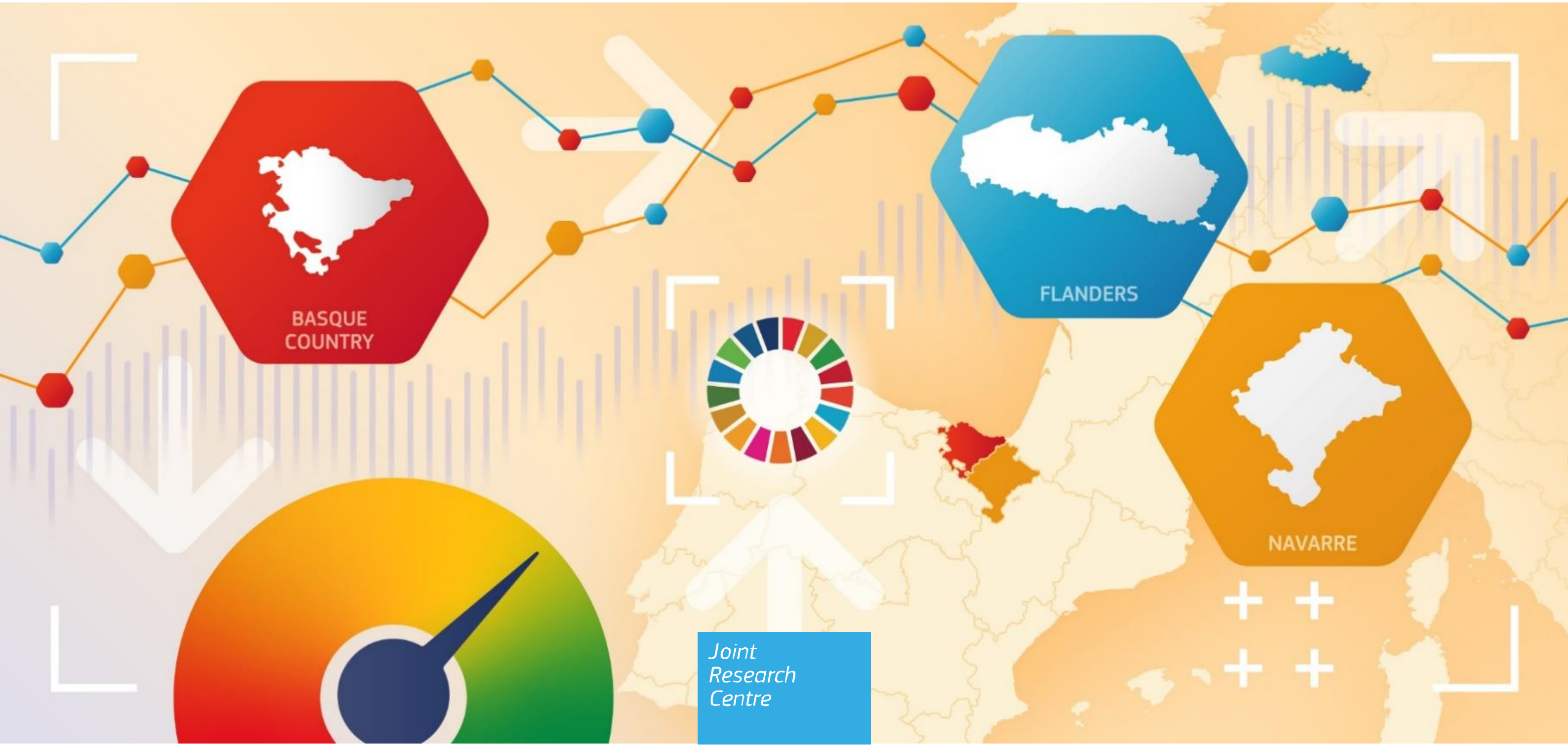
Regional indicators for the Sustainable Development Goals

An analysis based on the cases of the Basque Country, Navarre and Flanders

Ainhoa Gea Aranoa

Alice Siragusa and Paola Proietti (eds.)

2021



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Note to the reader: The lists of indicators for each case study included in this report are available upon request.

Abstract

This report proposes a number of indicators aimed at facilitating the work of European regional governments that want to monitor how their policies contribute to the Sustainable Development Goals (SDGs) and their progress toward them.

For this purpose, this report analyses four European SDG sub-national indicator sets. The analysis starts by identifying which indicators included in the European Handbook for SDG Voluntary Local Reviews (published by the European Commission in 2020) and proposed for the local level are also meaningful and available at the regional level. After this first step, three case studies are analysed: the Basque Country and Navarre in Spain, and Flanders in Belgium.

In spite of the differences between the case studies of the Basque Country, Navarra and Flanders, there are also remarkable similarities in these examples, which shows once again that the 2030 Agenda allows regions to speak a "common language".

Any regional government willing to adopt the proposed consolidated indicator system as the basis for the development of its own monitoring system, might select those indicators most relevant to the local situation and integrate them with additional indicators identified in the specific regional context.

Executive summary

This report contributes to the discussion on the role and experiences of sub-national governments in monitoring the 2030 Agenda for Sustainable Development and its SDGs. It proposes a set of regional indicators for the SDGs that European regions can use as a reference for their own SDG indicator sets.

The 2030 Agenda calls for institutional cooperation among different levels of government as a key element for the achievement of the SDGs. This is recognised by several Communications of the Commission and by the commitment of President Ursula Von der Leyen to integrate fully the SDGs in EU policies.

EU priorities and related programmes and funds contribute differently to the achievement of the SDGs and regional governments (or managing authorities) are responsible for the implementation of funds, for example the Structural Funds and the Cohesion Fund. Monitoring SDGs in EU regions can thus support the European implementation of the 2030 Agenda, not only by measuring progress toward their achievement but also by supporting regional development strategies, integrating the visions of member states, and highlighting priorities areas or topics.

Since 2016, various regional or sub-national governments have been carrying out awareness-raising activities, developing cooperation projects, establishing SDG strategies, and publishing Voluntary Local and Subnational Reviews (VLRs and VSR).

However, there are no harmonised SDG sets EU regions can use to as the basis for their VSRs. This report starts from the indicators proposed in the European Handbook for SDG Voluntary Local Reviews, to identify those which also suit the regional level. Then, three subnational monitoring sets are compared to identify indicators that recur in different locations. Finally, additional indicators are proposed to fill the gaps, when possible.

In addition to this report, the European Commission's Joint Research Centre (JRC) is releasing two reports on the use of urban indicators in the VLRs and the multilevel governance of the SDGs. Moreover, since October 2020, the JRC has been working with a group of European cities to validate the methodology proposed in the first European Handbook for SDG Voluntary Local Reviews: Bratislava, Oulu, Porto, Reggio Emilia, Seville, Valencia, Turku and Helsinki. Knowledge and insight from this work will feed the second edition of the European Handbook, planned for publication in 2022. This edition of the European Handbook will include an update of the state of the art on local reviews, a consolidated guidance indicator set and policy recommendations on viable strategies for the future.

1 Introduction

The 2030 Agenda for Sustainable Development (United Nations 2015) (hereafter 2030 Agenda) and its Sustainable Development Goals (SDGs) are built as a global framework but call for action by all levels of government: from national to sub-national governments and local administrations. The 2030 Agenda is considered as part of a global effort to achieve sustainability (via goals and targets) in all countries. However, the 2030 Agenda also encourages each territory to develop its own path towards sustainable development based on its own context, potential and resources.

Indeed, the territorial dimension and adaptation to the local scale are ground-breaking characteristics of the 2030 Agenda. Since the initial phases of definition of the 2030 Agenda, both the United Nations and the European institutions have emphasized that the Agenda needs to be implemented and monitored at the territorial levels closer to citizens (inter alia United Nations Development Programme and UN-Habitat 2015; European Commission 2016).

At the global level, the 17 SDGs and 169 targets are monitored and reviewed using a set of global indicators (Global Indicator Framework for the SDGs[1]). The Global Indicator Framework has been developed by the Inter-Agency and Expert Group on SDG Indicators (IAEG-SDGs) and agreed upon at the 48th session of the United Nations Statistical Commission held in March 2017[2]. The follow-up and review process are informed by an annual SDG Progress Report prepared by the UN Secretary-General (United Nations 2016; 2017; 2018; 2019; 2020). The 2030 Agenda implementation mechanism provides tools to monitor the progress of countries towards the SDGs and several specific activities supporting countries in reporting their progress[3].

Already after one year from the approval of the Agenda, a few local authorities around the world started to also measure their progress towards the SDGs. Most of these frontrunners adapted the type of document designed for member states (Voluntary National Reviews - VNRs) and published the first-generation Voluntary Local Reviews (VLRs)[4]. The VLRs have proved to be fundamental instruments to monitor progress and sustain the transformative and inclusive action of local actors towards the achievement of the SDGs and competitive sustainability.

To support these first experiences, the Joint Research Centre (JRC) and other European institutions have developed a wide range of initiatives for the “localization of SDGs” that aim at bringing the 2030 Agenda to the local level. Among those, in February 2020, the Joint Research Centre of the European Commission published the European Handbook for SDG Voluntary Local Reviews (hereafter European Handbook) (Siragusa et al. 2020) to provide local authorities with a practical guide to select SDG indicators and measure their progress.

This report aims at contributing to the potential adaptation of the Joint Research Centre’s URBAN2030 Project[5] and its Handbook to a sub-national-regional scale. While most of the efforts of international organisations have focused mostly on supporting cities (inter alia Siragusa et al. 2020; Ciambra 2021; UCLG Community of Practice on VLRs and UN-Habitat 2020; Fox and Macleod 2019; ESCAP 2020), few knowledge and technical support have been provided to European regions willing to measure their progress towards the SDGs (inter alia OECD 2020; Hidalgo Simón 2021; Widuto 2020). This report aims at filling this technical gap, starting from what has been used until now and checking its coherence with the implementation of SDGs in a regional context

The final objective is to create a knowledge base that can be used as a reference for regional governments to help them develop their SDG Voluntary Subnational Reviews, and to also recommend the use of harmonized indicators. Starting from case studies, the report provides examples and recommendations for the measurement of SDGs with a proper set of indicators for European regions.

In this report, *Chapter 2* defines the state of the art of the topic, *Chapter 3* the methodology used to carry out the research work. Then, *Chapter 4* describes the proposed set of indicators offering different layers of

1 https://unstats.un.org/sdgs/indicators/indicators-list/

2 For the last update and revision of the list, see https://unstats.un.org/sdgs/iaeg-sdgs/

3 See list of activities and materials here https://sustainabledevelopment.un.org/vnrs/

4 An update map of VLR is available https://urban.jrc.ec.europa.eu/sdgs/en/

5 The URBAN2030-II Project aims at fostering the achievement of SDGs in European cities and regions. It focuses on providing methodological support and inspiration for the design and implementation of SDG Voluntary Local Reviews. It builds on the knowledge and experience gained in the URBAN2030 project (2018-2020) developed with the support of the Directorate General for Regional and Urban Policy. The second phase of the project seeks to enhance efforts, working approaches and overall solutions. (source: https://urban.jrc.ec.europa.eu/sdgs/en/)

complexity and details. Finally, the chapter 5 *Conclusions and ways forward* illustrates some suggestions useful to set the basis for a wider reference document (e.g. Manual, Handbook) for the preparation of Voluntary Subnational Reports (VSRs) at the regional level with specific reference to the indicators.

2 State of art of the 2030 Agenda and SDGs in European sub-national governments

2.1 Multi-level Agenda

The 2030 Agenda is a global and international agenda for all countries and people, recognizing that development needs are the same for all people, regardless their origin, both now and for future generations (United Nations 2015, chap. Preamble).

The 2030 Agenda for Sustainable Development and its monitoring mechanism encourages Member States to conduct regular and inclusive reviews of progress at the national and sub-national levels.

At a national level, these reviews are expected to be presented as Voluntary National Reviews (VNRs) at the High-Level Political Forum on Sustainable Development (HLPF)[6]. They are voluntary, state-led, undertaken by both developed and developing countries, and should involve multiple stakeholders. The objective of the VNRs is to facilitate the communication of experiences of each country, including successes, challenges and lessons learned. Furthermore, they can be a tool to strengthen policies, connect with other governments and institutions and mobilize multi-stakeholder support and partnerships. In 2020, 47 countries have presented their report: 26 for the first time, 20 for the second, and 1 for the third time.

At the same time, one the distinguishing features of the 2030 Agenda is the commitment to promote the territorial and local dimensions. Therefore, each scale of governance is encouraged to define its own track toward sustainable development, taking into consideration its own circumstances and specific context.

Since the adoption of the 2030 Agenda, both the United Nations and the European Commission have given great importance to the role of sub-national and local governments in its implementation. Particularly in Europe, the subnational authorities are the ones that have competencies, resources and specific knowledge of the everyday realities and needs of their citizens.

The 2030 Agenda offers to all levels of administration a common language to communicate and create comprehensive public policies. It also encourages authorities to incorporate the logic of multilevel and crosswise governance and to provide to each of the different levels of government its own space and responsibilities (Hidalgo Simón 2021).

In order to facilitate local authorities to monitor their own progress, in 2020 the European Commission published the *European Handbook for SDG Voluntary Local Reviews* (Siragusa et al. 2020), providing a guide for the selection of appropriate indicators to use in the assessment and to tailor the review to local situations and challenges.

Concretely, several sub-national and regional governments are also adapting the 2030 Agenda but without any specific guidance framework. The final objective is to create a knowledge base that can be used as a reference for regional governments, where regional governments are considered to be any territorial and administrative structure existing above local governments and below national governments (Figure 1). Several typologies of regions exist across European countries and these have different competencies and responsibilities according to national legislations and governmental frameworks.

Figure 1 Multi-level 2030 Agenda

Source: Own elaboration

[6] The Forum meets annually under the auspices of the Economic and Social Council for eight days, including a three-day ministerial segment and every four years at the level of Heads of State and Government under the auspices of the General Assembly for two days. Source: https://sustainabledevelopment.un.org/hlpf

2.2 Regional governments measuring the SDGs

In this report, the cases of Spain and Belgium are discussed as these are the countries where the most interesting regional case studies have so far been identified.

Spain is an autonomic state formed by 16 autonomous communities, one chartered community and two autonomous cities. Every autonomous community has one or several provinces, with a total number of more than 50 provinces across the country. Each province is composed of a variable number of municipalities. Nevertheless, there are other territorial realities that count with legal entity, such as associations of municipalities (regions or communities), or sub-municipal entities with a lower status (minor local entities). In the Spanish case, for example, both the autonomous communities and the provinces that have their own Provincial Councils can be called regional governments.

Belgium is divided in three regions: Flanders, Wallonia (composed of 5 sub-provinces), and Brussels. In Belgium both the mentioned three regions and the sub-provinces are considered regional units in territorial terms.

This section introduces three examples of regional governments that are measuring their contributions to the SDGs and 2030 Agenda. A brief description of the different regional organizations is presented to facilitate the understanding characteristics and governmental frameworks of the case studies.

