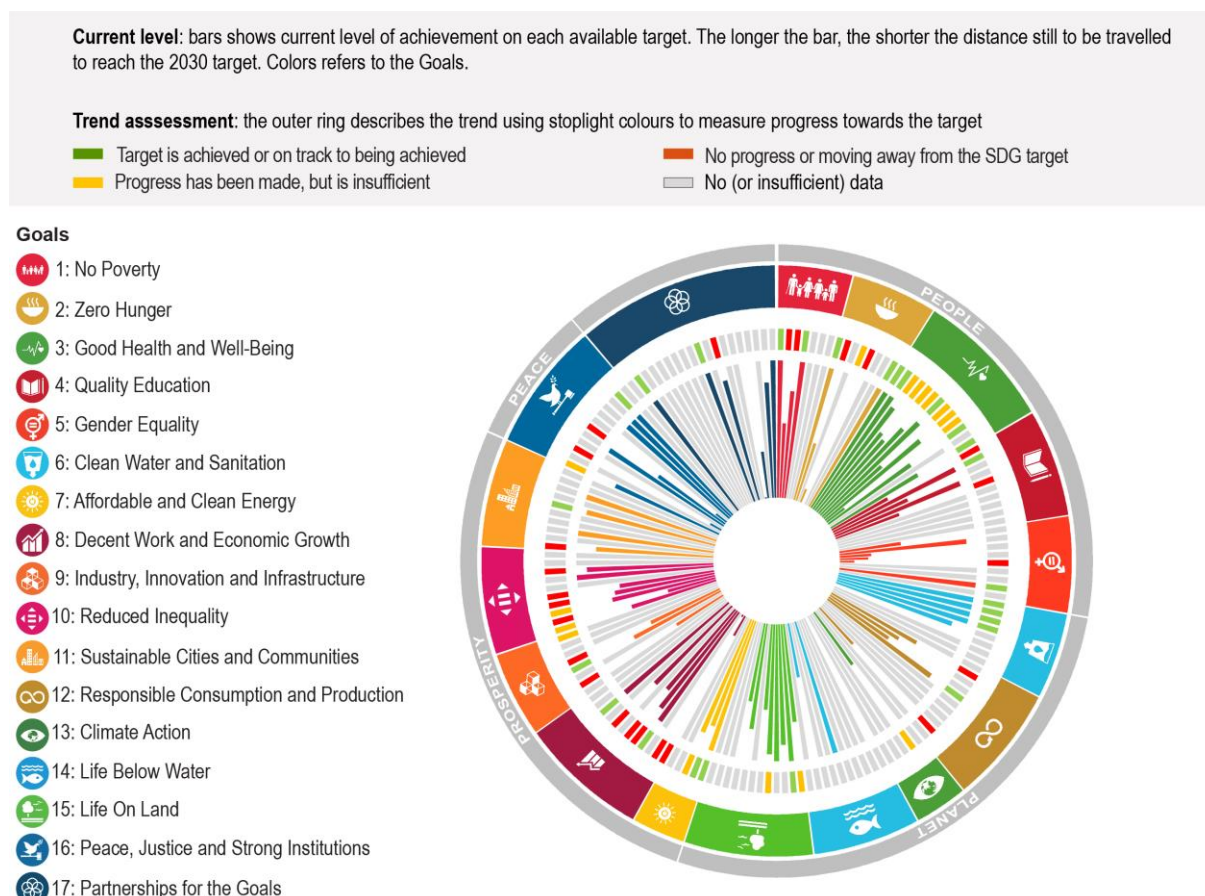


Measuring distance to the SDG targets – Luxembourg

Luxembourg has already achieved 24 of the 118 SDG targets for which comparable data are available and, based on most recent trends, is expected to meet 10 additional targets by 2030 (Figure 1). As virtually all OECD countries, Luxembourg has already met (or is close to meeting) most targets related to securing basic needs and implementing the policy tools and frameworks mentioned in the 2030 Agenda (see details in Table 1). Luxembourg is a prosperous economy and financial centre. It is also performing well on Peace, justice and institutions (Goal 16) and Partnerships (Goal 17). Yet, there is room for improving the performance on some targets, most notably on inclusion.

