



European Committee
of the Regions

Commission for
Economic Policy

ECON

Synergies between the Sustainable Development Goals and the National Recovery and Resilience Plans – Best Practices from Local and Regional Authorities



© European Union, 2022

Partial reproduction is permitted, provided that the source is explicitly mentioned.

More information on the European Union and the Committee of the Regions is available online at <http://www.europa.eu> and <http://www.cor.europa.eu> respectively.

QG-03-22-011-EN-N; ISBN: 978-92-895-1242-8; doi:10.2863/518460

**This report was written by Michele Alessandrini and Ana Pasturel (t33 Srl),
Kinga Hat and Arndt Münch (ÖIR GmbH),
Paola Marinović (Spatial Foresight GmbH).**

Language review by Jacqueline Dawn Palmer.

**It does not represent the official views of the European Committee of the
Regions.**

Table of contents

Executive summary	1
Introduction	5
1 SDGs as a framework for recovery at european level	11
2 SDGs as a frameowrk for recovery at national level	15
2.1 Social SDGs	20
2.2 Environmental SDGs	23
2.3 Economic SDGs	26
2.4 Political SDGs	27
3 SDGs as a frameowrk for recovery at regional level	29
3.1 Belgium: Flanders and Ghent	29
3.2 Estonia: Tallin	35
3.3 France: Provence-Alpes-Côte d’Azur	43
3.4 Germany: Baden-Württemberg, Stuttgart and Mannheim	50
3.5 Portugal: Azores	57
4. Conclusions and policy recommendations	65
4.1 Key study findings	65
4.2 Policy recommendations	70
References	75

List of abbreviations

ASGS: Annual Sustainable Growth Strategy or Annual Sustainable Growth Survey

DMO: Destination Management Organization

EGD: European Green Deal

EC: European Commission

EU: European Union

GDP: Gross Domestic Product

GSTC: Global Sustainable Tourism Council

LRA: Local and Regional Authority

NEET: not in education, employment or training

NRRP: National Recovery and Resilience Plans

RRF: Recovery and Resilience Facility

SDG: Sustainable Development Goal

SME: Small and Medium Enterprise

Executive summary

This report analyses how and to what extent the UN Sustainable Development Goals (SDGs) have been included in the European Semester, the NRRPs and the LRA strategies for recovery and growth.

After having investigated EU progress towards the SDGs, using the latest available estimates and reports, in the first chapter, the report goes on to assess the degree of integration of the SDGs in the National Recovery and Resilience Plans (NRRPs) in the second chapter. It applies the methodology adopted in the 2021 CoR study, which considered eight NRRPs, expanding it to all 26 submitted NRRPs. The methodology considered whether the SDGs are implicitly or explicitly mentioned and whether they use SDG indicators at the national level. Moreover, in a second step, the analysis also investigated whether the NRRPs foresee investments coherent with SDGs in terms of budget; interventions and projects; programmes, plans and strategies; and reforms.

The third chapter of the report considers five case studies including both regions and municipalities applying strategies for the implementation of the SDGs and looks at the potential synergies with the interventions designed in the NRRPs. The five case studies include Flanders and Ghent municipality (Belgium), Tallin (Estonia), Region Provence Alpes Cote d'Azur (France), Baden Wurttemberg and Stuttgart and Mannheim municipalities (Germany), and Azores (Portugal). The case studies are described in terms of context, strategies adopted, key links and relations with recovery efforts (including the NRRPs), and the main achievements and challenges in implementing the strategies.

The analysis of the literature shows that **the EU has gradually included the SDGs into the European Semester but, despite the progress made, there are still several areas for improvement.** At the EU level, in fact, both a **comprehensive strategy** addressing the gaps to the EU's achievement of the SDGs as well as a **well-structured monitoring methodology are lacking.** Moreover, there is the risk that, with the enlargement of the Semester's scope, procedures become even more **complex and time-consuming.** Regarding the NRRPs, **the SDGs are not mentioned in the guidance** provided by the European Commission (EC) for Member States drafting their NRRPs. There is also a lack of **cohesive coordination between the SDGs and all EU policies**, in particular the RRF. In addition, there is **very limited consideration for the territorial dimension**, and therefore LRA involvement, in both the design and the implementation of the NRRPs. Finally, **there are persisting challenges limiting the application of the SDGs at local level**, such as administrative and financial barriers, lack of support from national governments and of coordination across

different levels of governance, limited human resources, and difficulties in the collection of the necessary, relevant data to monitor local and regional progress.

Recent data on the overall achievement of the SDGs show that the EU has made progress in nine SDGs. However, **in eight SDGs the progress has been slow, neutral or even reversed**. Moreover, **the pandemic has made the achievement of the 2030 Agenda and the SDGs more challenging**: no EU country is on track to achieve all 17 SDGs by 2030 and, for the first time since the adoption of the SDGs in 2015, the average SDG Index score declined slightly in the EU27 on average. The pandemic has also exacerbated inequalities within countries, slowed down progress towards the environmental goals, increased negative spillovers and **widened the persisting differences in SDG performance across and within EU Member States**.

The analysis of the 26 NRRPs has confirmed the main findings outlined in the previous 2021 CoR report. There is a **lack of integration of the SDGs into the NRRPs**, and although Member States have several initiatives – projects, strategies, or even reforms - which could indirectly and implicitly contribute to the achievements of the SDGs, **the SDGs do not seem to be perceived in the NRRPs as a coherent framework for sustainable recovery at the national level**.

More specifically, the analysis at national level of the NRRPs demonstrated that:

- **The majority of Member States merely mention the SDGs implicitly** with very few Member States explicitly and clearly linking NRRP components to the SDGs.
- **The overall level of integration is rather low, with the highest score reached in the economic SDGs** (but below 50%). **The lowest integration value was recorded in the two political SDGs**, showing little interest in the NRRPs to improve the role and the functioning of LRAs, to foster cooperation and coordination across different levels of government, and to promote and encourage effective public, public-private and civil society partnerships.
- **The use of SDG indicators in the NRRPs is limited** to very few Member States, and for only a few SDGs, limiting both comparability between the plans as well as effective monitoring of their contribution to progress towards the SDGs.

The five case studies underline several lessons learned for effective and efficient design and implementation of local action plans to address the SDGs:

- Setting-up **clear objectives and targets** and a **strategy based on a long-term policy vision**;
- Actively **involving stakeholders**;
- Adopting an **effective bottom-up approach**;
- Establishing an **efficient governance structure**;
- Developing a **dedicated budget**;
- Setting-up a **well-structured monitoring system**;
- Aligning **local, national and regional strategies**.

The report has also investigated potential synergies between the NRRPs and the SDGs through the five LRA experiences, showing that there are **several measures in the five NRRPs which could support and finance the implementation of projects and interventions at local level in line with the local SDG strategies**.

To improve the integration of the SDGs in the recovery phase, at EU, national and regional level, the report concludes with the following recommendations:

- The EC should continue to **improve integration of the SDGs in the European Semester**, by strengthening the SDGs narrative in its documents, better linking it to the monitoring of the NRRPs.
- The EC should develop a **structured SDG implementation strategy with clear, measurable and time-bound EU-wide targets**.
- A **stronger alignment between the EU's governance systems in economic, social and environmental matters is required** such as the European Semester, the European Green Deal and the implementation of the European Pillar of Social Rights and the SDGs;
- Correct integration of the SDGs in the European Semester by implementing and better structuring the ‘whole of government’ approach to the SDGs **implies better LRAs inclusion in the Semester governance**.
- The EC needs to consider establishing a body for **structured stakeholder engagement in the implementation of the SDGs**, by reinstating the multi-stakeholder platform.
- The EC should consider **extending the SDGs beyond the cohesion policy funds**. The **Smart Specialisation Strategy framework could be revisited and extended** to foster transformative system innovation for the SDGs.

- The **monitoring system also needs to be reinforced** to capture the contribution of EU cohesion policy to SDG-related objectives other than climate (for instance, taking inspiration from the climate coefficients). The **robustness of the Eurostat SDGs monitoring system should be also increased**.
- Member States are called on to **adopt SDG indicators to monitor the implementation of the NRRPs**.
- Member States need to **actively involve LRAs in the implementation phases of the NRRPs**.
- The EC and CoR could organise a **joint forum on the implementation of the RRF to monitor the involvement of LRAs within the NRRPs**.
- An **EU sustainability award** could be introduced to stimulate LRAs to adopt and implement SDG strategies by rewarding those who are progressing better towards the SDGs.
- At local level, LRAs should **use the SDG framework as an explicit and formal reference for budget procedures**. LRAs could also **adopt the EU taxonomy for sustainable activities** to promote sustainable local investments;
- LRAs should establish **knowledge partnerships and collaboration with the scientific community, civil society and private sector** to strengthen the local science-policy interface, to increase capacity building, scale up sustainable solutions and monitor the progress towards the SDGs.
- **Direct incentives for financial and technical support for LRAs should be set-up** (both at EU and national level).

Introduction

The European Commission (EC) first explicitly expressed its intention to mainstream the Sustainable Development Goals (SDGs) into European policies in November 2016¹; however, the tools to implement and monitor them were not clearly mentioned. Then, in 2019, EC president Von der Leyen committed to integrating the SDGs into the European Semester². The 2020 European Semester cycle was therefore the first to integrate the SDGs into the Semester process. This was clearly evident in the change, in 2020, of the Annual Growth Survey into the Annual Sustainable Growth Strategy (ASGS). The 2020 ASGS set out the economic and employment policy strategy for the EU by placing sustainability and social inclusion at the heart of the EU's economic policymaking in line with the priorities included in the European Green Deal (EGD). The ASGS for 2020, in fact, focussed on four main priorities (i.e., dimensions of competitive sustainability): environmental sustainability, productivity gains, fairness and macro-economic stability. There was also a strong focus on labour market activation and macroeconomic goals. However, it should be noted that the concept of competitive sustainability is not strictly equivalent to SDGs, or sustainability. The first attempt to include SDGs in the Semester showed that this was still a work in progress with the need to better assess policy coherence and spillover effects.

With the ASGS for 2021, published in September 2020³, the EC set out strategic guidance for the implementation of the Recovery and Resilience Facility (RRF) and confirmed the four dimensions identified in the 2020 ASGS as the guiding principles underpinning the National Recovery and Resilience Plans (NRRPs) and Member States' reforms and investments. For these, the 2021 ASGS introduced seven European 'flagship areas' on which Member States were required to base their NRRPs, and encouraged investment mainly in green and digital transition. In fact, a minimum of 37% of NRRP expenditure was to be allocated to climate and a minimum of 20% to digital skills and transition. However, because of the COVID crisis the SDGs narrative was very weak, with the ASGS only indicating, without further details, that the RRF '*must guide and build a more sustainable, resilient and fairer Europe for the next generation in line with the United Nations Sustainable Development Goals*'.

¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Next steps for a sustainable European future European action for sustainability*, COM(2016)739.

² "A Union that strives for more My agenda for Europe", by candidate for President of the European Commission Ursula von der Leyen.

³ Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, *Annual Sustainable Growth Strategy 2021*, COM(2020)575.

The ASGS 2022⁴ (renamed Annual Sustainable Growth Survey), published in November 2021 and launching the 2022 European Semester cycle, stresses that the SDGs will be further integrated into the European Semester. As in previous years, the policy priorities have been structured around the four dimensions of competitive sustainability and in line with the SDGs. The 2022 European Semester cycle also provides fully updated and consistent SDG reporting across the EU (see chapter 1 based on the latest report by Eurostat, 2022). The yearly SDG monitoring reports are in fact now part of the European Semester documents (published as part of the Spring package) and each European Semester country report must also include a dedicated section discussing the country's status compared to the EU average, and its progress in each SDG area⁵.

Despite the recent progress in the inclusion of the SDGs in the European Semester and in the overall approach of the EU's growth strategy, there are still some issues that deserve attention:

- **Lack of a comprehensive strategy addressing the gaps to the EU's achievement of the SDGs.** As underlined by the Sustainable Development Solutions Network and Institute for European Environmental Policy (2021) the EU has legislative and policy tools in place, or in preparation, to address most SDG challenges, but it still lacks clarity on how it plans to achieve the SDGs. For the WWF (2022), to date, the lack of a structured SDG implementation strategy makes it more difficult to achieve policy coherence. With a structured framework for EU SDG implementation containing clear, measurable and time-bound EU-wide targets for all SDGs to report against, it would be much easier to identify gaps, inconsistencies and laggards. These aspects were also underlined by SDG Watch Europe (2021), which asked the European Commission to present a comprehensive strategy for a Sustainable Europe 2030 accompanied by a clear and policy coherent implementation plan.
- **Weaknesses of the SDG indicator set and monitoring methodology.** SDG Watch Europe (2020a,b) has stressed that the EU's SDG reporting creates an illusion of sustainability, as the indicator set ignores several sustainability challenges. For instance, no indicator looks into the sustainability of the EU's global supply chains, neither regarding human and labour rights violations nor

⁴ Communication from the Commission to the European Parliament, the European Council, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, *Annual Sustainable Growth Survey 2022*, COM(2021)740.

⁵ Moreover, a combination of these two elements and additional indicators that monitor Member States' performance in view of key EU policy targets (e.g., European Green Deal, Digital Decade) will inform the country reports and underpin country-specific recommendations. The resilience dashboards may also inform the analysis for the country reports (see European Commission, *Resilience dashboards for the social and economic, green, digital, and geopolitical dimension*, November 2022).

negative environmental impacts. Moreover, the monitoring does not address some of the most extreme forms of poverty and inequality in the EU, such as homelessness. The EU needs therefore to set up a more inclusive, participatory and transparent SDG monitoring process that works for all.

- **Procedures even more complex and time-consuming with the enlargement of the Semester's scope.** Sabato and Mandelli (2021), highlight that on top of adding many new scoreboards and indicators, there are limitations to using the Semester as a means for achieving and monitoring all 17 SDGs. Moreover, in the ASGS for 2021 the notion of competitive sustainability is not explicitly linked to the implementation of the 2030 Agenda and the SDGs, with the latter only briefly and generically mentioned in the document as a reference framework for the RRF.
- **The SDGs are not mentioned in the guidance provided by the European Commission to Member States for drafting their NRRPs⁶.** This was stressed in the Europe Sustainable Development Report 2021. Others (see for instance Solidar 2020)⁷ have also underlined that, due to the disruption of Covid-19 and the subsequent decision to integrate the NRRPs with the Semester cycle, the SDGs risk being pushed to the background. The 2021 ASGS is said to be guided by the SDGs, but it lacks a structured and clear commitment to progressing towards them. For instance, there is a specific expenditure earmarking for minimal allocation for climate and digital in the NRRPs, but not for combatting the social effects of the Covid-19 pandemic, nor in general, for expenditure for social purposes.
- **Lack of cohesive coordination between the SDGs and all EU policies, in particular the RRF.** Coordinating EU policies and the SDGs strategy is needed to show genuine commitment to SDGs and not as a mere 'tick the box' exercise that will not help implement the SDGs. As per the report by the Sustainable Development Solutions Network and Institute for European Environmental Policy (2021) there is a lack of alignment between the NRRPs and the particular SDG challenges. Few of the NRRPs analysed in the study (available at time of the report)⁸ made explicit reference to the SDGs, and the SDGs most covered by the NRRP, in terms of the number of measures and

⁶ European Commission (2021), *Commission staff working document - Guidance to Member States Recovery and Resilience Plans - Part 1* and *Commission staff working document - Guidance to Member States Recovery and Resilience Plans - Part 2*.

⁷ Solidar (2020), '*The SDGs and the European Semester*', Briefing Paper 96, December 2020.

⁸ Belgium, Cyprus, France, Germany, Greece, Italy, Latvia, Portugal and Spain.

the budget allocated, were not always those in which the countries face their biggest challenges (as identified in the SDG Index and Dashboards)⁹.

- **Very limited consideration for the territorial dimension in the design of the NRRPs.** As underlined by the CoR opinion in summer 2021 (European Committee of the Regions 2021a), LRAs play a fundamental role in triggering local, regional and, consequently, national policies in important fields related to the SDGs and in designing sustainable recovery plans¹⁰. However, LRAs are scarcely involved in some Member States and the lack of a meaningful consultation process in the formulation of NRRPs could compromise the success of the plans in these Member States, as the regional perspectives of far-reaching economic, social and environmental transformation are only partially reflected. As investigated in the CoR study published in 2021 (European Committee of the Regions 2021b), based on the analysis of eight NRRPs (Belgium, Croatia, France, Germany, Italy, Poland, Romania and Spain), although there was some LRA involvement in the preparation of the plans, there is limited evidence of their contributions being taken into account or the precise role they will play. Even when described in the plans, the LRAs feel their role in designing the NRRPs is marginal.
- **Lack of integration of the SDGs into the NRRPs.** The eight NRRPs analysed in the 2021 CoR study also show that while green and digital transitions have a core role, albeit without LRA involvement, SDGs are mainly covered implicitly. The NRRPs address the social, economic and environmental themes related to goals 1-15, but the SDGs are seldom explicitly named and their indicators are rarely integrated in the monitoring system. The policy areas related to SDG 16 (Peace, Justice and Strong Institutions) and 17 (Partnership for Peace) are insufficiently considered except for the Italian and Romanian NRRPs. These are also SDGs which require effective inclusion of LRAs and stakeholders in policy-making.
- **Insufficient consideration for LRAs in the implementation of the NRRPs.** The role of LRAs is also limited in the implementation of the NRRPs other than in their design. The recent CoR-CEMR consultation in April 2022 (European Committee of the Regions and CEMR, 2022) in fact underlined that too often the NRRPs have been implemented as top-down processes, on

⁹ For instance, despite relatively poor performances on related goals, measures and funds in the Italian and Spanish NRRPs allocated to transforming food systems and diets (SDG 2), or to biodiversity goals (SDG 14 and SDG 15), are lower in magnitude than those dedicated to other SDGs.

¹⁰ According to the results of the CoR-OECD survey on SDGs and recovery, in fact, despite the pandemic, LRAs mobilised for the implementation of the SDGs with 60% of the respondents indicating their conviction that the SDGs would facilitate a more holistic approach to recovery, 68% using the SDGs in the recovery phase to shape new plans policies and strategies or adapt existing ones, and 43% having a specific governance structure to implement them. See CoR-OECD survey '*SDGs as a framework for COVID-19 recovery in cities and regions*' ran from 10 May until 18 June 2021.

which LRAs seemingly have little to no impact. Only a very small share of the LRAs confirmed having had an appropriate role in the monitoring, or having been sufficiently taken into consideration based on their competencies. Ownership of the plans is therefore worryingly low and the risk both of failure to reach the targets and milestones in the NRRPs and of the misallocation of funds is high.

- **Persisting challenges limiting the application of the SDGs at local level.**

As stressed by the analysis carried out by CEMR in July 2020, when it comes to localising the SDGs, local and regional governments and their associations continue to encounter persisting challenges that could slow down progress. These include administrative and financial barriers and lack of support from national governments, lack of coordination across different levels of governance, limited human resources and/or the lack of proper skills and capacities to work on the 2030 Agenda. Moreover, according to the analysis, several LRAs across Europe still do not fully understand what the 2030 Agenda means and how it can apply to their territorial realities. The SDGs are still perceived as a new burden, an additional weight and agenda to integrate into their planning, which leads to very little motivation to work on the SDGs. There are also concerns about the monitoring process. LRAs, in fact, struggle to receive the relevant information from their national governments, regarding the possibilities to contribute with their territorial perspective. Concerning local reporting, difficulties lie in the collection of the necessary, relevant data to monitor local and regional progress.

