

# Achieving the UN Agenda 2030: Overall actions for the successful implementation of the Sustainable Development Goals before and after the 2030 deadline



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## IN-DEPTH ANALYSIS

# Achieving the UN Agenda 2030: Overall actions for the successful implementation of the Sustainable Development Goals before and after the 2030 deadline

### ABSTRACT

The European Union (EU) has a strong leadership role, globally and regionally, in implementing the Agenda 2030 for Sustainable Development but as a matter of urgency its ambitions now need to be translated into strategies and actions. Major global crises, such as the COVID-19 pandemic, the war in Ukraine and climate change, have all effectively reversed progress in achieving the Sustainable Development Goals (SDGs) and further exacerbated interrelated challenges relating to poverty, inequality, carbon emissions, education, health, economic growth and finance. The increasing likelihood of Agenda 2030 objectives not being met within the expected timeframe calls for major transformation in: SDGs' financing; ecology and green recovery; citizens' empowerment; political commitment to collective action; as well as cooperation between public, private and non-profit sectors. Achieving SDGs would be better served by adopting an overarching EU strategy for the Agenda 2030, to include: SDGs in the European Semester; the Green Deal; countries' recovery processes; increased collaboration between EU and United Nations institutions; and support for other countries in levelling up SDG achievements globally. This would not only provide positive signals for reassuring Agenda 2030 but also enhance countries' commitment to sustainability. This In-Depth Analysis aims to assist the European Parliament by contributing to policy and legislative debates ahead of the 2023 SDG Summit.

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## List of abbreviations

COP	Conference of Parties
CSOs	Civil society organisations
ESD	Education for Sustainable Development
EU	European Union
EGD	European Green Deal
GDP	Gross Domestic Product
GHG	Greenhouse Gas
HLPF	High-Level Political Forum
MDGs	Millennium Development Goals
MEP	Members of European Parliament
NGOs	Non-Governmental Organisations
NRRPs	National Recovery and Resilience Plans
ODA	Official Development Assistance
SDGs	Sustainable Development Goals
UBI	Universal Basic Income
UN	United Nations
UNDESA	Department of Economic and Social Affairs
UNSG	UN Secretary-General

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# 1 Introduction

'Transforming our world: the 2030 Agenda for sustainable development' adopted in 2015 by all countries, was a successful global commitment towards a sustainable future. This 2030 Agenda embraces five fundamental principles: Universality (it applies to all countries); Leaving no one behind (it considers all people irrespective of status and location); Interconnectedness and indivisibility (it needs to be implemented as a whole); Inclusiveness (every contribution is valid); and Multi-stakeholder partnerships (to support implementation). The 2030 Agenda contains an implementation framework of 17 Sustainable Development Goals (SDGs), 169 targets and 244 indicators (93 of which are environment-related). These 17 SDGs aim to measure the world's most pressing issues, more specifically related to: No poverty (SDG 1); Zero Hunger (SDG 2); Good Health and Well-being (SDG 3); Quality Education (SDG 4); Gender Equality (SDG 5); Clean Water and Sanitation (SDG 6); Affordable and Clean Energy (SDG 7); Decent Work and Economic Growth (SDG 8); Industry, Innovation and Infrastructure (SDG 9); Reduced Inequalities (SDG 10); Sustainable Cities and Communities (SDG 11); Sustainable Consumption and Production (SDG 12); Climate action (SDG 13); Life Below Water (SDG 14); Life on Land (SDG 15); Peace, Justice and Strong Institutions (SDG 16) and Partnerships for the Goals (SDG 17) (United Nations General Assembly, 2015).

During the first years of SDG implementation there was noticeable progress related to: decreasing poverty; improving health; building energy infrastructures based on renewables; protecting marine areas; implementing policies to support sustainable urbanisation; and supporting efforts to cut carbon emissions. However, despite these achievements, the world was not on track to reach the SDGs and hence the UN Secretary-General (UNSG) called the 2020-2030 years a 'Decade of Action' with specific mobilisation needed on three levels: global action, local action and people action (United Nations, 2019).

During the last two years, the dominant global crises of the COVID-19 pandemic, climate emergency and various conflicts have delayed or reversed progress on many SDG targets. The Agenda 2030 contains many complexities and challenges that cut across all the SDGs, the 'goals'. Certain context-specific challenges are largely related to: poor understanding of what each goal entails; trade-offs; capacity building; technology and data; as well as cultural issues. Additional challenges stem from poverty, education, health, climate change, economy growth and financing, all of which have been aggravated especially by the global pandemic and the war in Ukraine. These emerging global crises have further exacerbated food systems, energy provision, as well as humanitarian and refugee emergencies.

With the introduction of the UN's Agenda 2030 in 2015, new reforms were directed towards Development, Management as well as Peace and Security. In addition, institutional reforms at all levels for reducing bureaucracy and improving efficiency are now aimed at accelerating the implementation of the SDGs. Global crises have further exacerbated SDG challenges related to poverty, education, health, climate, economic growth, governance and financing.

The need for fast recovery and dealing with the pandemic has shifted the focus of governments towards the SDGs. As a result, the financial gap to reach the SDGs has increased considerably from USD 2.5 trillion before the pandemic, to USD 3.5 trillion thereafter. There is a strong interdependency between health crises, environmental crises and climate crises which is mirrored in interdependencies between the SDGs. The SDGs' interconnection is a dynamic process that reflects the evolution of sustainability issues. Scientific analyses of this interconnectivity can be a powerful tool for prioritising investments and defining areas of transformation.

To reach the SDGs by 2030, intensified and integrative collective actions are needed between countries, sectors, disciplines and actors. During the United Nations (UN) High-Level Political Forum (HLPF) in July 2022, it was stressed that the European Union (EU) can provide a leadership role, both globally and regionally, in accelerating the 2030 Agenda for Sustainable Development. Regression brought about by



the global pandemic and the war in Ukraine has increased the importance of this role. For the European Commission, sustainable development is a political priority as reflected in the European Green Deal (EGD).

The adoption of an overarching Strategy as proposed in the European Parliament resolution of 23 June 2022 on the implementation and delivery of the SDGs will facilitate implementation (European Parliament, 2022b). Furthermore, the EU can support this process through its actions covering: SDGs in the European Semester<sup>1</sup>; the Green Deal; countries' recovery processes; increased collaboration with UN institutions; as well as support for other countries in levelling up SDG achievements globally. Such actions will not only provide a positive signal for the revival of the 2030 Agenda but also enhance Member States' commitment to sustainability.

The new European Consensus on Development is a non-binding document adopted in June 2017 by three EU institutions (the European Commission, the Council and the European Parliament). It states that the EU and its Member States are committed to implementing the 2030 Agenda across all internal and external policies by means of a comprehensive and strategic approach. This should be closely coordinated with the implementation of the Paris Agreement on Climate Change and other international commitments, including the New Urban Agenda (European Commission, 2018). To yield the expected benefits, current and future EU policies need to have a greater degree of coherence, so as to take the SDGs into account in a more integrated way (European Commission, 2019).

This In-Depth Analysis aims to develop insights into the SDGs' implementation processes and respective complexities by analysing current challenges and the impact of global crises as well as potential actions needed to achieve the 2030 Agenda Goals. Such insights are aimed at assisting the European Parliament in its contributions to policy and legislative debates ahead of the 2023 SDG Summit.

Our methodological approach is based on a literature review, desk research and interviews with the representatives of organisations that play important roles in reaching global objectives such as: Global Call to Action against Poverty; SDGs Watch Europe<sup>2</sup>; United Nations Framework Convention on Climate Change; Regional Government of Aragon, Spain; European Parliament Committee on Environment, Public Health and Food Safety; UN Development Programme/ UN Office in Brussels and DG International Cooperation and Development (DG INTPA), European Commission. In this way, we are aiming not only to gain a better understanding of the various organisations' work towards achieving the SDGs but also to reflect their representatives' concerns and recommendations.

This In-Depth Analysis comprises three Sections. The first describes and analyses the current situation regarding the SDGs, challenges in their implementation, complexities aggravated by emerging global challenges and critical areas of transformation. The second is focused on actions needed to meet the SDGs aims by 2030, together with policy guidelines and financial aspects. The third provides specific recommendations for enhanced contributions to SDGs processes, for the European Parliament, European Commission, Member States, civil society, private sector and the scientific community. The In-Depth Analysis concludes with remarks regarding the future sought for a post-2030 Agenda.

<sup>1</sup> European Union, 'The European Semester', [webpage](#) and 'Linking the European Semester and the Recovery and Resilience Facility', [webpage](#), 2022.

<sup>2</sup> SDGs Watch Europe is an 'EU-level, cross-sectoral CSO alliance of NGOs from development, environment, social, human rights and other sectors. Its goal is to hold governments to account for the implementation of the 2030 Agenda for Sustainable Development (SDGs)'. See SDGs Watch Europe 'Home', [webpage](#), n.d.

## 2 The implementation of the Agenda 2030 for sustainable development halfway to 2030




### 2.1 The current state of the sustainable development goals

The Decade of Action from 2020 to 2030 was supposed to be dedicated to accelerating solutions for meeting the 2030 Agenda Goals and achieving a more sustainable world. Regrettably, a few months into the new decade, a global pandemic struck. Even before the devastating impact of COVID-19, though, the UN was issuing alerts stating that global efforts were not sufficient to deliver the changes needed, despite previous reports having indicated progress and positive trends in important areas.




Within the first five years of the SDGs' implementation, some aspects had improved considerably. According to the UN Department of Economic and Social Affairs (UNDESA), the number of people living in extreme poverty was declining, reaching 8.6 % in 2018 from 16.0 % in 2010 and 36.0 % in 1990, with special progress being recorded in Eastern Asia and Southern Africa. Regarding health, the highest rates of immunisation were observed, along with reduced maternal and child mortality, as a result of important investments in health management and care. In terms of infrastructure, energy efforts were emphasised. International investment in renewable energy in developing countries also increased considerably, from USD 9.9 billion in 2010 to USD 18.6 billion in 2016, with particularly good progress being recorded for wind, geothermal and solar energy (REN21, 2020). Additional positive outcomes were reported for: the protection of marine areas; policies to support sustainable urbanisation; consumption and production; as well as climate-related investments and efforts to cut carbon emissions.

Since the pandemic's outbreak, though, progress reports have turned negative. The first obvious drawback is seen in health indicators. Much investment had to be redirected towards fighting the pandemic, thereby disrupting other essential health services. The economic crisis that closely followed the Coronavirus outbreak worsened issues of unemployment, inequality and poverty. All countries had to adjust their priorities, resulting in environmental and climate-related initiatives lagging. The current status in implementing the goals, following the latest UN SDGs Report (United Nations, 2022) and the Sustainable Development Report (Sachs et al., 2022), is set out as follows in Table 1.

**Table 1: SDGs and their status of implementation**

	<p>The COVID-19 pandemic led to extreme poverty rates increasing for the first time in over 20 years. <b>No Poverty (SDG 1)</b> is currently presented as one of the goals with the highest level of reversal to what had previously been a good rate of progress. Data shows that over 90 million people have been pushed into extreme poverty over the last three years, increasing the rate to 9.2 % in 2020.</p>
	<p>The targets of <b>Zero Hunger (SDG 2)</b> are also a long way from being achieved. More people are suffering from hunger, food insecurity and malnutrition. Even more developed countries (e.g., Organization for Economic Co-operation and Development members) have registered poor performances under this goal due to the opposite problem of obesity in addition to unsustainable agriculture.</p>
	<p>Added to the pandemic's impacts and consequences experienced in the health sector, the goal of <b>Good Health and Well-being (SDG 3)</b> has been struck with further concerns about its implementation. These include a significant rise in people suffering from anxiety and depression, the disruption of services associated with fighting other diseases (such as malaria) and the serious uneven progress in universal health coverage.</p>

	<p>Even before the pandemic, children out of school as well as disparities in educational opportunities and outcomes were already being reported as great concerns within <b>Quality Education (SDG 4)</b>. These inequalities have now increased, with further efforts now being required to provide adequate infrastructure and teacher training. Many countries have fallen short in providing universal access to primary and secondary education, especially in lower-income countries, where the rate of youth and adults in formal and non-formal education is also much lower in comparison to richer countries.</p>
	<p>Equality-related goals – <b>Gender Equality (SDG 5)</b> and <b>Reduced Inequalities (SDG 10)</b> – are not on course to be achieved by the 2030 implementation deadline. For the former, the most worrying indicators refer to violence against women and girls, child marriage and legal gaps, whilst for the latter, there are risks associated with migratory routes, income inequality and discrimination.</p>
	<p>The goals of <b>Clean Water and Sanitation (SDG 6)</b> and <b>Affordable and Clean Energy (SDG 7)</b> require much effort to meet their targets by 2030. Although some indicators have been improving, around 2 billion people still lack properly managed water services and almost 3 billion lack sanitation services. Some progress around energy sustainability was reversed or at best slowed by the pandemic, albeit some positive trends in electrification and the use of renewables are being observed.</p>
	<p>Despite continuing economic recovery following the pandemic, implementing <b>Decent Work and Economic Growth (SDG 8)</b> remains heavily affected. While the Gross Domestic Product per capita increased by 1.4 % in 2019, the following year saw a severe decrease of 4.4 %. Labour productivity, employment rates and supply chain disruptions remain important challenges in achieving this goal.</p>
	<p>The situation regarding <b>Industry, Innovation and Infrastructure (SDG 9)</b> seems slightly more favourable, although progress after the pandemic has been uneven, especially in terms of manufacturing activity and access to financial support.</p>
	<p>Amid challenging scenarios, one particularly positive trend is seen in <b>Sustainable Cities and Communities (SDG 11)</b>. Between 2015 and 2021 the number of countries with disaster risk reduction strategies doubled, reaching a total of 98.</p>
	<p>Although the implementation of <b>Responsible Consumption and Production (SDG 12)</b> has been advancing with the support of policy instruments, the world is not on track to use natural resources sustainably or reduce the levels of food waste generation.</p>
	<p><b>Climate Action (SDG 13)</b> demands urgent initiatives to fight global changes. After the decline in emissions observed during the first pandemic year, thereafter emissions from energy combustion and industrial processes reached their highest level, with the global average temperature continuing to increase, along with more frequent and intense extreme weather events.</p>

	<p>Both goals related to environmental protection and biodiversity, <b>Life Below Water (SDG 14)</b> and <b>Life on Land (SDG 15)</b>, are seriously behind schedule in meeting 2030 goals. Marine pollution continues to grow, with plastic waste being of particular concern, and ocean acidification is expected to continue increasing in the years ahead. Although more key biodiversity areas have been protected, regions in Africa, Asia and Oceania still lag behind, whilst the world's forests continue to shrink.</p>
	<p>Finally, in terms of <b>Peace, Justice and Strong Institutions (SDG 16)</b>, war and violent conflicts are a major threat, with a quarter of the global population currently living in conflict-affected areas. Some progress is being observed in declining homicide rates, but gender differences are still a concern.</p>
	<p>Regarding <b>Partnerships for the Goals (SDG 17)</b>, implementation is being hindered by combined challenges and competing priorities, such as pandemic recovery, inflation and interest rates.</p>

Source: Based on UN SDGs Report (UN, 2022b) and the Sustainable Development Report (Sachs et al., 2022)

### 2.1.1 Key challenges in implementing the SDGs

As explored in the previous Section, each goal faces a number of context-specific challenges. The 2030 Agenda is a bold, yet much-needed effort, within which many complexities and challenges cut across all goals. Some of these challenges refer to monitoring. Accurate and reliable data are needed to ensure strategies for each goal are designed properly and implemented efficiently (UNECE, 2020). Engaging all stakeholders in the implementation process is another major challenge (Basheer et al. 2022). Stakeholders' involvement is essential in participatory decision-making. Moreover, they are the ones who must make demands for transparent and efficient processes of planning and implementation. However, engagement and contribution are made possible only when there is clarity and a proper understanding of goals and initiatives. Table 2 presents an overview of challenges identified in the literature and exploratory investigations.

**Table 2: Set of overall challenges observed in the implementation of the SDGs**

<p><b>Lack of understanding on what each goal entails</b></p>	<p>Difficulties in properly defining and understanding the goals leave room for individual interpretations and weak implementation. Broader definitions impede the process of setting responsibilities and lack of consensus on definitions and chosen indicators hinder collaboration.</p>
<p><b>Accountability</b></p>	<p>Ensuring accountability, i.e. a sense of commitment made towards the concrete implementation of the SDGs. This increases the chances of executing efficient initiatives following short- and long-term clearly defined scenarios.</p>
<p><b>Trade-offs</b></p>	<p>Each goal has been developed to tackle specific social, economic and environmental issues. When certain initiatives are applied, there can be conflicts between the goals and intended outcomes. While synergies should be encouraged, trade-offs must also be carefully identified and analysed on a case-by-case basis.</p>

<b>Capacity building</b>	Lack of knowledge and/or experience in implementation and monitoring methods and tools hinder progress towards achieving the SDGs. Capacity building should be ensured for all those involved in these processes, with appropriate education and awareness creation taking into consideration the context of implementation (e.g., guidance following challenges and opportunities of urban/rural areas, larger/smaller cities, etc.).
<b>Technology and data</b>	Collecting data and monitoring trends is imperative in the process of implementation. However, access to such data and technology needed to create more efficient and accurate processes represents challenges for many countries.
<b>Culture</b>	Some cultures might be less open to discussing new ideas and changes implied within the implementation of the SDGs, thereby hampering the process and potentially causing conflicts. Nevertheless, participation by a wide range of stakeholders is key for implementing the goals. Hence, being open for dialogue and collaboration is much needed.

Source: based on Bardal et al. (2021), Caiado et al., (2018) and Leal Filho, Wolf et al. (2020).

The text that follows explores common views on additional challenges encountered in implementing the SDGs, such as poverty, education, health, climate change, economy growth, governance and financing. In this In-Depth Analysis, we emphasise five of the 17 SDGs since they are especially important for developing nations and at the same time relevant to Europe.

**Poverty:** the 2030 Agenda recognises poverty as the greatest global challenge and its eradication must, therefore, be a key requirement within sustainable development. This challenge is associated with the many deep and complex interactions that poverty has with other sustainability issues, such as: access to health services; nutrition; water; sanitation and energy; as well as employment opportunities. According to sustainability researchers, nearly all goals tend to be negatively affected by poverty, particularly those related to hunger, health, education as well as water and sanitation (Leal Filho, Lovren et al., 2021). The threat of poverty became more evident with the pandemic, during which previous progress was reversed, worsened by issues to do with climate change impacts and humanitarian crises.