This country profile provides a high-level overview of some of Luxembourg’s strengths and challenges in performance across the SDG targets. As such, it differs in nature from Voluntary National Reviews (VNRs) or other reporting processes. To ensure international comparability, this assessment builds on the global indicator framework and relies on data sourced from the *SDG Global Database* and OECD databases. VNRs typically use national indicators that reflect national circumstances and are more up-to-date (See section How to read this country profile that provides some methodological details on country profiles).

Figure 1. Luxembourg's distance from achieving SDG targets included in this report



Source: All data is taken and adapted from UNDESA (2021), *SDG Global Database*, <https://unstats.un.org/sdgs/unsdg> and OECD (2021), *OECD.Stat*, <https://stats.oecd.org/> (accessed on 29 October 2021).

Main strengths

Luxembourg has pursued an ambitious and comprehensive environmental policy, with some objectives going beyond international and European commitments. Since the early 2000, energy consumption (Target 7.3), greenhouse gas emissions and major air pollutants have declined or remained stable despite higher GDP (Target 13.1), while air quality has improved (Target 11.6). Luxembourg has also caught up in terms of wastewater treatment (Target 6.3) and tripled the share of renewables in its electricity production (Target 7.2). Protected areas cover nearly 50% of Luxembourg's territory (Target 15.1) but their potential for conserving biodiversity and delivering ecosystem services is limited (e.g. less than a third of freshwater areas that are key for biodiversity are protected).

Luxembourg is a prosperous economy and financial centre. Before the pandemic hit, it was characterised by GDP growth well above the OECD average (Target 8.1) and an attractive labour market. Average hourly earnings are among the highest in the OECD (USD PPP 25 per hour in 2019), and the unemployment rate is below the OECD average (Target 8.5). On regulation of financial markets (Target 10.5), while the overall picture differ across indicators, Luxembourg is among the best performing countries for regulatory Tier 1 capital to risk-weighted assets, and perform well on non-performing loans to total gross loans and non-performing loans net of provisions to own capital. Other sectors are lagging behind. For instance, the share of manufacturing value added in GDP is decreasing and was only 4% in 2020 – ten percentage points below the OECD average (Target 9.2).

While there is still scope for improvement, Luxembourg is among the most advanced OECD countries in terms of achieving targets on Peace, justice and institutions (Goal 16) and Partnerships (Goal 17). Luxembourg is ahead of the OECD average on most indicators underpinning targets on violence (Target 16.1), corruption and bribery (Target 16.5) and citizens' confidence in the judicial system (Target 16.6), which is 20 percentage points higher than the OECD average. Yet, other measures of the rule of law (Target 16.3) show a more nuanced picture. For instance, while the police-reporting rate for robbery is 22 percentage points higher than the OECD average, almost half of the prison population is unsentenced. Lack of diversity of the central government workforce and parliament hampers Luxembourg's progress toward Target 16.7 on responsive, inclusive, participatory and representative decision-making processes. In the Partnerships category (Goal 17), Luxembourg shows strong achievements when it comes to foreign trade, market openness and financial assistance to developing countries. Luxembourg is one of the few OECD countries exceeding the target on Official Development Assistance, with 1% of its GNI going to ODA (Target 17.2). Yet, there is scope for improvement when it comes to aligning ODA to partner countries' priorities and to country-owned results frameworks (Target 17.15).