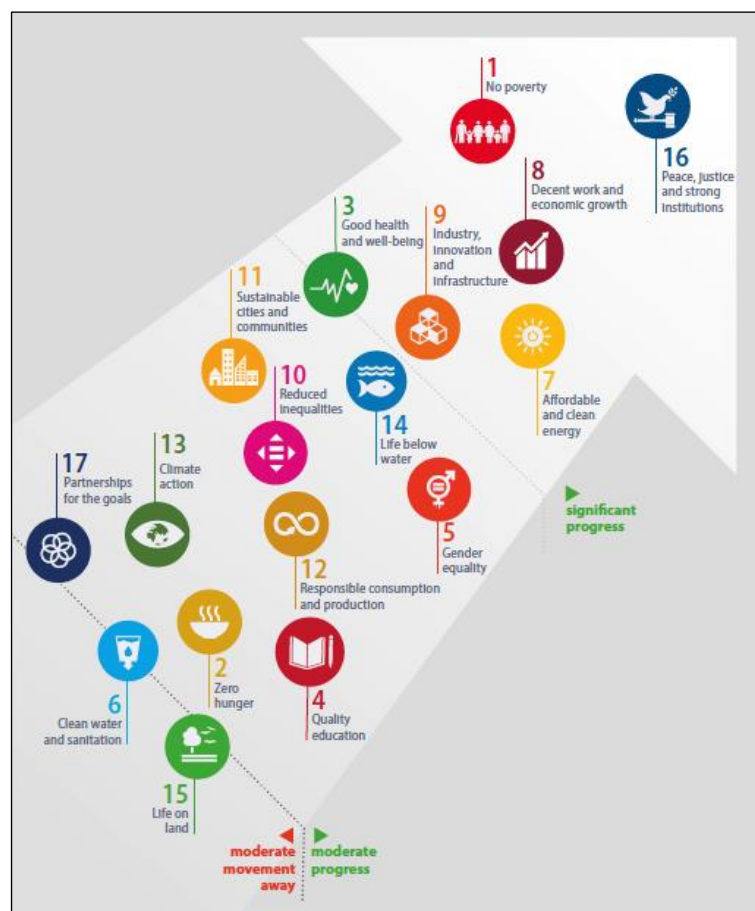
1 SDGs as a framework for recovery at European level

As recently reported by the EC¹¹, despite the progress observed in almost all SDGs at the EU level in recent years, more needs to be done, also considering the COVID-19 fallout and the current geopolitical and economic situation. Based on the latest Eurostat monitoring report on progress towards the SDGs in the EU published in May 2022 (Eurostat, 2022), the EU has:

- made the **strongest progress** in the last five years towards fostering peace and personal security within its territory and improving access to justice and trust in institutions (**SDG 16**), followed by significant improvements in economic growth and the labour market (**SDG 8**) and on innovation and infrastructure (**SDG 9**);

- made **significant progress** towards reducing poverty and social exclusion (**SDG 1**) - even though available data partly refer to the period up to 2019 only, and therefore do not consider the impact of the COVID-19 pandemic - and on clean and affordable energy (**SDG 7**) – although this was strongly affected by the remarkable reduction in energy consumption in 2020 as a result of COVID-19 related restrictions¹²;

Figure 1.1: Overview of EU progress towards the SDGs over the past five years



Source: reproduced from Eurostat (2022), p.10

¹¹ Communication from the Commission to the European Parliament, the Council, the European Central Bank, the European Economic and Social Committee, the Committee of the Regions and the European Investment Bank, 2022 *European Semester - Spring Package*, 23.5.2022, COM(2022) 600 final.

¹² Moreover, figures also do not yet take into account the latest energy developments related to the Russian invasion of Ukraine.

- achieved **good progress** in health and well-being (**SDG 3**), life below water (**SDG 14**) and gender equality (**SDG 5**);

- made **less progress** towards sustainable cities (**SDG 11**), reduced inequalities (**SDG 10**), responsible consumption and production (**SDG 12**), quality education (**SDG 4**), climate action (**SDG 13**) and zero hunger and sustainable agriculture (**SDG 2**);

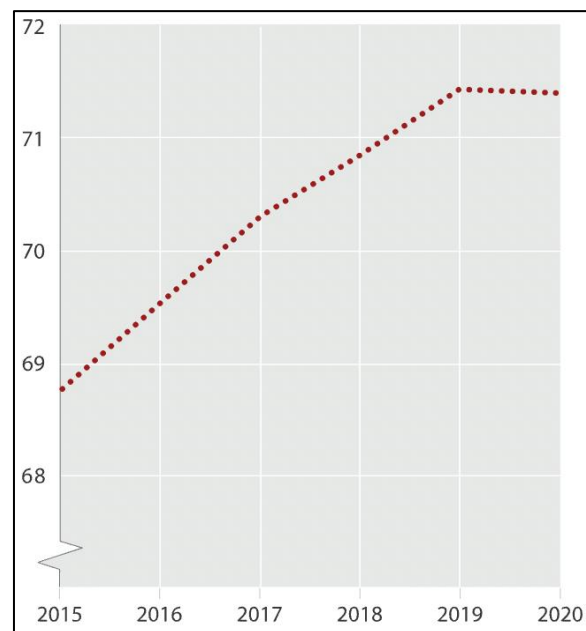
- followed a **neutral path** towards clean water and sanitation (**SDG 6**) and global partnerships for the goals and governance (**SDG 17**);

- experienced a **slight backtrack** in life on land (**SDG 15**), which reflects the fact that ecosystems and biodiversity remain under pressure from human activities.

The 2022 Eurostat monitoring report also underlines that **the pandemic has made achievement of the 2030 Agenda and the SDGs more challenging**. According

to the 2020 Europe sustainable development report (Sustainable Development Solutions Network and Institute for European Environmental Policy, 2020), even before the onset of the pandemic, no EU country was on track to achieving all 17 SDGs by 2030. The EU Member States, on average, were performing especially poorly on SDG 2.Zero hunger (due to unsustainable diets, high and rising obesity rates, and unsustainable agricultural and farming practices), and major performance gaps were seen for SDGs 12.Responsible consumption, 13.Climate action, 14.Life below water, and 15.Life on land.

Figure1.2: SDG Index Score EU 27



Source: reproduced from Sustainable Development Solutions Network and Institute for European Environmental Policy (2021)

The latest Europe sustainable development report (Sustainable Development Solutions Network and Institute for European Environmental Policy, 2021) has further underlined that **the pandemic halted progress towards achieving the SDGs in Europe in 2020**, reducing life expectancy, increasing poverty and unemployment rates in many countries, and highlighting the grave inadequacy of public health emergency preparedness and inequity in responses. For the first time since the adoption of the SDGs in 2015, the average SDG Index score for the EU did not increase in 2020 declining slightly in the EU27 on average (figure 1.2). The report, however, stresses that coordinated efforts to effectively implement EU

recovery plans and the ambitious policy and financial instruments adopted in 2020 and 2021, (including the Recovery and Resilience Facility RRF), could provide strong support for the SDGs. According to the report, this support is needed to mitigate the four main challenges that Europe is facing:

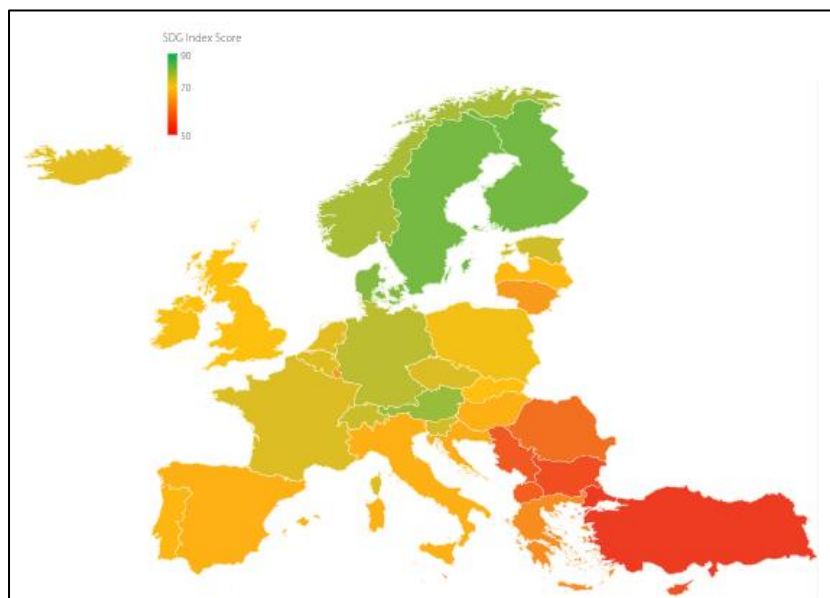
- **Poor performance in environmental goals.** Unsustainable diets and food systems, domestic and imported greenhouse gas emissions and biodiversity threats drive poor performance in these goals at the EU27 level (especially SDG 2.Zero hunger and SDGs 12.Responsible consumption, 13.Climate action, 14.Life below water, and 15.Life on land).

- **High inequalities within countries.** The EU is among the most equal continents in the world, but there are persisting gaps in access to high quality services and opportunities across population groups in some Member States (i.e. SDGs 3.Good health, 4.Quality education and 5.Gender equality). The COVID-19 pandemic exacerbated these inequalities, increasing poverty rates, food insecurity and unemployment among the most vulnerable population groups and regions.

- **Negative international spillovers embodied in trade and financial flows.** Many EU countries are undermining other countries' ability to achieve the SDGs, through unsustainable consumption and value chains, the export of toxic pesticides and weapons, and unfair tax competition and profit shifting.

- **Persisting differences in SDG performance across Europe.** As shown in figure 1.3 below, Northern Europe, EFTA countries and Western Europe consistently perform above the average EU27 SDG Index score. The 2021 SDG Index for Europe is topped by Finland, followed by Sweden and Denmark. All three countries have SDG Index scores close to or above 80%.

Figure 1.3: 2021 SDG Index Scores by country



Source: reproduced from Sustainable Development Solutions Network and Institute for European Environmental Policy (2021), p.7.

Southern Europe, the Baltic States, and Central and Eastern European countries all perform somewhat below this average, despite having progressed

more rapidly over the past decade. Candidate countries perform well below the EU27 average, with weaker results in socio-economic goals especially SDGs 1.No poverty, 3.Good health, 5.Reduced inequality, and in SDG 16.Strong institutions. Overall, the pace of convergence across the EU is insufficient and, in many cases, driven by convergence in capital regions only, with other areas lagging behind.

2 SDGs as a framework for recovery at national level

This chapter investigates the degree of integration of the SDGs considering the 26 NRRPs submitted and approved by the European Commission (only the Netherlands has not submitted a plan yet). The analysis is based on the methodological approach used in the 2021 CoR Study *‘Regional and local authorities and the National Recovery and Resilience Plans’*, which assessed eight NRRPs.

To proceed with the assessment of the integration of the SDGs in the NRRPs, the SDGs have been grouped into four clusters:

- Social: SDGs 1.No poverty, 2.Zero hunger, 3.Good health, 4.Quality education, 5.Gender equality, and 10.Reduced inequalities;
- Environmental: SDGs 6.Clean water, 7.Clean energy, 11.Sustainable cities, 12.Responsible consumption, 13.Climate action, 14.Life below water, and 15.Life on land;
- Economic: SDGs 8.Decent work and 9.Industry and innovation;
- Political: SDGs 16.Strong institutions, and 17.Partnerships.

The level of integration in the NRRPs is based on scores from 0-3 to determine whether the SDGs are considered in the plans:

Score	Description
0	Not mentioned
1	Implicitly mentioned
2	Explicitly mentioned
3	Integrated, i.e., if NRRPs use SDG indicators at the national level.

Scores have then been reported in terms of a percentage, where 100% is reached when all the SDGs in a cluster are fully integrated (i.e., obtain a score of 3) in the NRRPs.

A second analysis has investigated whether the NRRPs foresee investments coherent with SDGs in terms of the budget (there is a dedicated and quantified budget for the SDG dimension); interventions and projects (have the SDG dimension as a specific object); programmes, plans and strategies (the SDG interventions have a specific strategy/programme at national level); and reforms (the NRRP illustrates whether the Member State plans reforms within the scope of the SDG dimension).

The graph on the following pages (figure 2.1) provides an overview of the results of the analysis by SDG cluster. Moreover, table 2.1 details the level of integration by each SDG in each NRRP. A more detailed discussion by cluster, with some examples of the interventions, reforms and indicators, is provided in sections 2.1-2.4. Looking at the entire picture, what emerges is the following:

- **The majority of Member States only mention the SDGs implicitly.** Cyprus, Denmark and Estonia are the only three Member States that mention all 17 SDGs explicitly, followed by Belgium (all the SDGs are explicitly mentioned, excluding SDG 17.Partnership, which is not mentioned), Croatia (all the SDGs are explicitly mentioned excluding SDG 14.Life below water, not mentioned, and SDG 5.Gender equality, only implicitly mentioned), and Poland (all the SDGs are explicitly mentioned, excluding SDGs 1.No poverty, 5.Gender equality, and 14.Life below water which are implicitly mentioned, while SDG 15.Life on land, is not mentioned).
- **Very few Member States explicitly and clearly link NRRP components to the SDGs.** In most cases, reference to the SDG is in fact only at intervention level (project or reform). Sometimes, as in the case, for instance of SDG 5.Gender equality, the SDGs are explicitly mentioned but without any clear reference to a specific NRRP component, intervention or reform. A few exceptions include Belgium, Croatia and Poland (which detail, for each NRRP component, the impact on the implementation of the SDGs), Cyprus (which, for each SDG, details the budget allocation), Estonia (which has a specific section in the NRRP describing the overall NRRP links to the SDGs), and Denmark (which includes a specific appendix with all the SDGs in its NRRP, but the links to the components/interventions/reforms are not clearly described).

- **The overall level of integration is rather low, with the highest score reached in the economic SDGs**, which, on average, are integrated at 47%. However, all 26 Member States have designed interventions or reforms to support job creation or the improvement of working conditions (SDG 8) and to foster innovation processes for enterprises (SDG 9). Social SDGs are integrated, on average, at 42%, with the lowest level reached for SDG 2.Zero hunger (which also promotes sustainable agriculture), mentioned by only 12 Member States. The same score (42%) was obtained for environmental SDGs: here the lowest coverage is for SDG 14.Life below water (mentioned by 14 Member States) and SDG 7.Clean water (mentioned by 19 Member States). The lowest average score was obtained for political SDGs (28%). Here, while all Member States with the exception of Finland mention SDG 16.Strong institutions, very few Member States foresee interventions related to SDG 17.Partnerships.
- **The use of SDGs indicators in the NRRPs is very limited.** Very few Member States use SDG indicators, and then only for a few SDGs, generally limited to only one or two SDG indicators. Czech Republic is the Member State covering the highest number of SDGs (seven) with SDG indicators, followed by Croatia (five), Hungary (three), Estonia, Greece, Romania, Slovakia, and Sweden (two), Cyprus, Poland and Slovenia (one). The SDGs most covered by SDG indicators are SDG 4.Quality education (five Member States) and SDG 7.Clean energy (four).

Figure 2.1: The level of integration of the SDGs in the NRRPs by cluster

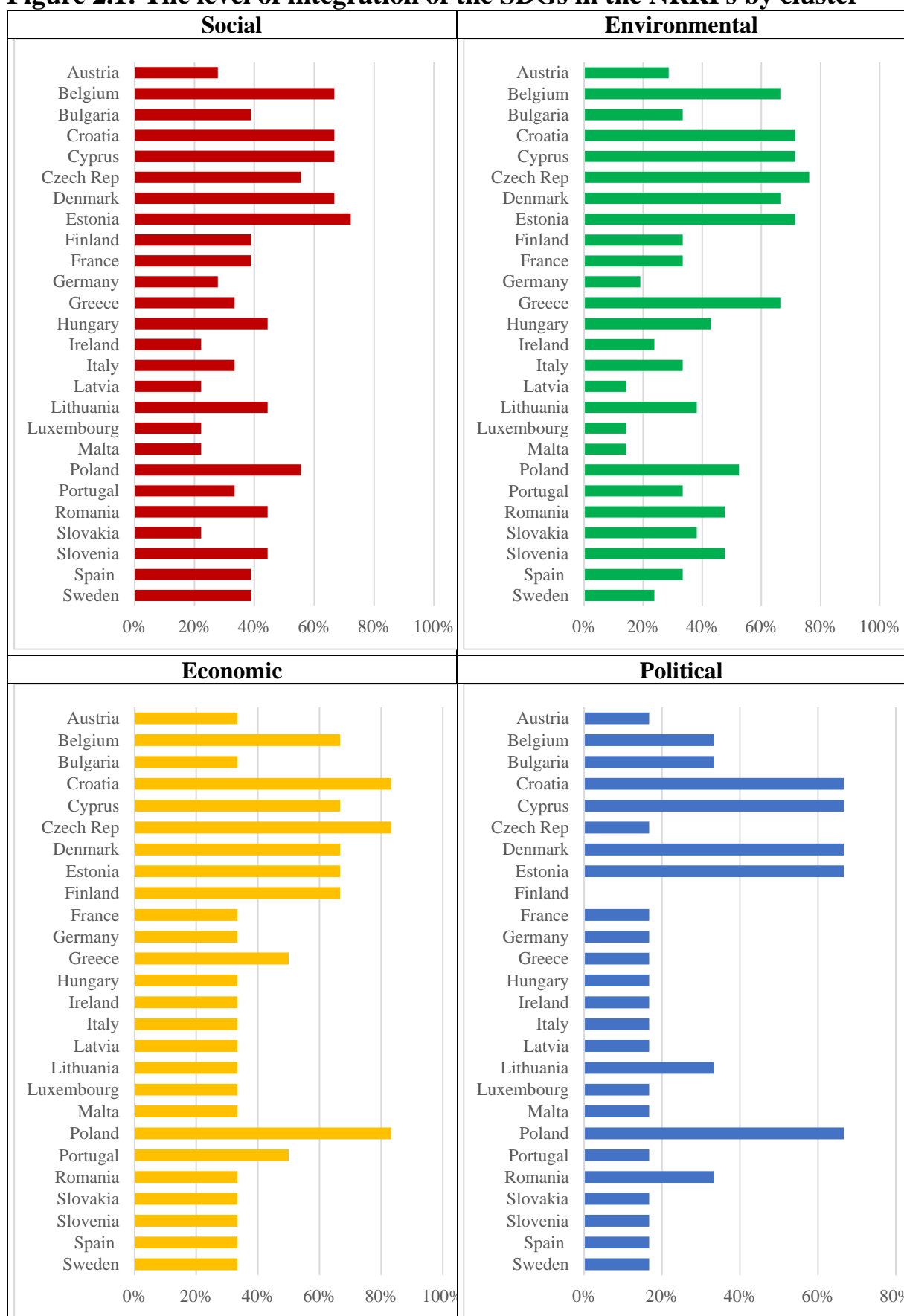


Table 2.1: Level of integration in the NRRPs by each SDG

	SOCIAL						ENVIRONMENTAL							ECONOMIC	POLITICAL		
	1.NO POVERTY	2.ZERO HUNGER	3.GOOD HEALTH	4.QUALITY EDUCATION	5.GENDER EQUALITY	10.REDUCED INEQUALITY	6.CLEAN WATER AND SANITATION	7.CLEAN ENERGY	11.SUSTAINABLE CITIES	12.RESPONSIBLE CONSUMPTION	13.CLIMATE ACTION	14.LIFE BELOW WATER	15.LIFE ON LAND	8.DECENT WORK	9.INDUSTRY, INNOVATION	16.STRONG INSTITUTIONS	17.PARTNERSHIP
Austria																	
Belgium																	
Bulgaria																	
Croatia																	
Cyprus																	
Czech Rep																	
Denmark																	
Estonia																	
Finland																	
France																	
Germany																	
Greece																	
Hungary																	
Ireland																	
Italy																	
Latvia																	
Lithuania																	
Luxembourg																	
Malta																	
Poland																	
Portugal																	
Romania																	
Slovakia																	
Slovenia																	
Spain																	
Sweden																	
Implicitly mentioned		Explicitly mentioned				Integrated (i.e. use of UN SDG indicators)											

2.1 Social SDGs

The highest score (72%) was obtained by Estonia, followed by Belgium, Croatia, Cyprus, and Denmark (67%). The most integrated SDGs are SDG 3.Good health (mentioned by all Member States), SDG 4.Quality education (mentioned by all Member States with the exception of Luxembourg), and SDG 5.Gender equality (mentioned by all Member States with the exception of Hungary and Slovakia). On the opposite end, SDG 2.Zero hunger is the least covered (dealt with by only 12 Member States). More in detail:

- **SDG 1.No poverty** is explicitly mentioned by six Member States (Belgium, Croatia, Cyprus, Denmark, Estonia and Finland) and implicitly by another 14. For this SDG, no Member State used SDG indicators. Except for **France's** NRRP which includes a national strategy to prevent and combat poverty, in most cases, the Member States only address this SDG indirectly. For instance, **Belgium** contributes to this SDG by improving housing conditions and education for the most vulnerable groups. **Denmark**, instead, foresees intervention in the healthcare system (especially through digital solutions) to support vulnerable patient groups. Similarly, **Cyprus**, which has seven measures explicitly addressing SDG 1, intends to finance the establishment of multifunctional centres and childcare centres to contribute to the reduction of the risk of poverty as well as the reduction of inequalities. **Estonia** has a specific reform to extend unemployment benefits in order to avoid an increase in long-term unemployment, and poverty of the unemployed, while **Finland**, despite explicitly mentioning SDG 1, does not foresee interventions or reforms directly or indirectly addressing poverty issues.