**Education:** this is a fundamental right and another major need within sustainable development prospects. Basic education and continued professional training increase opportunities, allow for upward socioeconomic mobility and improve quality of life. People with a greater level of education can also make informed decisions, prioritise healthier habits, support the empowerment of women and make sustainable consumption choices (United Nations Educational, Scientific and Cultural Organization, 2014). Countries considered the most sustainable worldwide also have the highest rates of education provision. The challenge of offering education to everyone throughout the world faces a lack of investment, a shortage of schools and trained teachers as well as school dropouts.

**Health:** the recent Coronavirus pandemic demonstrates how health issues can be considered a threat to meeting all SDGs. This health crisis has certainly produced negative consequences leading to major drawbacks in some areas and can be seen as having developed into a human and socio-economic crisis. The world must prepare for future pandemics while tackling existing diseases and ensuring universal health coverage (The Lancet Respiratory Medicine, 2022).

**Climate Change:** the latest report from the Intergovernmental Panel on Climate Change confirmed that the world is set to reach average temperatures of 1.5 °C above pre-industrial levels within the next two decades and hence called for extreme cuts in carbon emissions to prevent an environmental disaster. However, the consequences could be far more catastrophic in bringing about, for example: infrastructure

damage; disruption of basic services; population displacement; as well as injuries and even death to many of the global population. Studies point out clear synergies between climate action and other goals, but also reflect on the challenges associated with trade-offs, as in the context of climate mitigation efforts (Cohen et al., 2021; Fuso Nerini et al., 2019).

**Economic growth:** a focus largely on maximising economic development is generally viewed negatively, as it is associated with unsustainable use of natural resources and increased carbon emissions. However, from a different perspective, concerns may also include inappropriate practices involving slavery and child labour, as well as inefficient management of environmental impacts (International Labour Organization, 2016). The 2030 Agenda and especially SDG 8 must meet the challenge of bringing about a sustainable and inclusive outcome.

**Governance:** there are governance-related challenges to be faced in seeking to implement the SDGs successfully. Firstly, the political will and commitment needed to prioritise goals involve rearranging development programmes and commitments, to ensure implementation locally and regionally. Secondly, these changes must encompass long-term practices which will be in place well beyond any single period of government. Thirdly, even when these previous points have been actioned, governments still need the technical capacity in planning and execute the necessary solutions, prioritise certain goals based on local needs and remain prepared for difficult trade-offs.

**Financing:** even with all other challenges overcome, considerable resources will still be needed to implement the goals. Financing options are available but it remains imperative that sustainable development resources are applied at the scale and speed required to achieve these goals. Moreover, most countries lack the capital needed to fund implementation, especially in developing regions.

Table 3 describes some of the specific challenges associated with emerging global crises and financing issues. This list is by no means comprehensive but nevertheless, serves the purpose of illustrating specific issues which influence the implementation of the SDGs.

**Table 3. Specific challenges in SDGs implementation**

SDG	Gaps for implementation	Reference
1- No poverty	<ul style="list-style-type: none"> <li>• lack of sufficient policies related to agricultural productivity and rural infrastructure</li> <li>• rapid population growth</li> <li>• presence of gender gaps.</li> </ul>	Food and Agriculture Organization of the United Nations, 'Poverty eradication', <a href="#">webpage</a> , n.d.
2- Zero hunger	<ul style="list-style-type: none"> <li>• economic recession</li> <li>• climate change.</li> </ul>	C. Gonzalez, G. '2 - SDG 2: End Hunger, Achieve Food Security and Improved Nutrition and Promote Sustainable Agriculture', in Ebbesson J. and Hey, E. (eds), <i>The Cambridge Handbook of the Sustainable Development Goals and International Law</i> , Cambridge University Press, Cambridge, 2022, pp. 72–94.
3- Good health and well-being	<ul style="list-style-type: none"> <li>• lack of health data availability</li> <li>• problems in health funding</li> <li>• unequal access to health care.</li> </ul>	Zhao, L., Cao, B. and Borghi, E. et al., ' <a href="#">Data gaps towards health development goals, 47 low- and middle-income countries</a> ', <i>Bulletin of the World Health</i>

		<p><i>Organization</i>, Vol 100, No 1, 2022, pp. 40–49.</p> <p>Development Alternatives with Women for a New Era, <a href="#">‘The “Health SDG”: Some progress, but critical concerns remain’</a>, 2030 Spotlight, n.d.</p>
4- Quality education	<ul style="list-style-type: none"> <li>• lack of educational access</li> <li>• lack of educational outcome.</li> </ul>	<p>United Nations Department of Economic and Social Affairs, <a href="#">‘Review of SDG implementation and interrelations among goals: Discussion on SDG 4 - Quality education’</a>, Background Note on Meeting, 2019.</p>
5- Gender equality	<ul style="list-style-type: none"> <li>• lack of access to financial resources, land and technology</li> <li>• gender-based violence</li> <li>• legal barriers.</li> </ul>	<p>United Nations Women, ‘Remove the barriers’ <a href="#">webpage</a>, News, n.d.</p>
6- Clean water and sanitation	<ul style="list-style-type: none"> <li>• growing water shortages</li> <li>• difficulties in implementing innovative low-cost systems.</li> </ul>	<p>Pusch, D., Ihle, S., Lebuhn, M., Graeber, I., and López-Pila, J. M., <a href="#">‘Quantitative detection of enteroviruses in activated sludge by cell culture and real-time RT-PCR using paramagnetic capturing’</a>, <i>Journal of Water and Health</i>, Vol 3, Issue 3, 2005, pp. 313–324.</p>
7- Affordable and clean energy	<ul style="list-style-type: none"> <li>• interrelation of socio-economic, cultural and technical reasons (e.g. access to tools to harness solar energy)</li> <li>• lack of policies that reduce socio-cultural issues</li> <li>• insufficient economic incentives for investing in energy.</li> </ul>	<p>Tucho, G. T. and Kumsa, D. M., <a href="#">‘Challenges of Achieving Sustainable Development Goal 7 From the Perspectives of Access to Modern Cooking Energy in Developing Countries’</a>, <i>Frontiers in Energy Research</i>, Vol 8, 2020, pp. 1–11.</p>
8- Decent work and economic growth	<ul style="list-style-type: none"> <li>• exclusion of persons with disabilities</li> <li>• lack of access to decent work</li> <li>• lack of policies that promote employment</li> <li>• scarcity of equal pay for equal work.</li> </ul>	<p>United Nations Human Rights Office of the High Commissioner, <a href="#">Policy Guidelines for Inclusive Sustainable Development Goals: Decent Work and Economic Growth</a>, Report, 2021.</p>
9- Industry, innovation and infrastructure	<ul style="list-style-type: none"> <li>• lack of innovation-oriented research</li> <li>• lack of financing in developing countries</li> <li>• climate change.</li> </ul>	<p>Siew, R., <a href="#">‘What are some of the barriers towards achieving sustainability?’</a>, ResearchGate question, 2014.</p> <p>Mahadi, E., ‘Challenges of addressing SDG 9 while also limiting climate change to 1.5°C’ <a href="#">webpage</a>, University College</p>

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		London Institute for Sustainable Resources, n.d.
10- Reduced inequalities	<ul style="list-style-type: none"> <li>• economic instability</li> <li>• financial crisis</li> <li>• debt and inflation.</li> </ul>	Oxford Global, 'SDG 10: Reduced Inequalities' <a href="#">webpage</a> , 4 September 2020.
11- Sustainable cities and communities	<ul style="list-style-type: none"> <li>• high population density</li> <li>• inadequate infrastructure</li> <li>• pollution and congestion.</li> </ul>	United Nations Economic Commission for Europe, ' <a href="#">In focus SDG11: Make cities inclusive, safe, resilient and sustainable</a> ', 2019.
12- Responsible consumption and production	<ul style="list-style-type: none"> <li>• integrating environmental sustainability with economic growth and well-being</li> <li>• harmonise economic growth with the modifications in energy patterns needed to decouple growth from greenhouse gas emissions.</li> </ul>	United Nations Environment Programme, 'GOAL 12: Sustainable consumption and production', <a href="#">webpage</a> , n.d.  Partiti, E. and Arcuri, A., ' <a href="#">SDG 12: Ensure Sustainable Consumption and Production Patterns</a> ', TILEC Discussion Paper No DP2021-007, 2021.
13- Climate action	<ul style="list-style-type: none"> <li>• governance in water use</li> <li>• increased health risks</li> <li>• increased frequency and intensity of extreme weather.</li> </ul>	United Nations Environment Programme, 'GOAL 13: Climate action' <a href="#">webpage</a> , n.d.
14- Life below water	<ul style="list-style-type: none"> <li>• absence of effective marine protection</li> <li>• absence of a sustainable management plan.</li> </ul>	World Wildlife Fund for Nature, ' <a href="#">Failing SDG14: EU on a cliff edge for ensuring a sustainable ocean</a> ', 2020.
15- Life on land	<ul style="list-style-type: none"> <li>• increase in population</li> <li>• industrialisation</li> <li>• agricultural expansion.</li> </ul>	Küfeoğlu, S., ' <a href="#">SDG-15: Life on Land</a> ', in Küfeoğlu, S. (ed.) <i>Emerging Technologies : Value Creation for Sustainable Development</i> , Springer International Publishing, 2022, pp. 469–486.
16- Peace, justice and strong institutions	<ul style="list-style-type: none"> <li>• corruption</li> <li>• armed conflicts</li> <li>• violence.</li> </ul>	United Nations, 'Goal 16: Promote just, peaceful and inclusive societies', <a href="#">webpage</a> , n.d.



<p>17- Partnerships for the goals</p>	<ul style="list-style-type: none"> <li>• high level of inequality between and within countries</li> <li>• inability to align investment with long-term sustainable development goals.</li> </ul>	<p>United Nations, <a href="#">‘2018 HLPF Review of SDGs implementation: SDG 17 – Strengthen the means of implementation and the global partnership for sustainable development’</a>, High-Level Political Forum on Sustainable Development, 2018, pp. 1–7.</p>
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Source: Authors’ own compilation.

## 2.2 Interdependencies between crises and the SDGs' complexity

The 2022 SDGs Report from UNDESA emphasises that dominant global crises, such as the COVID-19 pandemic, climate emergency and various conflicts, have further ‘exacerbated food, energy, humanitarian and refugee crises’, reversing the previous years’ global achievements in ‘eradicating poverty and hunger, improving health and education, and providing basic services’, as well as hampering implementation of the 2030 Agenda. These ‘cascading and interlinked’ crises demonstrate the complexity and interdependence of sustainability issues.

In March 2022, UNSG António Guterres noted that ‘our world is suffering from the impact of unprecedented emergencies caused by the climate crisis, pollution, desertification and biodiversity loss, the COVID-19 pandemic, by new and ongoing conflicts, and by the ungoverned development of new technologies.’ These and other challenges produce the combined effect of slowing down progress towards the SDGs, thereby leaving many targets seemingly out of reach.

The COVID-19 pandemic revealed societies’ lack of resilience to deal and cope with unexpected crises. A report from the International Science Council, ‘Unprecedented and Unfinished: COVID-19 and Implications for National and Global Policy’, among critical factors regarding the pandemic’s long-term impact, refers to: geopolitical opportunism; poor access to capital markets for low- and middle-income nations; weakening of the multilateral system; and loss of progress on the UN Sustainable Development Goals (International Science Council, 2022).

According to the International Labour Organization, in 2020 8 million more workers were living in poverty than in 2019, and 28 million more unemployed in 2021 compared to 2019. The consequences in employment, education and training were more severe for young people (see Sodergren, Kapsos and Karkee, 2022).

The war in Ukraine has aggravated in particular crises related to ‘Food’, ‘Energy’ and ‘Refugees’, (SDG1, SDG2, SDG7, SDG16) thereby putting pressure on global food systems and increasing the number of people suffering from hunger and food insecurity. The resultant refugee crisis is said to be the worst since the Second World War (World Bank, 2022).

The 2022 report in the Lancet, ‘Countdown on health and climate change: health at the mercy of fossil fuels’ states among the key finding that:

‘Climate change is undermining every dimension of global health monitored, increasing the fragility of the global systems that health depends on, and increasing the vulnerability of populations to the coexisting geopolitical, energy, and cost-of-living crises and Climate change is increasingly undermining global food security, exacerbating the effects of the COVID-19, geopolitical, energy, and cost-of-living crises (Romanello et al., 2022).

European Commissioner Paolo Gentiloni<sup>3</sup>, at the Hearing on the SDGs in May 2022 at the ENVI-DEVE Committees of the European Parliament, stated that:

'While economic activity in the EU has rebounded after the disruptions caused by the COVID-19 pandemic, the Russian invasion of Ukraine and related effects will have a negative impact on the recovery in the EU. Moreover, persistent logistic and supply bottlenecks, including shortages of raw materials, have weighed on production, as have the elevated prices of energy and labour shortages in many EU countries. Inflationary pressures, which have been stronger than for many years, have started to curtail households' purchasing power' (ENVI-DEVE Committees, 2022).

A frequently overlooked aspect of the crises' impact on SDGs is the reduced flexibility of implementation at the local level and the diminished involvement of other actors in the implementation processes. It is largely accepted that achieving the SDGs depends on how quickly action is taken at the local level. The concentration on SDGs has shifted for those local governments which are more vulnerable and affected by these crises. Although cities did not experience the same difficulties during the COVID-19 pandemic, they continue to suffer the indirect consequences of long-term impacts on the economy and society.

Difficulties in localising SDGs during the pandemic are acknowledged in a number of Voluntary Local Reviews (VLRs) prepared by local governments in 2020, 2021 and 2022, (Ortiz-Moya and Kataoka, 2022). Although SDGs' ownership remains with central governments, their scalability at the local level and other stakeholders' involvement play a crucial role in their success. For instance, the COVID-19 pandemic created difficulties in engaging with stakeholders at large public meetings and hearings.

Data availability and accuracy have also suffered during the pandemic, which has consequently hindered the SDG's monitoring and reporting process. As outlined beforehand, 17 SDGs' monitoring framework was complemented with 161 targets and over 230 indicators to facilitate the measurement of achievements and allow a comparison between the countries in this global endeavour. Furthermore, an accurate monitoring process increases accountability, providing the basis for evidence-based policy making and directing policy interventions towards the most critical areas. 'During the pandemic, at a time when data were most needed, many statistical offices struggled to compile basic statistics, highlighting yet again the need to invest in the collection of data and the production of statistics' (Sodergren, Kapsos and Karkee, 2022).

Since quality and timely data are vital for enabling governments, international organisations, civil society, the private sector and the general public to make informed decisions on the SDGs, it is suggested that the Cape Town Global Action Plan for Sustainable Development Data (United Nations Statistical Commission, 2017) and the Partnership in Statistics for Development in the 21st-century (or 'Paris 21') are used to ensure the accountability of initiatives on implementing the SDGs.

SDGs are a turning point in global governance but credibility and 'greenwashing' can also relate to the 'SDGs-rhetoric', which can be misused by institutions for justifying inconsistent actions or over-reporting to gain recognition in the international arena. Societal storms and crises decrease the accountability of institutions and hence there is the risk of miscommunicating sustainability. This increases the need for other actors' involvement and contributions, especially civil society organisations (CSOs), in countries' SDG implementation processes and preparation of the Voluntary National Reviews.

## 2.2.1 Importance of SDGs interlinkages for evolving sustainability

An important element of the 2030 Agenda is its 'indivisibility'. The SDGs are strongly interrelated and actions for implementation of one SDG have positive or negative effects on the fulfilment of other SDGs.

<sup>3</sup> Since 2019 Paolo Gentiloni is the European Commissioner for Economy, coordinating, among others tasks, the implementation of the SDGs in the context of the European Semester cycle of economic governance.

Different methods have been used for analysing these SDG interactions, namely, 'Goal Interaction Scoring on a Seven-Point Scale' using mainly network analyses (Nilsson et al., 2017; Le Blanc, 2015; International Council for Science, 2016). The SDGs interrelations are context-dependent and influenced by many factors, such as: where a specific action takes place; their time of implementation; governance approach; and their stages of development. Examples of analyses exist at different levels (goal, target and indicators). For instance, there are analyses of target 4.7 interactions (Education for Sustainable Development) with goals and targets in the context of multi-stakeholder networks, Regional Centres of Expertise on Education for Sustainable Development, identifying multidimensional aspects of target 4.7 being strongly connected with SDG-13, SDG-7 and SDG-11 (Shulla et al, 2020). More emphasis and efforts must be applied to the scientific methods for interactions between SDGs.

Knowledge, information and scientific evidence about the SDGs interconnections are very important for many reasons, including: tackling a group of SDGs and addressing them at the same time; diminishing potential harm from controversies that can happen when implementing the goals within silos; enabling informed and evidence-based decision making; orienting investments and clarifying abstract narratives about SDGs; allowing for effective use of finances; preventing or reducing the environmental and social consequences of economically prioritised decisions; as well as facilitating more interaction between sectors and actors. The SDGs implementation processes should be fit for scientific analyses and enable evidence-based decision-making, whilst considering the interactions between all actors involved in these processes (Bennich et al., 2020).

Analysing interconnections between SDGs can be a powerful tool for drafting future strategies and defining areas of much-needed transformation. Nevertheless, scientific approaches are continually needed to analyse trade-offs and interactions, in other words, dynamic processes between different SDGs. Global crises brought about by the pandemic since early 2020 have provoked new inter-dependencies between the SDGs, such as the intensification or strengthening of interconnections between a number of Goals such as SDG 3, SDG 1 and SDG 2. Although the pandemic's effect on SDGs has yet to be fully assessed (recent studies focus more on one selected SDG or one specific sector or thematic issue), it is important to explore any emerging effects from the new circumstances, looking particularly at relations between SDGs and the challenges they embrace (Shulla et al., 2021). Nevertheless, only limited research has as yet been applied to important interactions, such as: those between actors; geographic spill-overs; as well as others on the level of SDGs Targets and Indicators (Weitz et al., 2020). Furthermore, there has been little investigation into the dynamic changes regarding SDGs' interactions related to the evolving stages of sustainable development. Depicting especially the SDGs de-coupling and re-coupling processes, it is important to prioritise actions, directing sustainability transformations and intensifying their achievement as a group (Wu et al., 2022).

Developing systematic, thorough and in-depth understanding as well as scientific analyses of the emerging new dependencies between the SDGs under the influence of current global crises would not only influence decision-making and the effectiveness of tackling multiple challenges but also provide guidance towards effective areas of transformation. For instance, there is a strong interdependence between health crises, environmental crises and climate crises. Hence, scientific analyses of these interactions based on specific contexts would be of great benefit in decision-making and building resilience.

During the UN HLPF in July 2022, it was stressed that:

'subsequent disruption of the global food and energy systems have also become strikingly apparent as has the interconnected nature of peace, security, food, health, agriculture, environment and energy, demonstrating the need for self-sufficiency and more robust, resilient systems. A similar level of urgency, collaboration, cooperation and strong science-policy interface as well as public awareness is needed now to realise the 2030 Agenda. This level of coordination

across sectors and governance structures will require unprecedented cooperation and participatory governance approaches’.