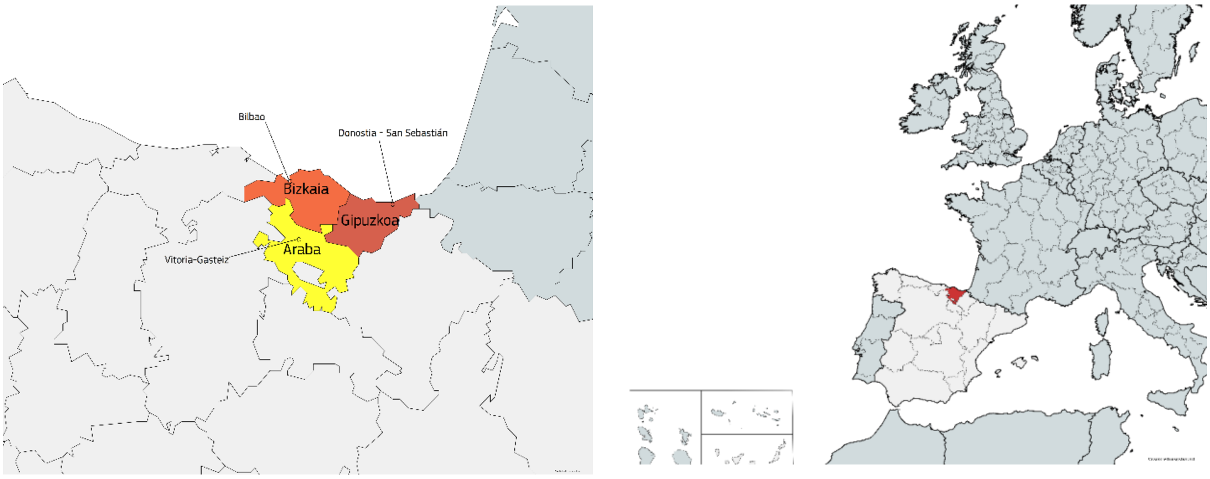
In the Spanish context, the Basque Autonomous Community and the Chartered Community of Navarre are two quite unique cases regarding the SDG monitoring. Indeed, they both have autonomic status with greater competences than other regions and a particular tax regime that allows them to collect their own taxes. In particular, in the case of Basque Autonomous Community we can refer to SDG monitoring as part of an “SDG ecosystem” (Hidalgo Simón 2021).

In the case of the region of Flanders, the overall approach to the VLR has been developed as a mixed bottom-up and top-down process.

2.2.1 The Agenda Euskadi Basque Country 2030

The **Basque Autonomous Community** is structured in three provinces – or historical territories – which are also divided into several territorial aggregates – named as "*comarcas*" – or union of cities or towns, making a total number of 251 municipalities. Therefore, in the Basque case, both the autonomous community and the provinces can be referred to as regions.

Figure 2 The Basque Autonomous Community



Source: own elaboration (created with mapchart.net)

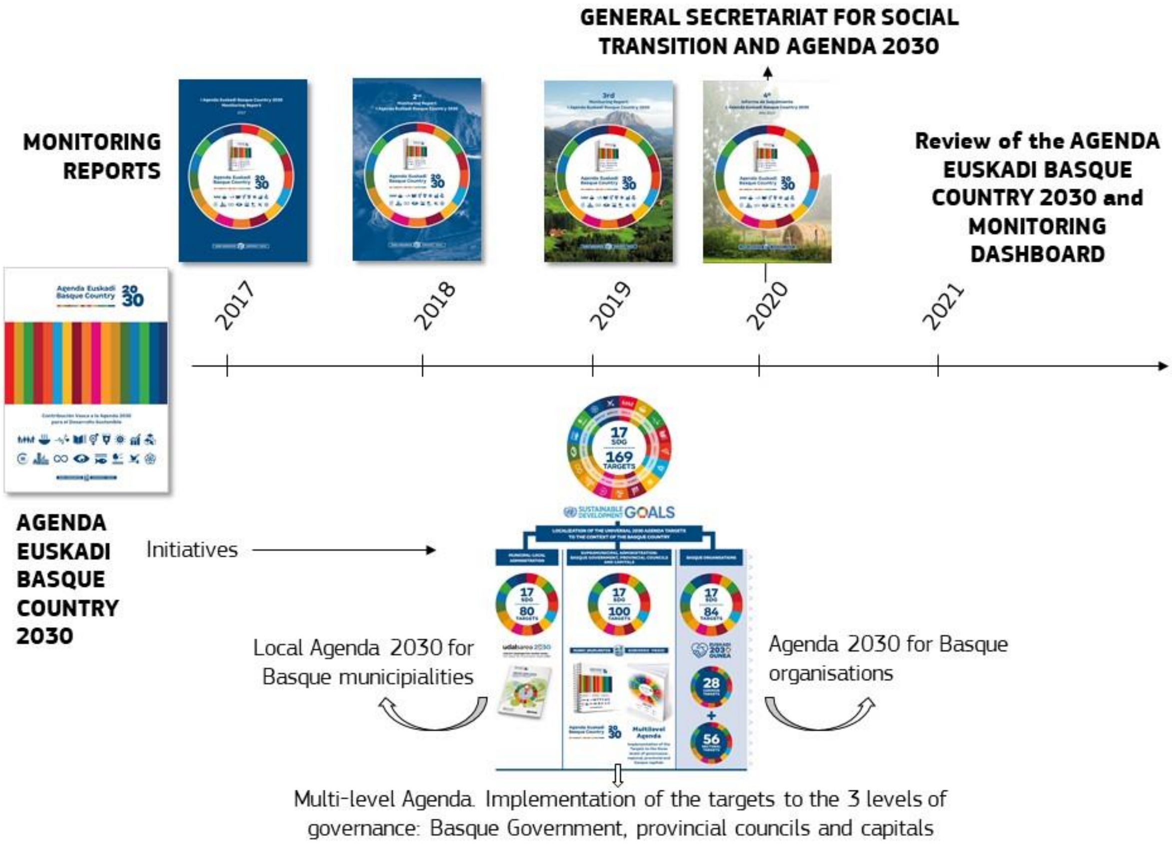
The case of the Basque Country focuses on the autonomic level because it is the best positioned to have specific knowledge of society's demands, and of the competences and resources required to guarantee the best possible response to its needs. In addition, the Basque Government fosters the participation of other regional and sub-regional entities as well as the involvement of stakeholders (Gobierno Vasco 2018).

In 2018 the Basque Government developed the Agenda Euskadi Basque Country 2030 (Euskadi Basque Country 2018b), aligning the legislative programme with the 2030 Agenda[7]. The Government of Basque Country has developed four Voluntary Regional Reports (2017, 2018, 2019 and 2020) (Euskadi Basque Country 2017; 2018a; 2019; 2021), measuring its contribution and progress towards the SDG and the 2030 Agenda. Likewise, it has promoted the coordination of the development of initiatives on three different scales:

- Practical Guide to address the 2030 Agenda and SDGs from a local level, in coordination with Udalsarea 2030-Basque Network of Municipalities for Sustainability (Udalsarea2030 and Gobierno Vasco 2019).
- Multi-level Agenda, developed by the Basque Government, three provincial governments and three Basque capitals.
- Methodological Guide to promote the development of 2030 Agendas in Basque Organizations (Gobierno Vasco 2020).

[7] For a comprehensive analysis of the multi-level governance experience of the Basque Country see Hidalgo Simón, A. (2021). SDG localisation and multi-level governance: lessons from the Basque Country (A. Siragusa & P. Proietti (eds.)). Publications Office of the European Union. https://doi.org/10.2760/20519

Figure 3 Development of 2030 Agenda and SDG initiatives in Basque Country region



Source: Own elaboration

Box 1. Agenda Euskadi Basque Country 2030

The architecture of ***Agenda Euskadi Basque Country 2030*** is structured around five spheres of critical importance to humanity and the planet as developed in the 2030 Agenda: people, planet, peace, prosperity, and partnership. In the report, for each SDG target planning instruments, legislative initiatives, and indicators, are defined with the total sum of:

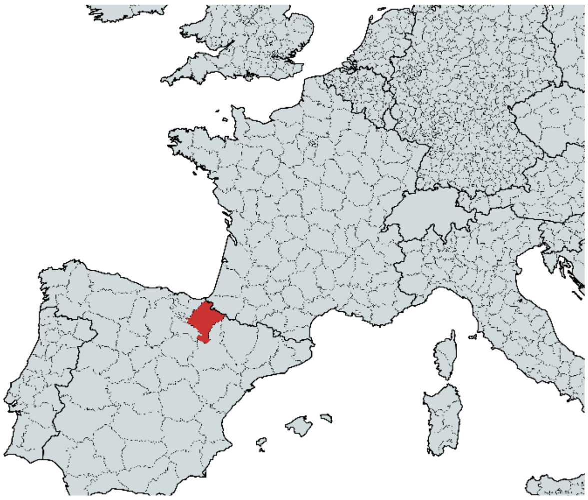
- 100 regional targets
- 80 planning instruments
- 19 legislative initiatives
- An **indicator dashboard** including 50 regional indicators

The four monitoring reports published in 2017, 2018, 2019 and 2020 are based on the proposed indicator dashboard.

2.2.2 2030 Agenda in Navarre

The Chartered Community of Navarre is composed by a unique province and a total of 272 municipalities. In this case, the main regional unit is the whole Chartered Community, but analysis of sub-regions has also been conducted.

Figure 4 The Chartered Community of Navarre



Source: own elaboration (created with mapchart.net)

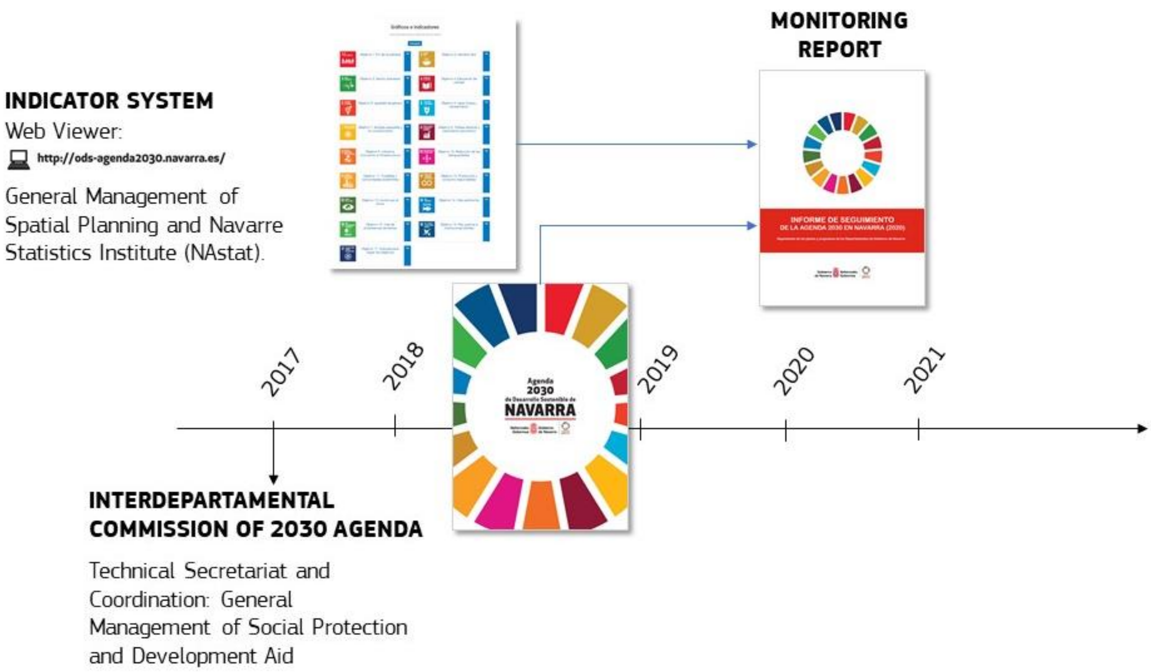
The following milestones can be identified in the path of Navarra towards the SDGs:

- 2017: creation of the Inter-departmental Commission for the 2030 Agenda. Its technical secretariat is located within General Management of the Department of Social Protection and Development Aid.
- 2019: publication of the 2030 Agenda of Navarre. This document is based on the alignment of the regional plans with the 2030 Agenda and reflects a strong commitment of monitoring and measuring this plan periodically.
- 2020: publication of the first Monitoring Report "Monitoring Report of the 2030 Agenda in Navarre (2020)" (Gobierno de Navarra 2020).

These milestones have been achieved after a journey of several administrative steps:

- Resolution of the Plenary of the Parliament of Navarre urging the Government of Navarre to conduct a study to determine what policies, programmes and actions could be implemented in order to meet the challenges implied by the 2030 Agenda (November 3, 2016).
- Agreement of the Government of Navarra on March 15, 2017 creating an Interdepartmental Commission for the preparation of a report on the policies, programmes, and actions of the Government of Navarra, in order to face the challenges implied by the 2030 Agenda for Sustainable Development.
- Preparation of reports on the alignment of public policies under the jurisdiction of the Government of Navarra and the Agenda 2030 for Sustainable Development.
- Agreement of the Government of Navarre on March 30, 2019 ratifying the adhesion of Navarre to the 2030 Agenda and establishing the monitoring and governance mechanisms.
- Agreement of the Government of Navarra, on January 29, 2020, appointing members of the Interdepartmental Commission and the Executive Committee for the implementation of the 2030 Agenda for Sustainable Development in Navarre.

Figure 5 Development of 2030 Agenda and SDG initiatives in Navarre region



Source: Own elaboration

Box 2. Online SDGs indicator database of Navarre

The Government of Navarre has joined the 2030 Agenda and is making efforts to align its social, economic and environmental policies with the SDGs and their targets. In addition, the Government developed an online platform available for all citizens to check and monitor progress towards the achievement of SDGs at an autonomic and sub-regional level:

https://ods-agenda2030.navarra.es/

2.2.3 The case of Flanders

Belgium is divided in three regions: Flanders, Wallonia and Brussels. Flanders is an autonomous region, and it has its own Parliament, Government and administration that take care of the preparation, implementation, execution and evaluation of policies.

Figure 6 The region of Flanders

Source: Flemish Government

The development of "Focus 2030: A 2030 objectives framework for Flanders" (Flemish Government 2019) started in February 2017 and was approved in April 2019 by the Flemish Government, on an administrative and political level.

The assessment and analysis of the existing long-term Flemish policy, good practices and challenges served also as input for the National Voluntary Review (NVR) of Belgium at the UN High Level Political Forum (HLPF) in New York in 2017. Experts of different policy areas of the Flemish administration (education, environment, work and social economy etc.) proposed their objectives for 2030 taking into account the international legislation and agreements as well as European, federal and Flemish regulations and existing policies, good practices and challenges. These proposals were presented to the political cabinets and discussed with different stakeholders. Adjustments and suggestions were made accordingly by the Flemish administration.

