initiatives have been specifically focused on the sustainable consumption and production of the industrial sector (by helping enterprises maximize resource use and minimize the generation of waste), as well as partnerships (bringing together ministries of environment and economy as key national partners and mobilizing the industrial sector, professionals, members of academia and other key stakeholders). Hitherto, over 100 SMEs benefited from the application of the RECP methodology and 10 regional RECP clubs have been created only since the launch of EU4Environment in 2019. Similar RECP activities are also taking place in other EaP countries – Armenia, Azerbaijan and the Republic of Moldova.

In Georgia, 13 experts were trained on the RECP methodology, while 17 SMEs joined the RECP clubs in Lower Kartly and Kakhety, from where over 40 SMEs benefited from the RECP coaching embedded within the clubs. Industrial waste mapping pilots were also developed

in Rustavi and Zestaponi to help enterprises embrace practices that minimize waste and promote industrial symbiosis (SDG target 12.4).[13]

"Our company had big energy and water consumption, so we were looking for advice on how we could better use these resources in a rational and efficient way. The results exceeded our expectations, as the implementation of RECP measures led to a decreased energy and water usage, and a significant reduction of waste," said Roman Ishkhneli, Chief Engineer, QARTULI FERMA, Georgia.[14]

The RECP experience was also successful in Ukraine, where the Amalgamated Territorial Communities of Slavuta City in Khmelnytskyi oblast and Davydiv Village in Lviv oblast were selected to undergo industrial waste mapping exercises.[15] Separately, over 20 enterprises took advantage of the RECP opportunities to reduce material inputs and pollution, out of which eight were featured as success stories.[16]

"Thanks to the project and the RECP implementation, we became confident that the industrial processes and operations could be improved through cleaner production. Moreover, this not only decreased waste generation and environmental pollution, but also saved our budget and generated additional income for the company through rational resources consumption," said Oleksii Kashkariov, Head of the Production Technical Preparation Department, UKRSTAL DNIPRO structural steel fabrication plant, PJSC, Ukraine.[17]

This is because RECP entails a continuous application of preventive environmental strategies to processes, products and services to keep resources in use for as long as possible by extracting their maximum value and relocating waste from the end of the supply chain to the beginning, thus giving a new life to used materials (SDG target 9.4). RECP can be applied to the processes used in any industry. A key feature of the success of RECP is the monitoring of performance improvement both in terms of increased resource productivity, as well as in terms of decreased pollution intensity. Performance indicators enable companies to monitor their use of energy, water and materials, as well as the generation of waste and emissions. Between 2013 and 2020, UNIDO carried out awareness-raising activities, trained national service providers, educated new experts, conducted in-plant assessments and helped establish RECP clubs to scale up RECP in key industrial regions. The RECP assessments identified a variety of RECP options that companies were then able to implement based on their specific needs, resources, capacity and priorities. In total, 10 Georgian SMEs and 8 Ukrainian SMEs (operating in the construction sector, metallurgy, dairy production, chemicals or food and beverages) were assessed under EU4Environment.

For an average investment of only 9,285 euros per year, the selected companies from Georgia and Ukraine recorded potential economic savings four times their investment of 39,577 euros per year.

Moreover, on average, the potential electricity savings (kWh per year) were 20 times higher than the cost of investment with fuel (m^3 per year) being the resource with the highest annual savings of 248,153 euros per year. This was followed by water savings (m^3 per year) and material savings (tonnes per year).

[13] EU4Environment profile, Georgia, achievements in 2021-2022, 2022

[14] EU4Environment brochure, RECP in Qartuli Ferma, 2022

[15] EU4Environment profile, Ukraine, achievements in 2021-2022, 2022

[16] EU4Environment, RECP success stories in Ukraine, 2021

[17] EU4Environment brochure, RECP in Ukrstal Dnipro, PJSC, 2021

RECP also prompted companies to decrease the generation of waste and pollution. Here, the most important potential achievement was the reduction of wastewater by 1,846 m^3 per year, emissions of CO_2-equivalent by 945 tonnes per year and general waste by 76 tonnes per year during 2015-2020.

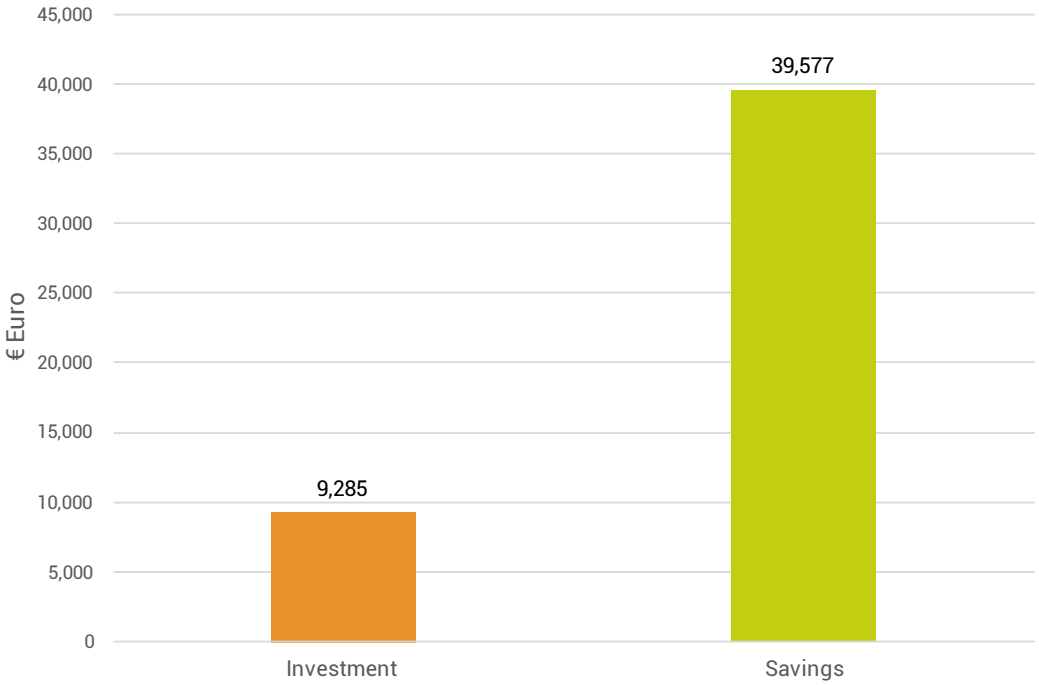
Photo credit: EU4Environment images.

Alongside its implementing partners within EU4Environment, UNIDO supports Ukraine's industry in its green reconstruction and recovery, as a greener industrial sector is crucial for the development and resilience of the economy and society. Enhancing industry's resource, energy and carbon productivity is particularly significant in the current context.[18]

To this end, UNIDO is working with the Government of Ukraine to develop a green recovery and post-crisis programme for the country's inclusive and sustainable industrial development. It will be synergetic with the country's National Recovery Plan and the United Nations Transitional Framework for Ukraine 2022-2023

Figure 14

Investments to and savings from resource-efficient and cleaner production by selected companies in Georgia and Ukraine



[18] EU4Environment press release, "European Union for Environment" programme supports Ukrainian industry on its path towards green reconstruction and recovery, 2022

Leveraging trade and innovation to enhance contribution of micro-, small- and medium-sized enterprises to sustainable development in Uzbekistan

UNECE Economic Cooperation and Trade Division

Uzbekistan joins the UNECE-led Sustainability Pledge to develop a strategy for ESG traceability and transparency in the textile industry, Tashkent, 25 March 2022. *Photo credit*: UNDP, 2022

> Traceability and transparency will remain critical requirements to demonstrate compliance with the environmental, social, and governance considerations, which have become increasingly important to global business along value chains.

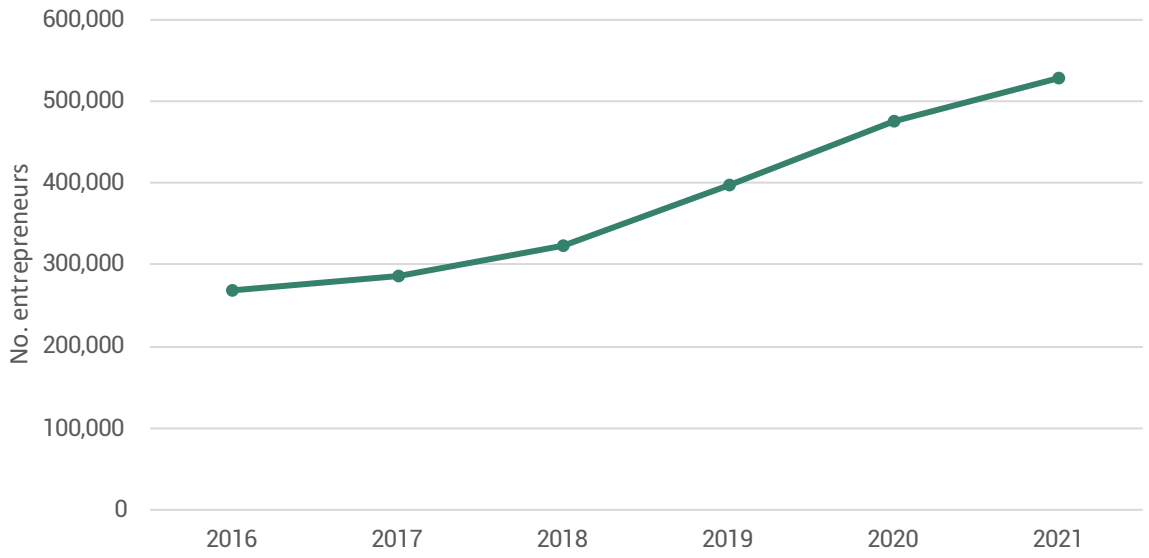
Supporting UNECE programme countries in achieving the Sustainable Development Goals (SDGs) and strengthening the support for micro-, small-, and medium-sized enterprises (MSMEs) have been central, cross-cutting themes in UNECE agendas in response to the triple planetary crisis and the Covid-19 pandemic. In 2022, the deteriorating global economic outlook and rising inflation have encouraged many economies to diversify their trade relationships, increase the value of their exports, and become more resilient. In this context, speeding up accession to the World Trade Organization (WTO) has become a priority for several Central Asian countries that are not yet part of the multilateral trading system. This includes Uzbekistan, the landlocked developing country at the heart of the ancient Silk Road.

Uzbekistan is a major producer and exporter of cotton – in 2022 it was the eighth largest cotton producer in the world.[19] The cotton sector is an important source of employment and opportunities for MSMEs.

However, for several years, the export of Uzbek cotton and textiles was held back due to concerns about social and environmental issues, such as the use of child and forced labour. This led to a boycott of Uzbek cotton, initiated by a coalition of international textile businesses and organizations. Following International Labour Organization reports noting significant progress on the country's labour and human rights, on 10 March 2022 the Cotton Campaign boycott was lifted.[20] This development holds great potential for enhancing market access to Uzbek cotton and textile producers. In this regard, UNECE worked closely with the private sector in Uzbekistan and supported the implementation of a blockchain pilot for the traceability of textiles in Uzbekistan through its "Sustainability Pledge" initiative based on UN/CEFACT standards and recommendations. Conformity with the Better Cotton Initiative means that Uzbek cotton is produced in accordance with global sustainability standards.[21]

Furthermore, MSMEs are an important focus of the forthcoming UNECE Study on Regulatory and Procedural Barriers in Uzbekistan. The report has found that despite the cotton boycott and the difficulties faced by small businesses during the COVID-19 pandemic, the country succeeded in doubling the number of its operating enterprises since 2016 (Figure 15).