‘The importance of this partnership between research and action cannot be overstated. Continued research will be needed to support action to end the current crisis and get onto a pathway to greater well-being and, eventually, prosperity and environmental sustainability’ (Editorial Nature, 2021)

Furthermore, there is a need to implement actions to maximise synergies in policy-making. This may be achieved, for instance, via Policy Coherence for Sustainable Development for which the EU has a specific strategy.

## 2.2.2 Synergies and contradictions between the SDGs

According to the recent ‘Sustainable development in the European Union — Monitoring report on progress towards the SDGs in an EU context’ (Eurostat, 2022a), current EU data suggest that there are more positive (24.1 %) than negative (13.4 %) SDGs’ interlinkages. Over two-thirds of indicator pairings (62.4 %) are not substantially connected with each other, showing that indicators in the EU SDG set monitor dissimilar phenomena, not necessarily directly related to one another. The proportions of synergies and trade-offs in the EU are 24.6 % and 13.7 %, respectively.

Globally, the goals of industry, innovation and infrastructure (SDG 9), decent work and economic growth (SDG 8), together with responsible consumption and production (SDG 12) have the most synergies with other goals. The goals of gender equality (SDG 5), zero hunger (SDG 2) and partnerships (SDG 17) entail most of the trade-offs (Leal Filho, Wall, et al., 2022). However, gender issues also have repercussions on the goals of zero hunger and ensuring access to nutritious and sufficient food for all, which have recently been severely affected during the pandemic. Thus, gender issues are greatly affecting poverty elimination (SDG 1), good health and well-being (SDG 3) as well as access to clean drinking water (SDG 6) (DownToEarth, 2021).

The EU data available in the most recent monitoring report on the specificity of SDG interlinkages is absolutely clear in stating that the way we live, create and consume is intertwined with many other sectors, both driving and being influenced by other developments (European Union, 2022c). SDG 12 strongly impacts resource and energy efficiency, hence consequently SDG 7, while reliable and sustainable energy systems are related to sustainable transport, thus influencing SDG 13 and SDG 9. As the hot summer of 2022 also demonstrated, SDG 13 is synergistically associated with SDG 3, and health and SDG 11 impact SDG 13. According to the same report, at the EU level no substantial trade-offs can be defined as universal, but in 10 out of 27 Member States final energy consumption was adversely related to real Gross Domestic Product (GDP) per capita and employment rates. As the war in Ukraine has made it clear, energy is the focus of our lives, impacting so many SDGs.

SDGs are a top global priority but their full implementation is compromised by high costs associated with the lack of knowledge among investors regarding sustainable investing, as well as the outdated notion that such investments are not profitable (Leal Filho, Dinis et al., 2022). While SDGs’ implementation calls for extensive planning and provision of resources, particularly concerning the necessary investments as well as technologies and infrastructures (Leal Filho, Vidal et al., 2022), the international implementation of SDGs is presented as a dichotomy between the numerous obstacles to their implementation and the opportunities for building momentum, particularly in the post-pandemic world (Leal Filho, Wall et al., 2022) and in the context of the war in Ukraine. Leal Filho, Vasconcelos, et al. have recently expressed concerns about why declarations and international cooperation on sustainable development frequently fall short of expectations. They point out that evidence reinforces the need for stepping up investments in research, development and innovation, while also urging for the expansion of international cooperation initiatives

that support and promote sustainable development (Leal Filho, Vasconcelos et al., 2022). Clear goals and supervising efficient implementation are mandatory. The social cost of failing to meet the SDGs should motivate us to pool resources and use synergies to create a better world for both the present and future generations (Leal Filho, Salvia et al., 2022).

The results from recent extensive research assessing the investment, technological and infrastructure requirements for achieving the SDGs suggest that their implementation is currently being undermined by various socio-economic problems (Leal Filho, Vidal et al., 2022). The same investigation shows that while SDG 3, SDG 7, SDG 9, SDG 14 and SDG 17 seem to be progressing, SDG 2, SDG 11, SDG 13, SDG 15 and SDG 16 progress since 2015 has been compromised.

Actions on climate change, also aimed at food security, affect SDG 13, but also many others. SDG 13 actions reducing emissions can have a positive impact on SDG 3, SDG 6, SDG 12, SDG 14 and SDG 15, but need not compromise SDG 1, SDG 2, SDG 5 and SDG 10. Thus, balancing trade-offs is critical, with SDG 12 at the forefront, in covering responsible consumption and production (Campbell et al., 2018).

The recent work by Zyoud has emphasised significant issues and flaws with current health care systems and their readiness, sustainable mobility plans, resilient cities and communities, sustainable supply chain management, digital literacy, responsible decision-making (in addressing circumstances, collaboration and coordination at different levels), which are all related to the pandemic but also to other factors (Zyoud, 2022). According to recommendations from this same research, risk management models identifying mitigation possibilities regarding the social, economic and environmental dimensions must be considered in sustainable decision-making aimed at assessing pandemics, climate changes, air pollution or food insecurity. This shows that the challenges are present and defy the slow nature of decisions.

## 2.3 The financing gap to reach the SDGs and the recovery investments

As previously presented, financing is among the main challenges in implementing the SDGs. The pandemic added greater concern to this matter, not only demanding priorities to be adjusted but also reversing prior progress with the 2030 Agenda. The pandemic's economic impact was even worse in those poorer countries that do not have the financial and technological means to handle the situations they face. In addition to negative growth, the crisis exacerbated inequality and increased financial needs. In this context of financial distress, these countries' chances of focussing on sustainable development are much reduced.

According to the UN's 2022 Financing for Sustainable Development Report, 60 % of the least developed and other low-income countries are at risk of or are already experiencing, debt distress, which is double the amount observed in 2015 (UN Inter-Agency Task Force on Financing for Development, 2022). Since before the pandemic, the UN Conference on Trade and Development's World Investment Report has been a central reference in estimating the annual financing gap for developing countries to meet the SDGs, reporting on a gap of around USD 2.5 trillion between funding and what was required (UNCTAD, 2014). Additionally, tax revenue in some developing countries was below the threshold considered necessary for effective functioning. The global crisis leading to this increased financial gap was aggravated by the following trends:

- **Negative or slow economic growth:** while still recovering from the pandemic, the economy faced additional challenges such as international conflicts and crises which resulted in a significant decrease in progress when compared with previous years. Inequalities across countries have aggravated the situation, with some being able to take advantage of low-interest rates, whilst others have suffered from high borrowing costs;
- **Declining assistance:** Official Development Assistance (ODA) also decreased in comparison to previous years. Although this kind of assistance is already reported as having increased since 2020,

largely due to support for COVID-19 vaccines in developing countries, the increase is insufficient to cope with the challenges faced;

- **Weak investments:** investment prospects are weak in developing countries, with most global foreign investment being currently recorded in already developed economies. In addition to any inequalities between countries and economic sectors, countries that depend on fossil fuels still invest too little into renewable energy, even as the world gradually transitions to a climate-neutral economy;
- **Impact of trade restrictions:** significant restrictions have been introduced, which as a result have disrupted trade in goods and services. The situation since 2020-2021 has improved to some extent but the effects are still severe in many regions;
- **Diverting resources from sustainable development:** while developed countries could use the fiscal space to devote more resources to social protection and areas such as technology and the green economy (e.g., through the European recovery plan NextGenerationEU), developing countries have had to reallocate resources, diverting them from sustainable development efforts. Social spending has also been hugely impacted, with cuts in financial support for education, health and sanitation;
- **High debt risk:** debt risks and debts are expected to rise in poorer countries, as they are aggravated by additional challenges (e.g., the food crisis). This scenario is worsened by the withdrawal of fiscal support;
- **Environmental shocks and climate risks:** fail to limit carbon emissions, reduce pollution and implement effective measures for climate change adaptation as well as environmental protection pose risks of environmental shocks (e.g., extreme weather events and related infrastructure impacts).

The Global Outlook on Financing for Sustainable Development by the Organization for Economic Co-operation and Development (OECD) was estimating that by 2021 an increase of at least 50 % in the gap due to the pandemic's impact, reaching USD 3.5 trillion per year, a gap which could be even bigger, considering the drop in external private resources (OECD, 2021). This crisis is referred to as the 'scissors effect' for the SDGs: the pandemic increased the financing needs and reduced the resources available in the market, as summarised in Table 4.

**Table 4: The SDG financing gap widened with increased needs and reduced resources**

<b>Increased needs</b>	<p><b>The SDG financing gap before the pandemic: USD 2.5 trillion.</b></p> <p><b>The COVID-19 recovery spending gap in developing countries: USD 1.0 trillion.</b></p>
<b>Reduced resources</b>	<p>The collapse in external private funding by USD 700 billion, with the decrease of:</p> <ul style="list-style-type: none"> <li>- 80 % in net inflows of portfolio investment;</li> <li>- 123 % in other investments;</li> <li>- 20 % in remittance inflows.</li> </ul>

Source: based on OECD (2020).

Governments must take the lead in regions' quest for a green and inclusive recovery, but support from the private sector is urgently needed. Ensuring that a proper financing environment is in place increases the chances for better conditions regarding private involvement and support. Despite the post-pandemic scenario, support from the private sector has great potential in areas such as climate change mitigation, food security and infrastructure. In this context, the Global Investors for Sustainable Development Alliance is an important unit coordinated by the UN and comprising 30 leaders of major financial institutions from around the world. The Alliance aims at scaling-up long-term finance and investment in sustainable development as well as supporting the SDGs.

Three action areas lead the way towards addressing the current financing gap for the SDGs (UN Inter-Agency Task Force on Financing for Development, 2022):

- **Urgently addressing financing gaps and rising debt risks:** by means of raising diversified sources of finance and ensuring that these resources are well invested, promoting long-term sustainable public finance and addressing sovereign debt issues;
- **Aligning all financing flows with sustainable development:** as previously mentioned, the crisis effectively diverted resources from sustainable development, leading, for example, to unbalanced investments with regard to inequalities and climate change. There is a need to align growth with adjusted fiscal policies as well as increased climate finance and incentives in the international financial system;
- **Enhancing transparency and a complete information ecosystem to improve risk management and use of resources:** better quality data is required for appropriate monitoring and accountability processes, in addition to enabling the facilitation of public and private sector planning and management.

The holistic financing strategy set out in the Addis Ababa Action Agenda contains areas in: domestic public resources; domestic and international private business finance; international development cooperation; international trade as an engine for development; debt and debt sustainability; addressing systemic issues; science and technology innovation; as well as capacity building.

The abovementioned Alliance, during a meeting with UNSG António Guterres in October 2022, presented transformative solutions for bridging the estimated annual gap in SDG financing. Accordingly, boosting efforts should help to transform incentives that can: encourage a long-term perspective in investment decision-making; enhance credibility and help scale the market for SDG-linked financial instruments; and put in place regional networks of companies committed to mobilising finance and investment for the SDGs (International Institute for Sustainable Development, 2022).

According to David R. Boyd, the UN Special Rapporteur on human rights and the environment: 'There are grossly inadequate levels of investment in achieving the goals, with an annual gap of more than \$4 trillion.' (OHCHR, 2022). He identifies several sources of funding that could generate up to USD 7 trillion annually towards achieving the Sustainable Development Goals, such as new taxes on wealthy individuals and pollution, debt relief for low- and middle-income States, closing tax loopholes, redirecting subsidies from environmentally destructive activities to sustainable actions and fulfilling longstanding commitments to foreign aid and climate finance (OHCHR, 2022).

The 2022 Sustainable Development Report stresses the need for a global plan to finance the SDGs, highlighting *inter alia*: larger flows of financing to developing countries; increased lending capacity and annual flows from the Multilateral Development Banks (MDBs); as well as redesigning the assessments of debt sustainability, taking into account the growth potential of developing countries and their need for far larger capital accumulation (Sustainable Development Report, 2022).

The 2022 World Economic Forum annual meeting identified seven sustainable finance challenges for meeting SDGs (Cattaneo, 2022), namely:

1. the drive for sustainability has magnified global inequalities in access to finance;
2. High demand for sustainable recovery financing and upward pressure on interest rates linked to stimulus packages in HICs could affect countries' capacities to attract capital;
3. Divestment from non-sustainable projects, or projects not labelled as sustainable, could have major implications for resources allocations and the geopolitical equilibrium;

4. Persistent barriers to investment and capacity constraints prevent developing countries from harnessing any benefits from the drive for sustainability;
5. The absence of Environmental, Social and Governance information in most developing countries could hide potential opportunities and add to the income bias in investment decisions;
6. In spite (or as a result) of the drive for sustainability, the mismatch between needs and offerings in sustainable financing could worsen; and
7. The proliferation of sustainability standards could create additional barriers to finance and investment in developing countries, adding significant compliance costs.

A successful sustainable development agenda requires partnerships between governments, the private sector and civil society, as part of the philosophy of SDG 17.

These inclusive partnerships, based on shared principles, values and a common vision along with common goals that put people and the planet first, are needed in the EU, but also at national and local levels.

## 2.4 Lessons learned and transformation areas

Previous editions of the 'Sustainable Development in the European Union — Monitoring' report on progress towards the SDGs in an EU context (European Union, 2022c) have shown that even before the COVID-19 pandemic, progress towards the SDGs in the EU was uneven, with some areas requiring more attention and action than others. Both within the EU and worldwide, the pandemic contributed to making the SDGs' achievement more challenging. In that regard, the European Statistical Recovery Dashboard (Eurostat, 2022) presents meaningful data that shows how the pandemic has affected SDGs' achievement. In particular, the decreases in the amount of greenhouse gas (GHG) emissions seen during the lockdowns significantly increased afterwards and now are at pre-pandemic levels.

The pandemic's impact on young people, who are expecting a greener and more inclusive future, is also highlighted. Indeed, around the world, one in eight students lacked access to either education or training although youth needs to be at the forefront of future planning for the post-pandemic era (United Nations, 2022c). The invaluable work of youth in standing for the planet is essential to help the world recover, according to the UN High Commissioner for Human Rights, Michelle Bachelet during the Economic and Social Council Youth Forum (United Nations, 2022a). During the same event, other participants urged the innovation sector to recognise and value the role of youth as a contributor that is shaping the world's future trajectory, especially given that too few young people making decisions is a persisting issue. Youth participation is significantly hampered by numerous structural, legal and financial obstacles, as well as persistent stereotypes that need to be fought.

The successful implementation of partnerships for the goals (SDG 17) advocates for increased collaboration between the public, private and non-profit sectors, with the SDGs being a blueprint for the year 2030. This not only encourages but also mandates that organisations collaborate and take particular actions to address the numerous challenges the world is currently facing (Leal Filho, Wall et al., 2022), exacerbated initially by the COVID-19 pandemic and now the war in Ukraine.

Universities are major shareholders and have a substantial sustainability impact on the cities where they are located, whether as employers, consumers, or simply as a draw for youth and cultural events (Leal Filho, Caughman et al., 2022). They can greatly contribute to supporting sustainable development and the SDGs implementation. In the framework of SDG-17, cooperative actions might include improved communication with city stakeholders as well as the implementation of joint initiatives and projects, capitalising on global challenges in sustainable development.



The role of artificial intelligence in contributing to the SDGs is today a matter of extreme importance, as shown by a study on sustainable development research involving 48 countries (Leal Filho, Yang et al., 2022). Mainly due to its ability to analyse and respond quickly in real-time, artificial intelligence can contribute to a world that is more just and sustainable. Skills, government, infrastructures and business are the main identified targets for Europe's digital transformation by 2030 (European Commission, 2021d). Accordingly, the list of multi-country projects of necessity needs to address: investment in data infrastructure; low-power processors; 5G communication; high-performance computing; secure quantum communication; public administration; blockchain; digital innovation hubs; and digital skills.

Another study states that priorities during the post-pandemic period should be focussed on rebuilding the economy and society (Zyoud, 2022). Integrated methodologies must assist in lessening the pandemic's effects through cooperation, engagement and dedication so that high-income nations prioritise helping more vulnerable communities using significant resources to deal with the crisis. Investment in green projects, efficient programmes aimed at reducing poverty and improvements to the health infrastructure are essential in overcoming any drawbacks.

The lessons learned from previous actions and agendas for global sustainability and — most importantly — the identification of current sustainability challenges in the light of emerging global crises can lead towards critical transformations. Said transformations are needed to intensify the global commitment to the 2030 Agenda for Sustainable Development.

### 2.4.1 Overview of different agendas for sustainable development

This section is dedicated to presenting lessons and experiences from two of the most well-known global sustainability agendas, predecessors of the SDGs, namely: the Agenda 21<sup>4</sup> and Millennium Development Goals (MDGs). The former is the action plan adopted by the UN at its 1992 Conference on Environment and Development held in Rio de Janeiro, Brazil, which aimed at promoting sustainable development and being better prepared for 21st-century challenges. The latter comprised eight goals set by UN member states at the 2000 Millennium Summit for achievement by 2015.

The MDGs were defined as a new global partnership to lay-out the path towards sustainable development. The goals focused on: poverty and hunger; education; gender equality; child mortality; maternal health; diseases such as malaria and HIV/AIDS; environmental sustainability; and universal partnership.

Agenda 21 is an extensive document containing 40 chapters that are covering: social and economic dimensions; conservation and management of resources; the role of major groups; and means of implementation. An important aim of this agenda was to have local governments develop their own 'Local version' of Agenda 21, adjusting the global views to local contexts, their challenges and priorities. These 'global to local' approaches were intended to accelerate the implementation of sustainable development.

As this Agenda was ambitious, each action area observed different levels of progress. Success is reported in areas such as the involvement of non-governmental organisations (NGOs) and local authorities, international institutional arrangements and legal mechanisms, as well as science for sustainable development. The implementation of Local Agendas 21 is recognised as an additional important outcome, especially for connecting global goals to local actions. This Agenda was also key in promoting gender equality and a pioneer in identifying responsibilities for stakeholders. Nevertheless, some weak points were seen in promoting a comprehensive involvement of different sectors, better connecting the different goals

<sup>4</sup> Agenda 21, the Rio Declaration on Environment and Development and the Statement of principles for the Sustainable Management of Forests were adopted by more than 178 Governments at the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, 3 to 14 June 1992. See more information on the UN Sustainable Development Goals Knowledge Platform, 'Agenda 21' [webpage](#), n.d.

and reporting on their progress, addressing consumption and production patterns, as well as developing human settlements (Dodds et al., 2012).

As with the Agenda 21, progress towards the MDGs was also quite unbalanced. Some countries were reported to engage only with some goals and not the whole Agenda. Gender inequality remained a huge barrier to sustainability and carbon emissions increased during this period, representing a challenge in the context of climate change. Nevertheless, a key outcome of the MDGs was the advance in reducing poverty worldwide: the number of people living in extreme poverty declined by more than half from 1990 to 2015, falling from 1.9 billion to 836 million (United Nations, 2015b).