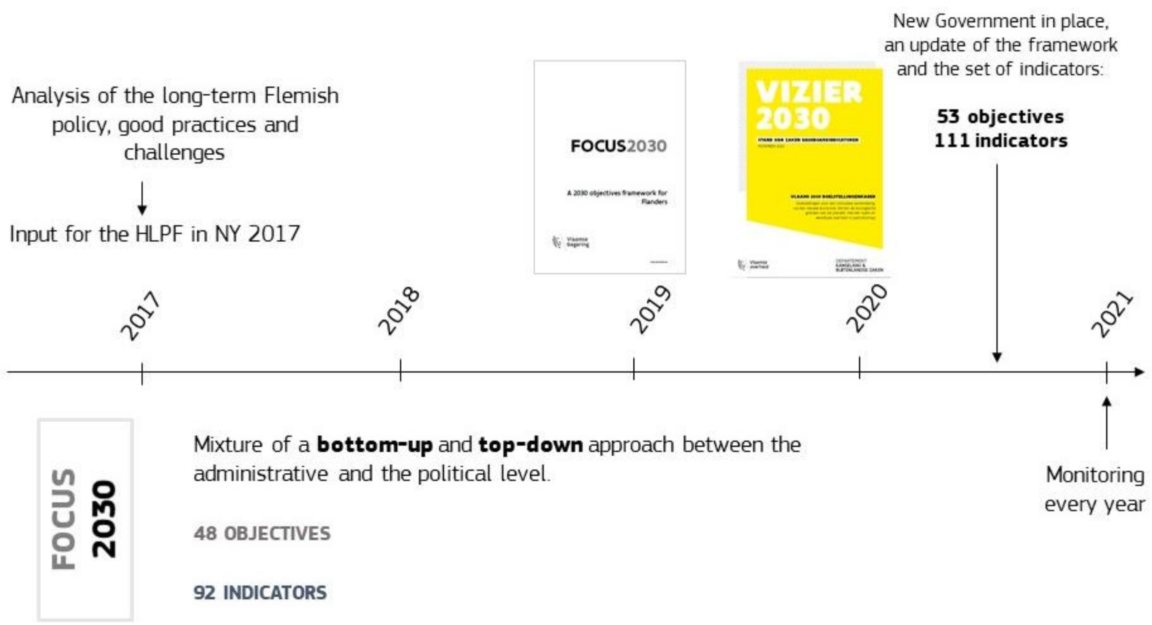
Regarding the indicators, the criteria to select them were based on quality, measurability, relevance and international comparability. Priority was given to existing indicators of the Flemish Public Statistics, also taking into account the Eurostat set of indicators[8] which is very much in line with the reality in Flanders and also allows to situate and benchmark Flanders in the European context.

For a number of Flemish 2030 objectives, no indicators were available in the Flemish Public Statistics and new indicators started to be developed. The list of Flemish Public Statistics is revised annually and, accordingly, statistics are also revised.

The development of Focus 2030 and its set of indicators was a mixture of a bottom-up and top down approaches.

[8] https://ec.europa.eu/eurostat/web/sdi/indicators

Figure 7 Development of 2030 Agenda and SDG initiatives in Navarre Flanders region



Source: Own elaboration

Box 3. Update of Focus 2030 and its indicators in October 2020

In October 2020, with a new Government in office, an update of the framework and the set of indicators was deemed necessary to align several policy developments to the new political agenda. The Focus 2030 framework did not yet include all SDGs because some topics, such as climate, energy, mobility, and urban planning, were set out in separate long-term strategic sectoral plans. Now that some of these sectoral plans have been adopted (Air Policy Plan, Flemish Climate and Energy Plan, and Policy Plan Living) more related information has been collected and incorporated in the new version of the Flanders' Focus 2030 framework. Also, the set of indicators of Focus2030 has been updated, accordingly. After the update, the report includes **53 objectives and 111 indicators**. The progress towards the Focus 2030 objectives is monitored yearly (next release expected in September 2021).

3 Method to identify regional indicators for SDGs

This report analyses four existing European SDG sub-national indicator sets. The scope is to contribute to the creation of a reference framework to help develop SDG reviews at regional level and in a comparative perspective.

Two of the most important characteristics for the inclusion of indicators in the framework were: the *availability* of the data to measure indicators at the regional level, the *potential availability* of the same indicator for lower and higher levels of aggregation as well as for other regions, in order to ensure comparability.

The procedure to identify the indicators has consisted of four main steps:

Step 1 – Selection of indicators, among those included in the European Handbook and proposed for the local level, which were meaningful and available also at the regional level.

Step 2 – Selection of the most relevant indicators, among those included in the reviews of the regions of Basque Country, Navarre and Flanders.

Step 3 – Identification of gaps in the considered monitoring frameworks.

Step 4 – Proposal of additional indicators.

In conclusion, the proposed framework of regional indicators to measure progress towards the achievement of SDGs includes 92 indicators: 71 from the case studies (41 of the proposed indicators are present in 2 or more of the four systems analysed) and 21 additional indicators.

Step 1 - Indicators included in the European Handbook, meaningful and available at the regional level

In Step 1, the indicators proposed for local authorities in the European Handbook (Siragusa et al. 2020) have been analysed. As a result of this analysis, indicators are presented with a colour-code that relates to the suitability to be used also in a regional context:

- In **green** are marked all the indicators that can be easily calculated and that cover areas of competence also of regional entities.

- In **light pink** are marked the ones that must be adapted to be used in a regional context.

- In **orange** are marked those that are difficult to calculate at regional scale or do not cover areas of competence of regions.

Table 1 Color-code used for the concordance analysis

COLOR-CODE (concordance analysis)	
High level of concordance	
Medium level of concordance (requires adaptation)	
Low level of concordance (not to be considered)	

Source: Own elaboration

An example of this exercise is presented in Table 2 for SDG11, while the findings from the analysis are reported in Table 5 (in annex). For sake of synthesis, the Table 5 indicate simply the concordance with a case study, however, the complete list is available upon request to the authors. The proposed framework of regional indicators includes 22 indicators retained from the Handbook as applicable also at the regional scale. Besides this, some indicators required some adaptation to be meaningful for the regional level.

Table 2 Example of the analysis on the indicators in the European Handbook for the SDG 11

GLOBAL TARGETS AND INDICATORS (UN)			MATCHING WITH INDICATORS IN THE EUROPEAN HANDBOOK FOR VLR (indicator concordance at regional level)
SDG	TARGETS	UN INDICATOR	VLR HANDBOOK
11. SUSTAINABLE CITIES AND COMMUNITIES	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing	
	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Access to public transport Bicycle traffic
	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1 Ratio of land consumption rate to population growth rate	
		11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically	
	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4.1 Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)	Cultural Creative Cities Index - C3 Index
	11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	
		11.5.2 Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters	Housing cost overburden rate
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities	
		11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	Population exposed to NO2 concentration
	11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Built-up area per capita Population without green urban areas in their neighbourhood
		11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months	
	11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	11.a.1 Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space	
	11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels	11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030	
		11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies	
	11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	*No suitable replacement indicator was proposed. The global statistical community is encouraged to work to develop an indicator that could be proposed for the 2025 comprehensive review.*	

Source: Own elaboration

Step 2 – Analysis of existing regional indicators from the three case studies

As mentioned in Chapter 2, some European regions have been already measuring their contribution and progress towards the SDGs using their own set of indicators, but the approaches have been quite diverse.

In order to understand the similarities and which indicators recurred in these sets, in Step 2, the indicators proposed for each SDG in the three case studies (Basque Country, Navarre and Flanders) have been analysed and presented using the same colour-code as in Step 1. An example of the application of this analysis to an SDG is presented in Table 3.

Table 3 Example of the analysis of indicators from the case studies for SDG 11

GLOBAL TARGETS AND INDICATORS (UN)			COMPARISON WITH EXISTING REGIONAL INDICATORS. Case studies.		
SDG	TARGETS	UN INDICATOR	Analysis of regional indicators - autonomic level The case of BASQUE COUNTRY (AEBC2030) https://www.euskadi.eus/2030-agenda/	NAVARRE https://ods-agenda2030.navarra.es/	FLANDERS https://cifal-flanders.org/
11. SUSTAINABLE CITIES AND COMMUNITIES	11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services and upgrade slums	11.1.1 Proportion of urban population living in slums, informal settlements or inadequate housing		Population living in households that report having noise problems	Share of dwellings of 'sufficient quality', separately for private rentals, social rentals and owners.
	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	11.2.1 Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities			
	11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	11.3.1 Ratio of land consumption rate to population growth rate		Uses of artificial soil per capita Changes in the use of artificial land	Soil sealing (surface of artificial ground cover in relation to total surface area)
		11.3.2 Proportion of cities with a direct participation structure of civil society in urban planning and management that operate regularly and democratically			
	11.4 Strengthen efforts to protect and safeguard the world's cultural and natural heritage	11.4.1 Total per capita expenditure on the preservation, protection and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)			
	11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	11.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population			
		11.5.2 Direct economic loss in relation to global GDP, damage to critical infrastructure and number of disruptions to basic services, attributed to disasters		Housing cost surcharge rate	
	11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management	11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities	Percentage of urban waste recycled		
		11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	Air quality index	Urban population exposed to particle pollution (PM2.5)	
			PM 10 concentration in cities	Urban population exposed to particle pollution (PM10)	
	11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities	11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities			
		11.7.2 Proportion of persons victim of physical or sexual harassment, by sex, age, disability status and place of occurrence, in the previous 12 months	Crime rate (criminal offences per 1,000 inhabitants)		
	11.a Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning	11.a.1 Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space			
	11.b By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015–2030, holistic disaster risk management at all levels	11.b.1 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030			
		11.b.2 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies			
	11.c Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	*No suitable replacement indicator was proposed. The global statistical community is encouraged to work to develop an indicator that could be proposed for the 2025 comprehensive review.*			

Source: Own elaboration

From the indicators proposed in the three case studies, 38 indicators from Basque Country, 51 from Navarre and 24 from Flanders have been retained for inclusion in the new reference framework of regional indicators. In some cases, indicators required some adaptation.

Step 3 - Identification of gaps in the considered monitoring frameworks

In Step 3, after the selection of the indicators for inclusion in the new reference framework from the European Handbook and the three case studies, the targets and indicators proposed by the UN in the Global Indicator Framework for the SDGs were reviewed in order to detect indicator "gaps".

In this sense, after identifying those targets and indicators that were not covered, different casuistry was found:

a) Targets and indicators that due to their own nature, are not adaptable to a regional level, and thus, are not considered for inclusion in the new reference framework, for example:

   TARGET: 11.7 By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

   INDICATOR: 11.7.1 Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities.

b) Targets and indicators that have a local nature, and for whom a regional aggregated view is possible and therefore, they are suggested as additional indicators in the context of the new reference framework, for example:

   TARGET: 1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

INDICATOR: 1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies

c) Targets and indicators that are meaningful at a regional level, but that were not mentioned in any of the case studies, and thus, are suggested as additional indicators, for example:

   TARGET: 12.7 Promote public procurement practices that are sustainable, in accordance with national policies and priorities.

   INDICATOR: 12.7.1 Degree of sustainable public procurement policies and action plan implementation

Step 4 – Identification of additional indicators

In Step 4, additional indicators are suggested to cover the gaps identified in step 3 by comparing the targets and indicators proposed by the UN in the Global Indicator Framework for the SDGs and that are meaningful at a regional level, with those mentioned in the European Handbook and in the three case studies of the Basque Country, Navarre and Flanders.

As explained in the previous step, the following types of additional indicators were included in this report:

1 Type b) indicator, those indicators that have a local nature, but with an aggregated view can be useful at the regional level

20 Type c) indicators, those indicators that are significant at regional level, but were not present in the case studies.

For these additional indicators, in Table 5 several comments or observations are added in order to provide information to illustrate their origin, potential data sources, availability, and relevance.

4 Proposal of indicators for European regions

The proposed framework of regional indicators includes 92 indicators. Of those, **71 indicators come from the case studies**, and **21 are original** and proposed by the author of this report in order to fill the gaps in the existing indicator sets. Among the 71 indicators that come from case studies:

— **22** are included in the European Handbook for SDG Voluntary Local Reviews and therefore should be available also at city level;

— **38** are mentioned in the regional indicator system of the Basque Country;

— **51** are considered in the regional indicator system of Navarra;

— **24** are enclosed in the regional indicator system of Flanders.

The following table presents the proposal of regional indicators:

Table 4 Summary of selected Indicators for regional level

GOAL	INDICATORS
1.NO POVERTY	1.1 At-risk-of-poverty or social exclusion rate (AROPE indicator)
	1.1.1 Percentage of people at risk of income poverty after social transfers
	1.1.2 Percentage of people with severe material deprivation
	1.1.3 Percentage of people living in households with very low work intensity
	1.2 Housing cost overburden rate
	1.3 Number of deaths, missing persons and people directly affected attributed to disasters per 100,000 inhabitants
	1.4 Direct economic loss attributed to disasters in relation to regional gross domestic product (GDP)
	1.5 Disaster Risk Reduction Strategies
	1.6 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national or regional disaster risk reduction strategies
	1.7 Proportion of total government spending on essential services (education, health, and social protection)
2. ZERO HUNGER	2.1 Adult Obesity rate
	2.2 Percentage of land dedicated to organic agriculture
	2.3 Percentage of surface area dedicated to organic livestock farming
	2.4 Gross Value Added (GVA) of agriculture, livestock and fishing with respect to the GVA of all sectors (current prices).
3. GOOD HEALTH AND WELL-BEING	3.1 Number of deaths due to Covid-19
	3.2 Life expectancy at birth
	3.2.1 Women's life expectancy at birth
	3.2.2 Men's life expectancy at birth
	3.3 Fatalities in traffic accidents
	3.4 Air quality index
4. QUALITY EDUCATION	4.1 Participation in early childhood education
	4.2 School drop-out rate
	4.3 Population between 30 and 34 years old with higher education level
	4.3.1 Percentage of women 30-34 years old with higher education level
	4.3.2 Percentage of men 30-34 years old with higher education level
	4.4 Low performance in reading, mathematics and science
	4.5 Life-long learning
	4.5.1 Life-long learning (women)
	4.5.2 Life-long learning (men)
5. GENDER EQUALITY	5.1 Fatal victims of gender-based violence at the hands of their partners or ex-partners
	5.2 Victims of violence against women
	5.3 Inactive population rate due to caregiving responsibilities
	5.3.1 Inactive female rate due to caregiving responsibilities