Figure 15
Number of operation enterprises in Uzbekistan, 2016–2021
Despite the COVID-19 pandemic, entrepreneurship in Uzbekistan is booming



Source: Centre for Economic Research and Reform (ЦЭИР), 2022

Since 2016, comprehensive reforms have been adopted to promote entrepreneurship and increase the value added of exports, with the goal to move away from raw materials towards

[19] Statista (2022). Leading cotton producing countries worldwide
[20] ILO (2021). 2021 third-party monitoring of child labour and forced labour during the cotton harvest in Uzbekistan; ILO (2022). ILO welcomes lifting of Cotton Campaign boycott of Uzbekistan
[21] The Better Cotton Initiative is a non-profit, multistakeholder governance group that promotes better standards in cotton farming and practices in 24 countries

higher value-added textiles. Export diversification could contribute to the achievement of SDG targets 9.2 and 9.3.[22]

Another chapter of the UNECE's agenda on MSMEs concerns innovation policies. In recent years, Uzbekistan has shown strong political commitment to spurring innovation-led growth of its economy, not least by establishing the Ministry of Innovation in 2017 and formulating national innovation strategies. In support of the country's strategic innovation policy ambitions and regional efforts as reflected in the SPECA Innovation Strategy for Sustainable Development, UNECE recently undertook the country's first Innovation for Sustainable Development Review of Uzbekistan (2022). The study examined the national innovation policy governance, processes, and instruments in the country, providing concrete recommendations on how existing mechanisms can be improved to have a catalytic impact on innovative activity. Results and recommendations of the analysis fed into the country's new National Innovation Strategy 2022-2030, which is now being implemented by the newly established Agency for Innovative Development under the Ministry of Education, Science and Innovation. As a result of the continuous work and improvement of the national innovation system, in 2022 the WIPO Global Innovation Index ranked Uzbekistan in 82nd place, improving by ten positions over the last two years (Table 2), making it Central Asia's highest ranked country.[23]

Table 2
Climbing up the ladder: Global Innovation Index rankings for Uzbekistan (2020-2022)

Year	Global Innovation Index rank
2022	82
2021	86
2020	93

Source: WIPO Global Innovation Index
Note: Out of 132 countries examined.

Looking ahead, accelerating the WTO accession process will be essential to increase the country's competitiveness, which will also bring spillover benefits to Uzbekistan's growing MSMEs. In addition, traceability and transparency will remain critical requirements to demonstrate compliance with the environmental, social, and governance considerations, which have become increasingly important to global businesses and consumers along value chains. UNECE is ready to support the smooth integration of Uzbekistan and its MSMEs into the multilateral trading system.

[22] SDG target 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; SDG target 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.
[23] WIPO (2022), Global Innovation Index 2022 – Uzbekistan.

Enhancing risk knowledge with the INFORM Subnational Risk Index for South-East Europe

UN Office for Disaster Risk Reduction, Regional Office for Europe and Central Asia

> Achieving the goal and outcome of the Sendai Framework for Disaster Risk Reduction (SFDRR) means that Member States must prevent the creation of new risks, reduce existing risks, and strengthen economic, social, health, and environmental resilience. The INFORM Subnational Risk Index for South-East Europe has proven to be effective in overall risk estimation and supporting high-level policy processes for the development of Disaster Risk Reduction strategies in North Macedonia and Albania at the national level, and in Montenegro at the local level.

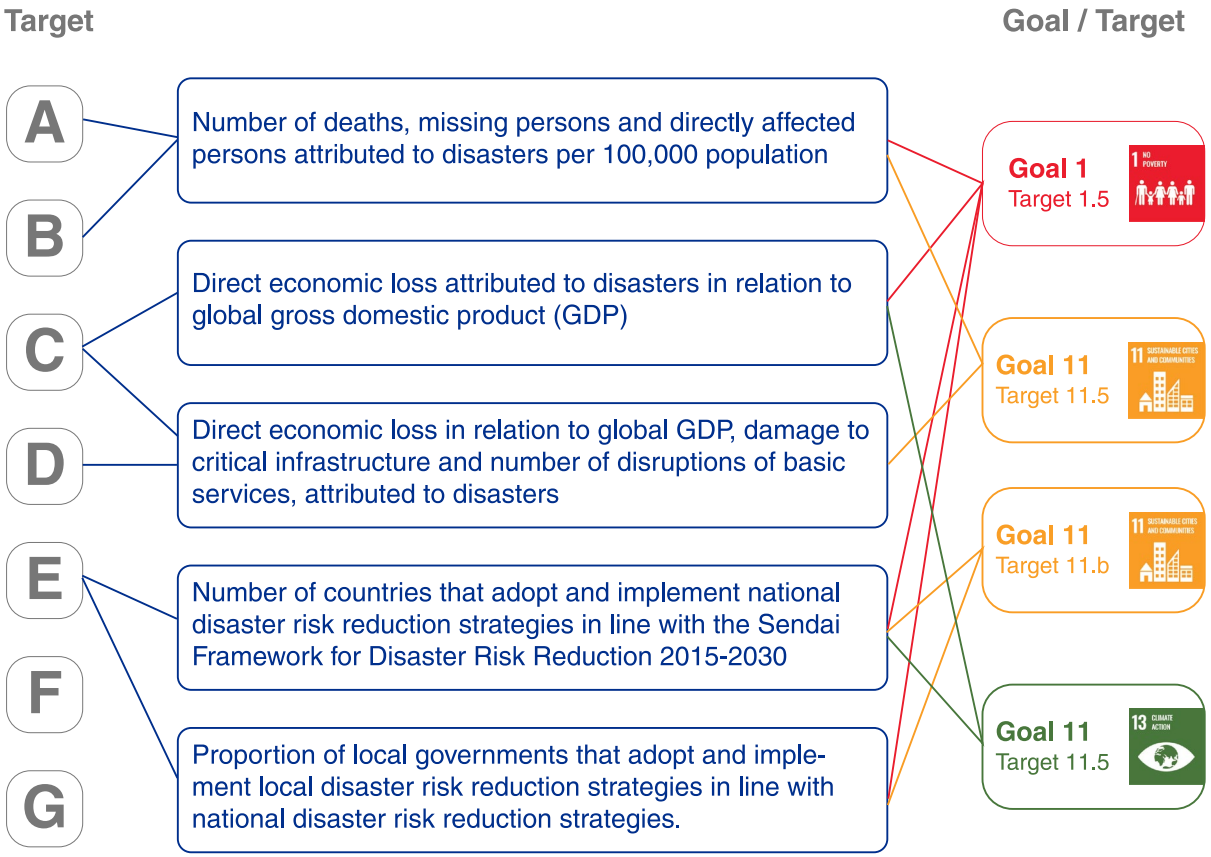
Context

Countries in South-East Europe (SEE) have a history of devastating earthquakes, floods, landslides, drought, extreme temperature, wildfires, and windstorms that cause major economic and human losses that overwhelm current management capacities. The level of preparedness and prevention also varies from country to country and within countries (regions, municipalities). Because of this high vulnerability and the relatively small size of administrative units within a country, it is crucial to assess the risk of each administrative unit through reliable and standardized data and statistics to inform Disaster Risk Reduction (DRR) policy. The INFORM Subnational Risk Index SEE aims to bridge the data gap in reporting and help identify the main risk factors at the local level, which can assist in managing risk. As the development of INFORM is collaborative and the results are open, it is particularly useful in supporting any decision-making process that involves a wide range of actors, such as humanitarian, development, or government planning.

SFDRR and the SDGs

Direct economic losses from disasters have increased tremendously in the last decades, with losses disproportionately borne by vulnerable developing countries. On the other side, disaster risk is increasingly systemic. If we want to reduce risk then we also must be increasingly joined up in our approaches: working across sectors, between and within institutions, and ensuring harmony from policy through to activity. Therefore, the SFDRR and the SDGs share many common indicators (Figure 16), as SFDRR monitoring is intended to complement the monitoring of those SDG indicators.

Figure 16
SFDRR and SDGs common reporting interlinkages



Source: UNDRR

UNDRR role in the development of INFORM Risk Subnational SEE

Understanding disaster risk is a complex process that requires a multidisciplinary approach. The INFORM Risk Index is a composite indicator developed by the EU Joint Research Centre as a tool for understanding the risk of humanitarian crisis and disasters. Consisting of three dimensions (Hazard, Vulnerability, and Coping Capacity), the INFORM Subnational Index is the first open source, continuously updated, transparent and reliable tool for understanding crises and disasters at subnational level within a country/region[24].

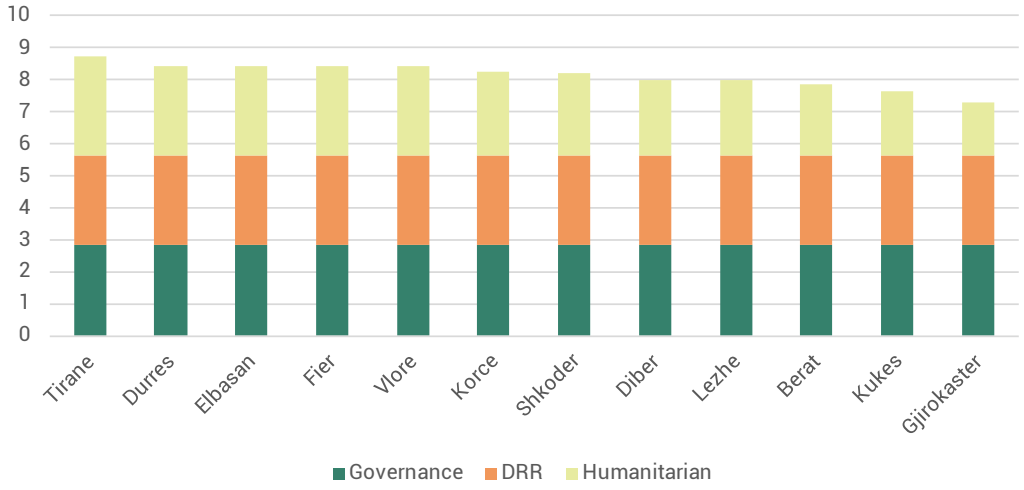
The UNDRR Regional Office for Europe and Central Asia in partnership with the Disaster Preparedness and Prevention Initiative for South-Eastern Europe has developed an SEE INFORM subnational risk index[25] for Albania, Montenegro, North Macedonia, and Romania. This index establishes a baseline view of disaster risk, its drivers, and coping capacity. The SEE INFORM model brings local administrations, governments, international organizations, donors, and humanitarian workers together to work closely towards a better understanding of disaster risk at local level.

[24] Read more on INFORM Risk Subnational at the web site of the European Commission Disaster Risk Management Knowledge Centre.
[25] Read more on SEE INFORM at the web site of the European Commission Disaster Risk Management Knowledge Centre.

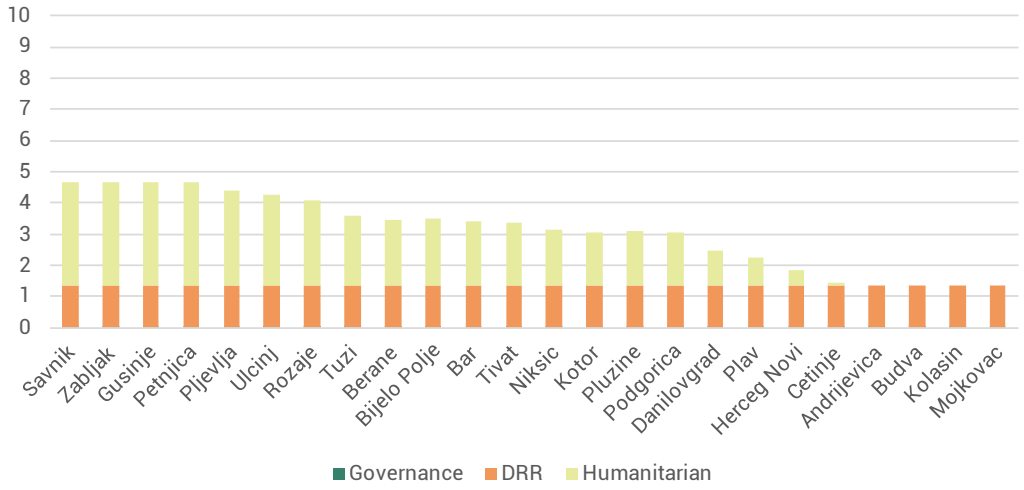
Figure 17

INFORM Subnational Risk Index SEE 2021, DRR component, contribution to Institutional risk, by administrative unit in Albania, Montenegro and North Macedonia