- **SDG 2.Zero hunger** is explicitly mentioned by seven Member States (Belgium, Croatia, Cyprus, Denmark, Estonia and Poland) and implicitly by another five. Most of the Member States finance projects and interventions to render agriculture and the food supply chain more sustainable. For instance, **Slovenia** intends to invest in the establishment of a National Food Institute as a central pillar steering food supply chain innovation within an eco-systemic approach, and **Poland's** NRRP includes a reform designed to improve the conditions for competition and the protection of producers / consumers in the agricultural sector. Several Member States have interventions to support organic food production, such as **Denmark** which intends to double the organic farmland area, the consumption of organic goods, and the export of organic goods by 2030. Denmark will also provide funds for innovation projects to be transferred to a new Innovation Centre, to conduct research, experiments and developments within organic agriculture and food and to collect and disseminate knowledge about organic products. Specific incentives and a reform are also included to improve agricultural productivity, such as

Cyprus’ NRRP supporting sheep and goat breeders and their farm infrastructure. There are no Member States applying SDG indicators for SDG2.

- **SDG 3.Good health** is mentioned by all Member States, with seven explicitly addressing it (Belgium, Croatia, Cyprus, Denmark, Estonia, Poland and Portugal) and three using SDG indicators (Czech Republic, Hungary and Lithuania). Other than specific interventions, most of the Member States also foresee reforms to improve the healthcare system, support the hospital network, accelerate investments and incentivize the adoption of digital solutions. For instance, **Malta** will reform its healthcare system, with a particular focus on health prevention and a strong workforce. One particular initiative is that of **Portugal**, which has a dedicated budget to create a Universal Active Life Support System, which foresees a national campaign and technological platform to promote physical activity, extend school sports to the community, and encourage the practice of physical activity in the work place. Concerning the indicators, **Czech Republic** and **Lithuania** both have indicators¹³ similar to the SDG indicator ‘Proportion of health facilities that have a core set of relevant essential medicines available and affordable on a sustainable basis’. **Hungary only** mentions this SDG implicitly, but adopts an indicator - ‘Number of doctors working in established and operating practice communities – similar to the SDG indicator ‘Health worker density and distribution’.

- **SDG 4.Quality education** is addressed by all Member States excluding Luxembourg. Eight of these mention the SDG explicitly (Belgium, Cyprus, Denmark, Estonia, Finland, Lithuania, Poland and Slovenia) and an additional six also have indicators similar to the SDG ones. Projects and reforms foreseen by Member States such as **Austria, Finland, Latvia, Malta, or Sweden** not only target student careers and schools (for instance, to improve infrastructure by investing in digital facilities), but also worker training, lifelong learning and vocational educational centres. In some Member States there are measures with specific targets. For instance, **Greece** has specific investments for upskilling and reskilling workers in tourism. **Germany** has a specific measure, which is embedded in the joint cup action programme, to support schoolchildren with pandemic-related learning backlogs. The NRRP of **Spain**, has a specific plan for the retraining and internationalization of teaching and research staff in component 21 dedicated to the modernization and digitization of the education system, including early education from 0-3 years,. Indicators are used by **Croatia, Czech Republic** and **Hungary** to monitor the digitalisation of education¹⁴; **Romania** and

¹³ In Czech Republic ‘Number of supported facilities providing oncological and hemato-oncological care’; in Lithuania ‘Number of regional hospitals with modern emergency and intensive care units’.

¹⁴ For Croatia ‘80% of public higher education institutions will have digital infrastructure and / or equipment’ similar to the SDG indicator ‘Proportion of schools with access to: [...] (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes [...]’; in Czech Republic ‘Number of schools which received support to

Slovakia to monitor the participation rate¹⁵; and **Sweden** to monitor NEET (people not in education, employment or training)¹⁶.

• **SDG 5. Gender equality** is explicitly mentioned by nine Member States (Belgium, Cyprus, Czech Republic, Denmark, France, Luxembourg, Romania, Slovenia and Spain), while two (Estonia and Sweden) have specific indicators. However, few of the Member States foresee specific interventions related to SDG 5, with most simply indicating that the overall NRRP should contribute to ensuring and fostering gender equality. Although specific projects and reforms are foreseen by **Croatia, Estonia, Germany, Italy, Spain, Romania, Poland, Cyprus** and **Lithuania**, in most cases the SDG is addressed indirectly. **Austria** for instance intends to reform the pension system, with the aim to increase future pensions for women. **Lithuania** has a reform for the provision of long-term care services which are expected to contribute to the implementation of the principle of gender equality, by improving the chances of people of working age caring for their relatives, most of whom are middle-aged women, to return to the labour market. Similarly, **Cyprus**, also intends to invest in care infrastructure to ensure gender equality and the economic empowerment of women, build resilient societies, combat precarious conditions in a female-dominated sector, and prevent poverty and social exclusion. Cyprus also has the National Action Plan for Equality between Women and Men (2019-2023). **Estonia** foresees a reform to reduce the gender pay gap within the development of the "Welfare Development Plan 2023-2030", which includes goals and activities related to the reduction of the gender pay gap' which is similar to SDG indicator 'Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex'. Similarly, **Sweden** has a reform for the compensation level raised for vocational education combined with courses in Swedish for immigrants, which should also strengthen integration, job and self-sufficiency opportunities for new female arrivals. Its NRRP indicates that the direct effects on gender equality will be analysed, at individual or household level, and with respect to gender or income distribution at the time of introduction of the reform.

implement new IT curricula - digital skills of teachers and guidance' similar to SDG indicator 'Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill'); in Hungary 'Acquisition of ICT tools (notebooks) for students and teachers', similar to the SDG indicator 'Proportion of schools with access to: [...] (b) the internet for pedagogical purposes; (c) computers for pedagogical purposes [...]').

¹⁵ In Romania '22% participation rate of preschool children in early education services' which corresponds to the SDG indicator 'Participation in early childhood education by sex - children aged 3 and over'); in Slovakia ('Enrolment rate in pre primary schools for children aged five' similar to 'Participation in early childhood education by sex - children aged 3 and over' and 'Number of trained teachers and specialized staff' similar to 'Proportion of teachers with the minimum required qualifications, by education level').

¹⁶ The Swedish NRRP clarifies that "*it is important that NEET, rather than unemployment, is used as indicator*" as the SDG indicator 'Proportion of youth (aged 15–24 years) not in education, employment or training'.

- **SDG 10.Reduced inequalities** is addressed by most Member States, seven of whom mention it explicitly (Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, and Poland). None of them, however, have adopted SDG indicators. This SDG has been addressed through different measures, such as financing social housing (for instance **Hungary, Luxembourg, Portugal** or **Slovenia**), by encouraging job creation for disadvantaged people (**Ireland**), by developing social and vocational rehabilitation services to promote the safety of people with disabilities (**Latvia** and **Lithuania**), and by reforming the social insurance system and restructuring the social insurance services (**Cyprus**). **Czech Republic** on its side plans to reduce inequalities in the cultural and creative sector by better protecting the status of artists. **Greece** has a specific component (Component 3.4. Increase access to effective and inclusive social policies) with several measures to support digital transformation of the social protection system, (re)integration of the most vulnerable population groups, specifically the homeless, guaranteed minimum income recipients, and refugees; programs for the digital inclusion of the elderly and people with disabilities and support for independent living for people with disabilities. **Bulgaria** also has an entire NRRP component dedicated to social inclusion which includes a reform to improve the overall social support system by assessing the impact of current legislation on minimum income schemes and adopting a code of social support to harmonize highly fragmented social laws.

2.2 Environmental SDGs

The highest score (76%) was obtained by Czech Republic, followed by Croatia, Cyprus, and Estonia (71%). Malta, Luxembourg and Latvia had the lowest score (14%). SDG 7.Clean energy, SDG 11.Sustainable cities, and SDG 13.Climate action are the most integrated SDGs (mentioned by all Member States), while SDG 14. Life below water is the least addressed (mentioned by 15 Member States). More in detail:

- **SDG 6.Clean water** is explicitly mentioned by only six Member States (Belgium, Croatia, Cyprus, Denmark, Estonia and Poland). **Croatia** is the only Member State using an SDG indicator, with a target of ensuring access to improved water supplies to 45,429 residents by the end of 2026, and corresponding to the SDG indicator ‘Proportion of population using safely managed drinking water services’. In most of the cases, this SDG is addressed within the framework of measures for the sustainable management of water for agriculture. For example, **Poland** foresees a reform and investments in sustainable water and sewage management in rural areas. More broadly, **Belgium** intends safeguarding the water supply for navigation, industry, drinking water companies and agriculture, even in times of prolonged drought. **Spain** is one of the few

countries that included measures explicitly dedicated to clean water in its NRRP with a plan for purification, sanitation, efficiency, saving and reuse. Among the several reforms foreseen in Italy's NRRP, one will target the simplification of legislation and strengthening of governance for the realization of investments in water supply infrastructures

- **SDG 7.Clean energy** is addressed by all Member States (and explicitly mentioned by Belgium, Bulgaria, Croatia, Cyprus, Denmark, Poland and Slovenia) mainly through the development of renewable energy sources (as in the case of Lithuania, Czech Republic, Estonia, and Slovakia). **Poland** also addresses this SDG by developing energy storage. Some Member States such as **Latvia**, **Malta**, and **Belgium** also focus on improving the energy efficiency of buildings. **Italy** intends to promote the production, distribution and use of hydrogen. **Bulgaria** will develop a definition and criteria for "energy poverty" for households in the Energy Act for the purposes of market liberalization and the financing of energy efficiency projects. SDG indicators are used by four Member States (Czech Republic, Estonia, Greece, and Slovakia). As an example, **Estonia's** ambition to decommission oil shale for electricity production in 2035 and decommission oil shale for oil production by 2040 can be related to the SDG indicator 'Energy intensity measured in terms of primary energy and GDP'. **Slovakia** uses the indicator 'new renewable energy source capacity' which is similar to 'installed renewable energy-generating capacity'.

- **SDG 11.Sustainable cities** is explicitly mentioned by 10 Member States (Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Greece, Hungary and Poland). This SDG is in the great majority of cases addressed through the development of sustainable transport (roads and cycling paths, trains, buses and trams, charging points for electric vehicles). For instance, **Estonia** plans on introducing a safe, green, competitive, needs-based and sustainable transport infrastructure, while **Latvia's** NRRP foresees the improvement of its national and regional road network. This SDG is also addressed via measures for the renovation of public buildings (**France**) and housing (**Luxembourg** and **Germany**). For this SDG, three Member States (Croatia, Czech Republic and Hungary) use an SDG indicator. As an example, **Hungary's** NRRP includes the renovation of social housing as a milestone, similar to the SDG indicator 'Proportion of urban population living in slums, informal settlements or inadequate housing'.

- **SDG 12. Responsible consumption** is explicitly mentioned by nine Member States (Belgium, Poland, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Greece, and Slovenia), and two use SDG indicators (Croatia and Czech Republic). This SDG is mainly addressed with measures designed to enhance the circular economy model, particularly through the better management of waste and the development of recycling centers and methods. For instance, Austria foresees investments in reverse vending systems and measures to increase the returnable quota for beverage containers, while **France's** NRRP includes the modernization of recycling centres. Other Member States also focus more precisely on the modification of production methods. **Estonia** plans on changing the business model of manufacturing companies, while **Ireland** wants to increase the uptake of carbon neutral low/medium temperature heating in the manufacturing industry. Similarly, **Denmark** and **Austria** intend to reduce plastic and textile waste, and **Italy** electronic and chemical waste. **Lithuania** on its side will increase tax rates for environmental pollution by landfill. **Czech Republic** has an indicator 'Completion of projects investing in recycling infrastructure' which can be related to the SDG indicator 'national recycling rate, tons of material recycled'.

- **SDG 13. Climate action** is addressed by all Member States, and explicitly mentioned by seven of them (Belgium, Croatia, Denmark, Estonia, Finland, Hungary and Poland) and three use SDG indicators (Cyprus, Czech Republic, and Slovenia). For instance, **Slovenia's** goal of adopting a new flood risk reduction plan could correspond to the SDG indicator 'Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies'. Some Member States plan on amending laws on climate action (**Ireland, Finland** and **France**). **Cyprus** will establish a green taxation. Some of the more specific measures planned to address this SDG focus on the reduction of greenhouse gas emissions (**Belgium, Sweden, Poland, Slovakia, and Croatia**). Other measures aim at better preventing natural hazards such as forest fires in **Cyprus**, or floods in **Italy** and **Czech Republic**. **Slovenia** explicitly mentions the SDG and use the indicator 'adoption of a new Flood Risk Reduction Plan' which is similar to the SDG indicator 'proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national disaster risk reduction strategies'.

- **SDG 14. Life below water** is the least addressed environmental SDG, explicitly mentioned by only four Member States (Belgium, Cyprus, Denmark and Estonia). No Member States apply SDG indicators for this SDG. **Spain** intends to regulate sustainable fishing, with the aim of promoting economic and social sustainability. **Belgium** intends to finance an 'off-shore energy island' project to make the Princess Elisabeth area in the North Sea a hub for off-shore wind energy. This will have a positive impact on biodiversity and fisheries, as it will not be possible to fish in the area to be developed.

• **SDG 15.Life on land** is explicitly mentioned by five Member States and three (Czech Republic, Greece, and Romania) use SDG indicators. For instance, **Greece**, has a national reforestation plan and will finance revitalization actions in the most affected territories, for which it has the indicator ‘Land rehabilitation (ha) completed and certified’, similar to the UN SDG indicator ‘Proportion of land that is degraded over total land area’. Most measures planned to address this SDG broadly foresee the protection of biodiversity (**France, Sweden, Slovakia and Finland**). **Austria** intends to set-up a Biodiversity Fund to support the preservation, improvement and restoration of biological diversity, seen as an important instrument for a green post-COVID-19 recovery. Some Member States chose to focus their measures particularly on the protection of forestry areas (**Spain, Belgium, Cyprus, and Czech Republic**).

2.3 Economic SDGs

For the two economic SDGs, the highest score (83%) was obtained by Croatia, Czech Republic and Poland, followed by Belgium, Cyprus, Denmark, Estonia, and Finland (67%). All Member States have included both SDGs in their NRRP interventions and/or reforms addressing them explicitly or implicitly, and the two SDGs show a similar level of integration. More specifically:

• **SDG 8.Decent work** is explicitly mentioned by eight Member States (Belgium, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, and Poland). **Poland** also has an indicator for the increase in 'GDP per capita according to PPP from 72.8 (2019) to 95 in 2030' which corresponds to UN SDG indicator ‘annual growth rate of real GDP per capita’. Overall, most Member States will support investments to improve workers skills, for example, the “FutureSkills” programme foreseen in the NRRP of **Luxembourg**, or in **Sweden’s**, which aims to increase opportunities to change career orientation through education by changing the labor law. In some cases, such as in **Latvia**, the NRRP foresees reforms to increase the minimum income. In others, the interventions are aimed at specific worker categories. **Estonia**, for example, will finance youth labor market measures such as the "My First Job" initiative, as part of the Estonian Youth Guarantee Action Plan, to encourage employers to recruit young people with little or no work experience, through a wage subsidy paid to the employer and the reimbursement of training costs related to the young person. **Finland** will implement a reform to increase the labor migration of experts and improve the opportunities for international degree students to find employment in the country. It also has a measure for mental health and employability as a prerequisite for employment and productivity. Similarly, **Slovakia** will activate support tools and assistance for returnees, highly qualified third-country workers and their family members as well as foreign higher education students studying in Slovakia.

• **SDG 9.Industry and innovation** is explicitly mentioned by ten Member States, those explicitly mentioning SDG 8.Decent work plus Greece and Portugal. Croatia and Czech Republic also have indicators similar to those of the UN SDG. **Czech Republic** intends to sign public contracts with at least four research and development consortia for a value of around EUR 200 million, a target which could correspond to the UN indicator ‘Research and development expenditure as a proportion of GDP’. The Czech NRRP has several measures for innovation, such as, those to support research activities related to the development of 5G networks and services. **Greece** foresees measures for the platform ‘Elevate of Greece’ to increase cooperation between the Greek research and innovation ecosystem and its counterparts abroad. **Portugal** will create and develop the Banco Português de Fomento to support the development of the economy through the provision of financing solutions for the development of companies, to enhance entrepreneurial capacity, and support investment and job creation. The Banco will also provide funding dedicated to investing in carbon neutral and circular economy projects. Similarly, the NRRP in **Bulgaria** will increase the innovation capacity of the Bulgarian Academy of Sciences in the field of green and digital technologies.

2.4 Political SDGs

The highest score (67%) was obtained by Croatia, Cyprus, Denmark, Estonia and Poland, followed by Belgium, Bulgaria, Lithuania and Romania (33%). All the other Member States are at 17%, except for Finland which has no interventions or reforms related to the political SDGs. However, the large majority of Member States focus their interventions on SDG 16.Strong institutions, while SDG 17.Partnerships is addressed by only six Member States.

• **SDG 16.Strong institutions** is explicitly mentioned by eight Member States (Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Poland and Romania), but none of them apply SDG indicators. The main issues that come up in the NRRPs are money laundering and terrorism, as well as corruption. **Sweden, Estonia, Malta, and Ireland** all plan on implementing reforms to fight money laundering and terrorism. Concerning the fight against corruption, **Cyprus, Croatia and Czech Republic** intend enforcing anti-corruption reforms. Other Member States address this SDG by focusing on their administration. For example, **Germany** will implement a joint programme of the Federal Government and the Länder for a high-performance, citizen- and business-friendly administration, while **Italy** intends to simplify its administration. **Spain** focuses on justice, with a reform to promote the rule of law and the efficiency of the public justice service.

- **SDG 17.Partnerships** is only addressed by six Member States (Poland, Lithuania, Estonia, Denmark, Cyprus, Croatia), none of whom use SDG indicators. **Poland**'s NRRP foresees the development of cooperation and partnership with local governments for solving development problems including the development of SDGs. Similarly, **Cyprus** intends to establish a coordinating body between central and local government.

3 SDGs as a framework for recovery at regional level

This chapter analyses in detail five case studies: Flanders and Ghent municipality (Belgium), Tallin (Estonia), Region Provence Alpes Cote d'Azur (France), Baden Wurttemberg and Stuttgart and Mannheim municipalities (Germany), and Azores (Portugal).

3.1 Belgium: Flanders and Ghent

Context

Flanders is the most populated region in Belgium, with around 6.6 million inhabitants in 2021. Due to Belgium's federal structure, Flanders has its own government and parliament.

Situated on the North Sea coast, Flanders is also one of the most urbanised regions in the EU-27, with a population density of 488 inhabitants per km². It is a relatively wealthy region, with a GDP per capita of EUR 34 183 (in PPP) and a productivity per employed person of EUR 79 160 (in PPP) in 2021 (Statistiek Vlaanderen, 2022a). Flanders' labour market has improved over the past decade, with 193 150 unemployed in 2021 as compared to 264 704 in 2010 (Statistiek Vlaanderen, 2022b). However, long-term unemployment has increased, with 36% of the unemployed having been unemployed for longer than two years, as compared to 24% in 2010.

Since 2004, the share of people in poverty or at risk of social exclusion has declined from 16.6% to 13% in 2021 in Flanders. This is below the EU-27 average of 22% (Statistiek Vlaanderen, 2022c). Household waste per capita declined between 2013 and 2020, from 562kg to 476kg (Statistiek Vlaanderen, 2022d). The carbon footprint per inhabitant of Flanders was 14.2 tonnes in 2016, representing a decline from 17.1 tonnes in 2010 (Statistiek Vlaanderen, 2022e). The gender wage gap stands at 6% in Flanders on average (City of Ghent, 2020).

Ghent is part of the province of East Flanders. In 2021, the city had a population of 264 676 inhabitants (stadsbestuur van Gent 2022) and a population density of approx. 1 700 inhabitants per square kilometre. The city has an important tourism sector due to its well-maintained mediaeval architecture and cathedrals. Furthermore, it has a large university (University of Ghent) and significant port infrastructure.

In Ghent, social deprivation and the risk of poverty are territorially focussed on a few neighbourhoods (City of Ghent, 2020). Child poverty stood at 22.2% in 2019, higher than the Flemish average (ibid). Energy poverty was already an issue in 2016: approximately 27 out of 1000 households were affected by energy poverty in 2016. Entry into the labour market is more difficult in Ghent compared to Flanders: 40% of school leavers are still looking for work one year after graduation – compared to 34% across Flanders (ibid).

Strategy

The Flemish Government outlined its overall sustainable development vision in “Vision 2050” in March 2016 and identified seven transition priorities: “circular economy”, “living, teaching and working in 2050”, “industry 4.0”, “living together in 2050”, “mobility; energy and climate”, and “an environment for the future”.