GOAL	INDICATORS
	5.3.2 Inactive male rate due to caregiving responsibilities
	5.4 Women in Parliament and Government
	5.5 Average gross annual salary
	5.5.1 Women average gross annual salary
	5.5.2 Men average gross annual salary
6. CLEAN WATER AND SANITATION	6.1 Percentage of population served by safely managed drinking water supply services
	6.2 Percentage of population connected to wastewater with at least secondary treatment
	6.3 Rate of water bodies that exceed a standardized quality rating
	6.4 Rate of groundwater that exceed a standardized quality rating
	6.5 Total water demand
7. AFFORDABLE AND CLEAN ENERGY	7.1 Percentage of people affected by energy poverty
	7.2 Share of renewable energies in gross final energy consumption
	7.3 Final energy intensity
8. DECENT WORK AND ECONOMIC GROWTH	8.1 GDP (Gross Domestic Product) at market prices (per capita)
	8.2 Unemployment rate
	8.2.1 Female unemployment rate
	8.2.2 Male unemployment rate
	8.2.3 Youth unemployment rate
	8.3 Incidence rate of occupational accidents
9. INDUSTRY, INNOVATION, AND INFRASTRUCTURE	9.1 Gross Value Added (GVA) of the industry with respect to the GVA of the total sectors (current prices)
	9.2 R&D expenditure
	9.3 R&D and research employment
	9.4 Greenhouse Gas Emissions from the industrial sector
10. REDUCED INEQUALITIES	10.1 GINI Index
	10.2 Immigration rate
	10.3 Unemployment rate of the immigrant population
	10.4 Unemployment rate of people with disabilities
11. SUSTAINABLE CITIES AND COMMUNITIES	11.1 Subsidized housing
	11.2 Artificialized land
	11.3 Knowledge of the second official language (in territories with two official languages)
	11.4 Particulate matter pollution (PM10)
	11.5 Particle pollution (PM2.5)
	11.6 Household and commercial waste generation per inhabitant
	11.7 Proportion of population residing in municipalities with local sustainable development plans
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.1 Material footprint (per capita)
	12.2 Food waste
	12.3 Hazardous Waste
	12.4 Rate of selective collection of household and commercial waste
	12.5 Responsible public procurement
	12.6 Number of sustainable tourism plans
13. CLIMATE ACTION	13.1 Greenhouse Gas Emissions (per capita)
	13.2 Percentage of budget allocated to climate action
14. LIFE BELOW WATER	14.1 Plastic pollution of seas and oceans
	14.2 Estuarine with high/very high water quality
	14.3 Coastal areas with good/very good water quality
	14.4 Protected natural areas including coastal and estuarine sites
15. LIFE ON LAND	15.1 Percentage of forest area over total surface area
	15.2 Protected natural areas
	15.3 Potentially contaminated land area
	15.4 Potentially contaminated area (cumulative) reclaimed for new uses

GOAL	INDICATORS
	15.5 Proportion of threatened (endangered and vulnerable) species with management or recovery plans.
	15.6 Control of invasive species
16. PEACE, JUSTICE AND STRONG INSTITUTIONS	16.1 Crime rate
	16.2 Transparency index
	16.3 Confidence in the Government
	16.4 Participation in the last elections
17. PARTNERSHIPS FOR THE GOALS	17.1 Imports from developing countries
	17.2 Official Development Assistance
	17.3 Partnerships to achieve the Sustainable Development Goals

Source: Own elaboration

The proposed framework for regions to monitor their progress towards the SDGs is reported in three different tables (in annex):

— **Table 5** (Annex 1) complements the proposed regional indicators for European regions with the following details: definition, unit, source (whether these indicators have been retrieved from the three discussed *case studies, the European Handbook* or are proposed by the authors as *additional),* frequency, and comments (only for additional indicators).

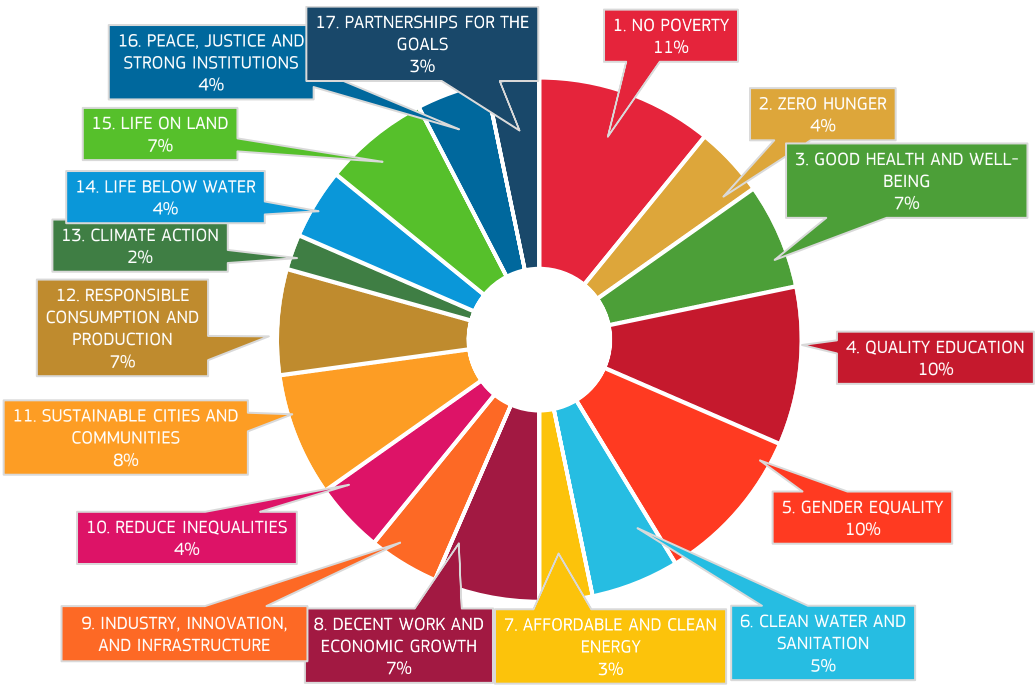
— **Table 6** (Annex 2) presents the coincidence of the proposed indicators with those included in the sets of the three case studies (Basque Country, Navarre and Flanders) and the European Handbook.

— In **Table 7** (Annex 3) the suggested indicator system is compared with the Global Indicator Framework for the SDGs, analysing the links and interrelations with targets and other SDGs. The table also includes a summary column for each SDG which explains in detail the chosen indicators.

A system of indicators which balances all dimensions of sustainable development

The 92 proposed indicators are distributed by SDG as illustrated in **Figure 8** and in **Figure 9**.

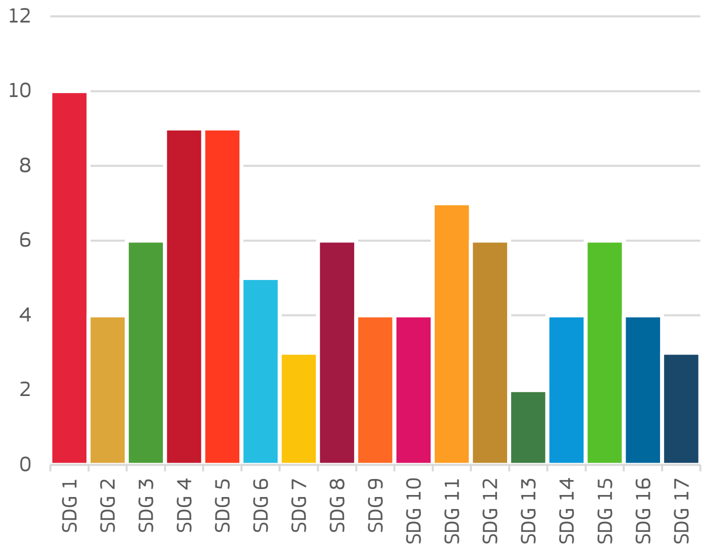
Figure 8 Proposed indicators per SDG (share)



Source: Own elaboration

Some SDGs might be also monitored with indicators suggested for other SDGs. In Table 7, the multiple interrelations between the Goals are highlighted. For example, *SDG 13* can be monitored also using some indicators suggested in the context of *SDG 1*, regarding the vulnerability of poor people to climate change, or *SGD 7*, *SDG 11* and *SDG 12* –in relation to mitigation.

Figure 9 Proposed indicators per SDG (number)



Source: Own elaboration

Figure 10 shows a comparison between the distribution of indicators per SDG in the proposed framework of regional indicators and the local indicators suggested for the Voluntary Local Reviews in the report "European SDG Voluntary Local Reviews: A comparative analysis of local indicators and data" (Ciambra 2021).

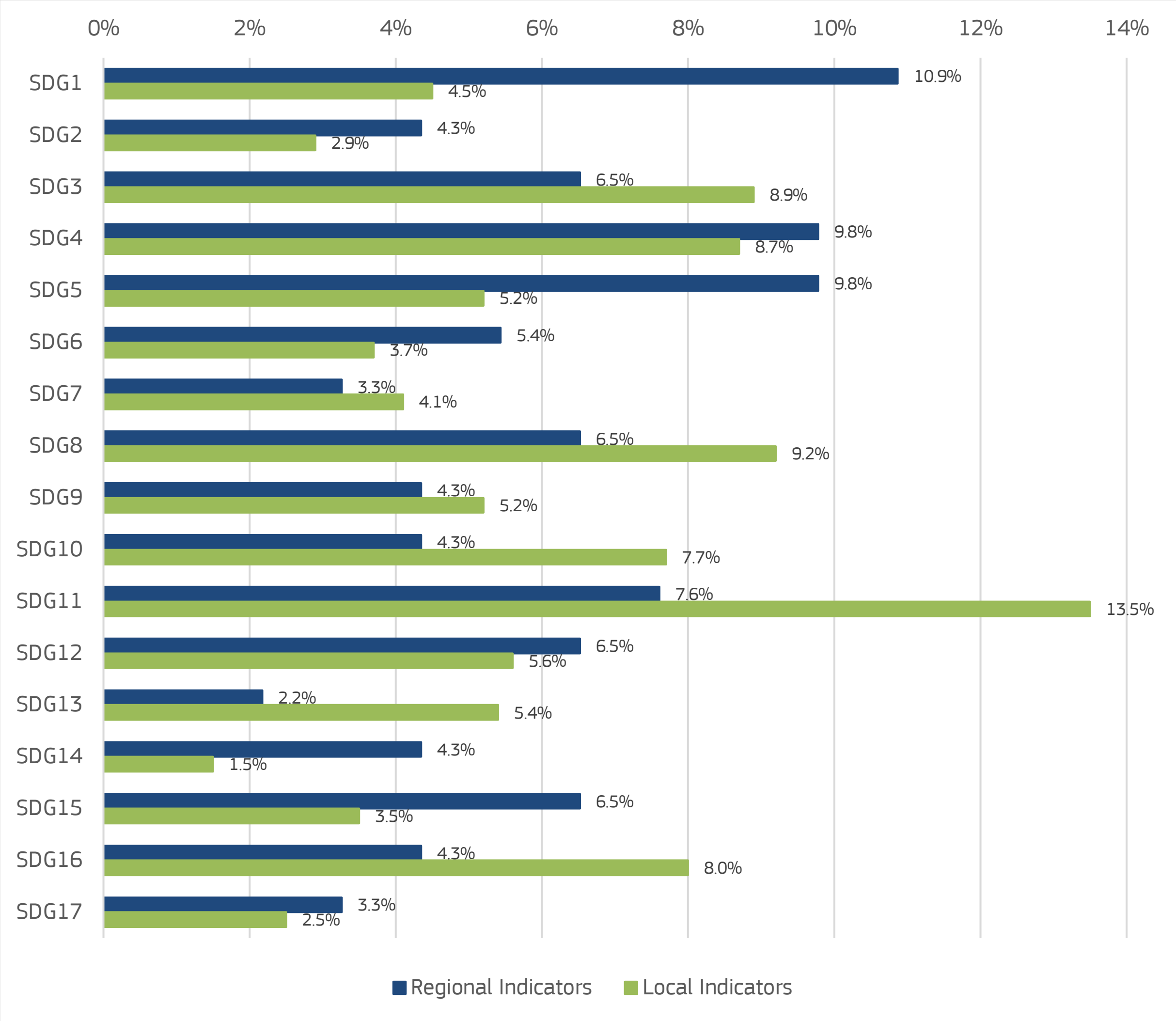
The main differences between the two systems are:

— At the regional scale, 10.9% of indicators refer to SDG 1, while at the local scale only the 4.5% of indicators relates to this SDG. In the first place, it should be considered that in the system of regional indicators proposed in this report, some indicators are disaggregated, which can result in 3 different indicators for the same data, for example, in the case of indicator *1.1. At-risk-of-poverty or social exclusion rate (AROPE)*. Furthermore, this report proposes at least three indicators related to disaster risk that in other indicator systems, including European Handbook, have been included in SDG 13. Therefore, in this case the main difference is not due to the level of competences of each of the administrative levels (local and regional) but due to the model of the indicator system and criteria used in its definition.

— At the local scale, 13.5% of indicators refer to SDG 11, while at the regional scale only the 7.6%. In this case, this difference is expectable, considering that in this SDG the local governments gain special prominence, and that some indicators proposed in the European Handbook are meaningful only at a local scale, such as, "Bicycle traffic", "Built-up area per capita", or "Population without green urban areas in their neighbourhood".

— Finally, a great difference can be observed in the case of SDG 5, as it is covered by the 9.8% of indicators at the regional scale, while the percentage drops to 5.2% for local indicators. In this case, as in the case of SDG 1, the suggested regional indicators are presented as gender-disaggregated data, increasing the number of indicators in the regional framework from 2 to 6: "Inactive population due to caregiving responsibilities", and "Average gross annual salary".

Figure 10 Comparison of local and regional indicators per SDG

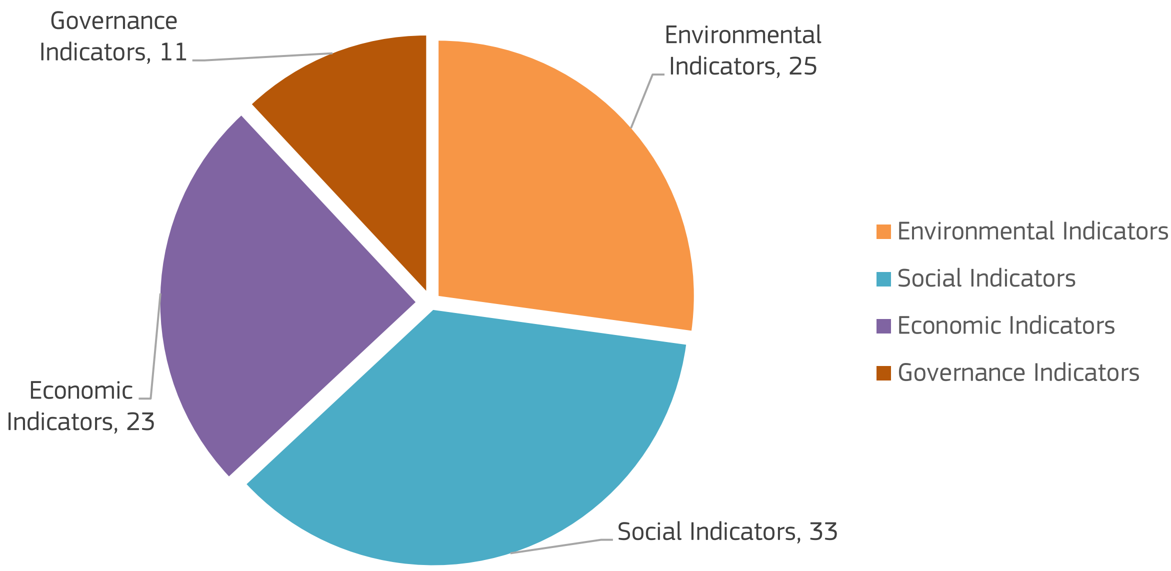


Source: Own elaboration

In Figure 11, the 92 suggested regional indicators have been classified into environmental (25), social (33), economic (23) and governance indicators (11)[9]. In this sense, it can be observed that the proposal is quite balanced, reflecting the presence of all the aspects of sustainable development implicit in the 2030 Agenda.