In addition to the number of goals that define the priority areas for action, three major differences can be identified between the MDGs and the SDGs. Firstly, while the MDGs had a scope more focused on social priorities and targeted developing countries, particularly the poorest, the SDGs encompass economic growth, social inclusion and environmental protection. Secondly, they target both developing and developed countries. Thirdly, the process of MDG's formulation is seen as being overseen only by experts, while SDGs had participation from UN member states, civil society and different groups of stakeholders.

Despite the challenges already observed in the SDG implementation, some aspects point to their advancement in relation to previous sustainability agendas. More attention has been paid to the synergies and trade-offs among goals. Furthermore, reports on the status of implementation are prepared by the UN and other research associations. Especially with support from educational institutions, the dissemination of the SDGs is more intensively covering different population groups and developed countries are leading many efforts and investments.

World sustainability agendas post-2015 are:

- **The Paris Climate Agreement (2015)** aimed to unite countries' responses to combatting climate change and adapting to its effects. It requires climate change mitigation and adaptation actions from all parties as legally binding. Its goals are to hold the global average temperature increase to well below 2°C above pre-industrial levels, to pursue efforts to limit this increase to 1.5 °C, to increase the ability to adapt to the adverse impacts of climate change and to make finance flows consistent with a pathway towards low GHG emissions and climate-resilient development;
- **The Sendai Framework for Disaster Risk Reduction (2015)** aims to prevent new and reduce existing disaster risks through the implementation of integrated and inclusive measures spanning all sectors. It also seeks to reduce hazard exposure and vulnerability to disasters while increasing preparedness for response and recovery;
- **The New Urban Agenda (2016)** serves as a framework for development in urban areas for the next 20 years.

These post-2015 global policy agendas for sustainable development aim at reaching common goals and are synchronised and interlinked in content but their implementation is rather disconnected. Translating them into integrated policies requires political attention and institutional capacities (Teebken, 2022). The synergies between the Nationally Determined Contributions under the Paris Agreement and the SDGs facilitate linked implementation for policymakers. The SDGs facilitate wider social, economic and environmental ambitions connected with climate actions. Integrating these targets can avoid duplication of effort and allow for more efficient budget allocation (Dzebo, Brandi and Savvidou, 2017). For instance, the Country Climate and Development Reports from the World Bank diagnose priority actions for reducing GHG emissions and climate vulnerabilities while achieving other development goals and informing governments and engaging actors in climate actions.

## 2.4.2 Critical areas of transformation

The transformative character of the 2030 Agenda, facilitated by the 17 SDGs, can be seen as providing a valuable framework for ‘building back better’<sup>5</sup>, preventing future crises and increasing the resilience of societies. However, there is a lack of understanding and comprehension at the global level that investing and acting in solving sustainability challenges and the SDGs will result in increased resilience and preparedness for future crises.

In 2022’s UN Sustainable Development Goals Report, UNSG António Guterres calls for ‘an urgent rescue effort for the SDGs by creating a global economy that works for all especially the most vulnerable and for greater investment in data infrastructure’. Furthermore, the UN Under-Secretary-General for Economic and Social Affairs Liu Zhenmin gives a three-step ‘road map for survival: (1) ending armed conflicts and embarking on a path of diplomacy and peace; (2) adopting low-carbon, resilient, and inclusive development pathways; and (3) comprehensively transforming the international financial and debt architecture’.

The European Parliament resolution of 23 June 2022 on the implementation and delivery of the SDGs states that achieving SDGs is an essential prerequisite for achieving a just and fair transition under the Paris Agreement and the EGD (European Parliament, 2022b).

The World in 2050 report has identified six fundamental transformations for achieving the SDGs and extending sustainable development beyond 2030, namely: advancing human capacities and demography; establishing responsible consumption and production patterns; achieving decarbonisation along with inclusive and sustainable energy systems; establishing sustainable land use management and access to food while safeguarding biodiversity of terrestrial and aquatic ecosystems; developing sustainable cities and communities; as well as aligning the digital revolution with the SDGs (The World in 2050, 2018). Sachs et al. introduced six transformations for the operationalisation of the SDGs: education, gender and inequality; health, well-being and demography; energy decarbonisation and sustainable industry; sustainable food, land, water and oceans; sustainable cities and communities; and digital revolution for sustainable development (Sachs et al., 2019).

Recent global crises and their complexity call for transformation that would influence the implementation of SDGs, especially related to: (i) Financing the SDGs, (ii) Ecology transition and green recovery and (iii) Citizens’ Empowerment and consequently help for a green recovery.

### 2.4.2.1 Financing the SDGs

Financing for all SDGs must be subject to collaborative action. The 2021 report ‘Capital as a Force for Good’, stated that ‘The funding of the world’s challenges is a multi-stakeholder responsibility. Governments, individuals, philanthropies, NGOs, and the private sector need to help fund the transition, alongside financial institutions. Closing a funding gap of nearly US\$100 trillion to 2030, representing GDP allocations of c. 10 % every year, will not be possible without a new understanding between all stakeholders’ (Force for Good Initiative, 2021).

The Global community even argues that the climate crisis is a good enough reason to use the ‘Special Drawing Rights’ – the international reserve asset<sup>6</sup>. Special Drawing Rights can act as a tool for leveraging

<sup>5</sup> The UN Office for Disaster Reduction defines the the term ‘Build Back Better’ as ‘The use of the recovery, rehabilitation and reconstruction phases after a disaster to increase the resilience of nations and communities through integrating disaster risk reduction measures into the restoration of physical infrastructure and societal systems, and into the revitalization of livelihoods, economies and the environment.’ See UN Office for Disaster Reduction, ‘Terminology: Build Back Better’, [webpage](#), n.d.

<sup>6</sup> As a result of the interviews conducted for the purpose of this In-Depth Analysis.

resources needed within global climate justice and were used in 2021 as a response to the COVID-19 pandemic.

In a European context, the opportunity to blend the implementation of the EGD and the SDGs should be seized and initiatives that enable 'Financing the joint implementation of EDG as a future programme and the SDGs' should be developed.

'The European Green deal is the roadmap for the EU to become climate-neutral by 2050. The concrete legislation that will allow Europe to reach the Green Deal targets is laid down in the Fit for 55 package that the Commission presented in July 2021. It will include the revision of existing legislation on emissions reduction and energy, which are explained further below. The EU is also working on achieving a circular economy by 2050, creating a sustainable food system and protecting biodiversity and pollinators' (European Commission, July 2021).

To finance the Green Deal, the European Commission presented the Sustainable Europe Investment Plan in January 2020. It aims to attract at least EUR 1 trillion of public and private investment over the next decade, while the Just Transition Fund is designed to support regions and communities that are most affected by a green transition, for instance, regions that are heavily dependent on coal<sup>7</sup>. '[The] EU has the opportunity to create "a new system of capitalism" that can generate large returns by investing in the European Green Deal which should be completely linked to the SDGs in order to truly unlock the value that the EU has now launched from the deal' (Crete, 2022).

Financing the SDGs can also be canalised through Member States' recovery processes. The EU launched the 'Next Generation EU' package, the main instrument for supporting Member States during their recovery. National Recovery and Resilience Plans (NRRPs) for the 27 EU Member States must embrace and build on the sustainability pillars. These plans are important elements in directing future development as well as building a resilient and sustainable recovery. Countries' guidelines for preparing the NRRPs do not refer specifically to the SDGs but to the six pillars of the EGD, which does not cover all SDG indicators, but nevertheless displays significant intersections (Koundouri et al, 2021). The EU recovery plan promises improvement based on global sustainability objectives. Building back better along with empowering green and digital transition through NRRPs would require EU Member States and the European Commission to enhance the plans' content by enhancing cross-references and links between measures, exploiting complementarities with other EU funding sources and strengthening reform components (Pilati, 2021).

The 2022 report 'Financing the Transformations for the Joint Implementation of Agenda 2030 for Sustainable Development and the EGD, stresses the need for private financial flows to be directed towards sustainable projects and activities.

The UN commitment to a 'TAX and SDGs' approach was stressed by the Director of Financing for Sustainable Development Office, Navid Hanif, during the Forum on international policy levers for sustainable investment (Hanif, 2022).

'The UN continues to work on other key aspects of carbon emission reduction through tax policies that concern developing countries, and works to produce guidance in the following areas: (i) the

<sup>7</sup> See for example the European Commission, [The European Green Deal Investment Plan and JTM explained](#), Questions and Answers, 14 January 2020.

interaction of carbon taxation with other national measures, such as in the context of broader tax reform, carbon offsetting programs, or addressing fossil subsidies; (ii) potential effect that a carbon tax can have on the full value chain and the fair allocation of the tax cost and tax revenue; and (iii) the role of carbon taxes and other measures to support energy transition, while ensuring that any measures do not cause a strain on their national capacities.'

Taxation as a tool to achieve the SDGs is often argued for by Sachs. During a meeting of the SDG Alliance of Members of the European Parliament (MEPs) for Agenda 2030<sup>8</sup> in July 2021, Sachs stressed the urgent need for an SDGs' financial plan. 'The EU should increase its paid capital to multilateral development banks for the sake of the SDGs. The combined wealth of the 2,700 wealthiest people is equal to USD 13 trillion and a global coordinated wealth tax is a measure which deserves our support. For example, a tax of 2 % on these 2,700 individuals would raise USD 260 billion (more than all ODA)<sup>9</sup>. Furthermore, he praised the EGD 'as the single most important initiative in the world regarding SDGs' and called for a similar deal that focuses on SDGs.

In this aspect, the most significant global reform of the international tax system in decades was introduced in 2021. The Multinational Enterprises will be subject to a minimum 15 % tax rate from 2023. The 'Inclusive Framework' introduces new taxing rights irrespective of physical location (OECD, 2021), albeit this agreement can have disadvantages for countries in the Global-South. Whilst many low-income countries are not included in this agreement, high income countries will undertake the first collection of taxes and should be able to accumulate most of the 15 % required. The EU can then intensify efforts for international tax reform.

The KPMG white paper on environmental taxes has praised the 'Fit for 55 package' and the EU Green Deal as being on the right track to reach a carbon-neutral Future. EU Green Deal taxation is related to: plastic tax; reform in the EU energy taxation directive; carbon border adjustment mechanism; and the EU emissions trading system. However, the paper also refers to a weakness, in that: 'EU measures are not harmonised, probably due to non-existent or restricted legislation power, divergent existing regulations and difficulty in juggling all stakeholders in a single political process' (KPMG, 2022).

#### 2.4.2.2 Ecological transition and green recovery

Governments' priorities during the global COVID-19 pandemic were focused on recovery processes. However, 'building back better' has lost the opportunity of bringing the global economy onto a path of sustainability, by investing in global climate, biodiversity and pollution crises (O'Callaghan and Murdock, 2021). Oxford University's Economic Recovery Project and the UN Environment Programme concluded that only 18.0 % of announced recovery spending can be considered 'green.'

Ecological transition can have several dimensions but as crucial in the light of the current crisis are considered, decarbonisation and clean energy, economic transformation to a circular economy and digital transition.

EU's commitment to the Paris agreement in 2015 refers to a 40 % cut in GHG emission levels by 2030 based on 1990 levels. In 2021, this target was changed to at least a 55 % reduction by 2030 and climate neutrality by 2050. Decarbonisation of the energy system is crucial for the EU's climate objectives.

<sup>8</sup> The European Parliament's SDG Alliance is an informal group of like-minded MEPs from different political groups who are committed to promoting the Sustainable Development Goals (SDGs) in the European Parliament and the EU.

<sup>9</sup> Barry Andrews MEP, '[SDG Alliance - Conversation with Professor Jeffrey Sachs](#)', Youtube, video (41:49).

According to the EU Commission, 'for the energy to be secure and affordable for consumers and businesses, the Member States have to transform their energy systems into a fully integrated, digitalised and competitive EU energy market that is based largely on renewable sources. In addition to regulatory reforms, Member States need to enable and promote further investments in clean energy, including energy efficiency'.

'The energy crisis will accelerate the EU Green Deal, since the transitions toward a low-carbon economy has an added important security dimension', according to Professor Nick Sitter, CEU and BI Norwegian Business School in an interview given to CEENERGYNEWS. Furthermore, he stresses that: 'The faster the transition, the more expensive it will be. Russia's invasion of Ukraine is likely to accelerate several policy initiatives designed to increase the share of renewable energy in the EU energy mix and improve energy efficiency. It is likely that this ambition will remain even if there are no gas sanctions and no gas cut-off, but in this case, it might be paced over at least half a decade. In the event of a cut-off, things can move much faster'.

In September 2022, the President of the Government of Spain, Sánchez, addressing the Upper House of Parliament in Madrid stated that: 'the EU in preparing for the worst possible energy scenario resulting from the war in Ukraine, a total cut-off of gas supplies by Russia, is increasing imports from other countries, accelerating diversification of energy sources and reducing consumption. Likewise, unity and solidarity among all member states will be fundamental' (La Moncloa, 2022).

Buck, Graf and Graichen foresee ten 'megatrends' shaping tomorrow's energy systems, namely: the decarbonisation challenge; deflation of fossil fuel prices; decrease in costs; digitalisation; electrification; the dominance of fixed costs; influential cities; demographic and economic change in rural areas; decentralisation; and interdependence (Buck, Graf and Graichen, 2019).

Ecological transition and green recovery are strongly linked with economic transformation. European countries' net zero targets will require restructuring of the industry and economy, according to the 2022 Sustainable Industry Barometer. The Sustainable Industry Barometer 2022 stressed that 'Companies must step up and align their business models with the SDGs'. The Manifesto by the European Business Network for Corporate Sustainability and Responsibility entitled 'Financing an Inclusive Just Transition' calls on European Policymakers to work towards greater coherence of European sustainability policies, building on the Council recommendations for a fair transition. There is a need to widen the scope of just transition to agriculture, land use & nature protection, digital transition, circular economy, waste management, and human rights, reflected also in the SDGs' (Corporate Sustainability and Responsibility Europe, 2022).

A linear economy extracts global resources and is responsible for climate change and GHG emissions. According to Vilella, 'A zero-waste circular economy can be a game-changer' to keep the planet under 1.5 °C of global warming, and experience shows that this visionary future is far closer if we look beyond business-as-usual scenarios and similar conservative climate and energy policies' (Vilella, 2018).

The circular model of an economy can attract the private sector towards green investment. It is a common understanding that private investment is crucial for achieving the SDGs. Nevertheless, green investments using public funds should not lead to an increase the profits in the private sector instead of contributing to the green recovery.

Another important aspect is the digital transition. Countries can harness digital public goods (such as digital payments solutions, data transfer protocols or digital health services) to improve public service delivery in a safe, trusted and inclusive way (World Economic Forum, 2022).

### 2.4.2.3 Citizen empowerment through Global Citizenship, Education for Sustainable Development and the Universal Basic Income

Global Citizenship and Education for Sustainable Development (ESD) are important elements within the 2030 Agenda, recognised in target 4.7 which states:

‘By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through Education for Sustainable Development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and nonviolence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development’.

The UN Educational, Scientific and Cultural Organization’s ESDfor2030 Road Map, published in 2020, quotes ESD as a crucial element of quality education and a key enabler of all 17 goals, highlighting particularly: (i) individual transformation; (ii) societal transformation; and (iii) technological advances. ESD can be strengthened by transforming learning environments, building the capacities of educators, empowering and mobilising youth, as well as accelerating local-level actions (UNESCO, 2022a). Lifelong learning can provide all individuals, regardless of their status and characteristics, with the knowledge to explain changes in the climate, trigger action and enforce resilience (UNESCO, 2022b).

Sustainable lifestyles and citizen’s responsible behaviour toward consumption and resource protection can be achieved through awareness-raising, lifelong learning education and civic involvement. For example, citizens in a number of European countries have sued governments because of health issues caused by air pollution. Communities and especially youth movements for climate have contributed to raising awareness regarding climate change. Citizen Science through monitoring and observing the environment provides participants with a better understanding of their environmental impact.

The partnership character of the 2030 Agenda allows for collaboration at different levels of society and every contribution is valid. Citizen science is a good example of citizens’ contributions to the SDGs, through their involvement in science and environment protection. Citizen Science, which has multiple outcomes, can contribute through many channels to the implementation of the SDGs. This can include the representation of ‘organized Citizen Science networks’ in the multi-stakeholder partnerships and engagement mechanisms for the SDGs at national and international levels; thematic contribution, especially to environmental SDGs, such as: biodiversity, nature conservation, climate change and health; participation in policy cycles for evidence-based policies; education and citizens’ empowerment by subject competency; and capacity building (Shulla et al., 2019). The most acknowledged contribution of Citizen Science for the SDGs is monitoring and reporting, as a new and non-traditional source for data provision (Fritz et al., 2019). In 2017, the ‘Citizen Science Global Partnership’, was launched by UN Institutions.

Strengthening the social aspects of the SDGs would require citizen empowerment. Aiming towards a more social Europe, the most frequent suggestion by citizens concerns a European Universal Basic Income (UBI), a periodic cash payment unconditionally delivered to all citizens. This idea has been the subject of discussion for decades in academic and economic circles as a means of reducing social inequality. Many countries around the world have carried out pilot projects for UBI. According to the Green European Foundation which has been working on this issue for a number of years, ‘The foreseeable loss of jobs brought about by the robotisation of the labour market and the COVID-19 crisis have made it more urgent than ever to open a debate on this unconditional subsidy’. The Green European Journal states that green circles and movements usually see basic income as a source for increasing individual freedom and capacities.

Deutsche Welle has reported on this issue as: ‘Universal basic income: An option for Europe?’. Moreover, the basic income debate is ongoing in many EU countries. A citizens’ initiative sent a request to the

European Commission to present a proposal for a basic income to the Member States. The example 'Implementing the Universal Basic Income in Catalonia' (#SDGAction 42844, UNDESA) stresses that UBI characteristics and type connect with certain targets within SDG1 and SDG10. The UN Assistant Secretary-General and UN Development Programme Regional Director for Asia and the Pacific, Kanni Wignaraja in 'The case for a universal basic income' emphasised:

'A new social contract needs to emerge from this crisis that rebalances deep inequalities that are prevalent across societies. To put it bluntly: The question should no longer be whether resources for effective social protection can be found – but how they can be found. UBI promises to be a useful element of such a framework' (Wignaraja, 2020).

Critical areas of transformation identified in order to foster the implementation of the SDGs in the light of recent global crises are considered to relate mainly to the need for transformation in the strategies and actions for SDGs financing, ecological transition based on decarbonisation, clean energy, circular economy and digital transformation and citizens empowerment through education and proper means to reduce social inequality.