These were refined in the 2030 goals, “Vision 2030”, with 53 objectives and 111 indicators (Vlaamse Regering, 2018). Vision 2030 provides milestones towards achieving the 2050 goals. In summary, the 2030 objectives are:

- Inclusive society: 20 objectives, covering improvements in public health, poverty, accessibility and quality of education, inclusive labour market participation, accessibility and quality of housing, acceptance of education certifications, and Dutch language skills.
- Transition to a new economy: 13 objectives, including improving the ease of doing business for SMEs, sustainability in agri-food systems, decoupling of resource-use and economic growth, multimodal accessibility, innovation and research and development, employment, economic competitiveness, energy costs, and digitalisation.
- Ecological sustainability: 15 objectives, including emission reduction, energy efficiency, use of renewable energy sources, stabilisation and protection of biodiversity, reduction of weather and climate related damage, more sustainable use of resources, and halting surface sealing.
- Open and agile partnerships: three objectives, including improving the efficiency of Flanders’ institutions, providing development aid, and increasing public investments.

The SDG implementation agenda follows the subsequent steps: (1) development of a tailored long term SDG agenda; (2) refinement and definition of Flemish 2030 targets; (3) implementation of 2030 SDGs (analysis of distance to targets,

implementation of mitigating actions targeting these needs, support of good practices); (4) development of a monitoring and reporting system; (5) integration of the SDGs into the management of government instruments; (6) cooperation between cities, municipalities, and provinces; and (7) leading stakeholder management process and the development of new partnerships.

Green and social investments to fulfil the SDG objectives are funded by sustainability bonds. The first sustainability bonds were issued on 12 November 2018 (Finance Flanders 2019), providing EUR 500 million in financing for projects related to the SDGs, in particular affordable housing and social education. For the years 2019-2020, instead, the sustainability bonds have been mainly allocated on energy efficiency projects.

Table 3.1: Funding per thematic area – sustainability bonds (in EUR million)

<i>Item</i>	<i>2018</i>	<i>2019-20</i>
Affordable housing	173.33	67.54
Access to education	300.97	67.27
Energy efficiency	25.7	865.22
Pollution prevention and control	0	0
<i>Total</i>	500	1 000.63

Source: Desk review of Finance Flanders (2019, 2020)

The Flemish government identifies potential projects which could qualify for sustainability bond funding on an annual basis. Usually, the pool of eligible projects exceeds the funding generated from the bonds. The following is an overview of the types of projects targeted by the resulting funding (Flemish Community, 2019):

- Affordable housing: social mortgage loans for social housing actors (Flemish Social Housing Association, Flemish Housing Fund);
- Social housing complexes (such as Luca 2 in Antwerp with 118 dwellings for MEUR 13.9). In 2019: 1 937 new rental dwellings completed, 1 702 completed renovations, 574 owner-occupied dwellings completed;
- Construction of new primary and secondary schools, such as BA Koekelberg – Campus UNESCO, with 1 200 student beneficiaries (completed in 2018);
- Support of passive-energy schools;

- Pollution prevention and circular economy initiatives (such as the VLAIO Clusters¹⁷ and Circular Flanders¹⁸).

The city of Ghent attributes considerable importance to the SDGs (City of Ghent, 2020). Since 2020, Ghent has published annual reviews on the achievement status of the 2030 SDGs. The 2020 voluntary local review monitored the situation across all 17 SDGs. The city also foresees linking the SDGs to measures in the city's multiannual strategic framework/budget. Subsequent reports are each focussed on progress towards the SDGs within a particular thematic area within the SDGs: *people* in 2021, *prosperity* in 2022, *planet* in 2023, with the topics *partnership* and *peace* reported every year. The latest report (City of Ghent, 2021) indicated the following actions and achievements in 2021, related to social SDGs (i.e. focus on people):

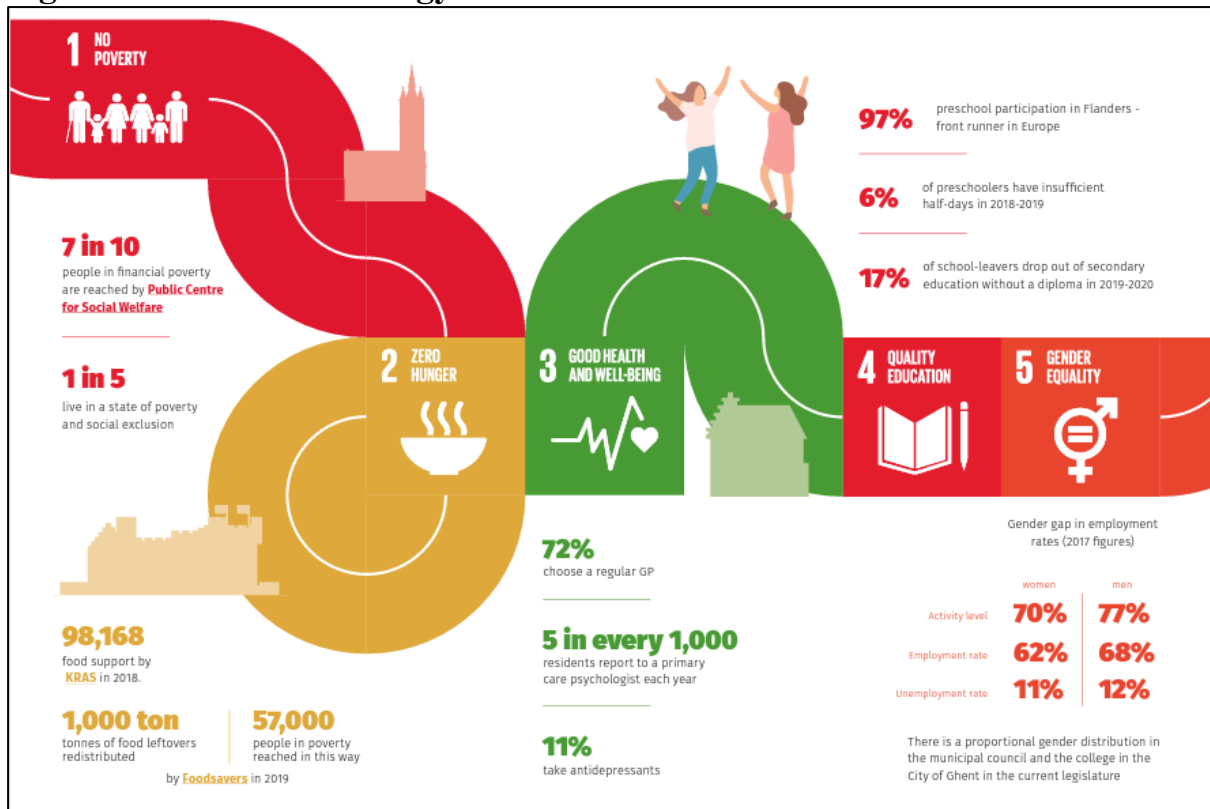
- Concerning SDG 1.No poverty, Ghent is implementing an integrated poverty policy including reintegration for the homeless and tailored assistance for vulnerable people¹⁹. Moreover, social workers are available in schools for children, via appointment and open days at schools with more vulnerable populations. In 2020, 35 schools had open days and 40 had consultations. The strategy is also offering outreach programs to people at-risk of poverty via dedicated associations. The city has set up collaborations with people affected by poverty, and is working to improve the participation of people affected by poverty in the planning processes.
- For the SDG 2.Zero hunger, Ghent is cooperating with international partners to promote local food production and reduce food waste (Food Smart Cities). Moreover, the initiative “Enchanté” allows inhabitants to donate the consumption of services (beds, basic services, food, etc.) in participating enterprises to people in need. The initiative “Gent en Garde”, instead, is a food strategy aiming to reduce food waste, improve sustainable production and consumption, as well as reduce supply chains among others. Ghent was the first city in Flanders with a food strategy. 7% of the population is vegetarian, above the Belgian average and four in ten people eat vegetarian food at least once per week (twice the Flemish average). Moreover, the redistribution of surplus food is a core activity (more than 1 000 tonnes saved).

¹⁷ See <https://www.vlaio.be/en/vlaio-network/innovation-clusters-flanders>

¹⁸ See <https://vlaanderen-circulair.be/en>

¹⁹ While poverty was declining until 2019, it started increasing significantly again with the beginning of the COVID-19 pandemic. Homeless people were counted for the first time in summer 2021.

Figure 3.1: Ghent's strategy and achievements in social SDGs



Source: reproduced from *City of Ghent* (2021), p.7.

- For SDG 3. Good health, health guides or volunteers who have a supporting role in improving the accessibility of health care services, especially to vulnerable populations, are available. Moreover, mobile mental health workers provide support to people in vulnerable neighbourhoods in Ghent.
- Concerning SDG 4. Quality education, the local childcare consultation promotes coordination and exchange between childcare providers and functions as a “one-stop-shop” for parents’ childcare questions and those in search of childcare spots. Annually there are 2 500 requests for places and approx. $\frac{3}{4}$ are allocated on the spot. Targeted initiatives have been implemented to reduce COVID-19 related learning gaps through summer schools in 2020 and 2021 and provide additional support to schools.
- For SDG 5. Gender equality, the initiative “Bounce up” in autumn 2020 was a month-long celebration of resilience among the Ghent LGBTQ+ community with multiple activities and a dedicated awareness raising campaign. Moreover, a “fathering group” project promotes the role of fathers in families, aiming to increase the care responsibilities taken on by fathers. As part of this project, fathers (or persons identifying as fathers) can join monthly meetings to share experiences.

Links and relations with recovery efforts (including the NRRP)

A desk review of the Belgian NRRP and related documents did not reveal any explicit interlinkages with the Flemish Vision 2030 or with the overarching Vision 2050. However, significant funding has been devolved to the Belgian Communities/Regions and there appears to be a high degree of thematic overlap between the priorities chosen as part of the NRRP and Vision 2030. Alignment can be observed across five axes of the NRRP (Kabinet van de staatssecretaris voor Relance en Strategische Investerings, belast met Wetenschapsbeleid, 2021) to various degrees:

- *High alignment* in axis 1 climate, sustainability and innovation. NRRP measures include many devolutions to Flanders. Relevant measures include in particular the NRRP components “renovation of buildings” (especially related to social housing and public buildings), “emerging energy technologies” (such as the development of renewable heat networks), “climate and environment” (such as ecological defragmentation).
- *Low alignment* in axis 2 digital transformation. Most NRRP measures are implemented at federal level. Digitalisation support to the Flemish government may have some degree of overlap with the Vision 2030 priority *open and agile partnerships*.
- *Medium alignment* in axis 3 mobility. This axis includes measures promoting the shift to non-car mobility solutions targeted at Flanders, particularly in terms of the cycling infrastructure, e-charging infrastructure, and the greening of public transportation fleets.
- *Medium alignment* in axis 4 people and society. This axis includes some measures targeted at Flanders aligned to the SDGs, such as support for higher education, labour market inclusiveness, and digitalisation in education.
- *High alignment* in axis 5 economy of the future and productivity. This axis targets several measures in Flanders which are highly aligned, including training and labour market activities, fostering a circular economy, and supporting research and development.

Closely aligned to the NRRP, the Flemish Government is investing EUR 4.3 billion (EUR 2.25 billion of which are financed via the RRF) to support regional resilience via the Flemish Resilience Plan (Government of Flanders 2020). While there is no explicit link to the Vision 2030/2050 framework, thematic alignment exists. This alignment is particularly close in terms of funding for environmental projects, education and work, and funding for sustainability. Funding for

sustainability foresees innovation support, transition to hydrogen, protection against flooding, renovation support, a multimodal shift and the greening of mobility, investments into renewable energy sources, and circular economy support. Regarding sustainability, the Flemish Resilience Plan is explicitly anchored in the Flemish Energy and Climate Plan 2021-2030, the long-term climate strategy 2050, and the long-term Renovation strategy 2050. These three strategies, however, reference the overarching Vision 2050, i.e. the long-term sustainable development perspective of Flanders.

Achievements and key challenges

Ghent displays a significant commitment towards the SDGs and has anchored the SDGs in the multiannual strategic plans and budgets. On the regional side, the Government of Flanders has detailed the overarching strategies towards achieving the SDGs in Vision 2030 and 2050. Accompanying strategic frameworks exist which promote the implementation of relevant goals within the policy programmes of the region.

As detailed in the previous sections, Flanders has disbursed significant funding obtained from Sustainability Bonds into relevant projects which align with the SDGs. This funding supported projects in the thematic areas of renovation and energy efficiency, as well as access to education, and affordable housing.

Progress towards the SDGs in Flanders due to the RRF is more difficult to assess. At the time of writing (June 2022) only EUR 770 million of funding had been disbursed to Belgium (equivalent to 13% of the country's total financial allocation)²⁰. However, there is some alignment between the measures specified in the NRRP and the associated Flemish Resilience Plan, which in turn is aligned with Vision 2030 and 2050. As such, successful implementation of these plans should facilitate the achievement of the SDGs.

3.2 Estonia: Tallin

Context

The city of Tallinn is the capital and the administrative, financial and service centre of Estonia (Euro Cities, 2022). Almost one-third of the Estonian population lives in Tallinn with the population of the city in 2021 at 445678, but decreasing. This was due to the natural population decrease (as a consequence of COVID-19) being higher than the growth attributed to migration (Tallinn City Government,

²⁰ See https://ec.europa.eu/commission/presscorner/detail/en/ip_21_4023

2022). During the 2010-2020 period, however, the population of Tallinn increased by more than 1% per year, a trend associated with better economic possibilities in comparison to other Estonian regions. In comparison to the average life expectancy of the European Union, Estonian residents live on average 3 years less. However, the City of Tallinn is part of the Harju County where life expectancy is 5 years longer for men and 4.8 years longer for women than on average in Estonia. The at-risk-of-poverty rate, which is one of the most critical indicators in Estonia, has been at the same level for many years. In 2017, almost 22% of the people living in Estonia had an equivalised disposable income below the at-risk-of-poverty threshold. The values of this indicator for Tallinn were slightly lower and amounted to around 16-17% (City of Tallinn, 2020c).

The city is located on the shores of the Gulf of Finland of the Baltic Sea and it has one of the biggest ports in the Baltic region. Despite its long merchant history, information technology is the most important economic sector of the city today. For many years, Tallinn has been the main contributor to national GDP as it has a higher GDP per capita than the national average due to the fact that around 50% of the country's added value is created in Tallinn. According to the business statistics (2010-2020), approximately 46% of all economically active enterprises in Estonia are located in Tallinn. Moreover, more than half of the employed population in Estonia, work in companies operating in the city (City of Tallinn, 2020c).

Tallinn has been awarded the European Green Capital for 2023 thanks to the effort made in achieving sustainability such as free public transport and delivering a climate action programme that supports the UN SDGs (Campbell, 2021). Due to the effects of climate change, the risks of floods, storms and heat waves in Tallinn have increased, which could impact on urban planning, transport, water management, energy management, health and tourism. There are three landscape protection areas, two conservation areas and numerous smaller protected areas in Tallinn, meaning the protected areas cover 13.8% of the overall city area (City of Tallinn, 2020c).

Strategy

Estonia has long-term experience in the field of sustainable development thanks to early adoption of the Sustainable Development Act in 1995. As a result of this, Estonia ranked tenth in the global sustainable development index in 2019 and can therefore be assessed as successful in implementing SDGs (Bertelsmann Stiftung and Sustainable Development Solution Network, 2019). Estonia's strengths in the implementation of the SDGs are high-quality and accessible education, efficient health care management, high employment and a large share of renewable energy in final energy consumption. Nevertheless, Estonia still has room for

improvement in some aspects such as achieving gender equality, reducing the risk of poverty for women and people with disabilities, ensuring efficient waste management and recycling, reducing green-house gas emissions and preserving biodiversity (Republic of Estonia, Government Office, 2020).

The most important stakeholders for the coordination of sustainable development issues in Estonia are the Government office, the Estonian Commission for Sustainable Development, the inter-ministerial working group on sustainable development and the coalition for sustainable development. At the central government level, the Government office is a key coordinator for sustainable development issues (Republic of Estonia, Government Office, 2020). This provides the national context in which sustainable development policies in Tallinn take place.

The Tallinn Development Strategy 2035 (City of Tallinn, 2020a) was developed in line with the UN SDGs, European Union policy, the development documents of Estonia, and feedback from citizens and stakeholders in Tallinn. This Strategy was prepared at the same time as the national strategy Estonia 2035 and other national strategic documents²¹. The new development strategy was initiated in June 2018 and adopted in December 2020. The national development strategy ‘Estonia 2035’ was adopted a few months later, in May 2021. The national strategy ‘Estonia 2035’ and other national strategic documents were based on SDGs, which enabled good connections between global, national and local goals as did the parallel and connected development of the strategies (Eesti 2035, 2022).

According to the Tallinn 2035 Development Strategy, the vision of the city is defined as ‘green and global’, with Tallinn aiming to become one of the leaders of green transformation in Estonia. The strategy sets out six strategic goals to achieve the overall vision: ‘Friendly urban space’, ‘Creative global city’, ‘Healthy mobility’, ‘Green transformation’ and ‘Home that includes the street’(City of Tallinn, 2020a). Each of these strategic goals is further detailed in subsections that guide the actual implementation (see the table below) and provide the indicators needed for the assessment of the progress towards the goal (City of Tallinn, 2020b). More details regarding these indicators are provided in the document ‘Explanations of vision and strategic goals in Tallinn 2035 Development Strategy’.

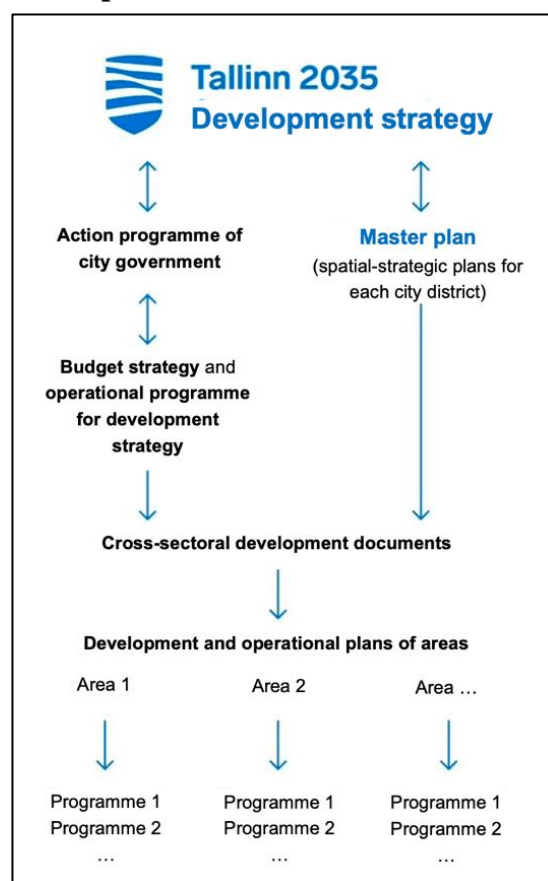
Tallinn’s strategy is in accordance with the UN SDGs with emphasis on SDGs 1.No poverty, 3.Good health, 4.Quality education, 5.Gender equality, 8.Decent work,

²¹ Transport and Mobility Master Plan 2021-2030, the Public Health Development Plan 2020-2030, the Education Development Plan 2021-2035 and the Estonian Research and Development, Innovation and Entrepreneurship Development Plan 2021-2035.

11.Sustainable cities, 12.Responsible consumption, 13.Climate action and 15.Life on land.

Figure 3.2 shows the city's system for development documents. In theory, the development strategy provides the basis in preparation for district master plans, but in practice both these documents are prepared in consideration with each other. City district master plans are the basis for the development of detailed spatial and constructional principles, and should be in accordance with the city's spatial development vision and objectives regarding the development of urban spaces. The strategic goals defined by the city's development strategy are detailed through the activities set out in specific development documents such as the operational programme and the budget strategy. The budget strategy is an important part of the development strategy and complements the goals. It details the financial plan for the implementation of the projects and is prepared for a period of 4-5 years (City of Tallinn, 2020a). The budget for the strategy has been developed for the period of 2021-2024 and amounts to nearly EUR 600 million (Whyte, 2020).

Figure 3.2: City's system of development documents



Source: City of Tallinn, 2020a

Implementing the vision requires the engagement of various stakeholders, such as the local public administration, citizens, communities, entrepreneurs, local authorities in the urban region as well as international partners. Such engagement was already implemented for developing the Tallinn Development Strategy 2035 when the citizen feedback collected by conducting round tables and workshops indicated the citizens' desire for the City of Tallinn to become green, safe and accessible. The Tallinn Development Strategy was led by the Strategy unit and coordinated by the City of Tallinn Strategical Planning Unit (City of Tallinn, 2022). For its implementation the development strategy builds on additional components: One is the monitoring mechanism for the implementation of SDGs, which is based on Estonian sustainable development indicators and reports thereon (Republic of Estonia, Government Office, 2020).