[9] The three pillars of sustainability are identified in (Brundtland 1987), but often the institutional/governance pillar is added.

Figure 11 Proposed indicators per field



Source: Own elaboration

Rationale for the creation and implementation of a regional framework

— The analysis of three regional systems highlights the significance of the common starting point that is the 2030 Agenda. Despite the differences between the three systems, there are also remarkable coincidences, which shows once again that the 2030 Agenda allows us to speak a "common language**".**

— Similarly to the local level, the different realities and spheres of action of each regional government must be taken into account when providing a reference system of regional indicators. Therefore, the aim of a common framework should be to provide a comprehensive system of indicators that each regional government can adapt to its own reality and nature of action, in relation to the 2030 Agenda.

— The system of indicators should be considered by the regional governments as a part of the Voluntary Reports. The statistical analysis, together with information about the actions planned and carried out to achieve the Goals, should provide a comprehensive picture of the regional situation per each SDG.

— In order to facilitate the interpretation of the indicators, it is suggested to present time series data that allow trend analysis.

— Finally, in the case of indicators for which reference data such as legislation or recommendations are in place, the regional data can always be accompanied by this information to facilitate its interpretation. This would be the case, for example, for indicators 11.4 and 11.5 on urban population exposed to PM10 and PM2.5 pollution, to which information on limit values and WHO recommendations can be added.

Interrelations between the SDGs

When carrying out an exhaustive exercise that involves analysing the targets and indicators for regional governments, an issue that is intrinsic to the 2030 Agenda arises: the interrelations between the different SDGs through their targets and, therefore, through the indicators.

Although some governments and entities have presented the same indicator in two different SDGs (multipurpose indicators), in this report it has been chosen to assign each indicator to a single SDG and point out the connection with indicators assigned to other Goals. Therefore, each regional government should decide which SDG presents certain indicators, whether to present them in more than one, but always in coherence with the plans and policies that each regional government associates with each SDG.

Examples would be the following:

- Indicator *11.6 Generation of household and commercial waste per inhabitant*, in this report it has been associated with SDG 11, while in three out of the four systems analysed in this report is associated with SDG 12.
- Indicator *12.4 Separate collection rate of household and commercial waste*, which in this report is associated with SDG 12, while the Basque and the Navarre indicators sets assign it to SDG 11.
- Indicator *16.1 Crime rate*, presented in this report associated with SDG 16, while in the Basque set of indicators it is assigned to SDG 11.

Monitoring the Sustainable Development Goals in multilevel governance

The Agenda 2030 calls for multilevel governance for specific SDGs. This is the case of some targets and related indicators suggested in this report, such as:

— 1.6 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national or regional disaster risk reduction strategies

— 11.7 Proportion of population residing in municipalities with local sustainable development plans. These require mechanisms that allow the regional government to have updated information on local policies and actions.

— In other cases, the indicator at regional level will also come from sources closer to the local level, as in the case of the following indicators:

  - 6.1 Percentage of population served by safely managed drinking water supply services
  - 6.2 Percentage of population connected to wastewater treatment with at least second grade of treatment
  - 6.3 Percentage of population connected to wastewater treatment with at least second grade treatment
  - 6.5 Total water demand
  - 11.1 Sheltered housing stock
  - 11.6 Household and commercial waste generation per inhabitant
  - 12.4 Rate of separate collection of household and commercial waste.

Areas of improvement in the monitoring of regional indicators - disaggregated data

The 2030 Agenda itself highlights the necessity of disaggregating data of social nature. Although this report presents several indicators disaggregated by sex, and in some cases by age, it is undoubtedly advisable that regional governments expand the disaggregation of such data when available and appropriate to reflect the social reality of their territories. For example, when talking about female unemployment rate, it would be relevant to consider different age groups or different population groups (people with disabilities, migrant women).

SDGs to focus on

Some particular SDGs might require specific attention, especially considering specific situations in European regions, or the technical difficulties related to the calculation of appropriate indicators. In particular:

- SDGs 1 and SDG 10, due to the need for more accurate information that truly reflects the different situations of poverty and inequality, including the impact that the Covid-19 pandemic has had on them.
- SDG 9, due to the difficulty measuring through indicators the information related to the resilience of infrastructures, or the information related to the transition of the industrial sector to more inclusive and sustainable models.
- SDG 14, to improve the information related to the conservation and sustainable use of the oceans and their resources, which is usually scarce.

5 Conclusions and ways forward

This report aimed at providing a first reference framework on how structure a SDG monitoring system of indicators to measure progress towards the SDGs for European regional governments, that can also potentially increase comparability.

Identification of the SDG regional indicators

While some gaps in the list of regional indicators to include in a comprehensive set have already been filled, there is still room to continue improving the regional monitoring of the SDGs. Examples of indicators that might complement the proposed list in the future/ on which more efforts are needed are the following:

- SDG 1 – Coverage of social protection systems in general, and of children more specifically.
- SDG 4 – The impact that COVID-19 may have had on the children education, both in terms of health and resources (e.g. internet access).
- SDG 4 – The extent to which education for sustainable development, including gender equality and human rights, is integrated into all levels of education, including specific curricula, teachers' training and student assessment.
- SDG 8 – The measurement of wealth generated by sustainable tourism in a region.
- SDG 9 – The evaluation of reliable, sustainable, resilient, and quality infrastructure, including regional and cross-border infrastructure, to support economic development and human well-being, with a particular focus on affordable and equitable access to these infrastructures for all people.
- The harmonised assessment of exports at the regional level, which can be linked to several SDGs.

Each regional government should complement this system of indicators. This is even more necessary when the monitoring couples with a Regional Agenda 2030, able to put the monitoring tool into a broader vision and to provide a framework for comparability over time.

Methodology to monitor the indicators

In most cases, the methods for calculating the indicators do not require very advanced technical skills. However, some indicators are related to specific legislation. This is the case, for example, for environmental indicators related to water or air quality. In this sense, it would be appropriate to analyse the regulatory standards in order to adjust the calculation method to the one identified by the law and regulation in force, also enabling comparability among regions.

Another example is the calculation of greenhouse gases, which requires complex calculations. In this regard, it would be useful that international organisations provide data which can be directly used by regional governments.

Availability of the proposed regional indicators across Europe

The exercise developed within the framework of the URBAN2030 – II project developed by the JRC with a number of pilot cities, could be also replicated at regional scale, to prove the availability of indicators for a large number of regions, and their applicability to different contexts.

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Links to indicator systems of case studies:

AEBC2030:
https://www.euskadi.eus/2030-agenda/

NAVARRE
https://ods-agenda2030.navarra.es/

FLANDERS
https://cifal-flanders.org/

List of abbreviations and definitions

HLPF	High-Level Political Forum
JRC	Joint Research Centre
SDG	Sustainable Development Goal
UN	United Nations
VLR	Voluntary Local Report
VNR	Voluntary National Review

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Annexes

Annex 1 Selected indicators for the regional level

The next table presents the selected indicators for the regional level.

Table 5 Selected Indicators for regional level

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
1.NO POVERTY	1.1 At-risk-of-poverty or social exclusion rate (AROPE indicator)	Case studies	Percentage of individuals affected by at least one of the following three forms of poverty or social exclusion: income poverty, severe material deprivation and very low employment intensity	%	Eurostat	yearly	
1.NO POVERTY	1.1.1 Percentage of people at risk of income poverty after social transfers	Case studies	Percentage of people living in households whose total equivalized disposable income is below the risk-of-poverty threshold (60% of the national median equivalized income) after social transfers.	%	Eurostat	yearly	
1.NO POVERTY	1.1.2 Percentage of people with severe material deprivation	Case studies	Percentage of people have living conditions that are greatly constrained by a lack of resources, which means they cannot afford at least four of the following items: to pay their rent or utility bills, to keep their home warm, to pay unexpected expenses, to eat meat, fish or a vegetarian equivalent every second day, a week's holiday away from home, a car, a washing machine, a colour TV or a telephone	%	Eurostat	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
1.NO POVERTY	1.1.3 Percentage of people living in households with very low work intensity	Case studies	Percentage of persons living in households with very low work intensity (households in which its members of working age worked less than 20% of their total work potential during the reference year).	%	Eurostat	yearly	
1.NO POVERTY	1.2 Housing cost overburden rate	Case studies	Proportion of population living in households where the total housing costs (net of housing allowances) represent more than 40% of household disposable income on housing	%	Eurostat	yearly	
1.NO POVERTY	1.3 Number of deaths, missing persons and people directly affected attributed to disasters per 100,000 inhabitants	Case studies	Number of deaths, missing persons and people directly affected attributed to disasters per 100,000 inhabitants	Number of deaths per 100,000 inhabitants	Regional government	yearly	
1.NO POVERTY	1.4 Direct economic loss attributed to disasters in relation to regional gross domestic product (GDP)	Additional	Millions of € lost directly attributed to disasters in relation to regional gross domestic product (GDP)	Million €		yearly	Indicator used in climate change adaptation strategies.
1.NO POVERTY	1.5 Disaster Risk Reduction Strategies	Additional	Existence of a regional strategy on risk reduction	Qualitative	Regional government	yearly	Whether or not there is a regional strategy to reduce risks, especially those associated with climate (adaptation to climate change).

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
1.NO POVERTY	1.6 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national or regional disaster risk reduction strategies	Additional	Percentage of local governments that adopt and implement local disaster risk reduction strategies in line with national/regional disaster risk reduction strategies	%	Regional government	yearly	Aggregate indicator at the regional level, feasible to calculate in case of having some mechanisms to facilitate the knowledge of local risk reduction strategies (e.g., climate change adaptation plans). Such a mechanism could be a line of subsidies, for example.
1.NO POVERTY	1.7 Proportion of total government spending on essential services (education, health, and social protection)	Additional	Percentage of total government spending on essential services (education, health, and social protection	%	Regional government	yearly	Indicator that measures the percentage of the regional government's annual budget dedicated to education, health and social protection.
2. ZERO HUNGER	2.1 Adult Obesity rate	Case studies	Proportion of obese adult according to their BMI. Persons aged 18 years or older who have a BMI equal to or greater than 30.	%	Health Surveys (regional, national, European) / Eurostat (The European Health Interview Survey)	Each survey every 5 years	
2. ZERO HUNGER	2.2 Percentage of land dedicated to organic agriculture	Case studies	Percentage of usable agricultural area devoted to organic farming	%	GV: ENEEK /Spain: INE, MAPAMA	yearly	
2. ZERO HUNGER	2.3 Percentage of surface area dedicated to organic livestock farming	Additional	Percentage of usable livestock area devoted to organic livestock farming	%	GV: ENEEK /Spain: INE, MAPAMA	yearly	Indicator complementing 2.2

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
2. ZERO HUNGER	2.4 Gross Value Added (GVA) of agriculture, livestock and fishing with respect to the GVA of all sectors (current prices).	Additional	Gross Value Added (GVA) primary sectors (agriculture, livestock and fisheries) as a share of GVA of all sectors (basic prices)	%	GV: EUSTAT	yearly	Economic indicator that facilitates the interpretation of the indicators 2.2 and 2.3
3. GOOD HEALTH AND WELL-BEING	3.1 Number of deaths due to Covid-19	Additional	Number of people dead due to Covid-19 in a year	Number.	Regional government	yearly	Indicator proposed due to the current Covid-19 pandemic situation
3. GOOD HEALTH AND WELL-BEING	3.2 Life expectancy at birth	Case studies	Average number of years that a new-born child can expect to live, if subjected throughout his or her life to the current mortality conditions	Years	Eurostat	yearly	
3. GOOD HEALTH AND WELL-BEING	3.2.1 Women's life expectancy at birth	Case studies	Average number of years that a new-born girl can expect to live, if subjected throughout his or her life to the current mortality conditions	Years	Eurostat	yearly	
3. GOOD HEALTH AND WELL-BEING	3.2.2 Men's life expectancy at birth	Case studies	Average number of years that a new-born boy can expect to live, if subjected throughout his or her life to the current mortality conditions	Years	Eurostat	yearly	
3. GOOD HEALTH AND WELL-BEING	3.3 Fatalities in traffic accidents	Case studies	Pedestrians, drivers, and passengers of vehicles (motorized and pedestrian) who died at the time of the accident or within 30 days of the accident	Number of deaths per 100,000 inhabitants	Spain: INE	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
3. GOOD HEALTH AND WELL-BEING	3.4 Air quality index	Case studies	Percentage of annual days with "very good", "good" and "improvable" air quality.[10]	%		yearly	In the Basque Country: based on hourly averages of various pollutants (PM2.5 / PM10 / NO2 / SO2 / CO / O3) five categories are established (Very Good, Good, Improvable, Bad and Very Bad) to provide an aggregate index understandable to the population.
4. QUALITY EDUCATION	4.1 Participation in early childhood education	Case studies	Proportion of students from 3 to 5 years old who participate in early childhood education (day care or school).	%	Regional Education Department	Yearly/school course	

10 In Basque Country: https://www.euskadi.eus/informacion/evaluacion-de-la-calidad-del-aire-en-euskadi/web01-a2ingair/es/