Main challenges

Non-medical determinants of health may undermine future prospects. Luxembourg's population enjoys good access to health care, with a broad benefits package and low out-of-pocket payments (Target 3.8), while the mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease is below the OECD average, thanks to the effectiveness of prevention policies (Target 3.4). Still, behavioural risk factors – especially poor nutrition, smoking, physical inactivity and alcohol consumption – are major drivers of morbidity and mortality in Luxembourg. Both alcohol and tobacco consumption, despite decreasing, are above the OECD average (Targets 3.5 and 3.a). Conversely, obesity remains below the OECD average but is on the rise (Target 2.2).

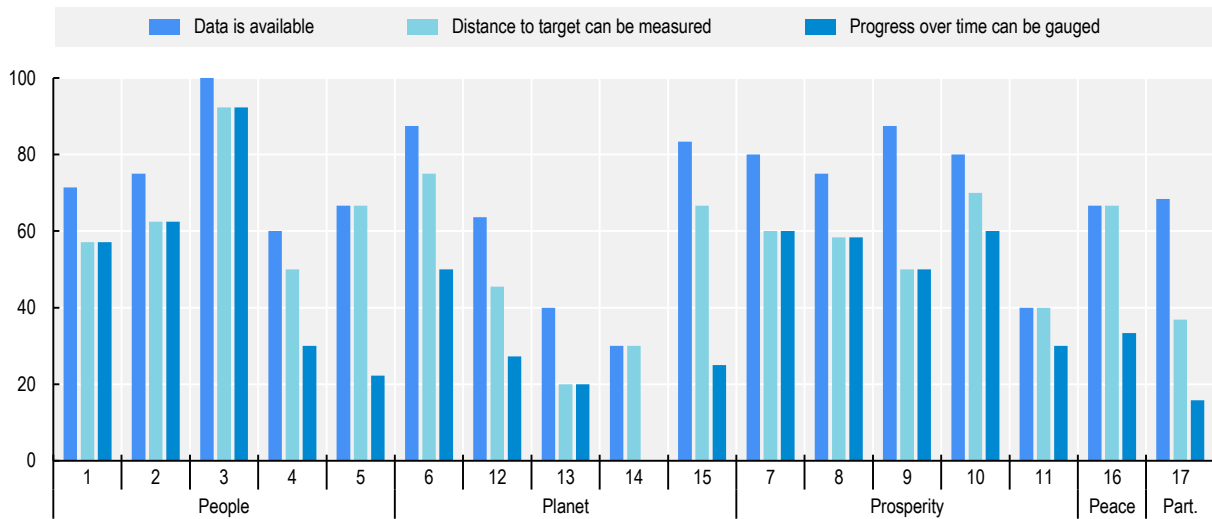
Tackling unequal opportunities for minorities and women requires further efforts. There is scope to improve the legal framework on gender equality (Targets 5.1 and 5.3). As many OECD countries, women bear the lion share of unpaid care and housework (Target 5.4) and they are underrepresented in both the public and economic spheres (Target 5.5) – around a third of seats in national parliament are held by women. Beyond gender inequality, more should be done to meet targets relating to equality of opportunity. There are large disparities among socio-economic and gender groups in terms of education outcomes (Target 4.5). As noted already, Luxembourg also reports a low score on diversity of central government workforce and is thus far from meeting Target 16.7 on inclusive decision-making.

Despite significant environmental progress, Luxembourg needs to sustain efforts to meet the climate targets and consolidate the results obtained in waste and material management. The carbon intensity of the economy is among the highest in the OECD (Target 13.2). While material productivity is very high, material consumption is among the highest of the OECD and it generates large amounts of waste (Target 12.2). On biodiversity, Luxembourg has not established national targets in accordance with Aichi Biodiversity Target (Target 15.9), while agriculture imposes a heavy toll on the environment – nitrogen surplus are twice the OECD average (Target 2.4).