### 3 Actions needed to reach the 2030 Agenda for sustainable development

Policy guidelines and actions for fulfilling the 17 SDGs are now considered, based on our analysis above and mindful of the difficulties in completing their implementation within the agreed timeframe. Included in what follows are financial frameworks and resources, investments to advance the 2030 Agenda and ways of overcoming any problems and actions needed to reach the SDGs by 2030.

#### 3.1 Guidelines for synergising different sustainability agendas

##### 3.1.1 The European Green deal, national recovery and resilience plans and the SDGs

The recent Sustainable Development in the European Union — Monitoring report on progress towards the SDGs in an EU context (Eurostat, 2022a), contains the revised global SDG indicator list which will allow monitoring of existing policies such as the European Pillar of Social Rights (European Commission, 2017), mainly focusing on a fair and inclusive EU which is full of opportunity. The new global indicator framework used to monitor the 2030 Agenda's implementation currently includes 231 indicators, supplemented with further indicators at the UN, world, region and country levels (European Union, 2022c).

The SDGs and EDG (European Commission, 2021f) both call for a more integrated approach to production and consumption along value chains. The higher relevance that the Green Deal gives to Life Cycle Thinking and Life Cycle Assessment will when interconnected, contribute to assessing value chains and supporting EU policies towards the SDGs (Sanye-Mengual and Sala, 2022). The EGD is conceived as an approach of highly transformational policies in order to deliver on the 2030 Agenda. Its goal is to convert the EU into a modern, resource-efficient and competitive economy in which climatic and environmental concerns are tackled and transformed into opportunities for all while making the transition equitable and inclusive for all (European Union, 2022c).

The European Climate Law (European Commission, 2021e) translates into law the European Green ambition for Europe's economy and society to achieve climate neutrality by 2050. The law also establishes an intermediate 2030 goal of lowering net GHG emissions by 55 %, when compared to 1990 levels. It seeks to guarantee not only that all EU policies contribute to this goal, but also that all sectors of the economy and society participate, thus addressing SDG13, with an additional positive impact on SDG3, SDG6, SDG12, SDG14 and SDG15 (Campbell et al., 2018). The law also establishes a procedure for determining a climate



target for 2040. Furthermore, an aggressive 2030 climate target of at least a 55 % reduction in net GHG emissions, relative to 1990, is set up with clarity on the role of emission reductions and removals.

A study from Karobliene and Pilinkiene provided an economic assessment of the 'sharing economy' in the context of the SDGs by specifically examining all EU Member States with a focus on economic growth. This study demonstrated how the sharing economy could help smaller nations to boost their economic and digital growth. In the same research area, the role of access to digital information was examined, which highlighted the importance of digitalisation in sustainable development (Leal Filho, Yang et al., 2022). In Europe, there are disparities in measuring business development and the sharing of economy variables (Karobliene and Pilinkiene, 2021). It is important to note that addressing youth integration in society has strong implications for sustainable development, with those who are not employed/involved in education/training differing significantly within EU Member States. The worst situations are found in Italy (23.4 %), Greece (19.5 %), Bulgaria (18.1 %) and Romania (17 %), while more positive situations are found in the Netherlands (5.7 %), Sweden (6.9 %), Malta (7.3 %) and Luxemburg (7.5 %). This illustrates the importance of addressing SDG4, which overlaps with many other SDGs and reflects directly in the development of a specific country and hence needs to be included at the policy level.

The Recovery and Resilience Facility is a temporary recovery instrument and a critical tool within the core of Next Generation EU, designed to help the Union emerge stronger and more resilient from the still ongoing pandemic crisis (European Commission, 2021i). This instrument comprises six pillars, namely: green transition; digital transformation; economic cohesion, productivity together with competitiveness; social and territorial cohesion; health, economic, social and institutional resilience; policies for the next generation (European Union, 2022c). Each country will need to address key points within appropriate contexts, which would have to be replicated in the event of repercussions from the war in Ukraine, particularly regarding the ongoing energy crisis and climate emergency.

The adoption of the EDG in 2019 (European Commission, 2021f) can be regarded as the EU's growth strategy, addressing numerous targets from climate ambitions to accelerating smart mobility (European Union, 2022c). As a result, the number of instruments, initiatives and policies produced by the European Commission to implement the 2030 Agenda is significant, illustrating the diversity involved in contributing to the SDGs' advancement (see Annex 2).

The new European Consensus on Development is a non-binding document that was adopted in June 2017 by the three EU institutions, the European Commission, the Council and the European Parliament. The European Consensus states that the Union and Member States are committed to implementing the 2030 Agenda across all internal and external policies in a comprehensive and strategic approach closely coordinated with the implementation of the Paris Agreement on Climate Change and other international commitments, including the New Urban Agenda (European Commission, 2018).

In order to yield the expected benefits, current and future EU policies need to have a greater degree of coherence, to take the SDGs into account in a more integrated way (European Commission, 2019). Apart from the need for policy coherence referred to earlier, efforts should be made to seek synergies between EU initiatives and those undertaken as part of the UN SDGs Framework.

According to the European Commission, from 2014 to 2019 its approach to SDG implementation was set out in three major policy documents (European Commission, 2020):

1. **A 2016 Communication on the 'Next steps for a sustainable European future'** (European Commission, 2016).
2. **The 2017 European Consensus on Development** (Joint Statement by the Council, representatives of the governments of the Member States meeting within the Council, the European Parliament and the Commission, 2017).
3. **A 2019 Reflection paper 'Towards a sustainable Europe by 2030'** (European Commission, 2019).

**Table 5. The Commission’s political programme and priorities to address the SDGs and certain related policies**

European Commission priorities and related policies	SDGs
<p><b>European Green Deal</b></p> <ul style="list-style-type: none"> <li>- Proposal to put into law the objective to make the EU climate neutral by 2050.</li> <li>- Communication on a Farm to Fork Strategy for a fair, healthy and environmentally friendly food system.</li> </ul>	<p>SDG 2; SDG 3; SDG 6; SDG 7; SDG 8; SDG 9; SDG 10; SDG 11; SDG 12; SDG 13; SDG 14; SDG 15</p>
<p><b>An Economy that works for people</b></p> <ul style="list-style-type: none"> <li>- Communication on the Annual Sustainable Growth Strategy 2020 initiating the European Semester surveillance cycle and the first step in integrating the SDGs.</li> <li>- Communication on the Green Deal Investment Plan: the EU strategy to boost sustainable public-private financing over the next decade.</li> <li>- Proposal establishing Just Transition Fund.</li> <li>- A new Circular Economy Action Plan for a cleaner and more competitive Europe.</li> <li>- Package for fair and simple taxation including Communication on an Action Plan for fair and simple taxation supporting the recovery.</li> </ul>	<p>SDG 1; SDG 3; SDG 4; SDG 5; SDG 8; SDG 9; SDG 10</p>
<p><b>Europe fit for the digital age</b></p> <ul style="list-style-type: none"> <li>- Communication on Shaping Europe’s Digital Future.</li> <li>- Communication on a New Industrial Strategy for Europe.</li> </ul>	<p>SDG 4; SDG 9</p>
<p><b>A European way of life</b></p> <ul style="list-style-type: none"> <li>- Coordination of a common European response to the COVID-19 outbreak to tackle the health crisis and cushion the impact of this economic hit and the ERA vs. Corona Action Plan.</li> <li>- Communication on a Union of Equality.</li> <li>- Communication on an EU Biodiversity Strategy for 2030.</li> <li>- Communication on European Skills Agenda for sustainable competitiveness and social fairness and resilience.</li> </ul>	<p>SDG 3; SDG 4; SDG 10; SDG 16</p>
<p><b>Stronger Europe in the World</b></p> <ul style="list-style-type: none"> <li>- Communication on Tax Good Governance in the EU and beyond.</li> </ul>	<p>SDG 17</p>
<p><b>European Democracy</b></p> <ul style="list-style-type: none"> <li>- Communication on a Strong Social Europe for Just Transitions.</li> <li>- Gender Equality Strategy 2020-2025.</li> <li>- Joint Communication and the EU Action Plan on Human Rights and Democracy for 2020-2024.</li> </ul>	<p>SDG 5; SDG 10; SDG 16</p>

Source: European Commission, [‘Delivering on the UN’s Sustainable Development Goals – A comprehensive approach’](#), Commission Staff Working Document, SWD (2020) 400 final, 2020.

The new Commission’s ‘Whole of Government’ approach to implementing the SDGs comprises several key strands:

- designing and effectively applying deeply transformative policies;
- the European Semester of economic governance: coordination of economic policies;

- the multiannual financial framework and the recovery instrument ‘nextgenerationeu’;
- mainstreaming the SDGs in policymaking using better regulation tools;
- ensuring policy coherence for sustainable development;
- EU engagement in the world;
- monitoring and reporting;
- engagement of civil society, private sector and other stakeholders.

The ‘Whole of Government approach’ is a good basis for the preparation of a new high-level, overarching strategy to implement the SDGs.

There is a need for a balanced Europe and an effective cohesion policy in regard to the SDGs, given present discrepancies in the levels of achievement, which see the Nordic countries as the most advanced whilst their Eastern European counterparts are lagging behind (Ricciolini et al.,2022). Through the Cohesion Policy 2021-2027, the EU aims not only to strengthen economic, social and territorial cohesion but also to correct imbalances between countries and regions.

Levelling imbalances between countries and regions can also be measured through the SDGs’ monitoring and evaluating framework. The EU is expected to present a voluntary report at the 2023 HLPF, the focus of which will primarily be internal to the EU but with some attention on external actions and internal/external policy coherence. The European Voluntary Review toward the SDGs should be inclusive, including EU Member States and possible EU Candidates as well as the European Free Trade Association Member States and EU Candidate Countries. The process should be supported by Regional Reviews (i.e, Voluntary review of Baltic Countries, Voluntary review of the Balkan Countries, etc.).

### 3.1.2 Financial frameworks and resources to advance the Agenda 2030

The Addis Ababa Action Agenda, which resulted from the Third International Conference on Financing for Development, developed in 2015, is an important global framework for financing sustainable development and supporting the implementation of both the 2030 Agenda and the SDGs. This is different from previous frameworks because it has a clear link with global goals. However, sadly the measures of this Action Agenda remained below expectations in their lack of more ambitious numeric targets. Table 6 summarises the action areas presented within the Addis Ababa Action Agenda, which also guides current initiatives and pathways for increased SDG financing.

**Table 6: Action areas within the Addis Ababa Action Agenda and strategies to improve the realisation of its potential**

Action Areas	Description (UN, 2015a)	Strategies to unleash its potential (OECD, 2020)
<b>Domestic public resources</b>	<ol style="list-style-type: none"> <li>1- Domestic resources are first and foremost generated by economic growth, supported by an enabling environment at all levels.</li> <li>2- Significant additional domestic public resources, supplemented by international assistance as appropriate, are critical to achieving the SDGs.</li> <li>3- International cooperation is to be strengthened to support efforts to build capacity in developing countries.</li> </ol>	<ol style="list-style-type: none"> <li>1. Improving international co-operation and exchange of tax information.</li> <li>2. Designing tax systems to support developing countries in identifying and implementing policy and administration reforms.</li> </ol>

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		3. Increasing the supply of tax expertise.
<b>Domestic and international private business and finance</b>	<ol style="list-style-type: none"> <li>1- Businesses are called to apply their creativity and innovation to solving sustainable development challenges.</li> <li>2- Foreign direct investment is concentrated in a few sectors and tends to be short-oriented, so change is needed in this regard.</li> </ol>	1. Scaling up innovative finance approaches and tools, such as blended finance and COVID-19 and SDG bonds.
<b>International development cooperation</b>	<ol style="list-style-type: none"> <li>1- International public finance plays an important role in complementing the efforts of countries to mobilise public resources domestically.</li> <li>2- The agenda demands public budgets and capacities, which require scaled-up and more effective international support.</li> </ol>	1. Developing a framework for assessing national SDG financing needs.
<b>International trade as an engine for development</b>	1- Promotion of a universal, rules-based, open, transparent, predictable, inclusive, non-discriminatory and equitable multilateral trading system and meaningful trade liberalisation.	1- Enhancing the quality of trade, investment and infrastructure.
<b>Debt and debt sustainability</b>	1. Borrowing needs to be managed prudently and developing countries should be supported in attaining long-term debt sustainability through coordinated policies.	1- Exploring new debt management and restructuring strategies.
<b>Addressing systemic issues</b>	<ol style="list-style-type: none"> <li>1. Countries are called upon to assess the impact of their policies on sustainable development.</li> <li>2. Measures to be taken to improve and enhance global economic governance and to arrive at a stronger, more coherent and more inclusive and representative international architecture for sustainable development.</li> </ol>	1. Mapping and matching demand and supply of SDG financing.
<b>Science, technology, innovation and capacity-building</b>	<ol style="list-style-type: none"> <li>1. Enhanced international support and establishment of multistakeholder partnerships for implementing effective and targeted capacity-building in developing countries.</li> <li>2. Support national plans to implement all the SDGs.</li> </ol>	1. Pursuing the effectiveness agenda, including multilateral development finance.

Source: Authors' own compilation.

### 3.1.2.1 Practical pathways for increased SDG financing

A typical low-income country collects under 20 % of its GDP in tax revenues. However, ideal public investments in SDGs could demand more than 40 % of the country's GDP. Hence, governments will need to increase domestic taxes to support their enhanced budget requirements.

Another source of revenue to support investment in SDGs for low- and low-middle-income countries is through increased borrowing from sovereign international capital markets and multilateral development banks, created specifically to supply long-term financing to developing countries at low-interest rates.

Whilst donor countries in the OECD are supposed to give 0.7 % of Gross National Income in ODA, in practice only 0.33 % was given in 2021. To close the gap, more ODA funding sources are required. A first potential solution would be to apply a levy on upper-middle-income countries based on annual carbon dioxide (CO<sub>2</sub>) emissions. The second solution would be a globally coordinated wealth tax on ultra-high-net-worth individuals.

Increased philanthropic funding has the potential to provide massive support to the SDGs. This could be mobilised by a campaign to seek donations initiated by the UN and/or individual governments.

Finally, refinancing developing countries' debts would give them a chance to recover, free from high-interest repayments and amortisation. In this way, a new wave of sovereign defaults could be avoided, which would severely harm countries' creditworthiness and ability to achieve the SDGs (Sustainable Development Report, 2022).

In addition to these strategies supporting the Addis Ababa Action Agenda, incentives and policies should be clearly presented and aligned with the investment chain, thereby promoting more efficient markets and collaboration between partners. The private sector in particular would benefit from a framework with the definition of sustainability objectives, further integration of environmental, social and governance factors, as well as the use of SDG metrics to facilitate investment assessments (OECD, 2020). The private sector's involvement should be based on transparency and accountability as well as government partnerships for maximising the co-benefits of investment.

The connection between SDGs and the transition to a low-carbon society is expected to take up a major share of private investments in sustainable development. National climate plans need a transparent and enabling regulatory environment with policy incentives to allow for market opportunities, especially in the infrastructure sector for areas such as: building efficiency; demand-side energy management; low carbon technologies in the transport sector; renewable energy; together with water and waste management. Other areas, such as education and healthcare, tend to be more sensitive to private sector involvement as related initiatives are held under the public sector's responsibilities.

### 3.1.3 Policy guidelines, binding aspects and legal facilitation

Sustainable development is an overriding political priority for the European Commission, reflected in the six headline Ambitions for Europe announced in the Political Guidelines, namely: the European Green Deal; an economy that works for people; Europe fit for the digital age; European way of life; stronger Europe in the world; and European democracy.<sup>10</sup> See details in Annex 1 below. These six headline targets combine in addressing specific needs that have major implications for different SDGs. In each case, more information is available on the European Commission webpages detailed in this Annex.

Beyond these Guidelines, recent work by Leal Filho, Caughman, et al. (2022), on Symbiotic Approaches Between Universities, Sustainable Development and Cities, sets out recommendations that must be taken into account within local policies to take full advantage of the numerous opportunities that can be

<sup>10</sup> European Commission, 'The European Commission's priorities: 6 Commission priorities for 2019-24', [webpage](#), n.d.

presented for cooperation in sustainable development at the city level. Included are: formal agreements between local universities and cities; funding allocations in city budgets encouraging collaboration; definitions of imperative sustainability topics; and provisions allowing for staff swaps between universities and city authorities (Leal Filho, Caughman, et al., 2022).

In addition to the enduring pandemic effects, the war in Ukraine has affected the 'safety net', generally acknowledged as part of the universal right to social protection. Research undertaken by Motte-Baumvol et al. on the lessons from this war towards the EU's temporary protection directive highlights the new difficulties regarding funding and the long-term viability of such protection. This affects sustainability at the global level and hence is not merely compromising SDG1, but also being reflected within all other SDGs (Motte-Baumvol et al., 2022). It is clear that there is a connection between food security and sustainability. Both new food insecurity and systemic flaws in existing global food security have been highlighted by the ongoing Russia-Ukraine conflict (Behnassi and El Haiba, 2022). Russia's invasion has effectively raised food prices in national and international markets, which is particularly damaging for low-income countries' food imports. Energy markets are also being disrupted, which again penalises importing countries, and this war has also reduced the ability of international food aid to meet rising food demands in times of crisis. Whilst affecting SDGs' implementation generally, this is producing a hugely detrimental impact on countries where SDG progress is less advanced.

According to the Everest Group, a research firm, three key challenges have already emerged from this war: (i) transition to renewable energy is being compromised by increasing metal and gas prices, with an 80 % cut in Russian natural gas being exported to Europe, while simultaneously the conflict is forcing Europe to accelerate its energy self-reliance; (ii) defence investment is classified as sustainable and seen as contributing to supporting SDGs' implementation, and (iii) investors are moving away from regimes considered as authoritarian, hence guaranteeing that investments are considered as Environmental, Social and Governance-compliant, thereby supporting sustainability and SDGs implementation (Everest Group, 2022).

However, according to UN Deputy Secretary-General Amina Mohammed's message to the UN Economic Commission for Europe Regional Forum for Sustainable Development 2022, the ramifications of the war in Ukraine have been many, besides the human suffering already highlighted (OCHA Services ReliefWeb, 2022). Supply chains have been shattered. Food, electricity, transportation as well as other necessities have all become more expensive and consequently, humanity faces the genuine threat of unparalleled famine. Hence, four priorities are highlighted to implement the SDGs agenda, mindful both of the war and ongoing pandemic. These are: (i) energy transition to renewables, given the necessary 45 % reduction in emissions by 2030, emissions will rise 14 % this decade, with food transformation pathways being included as well as addressing greater digitalisation; (ii) health coverage and equity, for instance, vaccination, bringing resilience to the pandemic; (iii) addressing inequality, empowering refugees and people with disabilities, also tackling gender equality and moving away from the GDP paradigm; and (iv) reinventing the future of education, preparing learners for a rapidly changing world.