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
4. QUALITY EDUCATION	4.2 School drop-out rate	Case studies	Percentage of non-schooled population aged 18 to 24 years, i.e., those who have reached at most the level of compulsory secondary education or the previous educational levels (0,1 and 2 according to the International Classification of Educational Levels, ISCED 1997, i.e., preschool education, primary education (first cycle of basic education) and lower secondary education (second cycle of basic education). The criterion for school dropout is not having received any type of education or training during the four weeks prior to the survey.	%	INE (Labor Force Survey) and Eurostat	yearly	
4. QUALITY EDUCATION	4.3 Population between 30 and 34 years old with higher education level	Case studies	Percentage of population between 30 and 34 years of age with higher education	%	INE (Labor Force Survey) and Eurostat	yearly	
4. QUALITY EDUCATION	4.3.1 Percentage of women 30-34 years old with higher education level	Case studies	Percentage of women between 30 and 34 years of age with higher education	%	INE (Labor Force Survey) and Eurostat	yearly	
4. QUALITY EDUCATION	4.3.2 Percentage of men 30-34 years old with higher education level	Case studies	Percentage of men between 30 and 34 years of age with higher education	%	INE (Labor Force Survey) and Eurostat	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
4. QUALITY EDUCATION	4.4 Low performance in reading, mathematics and science	Case studies	Proportion of 15-year-old students who did not reach level 2 ("basic skills level") on the PISA scale for the three core subjects of reading, mathematics and science. Data are from the Programme for International Student Assessment (PISA), which is a triennial international survey that aims to evaluate education systems by testing the skills and knowledge of 15-year-old students.	%	OECD (Programme for International Student Assessment (PISA)) and Eurostat (Sustainable Development Indicators).	every 3 years	
4. QUALITY EDUCATION	4.5 Life-long learning	Case studies	Ratio, in percent, of the population aged 25 to 64 years who received education or training, relevant or not, for the current job or for a future job, in the four weeks prior to the survey among the total population of the same age group, except those who did not respond to the question on participation in education and training.	%	INE (Labour Force Survey) and Eurostat	yearly	
4. QUALITY EDUCATION	4.5.1 Life-long learning (women)	Case studies	Ratio, in percent, of women aged 25 to 64 years who received education or training, relevant or not, for the current job or for a future job, in the four weeks prior to the survey among the total population of the same age group, except those who did not respond to the question on participation in education and training.	%	INE (Labour Force Survey) and Eurostat	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
4. QUALITY EDUCATION	4.5.2 Life-long learning (men)	Case studies	Ratio, in percent, of men aged 25 to 64 years who received education or training, relevant or not, for the current job or for a future job, in the four weeks prior to the survey among the total population of the same age group, except those who did not respond to the question on participation in education and training.	%	INE (Labour Force Survey) and Eurostat	yearly	
5. GENDER EQUALITY	5.1 Fatal victims of gender-based violence at the hands of their partners or ex-partners	Case studies	Number of fatal victims of gender-based violence at the hands of their partners or ex-partners	Number	Regional Government Security Department	yearly	
5. GENDER EQUALITY	5.2 Victims of violence against women	Case studies	Number of victims of violence against women	Number	Regional Government Security Department	yearly	
5. GENDER EQUALITY	5.3 Inactive population rate due to caregiving responsibilities	Case studies	Share of people that are not actively seeking work, so they are out of the Labour force. This definition used in the European Union Population Survey (EU-LFS) is based on ILO guidelines, Although there may be several reasons why someone is not seeking employment, only the main one is considered, "Inactivity due to caring responsibilities" refers to the reasons of "caring for children or incapacitated adults" and "other family or personal responsibilities."	%	INE (Spain) /Eurostat	yearly	
5. GENDER EQUALITY	5.3.1 Inactive female rate due to caregiving responsibilities	Case studies	Share of women that are considered to be out of the labour force, due to caring responsibilities for children or incapacitated adults.	%	INE (Spain) /Eurostat	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
5. GENDER EQUALITY	5.3.2 Inactive male rate due to caregiving responsibilities	Case studies	Share of men that are considered to be out of the labour force, due to caring responsibilities for children or incapacitated adults.	%	INE (Spain) /Eurostat	yearly	
5. GENDER EQUALITY	5.4 Women in Parliament and Government	Case studies	Proportion of women in parliament and regional government. Parliament is the national or regional legislative assembly.	%	Regional Government	yearly	
5. GENDER EQUALITY	5.5 Average gross annual salary	Case studies	Average gross salaries of salaried employees	€	INE (Labour Force Survey) and Eurostat / Basque Country (EUSTAT)	yearly	
5. GENDER EQUALITY	5.5.1 Women average gross annual salary	Case studies	Average gross salaries of salaried female employees	€	INE (Labour Force Survey) and Eurostat / Basque Country (EUSTAT)	yearly	
5. GENDER EQUALITY	5.5.2 Men average gross annual salary	Case studies	Average gross salaries of salaried male employees	€	INE (Labour Force Survey) and Eurostat / Basque Country (EUSTAT)	yearly	
6. CLEAN WATER AND SANITATION	6.1 Percentage of population served by safely managed drinking water supply services	Case studies	The indicator measures the percentage of population with access to water for consumption, meaning, drinking water with treatment and quality control	%	Water management entities or departments at the regional level	yearly	
6. CLEAN WATER AND SANITATION	6.2 Percentage of population connected to wastewater with at least secondary treatment	Case studies	The indicator measures the percentage of population connected to wastewater treatment systems with at least secondary treatment, resulting in a removal of organic material that reduces biochemical oxygen demand (BOD) by at least 70% and chemical oxygen demand (COD) by at least 75%.	%	Navarre: NILSA	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
6. CLEAN WATER AND SANITATION	6.3 Rate of water bodies that exceed a standardized quality rating	Case studies	Indicator that establishes the percentage of water bodies analysed in rivers that exceed a standardized quality rating. In the Basque Country, two ratings are established: "good" and "worse than good".	%	Navarre: NILSA / Basque Government: URA / Spain: Eurostat	yearly	
6. CLEAN WATER AND SANITATION	6.4 Rate of groundwater that exceed a standardized quality rating	Case studies	Quality of groundwater bodies. Indicator that establishes the percentage of groundwater bodies analysed that exceed a standardized quality rating. In the Basque Country, two ratings are established: "good" and "bad"	%	Basque Government: URA Agency / Spain: Eurostat	yearly	
6. CLEAN WATER AND SANITATION	6.5 Total water demand	Case studies	Total water demand for all uses at the regional level	m3/year	Basque Government: URA Agency	yearly	
7. AFFORDABLE AND CLEAN ENERGY	7.1 Percentage of people affected by energy poverty	Case studies	Proportion of the population that is unable to keep home adequately warm	%	ECV (INE) for Spain and Navarre	yearly	
7. AFFORDABLE AND CLEAN ENERGY	7.2 Share of renewable energies in gross final energy consumption	Case studies	Share of renewable energy consumption in gross final energy consumption	%	Eurostat	yearly	
7. AFFORDABLE AND CLEAN ENERGY	7.3 Final energy intensity	Case studies	Ratio of energy demand or consumption to gross domestic product.	tep/M€	"EVE" (Basque Country)	yearly	
8. DECENT WORK AND ECONOMIC GROWTH	8.1 GDP (Gross Domestic Product) at market prices (per capita)	Case studies	Gross Domestic Product at market prices. It measures the wealth generated by productive factors (industry, commerce, service companies, etc.) in euros per inhabitant per year.	€/inhabitant/year	Basque Government: EUSTAT / Eurostat	yearly	
8. DECENT WORK AND ECONOMIC GROWTH	8.2 Unemployment rate	Case studies	Percentage of the Labour force unemployed	%	Basque Government: EUSTAT / Navarre: NASTAT	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
8. DECENT WORK AND ECONOMIC GROWTH	8.2.1 Female unemployment rate	Case studies	Percentage of the female Labour force unemployed	%	Basque Government: EUSTAT / Navarre: NASTAT	yearly	
8. DECENT WORK AND ECONOMIC GROWTH	8.2.2 Male unemployment rate	Case studies	Percentage of the male Labour force unemployed	%	Basque Government: EUSTAT / Navarre: NASTAT	yearly	
8. DECENT WORK AND ECONOMIC GROWTH	8.2.3 Youth unemployment rate	Case studies	Percentage of young people (between 16 and 24) unemployed with respect to the total number of unemployed people	%	Basque Government: EUSTAT / Navarre: NASTAT	yearly	
8. DECENT WORK AND ECONOMIC GROWTH	8.3 Incidence rate of occupational accidents	Case studies	People killed in accidents occurring during the course of work and leading to the victim's death within one year	Accidents per 100,000 persons in employment	Eurostat / Navarra: NASTAT (EPA)	yearly	
9. INDUSTRY, INNOVATION, AND INFRASTRUCTURE	9.1 Gross Value Added (GVA) of the industry with respect to the GVA of the total sectors (current prices)	Case studies	Gross Value Added (GVA) of the industry with respect to GVA of all sectors (basic prices)	%	Basque Government: EUSTAT	yearly	
9. INDUSTRY, INNOVATION, AND INFRASTRUCTURE	9.2 R&D expenditure	Case studies	Total cost of R&D execution, including supporting activities, as a percentage of GDP.	%	Basque Government: EUSTAT / Eurostat	yearly	
9. INDUSTRY, INNOVATION, AND INFRASTRUCTURE	9.3 R&D and research employment	Case studies	Number of researchers and R&D personnel expressed as a percentage of the number of people employed	%	Eurostat / Navarre: NASTAT / Spain: INE	yearly	
9. INDUSTRY, INNOVATION, AND INFRASTRUCTURE	9.4 Greenhouse Gas Emissions from the industrial sector	Additional	GHG emissions in tons of CO2 equivalent from the industrial sector	t CO2e/year	Department of Environment of the Regional Government	yearly	Indicator that allows measuring the impact of the industrial sector in a comprehensive manner

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
10. REDUCED INEQUALITIES	10.1 GINI Index	Case studies	The Gini index (Gini 1912) measures the extent to which the distribution of income after taxes and transfers deviates from a perfectly equal distribution.	Index 0-100	Navarre: NASTAT, ECV / Basque Government: EUSTAT / EUROSTAT	yearly	
10. REDUCE INEQUALITIES	10.2 Immigration rate	Case studies	Ratio between the number of registered immigrants per 10,000 inhabitants	Number of immigrants/ 10,000 inhabits.	Basque Government: EUSTAT	yearly	
10. REDUCED INEQUALITIES	10.3 Unemployment rate of the immigrant population	Case studies	Percentage of unemployed immigrants	%	Spain: EPA-INE	yearly	
10. REDUCED INEQUALITIES	10.4 Unemployment rate of people with disabilities	Case studies	Percentage of unemployed people with disabilities	%	Spain: Odismet (ONCE)	yearly	
11. SUSTAINABLE CITIES AND COMMUNITIES	11.1 Subsidized housing	Case studies	Percentage of dwellings classified as subsidized housing with respect to the total number of dwellings in the municipality	%	Basque Government: Etxebide	yearly	Indicator that measures the proportion of social housing, to ensure access to decent housing even to those that cannot afford it
11. SUSTAINABLE CITIES AND COMMUNITIES	11.2 Artificialized land	Additional	Percentage of artificialized land in relation to the total area of the municipality.	%	Basque Country: UDALPLAN	yearly	Indicator measuring the proportion of artificialized land in the territory.
11. SUSTAINABLE CITIES AND COMMUNITIES	11.3 Knowledge of the second official language (in territories with two official languages)	Additional	Percentage of people who speak the second official language well or fairly well, more specifically, if they are able to hold a conversation in that language.	%	Basque Country: EUSTAT	yearly	This indicator would correspond to territories with two official languages.

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
11. SUSTAINABLE CITIES AND COMMUNITIES	11.4 Particulate matter pollution (PM10)	Case studies	Average annual value of suspended particulate matter (PM10) concentration calculated as the total mass of particles collected in the PM10 size range divided by the volume of sampled air measured at air quality monitoring stations.	µg/m3	Department of Environment of the Regional Government	yearly	
11. SUSTAINABLE CITIES AND COMMUNITIES	11.5 Particle pollution (PM2.5)	Case studies	Average annual value of suspended particulate matter (PM2.5) concentration calculated as the total mass of particulate matter collected in the PM2.5 size range divided by the volume of sampled air measured at air quality monitoring stations	µg/m3	Department of Environment of the Regional Government	yearly	
11. SUSTAINABLE CITIES AND COMMUNITIES	11.6 Household and commercial waste generation per inhabitant	Case studies	Household and commercial waste generation in kg. per inhabitant per day	kg/inhabitant/ day	Department of Environment of the Regional Government	yearly	
11. SUSTAINABLE CITIES AND COMMUNITIES	11.7 Proportion of population residing in municipalities with local sustainable development plans	Additional	Proportion of population residing in municipalities with local sustainable development plans (Agenda 21, Local Agenda 2030).	%	Department of Environment of the Regional Government	yearly	The feasibility of calculating this indicator will depend on the existence of a mechanism that allows the Regional Government to have updated information on which municipalities have this type of plan in force.
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.1 Material footprint (per capita)	Case studies	Tons of domestic material consumed per inhabitant per year	ton/ inhabitant/ye ar	Department of Environment of the Regional Government	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.2 Food waste	Case studies	Quantity of food and kitchen waste of domestic and commercial origin selectively collected per inhabitant (EXPERIMENTAL)	Kg/inhab./yea r	Department of Environment of the Regional Government	yearly	Although the method for calculating food waste has not yet been standardized, this indicator is included as an experimental indicator.
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.3 Hazardous Waste	Additional	Absolute value of hazardous wastes generated by companies	ton/year	Department of Environment of the Regional Government	yearly	Based on current legislation on hazardous waste, the environmental departments of some regional governments have this information available
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.4 Rate of selective collection of household and commercial waste	Case studies	Percentage of household and commercial waste that is collected selectively	%	Department of Environment of the Regional Government	yearly	
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.5 Responsible public procurement	Additional	Existence of regulations/criteria for incorporating sustainability clauses (social, environmental, etc.) in public procurement.	Qualitative indicator	Regional Government	yearly	This indicator is proposed as a qualitative indicator. Over time, it would be useful to quantify in percentage or budget the public tenders that incorporate sustainability criteria

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.6 Number of sustainable tourism plans	Additional	Number of areas of the territory with sustainable tourism plans, initiatives or seals.	Number	Department of Tourism/Economics of the Regional Government	yearly	This indicator is proposed as an experimental indicator in order to explore how to quantify in a homogeneous way the commitment to sustainable tourism destinations in a region.
13. CLIMATE ACTION	13.1 Greenhouse Gas Emissions (per capita)	Case studies	Evolution of total and diffuse GHG emissions per capita per country in tons of CO2 equivalent.. The result can be considered as an indicator of individual eco-efficiency, or per capita, so that countries with a lower ratio between the two variables, i.e., with lower emissions per capita/year, would be those with more eco-efficient inhabitants and, therefore, with more sustainable production and/or consumption patterns. [Definition extracted from the definitions of the Inventory of Greenhouse Gas Emissions of the C.A. of the Basque Country. 2018 [11]].	t CO2e/inhab./year	Department of Environment of the Regional Government	yearly	

[11] In Basque Country: https://www.euskadi.eus/web01-a2ingair/es/contenidos/estadistica/amb_cc_gei/es_def/index.shtml

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
13. CLIMATE ACTION	13.2 Percentage of budget allocated to climate action	Additional	Percentage of the regional government budget allocated specifically to initiatives, grant lines, plans or policies that address climate action, as well as human and institutional capacity and awareness for climate change mitigation, adaptation, mitigation and early warning. Energy, mobility and waste policies would not be included.	%	Department of Environment of the Regional Government	yearly	Indicator that measures the percentage of the regional government's annual budget dedicated to climate action.
14. LIFE BELOW WATER	14.1 Plastic pollution of seas and oceans	Additional	Existence of specific plans to reduce scattered plastics	Qualitative indicator	Regional Government	yearly	The 2019/904 Directive of the European Parliament establishes that by 2026 the amount of plastic should be significantly reduced compared to 2022. Some territories are beginning to develop an inventory and establishing specific plans for the reduction of this type of waste which, due to its characteristics (even if generated inland) is capable of ending up in seas and oceans by the action of the wind or through rivers.