Statistical gaps

Like in many other OECD countries, data availability remains a challenge when measuring distances to targets (see the Overview chapter for details). For Luxembourg, available data on the level of the different indicators allow covering 118 of the 169 targets. As shown in Figure 2 below, indicator coverage is uneven across the 17 goals. While six goals have most of their targets covered (the indicator coverage exceeds 80%), coverage is much lower for Goal 11 on cities, Goal 13 on climate action and Goal 14 on life below water (Luxembourg is a landlocked country and some Goal 14 Targets do not apply) with only 40% or less of their targets covered. Data gaps become starker when focusing on performance indicators, excluding those providing contextual information. In this case, coverage exceeds 80% for only Goal 3 on health. For nine goals, mostly related to the Planet category (Goals 12, 13, 14 and 15) but also to education, gender equality, cities, peace and partnerships (Goals 4, 5, 11, 16 and 17), data are lacking to monitor progress over time for more than two in three targets.

Figure 2. Luxembourg's share of the 2030 Agenda's targets covered by at least one indicator, by goal



Note: The figure represents Luxembourg's share of targets covered by at least one indicator for each SDG. Numbers from 1 to 17 stand for the goals: 1 No poverty, 2 Zero hunger, 3 Good health and well-being, 4 Quality education, 5 Gender equality, 6 Clean water and sanitation, 7 Affordable and clean energy, 8 Decent work and economic growth, 9 Industry, innovation and infrastructure, 10 Reduced inequalities, 11 Sustainable cities and communities, 12 Responsible consumption and production, 13 Climate action, 14 Life below water, 15 Life on land, 16 Peace, justice and strong institutions and 17 Partnerships for the goals. These goals are grouped under five broad themes (the "5Ps"): People, Planet, Prosperity, Peace and Partnership. Beyond data availability, other statistical gaps such as timeliness or granularity also need to be considered. For instance, given the lag in available data, the effects of the pandemic on current distance and trajectories may not be reflected in the estimates.

Source: All data is taken and adapted from UNDESA (2021), *SDG Global Database*, <https://unstats.un.org/sdgs/unsdg> and OECD (2021), *OECD.Stat*, <https://stats.oecd.org/> (accessed on 29 October 2021).

Detailed information

While some SDG Targets are, on average, close to being met, performance is very uneven across the 17 Goals of the 2030 Agenda for Sustainable Development. Table 1 presents an overview of Luxembourg's progress towards targets based on available data for each of the 17 Goals. It shows that distances to Targets and trends over time differ significantly even when considering a specific goal.

Table 1. Luxembourg distances to targets and recent trends

Goal	Target	Short Label	Distance to Target (s.u.)	Trend Assessment	OECD Average distance (s.u.)	OECD Trend Assessment
1	1.1	Extreme poverty	0.00	Target is achieved or on track to being achieved	0.00	Target is achieved or on track to being achieved
1	1.2	Poverty in all its dimensions	1.37	No progress or moving away from the SDG target	1.41	No progress or moving away from the SDG target
1	1.3	Social protection coverage	0.66	No progress or moving away from the SDG target	0.80	No progress or moving away from the SDG target
1	1.4	Access to basic services	0.00	Target is achieved or on track to being achieved	0.00	Target is achieved or on track to being achieved
2	2.1	Hunger	0.01	Target is achieved or on track to being achieved	0.28	No progress or moving away from the SDG target
2	2.2	Malnutrition	1.68	No progress or moving	2.46	No progress or moving