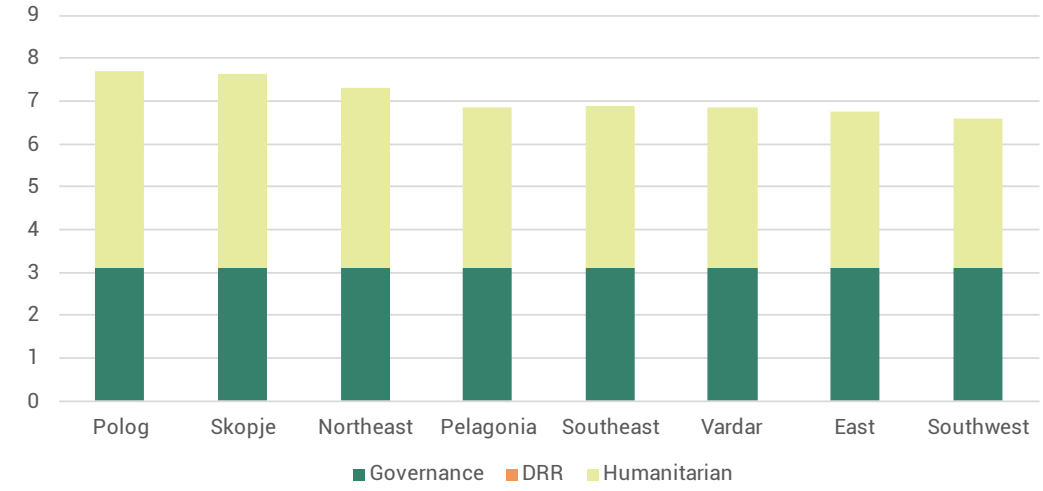
Albania



Montenegro



North Macedonia



Source: European Commission Disaster Risk Management Knowledge Centre

Use of SDG 11.b and SFDRR Target E in INFORM Risk Subnational SEE creation

Target E of the Sendai Framework for Disaster Risk Reduction (SFDRR) and target 11.b of the Sustainable Development Goals (SDG) both aim to quantify the quality of public policy, specifically disaster risk reduction (DRR) strategies, to track improvement over time. The SFDRR and the SDGs provide a set of reliable, consistent and comparable indicators required to understand the disaster risk drivers and underlying risk factors. Particularly, *SDG target 11b (SFDRR Target E1 and E2)*, is used to access the Institutional capacity risk within INFORM Subnational Index for SEE. DRR, Governance and Humanitarian component assemble the Institutional risk.

The data on DRR is based on SFDRR E1, which measures at 5.0 per cent in Albania and 25.0 per cent in Montenegro. The values for SFDRR target E2 are 1.64 per cent for Albania and 4.76 per cent for Montenegro. The data for Albania is from 2018 and for Montenegro from 2021 as shared by the Sendai Framework focal point. For North Macedonia, these data are not available. The reported percentages are transformed on the INFORM scale from 0 to 10 where 0 means no risk.

The regions in Albania face very high DRR risk due to lack of national and local DRR Strategies, while Montenegro face low risk considering the advancement in the implementation of its National and municipal DRR Strategy, in comparison with the other countries represented in the INFORM SEE model. At the same time, regions in Albania have less institutional coping capacity, due to increased risk in all of the components (Governance, DRR and Humanitarian), ranging from 7.3 in Gjirokaster to 8.7 in Tirana, ranking the regions in the high risk institutional capacity zone of the INFORM. The regions in North Macedonia are low risk of institutional capacity considering the low risk in all the components, while low risk across municipalities in Montenegro is a result of low risk in the governance and DRR component, although some municipalities face medium risk due to high humanitarian risk.

Way forward

Despite the usefulness of the DRR component in compiling INFORM, many challenges persist at (sub)national level. Many of the challenges are related to enforcement of the national/subnational DRR Strategies, but also to their implementation and reporting commitments. Weak national coverage, poor data quality and lack of time series hampers the efforts to include more indices under the INFORM initiative. However, the INFORM SEE initiative coincided with the policy process of development of DRR Strategies (in the case of North Macedonia and Albania at national, and Montenegro at local level), which will surely translate to better reporting and elimination of data gaps, contributing to better risk assessment (especially the coping capacity).

Sources

UN, WB, International Strategy for Disaster Reduction, South Eastern Europe Disaster Risk Mitigation and Adaptation Initiative – Risk Assessment for South Eastern Europe, Desk Study Review, 2006
UNDRR, INFORM SEE 2021 results
EU Joint Research Centre, INFORM Index for Risk Management Concept and Methodology Version 2017, 2017
UN Country Office North Macedonia, Open-source INFORM Index Provides Overview of Disaster Risk in North Macedonia, 2021
EU Joint Research Centre, Review of the Sendai Framework Monitor and Sustainable Development Goals indicators for their inclusion into INFORM Global Risk Index, 2019
Ministry of Internal Affairs Montenegro, Akcioni Plan za Sprovođenje strategije smanjenja rizika od katastrofa za period 2022/2023. godine, 2022

Transport of dangerous goods

UNECE Transport Division

> The Agreement concerning the International Transport of Dangerous Goods by Road (ADR) is a proven best practice United Nations instrument that has helped ensure the safe transport of hazardous substances for over 50 years. Incidents involving ADR vehicles carrying dangerous goods often result in no or minimum spillage, no or few people injured and even in many cases no significant damage to the cargo, people or the environment.

Far too many accidents involving the transport of dangerous goods still occur in countries all around the world. In November 2021, close to 100 people were reported to have died from a blast following a crash between a tank vehicle and a truck in a busy commercial district of Freetown, Sierra Leone.

Other major incidents among those recorded every year include the 2019 explosions of an overturned petrol tank vehicle in Niamey, Niger, which killed 58 people, and tank vehicle explosion in Yangchen, China, responsible for 68 deaths, or the 2017 fuel tank vehicle blast in Pakistan that claimed over 200 lives.

UNECE is ready to support all countries to implement proven United Nations instruments to prevent such accidents from occurring and to reduce the severity of their consequences.

For 75 years, UNECE has provided an intergovernmental platform where countries around the world come together to forge tools for economic cooperation, and negotiate and adopt UN conventions and recommendations on inland transport and elaborate updates and implementation of the conventions. The 59 UN conventions are considered indispensable for developing safe, efficient and sustainable inland transport systems. Among them, seven conventions provide legal frameworks that build safer roads and safer vehicle, safe handling of dangerous goods and ensure that we have safer drivers and safe road users. The Agreement concerning the International Transport of Dangerous Goods by Road (ADR) is one of these seven UN conventions to improve global road safety.

UN General Assembly resolutions over the years have consistently encouraged UN Member States to accede to all of the UN road safety legal instruments, and beyond accession, to implement and apply their provisions or safety regulations. Following the recent accession by Uganda in August 2022, the number of contracting parties to ADR increased to 54, mainly from the UNECE region but also from Asia and the Pacific (4) and Africa (4).[26]

[26] The detailed list of ADR contracting parties is available at the United Nations Treaty Collection.

The Agreement concerning the International Transport of Dangerous Goods by Road (ADR) is a proven best practice United Nations instrument that has helped ensure the safe transport of hazardous substances for over 50 years. Incidents involving ADR vehicles carrying dangerous goods often result in no or minimum spillage, no or few people injured and even in many cases no significant damage to the cargo, people or the environment.

According to ADR, reports on serious accidents or incidents need to be notified by the Contracting Parties.[27] On the contrary, accidents involving vehicles not complying with ADR requirements often have catastrophic consequences as mentioned above.

ADR offers a key practical tool that covers the classification, packaging and labelling of dangerous goods and the construction and equipment of the vehicles carrying them, including detailed training provisions of personnel involved in the transport operations of dangerous goods, for instance, drivers, vehicle crew and safety advisers. ADR helps to ensure safe transport – within countries and across borders – of a wide range of hazardous products including petroleum products, gases, chemicals, agrochemicals and fertilizers. More detailed information on the accession and implementation of ADR can be found in the ADR road map (UNECE 2022)[28].

Harmonization of transport of dangerous goods regulations across all transport modes (maritime, air, rail, road and inland waterways) is most important and started more than 60 years ago with the creation of a group of experts under the auspices of the United Nations Economic and Social Council (ECOSOC). The Sub-Committee of Experts on the Transport of Dangerous Goods is responsible for the development of provisions ensuring harmonization and safe transport of dangerous goods by all modes. Its "Recommendations on the Transport of Dangerous Goods, Model Regulations", commonly known as the "orange book", are implemented at worldwide level by all modes of transport, through the applicable international legal instruments (i.e. IMDG Code, ICAO Technical Instructions, RID, ADR, ADN) or through national or regional legislation. The implementation of the Model Regulations is crucial to ensure a safe transport of dangerous goods by all modes.[29]

The approaches of circular economy and the sustainable use of natural resources are important to achieve the Sustainable Development Goals (SDGs) of the 2030 Agenda. The UNECE Sustainable Transport Division is servicing on a regular basis the sessions of the ECOSOC Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals (TDG-GHS) and its sub-committees that also made important recommendations in these areas.

The contributions included among other updated model recommendations[30]:

- for the use of recycled plastics material to produce dangerous goods packaging (SDG 12)

- for the safe transport of electric storage systems, such as lithium ion and sodium ion batteries, and cleaner or alternative low-carbon fuels (SDGs 7, 12 and 13)

[27] See Accident reports (notifications according to 1.8.5.2) at the UNECE website.

[28] UNECE (2022). Road map for accession to and implementation of the Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR). Geneva: United Nations.

[29] The Secretary General's report on the Work of the Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals). E/2021/10.

[30] Further details are available at the UNECE website

- simplifying the provisions for the transport of nitrocellulose membrane filters to facilitate their availability for COVID-19 rapid test devices worldwide (SDGs 3 and 8)
- to facilitate classification using non-animal testing methods (SDGs 8 and 15)
- to improve hazard communication (SDGs 8 and 12)
- extending the scope to cover other chemicals of concern due to their health or environmental hazards (SDGs 12 and 14)

Promoting people-centred, smart and sustainable cities in countries with economies in transition

UNECE Forest, Land Management and Housing Division

> Regular engagement with the local authorities, city governments and stakeholders building on the approaches outlined in the "San Marino Declaration on principles for sustainable and inclusive urban design and architecture in support of sustainable, safe, healthy, socially inclusive, climate-neutral and circular homes, urban infrastructure and cities" ensures continuity, knowledge transfer and sustainable capacity-building of cities.

The project on innovative financing for sustainable smart cities (United Nations Development Account, 12th tranche) implemented by UNECE supports local governments in four different UNECE subregions – Eastern Europe (Belarus), South-Eastern Europe (Montenegro), Caucasus (Georgia) and Central Asia (Kazakhstan and Kyrgyzstan) – in their transitions towards making cities smart and sustainable. The project supports implementation of SDG 11 and specifically the targets on access for all to affordable decent housing (SDG target 11.1) and on inclusive and sustainable urbanization (SDG target 11.3). The project also promotes improved air and water quality through better cities' planning and design (SDG targets 3.9. and 6.1.) and more sustainable use of energy (SDG target 7.3).

The five cities engaged in the cooperation are Bishkek, Kyrgyzstan; Astana, Kazakhstan; Tbilisi, Georgia; Grodno, Belarus; and Podgorica, Montenegro. They all face similar challenges that include an insufficient capacity of city governments to develop evidence-based policies for smart sustainable development at the local level, and an insufficient capacity to facilitate funding for developing their urban infrastructure projects. These challenges prevent cities from achieving the SDGs at the local level, as they lack the local capacity to develop evidence-based policies and to facilitate funding for infrastructure projects.