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
14. LIFE BELOW WATER	14.2 Estuarine with high/very high water quality	Additional	Percentage of estuarine water bodies with good or very good ecological status. The ecological status of a water body is the degree of alteration it presents with respect to its natural conditions. It is an expression of the quality of the structure and functioning of the aquatic ecosystems associated with surface waters in relation to reference conditions and is obtained from a battery of biological, hydro morphological and physicochemical quality indicators. The Water Framework Directive (WFD) establishes five classes of ecological status, depending on the degree of alteration of the water body with respect to its reference conditions: very good (1), good (2), moderate (3), poor (4) and bad (5).	%	Basque Country: URA Agency	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
14. LIFE BELOW WATER	14.3 Coastal areas with good/very good water quality	Case studies	Percentage of coastal water bodies with good or very good ecological status. The ecological status of a body of water is the degree of alteration it presents with respect to its natural conditions. It is an expression of the quality of the structure and functioning of the aquatic ecosystems associated with surface waters in relation to reference conditions and is obtained from a battery of biological, hydro morphological and physicochemical quality indicators. The Water Framework Directive (WFD) establishes five classes of ecological status, depending on the degree of alteration of the water body with respect to its reference conditions: very good (1), good (2), moderate (3), poor (4) and bad (5).	%	Basque Country: URA Agency	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
14. LIFE BELOW WATER	14.4 Protected natural areas including coastal and estuarine sites	Additional	Hectares of protected natural areas, including coastal and estuarine areas.	Ha	Department of Environment of the Regional Government	yearly	This indicator is present in the report "Advancement of the SDGs of environmental and sustainable development policies in Gipuzkoa.2019"- Department of Environment and Hydraulic Works of the Provincial Council of Gipuzkoa. (Gipuzkoako Foru Aldundia and Observatorio de la sostenibilidad de Gipuzkoa 2019)
15. LIFE ON LAND	15.1 Percentage of forest area over total surface area	Case studies	The indicator measures the proportion of forest ecosystems compared to total area	%	Department of Environment of the Regional Government	yearly	
15. LIFE ON LAND	15.2 Protected natural areas	Case studies	Protected area with a special protection status	Ha	Department of Environment of the Regional Government	yearly	
15. LIFE ON LAND	15.3 Potentially contaminated land area	Case studies	Area of potentially contaminated land registered in any official registry related to contamination from current or past activities.	Ha	Department of Environment of the Regional Government	yearly	
15. LIFE ON LAND	15.4 Potentially contaminated area (cumulative) reclaimed for new uses	Case studies	Area of the official lists of potentially contaminated land that has been analyzed for conversion of use and, if necessary, remediated.	Ha	Department of Environment of the Regional Government	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
15. LIFE ON LAND	15.5 Proportion of threatened (endangered and vulnerable) species with management or recovery plans.	Additional	Proportion of threatened (endangered and vulnerable) species with management or recovery plans.	%	Department of Environment of the Regional Government	yearly	This indicator is present in the report "Advancement of the SDGs of environmental and sustainable development policies in Gipuzkoa.2019"- Department of Environment and Hydraulic Works of the Provincial Council of Gipuzkoa. (see footnote in Indicator 14.4)
15. LIFE ON LAND	15.6 Control of invasive species	Additional	Existence of specific plans for the prevention or control of invasive alien species	Qualitative indicator	Department of Environment of the Regional Government	yearly	
16. PEACE, JUSTICE AND STRONG INSTITUTIONS	16.1 Crime rate	Case studies	Criminal infractions per 1,000 inhabitants	per 1,000 inhabitants	Spain: Ministry of Interior /INE	yearly	
16. PEACE, JUSTICE AND STRONG INSTITUTIONS	16.2 Transparency index	Case studies	The Transparency Index or Corruption Perceptions Index (CPI) is an index published annually by Berlin-based Transparency International since 1995 which ranks countries "by their perceived levels of public sector corruption, as determined by expert assessments and opinion surveys."	Index 0-100	Transparency International	Every 2 years	
16. PEACE, JUSTICE AND STRONG INSTITUTIONS	16.3 Confidence in the Government	Case studies	Percentage of respondents who say they have confidence in the regional government	%	Basque Country: Basque Sociometer / Eurobarometer	yearly	

GOAL	INDICATORS	ORIGIN	DEFINITION	UNIT	SOURCE	FREQUENCY	Comments only for additional indicators
16. PEACE, JUSTICE AND STRONG INSTITUTIONS	16.4 Participation in the last elections	Case studies	Percentage of participation in recent regional government elections	%	Regional Government	every 4 years	
17. PARTNERSHIPS FOR THE GOALS	17.1 Imports from developing countries	Case studies	Value (at current prices) of EU imports from developing countries. In this context, developing countries are defined as countries on the OECD Development Assistance Committee (DAC) list of recipients of official development assistance (ODA).	Millions of euros /Percentage over total imports	UE28 and Spain - Eurostat	yearly	
17. PARTNERSHIPS FOR THE GOALS	17.2 Official Development Assistance	Case studies	Official Development Assistance (ODA) in terms of the OECD Development Assistance Committee of the Regional Government.	% of total general Budget	Regional Government	yearly	
17. PARTNERSHIPS FOR THE GOALS	17.3 Partnerships to achieve the Sustainable Development Goals	Additional	Number of networks in which the regional government actively participates related to the 2030 Agenda.	Number	Regional Government	yearly	There is a growing number of territorial, national and international networks specifically associated with the 2030 Agenda to multiply and accelerate the achievement of the SDGs.

Source: Own elaboration

Annex 2 Matching with the analysed indicator systems

In the following table, the previously selected indicators are compared with each of the analysed systems:

- The European Handbook for SDG Voluntary Local Reviews (European Handbook)
- The Case of Basque Country
- The Case of Navarre
- The Case of Flanders

Table 6 Matching with the analysed systems

GOAL	INDICATORS	MATCHING WITH THE ANALYSED INDICATOR SYSTEMS				COMMENTS
		EUROPEAN HANDBOOK	BASQUE COUNTRY	NAVARRE	FLANDERS	
1.NO POVERTY	1.1 At-risk-of-poverty or social exclusion rate (AROPE indicator)			X	X	
	1.1.1 Percentage of population at risk of income poverty after social transfers	X	X	X	X	
	1.1.2 Percentage of population with severe material deprivation		X	X	X	
	1.1.3 Percentage of people living in households with low work intensity	X	X	X	X	
	1.2 Housing cost overburden rate	X In SDG 11		X		
	1.3 Number of deaths, missing persons and people directly affected attributed to disasters per 100,000 inhabitants	X In SDG 13				
	1.4 Direct economic loss attributed to disasters in relation to regional gross domestic product (GDP)					Additional
	1.5 Disaster Risk Reduction Strategies					Additional
	1.6 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national or regional disaster risk reduction strategies					Additional

GOAL	INDICATORS	MATCHING WITH THE ANALYSED INDICATOR SYSTEMS				COMMENTS
		EUROPEAN HANDBOOK	BASQUE COUNTRY	NAVARRE	FLANDERS	
	1.7 Proportion of total government spending on essential services (education, health, and social protection)					Additional
2. ZERO HUNGER	2.1 Adult Obesity Rate	X	X	X		
	2.2 Percentage of land dedicated to organic agriculture			X		
	2.3 Percentage of surface area dedicated to organic livestock farming					Additional
	2.4 Gross Value Added (GVA) of agriculture, livestock and fishing with respect to the GVA of all sectors (current prices).					Additional
3. GOOD HEALTH AND WELL-BEING	3.1 Number of deaths due to Covid-19					Additional
	3.2 Life expectancy at birth		X	X		
	3.2.1 Women's life expectancy at birth			X		
	3.2.2 Men's life expectancy at birth			X		
	3.3 Fatalities in traffic accidents	X		X In SDG 11		
	3.4 Air quality index		X In SDG 13			
4. QUALITY EDUCATION	4.1 Participation in early childhood education	X		X		
	4.2 School drop-out rate		X	X	X	
	4.3 Percentage of population between 30 and 34 years old with higher education level		X	X		
	4.3.1 Percentage of women 30-34 years old with higher education level			X		
	4.3.2 Percentage of men 30-34 years old with higher education level			X		

GOAL	INDICATORS	MATCHING WITH THE ANALYSED INDICATOR SYSTEMS				COMMENTS
		EUROPEAN HANDBOOK	BASQUE COUNTRY	NAVARRE	FLANDERS	
	4.4 Low performance in reading, mathematics and science		X	X		
	4.5 Life-long learning		X	X		
	4.5.1 Life-long learning (women)			X		
	4.5.2 Life-long learning (men)			X		
5. GENDER EQUALITY	5.1 Fatal victims of gender-based violence at the hands of their partners or ex-partners			X		
	5.2 Victims of violence against women			X		
	5.3 Inactive population rate due to caregiving responsibilities			X		
	5.3.1 Inactive female rate due to caregiving responsibilities			X		
	5.3.2 Inactive male rate due to caregiving responsibilities			X		
	5.4 Women in Parliament and Government	X		X		
	5.5 Average gross annual salary		X In SDG 8	X In SDG 8		
	5.5.1 Women average gross annual salary		X	X		
	5.5.2 Men average gross annual salary		X	X		
6. CLEAN WATER AND SANITATION	6.1 Percentage of population served by safely managed drinking water supply services				X	
	6.2 Percentage of population connected to wastewater with at least secondary treatment	X		X		
	6.3 Rate of water bodies that exceed a standardized quality rating	X In SDG 14	X	X	X	
	6.4 Rate of		X		X	

GOAL	INDICATORS	MATCHING WITH THE ANALYSED INDICATOR SYSTEMS				COMMENTS
		EUROPEAN HANDBOOK	BASQUE COUNTRY	NAVARRE	FLANDERS	
	groundwater bodies that exceed a standardized quality rating					
	6.5 Total water demand		X			
7. AFFORDABLE AND CLEAN ENERGY	7.1 Percentage of people affected by energy poverty			X		
	7.2 Share of renewable energies in gross final energy consumption		X	X		
	7.3 Final energy intensity		X			
8. DECENT WORK AND ECONOMIC GROWTH	8.1 GDP (Gross Domestic Product) at market prices (per capita)	X	X	X	X	
	8.2 Unemployment rate	X	X	X	X	
	8.2.1 Female unemployment rate	X In SDG 5			X	
	8.2.2 Male unemployment rate	X In SDG 5			X	
	8.2.3 Youth unemployment rate			X	X	
	8.3 Incidence rate of occupational accidents	X		X		
9. INDUSTRY, INNOVATION, AND INFRASTRUCTURE	9.1 Gross Value Added (GVA) of the industry with respect to the GVA of the total sectors (current prices)		X	X	X	
	9.2 R&D expenditure		X	X	X	
	9.3 R&D and research employment			X	X	
	9.4 Greenhouse Gas Emissions from the industrial sector					Additional
10. REDUCED INEQUALITIES	10.1 GINI Index	X	X	X		
	10.2 Immigration rate	X				
	10.3 Unemployment rate of the		X			

GOAL	INDICATORS	MATCHING WITH THE ANALYSED INDICATOR SYSTEMS				COMMENTS
		EUROPEAN HANDBOOK	BASQUE COUNTRY	NAVARRE	FLANDERS	
	immigrant population					
	10.4 Unemployment rate of people with disabilities	X	X			
11. SUSTAINABLE CITIES AND COMMUNITIES	11.1 Subsidized housing	X In SDG 1				
	11.2 Artificialized land					Additional
	11.3 Knowledge of the second official language (in territories with two official languages)					Additional
	11.4 Particulate matter pollution (PM10)		X	X		
	11.5 Particle pollution (PM2.5)			X		
	11.6 Household and commercial waste generation per inhabitant	X In SDG 12	X In SDG 12	X In SDG 12		
	11.7 Proportion of population residing in municipalities with local sustainable development plans					Additional
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.1 Material footprint (per capita)		X		X	
	12.2 Food waste				X	
	12.3 Hazardous Waste					Additional
	12.4 Rate of selective collection of household and commercial waste		X In SDG 11	X In SDG 11	X	
	12.5 Responsible public procurement					Additional
	12.6 Number of sustainable tourism plans					Additional
13. CLIMATE ACTION	13.1 Greenhouse Gas Emissions (per capita)	X	X	X		

GOAL	INDICATORS	MATCHING WITH THE ANALYSED INDICATOR SYSTEMS				COMMENTS
		EUROPEAN HANDBOOK	BASQUE COUNTRY	NAVARRE	FLANDERS	
	13.2 Percentage of budget allocated to climate action					Additional
14. LIFE BELOW WATER	14.1 Plastic pollution of seas and oceans					Additional
	14.2 Estuarine with high/very high -water quality					Additional
	14.3 Coastal areas with good/very good water quality	X	X			
	14.4 Protected natural areas including coastal and estuarine sites					Additional
15. LIFE ON LAND	15.1 Percentage of forest area over total surface area		X	X		
	15.2 Protected natural areas			X	X	
	15.3 Potentially contaminated land area		X		X	
	15.4 Potentially contaminated area (cumulative) reclaimed for new uses		X		X	
	15.5 Proportion of threatened (endangered and vulnerable) species with management or recovery plans.					Additional
	15.6 Control of invasive species					Additional
16. PEACE, JUSTICE AND STRONG INSTITUTIONS	16.1 Crime rate	X	X In SDG11	x		
	16.2 Transparency index	X	X			
	16.3 Confidence in the Government		X		X	
	16.4 Participation in the last elections	X				
NERS HIPS FOR THE	17.1 Imports from developing countries			X		

GOAL	INDICATORS	MATCHING WITH THE ANALYSED INDICATOR SYSTEMS				COMMENTS
		EUROPEAN HANDBOOK	BASQUE COUNTRY	NAVARRE	FLANDERS	
	17.2 Official Development Assistance		X	X	X	
	17.3 Partnerships to achieve the Sustainable Development Goals					Additional

Source: Own elaboration

Annex 3 Matching with UN Indicators and targets

In table 6, the previously selected indicators are compared with the Global Indicator Framework for the SDGs, highlighting the links and interrelations with the targets and other SDGs. Finally, the column "Comments" explains in detail the chosen indicators for each SDG.

