

Will the goals of sustainable development be achieved in the European Union?

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WILL THE GOALS OF SUSTAINABLE DEVELOPMENT BE ACHIEVED IN THE EUROPEAN UNION?

Abstract

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Purpose - To harmonize diverse aspects of development, the United Nations 2030 Agenda for Sustainable Development outlined three dimensions of sustainable development: economic growth, social inclusion, and environmental protection. The goals of the 2030 Agenda cover a wide range of different development issues in which the principles of sustainability are applied at international, national, regional, and local levels. According to the Sustainable Development Goals Report (SDGR, 2023), the European Union is on track to achieve approximately 66% of the Sustainable Development Goals and is making limited progress on an additional 20% of the goals based on key indicators. However, it is falling behind on 13% of the stated goals. The aim of this study is to analyze selected indicators in relation to specific Sustainable Development Goals in targeted countries of the European Union in order to answer the research question: Are the Sustainable Development Goals being achieved in the European Union?

Methodology - Eurostat data was analyzed against selected 2030 Agenda indicators to determine progress towards achieving the sustainable development goals in selected European Union countries.

Results - Localization of the SDGs is the process of translating the 2030 Agenda for Sustainable Development into the local context. This includes identifying challenges, as well as defining, implementing and monitoring local actions and policies that contribute to the global achievement of the SDGs. The analysis indicates that EU member states are making progress on some goals but most still have room for improvement.

Contribution - The analysis in this article contributes to the broader understanding of SDG indicators of the EU Member States and the importance of local actors in the successful implementation of the Sustainable Development Goals. The article further recommends the launch of a new EU program for the exchange of best practices between cities and regions across the EU, as well as cities in non-EU regions and continents. This would facilitate identification of global best practices and promote international cooperation. The article also identifies the need to harmonize statistical data for all EU regions.

Keywords Agenda 2030, localization of SDG-s, sustainable development, European Union

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INTRODUCTION

The main objective of sustainable development is to ensure that natural resources are used sustainably at national and international levels and that the same, if not greater, availability is secured for future generations (Sharpley, 2020).

Sustainable development is an integrated concept that encompasses people's activities from the global to the local level. As such, sustainable development must be based on democracy, justice, and respect for fundamental rights, while promoting peace, freedom, equal opportunities and cultural diversity. Moreover, as a matter of social responsibility, production and consumption processes should not jeopardize the ability to renew natural resources (Črnjar, 1997; Bilas et al., 2017).

Sustainable development provides a framework for the formulation of policies and strategies to promote continuous economic and social progress coupled with careful regard to the environment and natural resource consumption (Environmental Protection and Energy Efficiency Fund, 2024). The idea of sustainable development is based on the assumption that the increase in prosperity is measured by the increase in the quality of life of individuals and the population as a whole, rather than by the increase in the quantity of material goods or energy produced or consumed (Ruggerio, 2021; Wang et al., 2024).

At the global level, numerous documents have been adopted that provide a framework for introduction and implementation of policies leading to sustainable development. Some of the programs have been fully and successfully implemented, while others have not achieved desired results. Relying on the global principle of subsidiarity, each country created an individualized plan to lay the groundwork for transitioning to a more sustainable development model (Clement et al., 2023; Ningrum et al., 2023). While progress has been made in meeting some of the Millennium Declaration goals, it has not been uniform across regions and countries. Millions of people did not receive needed help despite continued progress, development and profit resulting in environmental degradation. These activities significantly influenced (and continue to influence) the amplification of climate change (Khan et al., 2019; Salisu & Batsari, 2020). Criticism focused primarily on the equitable specificity of the targets, i.e., their inapplicability to all member states and all regions of the world on an equal amount (Fox & Macleod, 2023).

The 2030 Agenda (Agenda 2030; Weber, 2017) is an important document that attempts to address the problems identified in the Millennium Declaration and more precisely define development by 2030. The document serves as a central platform

for addressing the key challenges of our time within their interlinked economic, social, environmental, and political-security dimensions (Machin, D. & Liu, Y., 2023). The 2030 Agenda is a global agreement that aims to establish a universal, comprehensive program of action for 17 Sustainable Development Goals. The goals are subdivided further into 169 interlinked targets and 232 indicators to measure progress towards their achievement (Agenda 2030).