Goal	Target	Short Label	Distance to Target (s.u.)	Trend Assessment	OECD Average distance (s.u.)	OECD Trend Assessment
				away from the SDG target		away from the SDG target
2	2.4	Sustainable production	2.68	Progress has been made, but is insufficient to meet the target	1.34	No progress or moving away from the SDG target
2	2.5	Diversity of seeds and livestock*	4.69	No progress or moving away from the SDG target	3.59	No progress or moving away from the SDG target
2	2.c	Food prices anomalies	0.00	Target is achieved or on track to being achieved	0.00	Target is achieved or on track to being achieved
3	3.1	Maternal mortality	0.00	Target is achieved or on track to being achieved	0.00	Target is achieved or on track to being achieved
3	3.2	Death of newborns and children	0.00	Target is achieved or on track to being achieved	0.00	Target is achieved or on track to being achieved
3	3.3	Communicable diseases	0.18	Progress has been made, but is insufficient to meet the target	0.56	Progress has been made, but is insufficient to meet the target
3	3.4	Premature mortality	0.77	Progress has been made, but is insufficient to meet the target	1.26	Progress has been made, but is insufficient to meet the target
3	3.5	Prevention of Substance abuse	0.86	Progress has been made, but is insufficient to meet the target	0.63	Progress has been made, but is insufficient to meet the target
3	3.6	Road traffic accidents*	0.39	Progress has been made, but is insufficient to meet the target	0.78	Progress has been made, but is insufficient to meet the target
3	3.7	Access to sexual health-care	0.06	Target is achieved or on track to being achieved	0.58	Progress has been made, but is insufficient to meet the target
3	3.8	Health coverage	1.30	Progress has been made, but is insufficient to meet the target	1.79	Progress has been made, but is insufficient to meet the target
3	3.9	Deaths and illness from pollution	0.30	Progress has been made, but is insufficient to meet the target	0.55	No progress or moving away from the SDG target
3	3.a	Tobacco consumption	2.51	Progress has been made, but is insufficient to meet the target	2.65	Progress has been made, but is insufficient to meet the target
3	3.b	Vaccination	0.78	Target is achieved or on track to being achieved	0.37	Target is achieved or on track to being achieved
3	3.d	Health emergency preparedness	0.77	Target is achieved or on track to being achieved	1.19	Target is achieved or on track to being achieved
4	4.1	Primary and secondary education	1.60	No progress or moving away from the SDG target	1.17	No progress or moving away from the SDG target
4	4.2	Pre-primary education	0.00	Target is achieved or on track to being achieved	0.24	Target is achieved or on track to being achieved
4	4.3	Lifelong learning	1.22	n.a.	1.25	No progress or moving away from the SDG target
4	4.4	Skills for employment	0.03	n.a.	1.23	No progress or moving away from the SDG target
4	4.5	Disparities in education	1.52	No progress or moving away from the SDG target	1.49	No progress or moving away from the SDG target
5	5.1	Discrimination against women	1.64	n.a.	1.32	n.a.
5	5.2	Violence against women	0.21	n.a.	0.89	n.a.
5	5.3	Harmful practices	2.31	n.a.	1.37	n.a.
5	5.4	Unpaid care and domestic work	2.38	n.a.	1.79	n.a.