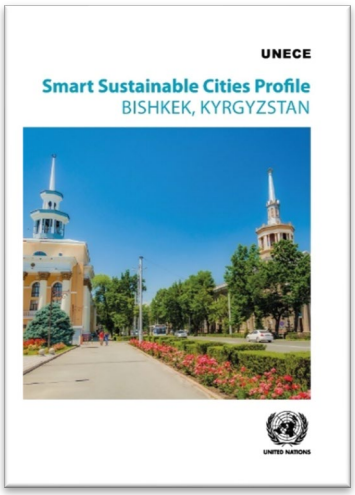
As part of the project, UNECE works to improve local capacity to develop and implement sustainable urban policies through: (i) evaluation of cities' performance and the drafting analytical smart sustainable cities profiles; (ii) capacity-building activities to promote evidence-based policies and vertical and horizontal coordination among different government agencies, with the participation of the cities' public; (iii) policy to support city governments in acquiring funding to support smart sustainable cities projects. The project supports the development of the smart sustainable cities profiles through the application of the UNECE/ITU Key Performance Indicators for Smart Sustainable Cities (KPIs for SSC), a United Nations standard developed by UNECE and ITU in 2015. The cities' performance is evaluated against the indicators; based on the evaluation, city profiles are developed which include concrete policy recommendations to the cities, including for concrete urban infrastructure projects.

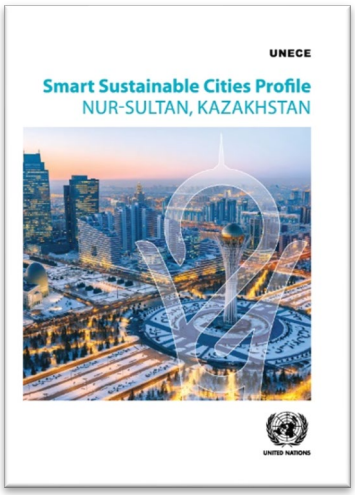
The KPI evaluation establishes a baseline, a snapshot of how well the city is advanced with addressing its urban challenges and achieving the SDGs at local level. For instance, in the case of the city of Bishkek (Figure 18), the KPI evaluation showed low performance on issues of water and solid waste management and urban transport. Based on the evaluation, UNECE formulated concrete recommendations for improvement and proposals for specific actions to be taken to address the challenges.

Following the development of the first city profile which establishes a baseline for the performance of a city, it is possible to prepare in a few years later the second profile which will allow to measure progress with smartness and sustainability.

The improvements depend to great extent on political stability and political commitment of the cities. For instance, the Bishkek city government is committed to cooperation with UNECE. Based on the recommendations of the Bishkek smart sustainable city profile, a key priority for funding was identified: improvement of the informal settlements which are part of the city. Following that, UNECE has conducted a survey to map the informal settlements and then partnered with the Cities Development Initiative for Asia (CDIA) to design a pre-feasibility study aimed at the integrated upgrading of five informal settlements and for job creation. As the CDIA provided $500,000 towards the pre-feasibility study to be implemented in 2023, UNECE is engaged to mobilize partnerships with international financial institutions to finance the upgrading of informal settlements beyond the pre-feasibility study phase. Similar work is under way to promote innovative financing approaches in other pilot cities engaged in the project

Following the development of the city profile with policy recommendations, UNECE organized capacity-building activities for the local government officials on evidence-based urban policies, including on urban data collection, analysis and use of the data in the decision-making. It further supported with policy advice and capacity building for raising external funding to support urban infrastructure projects.





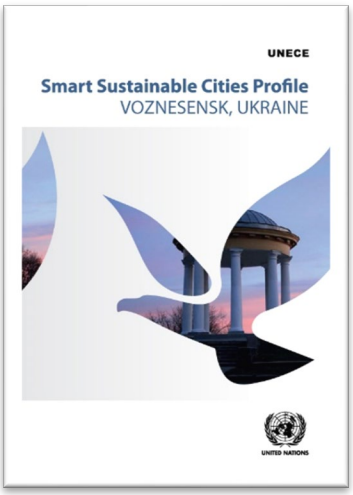
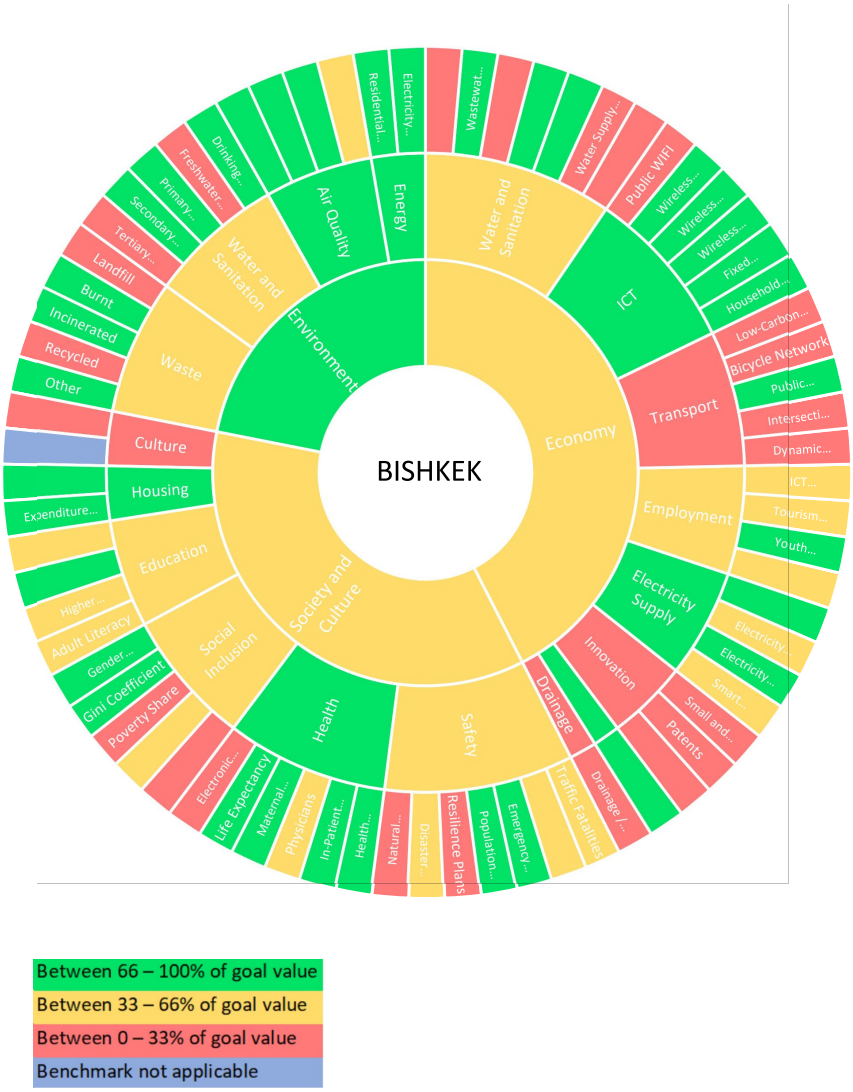


Figure 18
The performance of Bishkek against the Key Performance Indicators for Smart Sustainable Cities



Source: UNECE (2022). Smart Sustainable Cities profile: Bishkek, Kyrgyzstan. Geneva: United Nations.

Preventing gender-based violence through innovation

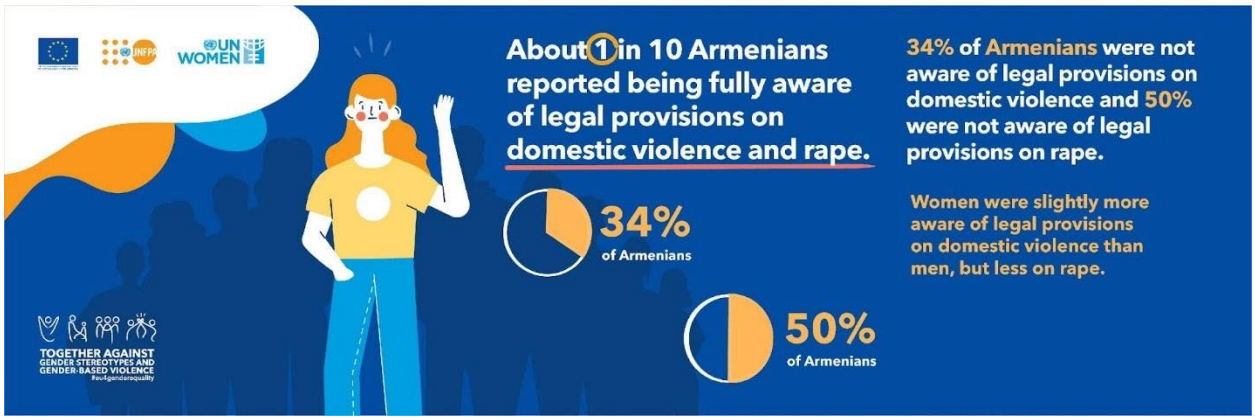
UNFPA Armenia

> UNFPA Armenia has addressed gender-based violence and harmful practices with a range of campaigns, interactive performances, educational programmes, communications materials and a mobile app. Where gender stereotypes prevail, such innovative, interactive methods have proven to be effective.

The pursuit of achieving gender equality and fight against gender-based violence run hand in hand, and on this path, innovative approaches and solutions designed to empower women and girls are essential. To support the strengthening of those actions, spread their positive impact and contribute to the progress in achieving the SDG targets 5, 9, and 17, the UNFPA Armenia country office collaborated with a number of initiatives and programmes.

One of these initiatives is the Safe YOU all-in-one innovative solution, which allows women to seek help in emergencies by sending alert messages with the user's geolocation to selected contacts, women support organizations, state authorities, or the police. The application created by Armenian women assists in connecting with a community that supports survivors of gender-based violence and educates them about their rights, health and life skills. The app offers forums for anonymous discussions with vetted professionals, such as doctors, lawyers, and psychologists.

Figure 19
Legal provisions on awareness about domestic violence in Armenia according to the Baseline Study On Gender Norms and Stereotypes



Due to the partnership with UNFPA Armenia and advocacy work, the platform developed its technical possibilities and reached broader users. In late 2021, UNFPA Armenia country office in partnership with UNFPA country office in Iraq launched Safe YOU to become available to Iraqi women and girls. Iraq became the third country in that programme after Armenia and Georgia. To ensure further inclusivity of the app, the Russian version of the application was developed with the UNFPA Armenia support in the framework of the EU-funded "Future Today" programme. In 2022, Safe YOU reached about 1600 new users in

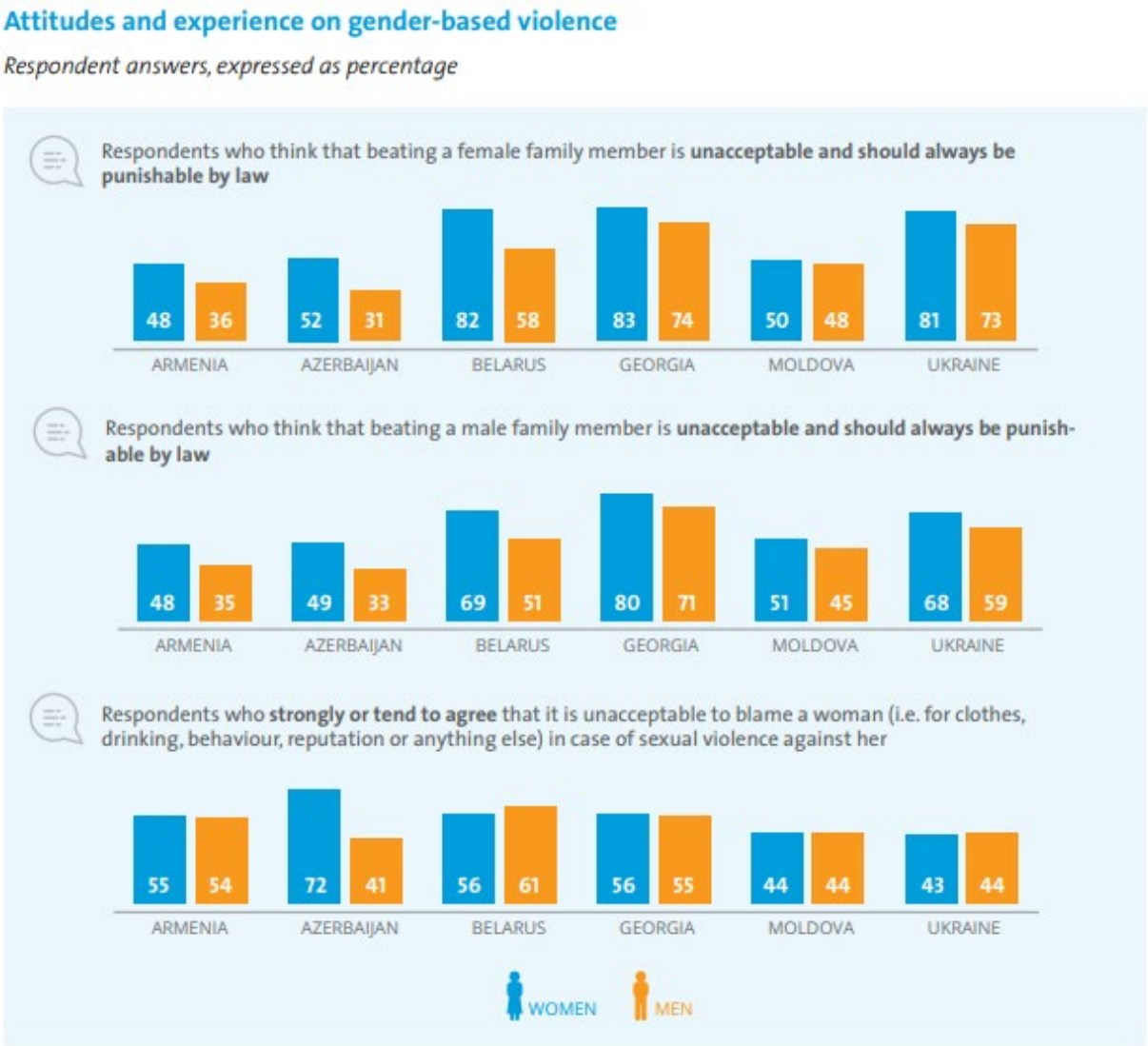
Armenia (4200 overall). The number of its users has reached 27 thousand in three countries. In 2022, out of 300 submissions, 61 countries, and 20 finalists, Safe YOU became one of the 10 winners of the Joint Innovation Challenge 2022.