Accordingly, energy issues, refugees, food security and extreme weather events are all interrelated, thereby compromising the SDGs' advancement in a post-pandemic era, or even in a possible post-Ukraine war era, with energy transition being considered a top priority. That is why at governmental and institutional levels, countries need to rely on new rules/legislation/policies to be incorporated into international humanitarian law that explicitly provides adequate protection for food-related infrastructures and activities, with appropriate sanctions in the event of violations (Behnassi and El Haiba, 2022). Policy guidelines will also need to rely on resilient infrastructures via a Nature-based solutions approach to deal with rising temperatures under climate change (SDG13), one of the most relevant SDGs currently affecting many other SDGs (European Commission, 2022b). Nature-based solutions are also able to create new jobs and skills, resulting in innovation, and have a broader economic impact, thus now needing to be considered at the

policy level. In addition to the war in Ukraine and the ongoing pandemic, water, energy dependence and droughts are all affecting EU sustainable development achievements. This summer in particular has illustrated these interdependences. Consequently, as with the rest of the world, the EU is witnessing an unprecedented combination of factors, which must guide us towards prevention at the policy implementation level, instead of remediating solutions. Specifically, at the EU level, each Member State has been facing specific challenges regarding health (pandemic) and food security (Russia's War of aggression on Ukraine), but the existing interconnectedness and dependence make it difficult in terms of common decision-making to move on and overcome difficulties threatening global sustainable development. To achieve certain SDGs simultaneously, policy measures must be carefully crafted to create synergies between the goals while avoiding trade-offs with other sustainability targets (European Union, 2022c; Leal Filho, Wall et al., 2022).

It should be pointed out that responsibility for implementing the 2030 Agenda primarily rests with countries or more specifically their local authorities (Organization for Economic Co-Operation and Development, 2016). The Global Civil Society Report on the 2030 Agenda and SDGs indicates that policy responses to the pandemic have in practice contributed to inequality at the global level (Spotlight on Sustainable Development, 2021). Hence, the 'leave no one behind' assurance from the 2030 Agenda for Sustainable Development is left in a vacuum. Given the various crises mentioned earlier and the challenges they present in threatening SDGs' implementation, there needs to be a stronger focus on policies addressing economic justice based on human rights allowing equal access to public services, including healthcare and education, with universities playing a crucial role. Hence, in considering the likelihood of unpredictable events policy guidelines need to act both as barriers and legal facilitators in facing extreme global consequences, involving *inter alia* food security. We are currently experiencing many setbacks that have huge economic and social implications, which must therefore be considered in future scenarios for deployment at the policy level.

Since governance and the rule of law are important aspects of implementing the SDGs, this sub-section describes their various dimensions. Although the SDGs are not legally enforceable, since in precise terms they form a normative conceptual framework (Arajärvi, 2017), nations are nevertheless required to assume responsibility for the 17 objectives and build national frameworks for their attainment (European Union, 2022c). Efforts to address SDG1, poverty elimination, at the heart of sustainable development and the other SDGs, need to account for factors such as gender, education, health and political issues (Leal Filho, Henrique Paulino Pires Eustachio et al., 2022). It is crucial for policymakers and other stakeholders to participate in creative approaches to combatting poverty. As previously seen and also experienced in the hot summer of 2022, the effects of human activity on the earth's systems are irreversible. They include climate change, a decline in economic activity and even the potential for unexpected events such as the ongoing pandemic and war, contributing to increased poverty, some of which is transient.

According to Arajärvi, the international legal system is built on the rule of law, but over time the rule of law has been increasingly challenged at the UN level. Knowing that the SDGs cannot be considered legally binding, the work developed has aimed to assess whether or not the rule of law in this context could be viewed as a normative and universal foundation of international law (Arajärvi, 2017). It was found that the concept of the UN normative settings in the 2030 Agenda for sustainable development could be in decline, being perceived as a symptom of international legal order fragility. Indeed, recent research by Leal Filho, Vasconcelos et al. have aimed precisely at emphasising the role of effective and robust international cooperation in supporting the implementation of sustainable development actions at the global level (Leal Filho, Vasconcelos et al., 2022). The present challenges posed by the pandemic, Russia's war on Ukraine, the energy crisis and the climate emergency will certainly contribute to a changing paradigm in this regard. In ensuring they are delivered in line with the rules of law, the SDGs need stronger institutions to advance the promotion of human rights and good governance through inclusive decision-making, as mentioned in this cited work of Arajärvi. This will also call for the endorsement of a common vision, as expressed in the

'The Future We Want' (Sustainable Development Knowledge Platform, 2012). Indeed, many references are made to 'legally binding' instruments aimed at developing 'effective legal and regulatory frameworks, policies and practices' for different sectors. Hence, effective implementation will be key in a post-2030 deadline agenda.

According to Advocates for International Development, the legal community involved has a relevant role in contributing to the SDGs' progress, for instance, in law reform, new legislation, legal education as well as legal aid provision and representation (Shah, 2016). For example, SDG5 on gender equality can be addressed by replacing legislation and practices discriminating against women and girls based on their gender, with strong legal frameworks that protect their legal rights (Leal Filho, Kovaleva et al., 2022; Leal Filho, Salvia et al., 2022). SDG12, responsible consumption, and SDG7, affordable and clean energy, call for globally endorsed legislative frameworks that also give poor nations the legal means to implement them. Accordingly, it may be argued that the promotion of the 'rule of law' globally is therefore the crucial element underlying the realisation of the 2030 Agenda, despite the somewhat secondary nature of its inclusion under target 16.3 along with the challenges posed by current weaknesses in international and national law. Thus, in practice, legal changes should be implemented by each country to facilitate the instruments intending to contribute to the full implementation of specific SDG targets.

While the UN aims to assure a coordinated approach to the rule of law, this has to date not become a cross-cutting issue, even considering SDG16, on peace, justice for all and strong institutions (Arajärvi, 2017). Looking ahead, it is crucial that the rule of law be more prominent in guiding the implementation of the goals, marking a critically important step in proactively utilising the legal system to advance the new development agenda, in particular in a post-2030 context.

## 3.2 Actions to achieve the SDGs by 2030

Implementation of the 2030 Agenda in conjunction with the Paris Climate Agreement (December 2015) offers a great opportunity to make the policy-making process more efficient leading to a transition to sustainable and low-emission lifestyles and economies worldwide. The 2030 Agenda explicitly calls for putting the weakest and most vulnerable at the centre and leaving no one behind.

The SDGs and their respective targets were designed in 2015 by the UN as a means of achieving sustainability worldwide by 2030. These goals were designed with rankings to ensure that countries would be held accountable for progress or lack thereof (Miola and Schiltz, 2019). Agenda 2030 was created to guarantee better living conditions for all human beings. The goals are specifically constructed to target environmental, economic and social problems that include poverty, education, climate change and gender equality. Each goal has specifically related targets with indicators so that the UN can monitor progress towards the achievement of goals (Miola and Schiltz, 2019).

At present, such progress is largely non-existent, due to various interlinked crises that have been slowing down or even reversing any achievement. These include the ongoing COVID-19 pandemic, problems associated with climate change and a number of conflicts, including the war in Ukraine, which affect many SDGs in various ways. This has resulted in at least a partial reversal of previous years' progress in areas such as fighting hunger (SDG1), poverty (SDG2) and climate change (SDG13). The agreement on the SDGs in 2015 was extremely ambitious from the outset but the results seven years later are extremely sobering. Hence, it has been agreed that achieving the SDGs in isolation is not feasible. Modelling trade-offs between the different goals may achieve faster results and in this way, more progress for the overall sustainability goal may be achieved (Soergel et al., 2021).

One of the best ways of making progress towards achieving the SDGs is to utilise collective action. This implies that several different nations, parties and stakeholders could work together to achieve the goals.



However, such collaboration is difficult to realise, which is possibly one of the main reasons for the SDGs' slow progress (Henry and Vollan, 2014).

Aside from this, more financial assistance needs to be allocated or raised for countries that are unable to put aside funds for sustainability. Low- and middle-income countries usually face financial constraints when attempting to achieve sustainability and thus progress suffers when compared to more developed countries (Jaiyesimi, 2016). Apart from better financial provisions, further actions needed to achieve the SDGs include:

- **Setting up coordinating offices in each country to monitor progress.** These may be overseen by government agencies which could report to Parliament.
- **Cross-checking current and future legislation so that it is consistent with and does not work in conflict with the SDGs.** For instance, new laws which permit temporary increases in the use of fossil fuels (such as coal) counteract SDG13 (Climate Action) and may be detrimental to SDG3 (Good Health and Well Being).
- **Putting greater emphasis on the SDGs in the context of educational programmes,** especially in higher education, but also in the context of professional and vocational programmes.
- **Mobilising the civil sector, especially NGOs,** in pursuing the SDGs more intensively.
- **Stimulating a coordinated mobilisation of industry,** so that the SDGs may be better taken into account within production processes.

Furthermore, efforts need to focus more on capacity building. Programmes need to be developed to ensure that people acquire the necessary skills to engage in sustainable activities and further engage in knowledge transfer. In doing so, cultural changes need to be adopted, as some cultures inhibit certain activities that assist in sustainability (Ashencaen Crabtree et al., 2019; Jaiyesimi, 2016). For example, the tradition of using fires to clear land poses a threat to people and nature. Also, the yearly shooting of hundreds of migratory birds which fly over Malta each April, cannot be regarded as a cultural behaviour associated with sustainable development. Overall, there is a need for efforts which may assist in moving closer to achieving sustainable development, despite the narrow time frame and barriers faced at present (United-Nations, 2022).

### 3.2.1 Necessary medium-term actions of a more fundamental nature to achieve the SDGs

While short-term actions are of great importance in achieving the SDGs, a long-term approach is also required. The global economy is still around 80 % dependent on fossil fuels and hence extremely rapid decarbonisation is required to prevent serious climate change damage in the coming decades. However, such a transition towards a fossil fuel-free society may take at least three decades without any significant technological breakthrough and adaptation of infrastructure and equipment (Smil, 2022). While large-scale energy transition is an economically and politically attractive option, it enhances the current process of globalisation and increasing interconnectedness. This leads to serious threats of economic disturbances (Taleb, 2007; 2012) in case of disasters that may lead, for instance, to blackouts and other types of systemic risk. Furthermore, there remains the issue of decarbonising global production and supply chains, which rely on: fossil fuel-intensive container shipping; construction and maintenance of infrastructure; as well as production and trade of goods with a high fossil fuel footprint due to the use of steel, cement, plastic and artificial fertilisers.

In this context, it is important to note that actions often aim at solving different types of serious problems, yet their outcome is often uncertain. The effectiveness of those actions becomes questionable, as they may trigger different effects which ultimately counteract different SDGs. As a consequence, attention should

also be drawn towards what not to do and what to avoid, as this may support less sustainable production and consumption patterns.

Many of the threats to sustainability embraced in the 17 SDGs are well known. A wide range of warning signals are recognised, whether it concerns climate change, threats to the financial system, energy supply, food supply, the rise of nationalism/populism, food crisis, hacker attacks threatening information safety, internet blackouts, or many other issues. These obvious but possible future crises are often downplayed or just ignored for different reasons (Wucker, 2016). Recognising this problem, there is the need to rethink which type of growth society needs to decrease resource intensity and improve distributional fairness (Hickel, 2020). Furthermore, the location of production centres should be reconsidered to reduce dependency on global supply chains, which show a tendency to increase in complexity and tend to feature different weakest links and bottlenecks (Smil, 2022). While COVID-19 has demonstrated the relevance of this issue, the same can be said of other extreme events such as the flooding of the Yangtze in China which devastated an area stretching almost 700 kilometres from Wuhan to Shanghai, causing not only incredible local damage but also seriously disturbing global supply chains (Fergusson, 2021).

These reflections lead to the following ideas for actions, which are intended to stimulate ideas beyond short-term SDG actions, as the time frame for implementation is rather long-term. These actions are presented to support the base line of sustainability – the prevention of different types of crises.

- **Action 1:** Start a debate on what not to do or avoid to achieve the SDGs. This may include research on the type of most damaging activities, to identify simple ways of reducing peoples' impact on the environment. An existing example is reducing meat consumption (in particular beef), but also preventing further expansion in the scale of agricultural production, which would effectively lengthen international supply chains with significant fossil fuel footprint.
- **Action 2:** Support and stimulate small-scale local energy transitions, not only stimulating resilience in energy supply but also supporting the subsidiarity principle. Small-scale projects support social cohesion, as they provide basic necessities for society's functioning, independent of political views (Sen, 1999). This action is related to rethinking growth, as it turns the focus from economic efficiency to creating buffers for different types of disturbances, as the war in Ukraine is demonstrating. This action also helps to prepare for future shocks in energy provision should this transition proceed more slowly than expected.
- **Action 3:** Support and stimulate Research and Development on technologies replacing fossil fuel-intensive production, such as fertilisers, steel, cement but also global transport. This action should be developed together with Actions 2 and 4.
- **Action 4:** Launch initiatives for creating local production systems, to reduce dependency on fossil fuel-intensive global transport, as well as particular production centres in the world.
- **Action 5:** Identify bottlenecks, weakest links and dependency on long, complex supply chains reliant on single regions and suppliers. This supports Actions 2, 3 and 4.
- **Action 6:** Identify sources of ignorance concerning the well-known risks of different types of crises. This is the basis for developing initiatives to increase peoples' preparedness for preventing and gearing up for different types of crises, without disturbing their mental comfort.

### 3.2.1.1 [Actions needed by the European Parliament and the European Commission](#)

The SDGs should be achieved within the nine planetary boundaries which cover the physical, chemical and biological processes of the Earth system. These boundaries are the following: climate change, biosphere integrity, biogeochemical flows, land-system change, ocean acidification, freshwater use, stratospheric

ozone depletion, novel entities and atmospheric aerosol loading. Whilst in the process of achieving the 14 socio-economic SDGs, there will be pressure on planetary boundaries and the three environmental SDGs (SDG13, SDG14 and SDG15) should the world continue with current conventional efforts (Randers, Rockström et al. 2019). According to the European Environmental Agency, the total ecological footprint of the 27 EU Member States (plus the United Kingdom) is more than twice the region's biocapacity of ecosystems to produce useful biological materials and to sink carbon emissions. Thus, the total demand for ecological goods and services exceeds Europe's ecosystem supply capacities. This ecological deficit has negative consequences for the environment within and outside Europe. In 2019, the EU had 6 % of the world's population and produced 9 % of the world's CO<sub>2</sub> emissions. EU import and export activity triggered 10 % of the world's CO<sub>2</sub> emissions, albeit over the past decade the EU's negative balance for CO<sub>2</sub> emissions has slightly decreased, according to Eurostat estimates.

- **The European Parliament could continue its work on reducing the ecological footprint in the European Union.** As highlighted by the European Environmental Bureau, the largest network of environmental citizens' organisations in Europe: 'In 2021, the European Parliament demanded the first ever EU-Targets to reduce over consumption. MEPs confirm push for targets to reduce resource use by 2030 and bring EU consumption within planetary boundaries by 2050 – an unprecedented move that could help Europe transition to a more resilient and less wasteful economy' (European Environmental Bureau, 2021). The report 'Europe's Environment: The Seventh Pan-European Environmental Assessment' which covers the period until the end of 2021 calls for greater efforts to tackle: air pollution; reduction of GHG emissions through decarbonisation and renewable energy; as well as the reduction of waste and resource use by promoting a circular economy. At the same time, there should be increases in green finance and public spending on environmental protection as well as stronger environmental governance through education and data sharing (UN Economic Commission for Europe and UN Environment Programme, 2022).
- **The European Parliament could push for speeding the process of developing the 'Beyond GDP' dashboard.** The 8th Environment Action Programme urges the EU to make progress towards a Wellbeing Economy and develop a 'Beyond GDP' dashboard<sup>11</sup>. This maps how the EU performs in key sustainability, wellbeing and resilience aspects. It builds on the priorities of the Commission (e.g EGD, SDGs, EU Semester, social scoreboard). The European Economic and Social Committee likewise proposed in 2021 that a series of new indicators should be developed to complement GDP and be integrated into the European Green Deal as well as the EU economic governance framework.
- **The European Parliament could push for better handling of spill-overs from the European Union.** According to SDGs Watch Europe, current indicators (Eurostat) do not address many negative spill-over effects from EU policies for the world. The 2022 Sustainable Development Report compares the 'SDG Index Score versus International Spill-over Index Score' and stresses that 'At the member states' level, in 2022, Sweden became the first country to announce its intention to set a national target to curb imported CO<sub>2</sub> emissions'. The report also underlines four major priorities to curb negative international spill-overs generated by rich countries: (i) Scale up international development and climate finance; (ii) Leverage technical cooperation and SDG diplomacy; (iii) Adopt national targets and instruments to address consumption-based impacts on other countries; (iv) Strengthen monitoring and data systems at international, national, industrial and corporate levels covering the full supply chains and make them an integral part of SDG reporting (Sachs, 2022).

The European Parliament resolution of 23 June 2022 on the implementation and delivery of the SDGs (2022/2002(INI)) is a comprehensive document and an important initiative in the SDGs implementation process (European Parliament, 2022b). Furthermore, the European Parliament resolution on climate

<sup>11</sup> See European Commission, 'Environment action programme to 2030' [webpage](#).

change clearly indicates the need for the institution to more prominently feature in the Paris Agreement processes. Since it must give its consent to international agreements and plays a central role in the domestic implementation of the Paris Agreement as a co-legislator, the European Parliament should be more closely involved in the negotiations and implementation processes, including attendance in EU coordination meetings at the Conferences of the Parties of the UN Framework Convention on Climate Change such as the Conference of Parties (COP) 27 held in Sharm El-Sheikh (European Parliament, 2022a).

- **The European Parliament could be active in the entire process of the EU Voluntary Review preparation.** This can include participation in meetings with concerned actors, reviewing the documents, and receiving reporting to the EP regarding this process.
- **The European Parliament could play an important role in communicating on the SDGs, governance aspects and civic participation.** Furthermore, it can push for details and further elaboration of the ‘whole government approach’, through which Commission President von der Leyen is taking responsibility for coordinating efforts for SDGs implementation, as stated in the European Commission’s Staff Working Document on ‘Delivering on the UN’s Sustainable Development Goals- A comprehensive approach’, in 2020.
- **The European parliament could continue to push for renewal of the high-level multi-stakeholder platform on the implementation of the SDGs with a clear mandate until 2030**<sup>12</sup>. This platform was set up to ‘support and advise’ the European Commission and all stakeholders on SDGs’ implementation at the Union level and its mandate ended in December 2019. This platform will allow a structured dialogue and engagement for many: CSOs; community-based groups; private sector associations; trade unions; cooperatives; academia and the science community; local government units; and any ‘left behind’ groups (World Wildlife Fund, 2022).