Table 3.2: Strategic goals, subsections of the goal, SDGs and indicators of the Tallinn 2035 Development Strategy

Strategic goals	SDGs	Indicators
<p>Friendly urban space aims to achieve urban space that allows people to use it in as many ways as possible, prevents conflict between users and improves the quality of life:</p> <ul style="list-style-type: none"> • Spatially cohesive urban region • Inviting heart of the city • 15-minute city • Shared streets • Green urban space everywhere • A city open to the sea 	<p>SDG 1.No poverty, SDG 3.Good health, SDG 7.Clean energy, SDG 8.Decent work, SDG 9.Industry and innovation, SDG 11.Sustainable cities, SDG 12.Responsible consumption, SDG 13.Climate action, SDG 15.Life on land, and SDG 16.Strong institutions</p>	<ul style="list-style-type: none"> • Share of citizens who are very satisfied with the living environment in their districts • Connection of the centres of the urban region of Tallinn • The share of residents who live in the centre of its area of influence • The share of green routes and the share of citizens who live up to 300 m from a green area • The share of everyday journeys made by the residents of the Tallinn region by public transport, on foot or by bicycle • Accessibility of the streets, pavements, public transport stops and the main network of cycling tracks • Use of public transport that takes no more than half an hour on average • Road users consider the Tallinn mobility environment safe • The number of traffic accidents with human victims • Number of city assets • Conditions of the city's real estate environment • Satisfaction of the users of the city's real estates
<p>Creative global city highlights the importance of knowledge, creativity and innovation in making Tallinn more attractive as a business and living environment:</p> <ul style="list-style-type: none"> • The hearth of smart economy • Open learning space • City of research, innovation and experimentation • City of creative people and events • Protected architectural and cultural heritage 	<p>SDG 1.No poverty, SDG 3.Good health, SDG 4.Quality education, SDG 8.Decent work, SDG 9.Industry and innovation and infrastructure, and SDG 12.Sustainable cities.</p>	<ul style="list-style-type: none"> • The share of participants in lifelong learning among people aged 25-64 • Productivity per employed person based on added value • Productivity per employed person based on sales revenue • Hourly productivity based on sales revenue • Productivity of Estonian companies per employed person • The investments of companies in property, plant and equipment and in intangible assets • Share of investments in GDP • Number of companies established every year • Number of companies per 1 000 residents • Number of start-up companies per 100 000 residents • Share of export in companies' turnover • Share of foreign investments in the volume of investments • The number of overnight stays by foreign guests in accommodation establishments • Income per region guest by target group • Satisfaction of foreign guests
<p>Healthy mobility deals with the improvement of both health and transport as it was concluded that from the local government viewpoint the</p>	<p>SDG 3.Good health, and SDG 11.Sustainable cities</p>	<ul style="list-style-type: none"> • Health expectancy • Share of schoolchildren who can move independently • The share of everyday journeys made by the residents of the Tallinn region by public transport, on foot or by bicycle

<p>two topics should be addressed together:</p> <ul style="list-style-type: none"> • Healthy lifestyles • Mobility service at a new level • Life in fresh air • City accessible to everyone 		<ul style="list-style-type: none"> • Use of public transport that takes no more than half an hour on average • Road users consider the Tallinn mobility environment safe • The number of traffic accidents with human victims • Share of people to whom the main network of cycle lanes is accessible at up to 500 m • The existence of public transport stops within 400 m of most residents • The share of people who have unobstructed access to public transport stops • The regular physical activity of Tallinn residents • The share of young people who are moderately or intensively physically active for at least 60 minutes every day • Satisfaction with the accessibility of health services • Share of students covered by health checks
<p>Green transformation is associated with achieving sustainability, environmental protection and a circular economy:</p> <ul style="list-style-type: none"> • Climate-neutral city • Fertile ground for green innovation • Biodiverse and blossoming urban nature • Circular economy 	<p>SDG 7.Clean energy, SDG 11.Sustainable cities, SDG 13.Climate action, and SDG 15.Life on land</p>	<ul style="list-style-type: none"> • CO₂ emissions • Share of natural soil in the total area of Tallinn • Waste generation per resident • The energy use of buildings complies with the minimum requirements in force and is cost-effective • Greenhouse gas emissions from transport
<p>Home that includes the street is a goal that includes many topics related to housing such as diversity, connection to urban space, accessibility and availability:</p> <ul style="list-style-type: none"> • Multi-purpose residential areas • Unique subdistricts and yards • Homes that meet people's needs • Energy-efficient and comfortable homes 	<p>SDG 1.No poverty, SDG 3.Good health, SDG 10.Reduced inequality, and SDG 11. Sustainable cities</p>	<ul style="list-style-type: none"> • The share of people who are very satisfied with their home • The share of housing costs in total costs • Number of rooms per household member • Share of energy-efficient buildings • The satisfaction of citizens with the cleanliness of urban space • The share of green journeys • The share of residents from whom a green area is up to 300 m away • The share of everyday mobility covered by physical activity, walking or cycling • The share of schoolchildren who can move independently
<p>Kind community focuses on achieving a decrease in the rate of persistent relative poverty and improving the sense of security in public spaces</p> <ul style="list-style-type: none"> • Strong sense of security • Integrated society • Independent coping • Strong and courageous civil society 	<p>SDG 1.No poverty, SDG 5.Gender equality, SDG 10. Reduced inequality, and SDG 16. Strong institutions</p>	<ul style="list-style-type: none"> • The rate of persistent relative poverty • The share of residents who feel fully secure in the public places of their city district

Source: City of Tallinn, 2020a

Links and relations with recovery efforts (including the NRRP)

Estonia's NRRP for EUR 982 million was approved by the Council in October 2021. The plan is part of the long-term national strategy 'Estonia 2035' and sets out the reforms and projects that Estonia aspires to implement with the support of RRF (European Parliament Research Service, 2022). The NRRP is structured around six components: 'Digital transformation of enterprises' (EUR 116.2 million), 'Accelerating the green transition in enterprises' (EUR 220.2 million), 'Digital Estonia' (EUR 121.7 million), 'Energy and energy efficiency' (EUR 92 million), 'Sustainable transport' (EUR 96.1 million) and 'Health and social protection' (EUR 336.3 million). The key focus of the plan is on green and digital transition, the resilience and accessibility of the healthcare system and social inclusion. This plan contains 45 measures – 20 reforms and 25 investments.

The Estonian NRRP refers to the Estonia 2035 strategy but does not refer directly to the Tallinn 2035 Development Strategy. However, several of its goals address the same SDGs as the Tallinn 2035 Development Strategy goals. Table 3.3 details the synergies between the SDGs, the Tallinn 2035 Development Strategy and Estonia's NRRP. This comparison shows that the objectives of the strategies overlap with eight SDGs: SDG 1. No Poverty, SDG 3. Good health, SDG 7. Clean energy, SDG 8. Decent work, SDG 9. Industry and innovation, SDG 10. Reduced inequality, SDG 11. Sustainable cities, SDG 12. Responsible consumption and production and SDG 13. Climate action. Two projects planned by the NRRP for Tallin are in accordance with the SDGs: construction of Tallinn Hospital and construction of the Tallin Old Harbor tram line.

Table 3.3: Synergies between the SDGs, Tallinn 2035 Development Strategy and Estonia's NRRP

UN SDGs*	Tallinn 2035 Development Strategy	Estonia's Recovery and Resilience Plan
1. No Poverty	1. Friendly urban space 2. Creative global city 5. Home that includes streets 6. Kind community	6. Health and social protection
3. Good health and well-being	1. Friendly urban space 2. Creative global city 3. Healthy mobility 5. Home that includes streets	6. Health and social protection
4. Quality education	2. Creative global city	
5. Gender equality	6. Kind community	
7. Affordable and clean energy	1. Friendly urban space 4. Green transformation	2. Accelerating the green transition in business sector 4. Energy and energy efficiency
8. Decent work and economic growth	1. Friendly urban space 2. Creative global city	1. Digital transformation of enterprises 6. Health and social protection

9. Industry, innovation and infrastructure	1. Friendly urban space 2. Creative global city	1. Digital transformation of enterprises 3. Digital Estonia 4. Energy and energy efficiency 5. Sustainable transport 6. Health and social protection
10. Reduce inequalities	5. Home that includes streets 6. Kind communities	
11. Sustainable cities and communities	1. Friendly urban space 2. Creative global city 3. Healthy mobility 4. Green transformation 5. Home that includes streets	2. Accelerating the green transition in enterprises 4. Energy and energy efficiency 5. Sustainable transport
12. Responsible consumption and production	1. Friendly urban space	2. Accelerating the green transition in enterprises
13. Climate action	1. Friendly urban space 4. Green transformation	2. Accelerating the green transition in enterprises 4. Energy and energy efficiency 5. Sustainable transport
15. Life on land	1. Friendly urban space 4. Green transformation	
16. Peace, justice, and strong institutions	1. Friendly urban space 6. Kind communities	

Sources: City of Tallinn (2021) and European Parliament Research Service (2022). The components listed in the Estonian NRRP column do not explicitly mention the SDGs and have been assignment by the author to its respective SDGs.

Achievements and key challenges

Tallinn is the only city in Estonia that systematically incorporates the SDGs defined by the UN 2030 Agenda in its Development Strategy. The Tallinn 2035 development strategy is based on ample stakeholder involvement. Since Tallinn's key strategic document refers to the SDGs, Tallinn was elected to lead a newly launched partnership of 19 European cities. This partnership project 'Implementing Sustainable Development Goals in Cities - SDGs in Cities' aims to prepare an action plan for the implementation of sustainable development goals at the city level²².

According to a key stakeholder, the key challenge in the implementation of SDGs in local or national strategies is lack of coordination with SDGs at the European level. In the future, this challenge could be tackled by the integration of SDG indicators in the monitoring system. In this way, development strategies could be aligned with the SDGs from the beginning. The objectives of Estonia's recovery and resilience plan are expected to contribute to green and digital transitions, the improvement of the healthcare system and social inclusion. Although the Estonian RRP does not refer directly to the Tallinn 2035 Development Strategy, this plan reinforces the economic and social resilience of the City of Tallinn with measures

²² <https://www.tallinn.ee/en/cities-sustainable-development-cooperation-network-exchanged-experiences-under-leadership-tallinn>

such as the construction of the Northern Estonia Medical Campus and the construction of the Rail Baltic multimodal terminal in Tallinn.

3.3 France: Provence-Alpes-Côte d’Azur

Context

Provence-Alpes-Côte d’Azur region is composed of 3 metropolitan areas: Aix-Marseille, Nice, and Toulon. It is France's most important maritime region, and the third largest in terms of commercial flows. According to the French National Institute of Statistics and Economic Studies (Institut national de la statistique et des études économiques, INSEE), the region’s gross domestic product (GDP), amounted to EUR 166 billion in 2018 (7% of national GDP).

With a population of 5.09 million inhabitants in 2021, it is the second most unequal region after the Ile de France in terms of income distribution. According to INSEE, the poverty rate was 17.3% in 2021, above the national average of 14%. The average hourly net pay gap between women and men was -17.3% in 2019, and regarding access to quality education, the proportion of 20–24-year-olds who left the education system without a diploma stands at 19%, above the national average (17%).

The Region is also exposed to various natural risks, such as marine submersion, land movements, earthquakes, and forest fires. In fact, 1 million people, which corresponds to around 20% of the regional population, live in areas at risk of flooding. With 65% of the region covered by mountainous massifs, half of which are occupied by forests, it is home to a great diversity of environments, habitats and species. However, each year, 750 ha of natural, agricultural and forest areas are consumed. Moreover, there is a high level of household waste production (737 kg per year per inhabitant in 2018, i.e. 154 kg more than the national average) as well as waste from economic activities (700 kg per year per inhabitant in 2018, i.e. 260 kg more than the national average). Concerning the energy field, it is the third largest region for hydroelectric and solar photovoltaic production, yet 35% of its energy consumption is related to transport.

Overall, the region’s reputation and its biodiversity are counterbalanced by a decline in regional attractiveness, a demographic slowdown, inequalities, high land consumption and numerous transport malfunctions.

Strategy

The Regional Planning, Sustainable Development and Territorial Equality Plan (Le Schéma Régional d'Aménagement, de Développement Durable et d'Égalité des Territoires: SRADDET) was the first plan of this kind approved in France, in October 2019. SRADDET outlines the region's strategy in the medium and long term (2030-2050) by defining objectives and rules relating to the eleven mandatory areas²³ defined by French law. It was co-elaborated in consultation with local stakeholders for three years, through forums and workshops with the population, local authorities, and associations. In total, 60 meetings brought together nearly 3 000 participants and resulted in more than 450 contributions.

The coordination and monitoring of SRADDET is ensured by several levels of governance: the Internal Monitoring Committee (Comité de pilotage interne, COPIL) which gathers the 20 Vice-Presidents and Chairmen of the Region's study and working committees as well as the Partnership Committee (Comité partenarial: COPART) which includes the public bodies involved in the preparation of the plan. In addition, four territorial dialogue bodies have been set up to accompany the implementation of SRADDET in the territories. The « conférence avenir de nos territoires »²⁴ (conference on the future of our territories) is held annually to discuss the implementation of SRADDET with all the partners involved in its preparation.

SRADDET is in line with the UN SDGs, both in terms of objectives and in terms of time. Firstly, many of the objectives assigned by law to SRADDET intersect with those of the 2030 Agenda for Sustainable Development.

Secondly, in terms of temporality, the two

Figure 3.3: The SRADDET strategy - nine key areas



Source: Region Sud – Provence Alpes Côtes d'Azur

²³ Combating climate change, spatial management, implementation of infrastructures of regional interest, air pollution, housing, territorial balance, energy management and development, intermodality and development of transport, protection and restoration of biodiversity, waste prevention and management, opening up rural areas.

²⁴ <https://connaissance-territoire.maregionsud.fr/sraddet-avenir-de-nos-territoires/la-mise-en-oeuvre/conference-avenir-de-nos-territoires/>

2020 edition <https://youtu.be/iq6v23TAurg>

2021 edition https://event.novialys.com/Datas/ltvi/1610697_6155ee7b321de/

approaches intersect as well: SRADDET develops a spatial planning strategy for which sustainable development is both the primary material and the final goal. The SRADDET strategy is broken down into nine key areas²⁵: regional area management, space-saving management, energy transition, climate change and pollution, transport inter-modality, biodiversity preservation, water and the circular economy, waste and the circular economy, housing stock, and infrastructures of regional interest.

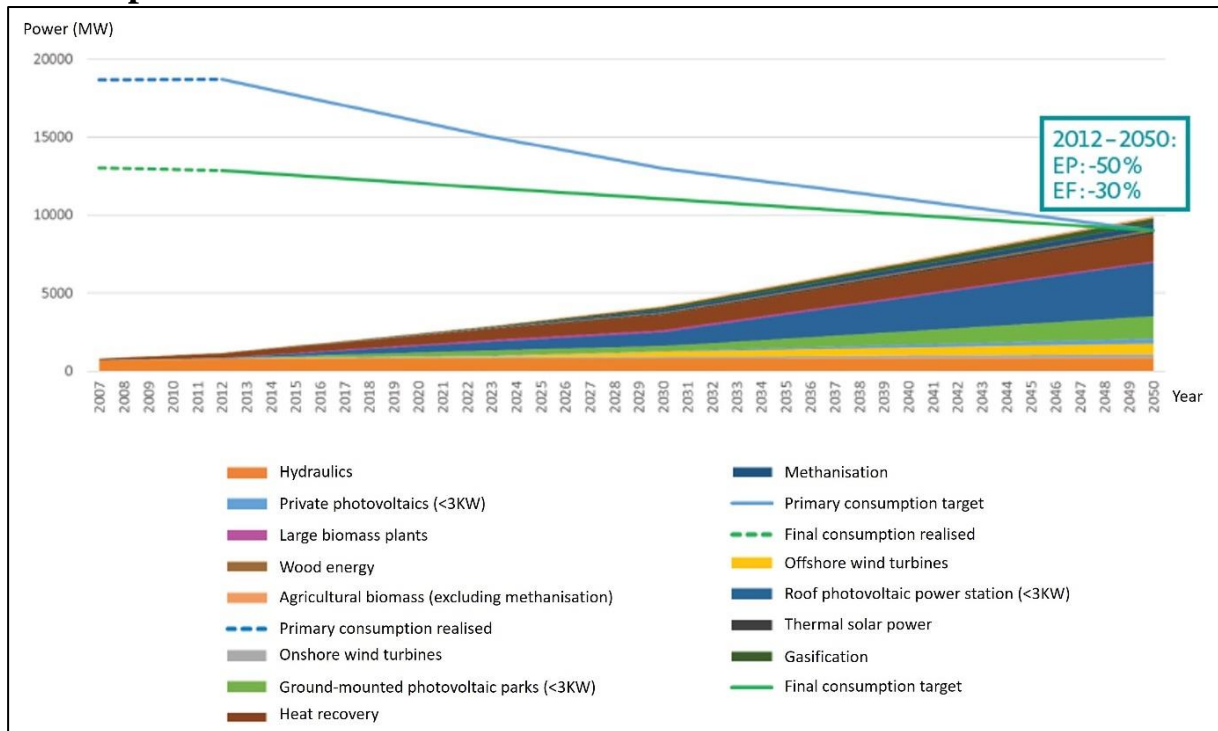
Regarding regional area management, the main goal is to achieve efficient demographic growth of +0.4% each year by 2050, by modulating development according to urban density. In line with the 11th SDG the idea is also to improve the quality of life of the inhabitants, especially through the consolidation of regional urban centres, as well as the promotion of nature in the cities.

The second main objective of SRADDET is to guarantee the quality of life in the territory and to promote development that reconciles economic and demographic attractiveness with a moderation of land use. Within the context of SDGs 12 and 13 on responsible consumption and production and climate action, the region aims at reducing its consumption of agricultural, natural and forestry land by 50% or 375 ha per year. Moreover, in line with SDGs 13 and 15 on climate action and life on land, the strategy intends to limit soil oiling and preserve the region's agricultural potential by achieving 0 loss of irrigated agricultural land.

In line with SDGs 7 and 13 on affordable and clean energy and climate action, the region's strategy for energy transition intends to reduce primary energy consumption by 50% by 2050 and increase renewable energy production by a factor of 9 for a carbon neutral region in 2050.

²⁵ <https://experience.arcgis.com/experience/2d1f81264c4a4b228fb8f2cccc9d7554/page/Accueil/?views=Notre-strat%C3%A9gie-pour-r%C3%A9ussir->

Figure 3.4: The region's ambition in terms of energy production and consumption



Source: Région Sud (2019), p.178. 'EP' is primary energy and 'EF' is final energy.

SRADDET also aims at completing thermal and energy renovation of 50% of the old housing stock by 2050. Moreover, it is about supporting innovation, which can be linked to the 9th SDG on industry, innovation, and infrastructure.

The fourth pillar of the region's strategy is in accordance with SDGs 11 and 13 on sustainable cities and communities and climate action. It aims at reducing greenhouse gas emissions by 27% in 2030 and by 75% in 2050, as well as energy consumption and pollution. More precisely, it is about improving air quality and safeguarding people's health (SDG 3 good health and well-being). Moreover, it intends to improve the resilience of the territory by reducing vulnerability to natural hazards, promoting new modes of agricultural production, and protecting water resources (in accordance with SDGs 6 and 14 on clean water and sanitation and life below water). More generally, it supports the transition to new agricultural and food production and consumption patterns (SDG 2 zero hunger).

In line with SDG 13 on climate action, the SRADDET pillar on biodiversity preservation foresees better protection of unprotected areas. In the context of SDGs 6 and 14 on clean water and sanitation and life below water, the plan intends to ensure respect of the fragility of aquatic areas. Moreover, in order to respect SDGs 14 and 15 on life below water and life on land, the region's strategy promotes new agricultural and forestry practices in order to preserve twice as many natural, agricultural and forest areas.

he 7th pillar of SRADDET focuses on waste and the circular economy and matches it to SDGs 11, 12 and 13 on sustainable cities and communities, responsible consumption and production, and climate action. The main objective is to recycle 65% of waste from households and economic activities by 2025. The strategy also aims at planning the implementation of waste management and treatment facilities.

The SRADDET strategy for transport intermodality intersects with SDGs 11 and 17 on sustainable cities and communities and partnerships to achieve the goal. Indeed, it aims at strengthening coherence between urban planning and transport in collaboration with the authorities in charge of mobility by improving the functionality of transport hubs and facilitating the user's journey in order to increase the use of public transport by 15%. Another objective is to contribute to the deployment of clean transport and promote alternative fuels and new mobility oriented towards active modes such as walking or cycling.