Such initiatives, which can fight against domestic violence, have a vital role in the world, including Armenia, where women and men are generally more unaware of rape laws and policies.

Baseline Study On Gender Norms and Stereotypes in the countries of the Eastern Partnership conducted within the "EU 4 Gender Equality: Together against gender stereotypes and gender-based violence" programme showcased a high level of violence tolerance in the six countries of the Eastern Partnership (Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Ukraine).

Figure 20

Perceptions of domestic violence and justice in the six countries of the EU Eastern Partnership, according to the Baseline Study On Gender Norms and Stereotypes



The study shows the continuation of efforts towards achieving gender equal environment is essential. In terms of these efforts, the UNFPA Armenia office has been the supporter and initiator of several innovative and creative engagement methods in 2022.

Figure 21

Perceptions of domestic violence and justice among Armenians according to the Baseline Study On Gender Norms and Stereotypes

UNFPA Armenia Gender Portfolio programmes implemented several activities addressing sensitive gender issues in Armenia through edutainment, that is, interactive performances, educational programmes and communications materials.

In the framework of the "EU 4 Gender Equality" programme, about 300 Armenians deepened their knowledge about gender equality and positive parenting. They explored the best ways of increasing the father's involvement in child care and improved their understanding of equal sharing of domestic work by participating in the "Papa Schools" sessions and "Caring for Equality" parenting course at the Family Corners established in Shirak, Tavush and Lori regions.

"During the parenting course, we learned practical skills and acquired knowledge, starting from childcare to family relationships. Each topic is connected to real life and uniquely essential to the relationship between couples," says 32-year-old Vahan Davoyan, one of the "Caring for Equality" course participants at the Vanadzor Family Corner.

The "Prominent Armenian Women for Women Empowerment" campaign sensitized 284 local people and key stakeholders, including representatives from regional and national administration offices, education institutions, police, and health workers. Performances aiming to foster gender-transformative approaches to eliminate discriminatory social norms and harmful practices in communities were held in the framework of the programme "Addressing gender-biased sex selection and related harmful practices in the South Caucasus".

The sensitive gender issues were addressed through the "Race for Carrots" innovative interactive performance by the "Theatre of Change" NGO, reaching around 400 young Armenian people. Furthermore, 411 participants received information about gender-based violence (GBV), harmful practices and the importance of GBV prevention via "I am a Woman" theatre play.

Among policy change activities – policy briefs on gender-biased sex selection are developed and available to the regional and local administration offices, another-to health and education sectors. Policy briefs are available in Armenian and English.

Learnt lessons have shown that addressing sensitive gender issues with innovative, interactive methods is more effective in stereotyped societies. Taking into account the successful experiences in this regard, we must continue focusing on achieving an equal society with empowered women.

Strengthening availability and disaggregation of SDG indicators through the new round of Multiple Indicator Cluster Surveys

UNICEF

Multiple Indicator Cluster Surveys (MICS) currently allow the monitoring of 33 SDG indicators under 11 different goals. The new round of MICS, starting in 2023, includes technological innovation as well as additional modules on mental health, bullying, children's time use and inclusive education. This will further improve data availability for SDGs, including disaggregated data for monitoring the principle of leaving no one behind.

The 2030 Agenda requires effective collaborations between all partners to achieve the 17 Sustainable Development Goals (SDGs). The Multiple Indicator Cluster Surveys (MICS) is a household survey programme developed and supported by UNICEF and conducted by national statistical offices (NSOs) for monitoring progress toward national goals and global commitments such as SDGs. It represents a strong partnership between national statistical systems, UNICEF and other stakeholders to improve data availability, quality and disaggregation.

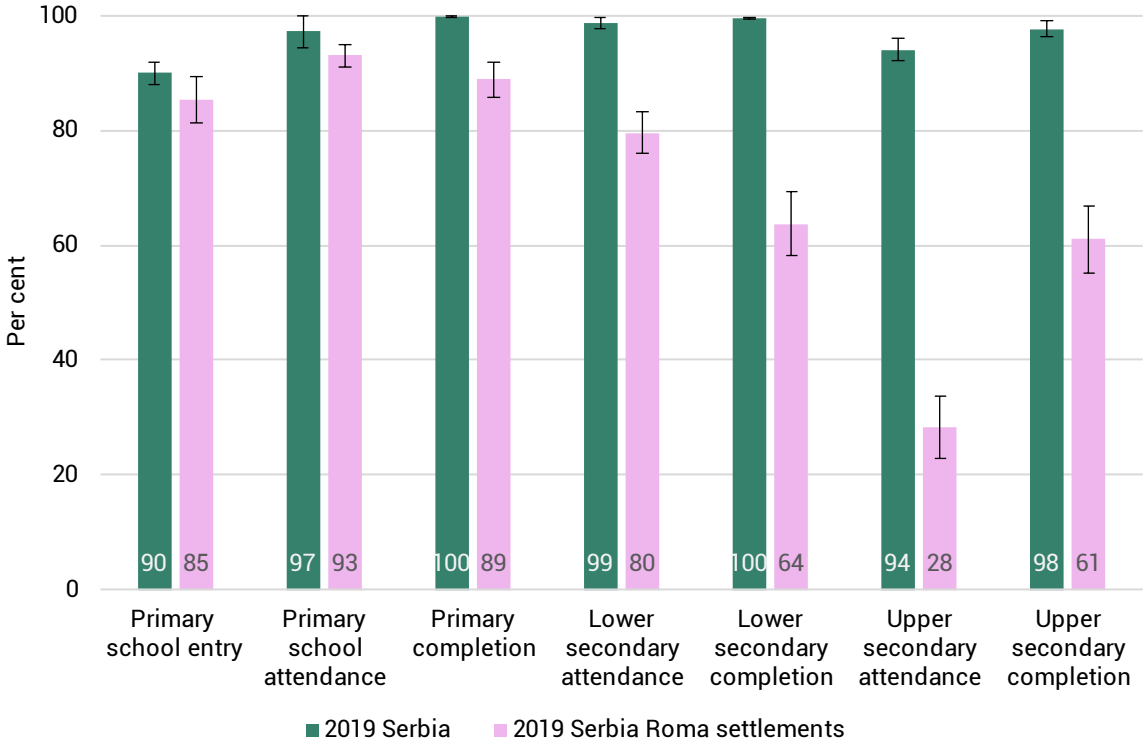
Six rounds of MICS have been implemented since the mid-1990s, with the seventh round starting in 2023. Globally, 351 surveys have been conducted by 118 countries, 59 of these surveys in the UNECE region. MICS provides statistically sound and internationally comparable data essential for developing evidence-based policies and programmes, and monitoring progress toward national goals and global commitments. It is a major data source for tracking progress toward the SDGs. Out of the 231 SDG indicators, 80 can be monitored through household surveys. MICS currently allows the monitoring of 33 SDG indicators under 11 different goals. With the addition of new indicators, this will further increase to cover about half of all household survey-based SDG indicators. Apart from governments, UNICEF, UNFPA, USAID, European Commission, Swedish International Development Cooperation Agency (Sida), Swiss Agency for Development and Cooperation (SDC), and the World Bank have been the major partners and donors for MICS in the region.

A supervisor assigns sampled household for an interview in the recent 2021-2022 Uzbekistan MICS. *Photo credit*: UNICEF/UNICEF Uzbekistan/2022

The availability of disaggregated data by many potential markers of inequity and discrimination makes MICS a powerful tool to measure how countries are implementing the principle of the 2030 Agenda to leave no one behind. In some countries, sub-national surveys, such as MICS in Roma settlements, provide even further insights into the situation of the most vulnerable children and families. Some countries in the region, such as Serbia, Turkmenistan, Kyrgyzstan, and North Macedonia, participated in most of the previous rounds, providing valuable trend data for a number of indicators. For example, figures from the Serbia MICS show the situation of school attendance at the national level and for children living in Roma settlements.

Figure 22

School attendance and completion cascade, Serbia and Serbia Roma settlements, 2019 MICS



NSOs have a comprehensive set of tools guiding them through every step of the MICS process – from planning, design and data collection in the field to data processing, analysis, interpretation, documentation and dissemination. Albeit not its primary objective, MICS has helped develop transferable knowledge within NSOs that are used in other surveys while enhancing the understanding of indicators within the whole NSS in the country.

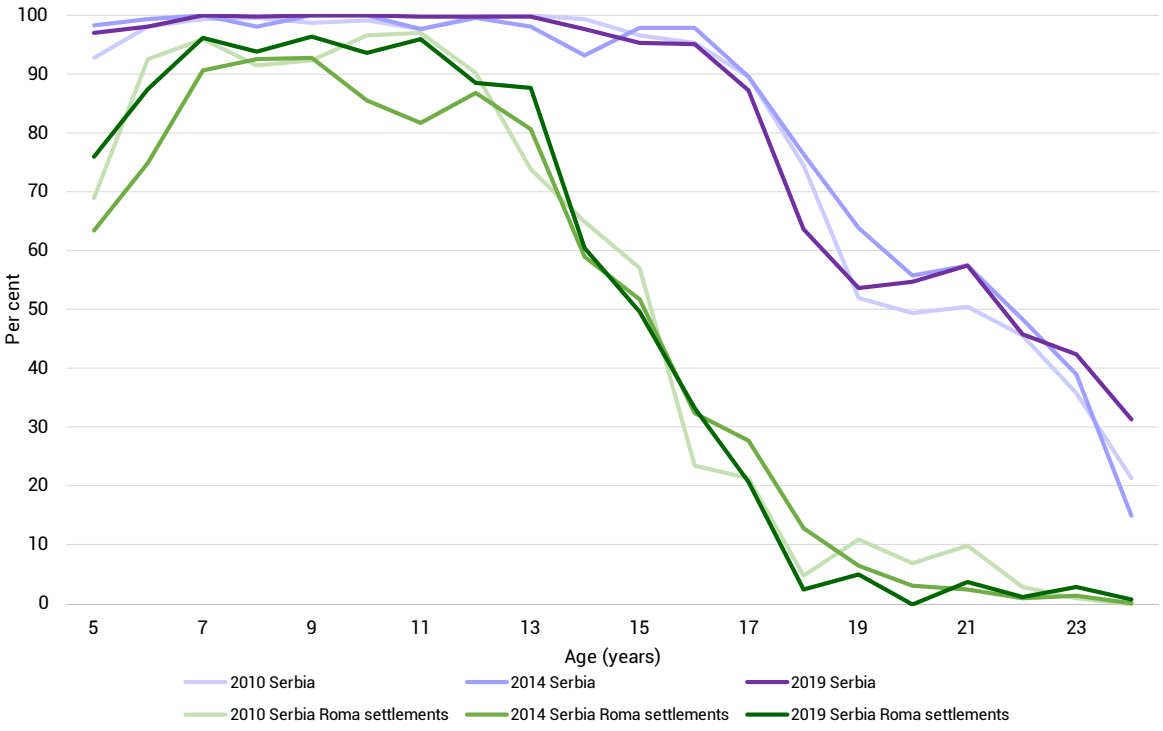
MICS measures a range of indicators for households, women and various age groups of children. Many indicators have specific age groups as their denominators, in line with the SDG indicator definitions. For example, the prevalence of the SDG indicators related to nutrition is measured for all children under five, while the immunization rates are calculated for children aged 24 to 35 months. One of the challenges in developing the sampling strategy for usual household surveys from the perspective of children is not having enough households with children in the sample. The application of oversampling of households with children in MICS surveys has helped overcome this while keeping the sample size manageable.