## 4 Potential scenarios for achieving the SDGs by 2030

There are three potential scenarios for achieving the SDGs considering the potential risks:

1. **Business as Usual:** The European Union pursues sustainability in an *ad hoc* manner, which is what seems to be happening to a large extent at the moment.

**Potential Risks:** Key risks are associated with the triggering of climate tipping points and threats to planetary boundaries. A recent study by McKay et al. highlights the importance of commitments to the Paris Agreement, indicating the risk of passing multiple climate tipping points above 1.5 °C global warming. To have a 50 % chance of achieving 1.5 °C, global GHG emissions must register at least a 50 % reduction by 2030, reaching net-zero by 2050 (McKay et al., 2022). ‘The Earth may have already left a “safe” climate state when temperatures exceeded approximately 1 °C warming. The United Nations’ Paris Agreement goal to limit warming to well-below 2 °C and preferably 1.5 °C is not enough to fully avoid dangerous climate change’ (Earth Commission, 2022). The Sixth Assessment Report of the Intergovernmental Panel on Climate Change states that the risks of triggering climate tipping points become high at around 2 °C above pre-industrial temperatures and very high at 2.5-4 °C (Intergovernmental Panel on Climate Change, 2022).

2. **Sustainability as a modest priority:** more emphasis is placed on sustainability as a whole and especially the SDGs.

<sup>12</sup> This recommendation was drawn from the interviews conducted for the purpose of this In-Depth Analysis.

The still unknown long-term consequences of COVID-19 and the war in Ukraine would undermine efforts in this scenario. The War has undermined food security and supply chains, energy security, industrial supply chains and the environment (aggravating eco-systems, air quality, deforestation etc.) (European Think Tanks Group, 2022). Hence, this scenario cannot guarantee societies' resilience towards unexpected crises and dependency on supply chains for food, energy and health care systems.

**Potential Risks:** The EU commitment to net zero may not be achieved. The International Energy Agency, in its World Energy Model Report in 2022, refers to a Sustainable Development Scenario that is based on clean energy policies and investment (International Energy Agency, 2022). Soergel et al., consider optimistic the 'Sustainable development pathway scenario' in which global GHG emissions are reduced rapidly, by 2050, through among others a rapid reduction of agricultural Methane and Nitrous Oxide emissions. (Soergel et al., 2021).

**3. Sustainability as a driver of wellbeing and growth:** Europe fully embraces sustainability and the SDGs, making it a cross-cutting issue of EU policy-making.

**Potential risk:** There could be a lack of global commitment to the same values, potential conflicts and consequent instability. Illegal operations could increase environmental damage and plastic pollution. The global population will continue to increase. The need for resources will be intensified as the world's population is expected to reach around 8.5 billion by 2030 and 9.7 billion by 2050, according to the latest UN projections. By 2030 the number of residents in urban areas is expected to be nearly 790 million (56 % in Asia, mostly China and India and approximately 30 % in Africa, mainly in Nigeria). UN projections show that the world's top 10 fastest-growing cities between 2018 and 2035 are expected to be in Africa, (Shulla and Kőszeghy, 2021). The EU population, according to Eurostat projections of April 2020 will increase from 446.8 million in 2019 to 449.3 million in 2026 (+0.6 %), then gradually decrease to 441.2 million in 2050 and to 416.1 million by 2100. Despite this overall decline, Europe's level of urbanisation is expected to increase by 83.7 % in 2050, according to projections published on Knowledge for Policy (Competence Centre on Foresight). As a result, agricultural land abandoned is expected to increase to a total of abandoned land to 5.6 million ha by 2030. Built-up areas are likely to reach 7 % of the EU territory by 2030<sup>13</sup>.

The importance of the SDGs for post-Covid recovery is acknowledged in the report 'Achieving SDGs in the wake of COVID-19: Scenarios for policymakers' from UNDESA, which states that countries that had made more progress in achieving the SDGs were better able to deal with the COVID-19 pandemic. 'Overall, the kind of post-COVID-19 scenario that takes hold of a country depends on whether it can: (i) minimize the damage caused by COVID-19; (ii) recover quickly from the damages; (iii) hold on and build further on the positive changes introduced to its healthcare, social protection, and governance systems during the pandemic; (iv) sustain and bolster positive gains made regarding the planet-related SDGs, while countering negative environmental effects such as plastic pollution and illegal deforestation; and (v) reenergize its general effort toward sustainable development' (Development Research Branch of the Economic Analysis and Policy Division, 2020).

<sup>13</sup> See the European Commission, 'Competence Centre on Foresight: Developments and Forecasts on Continuing Urbanisation', [webpage](#), n.d.

## 5 Recommendations

The Section 3 focuses on the recommendations and insights of what could ideally be done to achieve the goals set out in Agenda 2030 for Sustainable Development. These recommendations are directed towards the European Parliament, European Commission, Member States, civil society, private sector and the scientific community. Taking into consideration the likelihood that the SDGs will not be reached within this time frame, it concludes with remarks about the future of the world post-2030.

### 5.1 Recommendations for the European Parliament

- The European Parliament, through its three main functions (scrutiny, legislation and budget control) can increase its role in fostering the implementation of the Agenda 2030 on sustainable development in the EU and Member States.
- The European Parliament can be active and represented throughout the entire process of preparing the EU Voluntary Review, through participation, reviewing and request reporting and can encourage the preparation of the EU Voluntary sub-regional Reviews.
- The European Parliament can be more active in placing greater emphasis on the SDGs in the EU Green Deal, including transparency regarding the SDGs spill-over effects outside the EU.
- The European Parliament can continue to push its efforts for reducing the EU's ecological footprint (i.e., initiative for the EU targets regarding over consumption).
- The European Parliament can take on a leadership role by increasing the individual initiatives of the MEPs for the SDGs, such as the SDGs Alliance of MEPs. Said initiatives can have continuity in 2024 at the beginning of the Parliament's new mandate and thus encourage alliances for the SDGs at any level.
- The European Parliament can strengthen the internal mechanisms and cooperation regarding the SDGs, for example between different Committees of the European Parliament having competencies which relate to the SDGs thematic challenges (such as Development, Environment, Public Health and Food Safety Industry, Research and Energy, Regional Development, etc.) and possibly at the Conference of Committee Chairs' level.
- The European Parliament can request regular reporting from the European Commission on the SDGs that are separate from the annual report of Eurostat which gives an overview of the SDGs.
- The European Parliament can support Member States' parliaments in enforcing/establishing engagement mechanisms for the SDGs (i.e. through knowledge sharing).
- The European Parliament can play a positive role in increasing the transparency of different agreements, thus enforcing awareness and involvement within society and supporting participatory governance and democracy including schemes such as the European citizens' initiative.
- The European Parliament can support the establishment of a global fund for social protection and UBI, contributing to the empowerment of the individual.
- The European Parliament can mainstream the SDGs in the diverse existing programmes, for example in the 'Future Leaders Initiative' to raise awareness among future leaders about the importance of global commitments to sustainability.
- The European Parliament, as part of its efforts to increase support for democracy around the globe, can devote special attention to contributing to SDG 16 'Promote peaceful and inclusive societies for

sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels’.

- The European Parliament can mainstream the SDGs through specific programmes that are in force for the Parliaments of Turkey and the Western Balkans (Albania, Bosnia-Herzegovina, North Macedonia, Montenegro, Serbia and Kosovo), support capacity strengthening for the SDGs for Members and staff of these Parliament and influence Candidate Countries for greater commitments toward the SDGs implementation (i.e. SDGs monitoring and reporting during the association process).

## 5.2 Recommendations for the European Commission

- The European Commission can strengthen its commitment to the Agenda 2030 and move from ambitions to strategies and actions for the SDGs.
- The European Commission can adopt an overarching high-level EU Agenda 2030 strategy to implement the SDGs fully, reinforcing the statement from the European Parliament Resolution of 23 June 2022 on the implementation and delivery of the SDGs, ‘whereas Parliament, the Council and the European Council have, on repeated occasions since the adoption of the Agenda 2030 for Sustainable Development in 2015, called on the Commission to adopt an overarching strategy to fully implement the SDGs’. (European Parliament, 2022b). This strategy can be a logical follow-up of the first EU Voluntary Review.
- The European Commission can further promote official reporting for the SDGs through voluntary reviews (national and local, sub-regional) and establish an official multi-stakeholder engagement process during the preparation of the first EU Voluntary Review.
- The European Commission can integrate the SDGs in the EU’s economic monitoring and budgeting processes, such as the European Semester and in the investment priorities of the Multi-annual Financial Framework.
- The European Commission can align the implementation and financing of the Green Deal with the SDGs. The European Green Deal as the EU instrument for delivering on sustainable development should secure its continuity after this EU mandate and Member States should have incentives for its continuity<sup>14</sup>.
- The European Commission can use the crises as a turning point to build back better, aligning the national recovery processes with the SDGs which require that the SDGs are reflected in countries’ National Recovery and Resilience Plans.
- The European Commission can aim at the synergising implementation of the different sustainability agendas and should intensify efforts for aligning the SDGs with binding agreements and existing laws at the European Level (i.e., the 2015 Paris agreement, European Climate Law, etc.) and work towards further alignment of Eurostat and SDG indicators.
- The European Commission can aim for a compact Europe, levelling differences between European regions where Nordic countries are more advanced and supporting the regions that are behind in SDG implementation, i.e. Eastern European countries, fulfilling the Universality character of the 2030 Agenda that it applied to all countries.

<sup>14</sup> As a result of the input from the interviews conducted for the purpose of this In-Depth Analysis.

- The European Commission can follow inclusive policies for countries aiming to join the EU, including their monitoring and reporting for a comprehensive overview of achievements on the SDGs in Europe. (Candidate countries perform below average on progress towards the SDGs).
- The European Commission can promote target 4.7, (SDG 4) Global Citizenship and Education for Sustainable Development, including all forms of education, which is crucial for the implementation of the 17 SDGs and for promoting the role of youth in decision-making processes.
- The European Commission can promote stronger institutions, inclusive decision-making, promotion of human rights and good governance as means for reaching the SDGs.
- The European Commission can have a stronger mandate for fostering the implementation of the SDGs in Member States, but also assume greater responsibility and involvement in countries' implementation processes<sup>15</sup>.

### 5.3 The European Union and the SDGs: an external dimension

- The European Union can review its global partnership agreements and collaborations with regard to the SDGs, thus implementing SDG 17 'Partnerships for the Goals'.
- The European Union can strengthen its role as a global leader in SDG implementation. The EU has been a very active player during the SDGs' creation and should now play a crucial role to revive the Agenda 2030 on a global level, given the difficult geopolitical situation.
- The European Union can enhance multilateral cooperation between EU institutions, UN Institutions as well as EU Member States and, as a long-term partner of the UN, increase cooperation regarding the SDGs, giving a political signal for the importance of this process.
- The European Union can increase the financial contributions for SDGs in developing countries through UN Agencies, bilateral agencies and Member States' cooperation agencies, whilst at the same time facilitating proper environments for financing and investment and access to the world's financial channels<sup>16</sup>.
- The European Union as an economic and financial power can help other countries to raise their ambitions regarding the SDGs and climate targets, by working with them to address the challenges and through investment support.
- The European Union can work on reducing outsourced economic, social and environmental impacts, thus contributing to the reduction of external spill-overs of the SDGs and intensify efforts for international tax reform.
- The European Union can support globally endorsed legislative frameworks to trigger SDG implementation in all countries and actively utilise the legal system to progress the Agenda 2030.
- The European Union can strengthen its support for civil society involvement in the SDG implementation process in other countries.
- The Green Deal can enforce an external dimension, that is focusing on the impact the EU has on SDG implementation globally.

<sup>15</sup> As a result of the input from the interviews conducted for the purpose of this In-Depth Analysis.

<sup>16</sup> As a result of the input from the interviews conducted for the purpose of this In-Depth Analysis.



- The European Union can lead other countries in the world towards net zero and especially increase collaboration in this aspect with the countries that are the largest CO<sub>2</sub> emitters, namely China, the US, India, Russia and Japan.

## 5.4 Recommendations for Member States

- Member States can encourage multi-level governance and an integrated approach in addressing the SDGs and multi-stakeholder collaboration by establishing alliances with a wide range of actors (such as businesses, civil society, scientific committees, communities and informal groups).
- Member States can especially support the implementation of the SDGs at the local level, including the provision of financial assistance for local government, support in preparing VLRs and encouraging collaboration between local actors and encouraging bottom-up initiatives for fighting climate change. For example a 'Global Push for More '15-Minute Cities' by the non-profit group C40 Cities that is piloting walkable neighbourhoods in five global cities'<sup>17</sup>.
- Member States can avoid the implementation of selective SDGs and implement the 2030 Agenda as a whole, fulfilling the Indivisibility character of the 2030 Agenda.
- Member States can synergise the implementation of sustainability agendas to avoid the duplication of efforts and inefficient budget allocations. This could feature initiatives such as joint commitments for the Nationally Determined Contributions under the Paris Agreement and SDGs reporting.
- Member States can better communicate the SDGs to the public. For instance, the Commissioner for the Agenda 2030 of the Government of Aragon communicates the work for the SDGs and also raises awareness through a dedicated TV channel (Setuain, 2021).
- Member States can facilitate legal frameworks for the implementation of specific SDGs targets.
- National plans can incentivise and allow for market opportunities in green technologies applied to infrastructure, building, low carbon and renewable energies as well as water and waste management, create strategies for financing SDGs through different sources, including access to world financial channels for the SDGs.
- Member States can benefit from the global knowledge accumulated for the SDGs by sharing and transferring this experience.
- Member States can strengthen science-policy interaction and base their decisions in relation to the SDGs on evidence and scientific knowledge.

## 5.5 Recommendations for the scientific community, civil society and private sector and local governments

- The scientific community can contribute to improving knowledge of the SDGs and scientifically back up the implementation of the Agenda 2030.
- Science can address the urgent need to integrate quantitative science targets for all planetary boundaries within the SDG framework (Rockström, 2021).
- The scientific community can conduct systematic analyses and modelling for the identification of interlinkages between the SDGs, considering new dependencies between them, given the influence of newly emerging crises in the world on these interlinkages.

<sup>17</sup> C40 cities, '[C40, NREP to collaborate on 15-minute city pilots](#)', 2022.

- The scientific community can contribute to informed decision-making, for defining future strategies and areas of transformation as well as addressing multiple challenges.
- The scientific community can work on inventing new technologies to address challenges related to the SDGs.
- The scientific community can increase research related to the SDGs and action-oriented research (only 10 % of the world research is related to the SDGs<sup>18</sup>)
- The scientific community can work on developing a universal SDG index that would consider externalities, both 'SDG Index Score and International Spill-over Index Score' for comprehensive SDGs monitoring.
- Academic institutions can conduct 'Voluntary University Reviews' for the SDGs, including teachers and students in the process, to increase awareness in these institutions and incorporate the SDGs in teaching and learning<sup>19</sup>.
- Civil society can include the SDGs in their actions and increase their presence in the SDGs implementation processes, i.e. CSOs in Europe can actively participate in the process of EU Voluntary Review, National Voluntary Reviews and Local Voluntary Reviews.
- CSOs can hold their governments accountable for SDG implementation and secure realistic reporting of their implementation status.
- The private sector can increase its share of investments in sustainable development, connecting the SDGs and transitioning to a low-carbon society and aligning its strategies and programmes to the SDGs.
- Businesses can integrate the SDGs into sustainability reporting, in line with SDG 12, target 12.6: 'Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle'<sup>20</sup>.
- The private sector can be actively represented in the SDGs implementation processes and engaging mechanisms at international, national and local levels as well as in the process of Voluntary Reviews.
- Local governments can translate SDGs into local policies and programmes and actively participate in national processes for SDG implementation.
- Local governments can prepare VLRs by engaging a wide range of local stakeholders. Conducting a VLR can help local governments: recognise the most critical sustainability challenges and opportunities; increase transparency and credibility; enforce collaboration at different levels.
- Local governments can acknowledge their roles as global players for SDGs and contribute to the global monitoring and reporting framework. At least 105 out of 161 targets can be implemented at the local level.
- Local governments can access additional financial resources and promote business investments, thus triggering a bigger impact on sustainable development in their regions.

<sup>18</sup> Alex Jackson, '[Digital Science reports that just 10% of global research output relates to the UN's Sustainable Development Goals](#)', Digital Science, 7 May 2020.

<sup>19</sup> Concordia University, 'Voluntary University Review' [webpage](#), n.d.

<sup>20</sup> See target 12.6 on Sustainable Development Solutions Network, 'Indicators and a Monitoring Framework: Launching a data revolution for the Sustainable Development Goals', [webpage](#), n.d.

- Local governments can team up with other cities in the world to share experiences about the SDGs.
- Local governments can encourage bottom-up approaches from the community, youth and small businesses, through financial incentives for the SDGs.
- Local governments can include SDGs as a common language in public hearings and debates.

## 6 Concluding remarks on the future we want and the post-2030 Agenda

The Agenda 2030 for Sustainable Development is a global commitment that must be intensified. The delayed or reversed implementation due to global crises has created a critical momentum for the implementation of the 17 SDGs which can result in aggravating the challenges that they intend to address. The European Union can lead the global community to turn the crises into renewed momentum for the SDGs and intensify the 'Partnership for the Goals'.

SDGs should be a common language for the global community. The 17 goals of the 2030 Agenda are aimed at everyone, from states to individual citizens. The post-2030 agenda is very likely to continue adopting this approach. Even though much has been achieved in recent years, there are also major challenges for the future. Global crises such as the COVID-19 pandemic have not only caused development progress to stagnate but it has also led to the regression of many goals. We urgently need a turnaround. Other challenges such as Russia's war of aggression on Ukraine and climate change demonstrate that concerted action is needed. The full consequences of the global crises are still unknown but it is commonly agreed that they are seriously hindering implementation of the Agenda 2030 on time.

Targeted cooperation within the EU and globally is needed to enable the transformation of economies towards sustainable development, for example through responsible consumption and production patterns, as well as clean and affordable energy. It is becoming clear that climate policy, sustainable development and poverty reduction are inextricably intertwined. Any actions in the context of the post-2030 Agenda need to take these issues into account. Transformations needed for the SDGs' implementation are especially related to financing, green technology and sustainable lifestyles. These transformations should consider the planetary boundaries and foster education at all levels since education is one of the keys to the achievement of all Goals in the long term.

The EU should step up the implementation of the SDGs within EU regions and strengthen support for other countries around the world. The Union should also advocate for embracing the principles of net zero emissions across the globe. The EGD is an important initiative and steps forward for the European Union, which should serve as a signal to the world for commitment towards sustainability and increase the ambitions of countries towards the SDGs. Joint financing of the SDGs and the EGD can help revitalise the Agenda 2030.