At the EU-level, the Commission’s Political Guidelines 2019-2024 assigned a central role to the 2030 Agenda and its Sustainable Development Goals, declaring sustainable development as the foundation of European policy to facilitate Europe’s leadership in green and digital transitions (Angelidis et al., 2024). The role of the SDGs at the heart of EU policy, legislation and financing is also emphasized by the “overall ownership” approach - i.e., the comprehensive approach - in the Commission staff working document on achieving the UN Sustainable Development Goals 2020 (United Nations 2015; United Nations 2020). The Joint Declaration of the European Parliament, the Council of the European Union and the European Commission on the EU’s legislative priorities for 2023 and 2024 also includes a commitment to accelerate the implementation of this framework. In sum, the 2030 Agenda and EU implementing strategy puts people, planet, prosperity, peace, and partnership at its heart and expects countries to do everything within their national means to ensure that “no one is left behind”. Although the 2030 Agenda itself is not a legally binding document, all UN member states have made a political commitment to implementation. In theory, implementation strengthens the principles of good governance and the rule of law at both national and global levels, while reducing the risks and causes of various crises, conflicts and other threats to international peace and security. Despite political efforts, the authors, based on analysis of selected indicators in the context of the SDGs, warn that although implementation is at the halfway point, in many aspects progress to date is lacking. Many Sustainable Development Goals are moderately to severely behind schedule, with around 30% of them having made no progress or fallen below the 2015 baseline (Sustainable Development Goals Report, 2023). This article analyzes progress and the importance of implementing the goals at the local level--involving citizens and a wider range of stakeholders. Building on the Council’s conclusion that implementation of the goals at the local level there is a need to increase efforts would initiate accelerated, sustainable, and transformative action. and. The authors propose that the involvement of local actors will further advance Agenda 2030 policy objectives.

1.LITERATURE REVIEW

In 2015, there were indications that governments, businesses, the private sector and the general public were accepting of the Sustainable Development Goals. However, some authors, such as Fiandrino et al (2022) and Weiland et al (2021), believe that their transformative impact can only be demonstrated to a certain extent. A group of researchers have presented the results of a meta-analysis of the available scientific evidence on the policy impact of the SDGs (Bierman et al, 2022).

They consider that the goals have had some policy impact on institutions and policies, from local to global governance, and they estimate that “although there is some limited impact of the Sustainable Development Goals, they are not yet a transformative force in themselves.

Bierman et al (2022) summarized findings from an analysis of over 3,000 academic studies on the Sustainable Development Goals published between 2016 and April 2021. The findings suggest that the goals have had some political influence on institutions and policies, from local to global governance. This influence has been largely discursive, influencing the way actors understand and communicate about sustainable development. More profound normative and institutional impacts, ranging from legislative measures to changes in resource allocation, are rare. They conclude that the scientific evidence suggests only limited transformative policy impacts of the SDGs.

Graph 1, below, illustrates the progress assessment and summary for the 17 SDGs as of 2023.

Graph 1: Progress assessment for the 17 Goals based on assessed targets, 2023



Source: Sustainable Development Goals Report, 2023

Starting in 2020, progress towards achieving the SDGs in Europe slowed due to the combined impact of the COVID-19 pandemic and other international crises, which has led to setbacks in many European countries, particularly in relation to the goals of a world without poverty (SDG 1), good health and well-being (SDG 3) and decent economic growth (SDG 8).

A 2023 report on the Sustainable Development Goals (2023) noted the necessity of developing a plan focused on three main tasks (Eurostat, 2023a):

1. Training administrations and institutions for a sustainable and inclusive transformation.
2. Prioritize actions and investments that have multiple impacts on different objectives.
3. Allocate significantly more financial resources to the Sustainable Development Goals and create a stimulating global environment for developing countries.

Although Rasche (2020) believes that the Sustainable Development Goals are “the UN’s most comprehensive and detailed attempt to promote sustainable development, Spangeberg (2017) emphasizes that no concrete measures or alternative solutions such as an action plan to better implement the SDGs are proposed. A complicating challenge deserving highlight is the inadequate collection or the inconsistency of data for European Union member states.