Regarding the region's housing stock, SRADDET provides for the production of 30 000 housing units per year by 2030. Moreover, 50% of these houses should be affordable housing, taking into account vulnerable groups and improving social cohesion, in accordance with SDGs 1 and 10 on no poverty and reduced inequality.

The last pillar of the region's strategy intends to raise the profile of the region to make it more attractive and sustainable, through the strengthening of the gateways to the regional territory, as well as the development of the port and river strategy. These objectives coincide with SDGs 8 and 9 on decent work and economic growth and industry, innovation, and infrastructure.

Moreover, SRADDET aims at developing centres of economic, academic, cultural and tourist excellence that will enhance the region's influence, particularly through support for the territory's influence in terms of universities, research, and innovation (SDG 4 on quality education).

Although many aspects of SRADDET intersect with the SDGs, two are not explicitly referred to: SDG 5 on gender equality and SDG 16 on peace and justice and strong institutions. Nevertheless, the SDGs are generally well integrated into the region's strategy, even though they are not explicitly mentioned.

Links and relations with recovery efforts (including the NRRP)

A CoR-CEMR joint consultation from January 2021 to ? (European Committee of the Regions and CCRE-CEMR, 2021) on the involvement of municipalities, cities and regions in the preparation of the NRRPs outlines that in France, local

government associations were consulted with an impact on the outcome regarding the “definition of the overall priorities and objectives of the RRP”. Moreover, France reported that the involvement of LRAs in the preparation of the RRP was structured and institutionalised. Consultation respondents also mentioned that they had received a draft of the NRRP by early January 2021.

The State-Region Plan Contract 2021-2027²⁶ (Contrat de plan Etat-Region: CPER) signed between the Prime Minister and the region and structured in line with SRADDET is the first regional version of the French recovery plan. Within the framework of this contract, the State and the Region will jointly commit more than EUR 5.12 billion (half from the State and half from the Region), and an additional EUR 1.03 billion of European funds. The objectives presented in this contract largely coincide with the elements mentioned in SRADDET. For instance, regarding energy transition, the CPER refers to building renovation, the development of renewable energies, waste management, and protection of agricultural land. It also refers to the SRADDET objectives in terms of health, higher education, research and innovation, and tourism.

Hence, the region’s recovery loan will be used to achieve the objectives of SRADDET. More precisely, EUR 90.3 million will be dedicated to Climate Plan 2 which includes thermal and energy renovation of the old housing stock, the management of waste, and the increase of renewable energy production, which are mentioned in SRADDET.

As part of the recovery plan for the conversion of agricultural equipment, EUR 135 million will be assigned to support the shift towards virtuous, sustainable and innovative agricultural practices in the context of the SRADDET strategy regarding agricultural sustainability. The latter includes the limitation of soil oiling and the preservation of the region's agricultural potential, as well as the reduction of the consumption of agricultural, natural and forestry land.

Furthermore, in accordance with the SRADDET objectives concerning the revitalisation of ports and the respect of the fragility of aquatic areas, EUR 30.5 million out of the EUR 200 million mobilised at national level for the sustainable transformation of ports will be specifically earmarked for the PACA region.

²⁶ https://connaissance-territoire.maregionsud.fr/fileadmin/user_upload/20201211_CONTRAT_AVENIR_ETAT_REGION_V6_-_Sign_1er_Ministre_-_Copie.pdf

The twelve shared priorities of CPER are as follows: adaptation of the territory to the climate change, energy and environmental transition, balance and solidarity of the territories, higher education, research and innovation, education, health, tourism, culture, economic development, professional training and gender equality, the metropolitan section, the Alps Massif, development of the Rhone, reconstruction of the destroyed valleys of the Maritime Alps.

Part of the region's recovery loan will be used in the context of the last SRADDET pillar which focuses on increasing the region's attractiveness and sustainability. The State and the region will respectively dedicate EUR 40.9 million and EUR 86.3 million for projects on the region's service lines designed to strengthen the gateways to the regional territory. In addition, in line with the region's objective of promoting new mobility habits oriented towards active modes such as walking or cycling, EUR 12 million will be dedicated to the Cycling Plan.

Thus, the CPER links the national recovery plan with the regional strategy which includes the SDGs in its policy plan. However, whether it is the national or the regional level that determines the ambition on SDGs remains unclear.

Achievements and key challenges

The annual meeting of the partners involved in the preparation of SRADDET to discuss its implementation has already taken place twice (in 2020 and 2021). Overall, the most debated topics, needing further work are the economic management of space, housing issues, and demography. More precisely, the stakeholders presented the evolution of the coherence between the local planning projects and the SRADDET objectives.

The number of lodgings is increasing, as foreseen in the plan, and digital coverage is growing at a steady pace. However, the demographic targets are not ambitious enough for a number of municipalities. Moreover, the rehabilitation of city centres must continue in order to better concentrate people and housing. In addition, communication routes need to be improved and transport provision must be rethought and improved. The new residential, professional and mobility dynamics must be better supported in order to integrate, in particular, the growing importance of teleworking. The desire to reduce land consumption is present in recent planning projects, but it should be treated even more ambitiously in order to achieve the objective of reducing the consumption of natural areas by 50% as mentioned in SRADDET.

Moreover, while data regarding the transition of the vehicle fleet, energy consumption and greenhouse gas emissions are rather encouraging, efforts are still insufficient to achieve the SRADDET objectives. The process of energy transition must be accelerated in order to catch up with the production of renewable energy and to reinforce the dynamics of greenhouse gas reduction. Furthermore, although the state of the environment and resources is stable overall, planning projects could be more ambitious, particularly with regard to reducing water consumption and matching water resources to local developments. It is also a question of improving the way territories take into account the issue of quantitative

management of water resources as well as the prevention and management of waste in planning projects.

Overall, despite the general trends that seem positive, efforts are nevertheless needed to achieve the objectives set by SRADDET. The SDGs are well integrated into the region's strategy, but its implementation faces some challenges. One of the main challenges, according to interviews, is the stakeholders' involvement at local level. It is difficult for stakeholders to rely on the long-term objectives of SRADDET. In this context, the annual conference on the future of our territories is an essential element for evaluating the difficulties encountered and adjusting strategies to meet the new issues and challenges.

3.4 Germany: Baden-Württemberg, Stuttgart and Mannheim

Context

Baden-Württemberg is a federal state²⁷ in the south-western part of Germany on the border of Switzerland and France. It has 11.1 million inhabitants and is the third most populous federal state. With a recorded population growth of 11% from 1991 to 2020 it belongs to the fastest growing states in the country. The capital city of Baden-Württemberg is Stuttgart. It is the largest city in the federal state and has 610 000 inhabitants (Statistisches Amt der Landeshauptstadt Stuttgart, 2022), followed by Mannheim with 322 000 (Stadt Mannheim, 2022) and Karlsruhe with 302 000 (Stadt Karlsruhe, 2021).

The GDP per capita of EUR 45 524, compared to other states and the average of EUR 40 495 is one of the highest in Germany (Statistische Ämter der Länder 2022). The economic structure is strongly characterised by the manufacturing sector which has a 38% share in gross value added, leaving 61% to the service sector. The export value is the highest in the country (EUR 221.5 billion). Several further exemplary indicators provide an overview and reflect the state's leading position within the country. It has one of the lowest unemployment rates (3.9% in comparison to the national average of 5.7%). The regional innovation index is the highest in the country. The share of children in families receiving basic social security benefit at 7.5% is one of the lowest in the country, while life expectancy at birth, 84.3 for women and 79.9 for men is the highest in Germany. Accessibility

²⁷ As all federal states in Germany Baden-Württemberg has its own federal government and legislative power especially with regard to culture, education, universities, local authority matters and the police as well as the influence on digitalisation, and all other areas which are not exclusively assigned to the central level.

to public transport is provided at a high level: 96% of the inhabitants have access to at least basic public transport services²⁸.

Considering renewable energies, the state has progressively developed infrastructure. Installed photovoltaic capacity in kilowatt-peak per square kilometre reached 194 in 2020, compared to Germany's average of 150. With 6.6% of buildings having installed heat pumps, Baden-Württemberg is Germany's forerunner (Staatsministerium Baden-Württemberg, 2022). Total GHG emissions in CO₂ equivalents were nearly 70 thousand tonnes in 2020 which means a reduction of 26% on 1990 figures (Statistisches Landesamt Baden-Württemberg 2021a). Accordingly, emissions are also declining per inhabitant: from 8.5 t in 2000 to 6.7 in 2019 (Statistisches Landesamt Baden-Württemberg 2021b).

Strategy

Baden-Württemberg started its sustainability strategy (*Nachhaltigkeitsstrategie Baden-Württemberg*)²⁹ already in 2007 as a cooperation between the state, industry and society in the form of a platform for discussion and implementation of sustainable development. It has since been established as a permanent element of the state's policy. The federal state's government agreed to refine the strategy goals, and since 2014 progress has been regularly published in the form of an indicator report. After the UN's announcement of Agenda 2030, the guiding principles of the sustainability strategy were assigned to SDGs. Since then, they have been considered in the state's policies in many ways and are explicitly addressed by state activities. Between 2017 and 2019 the state association for development policy in Baden-Württemberg provided the opportunity for dialogue and engagement by organising a series of events dedicated to each SDG ("17 goals in 17 locations")³⁰. In Baden-Württemberg special focus is given to the SDG 11. Sustainable cities, which is equally dedicated to all municipalities. Therefore, the state provides the municipalities with guidelines for the elaboration of municipal sustainability reports. The document encompasses the principles of sustainable community development, fields of action for municipal development and the corresponding 23 tailored indicators (state specific but with many overlapping with the UN SDG indicators) for which the data is provided by the state statistics (*Nachhaltig handeln Baden-Württemberg*, 2015).

²⁸ Maximum distance to of 600 metres (bus) or 1 200 metres (train) to a stop with at least 20 departures per day (as of 2020).

²⁹ Ministerium für Umwelt, Klima und Energiewirtschaft Baden-Württemberg. *Nachhaltigkeitsstrategie (Sustainability Strategy)* <https://um.baden-wuerttemberg.de/de/umwelt-natur/nachhaltigkeit/nachhaltigkeitsstrategie/nachhaltigkeitsstrategie/>

³⁰ DEAB Dachverband Entwicklungspolitik Baden-Württemberg e.V. 17 Ziele an 17 Orten – Die Globalen Nachhaltigkeitsziele in Baden-Württemberg <https://www.deab.de/themen-programme/agenda-2030-globale-nachhaltigkeitsziele/17-ziele-an-17-orten/>

Among the municipalities in the federal state, Stuttgart and Mannheim dedicate special efforts to reflect the SDGs in their development and consequently their respective strategies were analysed in this case study.

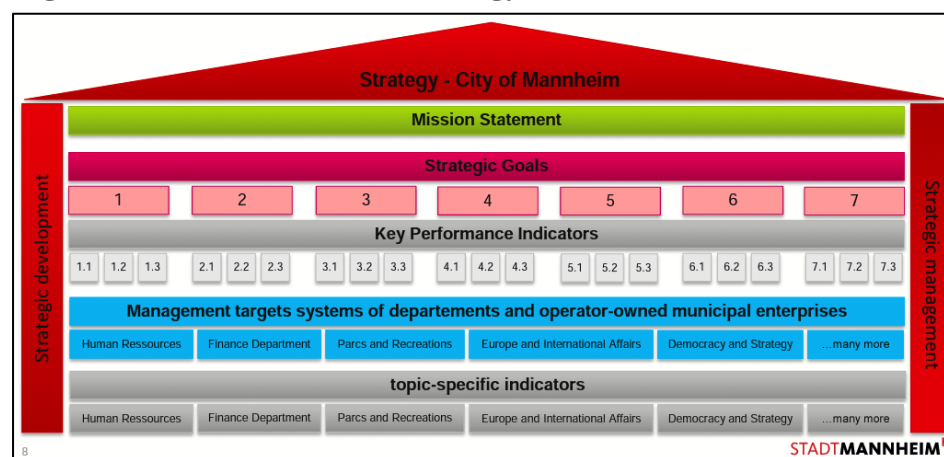
The implementation of SDGs in Stuttgart is embedded in the “Global Development Goals” (*Globale Entwicklungsziele*) project launched by the city council. The city council signed the corresponding model declaration of the German Association of Cities for the commitment to the SDGs in 2018. The project consists of the following fields of action:

- development of a common strategic framework to strengthen the goals of Agenda 2030 across all sectors;
- partnerships with business, civil society and academia to engage all stakeholders in the implementation of the SDGs;
- national and international cooperation in order to exchange experiences and learn from each other. As the state capital, the city of Stuttgart aims at contributing to international strategies, organisations and networks.

The city of Stuttgart monitors its progress comparing the developments with the initial assessment of the status quo using the UN indicators for urban areas. The city has outlined a wide range of specific measures for each of the SDGs. For selected topics there are separate strategies, networks and platforms for exchange. One example is the “70599Lebenswert” – a network with special focus on the SDG 11.Sustainable cities as well as on SDG 2.Zero hunger, SDG 7.Clean energy, SDG 12.Responsible consumption, SDG 13.Climate action and SDG 14.Life below water). It aims at strengthening cooperation, knowledge management and enabling the expansion of participation in two city districts (Birkach and Plieningen).

The city of Mannheim utilised a participative process to elaborate a mission statement for the implementation of SDG targets at local level and presented a

Figure 3.5: The Mannheim's strategy



Source: reproduced from Stadt Mannheim (2019a).

vision of how the city should look in 2030. This commitment defines seven strategic goals for Mannheim, which are intended to be implemented in a financially sustainable way (Stadt Mannheim, 2019a) and monitored using the UN SDG indicators (Stadt Mannheim 2019b):

- Social and cultural integration, societal cooperation and lifelong learning (corresponding to SDG 1.No poverty, SDG 4.Quality education, SDG 8.Decent work and SDG 11.Sustainable cities). The city commits to guaranteeing educational equality and preventing poverty. The city strives for cohesion and good living quality in the urban quarters as well as societal encounters in public spaces, and inclusive mobility. Educational and cultural activities are organised in accordance with the needs and interests of the inhabitants. Tailored instruments to foster good employment for everyone are also part of the strategy.
- Health, wellbeing and demographic change (corresponding to SDG 2.Zero hunger, 3.Good health, SDG 4.Quality education, SDG 12.Responsible consumption and SDG 16.Responsible consumption). The city provides an exemplary urban quality of life with a high level of security as the basis for a healthy, happy life for people of all age groups and thereby gains more citizens for the city. This includes offering high-quality childcare free-of-charge and a support network and appropriate care structures for the self-determined ageing.
- Equality, diversity and integration (corresponding to SDG 1.No poverty, SDG 5.Gender equality, SDG 10.Reduced inequality and SDG 11.Sustainable cities). The strategic goals envisage that the schools and sport clubs fulfil an integrative function and that cultural diversity is a motor of communal life. Mindfulness, mutual encouragement, participation together with equality and the acceptance of diverse human identities and life-styles characterise the city community. The economy follows corporate social responsibility.
- Democracy, dedication and participation (corresponding with SDG 4.Quality education, SDG 10.Reduced inequality, SDG 11.Sustainable cities, SDG 16.Strong institutions and SDG 17.Partnerships). The city has a strong city community and good administrative procedures. The residents take part in transparent democratic processes regarding the development of their city to an above-average extent.
- Digitalization, innovation and future-proof added value (corresponding to SDG 4.Quality education, SDG 8.Decent work, SDG 9.Industry and innovation, SDG 11.Sustainable cities and SDG 12.Responsible

consumption). The city has become a digital and innovative metropolis by offering digital training to all its residents, providing intelligent and sustainable mobility, developing e-government and fostering smart production and a creative economy.

- Climate, environment and alternative mobility (corresponding to SDG 6.Clean water, SDG 7.Clean energy, SDG 11.Sustainable cities, SDG 12.Responsible consumption, SDG 13.Climate action, SDG 14.Life below water and SDG 15.Life on land). The target includes low emission mobility, high-quality diversified urban green spaces, appropriate care of the water ecosystems, economic alliance for climate protection and education for sustainable development.
- International cooperation, global responsibility and consumption (corresponding to SDG 10.Reduced inequality, SDG 11.Sustainable cities, SDG 12. Responsible consumption, SDG 16.Strong institutions and SDG 17. Partnerships). Mannheim prioritises an internationally connected economy and responsible consumption and fosters local development through global learning. The city is committed to European unity and its municipal development policy and fair procurement encourage global justice.

Links and relations with recovery efforts (including the NRRP)

Progress in the realisation of the Sustainability Strategy of Baden-Württemberg is monitored along the SDGs even though the strategy text, elaborated before the UN Agenda 2030, does not directly refer to the SDGs (Zukunftsinstitut GmbH, 2021).

The German NRRP includes general statements on efforts to pursue the SDGs more decisively than before with a strong focus on the green transition; climate protection; actions for clean mobility and sustainable housing; and digitalisation; as well as further measures to boost jobs; smart, sustainable and inclusive growth and investments; social and territorial cohesion; and health, social, economic and institutional resilience. There is substantial content, and measures overlaps with the Sustainability Strategy of Baden-Württemberg. The synergies and complementarities of the six missions of the German NRRP can be summarised as follows:

- Mission 1: Climate policy and energy transition corresponds to a high extent with the priorities “Energy and climate”, “Resources” and “Sustainable Mobility” as well as further action programmes like “Sport

and Sustainability” and “Transformation of science and research to support the energy transition” of the strategy.

- Mission 2: Digitalisation of the economy and infrastructure has no direct links to the sustainability strategy. However, it corresponds indirectly with the priority “Education for sustainable development” as it implies adoption of new skills and knowledge.
- Mission 3: Digitalisation of education corresponds directly with the priority “Education for sustainable development” and the action field “Science for sustainability”.
- Mission 4: Strengthening social inclusion corresponds to some extent with the priority “Sustainable integration” as well as the action programme “Sport and Sustainability”.
- Mission 5: Strengthening of a pandemic-resilient healthcare system does not directly correspond with the strategy.
- Mission 6: Modern public administration and the reduction of barriers to investment has no direct links with the strategy.

The NRRP missions interrelate in many ways with the general framework of the sustainability strategy as well as the activities of the sustainability network of Baden-Württemberg.

Considering recovery from the Covid-19 crisis, no special programmes or plans dedicated to this issue were identified in Baden-Württemberg or in Stuttgart and Mannheim. Even before this crisis, the state and the two cities were investing money in different areas of development, which are also foreseen in the NRRF. For example, the city of Stuttgart adopted a significant budget of EUR 200 million for climate actions already in December 2019.

After the outbreak of the pandemic, Baden-Württemberg commissioned a report on the economy in the state before and after the Covid-19 crisis. The key findings reveal that there are new opportunities in glocalization, meaning that local structures shall be strengthened in order to increase the region’s overall resilience within the global economy. There is a great chance for companies from the region to become winners in this process if they actively incorporate megatrends like connectivity, the combination of environmental and climate protection, innovative technologies, mobility, new work models and health within their development. A further opportunity for the region is the reshoring of production to Europe and the change in supply chains to which the companies and the state

government need to actively adapt. As a business location, Baden-Württemberg should be prepared for the rise of new, sustainable business fields (Zukunftsinstitut GmbH, 2021). It is expected that the findings of the report will be followed by a customised strategy for further sustainable development to tackle, on the one hand, recovery after the recent health crisis, and on the other hand, to give the state a chance to overcome the current crisis.

Achievements and key challenges

Baden-Württemberg is an economically active and successful region and at the same time it has ambitious aims for sustainability. The SDGs have been made visible to the inhabitants as well as stakeholders and could be incorporated into the strategies and plans at the federal state level by the provision of appropriate documents and support for the municipalities. Moreover, the cities as described above, in the example of Stuttgart and Mannheim, are addressing the SDGs more in detail by aligning their measures and activities with the SDGs. The commitment to the SDGs is also being realised through sound progress monitoring.

There are detailed indicators such as total photovoltaic output, the number of medical physicians per inhabitant or the share of recycled paper in public facility paper consumption, but the achievement, in excess, of the scheduled reduction of CO₂-emissions reflects the federal state's capability to change. Furthermore, the Climate Protection Law of Baden-Württemberg was recently amended and now specifies that the federal state must achieve climate neutrality by 2040 – instead of 2050 as previously planned.

The city of Stuttgart is making great efforts to achieve climate neutrality. In 2019, a total of 3.8 million tonnes of GHG-emissions (in CO₂-eq) were emitted in the Stuttgart urban area, representing a reduction of 41% compared to the year 1990 and exceeding the envisaged reduction targets. However, the city still has a long way to go to achieve the 1.5-degree Paris target by 2050 meaning a total reduction of 95% of GHG-emissions in comparison to 1990.