MICS has allowed countries in the region to collect data on some topics and indicators for the first time, such as violence against children, early childhood development, disability, coverage with social protection etc. The introduction of new modules, such as the child and adult functioning modules and questions on migration, has helped put MICS countries in a more advantageous position than others in terms of disaggregation by disability and migratory status. Almost all of the 16 countries out of 54 in the UNECE region have data on SDG indicator 16.2.1 on violence against children thanks to the MICS programme.

As the new round of MICS starts in 2023, additional modules pertinent to SDGs and the evolving challenges for children and families in the region are being added, such as mental health, bullying, children's time use and inclusive education.

Figure 23

Attendance to education by age, Serbia and Serbia Roma settlements, 2010, 2014 and 2019 MICS



Note: Attendance indicators for the 2010 and 2014 Serbia MICS and the 2010 and 2014 Serbia Roma Settlements MICS have been recalculated to correspond to the criteria for defining age at the start of school used in the analysis of data for 2019[31].

New enhancements also include (i) linking to administrative data (MICS Link) for synergy, (ii) geo-coding (MICS GIS) to link to Big Data, environmental and climate-related covariates and geographically granular estimates, (iii) addition of MICS Plus (rapid phone household surveys) to follow the situation of a representative group of households over time and

[31] For Serbia, the calculation of age at the start of schooling has been adjusted to take into account the change in primary school entry eligibility criteria that took place in 2006. Different age criteria have been applied for children born before or during 1998 and for those born after 1998. For the former group, age at the start of primary school refers to the child's age in the calendar year (2010 in MICS4, 2014 in MICS5 and 2019 in MICS6), while for the second group, the adjusted age is the age of the child (in completed years) by the end of February (2010, 2014 and 2019, respectively).

(iv) MICS tabulator to allow access to all generations of MICS data, without having to use statistical software.

MICS will continue bringing in further innovations and technologies over the years to reduce the time from data collection to the publication of the findings, access to rigorous data and new topics relevant to the countries. It will develop statistical capacities and produce evidence on the implementation of the 2030 Agenda.

Making progress in measuring progress – are we on track?

UNECE Statistical Division

> As recommended in the UNECE Road map on statistics for SDGs, 47 out of the 56 UNECE member States have a national reporting platform for SDGs. Yet, data availability remains a challenge. The present 2023 UNECE regional progress assessment found data on only 156 (63 per cent) of the 247 global monitoring indicators, which calls for further improvement in SDG data availability.

The 2030 Agenda for Sustainable Development calls for the participation of all Member States of the United Nations in providing national statistics to measure progress towards the 17 Sustainable Development Goals, emphasizing that official statistics and data from the national statistical systems constitute the basis for the SDG global indicator framework. Targets 17.17 and 17.18 focus on promoting partnerships in statistics and building statistical capacity.

Much has been achieved since 2015, when the goals were first established, in the ability to measure progress towards the SDGs. The first list of global SDG indicators was approved by the United Nations Statistical Commission in March 2016. At that time, internationally-agreed methodologies existed for about 60 per cent of the 232 global indicators. For about 35 per cent of indicators, data was widely available (but not for all countries) and for 25 per cent of indicators, data was available in less than half of the countries. The remaining 40 per cent of indicators were new. There were not yet (agreed) methodologies how to calculate them and consequently, no data available. By the end of 2020, agreed methodologies were developed for all indicators. By the end of 2022, data were widely available for almost two thirds of SDG indicators.

After the SDGs were established, countries started to set up websites and dashboards to provide information on progress towards SDGs. The UNECE Road map on statistics for SDGs recommends setting up a National Reporting Platform (NRP), or a similar web platform to provide access to SDG indicators through a single entry point. This requires strong national coordination, as the data for SDG indicators in countries is provided by many different agencies, a number of which are outside the national statistical system. It requires a special effort from national statistical offices to establish and coordinate regular mechanisms for all involved agencies to provide the data. There has been steady progress in this area. While in 2015 no country had such a platform, in 2022, 47 out of the 56 UNECE member States have an NRP or a similar web platform (links to national NRPs are available on the UNECE knowledge hub).

While global SDG indicators are aimed at measuring the overall progress towards SDGs in the whole world, more targeted indicators may be needed to focus on issues that are of relevance in the regional or national context. Therefore, some regional organizations are using additional indicators to assess progress in their region, and many countries have set up national SDG indicators. Complementary national indicators based on country-specific challenges and priorities enable different actors (government, academia, private sector,

NGOs and civil society) to find out where and how they can contribute most in terms of the SDGs. Currently 40 UNECE member States have established national indicators. Country-specific SDG data sets can also be an asset in the preparation of Voluntary National Reviews, allowing countries to conduct a comprehensive assessment of progress, achievements and specific challenges faced at the country level. At the same time, this increases the amount of data needed, especially with the required level of detail to ensure that nobody is left behind.

Availability of data is still a big challenge. While the scope of data in the Global SDG Database has increased in recent years, coverage remains weak in many areas. Sufficient national data to track change over time are available for 156 (63 per cent) of the 247 global monitoring indicators and for 115 (68 per cent) of the 169 targets.

One of the reasons for insufficient data availability is that in only a very few countries have additional resources been given to national statistical offices to work on SDG indicators. This work is often done as an additional task using existing resources. Often there are more urgent priorities on which to provide data, such as Covid-19, the rapidly rising cost-of-living and unsure security situation. Therefore, progress is slow and hardly any country can provide data on all SDG indicators. Nine UNECE member States still do not have a web platform with SDG data.

If the increase in the availability of global SDG indicators continues at the same pace as was seen from 2015 to 2022, all indicators will be available in only half of all countries globally by 2026 or 2027. Midway through the SDG journey, there is still time to accelerate this pace of improvement.

Technical notes on the progress assessment

Data

The progress assessment is based on the Global indicator framework for the Sustainable Development Goals[32]. The data were downloaded from the United Nations Global SDG Indicators Database as of 16 December 2022. For some indicators, the report relies on the UNECE Statistical Database. This is the case where the UNECE Database, through its existing data collection, has a more comprehensive coverage of countries or data on more recent years for UNECE countries, or where the UNECE Database provides more precise or consistent measurements for the UNECE region. This concerns indicators 3.6.1 on road traffic deaths and 9.1.2 on passenger and freight volumes. Indicator 3.7.1 on family planning is sourced from the United Nations Population Division, indicator 8.1.1 on annual growth rate of the gross domestic product per capita from the World Bank, and indicator 8.5.1, unemployment rate, from the International Labour Organization.

Assessment measure

The assessment presents the Anticipated Progress Index, a method developed by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)[33] and applied by all five United Nations regional commissions.

The Anticipated Progress Index measures whether a target will be achieved by 2030 based on the rate of change observed between 2000 and 2022. Recent data are given more weight than earlier data in estimating anticipated indicator values for 2030. For targets that will not be achieved, the Index reports the anticipated gap between the target value and the projected value for 2030 relative to the progress required between 2015 and 2030.

Estimation and aggregation

The anticipated values for 2030 are estimated using the available data between 2000 and 2022. The time-weighted linear regression used for the estimation gives more importance to more recent data. The assessment uses all available indicators where at least two data points are available for at least 15 UNECE countries and for which it is possible to set a target value (see Target values). In total, 156 indicators across 115 targets and all 17 goals (see Indicators used in the assessment). For 77 indicators, insufficient country data are available to assess progress for the region. Fifteen indicators are excluded due to challenges around

[32] United Nations (2017). Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. 6 July 2017. A/RES/71/313 and annual refinements E/CN.3/2018/2 (Annex II), E/CN.3/2019/2 (Annex II), and E/CN.3/2020/2.

[33] United Nations Economic and Social Commission for Asia and the Pacific (2022). Annex 1 – Technical notes. Pp. 73–76 in *Asia and the Pacific SDG progress report 2022: widening disparities amid COVID-19*. Bangkok: United Nations.

aggregation or target-setting. Some indicators consist of several components. For example, indicator 1.3.1 (Proportion of population covered by social protection) consists of 11 social protection benefits, and indicator 3.c.1 (Health worker density by occupation) consists of separate measures for nurses, doctors, pharmacists and physicians. In such cases, all components with data are used in calculations, and the progress index for the indicator is the average of the indices of its components.

The estimation described above is carried out on the country level. For the regional level assessment, the median value is used for most indicators. For a subset of indicators, the mean provides a better summary of the distribution of values across the region.[34] For indicators with binary values, which show the existence of a certain policy in a country, the summary value for the region is the percentage of countries with such policy.

In this report, the assessment results are presented at the level of SDG targets. In aggregation to the target level, each indicator has an equal weight (independent of its number of components) under the corresponding target.

Target values

The methodology uses target values for each indicator (or its component), which are expected to be reached by 2030. The 2030 Agenda for Sustainable Development explicitly or implicitly defines target values for 76 indicators included in this progress assessment. For the other indicators, the "champion area" approach is used to define the region's target value. Three variants of this approach are applied.

The most common variant identifies top performers in the region according to the rate of change. Top performers are defined as the five countries with the highest compound annual growth rate between the earliest observation available and 2015. When the earliest empirical observation is 2015 or later, the growth rate is the compound annual growth rate between this value and the next available value. The target value is set as the product of the mean growth rate of the top performers and the regional median value in 2015.

For some indicators, such as those on internet connections and use, the very rapid progress cannot reasonably be applied to the future. For these, top performers are identified as the five countries with either the highest or lowest values in 2015 depending on whether the desirable direction of change is an increase or a decrease. The target is then set as the mean value in 2015 among these top performers.

To set a reasonable target value for certain indicators, it is necessary to transform the data disseminated in the Global SDG Indicator Database into a different unit of measurement. For example, data for indicator 17.17.1 on funds committed to public-private partnerships are reported in total United States dollars. The size of national economies varies across the UNECE region, and it would not be appropriate to set a dollar-value target according to the largest or best performing economies. In these cases, we normalize data values based on gross domestic product for the corresponding year so that the data reflect per cent of gross domestic product. It is then possible to apply a universally appropriate target value based on

[34] The regional value represents the mean value for indicators 2.5.1, 3.6.1, 4.1.1, 10.7.2, 12.4.1, 15.2.1, and 16.1.1.

per cent of gross domestic product. Data for indicators 8.a.1, 15.a.1, 15.b.1,17.9.1 17.7.1, and 17.17.1 have been transformed in this way.

For a small group of indicators, it is not obvious whether rapid change or low or high absolute levels are desired (for example, 9.2.2, Manufacturing employment as a percentage of total employment). For such indicators, top performers are taken to be the countries with the highest gross domestic product per capita in 2015 and the target value as the average value for 2015 of these top performers.

For a few indicators, a desirable direction of change and a target value cannot be determined. This is typically the case with indicators that are meant to provide a dashboard for a qualitative overall assessment of the situation (for example, indicator 6.6.1 on changes to water-related ecosystems over time). Such indicators were left out of the assessment.

Outliers are dropped from the target-value estimation using the interquartile range method.