Rather than a top-down approach, Masuda et al. (2022) point out that local and regional authorities, and especially cities, are often more innovative and progressive than their central governments in building coalitions to implement the Sustainable Development Goals. Therefore, we should also involve the local community in awareness efforts (Mariam et al. 2024). Cities and their supply chains are responsible for almost 80% of global energy consumption and over 60% of greenhouse gas (GHG) emissions. It is expected that 70% of the world’s population will live in urban areas by 2050 (Haris, 2020).

As cities become the main drivers of a sustainable future (Morales, 2024), the halfway mark in the implementation of the Sustainable Development Goals presents an opportunity for change with renewed emphasis on local measures.

The European Union has achieved around 66% of the Sustainable Development Goals listed in the Sustainable Development Report for Europe. However, as illustrated in Graph 2, below, progress is limited for 20% of the indicators, while 13 have regressed.

Graph 2. Halfway into the SDGs, progress towards targets varies across European countries and goals



Source: Sustainable Development Goals Report, 2023

According to the Sustainable Development Goals Report (SDGR, 2023), the European Union is on track to achieve approximately 66% of the Sustainable Development Goals and is making limited progress on an additional 20%. Unfortunately, it is but falling behind on the remaining 13%.

The report on sustainable development in Europe also calls for strong European leadership to achieve the goals set with considerable efforts needed to rekindle public support. Suggested actions include: increasing the visibility of the Sustainable Development Goals in EU policies, creating a permanent platform for the engagement of civil society organizations involved in the process of implementing the Sustainable Development Goals, and improving the quality of Eurostat data on relevant indicators. In addition, the 2030 Agenda promotes an important paradigm shift towards a participatory model of multi-stakeholder governance highly dependent on local actors to achieve sustainable development goals (Valdecanas, 2023).

2. ANALYSIS OF THE ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS IN THE EU

The EU has compiled an overview of progress towards achieving the Sustainable Development Goals for 163 countries (Eurostat, 2023b). The measurement and assessment of target achievement is based partly on the sub-targets of the 2030 program, with some indicators developed independently by Eurostat and confirmed by the European Commission (Matešić,

2018). As there are more than 230 indicators for each goal, this paper only selects indicators that relate to:

- SDG 4 Quality education - because without education there is no progress;
- SDG 7 - Affordable energy - because without energy there is no life;
- SDG 11 – Sustainable cities and communities, because they offer the population a good quality of life
- SDG 12 – Responsible consumption and production, because they enable economic prosperity
- SDG 13 – Climate action, because it enables the protection of all resources and the preservation of life on earth.

The selected SDGs do not diminish the importance of other SDGs not listed in this paper and leave significant opportunities for future research.

SDG 4 – Quality education

In the EU, improvement in the quality of education is measured by indicators such as: persons leaving education and training early; persons completing tertiary education; participation in early and pre-school education; unsatisfactory results in reading, etc. The participation in adult education indicator shows positive trends and was fully achieved. It is interesting to compare this with the tertiary education indicator, which measures the proportion of the population aged between 30 and 34 who have successfully completed tertiary education (universities, universities of applied sciences, etc.).

Table 1: Tertiary education in EU countries in the period from 2016-2023.