The city of Mannheim cut its CO₂ emissions from 4.3 to 3.1 million of tonnes per year between 1990 and 2018 which means a reduction of 27.7%. Even though the biggest reduction was achieved in the industry and trade sector (-32%), these still accounted for 67.5% of total emissions in the city. The most persistent emissions are those from the transport sector, with a reduction of only 8% over the analysed period (Ifeu, 2020).

It is not yet possible to assess the real contribution of the RRF to the fulfilment of SDGs in Baden-Württemberg, Stuttgart and Mannheim. As the state and city measures and projects for the SDGs are not contrary to the RRF missions it is to be expected that many of the initiatives could gain an extra boost from the RRF.

For the state with such a significant share of industry in the economy, the main challenge is the transition to clean energy. This process gained new importance in the face of the current political situation and the hitherto dependency on Russian gas supplies for energy provision.

3.5 Portugal: Azores

Context

The Azores, a Portuguese archipelago and autonomous region located in the North Atlantic, is composed of nine islands of volcanic origin: Santa Maria, São Miguel, Terceira, Graciosa, São Jorge, Pico, Faial, Corvo, and Flores. The total population of the archipelago is 236 440 inhabitants (CENSUS 2021), unevenly distributed across the islands. Approximately 56% of the population live in São Miguel, 23% in Terceira and 21% are spread among the other 7 islands.

For many years the Azores have been strongly associated with practices of sustainable development, having received awards for their conservation programmes. Almost 25% of the Azorean terrestrial area is protected and integrated in the Natural Parks created on each and every island in the archipelago. There are 50 Marine Protected Areas (MPAs) included in the National Parks or located in the Marine Park of the Azores, offshore. UNESCO has recognized several Azorean sites as World Network of Biosphere Reserves, World Heritage sites, or examples of best practices. Moreover, the Azores were also the first archipelago to receive an EarthCheck certification under the sustainable tourism destination programme, recognized by the Global Sustainable Tourism Council (GSTC).

As an autonomous region, the Azores have the right to political, legislative, administrative, financial, and patrimonial autonomy. The Regional Government is responsible for economic and social development plans and implementation, and the regional budgets. Therefore, projects such as the UN Agenda 2030 are within the legislation of the Regional Government of the Autonomous Region of the Azores.

According to the OECD (2020), the Azores show a positive change for all SDGs and are above the OECD countries average in eight out of the 17 SDGs, for which there is available data. The region has already reached its goal (i.e., value of 100) in SDG 7.Clean energy. The next highest values are seen for SDG 16.Strong institutions (91) and SDG 17.Partnerships (92). The lowest values are in SDG 9.Industry and innovation (9) and SDG 4.Quality education (25).

According to the CENSUS 2021, only 12.7% of the total population have completed higher education, while 36.6% of the population have completed only the basic education or have not completed any education cycle. According to Eurostat (2022), the rate of persons at risk of poverty or social exclusion in the Autonomous Region of the Azores was 32.4% in 2020, while the Portuguese national average was 19.8%.

During the first trimester of 2022, the rate of unemployment was 6.6% in the Azores (Serviço Regional de Estatística dos Açores, 2022). The major employer is the public administration, followed by the service sector, and agriculture (Azevedo, 2017). Although the agriculture sector is the third largest employer, it is still heavily dependent on family labour (80%). The biggest challenges in this sector regard fragmentation of the territory and the high costs of transportation, which make all products generally less competitive for exportation (Azevedo, 2017). The tourism sector is another important sector for the Azores. Between 2015 and 2019, there was a growth of 92% in the number of guests in the archipelago, along with a decrease in seasonality, and diversification of the overnight stays across the islands, leading to more equal territorial dispersion of tourists (Destination Management Organization of Azores, 2019). These rates were strongly impacted by the COVID-19 pandemic, however, according to the Azorean Statistics office, the number of tourists visiting the islands is rising again.

Strategy

The United Nations 70th General Assembly designated 2017 as the International Year of Sustainable Tourism for Development. The goal was to raise awareness of the contribution the tourism sector can bring to SDGs. The sector is considered a possible engine and driver of sustainable development due to the fact it interacts and collaborates with many other industries and services. Therefore, the Regional Government of the Azores decided to align the growth of their tourism sector, with the regional plans for sustainable development. In addition, in the same year, the Regional Government of the Azores announced its intention to become the first archipelago to obtain Sustainable Destination Certification according to the criteria of the GSTC, which is also strongly aligned with all the SDGs.

The regional government created the Destination Management Organization (DMO) in 2019, an extension of the Secretariat for Tourism, Mobility and Infrastructure. The DMO has the mission of being a facilitator and catalyst of sustainable development. It articulates an advisory committee, a monitoring group, the green teams, the sustainable charter, and the awareness meetings.

- The advisory committee is composed of 25 entities (including representatives of local interests and associations). Their meetings take

place at least once a year to discuss the issues observed within the region. One example of the committee's responsibilities is the collection of information about potential risks in the archipelago. These are in the sphere of natural resources management, waste management, land use management, social and culture, and economics.

- The monitoring group is composed of representatives from different government departments. Their meetings take place twice a year, once the information about potential risks (collected by the advisory committee) has been analysed, along with other relevant documentation, to be aligned with the plans of the regional departments.
- The green teams are monitoring forums present on every island of the archipelago. Their meetings take place twice a year, where local issues are discussed with representatives of the communities. These meetings work to sensitize the local communities about their role in the SDGs, collect information about their necessities, and find potential solutions.
- The sustainable charter is a tool developed to encourage the participation of the private sector in SDGs. It was first launched by the regional government in 2017, and it is based on the SDG Compass. In 2022, there were already 207 entities subscribed, and their commitments totalled 837 actions aligned to the SDGs (generally 3 actions per entity, per year).
- The awareness meetings are organized to bring awareness to the population and other organizations (private and NGOs) about the importance of their participation in the process of achieving the SDGs.

The DMO is also responsible for the management of the “Action Plan for the Sustainability of the Azores Destination”, designed and implemented with the assistance of the monitoring group. During their biannual meetings, the strategies and operational instruments planned by each regional department are verified, and then updated in the action plan. The first version of the “Action Plan for the Sustainability of the Azores Destination” was published by the DMO in 2019. It was intended to cover the period of 2019 to 2027, however it was designed to be updated every year, according to new developments and necessities. This document describes the region's goals, aligned with the SDGs and the GSTC domains of evaluation, in a detailed action plan (Destination Management Organization of Azores, 2019 and 2021) . In December 2019, the archipelago received the first EarthCheck certification, according to GSTC criteria. However, this certification is not final, it is part of a continuous and complex process, and remains important for the updated versions of the Action Plan for the Sustainability of the Azores Destination.

The action plan published in 2019 is designed for both short-term and long-term achievements. It presents 10 key areas of activity, each composed of clear goals, justification, list of entities to involve, and both global and key actions. The document also presents activity maps, detailing each key action with its objectives, goals, deadline, and budget. The 10 key areas include energy efficiency, greenhouse gases/ decarbonization, drinking water resources, wastewater and sewage, ecosystems and biodiversity, transport, solid waste, society and culture, economy, and territorial planning. The action plan prioritised 10 of the SDGs, with the intention of strengthening social and territorial cohesion, to promote better life conditions for the local population, and to promote economic growth through the development of the tourism sector. The priority SDGs are: SDG 4.Quality education, SDG 7.Clean energy, SDG 8.Decent work, SDG 10.Reduced inequality, SDG 11.Sustainable cities, SDG 12.Responsible consumption, SDG 13.Climate action, SDG 14.Life below water, SDG 15.Life on land, and SDG 17.Partnerships.

The action plan was duly updated, republished in December 2021, and refers to the period between 2019 and 2030. It indicates actions that have already been accomplished, those that have been delayed, and the addition of new commitments and their respective plans. It also includes two newly identified key areas of activity, “Environmentally harmful substances”, and “Air quality and light and noise pollution”. The latest version also includes a sub-chapter on measures that were taken to prevent the spread of COVID-19.

Table 3.4: Actions listed in the Action Plan for the Sustainability of the Azores Destination

Key areas	Goals (2019 – 2030)	Identified SDGs*
1. Energy Efficiency	<ul style="list-style-type: none"> - Raise awareness in the local community by holding at least 4 meetings with the Energy Efficiency every year. - Raising awareness in the school community by carrying out awareness-raising actions in schools in the region and promoting the adoption of energy efficiency practices by the hotel sector, by carrying out actions to disseminate good practices on social networks. - Integrate at least one energy efficiency innovation project per year. - Improve the efficiency of heat recovery systems for the exhaust gases of power plants. 	7. Clean energy 13. Climate action
2. Greenhouse gases/ decarbonization	<ul style="list-style-type: none"> - Ensure, by 2025 that 61% of the electricity is produced from renewable and endogenous sources. - Until 2025, annually produce 187 GWh of energy from geothermal sources in the Azores. - Install 16 fast charging points and 118 standard public access points by 2024. - By 2024, ensure that 50% of the regional public administration and public sector automobile fleet is electrical. 	7. Clean energy 13. Climate action
3. Drinking water resources	<ul style="list-style-type: none"> - By 2023, install 3,000 flow reducers to reduce water consumption, namely, in large non-domestic consumers. - Reduction, by 2027, of water losses in public supply systems to less than 20% of the total water abstracted. 	6. Clean water

4. Wastewater and Sewage	- Every year, train the human resources of the WWTP, ERA and similar for the storage and management of hazardous materials and the correct handling of these.	6. Clean water
5. Ecosystems and Biodiversity	- By 2027, create 124 ha of ecological corridors to ensure the status of 9 protected habitats. - By 2025, increase the regional network of marine protected areas to cover at least 15% of the Zone Exclusive Economy of the Azores. - By 2023 reinforce the populations of Azorina Vidalli and Lotus Azoricus to the “favorable” grade. - By 2024, increase the population of three endemic beetles by 15%.	14. Life below water 15. Life on land
6. Transports	- By 2024, proceed with the acquisition of 10 new buses/minibuses for public transport powered by energy "green".	11. Sustainable cities
7. Solid waste	- Prohibit, in 2021, the provision by hotel, restaurant and cafeteria establishments or similar of single-use products whose main structural component is plastic, namely plates, bowls, glasses, cutlery, straws and straws. - Install, by 2022, at least 45 containers for the selective collection of waste in the Forest Reserves of Playground. - Install, in 2022, 25 logistics machines for the collection of non-reusable packaging, within the scope of the project “Gives another value to packaging”.	12. Responsible consumption
8. Society and Culture	- Promote measures to enhance and promote the material and intangible cultural heritage of the RAA. - Empower the territory with digital tools that facilitate and encourage access to specialized training, information on existing cultural heritage and promote culture Azorean and associated initiatives. - Recognize and reward good business, associative or individual practices that stand out through sustainability initiatives or projects in the Azores.	8. Decent work 9. Industry and innovation 10. Reduced inequality
9. Economy	- By 2021, complete the installation of the marine megafauna observation and monitoring point. - Annually, train 100 professionals through the Escola do Mar dos Açores. - By 2023, prepare the strategic plan for the use of fishery by-products. - By 2027, increase the number of tourism companies that integrate smart technologies into management of your business.	8. Decent work 9. Industry and innovation 17. Partnerships
10. Territorial Planning Policy	- Empower the territory with measures that mitigate the impacts of climate change and prepare the region to react more efficiently to meteorological phenomena extremes, changes in rainfall patterns, or other associated natural events. - Study and better manage the maritime space and the activities promoted. - Guide economic agents and discipline administrative action, defining the strategic tourism products and the evolution of the tourism offer.	11. Sustainable cities 14. Life below water

Source: Destination Management Organization of Azores (2021). *UN SDGs identified by the author.

Other important documents published by the DMO are the risk assessment (with assistance of the advisory committee), which is also updated every year and covers subjects such as natural resources management, waste management, land use management, social and culture, and economics; the sustainability report, which presents the results of the monitoring activities, the progress accomplished by the entities and the final goals of the region; and the sustainability management policy, a guiding document that describes the main commitments and goals of the regional government.

Links and relations with recovery efforts (including the NRRP)

The Portuguese NRRP, “*Recuperar Portugal, Construindo o Futuro*”, is organized around 3 dimensions: resilience, climate transition, and digital transition. These dimensions include 20 components, 37 reforms and 83 structural investments to be executed by 2026 (Ministério do Planeamento Português, 2021).

Out of the 83 structural investments, 11 are dedicated to the Autonomous Region of the Azores (Governo dos Açores, 2021), for EUR 580 million. Out of these, EUR 369 million are designated to the resilience dimension (7 structural investments); EUR 148 million are designated to the climate transition dimension (2 structural investments), and EUR 63 million are designated to the digital transition dimension (2 structural investments). These investments will be managed by the regional authorities and made available through mobilizing agents. Ten components will be covered by the investments: the national health service; housing; good health and well-being; capitalization and business innovation; qualifications and competences; infrastructure; the sea/ocean; hydrogen and renewables; public administration; and digital school (Governo dos Açores, 2021). Therefore, the majority of the investments are aimed at recovery in those sectors that suffered the most during the COVID-19 pandemic, but there are also relevant investments dedicated to the further development and modernization of other sectors.

Table 3.5: Portuguese NRRP Components that explicitly include Azores

Key areas of activity (Components)	Structural investments	UN SDGs	Investment (EUR million)
1. National Health Service	- Digital Hospital in the Autonomous Region of Azores.	3. Good health	30
2. Housing	- Enhance the housing conditions of the housing stock of the Autonomous Region of the Azores.	11. Sustainable cities	60
3. Good health and well-being	- Implement the Regional Strategy to Combat Poverty and Social Exclusion - Social Support Networks.	1. No Poverty	35
5. Capitalization and business innovation	- Recapitalize Azores Business System Economic. - Relaunch of Azorean Agriculture.	8. Decent work 9. Industry and innovation	125 30
6. Qualifications and competences	- Adult qualification and lifelong learning in the RAA.	4. Quality education	29
7. Infrastructure	- Logistics Circuits - Regional Road Network of the Azores.	9. Industry and innovation, 11. Sustainable cities	60
10. The Sea/Ocean	- Development of the "Cluster of the Azores Sea".	14. Life below water	32

14. Hydrogen and renewables	- Energy Transition in the Azores	13. Climate action	116
19. Public administration	- Modernization and digitization of Public Administration - RAA	16. Strong institutions	25
20. Digital school	- Digital education (Azores)	4. Quality education	38

Source: the components listed in the NRRP Portugal column are the only ones that explicitly mention the Azores and have been assigned by the author to the respective SDGs.

There are links to the SDGs in the NRRP and a few of its structural investment proposals address the same SDGs as the Azorean Action Plan commitments. The table below on “Synergies between the SDGs, the Azorean Sustainability Plan, and the NRRP” lists those components of the NRRP that refer to the Azores and the commitments of the Azorean Sustainability Plan in relation to their respective SDGs. Although both plans address SDG 11. Sustainable cities, SDG 13. Climate action, and SDG 14. Life below water, the foreseen activities do not overlap. There are two SDGs that do not seem to be addressed by the plans, SDG 2. Zero hunger and SDG 5. Gender equality. However, both are covered by the Portuguese NRRP and by the Azorean Action Plan in a transversal manner. Therefore, it is possible to presume that the Portuguese NRRP and the Action Plan for the Sustainability of the Azores Destination are complementary.

Table 3.6: Synergies between the SDGs, the Azorean Sustainability Plan, and the NRRP

UN SDGs	Azorean Action Plan 2019 – 2030 areas of activity*	Portuguese NRRP components**
1. No poverty		3. Social Responses
3. Good health		1. National Health Service
4. Quality education		6. Qualifications and competences 20. Digital school
6. Clean water	3. Management of water resources 4. Management of water drainage and sewage	
7. Clean energy	1. Energy Efficiency 2. Gas emissions and decarbonization	
8. Decent work	8. Society and Culture 9. Economy	5. Capitalization and business innovation
9. Industry and innovation	8. Society and Culture 9. Economy	5. Capitalization and business innovation 7. Infrastructure
10. Reduced inequality	8. Society and Culture	
11. Sustainable cities	6. Transports 10. Territorial Planning	2. Housing 7. Infrastructure
12. Responsible consumption	7. Solid waste	
13. Climate action	1. Energy Efficiency 2. Gas emissions and decarbonization	14. Hydrogen and renewables

14. Life below water	5. Ecosystems and Biodiversity 10. Territorial Planning	10. The Sea/Ocean
15. Life on land	5. Ecosystems and Biodiversity	
16. Strong institutions		19. Public administration
17. Partnerships	8. Society and Culture 9. Economy	

Source: * Some of the areas of activities listed in the Azorean Action Plan 2019-2030 column cover one or more SDGs in a transversal manner. These connections are not illustrated by the table.
 **The components listed in the NRRP Portugal column are the only ones that explicitly mention the Azores and have been assigned by the author to the respective SDGs.

Achievements and key challenges

The Azores are moving forward in the direction of the SDGs, as pointed out by the OECD (2020), and confirmed by the analysis of the action plan update and the sustainability report. It is largely thanks to the collaborative strategy, led by the DMO, that it is possible to engage the public services, the private sector, and individuals, facilitating and accelerating a path towards the SDGs. The Sustainable Charter has already been internationally recognized as a best practice and used as benchmark for sustainable development plans in other places.

The main challenge of the region is territorial fragmentation which results in a lack of accessibility to health services, education, and work opportunities for part of the population. Consequently, this fragmentation is also an obstacle for the achievement of the SDGs. The investments envisaged by the Portuguese NRRP in the dimensions of resilience and digital transition will most likely assist the region to overcome the issues of territorial fragmentation.

For good and efficient implementation of the Portuguese NRRP, it is important to maintain a collaborative approach and to facilitate the access to funds, in a coordinated structure and results oriented manner. The NRRP should be simple to comprehend and implement at regional level. This could be facilitated through pilot projects involving all entities, both public and private.

4. Conclusions and policy recommendations

This report has investigated how and to what extent the UN SDGs have been included in the European Semester, the NRRPs and the LRA strategies for recovery and growth. Based on desk research using the latest available estimates and reports, progress towards achieving the SDGs at EU level was investigated in the first chapter. Applying the methodology adopted in the 2021 CoR study, the report then analysed the degree of integration of the SDGs in the 26 NRRPs, by investigating whether the plans implicitly or explicitly mention the SDGs and foresee interventions (projects and/or reforms) to address them. The analysis also explored the use of the UN SDG indicators to monitor implementation of the NRRPs. The third and final chapter presents five case studies from both regions and municipalities applying strategies for the implementation of the SDGs with potential synergies with the interventions designed in the NRRPs.

The main findings, summarised at European, national and regional level, and key recommendations are illustrated in the following two sections.

4.1 Key study findings

European level

The SDGs have gradually been included in the European Semester, but despite the progress made, there are still several issues to be addressed:

- The literature has in fact underlined the **lack of a comprehensive strategy** addressing the gaps to the EU's achievement of the SDGs, as well as the need for a **well-structured monitoring methodology**;
- There is a risk that procedures become even more **complex and time-consuming** with the enlargement of the Semester's scope;
- There are also shortcomings in relation to the NRRPs. **The SDGs are not mentioned in the guidance** provided by the EC to Member States for drafting their NRRPs and there is a lack of **cohesive coordination between the SDGs and all EU policies**, in particular the RRF. Moreover, there is **very limited consideration for the territorial dimension**, and therefore LRA involvement, in both the design and in the implementation of the NRRPs;

- Overall, **there are persisting challenges limiting the application of the SDGs at local level**, such as administrative and financial barriers, lack of support from national governments and lack of coordination across different levels of governance, limited human resources, and difficulties in the collection of the necessary and relevant data to monitor local and regional progress.
- Recent data on the overall achievement of the SDGs indicate that the EU has made progress in nine SDGs (strongest in SDGs 8.Decent work, 9. Industry and innovation, 16.Strong institutions; significant in SDGs 1.No Poverty, and 7.Clean energy; and good in SDGs 3.Good health, 5.Gender equality, and 14.Life below water). However, **in eight SDGs the progress has been slow** (SDGs 2.Zero hunger, 4.Quality education, 10.Reduced inequality, 11.Sustainable cities, 12.Responsible consumption, and 13.Climate action), **neutral** (SDGs 6.Clean water and 17.Partnerships) **or even reversed** (SDG 15.Life on land);
- **The pandemic has made the achievement of the 2030 Agenda and the SDGs more challenging**: no EU country is on track to achieve all 17 SDGs by 2030 and, for the first time since the adoption of the SDGs in 2015, the average SDG Index score for the EU saw a slight decline in the EU27 on average;
- The pandemic has also exacerbated inequalities within countries, slowed down the progress towards the environmental goals and increased negative spillovers; **these new challenges could further widen the persisting differences in SDG performance across and within EU Member States.**

National level

The analysis of the 26 NRRPs has confirmed the key finding outlined in the 2021 CoR report, which underlined the **lack of integration of the SDGs in the NRRPs**. Although there are several initiatives – projects, strategies, or even reforms - that could indirectly and implicitly contribute to achieving the SDGs, **the SDGs do not seem to be perceived as a coherent framework for sustainable recovery at the national level in the NRRPs**. The analysis in this report has in fact demonstrated that:

- **The majority of Member States merely mention the SDGs implicitly.** Only Cyprus, Denmark and Estonia mention all 17 SDGs explicitly, while Belgium, Croatia and Poland, mention most of the SDGs explicitly.