Indicators used in the assessment

Indicator short name	Indicator
GOAL 1 – No Poverty	
Extreme poverty	**1.1.1** - Proportion of population below international poverty line (%) - Proportion of employed population below international poverty line (%)
National poverty	**1.2.1** Proportion of population living below the national poverty line (%)
Multidimensional poverty	**1.2.2** Proportion of population living in multidimensional poverty (%)
Social protection	**1.3.1** - Proportion of population covered by social assistance programs (%) - Proportion of population covered by social assistance programs, lowest income quantile (%) - Proportion of population covered by social insurance programs (%) - Proportion of population covered by social insurance programs, lowest income quantile (%) - Proportion of unemployed persons receiving unemployment cash benefit (%) - Proportion of population above statutory pensionable age receiving a pension (%) - Proportion of population with severe disabilities receiving disability cash benefit (%) - Proportion of population covered by at least one social protection benefit (%) - Proportion of children/households receiving child/family cash benefit (%) - Proportion of mothers with newborns receiving maternity cash benefit (%) - Proportion of vulnerable population receiving social assistance cash benefit (%)
Access to basic water and sanitation services	**1.4.1** Proportion of population: - Using basic drinking water (%) - Basic sanitation services (%)
Deaths/missing/affected from disasters	**1.5.1** - Number of deaths and missing persons attributed to disasters per 100,000 population - Number of directly affected persons attributed to disasters per 100,000 population
Economic loss from disasters	**1.5.2** Direct economic loss attributed to disasters relative to GDP (%)
Disaster risk reduction	**1.5.3** Score of adoption and implementation of national DRR strategies in line with the Sendai Framework
Disaster risk reduction	**1.5.4** Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (%)

Indicator short name	Indicator
ODA grants for poverty reduction	**1.a.1** Official development assistance grants for poverty reduction, by donor countries (% of GNI)
Government spending on education and health	**1.a.2** Proportion of total government spending on essential services, education (%)
GOAL 2 – Zero Hunger	
Prevalence of undernourishment	**2.1.1** Prevalence of undernourishment (%)
Moderate or severe food insecurity in the population	**2.1.2** Prevalence of moderate or severe food insecurity in the adult population (%)
Prevalence of stunting	**2.2.1** Proportion of children moderately or severely stunted (%)
Prevalence of malnutrition	**2.2.2** - Proportion of children moderately or severely wasted (%) - Proportion of children moderately or severely overweight (%)
Prevalence of anaemia	**2.2.3** Proportion of women aged 15-49 years with anaemia (%): - Pregnant - Non-pregnant
Production per labour unit	**2.3.1** Productivity of small-scale food producers (agricultural output per labour day, constant PPP 2011 USD)
Plant and animal genetic resources in conservation facilities	**2.5.1** - Number of local breeds for which sufficient genetic resources are stored for reconstitution - Number of transboundary breeds for which sufficient genetic resources are stored for reconstitution - Plant genetic resources accessions stored ex situ (number)
Local breeds at risk of extinction	**2.5.2** Proportion of local breeds classified as being at risk as a share of local breeds with known level of extinction risk (%)
Agriculture orientation index	**2.a.1** Agriculture orientation index for government expenditures
GOAL 3 – Good health and well-being	
Maternal mortality ratio	**3.1.1** Maternal mortality ratio
Births attended by skilled health personnel	**3.1.2** Proportion of births attended by skilled health personnel (%)
Under-five mortality	**3.2.1** - Under-five mortality rate (deaths per 1,000 live births) - Infant mortality rate (deaths per 1,000 live births)
Neonatal mortality	**3.2.2** Neonatal mortality rate (deaths per 1,000 live births)
HIV infections	**3.3.1** Number of new HIV infections per 1,000 uninfected population
Tuberculosis	**3.3.2** Tuberculosis incidence (per 100,000 population)
Cardiovascular disease, cancer, diabetes or chronic respiratory disease	**3.4.1** Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease (probability)
Suicide	**3.4.2** Suicide mortality rate (deaths per 100,000 population)
Harmful use of alcohol	**3.5.2** Alcohol consumption per capita (aged 15 years and older) within a calendar year (litres of pure alcohol)

Indicator short name	Indicator
Road traffic deaths[35]	**3.6.1** Road traffic fatalities, rate per million inhabitants
Modern methods for family planning[36]	**3.7.1** Women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods (%)
Adolescent births	**3.7.2** - Adolescent birth rate (per 1,000 women aged 10-14 years) - Adolescent birth rate (per 1,000 women aged 15-19 years)
Universal health coverage index	**3.8.1** Universal health coverage (UHC) service coverage index
Household expenditures on health	**3.8.2** Proportion of population with large household expenditures on health as a share of total household expenditure or income (%): - Greater than 10% - Greater than 25%
Unintentional poisoning	**3.9.3** Mortality rate attributed to unintentional poisonings (deaths per 100,000 population)
Tobacco use	**3.a.1** Age-standardized prevalence of current tobacco use among persons aged 15 years and older (%)
Population covered by all vaccines in national programme	**3.b.1** Proportion of the target population with access to (%): - 3 doses of diphtheria-tetanus-pertussis (DTP3) (%) - Measles-containing-vaccine second dose (MCV2) (%) - Pneumococcal conjugate 3rd dose (PCV3) (%) - Affordable medicines and vaccines on a sustainable basis, human papillomavirus (HPV) (%)
Health worker density and distribution	**3.c.1** Health worker density (per 10,000 population) - Dentists - Nurses - Pharmacists - Physicians - Health worker distribution, female physicians (%)
Health capacity and emergency preparedness	**3.d.1** International Health Regulations (IHR) capacity (%): - Legislation and financing - Laboratory - Surveillance - Food safety - Human resources - Points of entry - Risk communication - Health service provision - Chemical events - Radiation - National health emergency framework - IHR Coordination and National Focal Point Functions - Zoonotic events and the Human-Animal Health Interface

[35]Data source is UNECE Statistical Database

[36]Data source is United Nations, Department of Economic and Social Affairs, Population Division (2020). *Model-based Estimates and Projections of Family Planning Indicators 2020*, custom data acquired via website.

Indicator short name	Indicator
Antimicrobial-resistant bloodstream infections	**3.d.2** - Percentage of bloodstream infection due to Escherichia coli resistant to 3rd-generation cephalosporin (ESBL- E. coli) among patients seeking care and whose blood sample is taken and tested (%) - Percentage of bloodstream infection due to methicillin-resistant Staphylococcus aureus (MRSA) among patients seeking care and whose blood sample is taken and tested (%)
GOAL 4 – Quality education	
Minimum proficiency in reading and maths	**4.1.1** Proportion of children and young people achieving a minimum proficiency level (%): - Mathematics - Reading
Completion rate	**4.1.2** Completion rate (%): - Primary - Lower secondary - Secondary
Organised learning before primary entry age	**4.2.2** Participation rate in organized learning (one year before the official primary entry age) (%)
Formal and non-formal education and training	**4.3.1** Participation rate in formal and non-formal education and training (%)
Youth and adults with ICT skills	**4.4.1** Proportion of youth and adults with information and communications technology (ICT) skills (%): - Programming language - Transfer file - Download software - Electronic presentation - Spreadsheet arithmetic - Copy/move file/folder - Copy/paste - Email
Inequality indices for education indicators	**4.5.1** Parity status index for achievement in reading and math in lower-secondary (ratio): - Language - Immigration status - Gender - Rural to urban - Socio-economic status
Schools with access to basic services	**4.a.1** Schools with access to (%) [Primary, lower secondary, secondary]: - Computers for pedagogical purposes - Internet for pedagogical purposes - Electricity - Basic handwashing facilities - Single-sex basic sanitation - Basic drinking water
Teachers with minimum required qualifications	**4.c.1** Proportion of teachers with the minimum required qualifications (%): - Pre-primary and primary - Secondary
GOAL 5 – Gender Equality	

Indicator short name	Indicator
Legal frameworks on non-discrimination	**5.1.1** Legal frameworks that promote, enforce and monitor gender equality (% of achievement): - Overarching legal frameworks and public life - Violence against women - Employment and economic benefits - Marriage and family
Gender parity in time spent on domestic tasks	**5.4.1** Male/female ratio of hours spent on domestic tasks
Seats held by women in national parliaments and local governments	**5.5.1** - Proportion of seats in national parliaments held by women (%) - Proportion of elected seats held by women in deliberative bodies of local government (%)
Proportion of women in managerial positions	**5.5.2** Proportion of women in (%): - Managerial positions - Senior and middle management positions
Mobile phone ownership	**5.b.1** Proportion of females who own a mobile phone (%)
GOAL 6 – Clean water and sanitation	
Safely managed drinking water services	**6.1.1** Proportion of population using safely managed drinking water services (%)
Open defecation practice and handwashing facilities	**6.2.1** Proportion of population (%): - Practicing open defecation - Using safely managed sanitation services
Bodies of water with good ambient water quality	**6.3.2** Proportion of bodies of water with good ambient water quality (%)
Water use efficiency	**6.4.1** Water Use Efficiency (United States dollars per cubic meter)
Water stress	**6.4.2** Level of water stress: freshwater withdrawal as a proportion of available freshwater resources (%)
Degree of integrated water resources management	**6.5.1** Degree of integrated water resources management implementation (%)
Transboundary basin area with an operational arrangement for water cooperation	**6.5.2** Proportion of transboundary basins (river and lake basins and aquifers) with an operational arrangement for water cooperation (%)
GOAL 7 – Affordable and clean energy	
Access to electricity	**7.1.1** Proportion of population with access to electricity (%)
Reliance on clean energy	**7.1.2** Proportion of population with primary reliance on clean fuels and technology (%)
Renewable energy share	**7.2.1** Renewable energy share in the total final energy consumption (%)
Energy intensity	**7.3.1** Energy intensity level of primary energy (megajoules per constant 2011 purchasing power parity GDP)
GOAL 8 – Decent work and economic growth	
Real GDP per capita growth rate	**8.1.1** Annual growth rate of real GDP per capita (%)
Real GDP per employed person growth rate	**8.2.1** Annual growth rate of real GDP per employed person (%)

Indicator short name	Indicator
Domestic material consumption	**8.4.2** Domestic material consumption per unit of GDP (kilograms per constant 2015 United States dollars): - Biomass - Fossil fuels - Metal ores - Non-metallic minerals - Coal - Crop residues - Crops - Ferrous ores - Natural gas - Grazed biomass and fodder crops - Non-ferrous ores - Non-metallic minerals, industrial or agricultural dominant - Non-metallic minerals, construction dominant - Petroleum - Wild catch and harvest - Wood - Oil shale and tar sands - Total
Unemployment rate	**8.5.2** Unemployment rate (%)
Youth not in education, employment or training	**8.6.1** Proportion of youth not in education, employment or training (%)
Occupational injuries	**8.8.1** Occupational injuries among employees per 100,000 employees: - Fatal - Non-fatal
National compliance to labour rights	**8.8.2** Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation
Tourism direct GDP as proportion of total	**8.9.1** Tourism direct GDP as a proportion of total GDP (%)
Commercial bank branches and automated teller machines	**8.10.1** Number of automated teller machines (ATMs) per 100,000 adults
Adults with a bank account	**8.10.2** Proportion of adults (15 years and older) with an account at a financial institution or mobile-money-service provider (%)
Aid for trade commitments and disbursements	**8.a.1** Total official flows (disbursement) for Aid for Trade, by donor countries (millions of constant 2020 United States dollars, transformed to per cent of GDP)
Strategy for youth employment	**8.b.1** Existence of a developed and operationalized national strategy for youth employment, as a distinct strategy or as part of a national employment strategy
GOAL 9 – Industry, innovation and infrastructure	
Passenger and freight volumes[37]	**9.1.2** - Non-road freight as proportion of total (%) - Rail passengers, thousand passenger-km per capita

[37] Data source is UNECE Statistical Database.