Goal	Target	Short Label	Distance to Target (s.u.)	Trend Assessment	OECD Average distance (s.u.)	OECD Trend Assessment
5	5.5	Women's participation	2.68	No progress or moving away from the SDG target	1.89	Progress has been made, but is insufficient to meet the target
5	5.b	Women's empowerment	0.00	Target is achieved or on track to being achieved	0.53	Target is achieved or on track to being achieved
6	6.1	Access to drinking water	0.00	Target is achieved or on track to being achieved	0.15	Target is achieved or on track to being achieved
6	6.2	Waste water treatment	0.00	Target is achieved or on track to being achieved	0.35	Progress has been made, but is insufficient to meet the target
6	6.3	Water quality	0.00	Target is achieved or on track to being achieved	0.68	Target is achieved or on track to being achieved
6	6.4	Water-use efficiency	0.00	Target is achieved or on track to being achieved	0.54	Progress has been made, but is insufficient to meet the target
6	6.5	Water resources management	0.31	n.a.	0.98	n.a.
6	6.6	Water-related ecosystems*	3.85	n.a.	2.18	n.a.
7	7.1	Access to energy	0.00	Target is achieved or on track to being achieved	0.00	Target is achieved or on track to being achieved
7	7.2	Clean energy	0.52	Target is achieved or on track to being achieved	0.62	Progress has been made, but is insufficient to meet the target
7	7.3	Energy efficiency	0.31	Progress has been made, but is insufficient to meet the target	0.98	Progress has been made, but is insufficient to meet the target
8	8.1	GDP growth	2.51	No progress or moving away from the SDG target	1.89	No progress or moving away from the SDG target
8	8.2	Productivity	2.95	No progress or moving away from the SDG target	1.77	No progress or moving away from the SDG target
8	8.4	Material footprint	0.06	Target is achieved or on track to being achieved	0.82	Progress has been made, but is insufficient to meet the target
8	8.5	Employment	0.30	No progress or moving away from the SDG target	0.97	No progress or moving away from the SDG target
8	8.6	NEET	0.70	No progress or moving away from the SDG target	1.69	No progress or moving away from the SDG target
8	8.8	Labour rights	0.62	No progress or moving away from the SDG target	0.80	Progress has been made, but is insufficient to meet the target
8	8.10	Financial institutions	0.00	Target is achieved or on track to being achieved	0.45	Target is achieved or on track to being achieved
9	9.2	Sustainable industry	1.80	No progress or moving away from the SDG target	0.95	No progress or moving away from the SDG target
9	9.4	Environmental impact	0.85	Target is achieved or on track to being achieved	0.87	Progress has been made, but is insufficient to meet the target
9	9.5	Research and development	1.32	No progress or moving away from the SDG target	1.06	Progress has been made, but is insufficient to meet the target
9	9.c	ICT	0.17	Progress has been made, but is insufficient to meet the target	0.36	Progress has been made, but is insufficient to meet the target
10	10.1	Income distribution	1.06	Progress has been made, but is insufficient to meet the target	1.23	No progress or moving away from the SDG target
10	10.2	Social inclusion	1.92	No progress or moving	1.54	No progress or moving

Goal	Target	Short Label	Distance to Target (s.u.)	Trend Assessment	OECD Average distance (s.u.)	OECD Trend Assessment
				away from the SDG target		away from the SDG target
10	10.3	Inequalities of outcome	0.69	Progress has been made, but is insufficient to meet the target	1.27	Progress has been made, but is insufficient to meet the target
10	10.4	Redistribution	0.78	No progress or moving away from the SDG target	1.12	No progress or moving away from the SDG target
10	10.5	Financial markets	0.91	No progress or moving away from the SDG target	0.90	No progress or moving away from the SDG target
10	10.7	Migration	0.00	n.a.	0.69	n.a.
10	10.a	Tariff-lines	0.23	No progress or moving away from the SDG target	0.93	Progress has been made, but is insufficient to meet the target
11	11.1	Housing	0.43	No progress or moving away from the SDG target	0.80	No progress or moving away from the SDG target
11	11.3	Urbanization	0.00	n.a.	1.19	Progress has been made, but is insufficient to meet the target
11	11.6	Environmental impact of cities	0.10	Target is achieved or on track to being achieved	0.49	Progress has been made, but is insufficient to meet the target
11	11.a	Urban policies	0.00	n.a.	0.23	n.a.
12	12.2	Efficient use of natural resources	0.84	No progress or moving away from the SDG target	0.87	Progress has been made, but is insufficient to meet the target
12	12.3	Food waste	1.22	n.a.	1.36	n.a.
12	12.4	Chemical and hazardous waste*	1.41	n.a.	1.02	n.a.
12	12.5	Waste generation	0.18	Target is achieved or on track to being achieved	0.66	Progress has been made, but is insufficient to meet the target
12	12.b	Tourism sustainability	1.92	No progress or moving away from the SDG target	1.87	No progress or moving away from the SDG target
13	13.2	Greenhouse gas emissions	1.58	Progress has been made, but is insufficient to meet the target	1.15	Progress has been made, but is insufficient to meet the target
14	14.1	Marine pollution**	3.93	n.a.	1.84	Progress has been made, but is insufficient to meet the target
14	14.6	Harmful subsidies to fisheries*	0.00	n.a.	0.36	n.a.
14	14.b	Small-scale fisheries	1.80	n.a.	1.64	n.a.
15	15.1	Ecosystem protection*	0.85	Progress has been made, but is insufficient to meet the target	0.74	Progress has been made, but is insufficient to meet the target
15	15.2	Sustainable use of forest*	0.00	Target is achieved or on track to being achieved	0.60	Target is achieved or on track to being achieved
15	15.3	Desertification	0.36	n.a.	1.04	n.a.
15	15.4	Mountain ecosystems	0.01	n.a.	0.73	Progress has been made, but is insufficient to meet the target
15	15.5	Threatened species*	0.15	Progress has been made, but is insufficient to meet the target	1.20	No progress or moving away from the SDG target
15	15.6	Benefits from genetic resources	1.13	n.a.	0.78	n.a.
15	15.8	Invasive alien species*	0.67	n.a.	0.30	n.a.