	2016	2017	2018	2019	2020	2022	2022	2023	Annual growth rate 16/23 (u%)
EU 27	36,8	37,6	38,6	39,4	40,5	41,4	42,0	43,1	2,28
Croatia	32,8	32,7	35,4	35,5	36,6	35,7	35,5	38,7	2,39
Slovenia	43,8	44,5	40,7	44,1	45,4	47,9	47,9	40,7	-1,04
Czechia	32,6	33,8	33,3	32,6	33,0	34,9	34,5	33,7	0,48
Hungary	30,4	30,2	30,6	30,6	30,7	32,9	31,9	29,4	-0,48
Poland	43,5	43,6	43,5	43,5	42,4	40,6	40,5	46,3	0,9
Germany	30,5	31,3	32,3	33,3	35,3	36,9	37,1	38,4	3,35
Italy	25,6	26,9	27,7	27,7	28,9	28,3	29,2	30,6	2,58
Austria	39,7	40,3	40,5	41,6	41,4	42,4	43,1	43,5	1,31
Sweden	47,3	47,4	47,6	48,4	49,2	49,3	52,7	54,1	1,94
Spain	41,0	42,6	44,3	46,5	47,4	48,7	50,5	52,0	3,45
Belgium	44,3	45,7	47,4	47,3	48,5	50,9	51,4	50,0	1,74
Bulgaria	32,8	33,4	34,0	32,7	33,0	33,6	34,0	35,8	1,26
Denmark	44,6	45,5	45,8	47,1	47,1	49,1	49,0	49,0	1,35
Estonia	39,1	40,9	41,1	40,6	40,1	43,2	43,9	43,5	1,54
Ireland	54,3	54,7	56,2	55,4	58,4	62,2	63,0	62,7	2,08
Greece	41,0	42,5	42,8	42,4	43,7	44,2	45,2	44,5	1,18
France	44,2	44,5	47,0	48,2	49,4	50,3	50,4	51,9	2,32
Cyprus	56,2	57,0	58,5	60,3	57,8	58,3	59,2	61,6	1,32
Latvia	42,1	41,6	41,6	43,8	44,2	45,5	45,9	45,1	0,99
Lithuania	54,9	55,6	55,6	55,2	56,2	57,5	58,2	57,4	0,64
Luxembourg	51,5	51,3	53,7	56,1	60,6	62,6	61,0	60,2	2,25
Malta	34,3	34,9	40,2	41,0	40,2	42,9	42,5	46,3	4,38
Netherlands	45,2	46,6	47,6	49,1	52,3	55,6	56,4	54,5	2,71
Portugal	35,0	34,0	35,1	37,4	41,2	45,2	42,5	40,9	2,25
Romania	24,8	25,6	24,9	25,5	24,9	23,3	24,7	22,5	-1,19
Slovakia	33,4	35,1	37,2	39,2	39,0	39,5	39,1	39,8	2,54
Finland	40,7	40,3	40,3	42,0	43,8	40,1	40,7	39,2	-0,54

Source: https://ec.europa.eu/eurostat/databrowser/view/SDG_04_20/default/table?lang=en&category=sdg.sdg_04

As Table 1 illustrates, there are positive trends at EU level in the period under review (2016-2023). Ireland and Cyprus have the highest level of highly educated people aged 25-34, where Malta, Spain, and Germany have the highest average annual growth rates are: Malta, Spain and Germany. In the Republic of Croatia, the proportion of people who have successfully completed tertiary education is increasing at an average annual rate of 2.39%, slightly above the EU mean growth of 2.28 and well above the median of 1.64. Slovenia and Romania achieve the worst results with an average annual decline of 1.04% and 1.19 respectively.

SDG 7 – Affordable energy from clean sources

With regard to the seventh goal entitled “Affordable energy from clean sources”, some EU member states continue to experience significant challenges, even though there is evidence of some improvement compared to previous years. The indicators of this goal are: the share of the population that has access to electricity; the share of energy from renewable sources in gross final energy consumption; dependence on energy imports; the population that cannot adequately heat their homes; final energy consumption. All indicators have developed positively.

Table 2: The share of renewable energy sources in the total final energy consumption in the EU countries in the period from 2015-2022.