Table 7 Matching with UN Indicators, targets and interrelation with other SDG

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
1.NO POVERTY	1.1 At-risk-of-poverty or social exclusion rate (AROPE indicator)	1.2.1 Proportion of population living below the national poverty line, by sex and age 1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	1.2	10	For Goal 1, the monitoring system of regional governments might focus on measuring the level of poverty in a comparable manner between regions, measuring the human and material costs due to disasters, mostly associated with extreme weather events (link with SDG 13) and along the same lines, identifying the existence of risk reduction plans and more specifically, plans for adaptation to climate change. On the other hand, in the case of regional governments with jurisdiction over education, health and social protection, the monitoring of Goal 1 might also include information on the amount of the regional budget dedicated to these areas.
	1.1.1 Population at risk of income poverty after social transfers		1.2	10, 11	
	1.1.2 Population with severe material deprivation				
	1.1.3 People living in households with low work intensity				
	1.2 Housing cost overburden rate				
	1.3 Number of deaths, missing persons and people directly affected attributed to disasters per 100,000 inhabitants	1.5.1 Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	1.5	13	
	1.4 Direct economic loss attributed to disasters in relation to regional gross domestic product (GDP)	1.5.2 Direct economic loss attributed to disasters in relation to global gross domestic product (GDP)		13	
	1.5 Disaster Risk Reduction Strategies	1.5.3 Number of countries that adopt and implement national disaster risk reduction strategies in line with the Sendai Framework for Disaster Risk Reduction 2015–2030		13	
	1.6 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national or regional disaster risk reduction strategies	1.5.4 Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies		13	
	1.7 Proportion of total government spending on essential services (education, health, and social protection)	1.a.2 Proportion of total government spending on essential services (education, health, and social protection)	1.a	3, 4, 10	
2. ZERO HUNGER	2.1 Adult Obesity rate	-	-	3	For Goal 2, regarding food and nutrition, the case studies focus on monitoring the obesity rate as an indicator of malnutrition. Regarding food production, the monitoring might also include information on the agricultural and
	2.2 Percentage of land dedicated to organic agriculture	2.4.1 Proportion of agricultural area under productive and sustainable agriculture	2.4	15	
	2.3 Percentage of surface area dedicated to organic livestock farming			15	
	2.4 Gross Value Added (GVA) of agriculture, livestock, and fishing with respect to the GVA of all sectors (current prices).			14, 15	

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
					livestock area devoted to organic production, which also leads to a better nutrition of the population and a greater demand for this type of products. The indicator related to the GVA of the primary sector might also be included because it complements the two previous ones.
3. GOOD HEALTH AND WELL-BEING	3.1 Number of deaths due to Covid-19	-	3.3		Incidence by Covid-19 is incorporated in this Goal due to the current pandemic scenario. An indicator such as life expectancy at birth, disaggregated by sex, might also enter the monitoring. In addition, the indicator of traffic fatalities is also proposed for inclusion. Instead, the air quality index is included here in order to give visibility to the relationship between health and the environment, despite indicators related to air quality are usually used to measure another Goal, the SDG11
	3.2 Life expectancy at birth	3.4.1 Mortality rate attributed to cardiovascular disease, cancer, diabetes, or chronic respiratory disease	3.4		
	3.2.1 Women's life expectancy at birth				
	3.2.2 Men's life expectancy at birth				
	3.3 Fatalities in traffic accidents	3.6.1 Death rate due to road traffic injuries	3.6	11	
	3.4 Air quality index	3.9.1 Mortality rate attributed to household and ambient air pollution	3.9	11, 13	
4. QUALITY EDUCATION	4.1 Participation in early childhood education	4.2.1 Proportion of children aged 24-59 months who are developmentally on track in health, learning and psychosocial well-being, by sex	4.2		For this Goal it is suggested to measure, on the one hand, the access of children under 5 years of age to the preparatory stages of primary education and, on the other hand, the school dropout rate, in order to identify the share of young adults that is not achieving the minimum level of education necessary to access decent jobs. This links Goal 4 with Goal 8. It is also proposed to monitor the population, with higher education, disaggregated by sex.
	4.2 School drop-out rate	4.5.1 Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated 4.6.1 Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	4.5 4.6	8	
	4.3 Percentage of population between 30 and 34 years old with higher education level			8	
	4.3.1 Percentage of women 30-34 years old with higher education level			5, 8	
	4.3.2 Percentage of men 30-34 years old with higher education level			5, 8	
	4.4 Low performance in reading, mathematics and science				
	4.5 Life-long learning	4.3.1 Participation rate of youth and adults in formal and non-	4.3	8	
	4.5.1 Life-long learning			5, 8	

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
	(women)	formal education and training in the previous 12 months, by sex	4.4		This sex-disaggregation responds to gender target 5.4, and together with other proposed sex-disaggregated indicators, helps to interpret gender inequalities more comprehensively (SDG 5).
	4.5.2 Life-long learning (men)	4.4.1 Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill		5, 8	
5. GENDER EQUALITY	5.1 Fatal victims of gender-based violence at the hands of their partners or ex-partners	5.2.1 Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	5.2	16	Goal 5 focuses on monitoring violence against women, both in relation to their partners or ex-partners, as well as sexual violence by outsiders. In addition, it measures inequalities in relation to caretaking responsibilities and their impact on women's professional development. Finally, this Goal includes information on the gender employment gap and the differences in the proportion of elected women in political positions at the regional level.
	5.2 Victims of violence against women	5.2.2 Proportion of women and girls aged 15 years and older subjected to sexual violence by persons other than an intimate partner in the previous 12 months, by age and place of occurrence		16	
	5.3 Inactive population rate due to caregiving responsibilities	5.4.1 Proportion of time spent on unpaid domestic and care work, by sex, age and location	5.4	4, 8	
	5.3.1 Inactive female rate due to caregiving responsibilities			4, 8	
	5.3.2 Inactive male rate due to caregiving responsibilities			4, 8	
	5.4 Women in Parliament and Government	5.5.1 Proportion of seats held by women in (a) national parliaments and (b) local governments	5.5	16	
	5.5 Average gross annual salary	5.1.1 Whether or not legal frameworks are in place to promote, enforce and monitor equality and nondiscrimination on the basis of sex	5.1	4, 8, 10	
	5.5.1 Women average gross annual salary			4, 8, 10	
	5.5.2 Men average gross annual salary			4, 8, 10	
6. CLEAN WATER AND SANITATION	6.1 Percentage of population served by safely managed drinking water supply services	6.1.1 Proportion of population using safely managed drinking water services	6.1		To measure Goal 6 at the regional level the following indicators are proposed: - access to properly managed drinking water, -the extent of wastewater treatment systems, - the quality of surface and groundwater; and
	6.2 Percentage of population connected to wastewater with at least secondary treatment	6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water	6.3	14, 15	
	6.3 Rate of water bodies that exceed a standardized quality rating	6.3.1 Proportion of domestic and industrial wastewater flows safely treated		14	

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
	6.4 Rate of groundwater bodies that exceed a standardized quality rating			15	-total regional water demand. On the contrary, indicators related to downstream management of drinking water, such as average annual consumption per inhabitant or downstream water losses, are not included, as these are aspects more related to local entities
	6.5 Total water demand	6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources		13	
7. AFFORDABLE AND CLEAN ENERGY	7.1 Percentage of people affected by energy poverty	7.1.1 Proportion of population with access to electricity	7.1	1, 10, 11	The indicators proposed to measure goal 7 might support regions in monitoring: -the level of access to affordable, reliable and modern energy services. -the share of renewable energy in the energy mix; and - the level of global rate of improvement in energy efficiency.
	7.2 Share of renewable energies in gross final energy consumption	7.2.1 Renewable energy share in the total final energy consumption	7.2	13	
	7.3 Final energy intensity	7.3.1 Energy intensity measured in terms of primary energy and GDP	7.3	13	
8. DECENT WORK AND ECONOMIC GROWTH	8.1 GDP (Gross Domestic Product) at market prices (per capita)	8.1.1 Annual growth rate of real GDP per capita	8.1	1	The proposed indicators and their annual monitoring are intended to provide information on the evolution of economic growth and the evolution of the employment. This Goal on economic growth and decent employment is complemented at the indicator level by the indicators proposed in SDG 5, about the gross annual salary disaggregated by gender. In relation to target 8.8, the incidence rate of occupational accidents is also included.
	8.2 Unemployment rate	8.5.2 Unemployment rate, by sex, age and persons with disabilities	8.5	1, 4, 10	
	8.2.1 Female unemployment rate			1, 4, 5, 10	
	8.2.2 Male unemployment rate			1, 4, 5, 10	
	8.2.3 Youth unemployment rate			1, 4, 10	
	8.3 Incidence rate of occupational accidents	8.8.1 Fatal and non-fatal occupational injuries per 100,000 workers, by sex and migrant status	8.8	3	
INDUSTRY, INNOVATIO N, AND INFRASTRU	9.1 Gross Value Added (GVA) of the industry with respect to the GVA of the total sectors (current prices)	9.2.1 Manufacturing value added as a proportion of GDP and per capita	9.2	8	To monitor Goal 9 it is suggested to use a set of indicators to measure both the importance of

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
	9.2 R&D expenditure	9.5.1 Research and development expenditure as a proportion of GDP	9.5	4, 8	the industrial sector within a certain regions, as well as its environmental impact (e.g. GHG emissions). In addition, to complement the picture on industry, innovation and infrastructure, it is proposed to take into account also the investments in R&D as well as the employment generated by this sector.
	9.3 R&D and research employment	9.5.2 Researchers (in full-time equivalent) per million inhabitants		4, 8	
	9.4 Greenhouse Gas Emissions from the industrial sector	9.4.1 CO2 emission per unit of value added	9.4	13	
10. REDUCED INEQUALITIES	10.1 GINI Index	10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population 10.2.1 Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities	10.1 10.2	1	The set of indicators proposed to monitor progress toward the achievement of Goal 10, includes information on income inequalities, unemployment rate per different population subgroups as well as the relevance of the migration phenomenon. The indicators proposed to measure this Goal can be complemented with those proposed for SDG 1 in relation to poverty and in SDG 5 in relation to gender equality. For Goal 10, the alignment of the proposed indicators with those included in the UN Global indicator framework is more distant.
	10.2 Immigration rate	10.7.2 Number of countries with migration policies that facilitate orderly, safe, regular and responsible migration and mobility of people 10.7.4 Proportion of the population who are refugees, by country of origin	10.7		
	10.3 Unemployment rate of the immigrant population			8	
	10.4 Unemployment rate of people with disabilities	10.3.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law	10.3	3, 8	
11. SUSTAINABLE CITIES AND COMMUNITIES	11.1 Subsidized housing	11.1.1 Proportion of urban population living in slums, informal settlements, or inadequate housing	11.1	1, 10	Although the indicators proposed to measure Goal 11 explicitly refer to life in cities and towns, they measure phenomena that cover
	11.2 Artificialized land	11.3.1 Ratio of land consumption rate to population growth rate	11.3	15	

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
	11.3 Knowledge of the second official language (in territories with two official languages)	11.4.1 Total per capita expenditure on the preservation, protection, and conservation of all cultural and natural heritage, by source of funding (public, private), type of heritage (cultural, natural) and level of government (national, regional, and local/municipal)	11.4	4	areas of competence of regions too. Those that are specific to local governments, such as the use of public transport in cities or access to green areas and spaces, for example, have not been considered.
	11.4 Particulate matter pollution (PM10)	11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities (population weighted)	11.6	3	
	11.5 Particle pollution (PM2.5)			3	
	11.6 Household and commercial waste generation per inhabitant	11.6.1 Proportion of municipal solid waste collected and managed in controlled facilities out of total municipal waste generated, by cities		12	
	11.7 Proportion of population residing in municipalities with local sustainable development plans	11.a.1 Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space	11.a		
12. RESPONSIBLE CONSUMPTION AND PRODUCTION	12.1 Material footprint (per capita)	12.2.1 Material footprint, material footprint per capita, and material footprint per GDP	12.2		To measure Goal 12 it is suggested to include several indicators: - the rate of selective waste collection as an indicator that shows the commitment to environmental policies and the degree of citizens' involvement. This indicator is complemented by Indicator 11.6 which measures the amount of domestic and commercial waste generated per inhabitant. - Three other indicators which, although not yet sufficiently standardized at the regional level, provide a regional view of the other aspects addressed by the SDG 12: food waste, responsible public procurement and sustainable tourism.
	12.2 Food waste	12.3.1 (a) Food loss index and (b) food waste index	12.3	2	
	12.3 Hazardous Waste	12.4.2 (a) Hazardous waste generated per capita; and (b) proportion of hazardous waste treated, by type of treatment	12.4	9	
	12.4 Rate of selective collection of household and commercial waste	12.5.1 National recycling rate, tons of material recycled	12.5	11	
	12.5 Responsible public procurement	12.7.1 Degree of sustainable public procurement policies and action plan implementation	12.7		
	12.6 Number of sustainable tourism plans	12.b.1 Implementation of standard accounting tools to monitor the economic and environmental aspects of tourism sustainability	12.b	8	

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
13. CLIMATE ACTION	13.1 Greenhouse Gas Emissions (per capita)	13.2.2 Total greenhouse gas emissions per year	13.2	7, 11, 12	This SDG promotes the adoption of urgent measures to fight climate change and its effects. Mitigation policies address issues such as energy, mobility or waste, in which sectorial monitoring indicators are proposed in SDGs 7, 11 and 12. SDG 1 also addresses the impact that extreme events and natural disasters can have on the population.
	13.2 Percentage of budget allocated to climate action				
14. LIFE BELOW WATER	14.1 Plastic pollution of seas and oceans	14.1.1 (a) Index of coastal eutrophication; and (b) plastic debris density	14.1	11, 12	To monitor Goal 14 it is suggested to use an indicator related to the importance of regulating the control of plastics, (one on the greatest impacts generated on land and ending up in the sea), and three indicators applicable to territories with coastal zones.
	14.2 Estuarine with high/very high water quality			6	
	14.3 Coastal areas with god/very good water quality			6	
	14.4 Protected natural areas including coastal and estuarine sites	14.5.1 Coverage of protected areas in relation to marine areas	14.5	15	
15. LIFE ON LAND	15.1 Percentage of forest area over total surface area	15.1.1 Forest area as a proportion of total land area	15.1	3, 13	The indicators proposed to measure SDG 15 might vary depending on the competence of each regional administration on areas as: the processing and management of protected natural areas, the legislation, processing and management of potentially contaminated soils and the management of endangered species and control of invasive species
	15.2 Protected natural areas	15.1.2 Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type			
	15.3 Potentially contaminated land area	15.3.1 Proportion of land that is degraded over total land area	15.3	8, 9, 12	
	15.4 Potentially contaminated area (cumulative) reclaimed for new uses			8, 9, 12	
	15.5 Proportion of threatened (endangered and vulnerable) species with management or recovery plans.	15.5.1 Red List Index	15.5		
	15.6 Control of invasive species	15.8.1 Proportion of countries adopting relevant national legislation and adequately resourcing the prevention or control of invasive alien species	15.8		

GOAL	REGIONAL INDICATOR	UN INDICATOR/S	TARGET/S	LINKS WITH OTHER SDG	COMMENTS
16. PEACE, JUSTICE AND STRONG INSTITUTIONS	16.1 Crime rate	16.1.3 Proportion of population subjected to (a) physical violence, (b) psychological violence and (c) sexual violence in the previous 12 months	16.1	11	In the framework of Goal 16, the crime rate is an indicator useful to measure the level of violence across regions. The Corruption Perception Index is also suggested as a useful indicator to measure the perceived level of regional governments' corruption. The percentage of participation in recent elections is included because it reveals society's level of local participation / engagement. While the indicator 'confidence in the government' is calculated based on the results of surveys conducted among citizens, specifically regarding the level of trust in institutions.
	16.2 Transparency index	16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information	16.10		
	16.3 Confidence in the Government	16.6.2 Proportion of population satisfied with their last experience of public services	16.6		
	16.4 Participation in the last elections				
17. PARTNERSHIPS FOR THE GOALS	17.1 Imports from developing countries	-	-		Three indicators are proposed to measure SDG 17: two in relation to international cooperation and one that reveals active participation in networks and partnerships that multiply and accelerate the achievement of the SDGs among multiple actors.
	17.2 Official Development Assistance	17.2.1 Net official development assistance, total and to least developed countries, as a proportion of the Organization for Economic Cooperation and Development (OECD) Development Assistance Committee donors' gross national income (GNI)	17.2		
	17.3 Partnerships to achieve the Sustainable Development Goals	17.16.1 Number of countries reporting progress in multi-stakeholder development effectiveness monitoring frameworks that support the achievement of the sustainable development goals	17.16		

Source: Own elaboration

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