- **Very few Member States explicitly and clearly link NRRP components to the SDGs.** In most of the cases, in fact, reference to the SDG is only at intervention level (project or reform), while in others, the SDGs are explicitly mentioned but without a clear reference to a specific NRRP component, intervention or reform. The few exceptions include Belgium, Cyprus, Croatia, Estonia and Poland.
- **The overall level of integration is rather low, with the highest score reached in economic SDGs** (but below 50%), in which all 26 Member States have designed interventions or reforms for the two economic SDGs 8.Decent work and 9. Industry and innovation. The lowest values were scored in the social SDG 2.Zero hunger (which also promotes sustainable agriculture), and in the environmental SDGs 7.Clean water and 14.Life below water. These three SDGs can be considered of primary importance given the current situation where food and water resources are threatened and limited by the effects of the Ukraine war and climate change. A relatively low level of integration was also recorded for SDG 12.Responsible consumption and production, which should promote circular economy strategies, and is therefore strongly connected to sustainable agriculture and the management of natural resources.
- **The lowest integration value was recorded in the two political SDGs,** 16.Strong institutions and 17.Partnerships. All Member States, with the exception of Finland, foresee interventions, especially reforms, to improve the institutional framework, but only six have measures for SDG 17. Overall, there is little interest in the NRRPs to improve the role and the functioning of LRAs, to foster cooperation and coordination across different levels of government, and to promote and encourage effective public, public-private and civil society partnerships.
- **The use of SDG indicators in the NRRPs is limited** to very few Member States, and for only a few SDGs. Moreover, the use is generally limited to merely one or two SDG indicators. The SDGs most covered by SDG indicators are SDG 4.Quality education (five Member States) and SDG 7.Clean energy (four Member States). The lack of SDG indicators limits comparability between the plans and does not allow for effective monitoring of the NRRPs contribution to progress towards the SDGs.

Regional level

The report analysed five case studies in detail: Flanders and Ghent municipality (Belgium), Tallin (Estonia), Region Provence Alpes Cote d'Azur (France), Baden Wurttemberg and Stuttgart and Mannheim municipalities (Germany), and Azores

(Portugal). These LRA experiences highlight several lessons learned on the effective and efficient design and implementation of local action plans to address the SDGs:

- **Clear objectives and targets, and a strategy based on a long-term policy vision.** In some cases (for instance, Azores and Tallin) the action plans focus on a targeted number of SDGs, which are related to the principal local challenges and addressed through the identification of key policy areas of intervention. In other cases (for instance, Ghent municipality), the achievement of the SDGs is also programmed and monitored in different sub-plans and steps, starting first from the social SDGs and then working up to the economic and environmental ones, while the political SDGs are transversally addressed. The strategies are therefore effectively designed to respond to the specific characteristics of the local contexts, with mid-term and long-term milestones.
- **Well-structured stakeholder involvement.** For instance, Azores created the Sustainable Charter to encourage private sector participation in the implementation of the SDG action plan. In the Region Provence Alpes Cote d'Azur, the strategy was elaborated in consultation with local stakeholders, through forums and workshops with the population, local authorities, and different associations. Dialogue bodies have also been set up to accompany the implementation of the action plans and an annual conference on the future of the territories has been organised to discuss the implementation of the strategy with all the partners involved in its preparation.
- **Adopting an effective bottom-up approach.** For example, in Tallin the city's development strategy is based on the master plans of the city districts. The city of Stuttgart has established networks and platforms for the exchange of ideas to strengthen cooperation, knowledge management and expand participation. In Azores, the Awareness Meetings raise awareness in the population and other organizations (private and NGOs) of the importance of their participation in the process of achieving the SDGs.
- **An efficient governance structure.** An illustrative example is that from Azores, which has created an ad-hoc structure, the DMO - an extension of the Secretariat for Tourism, Mobility and Infrastructure. This body, consisting of an Advisory Committee, a Monitoring Group, and the Green Teams, other than the above-mentioned Sustainable Charter and Awareness Meetings is a facilitator and catalyst for sustainable development. The SRADDET strategy in Region Provence Alpes Cote d'Azur is implemented through a Partnership Committee, which includes the public bodies involved in the preparation of the plan, and monitored by an Internal

Monitoring Committee gathering the 20 Vice-Presidents and Chairmen of the Region's study and working committees.

- **A dedicated budget.** This emerges from Tallin, which has a structured budget strategy based on the special-strategic plans for each city district for a period of up to five years. The Flemish government has adopted a more innovative approach identifying potential projects - mainly in the thematic areas of renovation and energy efficiency, as well as access to education, and affordable housing - on an annual basis which are financed through sustainability bonds, thus providing investors with a means of aligning their asset allocations with sustainability objectives.
- **A well-structured monitoring system.** The action plans adopted by the LRAs analysed are all subject to consolidated monitoring systems. In Azores, the DMO has a specific Monitoring Group, composed of representatives of the different government departments. Moreover, the Green Teams, monitoring forums present on each island of the archipelago, sensitize local communities about their role in the SDGs, provide potential solutions, and collect information. Azores produces a risk assessment, updated every year; the Sustainability Report, presents the results of the monitoring activities; and the Sustainability Management Policy is a guiding document that describes the main commitments and goals of the Regional Government. Ghent intends to produce various yearly reports each focused on progress towards the SDGs within particular thematic areas (people in 2021, prosperity in 2022, planet in 2023). Indicators, such as those used by Azores and Stuttgart, are mainly based on the UN SDG indicators. Baden-Württemberg's strategy uses 23 state specific tailored indicators, but many overlap with the UN SDG indicators. Similarly, Tallin has a monitoring mechanism based on Estonian sustainable development indicators.
- **Aligning local to national and regional strategies.** In some cases, the case studies highlight the importance of links between local strategies and regional or national action plans. For instance, in Estonia, national and local strategies run parallel. The Tallinn 2035 Development Strategy was in fact designed at the same time as the national one, Estonia 2035. They share similar goals and the same monitoring system. Moreover, as the Estonian NRRP explicitly refers to Estonia 2035, there is a strong alignment between the NRRP and Tallinn 2035. In Baden-Württemberg, the strategy has a special focus on SDG 11. Sustainable cities, which is equally dedicated to all municipalities. The state provided guidelines for the elaboration of municipal sustainability reports, the principles of sustainable community

development, fields of action for municipal development and the corresponding tailored indicators.

The report has also investigated potential synergies between the NRRPs and the SDGs through the five LRA experiences. It emerged (as discussed in chapter 2) that reference to the SDGs in the five NRRPs remains very limited. The only exception being Estonia, one of the few Member States explicitly mentioning the SDGs, with clear links between Estonia 2035 and, indirectly, with the Tallinn 2035 Development Strategy which has several goals addressing the same SDGs.

However, there are **several measures in the NRRPs which could support and finance the implementation of projects and interventions at a local level in line with the local SDG strategies**. One illustrative example is the State-Region Plan Contract 2021-2027 signed between the French central government and Region Provence Alpes Cote d'Azur, the first regional version of the French recovery plan and structured in line with SRADDET. Similarly, closely aligned to the NRRP, the Flemish Government has a dedicated budget (financed via the RRF) to support regional resilience via the Flemish Resilience Plan which has thematic alignment with the local SDG Flemish Vision 2030/2050 framework. In the Portuguese NRRP, out of the 83 structural investments, 11 are dedicated to the Autonomous Region of the Azores in line with the resilience and climate transition dimensions. The Estonian NRRP also has projects planned for Tallin in accordance with the SDGs. The missions of the German NRRP interrelate in many ways with the general framework of the Baden-Württemberg Sustainability Strategy.

4.2 Policy recommendations

The following recommendations are made to improve the integration of the SDGs in the recovery phase, at EU, national and regional level:

- The EC **should continue to improve integration of the SDGs in the European Semester**, by strengthening the SDGs narrative in its documents, better linking it to the monitoring of the NRRPs.
- The EC should develop a **structured SDG implementation strategy with clear, measurable and time-bound EU-wide targets**. Sustainable development needs to be prioritised at every stage of the EU policy development process, and all dimensions of sustainable development should be systematically considered in all impact assessments.

- **A stronger alignment in economic, social and environmental matters is required between the EU's governance systems** such as the European Semester, the European Green Deal and the implementation of the European Pillar of Social Rights and the SDGs;
- Correct integration of SDGs in the European Semester **implies better inclusion of regions and cities in the Semester governance**. The EU should implement and better structure the ‘whole of government’ approach to the SDGs (initiated in 2019) and recognize the key role of LRAs in designing and delivering SDG action plans.
- The EC needs to consider establishing a body for **structured stakeholder engagement in the implementation of the SDGs**, by reinstating the multi-stakeholder platform to advise the EU on the implementation of the SDGs, in an inclusive and participatory manner. The platform could also help prepare the EU’s voluntary review, ensuring that the process for its preparation is participatory and inclusive of local and regional representatives.
- The EC should consider **extending the SDGs beyond the cohesion policy funds** and explore synergies with Horizon Europe, LIFE+, InvestEU, Creative Europe, Digital Europe, as well as the financial support of the European Investment Bank to mainstream sustainable development and scale up policies and projects. Meeting the SDGs should be a common and crosscutting objective for all EU funding programmes under direct and indirect management.
- The **Smart Specialisation Strategy framework could be revisited and extended to foster transformative system innovation for the SDGs**. The SDGs could in fact offer a strategic guidance for selecting areas of specialisation and inter-regional collaborations to encourage local investment in projects and policies that support innovation with the transformative potential to tackle sustainability challenges.
- The **monitoring system also needs to be reinforced to capture the contribution of EU cohesion policy to SDG-related objectives other than climate**. The EU has introduced climate coefficients (based on OECD Rio markers) to monitor climate expenditure in the ESIF since 2014-2020; a similar monitoring system should also be introduced to monitor expenditure in economic, social and political (i.e., strengthening multilevel governance) issues.

- The **robustness of the Eurostat SDGs monitoring system should be increased**, by including SDG achievement levels that can be easily quantified and determined at LRA level, and in which LRAs can have an impact.
- Despite the limited reference to the SDGs in the NRRPs especially in the use of monitoring indicators, **Member States are called on to monitor the implementation of the NRRPs adopting the SDG indicators**. Moreover, the EC should start to assess and map how the NRRPs contribute to the achieving the SDGs.
- Member States need to **actively involve LRAs in the implementation phases of the NRRPs** especially for those investments with a local impact and with a clear link to sustainable development policies.
- The EC and CoR could organise a **joint forum on the implementation of the RRF to monitor the involvement of LRAs within the NRRPs**. This will help set up a structured dialogue in a spirit of shared responsibilities for sustainable recovery.
- An **EU sustainability award could be introduced to stimulate LRAs to adopt and implement SDG strategies by rewarding those that are better progressing towards the SDGs**. This award could be modelled on the European Entrepreneurial Region award for LRAs that implement strategies for the adoption of the Small Business Act.
- At local level, LRAs should **use the SDG framework as the explicit and formal reference for budget procedures**, encouraging each policy actor to identify how strategies and actions would benefit sustainability in other policy areas within the competence of the local government.
- **LRAs could adopt the EU taxonomy for sustainable activities** to promote sustainable local investments by defining clear criteria for investments;
- LRAs should establish **knowledge partnerships and collaboration with the scientific community, civil society and private sector to strengthen the local science-policy interface**, to increase capacity building, scale up sustainable solutions and monitor the progress towards the SDGs.

- **Direct incentives for financial and technical support for LRAs should be set-up** (both at EU and national level) to design and implement local SDG strategies, allow LRAs to cooperate directly with the private sector and civil society to advance the SDGs, and to improve awareness among citizens.

References

- Azevedo F. (2017), *Estudo para a Comissão REGI - A situação económica, social e territorial dos Açores (Portugal)*.
- Bertelsmann Stiftung and Sustainable Development Solution Network (2019), *Sustainable Development Report 2019*.
- Campbell, M. (2021), *What makes Tallinn the greenest city in Europe?*
- CCRE-CEMR (2020), *The 2030 Agenda - Through the eyes of local and regional governments' associations*.
- City of Ghent (2020), *Ghent Sustainability Report 2020 – Voluntary Local Review*.
- City of Ghent (2021), *Ghent Sustainability Report 2021 – Voluntary Local Review*.
- City of Tallinn (2020a), *Tallinn 2035 Development Strategy*.
- City of Tallinn (2020b), *Tallinn 2035 Development Strategy - Leaflet*.
- City of Tallinn (2020c), *The Short Analysis - Work Material Development Strategy “Tallinn 2035”*.
- City of Tallinn (2021), *Explanation of Vision and Strategic Goals in “Tallinn 2035” development strategy*.
- City of Tallinn (2022), *Strategic planning*.
- Destination Management Organization of Azores (2019), *Plano de Ação 2019 - 2027 Sustentabilidade do Destino Turístico Açores*.
- Destination Management Organization of Azores (2021), *Plano de Ação 2019-2030 da Sustentabilidade do Destino Turístico Açores*.
- Eesti 2035 (2022), *Overview of the implementation of the ‘Estonia 2035’ Action Plan*.
- Euro Cities (2022), *Tallinn*.

- European Committee of the Regions (2021a) *Delivering on the Sustainable Development Goals by 2030*, Opinion, 145th plenary session, 30 June–1 July 2021.
- European Committee of the Regions (2021b), *Regional and local authorities and the National Recovery and Resilience Plans*.
- European Committee of the Regions and CCRE-CEMR (2021), *The involvement of municipalities, cities and regions in the preparation of the national Recovery and Resilience Plans: Results of the CoR-CEMR targeted consultation*, January 2021.
- European Committee of the Regions and CCRE-CEMR (2022), *Implementation of the Recovery and Resilience Facility: The Perspective of Local and Regional Authorities - Results of the CoR-CEMR targeted consultation*, April 2022.
- European Parliament Research Service (2022), *Estonia's National Recovery and Resilience Plan - Latest state of play*.
- Eurostat (2022), *Sustainable development in the European Union - Monitoring report on progress towards the SDGs in an EU context - 2022 Edition*, May 2022.
- Finance Flanders (2019), *Sustainability Bond Reporting 2018*.
- Finance Flanders (2020), *Sustainability Bond Reporting 2019*.
- Flemish Community (2019), *Sustainability Bond Investor Presentation*.
- Government of Flanders (2020), *Flemish Resilience – Government of Flanders Recovery Plan*.
- Governo dos Açores (2021), *Recuperar Portugal, Construindo o Futuro / Investimentos dos Açores*.
- Ifeu (2020), *Aktualisierung und Anpassung der CO2-Bilanz Energie und Verkehr für die Stadt Mannheim bis 2018*.
- Kabinet van de staatssecretaris voor Relance en Strategische Investeringsen, belast met Wetenschapsbeleid (2021), *Nationaal Plan Voor Herstel En Veerkracht*.
- Mandelli M. and Sabato S. (2021), *‘Integrating the Sustainable Development Goals into the European Semester: a governance conundrum for the von der*

Leyen Commission? in European Trade Union Institute & European Social Observatory ‘Social policy in the European Union: state of play 2020. Facing the pandemic’, January 2021.

- Ministério do Planeamento Português (2021), *Recuperar Portugal, Construindo o futuro - PRR Plano de Recuperação e Resiliência*.
- Nachhaltig handeln Baden-Württemberg (2015), *N!-Berichte für Kommunen Leitfaden zur Erstellung von kommunalen Nachhaltigkeitsberichten*.
- OECD (2020), *OECD Regional Statistics (database) - Measuring the distance to the SDGs*.
- Republic of Estonia, Government Office (2020), *Review of the implementation of the UN2030 Agenda in Estonia*.
- Région Provence Alpes Côte d’Azur (2020), *Contrat d’avenir Etat en ProvenceAlpes-- Région Côte d’Azur 20212027*.
- Région Sud (2019), *Schéma Régional D’aménagement, De Développement Durable Et D’égalité Des Territoires Sraddet*, Rapport.
- SDG Watch Europe (2020a), *The sustainability illusion – The reality behind the EU’s sustainability claims and the necessity to accelerate action*, Civil society SDG monitoring report.
- SDG Watch Europe (2020b), *Time to reach for the moon – The EU needs to step up action and lead the transformation to sustainability*, Civil society SDG monitoring report.
- SDG Watch Europe (2021), *This is not enough! Reaffirming our call for ambitious EU policies on the SDGs*.
- Serviço Regional de Estatística dos Açores (2022), *Boletim Trimestral - 1o Trimestre de 2022*.
- Solidar (2020), *The SDGs and the European Semester*, Briefing Paper 96, December 2020.
- Staatsministerium Baden-Württemberg (2022), *Baden-Württemberg und die anderen Länder*.
- stadsbestuur van Gent (2022), *Bevolkingscijfers over Gent*.

- Stadt Karlsruhe (2021), *Statistik aktuell Bevölkerung*.
- Stadt Mannheim (2019a), *Mission statement Mannheim 2030*.
- Stadt Mannheim (2019b), *Voluntary Local Review - The Implementation of the United Nations' Sustainable Development Goals in Mannheim 2030*.
- Stadt Mannheim (2022), *Bevölkerung*.
- Statistiek Vlaanderen (2022a), *Vlaanderen in cijfers*.
- Statistiek Vlaanderen (2022b), *VDAB-werkzoekenden*.
- Statistiek Vlaanderen (2022c), *Bevolking in armoede of sociale uitsluiting*.
- Statistiek Vlaanderen (2022d), *Huishoudelijk afval*.
- Statistiek Vlaanderen (2022e), *Koolstofvoetafdruk*.
- Statistisches Amt der Landeshauptstadt Stuttgart (2022), *Informationen zur Einwohnerentwicklung Mai 2022*.
- Statistische Ämter der Länder (2022), *Volkswirtschaftliche Gesamtrechnungen der Länder*.
- Statistisches Landesamt Baden-Württemberg (2021a), *Klima und Luft Treibhausgas-Emissionen*.
- Statistisches Landesamt Baden-Württemberg (2021b), *Environmental Data-Environmental indicators for Baden-Württemberg*.
- Sustainable Development Solutions Network and Institute for European Environmental Policy (2020), *Europe Sustainable Development Report 2020 – Meeting the Sustainable Development Goals in the face of the COVID-19 pandemic*, December 2020.
- Sustainable Development Solutions Network and Institute for European Environmental Policy (2021), *Europe Sustainable Development Report 2021 – Transforming the European Union to achieve the Sustainable Development Goals*, December 2021.
- Tallinn City Government (2022), *Tallinn Arvudes 2021: Statistical Yearbook of Tallinn 2021*.

- Vlaamse Regering (2018), *Visie 2030*.
- Whyte, A. (2020), *Tallinn budgetary strategy set at €600 million for next four years*.
- WWF (2022), *Implementation and delivery of the Sustainable Development Goals: WWF recommendations to the European Parliament resolution*, March 2022.
- Zukunftsinstitut GmbH (2021), *Die Wirtschaft in Baden-Württemberg mit und nach Corona*.

EN

ISBN 978-92-895-1242-8

doi: 10.2863/518460

QG-03-22-011-EN-N



Publications Office
of the European Union



**European Committee
of the Regions**

Created in 1994, the European Committee of the Regions is the EU's political assembly of 329 regional and local representatives such as regional presidents or city-mayors from all 27 Member States, representing over 446 million Europeans.

Rue Belliard/Belliardstraat 101 | 1040 Bruxelles/Brussel | BELGIQUE/BELGIË | Tel. +32 22822211
www.cor.europa.eu | [@EU_CoR](https://twitter.com/EU_CoR) | [/european.committee.of.the.regions](https://facebook.com/european.committee.of.the.regions)
[/european-committee-of-the-regions](https://linkedin.com/company/european-committee-of-the-regions) | [@EU_regions_cities](https://instagram.com/EU_regions_cities)