	2015	2016	2017	2018	2019	2020	2021	2022	Annual growth rate 15/22 (u%)
EU 27	17,8	17,9	18,4	19,0	19,8	22,0	21,7	23,0	3,73
Croatia	28,9	28,3	27,3	28,0	28,5	31,0	31,3	29,3	0,2
Slovenia	22,8	21,9	21,6	21,3	21,9	25,0	25,0	25,0	1,32
Czechia	15,0	14,9	14,7	15,1	16,2	17,3	17,6	18,2	2,8
Hungary	14,4	14,4	13,5	12,5	12,6	13,8	14,1	15,2	0,78
Poland	11,8	11,4	11,0	14,9	15,3	16,1	15,6	16,9	5,27
Germany	14,9	14,8	15,4	16,6	17,3	17,0	19,2	20,8	4,88
Italy	17,5	17,4	18,3	17,8	18,0	20,4	19,0	19,1	1,26
Austria	33,5	33,4	33,1	33,7	33,7	36,5	36,4	33,7	0,09
Sweden	52,2	52,6	53,4	53,9	55,8	60,1	62,5	66,0	3,41
Spain	16,2	17,0	17,1	17,0	17,8	21,2	20,7	22,1	4,54
Belgium	8,0	8,7	9,1	9,5	9,9	13,0	13,0	13,7	7,99
Bulgaria	18,2	18,7	18,7	20,5	21,5	23,3	19,4	19,0	0,62
Denmark	30,4	31,7	34,3	35,1	37,0	31,7	41,0	41,6	4,58
Estonia	28,9	29,2	29,6	29,9	31,7	30,1	37,4	38,5	4,18
Ireland	9,1	9,2	10,5	10,9	11,9	16,2	12,4	13,1	5,34
Greece	16,7	15,4	17,3	18	19,6	21,8	22,0	22,7	4,48
France	14,8	15,5	15,7	16,4	17,2	19,1	19,2	20,2	4,54
Cyprus	9,9	9,8	10,5	13,8	13,7	16,9	19	19,4	10,1
Latvia	37,5	37,1	39	40	40,9	42,1	42,1	43,3	2,08
Lithuania	25,8	25,6	26,1	24,7	25,5	26,7	28,1	29,6	1,98
Luxembourg	4,9	5,3	6,2	8,9	7,1	11,7	11,7	14,4	16,6
Malta	5,1	6,2	7,2	7,9	8,2	10,7	12,7	13,4	14,8
Netherlands	5,7	5,8	6,5	7,4	8,8	13,9	12,9	14,9	14,7
Portugal	30,5	30,8	30,6	30,2	30,6	33,9	33,9	34,7	1,86
Romania	24,7	25	24,4	23,8	24,3	24,5	23,9	24,1	-0,41
Slovakia	12,8	12	11,4	11,8	16,9	17,3	17,4	17,5	4,57
Finland	39,2	38,9	40,8	41,2	42,8	43,9	42,8	47,8	2,87

Source: https://ec.europa.eu/eurostat/databrowser/view/SDG_07_40/default/table?lang=en

As the table shows, the share of renewable energy sources is growing at EU level in the period under review. All countries, except Romania achieve positive annual growth rates on average. Exceptionally high shares of renewable energy sources in total final consumption can be found in Sweden, Finland and Latvia. Croatia’s 29.3% share of renewable energy is above the EU mean of 23.0 and ranks 9th among the member states.

SDG 11 – Sustainable cities and communities

Building on the foundational Brundtland Report, sustainable cities are those that meet the needs of their citizens without jeopardizing the development opportunities of other people or future generations, and where development solutions are supported by a smart IT system (Macke, Sarate, Moschen, 2019). The realization of the concept of sustainability in cities results in less pollution and environmental degradation, and higher satisfaction of residents living in such an economic system that balances current prosperity with regards to future outcomes. Based on Eurostat data (2021), there is much room for progress in achieving this target across all EU Member States.

SDG 12 – Responsible consumption and production

With respect to the twelfth goal—responsible consumption and production—major challenges persist. However, despite low absolute levels, indicators are trending positively on an eventual path to achieve the Sustainable Development Goals. Some of the indicators for this goal include: municipal waste generation, electronic waste, SO₂ emissions from the manufacturing sector, export of plastic waste, etc. Although some indicators reveal progress, for other indicators no data is available. The implementation of the concept of sustainable consumption and production leads to less waste generation. The amount of municipal waste per inhabitant in EU countries is in Table 3, below.