Goal	Target	Short Label	Distance to Target (s.u.)	Trend Assessment	OECD Average distance (s.u.)	OECD Trend Assessment
15	15.9	National and local planning*	1.27	n.a.	0.54	n.a.
16	16.1	Violence and related deaths	0.50	Progress has been made, but is insufficient to meet the target	0.66	Progress has been made, but is insufficient to meet the target
16	16.3	Rule of law	2.72	No progress or moving away from the SDG target	2.33	No progress or moving away from the SDG target
16	16.5	Corruption and bribery	0.00	n.a.	0.17	n.a.
16	16.6	Accountable institutions	1.21	No progress or moving away from the SDG target	2.26	Progress has been made, but is insufficient to meet the target
16	16.7	Inclusive decision-making	2.71	n.a.	1.85	n.a.
16	16.9	Legal identity for all	0.00	n.a.	0.00	n.a.
16	16.10	Access to information	0.00	n.a.	0.00	n.a.
16	16.a	National institutions	0.00	Target is achieved or on track to being achieved	0.54	Target is achieved or on track to being achieved
17	17.2	Official Development Assistance	0.00	Target is achieved or on track to being achieved	0.94	Progress has been made, but is insufficient to meet the target
17	17.10	Multilateral trading system	0.01	Target is achieved or on track to being achieved	0.45	Target is achieved or on track to being achieved
17	17.12	Market access for least developed countries	0.28	No progress or moving away from the SDG target	0.72	No progress or moving away from the SDG target
17	17.15	National leadership to implement policies for poverty eradication	2.97	n.a.	2.32	n.a.
17	17.16	Global Partnership for Sustainable Development	1.98	n.a.	0.89	n.a.
17	17.18	Statistical capacity	0.48	n.a.	0.09	n.a.
17	17.19	Statistical capacity-building	0.00	n.a.	0.11	n.a.

Note: * refers to targets with a 2020 deadline. ** refers to targets with a 2025 deadline. The OECD average is measured as the simple average across OECD countries with available data.

Source: All data is taken and adapted from UNDESA (2021), *SDG Global Database*, <https://unstats.un.org/sdgs/unsdg> and OECD (2021), *OECD.Stat*, <https://stats.oecd.org/> (accessed on 29 October 2021).

How to read this country profile

The OECD report *The Short and Winding Road to 2030: Measuring Distance to the SDG Targets* evaluates the distance that OECD countries need to travel to meet SDG targets for which data are currently available. It also looks at whether countries have been moving towards or away from these targets, and how likely they are to meet their commitments by 2030, based on an analysis of recent trends and the observed volatility in the different indicators.

As most authors and international organisations, this report adopts a rather simple geometric growth model for assessing the direction and pace of recent changes in the context of the SDGs. Yet, instead of making direct estimates of the value of the indicator by 2030, it models the likelihood of achieving a specific level using Monte Carlo simulations.