Indicator short name	Indicator
Manufacturing value added	**9.2.1** Manufacturing value added as a proportion of GDP (%)
Manufacturing employment	**9.2.2** Manufacturing employment as a proportion of total employment (%)
Small-scale industries as share of total	**9.3.1** Proportion of small-scale industries in total industry value added (%)
Small-scale industries with a loan or line of credit	**9.3.2** Proportion of small-scale industries with a loan or line of credit (%)
CO2 emission intensity	**9.4.1** Carbon dioxide emissions (kilogrammes of CO2 per constant 2010 United States dollars): - Per unit of GDP - Per unit of manufacturing value added
Research and development expenditure	**9.5.1** Research and development expenditure as a proportion of GDP (%)
Number of researchers	**9.5.2** Researchers (in full-time equivalent) per million inhabitants (per 1,000,000 population)
Medium and high-tech industry value added	**9.b.1** Proportion of medium and high-tech industry value added in total value added (%)
Population covered by mobile phone network	**9.c.1** Proportion of population covered by mobile network (%): - At least a 2G - At least a 3G - At least a 4G
GOAL 10 – Reduced inequalities	
Population living below 50 percent of median income	**10.2.1** Proportion of people living below 50 percent of median income (%)
Labour income share of GDP	**10.4.1** Labour share of GDP (%)
Redistributive impact of fiscal policy	**10.4.2** Redistributive impact of fiscal policy, Gini index (%): - Pre-fiscal income - Post-fiscal income
Financial soundness indicators	**10.5.1** - Non-performing loans net of provisions to capital (%) - Non-performing loans to total gross loans (%) - Return on assets (%) - Regulatory capital to assets (%) - Regulatory Tier 1 capital to risk-weighted assets (%) - Liquid assets to short-term liabilities (%) - Net open position in foreign exchange to capital (%)
Migration policies	**10.7.2** Countries with migration policies to facilitate orderly, safe, regular and responsible migration and mobility of people [All domains]
Migrant deaths and disappearances	**10.7.3** Total deaths and disappearances recorded during migration (number)
Refugees	**10.7.4** Proportion of the population who are refugees, by country of origin (%)
Zero tariff imports	**10.a.1** Proportion of tariff lines applied to imports with zero-tariff (%), all products
Total resource flows for development	**10.b.1** Net official development assistance (ODA) as a percentage of OECD-DAC donors' GNI, by donor countries (%)

Indicator short name	Indicator
Remittance costs	**10.c.1** - Remittance costs as a proportion of the amount remitted (%) - Average remittance costs of sending $200 for a sending country as a proportion of the amount remitted (%)
GOAL 11 – Sustainable cities and communities	
Slums	**11.1.1** Proportion of urban population living in slums (%)
Expenditure cultural and natural heritage	**11.4.1** Total expenditure per capita spent on cultural and natural heritage, public funding (PPP, constant 2017 United States dollars)
Deaths/missing/affected from disasters	**11.5.1** - Number of deaths and missing persons attributed to disasters per 100,000 population (number) - Number of directly affected persons attributed to disasters per 100,000 population (number)
Economic loss and affected infrastructure & services from disasters	**11.5.2** Direct economic loss attributed to disasters relative to GDP (%)
Mean levels of fine particulate matter in cities	**11.6.2** Annual mean levels of fine particulate matter (population-weighted, micrograms per cubic meter)
Disaster risk reduction	**11.b.1** Score of adoption and implementation of national DRR strategies in line with the Sendai Framework
Disaster risk reduction, local governments	**11.b.2** Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (%)
GOAL 12 – Responsible consumption and production	
Domestic material consumption	**12.2.2** Domestic material consumption per unit of GDP (kilograms per constant 2015 United States dollars): - Biomass - Fossil fuels - Metal ores - Non-metallic minerals - Coal - Crop residues - Crops - Ferrous ores - Natural gas - Grazed biomass and fodder crops - Non-ferrous ores - Non-metallic minerals, industrial or agricultural dominant - Non-metallic minerals, construction dominant - Petroleum - Wild catch and harvest - Wood - Oil shale and tar sands - Total

Indicator short name	Indicator
Handling of hazardous waste	**12.4.1** Parties meeting their commitments and obligations in transmitting information on hazardous waste and other chemicals, as required by: - Basel Convention - Montreal Protocol - Rotterdam Convention - Stockholm Convention
Hazardous waste generated	**12.4.2** - Hazardous waste treated or disposed (%) - Hazardous waste generated, per capita (kg)
National recycling rate	**12.5.1** Electronic waste recycling, per capita (kg)
Economic and environmental aspects of tourism	**12.b.1** Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism: - Number of tables - SEEA tables - Tourism Satellite Account tables
Fossil fuel subsidies	**12.c.1** - Fossil-fuel pre-tax subsidies (consumption and production) as a proportion of total GDP (%) - Fossil-fuel subsidies (consumption and production) per capita (constant US dollars)
GOAL 13 – Climate action	
Deaths/missing/affected from disasters	**13.1.1** - Number of deaths and missing persons attributed to disasters per 100,000 population - Number of directly affected persons attributed to disasters per 100,000 population
Disaster risk reduction	**13.1.2** Score of adoption and implementation of national DRR strategies in line with the Sendai Framework
Disaster risk reduction, local governments	**13.1.3** Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies (%)
Greenhouse gas emissions	**13.2.2** Total greenhouse gas emissions without LULUCF (Mt CO2, equivalent): - Annex I Parties - Non-Annex I Parties
GOAL 14 – Life below water	
Coastal eutrophication and plastic debris density	**14.1.1** - Chlorophyll-a anomaly, remote sensing (%) - Moderate - High - Beach litter originating from national land-based sources that ends in the beach (%) - Beach litter originating from national land-based sources that ends in the ocean (%)
Protected marine areas	**14.5.1** Average proportion of Marine Key Biodiversity Areas (KBAs) covered by protected areas (%)
Combatting illegal fishing	**14.6.1** Progress by countries in the degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing (level of implementation)

Indicator short name	Indicator
Sustainable fisheries	**14.7.1** Sustainable fisheries as a proportion of GDP (%)
Research budget for marine technology	**14.a.1** National ocean science expenditure as a share of total research and development funding (%)
Legal frameworks to protect small-scale fisheries	**14.b.1** Degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries (level of implementation: 1 lowest to 5 highest)
GOAL 15 – Life on land	
Forest area	**15.1.1** Forest area as a proportion of total land area (%)
Sites for terrestrial and freshwater biodiversity	**15.1.2** Average proportion of Key Biodiversity Areas (KBAs) covered by protected areas (%) - Freshwater - Terrestrial
Sustainable forest management	**15.2.1** - Above-ground biomass in forest (tonnes per hectare) - Forest area net change rate (%) - Proportion of forest area with a long-term management plan (%) - Proportion of forest area within legally established protected areas (%)
Sites for mountain biodiversity	**15.4.1** Average proportion of Mountain Key Biodiversity Areas (KBAs) covered by protected areas (%)
Mountain Green Cover Index	**15.4.2** Mountain Green Cover Index
Red List Index	**15.5.1** Red List Index
Plant genetic resources for good and agriculture	**15.6.1** - Countries that have legislative, administrative and policy framework or measures reported through the Online Reporting System on Compliance of the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA) - Countries that are contracting Parties to the International Treaty on Plant Genetic Resources for Food and Agriculture (PGRFA)
Management of invasive alien species	**15.8.1** - Legislation, Regulation, Act related to the prevention of introduction and management of Invasive Alien Species - Countries with an allocation from the national budget to manage the threat of invasive alien species - National Biodiversity Strategy and Action Plan (NBSAP) targets alignment to Aichi Biodiversity target 9 set out in the Strategic Plan for Biodiversity 2011-2020
ODA for biodiversity	**15.a.1** Total official development assistance for biodiversity (millions of constant 2017 United States dollars) by: - Donor countries - Recipient countries
GOAL 16 – Peace, justice and strong institutions	
Intentional homicides	**16.1.1** Number of victims of intentional homicide per 100,000 population

Indicator short name	Indicator
Robbery	**16.1.3** Proportion of population subjected to robbery in the previous 12 months (%)
Safety walking alone	**16.1.4** Proportion of population that feel safe walking alone around the area they live after dark (%)
Detected victims of human trafficking	**16.2.2** Detected victims of human trafficking (number)
Robbery reporting rate	**16.3.1** Police reporting rate for robbery (%)
Unsentenced detainees	**16.3.2** Unsentenced detainees as a proportion of overall prison population (%)
Bribery	**16.5.2** Bribery incidence (% of firms experiencing at least one bribe payment request)
Government expenditure	**16.6.1** Primary government expenditures as a proportion of original approved budget (%)
Representation in national and local institutions	**16.7.1** - Ratio of judges compared to national population distributions - Ratio of registrars compared to national population distributions - Ratio of members of parliament to eligible national population, lower chamber or unicameral - Ratio of members of parliament to eligible national population, upper chamber - Persons aged 45 or under - Females
Public access to information	**16.10.2** Countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information
Human Rights, Paris Principles	**16.a.1** Countries with National Human Rights Institutions in compliance with the Paris Principles, A status
GOAL 17 – Partnerships for goals	
Tax revenue	**17.1.1** Total government revenue (budgetary central government) as a proportion of GDP (%)
Domestic budget funded by domestic taxes	**17.1.2** Proportion of domestic budget funded by domestic taxes (% of GDP)
ODA from OECD-DAC	**17.2.1** Net official development assistance (ODA) as a percentage of OECD-DAC donors' GNI, by donor countries to (%): - Landlocked developing countries - Small island states (SIDS) - Least developed countries (LDCs)
Debt service	**17.4.1** Debt service as a proportion of exports of goods and services (%)
Fixed Internet broadband subscription by speed	**17.6.1** Fixed Internet broadband subscriptions per 100 inhabitants: - 10 MPBS - Any speed
Internet users	**17.8.1** Internet users per 100 inhabitants

Indicator short name	Indicator

Worldwide weighted tariff-average	**17.10.1**
	- Worldwide weighted tariff-average, most-favoured-nation status (%):
	  - Agricultural products
	  - Clothing
	  - Industrial products
	  - Oil
	  - Textiles
	  - All products
	- Worldwide weighted tariff-average, preferential status (%)
	  - Agricultural products
	  - Clothing
	  - Industrial products
	  - Oil
	  - Textiles
	  - All products

Average tariffs faced by developing countries	**17.12.1**
	- Average tariff applied by developed countries, most-favoured nation status (%):
	  - Agricultural products
	  - Arms
	  - Clothing
	  - Industrial products
	  - Oil
	  - Textiles
	  - All products
	- Average tariff applied by developed countries, preferential status (%):
	  - Agricultural products
	  - Arms
	  - Clothing
	  - Industrial products
	  - Oil
	  - Textiles
	  - All products

Macroeconomic dashboard	**17.13.1** - Gross public sector debt, Central Government, as a proportion of GDP (%) - Annual inflation, consumer prices (%) - Annual growth of households and NPISHs final consumption expenditure (%) - Annual GDP growth (%)
Country-owned results frameworks and planning tools	**17.15.1** - Extent of use of country-owned results frameworks and planning tools by providers of development cooperation, data by provider (%) - Proportion of project objectives of new development interventions drawn from country-led result frameworks, data by provider (%) - Proportion of results indicators drawn from country-led results frameworks, data by provider (%) - Proportion of results indicators which will be monitored using government sources and monitoring systems, data by provider (%)

Indicator short name	Indicator
Funding for environmentally sound technologies	**17.7.1** - Amount of tracked exported Environmentally Sound Technologies (current United States dollars) - Amount of tracked exported Environmentally Sound Technologies (current United States dollars)
Official development assistance for technical cooperation	**17.9.1** Total official development assistance (gross disbursement) for technical cooperation (millions of 2020 United States dollars)
Compliance with the Fundamental Principles of Official Statistics	**17.18.2** Countries with national statistical legislation exists that complies with the Fundamental Principles of Official Statistics
National statistical plan	**17.18.3** - Countries with national statistical plans with funding from Government - Countries with national statistical plans that are fully funded - Countries with national statistical plans that are under implementation
Census, birth and death registration	**17.19.2** - Countries that have conducted at least one population and housing census in the last 10 years - Countries with birth registration data that are at least 90 percent complete - Countries with death registration data that are at least 75 percent complete

Growing Challenges for Sustainable Development: Can the UNECE Region Turn the Tide in 2023?

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