Table 3. **Production of municipal waste per inhabitant in EU countries in the period from 2015-2022.**

	2015	2016	2017	2018	2019	2020	2021	2022	Annual growth rate 15/22 (u%)
EU 27	480	493	499	500	504	521	530	513	0,95
Croatia	393	403	416	432	445	418	446	478	2,84
Slovenia	449	457	471	486	504	487	511	487	1,17
Czechia	316	339	489	494	500	543	570	-	10,3
Hungary	377	379	385	381	387	403	416	406	1,06
Poland	286	307	315	329	336	346	362	364	3,51
Germany	632	633	627	606	609	641	646	593	-0,91
Italy	486	497	488	499	503	487	495	-	0,31
Austria	560	564	570	579	588	834	835	-	6,88
Sweden	451	447	452	434	449	431	418	395	-1,88
Spain	456	463	473	475	472	469	472	467	0,34
Belgium	412	419	411	409	416	729	755	677	7,35
Bulgaria	419	404	435	407	442	408	445	-	1,01
Denmark	822	830	820	814	844	814	769	787	-0,62
Estonia	359	376	390	405	369	383	395	373	0,55
Ireland	-	581	576	598	625	644	-	-	2,61
Greece	488	498	504	515	524	499	509	-	0,7
France	516	553	558	557	555	539	565	539	0,62
Cyprus	637	649	642	662	664	625	650	673	0,79
Latvia	404	410	411	407	439	478	461	-	2,22
Lithuania	448	444	455	464	472	483	480	465	0,53
Luxembourg	607	815	798	803	791	790	793	721	2,49
Malta	641	642	666	672	697	643	611	618	-0,52
Netherlands	523	520	513	511	508	533	515	473	-1,43
Portugal	460	474	486	507	513	513	513	-	1,83
Romania	247	261	272	272	280	290	302	301	2,86
Slovakia	329	348	378	414	421	478	497	478	5,48
Finland	800	504	510	551	566	609	630	-	-3,9

Source: https://ec.europa.eu/eurostat/databrowser/view/env_wasmun/default/table?lang=en

As the table shows, the volume of municipal waste generated at EU level grew at an average annual rate of 0.95% over the period under review. Romania and Poland had a low starting position, but recorded an increase in municipal waste generation at an average annual rate of 2,8% and 3.5% during the period under review. The Czechia also had a good starting position in

2015 but recorded an average annual growth rate in municipal waste generation per capita of 10.3%. The Republic of Croatia is in a relatively favorable situation compared to the other countries observed, and its municipal waste generation is growing at an average annual rate of 2.84%. The countries with the largest amounts of waste per capita are Austria, Denmark, and Finland, but both Denmark and Finland achieved a decline in waste per capita generation over the time period. Future work could index waste to account for overall increases in consumption and/or income growth to compare the relative declines of municipal waste per unit of consumption, even if absolute values remain high.

SDG 13 – Climate action

Substantial progress is needed to achieve the thirteenth goal--climate protection. Unfortunately, when looking at the trend (see Table 4, below) the EU is backsliding. Climate protection depends not only on the activities of an individual country, but also by the world community.

Some of the indicators for this goal are CO₂ emissions from the production of fossil fuels and cement; CO₂ emissions from imports; CO₂ emissions from the export of fossil fuels. However, the analysis of greenhouse gas emissions per capita is also interesting.

Table 4: **Emission of greenhouse gases per inhabitant in the EU countries in the period from 2015-2022.**