While the report provides an overview of where OECD countries, taken as a whole, currently stand, country profiles provide details of the performance and data availability of individual OECD countries.

How to read the OECD SDG Wheel?

Progress on SDGs requires a granular understanding of countries' strengths and weaknesses based on the consideration of the 169 targets of the 2030 Agenda. Figure 1 shows both **current achievements** (in the inner circle; the longer the bar, the smaller the distance remaining to be travelled) **as well as whether OECD countries are on track** (or are at least making progress) to meet their commitments by 2030 (in the outer circle).

The length of each bar shows current level of achievement on each target. As detailed in the Methodological Annex, countries' distance to target is measured as the "standardised difference" between a country's current position and the target end-value. For each indicator, the standardised measurement unit (s.u.) is the standard deviation observed among OECD countries in the reference year (i.e. the year closest to 2015). Therefore, the longer the bar, the shorter the distance still to be travelled to reach the target by 2030. The colours of the bars applied to the various targets refer to the goals they pertain to.

The outer ring shows how OECD countries are performing over time and how likely they are to meet the different targets by 2030 based on the observed trends of the various indicators. It uses stoplight colours to classify the progress towards the target:

- green is used to indicate those countries that (based on the change in the different indicators over a recent period) should meet the target in 2030 just by maintaining their current pace of progress (i.e. more than 75% of (randomised) projections meet the target);
- yellow for those countries whose current pace of progress is insufficient to meet the target by 2030 (i.e. less than 75% of randomised projections meet the target, while the correlation coefficient between the indicator and the year is high and statistically significant, implying that a significant trend could be detected); and
- red for those countries whose recent changes have been stagnating or moving them further away from the target (i.e. less than 75% of randomised projections meet the target and the correlation coefficient between the indicator and the year is low or statistically insignificant, implying that no statistical trend could be identified).

How to read the Strength and Challenges sections?

With the aim of helping its member countries in navigating the 2030 Agenda and in setting their own priorities for action, this report relies on a unique methodology for measuring the distance that OECD countries have to travel to achieve SDG targets. The identification of the main strengths and challenges proposed in this report relies on current performances only:

- A target is considered to be a strength when the distance to the target end-value is lower than 0.5 s.u. (i.e. the distance is deemed to be small) or when the country is closer to the target than the OECD average. For instance, while Korea's distance to Target 2.2 on malnutrition is 1.4 s.u. (i.e. classified as medium distance), the average OECD distance is 2.5 s.u. Therefore, Target 2.2 is categorised as being a strength for Korea.
- A target is considered to be a challenge when the distance to target is greater than 1.5 s.u. (i.e. distance is deemed to be long) or when the country is further away from the target than the OECD average. For instance, Estonia's distance to Target 4.2 on pre-primary education is 1.1 s.u. (i.e. medium distance), which is higher than the 0.24 s.u. distance for the OECD average. Target 4.2 is therefore classified as a weakness for Estonia.

While the lack of consistent time series often prevents an exhaustive assessment of trends, they are discussed when available and relevant in nuancing the assessment of current performance.

How to read the Statistical Gaps section?

In total, this report relies on 537 data series supporting 183 of the 247 indicators listed in the global indicator framework (or for close proxies of these indicators). These indicators cover 134 of the 169 SDG targets. Yet, target coverage is uneven across the 17 goals and among OECD member countries.

Figure 2 summarises data availability:

- darker blue bars indicate the share of *targets* for which at least one indicator (including indicators providing context information) is available
- lighter blue bars indicate the share of *targets* for which the available indicator(s) include those having a clear normative direction (i.e. allowing to distinguish between good and bad performance), which are the only ones used to measure distances to target levels.
- medium blue bars indicate the share of *targets* for which progress over time can be gauged (i.e. at least three observations are available over a five-year period).

All methods and concepts are further detailed in the Methodological Annex.