index 1990=100

	2015	2016	2017	2018	2019	2020	2021	2022	Annual growth rate (u%)
EU 27	76,4	76,6	78,7	77,0	73,9	66,1	69,9	69,0	-1,44
Croatia	80,1	81,0	87,7	81,6	81,0	75,5	77,2	81,7	0,28
Slovenia	121	128	128,6	128,2	114,6	107	109	107,2	-1,72
Czech	63,7	65	66,3	68,2	68,5	64,2	65,5	63,1	-0,14
Hungary	61,8	63,6	65,4	66,1	65,2	60,6	61,7	58,1	-0,88
Poland	78,4	79,4	82,5	82,8	81,9	78,0	84,2	77,6	-0,15
Germany	70,7	70,4	69,7	68,1	63,6	63,6	60,2	60,3	-2,25
Italy	78,4	78,1	80,9	76,2	71,8	67,9	75,2	76,1	-0,42
Austria	109,6	110,6	119,4	126,9	125,1	101	98,9	103,0	-0,88
Sweden	15,1	21,3	49,0	74,3	58,3	18,4	24,2	27,6	9,0
Norway	101,9	103,1	95,9	103,9	109,9	84,4	94,7	91,0	-1,6
Spain	116,6	112,5	117,9	115,6	108,9	89,3	96,6	101,4	-1,98
Belgium	84,1	83	83,1	83,8	83,2	75,8	78,4	74,3	-1,75
Bulgaria	64,8	59,5	61,8	56,4	55,1	47,4	54,9	60,4	-1
Denmark	65,2	69,1	66,1	68,3	62,3	56	56,2	54,8	-2,45
Estonia	54	61,4	64,6	67,2	51,2	36	38,5	41,2	-3,79
Ireland	111	113,4	116,4	115,7	111,7	106	110	110,3	-0,09
Greece	90,9	87,7	92	88,5	81,7	69,1	72,5	73,8	-2,93
France	82	83,4	86,0	81,6	81	70,9	75,7	73,7	-1,51
Cyprus	143,3	154,1	156,9	156	156,7	139	147	150,8	0,73
Latvia	82,5	69,8	60,1	81,9	69,6	82,4	94,9	111,7	4,42
Lithuania	28,7	30,9	32,6	33,9	33,9	32,8	34,6	29,9	0,59
Luxembourg	86,2	84,9	88,4	92,7	92,7	78,0	81,2	72,3	-2,48
Malta	89,2	79,5	87	88,7	93,9	81,4	83,4	94,1	0,77
Netherlands	91	91,3	89,9	87,7	84,9	75,4	76,8	72,2	-3,25
Portugal	99,1	103,9	142,4	100,5	94,2	80,6	77,3	80,8	-2,87
Romania	29,8	28,1	30,3	31,2	29,8	27	29,1	27,5	-1,14
Slovakia	55,3	55,9	57,8	59,1	54,3	46,5	52,7	46,4	-2,48
Finland	89,1	102,3	101,9	123,4	105,8	87,8	105	105,3	2,42

Source: https://ec.europa.eu/eurostat/databrowser/view/SDG_13_10/default/table?lang=en

Greenhouse gas emissions per capita have declined at an average annual rate of 1.44% over the period under review. Sweden, Lithuania and Romania achieves by far the best results with very low emissions. Countries with the highest results are Ireland and Cyprus.

3. CHALLENGES AND RECOMMENDATION

Global development has long been a wicked problem for policymakers, economists and, most importantly, the global poor. Wicked problems require an ambitious vision and therein lies the hope for the framework surrounding the Sustainable Development Goals (SDGs). As a starting point, Lella and Osés-Eraso identify some of the current challenges, including: complex interdependencies, large financial resources, policy adaptation, changing social mindsets, the need for global corporations, a territorial approach, and monitoring (Lella and Osés-Eraso, 2023).

At the core of many wicked problems, progress toward one goal requires parallel process on others. The SDGs recognize these complex interdependencies and further note that the problems (and solutions) are not confined to isolated tasks. This is not a Gordian knot capable of being slayed by the brute force of Alexander's sword, but rather a careful unwinding process that transcends cultures and communities. Interconnected problems also require significant financial resources, at multiple levels of government, over a sustained period of time. Sustaining the commitment is a political challenge, especially when progress is slow or not readily visible. Moreover, financial resource requirements can exacerbate inequality among communities and regions. The alignment of adaptive policies, often in a cross-border context, present another barrier to the development and implementation of a coherent short- through long-term strategy. They may also require adjustment (or in some instances abandonment) of historical policy development approaches. Apart, but in parallel to the political process, social norms may need to adapt by placing increased value on inclusive sustainability. How this may play out may vary widely between highly developed (and high consumption) regions versus developing or underdeveloped economies.

A key element in this regard is not just sustainability, but inclusive sustainability. In a fractured political environment, both domestically and globally, obtaining the level of global cooperation required to achieve the SDGs may seem unobtainable. Yet institutional structures need to be strengthened or developed in the first instance to provide a mechanism to bridge political, economic, and cultural divides. Absent these efforts, the untangling of the wicked aspects of sustainability development will be further complicated.

Along with global cooperation and alignment, as noted by Lella and Osés-Eraso, a territorial approach is needed to adapt approaches to the heterogeneous challenges at the local level. A bottom-up approach assists in adoption of strategies that are relevant, appropriate, and effective in the improvement of people's lives. This approach also may serve to maintain public support and facilitate adjustments to social and cultural norms.

Finally, as noted previously, consistency and adequacy of data is a significant challenge. But absent robust data, monitoring progress at the local through global level approaches futility. On the other hand, forcing a general benchmarking methodology that does not account for local variation can be equally counterproductive and unnecessarily focused on artificial data reporting metrics that fail to account for actual progress (or backsliding).

The aim of the report was to select a list of indicators that are useful for SDG monitoring at the regional level. The analysis conducted has identified key challenges and bottlenecks in this process.

There are many limitations in this work, but most of them refer to statistical data reports (Eurostat, 2023c). In this work, the authors wanted to analyze the indicators of the SDGs at the regional or local level. However, when analyzing the technical regional reports, it was concluded that it is not possible to comprehensively analyze and compare the data by region for the following reasons:

- a. Regions used different sources to analyze the same indicator and had different preferences in the choice of source to be used (European or national/regional sources);
- b. The units of measurement used are not always consistent (some regions prefer absolute numbers, while others use percentages or rates, etc.).

The meaning of substituted indicators ('1to1'), alternative indicators, complementary indicators or additional indicators was also interpreted differently by the regions.

One of the challenges pointed out by the authors is that some regions preferred European sources when data were available, while other regions preferred national/regional sources when they were available (even when data from European sources were available). For indicators that were not available from either European or national/regional sources, regions provided alternative indicators where possible. This made it difficult or even impossible to compare the data. Due to the limitation and problem of availability of data at European level for all regions in Europe, this paper analyzes the indicators at the level of selected Member States.

CONCLUSION

There is a great need for coordination at EU level and for financial and policy instruments to promote innovation and investment that support the implementation of the Sustainable Development Goals and recognize the key role of regions.

The Council of European Municipalities and Regions supports local and regional authorities in developing, implementing and monitoring sustainable development goals as part of their local strategies. A study on the localization of sustainable development goals is published annually and provides support to local authorities in preparing their own voluntary local audits, which then feed into the voluntary national audits (VNRs).

In addition, the Council of European Municipalities and Regions works closely with URBACT as part of the Global Goals for Cities network, which supports cities in localizing sustainable development goals. The aim is to translate the Sustainable Development Goals to the local level and encourage participating cities to share their experiences and issues and replicate this with other colleagues or stakeholders.

As described above, integration of SDGs into every aspect of policy development and execution requires a transition away from thinking in terms of a simple list of tasks to be done, but to understand the Sustainable Development Goals as a holistic approach to governance in the economic and social development context.

One promising example is the recently launched URBACT pilot network of cities localizing the Sustainable Development Goals. Building upon the efforts of URBACT, the EU should consider the launch of a new program for the exchange of best practices between cities and regions not only across the EU, but the inclusion of cities from other continents. This concentrated, global effort could identify best practices, promote bilateral agreements, and develop strategies to translate successful programs for adoption in other regions. A parallel prerequisite for this expanded EU coordinating effort is development of a standardized data management for all EU regions.

Europe has the potential to prove that it is capable of taking a real leadership role on the world stage in relation to the Sustainable Development Goals. With many countries affected by political instability, persistent inflationary economic crises, and global shocks that could undo crucial progress towards achieving the Sustainable Development Goals, the EU must revive the spirit of multilateral cooperation and foster the political will needed to fulfil the sustainability commitments made in 2015. Above all, the European Union must take action to reverse negative trends. Economic development focused solely on profit and self-interest can lead to an unstable situation in the long term, particularly in terms of social well-being and the state of the environment. Therefore, the underlying political and social conditions must be curated in order for the concept of sustainable development to be fully implemented. The brief analysis of the selected indicators of the SDGs reveals that for all goals selected in this paper (SDG 4, SDG 7, SDG 9, SDG 11, SDG 12, and SDG 13), there remains room for significant progress. Accordingly, local and regional authorities need to redouble their efforts and commitment to financial support to identify and translate global best practices through international cooperation.

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