The SDGs Summit 2023, the HLPF, under the auspices of the UN General Assembly will be a crucial moment regarding future decisions concerning the SDGs. Presentation of the EU Voluntary Review will be an important milestone for the SDGs monitoring and reporting process. Consequently, the European Voluntary Review has to be an excellent example of a preparatory process with the contribution of all interested stakeholders and present a realistic document about the SDGs achievements.

In September 2021, responding to a request from the UN General Assembly in its UN75 declaration, the UN Secretary-General released 'Our Common Agenda' report that looks ahead to the next 25 years and represents the Secretary-General's vision on the future of global cooperation. It calls for inclusive, networked and effective multilateralism to improve responses to humanity's most pressing challenges. Our Common Agenda is an agenda of action designed to accelerate the implementation of existing agreements, including the SDGs. Specifically, it proposes a Global Digital Compact to be agreed upon at

the Summit of the Future in September 2023 through a technology track involving all stakeholders, such as governments, the UN system, the private sector (including tech companies), civil society, grassroots organisations, academia and individuals, including youth.

The years to come will be crucial for defining the future process of implementing the Agenda 2030. The upcoming UN Climate Change COPs in 2023 and 2024 are expected to influence the process of SDGs implementation and for the most part, turn into 'action-oriented COPs'. The 'Transforming Education' Summit, in September 2022 was also an important event for supporting global crises in education and for increasing the presence of youth in global decision-making. The 2025 Social Summit, proposed by UNSG António Guterres, can draw new attention to human rights and cooperation across borders.

'There is no time to waste. We cannot afford for the SDGs to fall out of reach', warned António Guterres. Notwithstanding the importance of planning the actions for sustainability after 2030, the global community should act now and put all necessary efforts in motion to fulfilling global commitments to sustainability by 2030.

## 7 References

- Arajärvi, N., [‘The Rule of Law in the 2030 Agenda’](#), *KFG Working Paper Series*, No 9, 2017.
- Ashencaen Crabtree, S., Parker, J., Man, Z., Garcia Segura, A. and Sylvester, O., [‘Sustainability, development and devastation: new encounters in indigenous dialogues’](#), *Discovery Society*, 3 July 2019.
- Bardal, K.G., Reinart, M.B., Lundberg, A.K. and Bjørkan, M., [‘Factors Facilitating the Implementation of the Sustainable Development Goals in Regional and Local Planning—Experiences from Norway’](#), *Sustainability*, Vol 13, No 8, 2021.
- Behnassi, M. and El Haiba, M., [‘Implications of the Russia-Ukraine war for global food security’](#), *Nature Human Behaviour*, Vol 6, No 6, 2022, pp. 754-755. Buck, M., Graf, A., Graichen, P. et al., [European Energy Transition 2030: The Big Picture. Ten Priorities for the next European Commission to meet the EU’s 2030 targets and accelerate towards 2050](#), *Agora Energiewende*, 2019.
- Caiado, R.G.G., Leal Filho, W., Quelhas, O.L.G., de Mattos Nascimento, D.L. and Ávila, L.V., [‘A literature-based review on potentials and constraints in the implementation of the sustainable development goals’](#), *Journal of Cleaner Production*, Vol 198, 2018, pp. 1276-1288.
- Campbell, B. M., Hansen, J., Rioux, J., Stirling, C. M., Twomlow, S. and Wollenberg, E., [‘Urgent action to combat climate change and its impacts \(SDG 13\): transforming agriculture and food systems’](#), *Current Opinion in Environmental Sustainability*, Vol 34, 2018, pp. 13-20.
- Cattaneo, O., [‘7 sustainable finance challenges to fix global inequality’](#), *World Economic Forum*, 19 May 2022.
- Cohen, B., Cowie, A., Babiker, M., Leip, A. and Smith, P., [‘Co-benefits and trade-offs of climate change mitigation actions and the Sustainable Development Goals’](#), *Sustainable Production and Consumption*, Vol 26, 2021, pp. 805-813.
- Corporate Sustainability and Responsibility Europe, [2022 Sustainable Industry Barometer](#), Assessing the maturity and integration of social risk in European business, 2022.
- Council of the European Union, [‘The new European consensus on development ‘our World, our Dignity, our Future’ - Joint statement by the Council and the Representatives of the Governments of the Member States meeting within the Council, the European Parliament and the European Commission’](#), 19 November 2018.
- Crete, E., [‘Sustainable Finance, SDGs, and the European Green Deal’](#), *Sustainable Development Solutions Network*, 10 May 2022.
- Development Research Branch of the Economic Analysis and Policy Division, [‘Achieving SDGs in the wake of COVID-19: Scenarios for policymakers’](#), United Nations Department of Economic and Social Affairs, Policy Brief 84, 2020.
- Dodds, F., Schneeberger, K. and Ullah, F., [Review of implementation of Agenda 21 and the Rio principles](#), United Nations Department of Economic and Social Affairs, New York, 2012.
- DownToEarth, [‘Several trade-offs impede Zero Hunger goal. A UN report explains why, and how’](#), DTE Staff, 2021.
- Dzebo, A., Brandi, C. and Savvidou, G., [‘How did we do this? The NDC-SDG Connections Tool’](#), *Stockholm Environment Institute*, 2017.
- Earth Commission, [‘Risk of passing multiple climate tipping points escalates above 1.5°C global warming’](#), Press Release, 8 September 2022. European Environmental Bureau, [‘European Parliament demands first-ever EU targets to reduce over-consumption’](#), 10 February 2021.

European Think Tanks Group, [The European Green Deal and the war in Ukraine Addressing crises in the short and long term](#), Report, July 2022.

EU Reporter, [‘UN 2030 Sustainable Development Goals should guide the European Recovery’](#), 2021.

European Commission, ‘The COVID-19 pandemic: Detecting impacts and monitoring the recovery’ in European Commission, [Sustainable development in the European Union: Monitoring report on progress towards the SDGs in an EU context: 2022 edition](#), Report, 2022a, pp. 29–36.

European Commission, [‘The vital role of nature-based solutions in a nature positive economy’](#), 2022b.

European Commission, [Sustainable development in the European Union: Monitoring report on progress towards the SDGs in an EU context: 2022 edition](#), Report, 2022c.

European Commission, [‘European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions’](#), Press Release, 14 July 2021.

European Commission, [‘Fit for 55’: delivering the EU’s 2030 Climate Target on the way to climate neutrality’](#), COM(2021) 550 final, 14 July 2021.

European Commission, [‘Cohesion Policy 2021-2027’](#), 2021a.

European Commission, [‘Commission presents guide for a fair transition towards climate neutrality’](#), 2021b.

European Commission, [‘Europe’s Digital Decade: digital targets for 2030’](#), 2021d.

European Commission, [‘European Climate Law’](#), 2021e.

European Commission, [‘A European Green Deal’](#), 2021f.

European Commission, [‘European industrial strategy’](#), 2021g.

European Commission, [‘Global Gateway’](#), 2021h.

European Commission, [‘Recovery and Resilience Facility’](#), 2021i.

European Commission, [‘European Climate Law’](#), 2021j.

European Commission, [‘Delivering on the UN’s Sustainable Development Goals – A comprehensive approach’](#), SWD(2020) 400 final, 18 November 2020.

European Commission, [‘2030 Climate Target Plan’](#), 2020a.

European Commission, [‘Biodiversity strategy for 2030’](#), 2020b.

European Commission, [‘Circular economy action plan’](#), 2020c.

European Commission, [‘European Democracy Action Plan’](#), COM (2020) 790 final, 2020d.

European Commission, [‘Sustainable and Smart Mobility Strategy’](#), 2020f.

European Commission, [‘Farm to Fork strategy’](#), 2020e.

European Commission, [‘Team Europe’](#), 2020g.

European Commission, [REFLECTION PAPER TOWARDS A SUSTAINABLE EUROPE BY 2030](#), COM(2019)22, 30 January 2019.

European Commission, [‘A Union that strives for more: my Agenda for Europe: By candidate for President of the European Commission Ursula von der Leyen’](#), 2019.

European Commission, [‘European Pillar of Social Rights’](#), 2017.

European Commission, [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 final, 2016.

European Commission, Directorate-General for International Cooperation and Development, '[Policy coherence for development: 2019 EU report](#)', 2019.

European Parliament and Council of the European Union, '[General Union Environment Action Programme to 2030](#)', DECISION (EU) 2022/591, L114/22, 6 April 2022.

European Parliament, [MOTION FOR A RESOLUTION on the 2022 UN Climate Change Conference in Sharm El-Sheikh, Egypt \(COP27\)](#), 2022/2673(RSP), 10 November 2022a.

European Parliament, [Resolution of 23 June 2022 on the implementation and delivery of the Sustainable Development Goals \(SDGs\) \(2022/2002\(INI\)\)](#), P9\_TA(2022)0263, 2022b.

European Union, '[2022 European Semester: Annual sustainable growth survey](#)', 2021.

Eurostat, '[Sustainable development in the European Union — Monitoring report on progress towards the SDGs in an EU context](#)', 2022a.

Eurostat, '[European Statistical Recovery Dashboard](#)', 2022b.

Everest Group, '[The Ukraine-Russia War is Impacting Global Sustainability Initiatives and Derailing Progress in Meeting SDG Goals](#)', 2022.

Fergusson, N., *Doom. The politics of catastrophe*, Penguin Press, London, 2021.

Force for Good Initiative, [Capital as a Force for Good: Capitalism for a Sustainable Future](#), 2021.

Fuso Nerini, F., Sovacool, B., Hughes, N., Cozzi, L. et al., '[Connecting climate action with other Sustainable Development Goals](#)', *Nature Sustainability*, Vol 2, No 8, 2019, pp. 674-680.

Hanif, N., '[FORUM ON INTERNATIONAL POLICY LEVERS FOR SUSTAINABLE INVESTMENT](#)', *United Nations*, Keynote, 13 June 2022.

Henry, A. D. and Vollan, B., '[Networks and the challenge of sustainable development: Annual review of environment and resources](#)', *Annual Reviews*, Vol 39, 2014, pp. 583-610.

Hickel, J., *Less Is More – How Degrowth Will Save The World*, Windmill Books, London, August 2020.

Intergovernmental Panel on Climate Change, '[Summary for Policymakers](#)', In Pörtner, H.O., Roberts, D.C., Poloczanska, et al. (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability, Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge University Press, Cambridge and New York, 2022, pp. 3–33.

International Energy Agency, [World Energy Outlook](#), Report, 2022.

International Institute for Sustainable Development, '[CEOs Explore Solutions to Bridge Annual USD 4.3](#)', *IISD*, 19 October 2022.

International Science Council, [A Guide to SDG Interactions: from Science to Implementation](#), formerly International Council for Science, 2017.

International Science Council, [UNPRECEDENTED AND UNFINISHED: COVID-19 and Implications for National and Global Policy](#), *International Science Council*, Paris, France, 2022.

Jackson, A., '[Digital Science reports that just 10% of global research output relates to the UN's Sustainable Development Goals](#)', *Digital Science*, 7 May 2020.

Jaiyesimi, R., [‘The challenge of implementing the sustainable development goals in Africa: The way forward’](#), *African journal of reproductive health*, Vol 20, No 3, 2016, pp. 13-18.

Joint statement by the Council and the representatives of the governments of the Member States meeting within the Council, the European Parliament and the Commission, [‘THE NEW EUROPEAN CONSENSUS ON DEVELOPMENT: ‘OUR WORLD, OUR DIGNITY, OUR FUTURE’](#)”, Official Journal of the European Union, C 210/01, 2017.

Karobliene, V. and Pilinkiene, V., [‘The Sharing Economy in the Framework of Sustainable Development Goals: Case of European Union Countries’](#), *Sustainability*, Vol 13, No 15, 2021.

Koundouri, P., Devves S. and Plataniotis, A., [‘Alignment of the European Green Deal, the Sustainable Development Goals and the European Semester Process: Method and Application’](#), *Theoretical Economics Letters*, Vol 11, 2021, pp. 743-770.

KPMG, [‘Environmental Taxes: What tax departments can expect from the European Green Deal’](#), White Paper, June 2022.

La Moncloa, [‘Sánchez says Spain will overcome current challenges and uncertainties and continue to grow in the coming years’](#), President’s News, 9 June 2022.

Le Blanc, D., [‘Towards integration at last? The sustainable development goals as a network of targets’](#), *United Nations Department of Economic and Social Affairs*, Working Paper No 141, ST/ESA/2015/DWP/141, 2015.

Leal Filho, W., Dinis, M. A. P., Ruiz-de-Maya, S. et al, [‘The economics of the UN Sustainable Development Goals: does sustainability make financial sense?’](#), *Discover Sustainability*, Vol 3, No 1, 2022.

Leal Filho, W., Caughman, L., Alzira Pimenta Dinis, A. et al., [‘Towards symbiotic approaches between universities, sustainable development, and cities’](#), *Scientific Reports*, Vol 12, No 1, 2022.

Leal Filho, W., Henrique Paulino Pires Eustachio, J. et al., [‘Transient poverty in a sustainable development context’](#), *International Journal of Sustainable Development & World Ecology*, Vol 29, No 5, 2022, pp. 415-428.

Leal Filho, W., Kovaleva, M. et al., [‘Promoting Gender Equality across the Sustainable Development Goals’](#), *Environment, Development and Sustainability*, 2022.

Leal Filho, W., Lovren, V.O., Will, M., Salvia, A.L. and Frankenberger, F., [‘Poverty: A central barrier to the implementation of the UN Sustainable Development Goals’](#), *Environmental Science & Policy*, Vol 125, 2021, pp. 96-104.

Leal Filho, W., Salvia, A. L. et al., [‘Barriers to institutional social sustainability’](#), *Sustainability Science*, 2022.

Leal Filho, W., Vasconcelos, C. R. P., Dinis, M. A. P. and Viera Trevisan, L., [‘Empty promises: why declarations and international cooperation on sustainable development often fail to deliver’](#), *International Journal of Sustainable Development & World Ecology*, 2022, pp. 1-8.

Leal Filho, W., Vidal, D. G., Chen, C. et al., [‘An assessment of requirements in investments, new technologies, and infrastructures to achieve the SDGs’](#), *Environmental Sciences Europe*, Vol 34, No 1, 2022, pp. 1-17,.

Leal Filho, W., Wall, T., Barbir, J. et al., [‘Relevance of international partnerships in the implementation of the UN Sustainable Development Goals’](#), *Nature Communications*, Vol 13, No 1, 2022.

Leal Filho, W., Wolf, F., Lange Salvia, A., Beynaghi, A., Shulla, K. et al., [‘Heading towards an unsustainable world: some of the implications of not achieving the SDGs’](#), *Discover Sustainability*, Vol 1, No 1, 2020, pp. 1-11.



Leal Filho, W., Yang, P., Eustachio, J., Azul, A. M. et al., '[Deploying digitalisation and artificial intelligence in sustainable development research](#)', *Environment, Development and Sustainability*, 2022, pp. 1-32.

McKay, A. et al., '[Exceeding 1.5°C global warming could trigger multiple climate tipping points](#)', *Science*, Vol 377, Issue 6611, 2022.

Miola, A. and Schiltz, F., '[Measuring sustainable development goals performance: How to monitor policy action in the 2030 Agenda implementation?](#)', *Ecological Economics*, Vol 164, 106373, 2019.

Motte-Baumvol, J., Mont'Alverne, T. C. F. and Guimarães Braga, G., '[Extending Social Protection for Migrants Under the European Union's Temporary Protection Directive: Lessons from the War in Ukraine](#)', *SSRN Electronic Journal*, 2022.

Nilsson, M., '[Important interactions among the Sustainable Development Goals under review at the High-Level Political Forum 2017](#)', *Stockholm Environment Institute*, Working Paper, 2017.

O'Callaghan B. and Murdock, E., '[Are we building back better? Evidence from 2020 and Pathways to Inclusive Green Recovery Spending](#)', United Nations Environment Programme, 2021.

OCHA Services Reliefweb, '[Goals of 2030 Agenda Hang in Balance as Ukraine War Causes Massive Suffering, Deputy Secretary-General Tells United Nations Economic Commission for Europe](#)', United Nations Press Releases, 6 April 2022.

Office of the United Nations High Commissioner for Human Rights, '[Trillions needed to close finance gap on Sustainable Development Goals, says UN expert](#)', Press Release, 21 October 2022.

Organization for Economic Co-Operation and Development, '[Global Outlook on Financing for Sustainable Development 2021: A New Way to Invest for People and Planet](#)', OECD Publishing, 2020.

Organization for Economic Co-Operation and Development, '[Better Policies for 2030](#)', OECD Publishing, 2016.

Ortiz-Moya, F. and Kataoka, Y., '[State of the Voluntary Local Reviews 2022: OVERCOMING BARRIERS TO IMPLEMENTATION](#)', *Institute for Global Environmental Strategies*, Research Report, Hayama, Japan, 2022.

Pilati, M., '[National Recovery and Resilience Plans: Empowering the green and digital transitions?](#)', *European Policy Centre (EPC)*, Discussion Paper between and EPC and Konrad-Adenauer-Stiftung, April 2021.

Ricciolini, E., Rocchi, L., Cardinali, M. et al. '[Assessing Progress Towards SDGs Implementation Using Multiple Reference Point Based Multicriteria Methods: The Case Study of the European Countries](#)'. *Social Indicators Research*, Vol 162, 2022, pp. 1233–1260.

Romanello, M., et al., '[Countdown on health and climate change: health at the mercy of fossil fuels](#)', *Lancet*, 2022.

Rockström, J., '[Protecting planetary boundaries: aligning the SDGs to ensure humankind's future](#)', *SDG Action*, 16 June 2021.

Sachs, J.D., Schmidt-Traub, G., Mazzucato, M. et al. '[Six Transformations to achieve the Sustainable Development Goals](#)'. *Nature Sustainability*, Vol 2, 2019, pp. 805–814.

Sanye-Mengual, E. and Sala, S., '[Life Cycle Assessment support to environmental ambitions of EU policies and the Sustainable Development Goals](#)', *Integrated Environmental Assessment and Management*, 2022.

Sen, A.K., '[Development as Freedom](#)', Anchor Books, New York, 1999.

Setuain, E., '[Fermín Serrano: The climate of consensus towards a social, green and digital Aragón is helping to attract investments](#)', *Go Aragón*, 15 November 2021.

- Shah, P., [‘The Rule of Law and the Sustainable Development Goals’](#), *Advocates for International Development*, 2016.
- Shulla K. and Kószeghy L., [Progress Report: She Sustainable Development Goals 11 Target 11.1](#), *Habitat for Humanity*, 2021.
- Shulla, K., Leal Filho, W., Lardjane, S., Sommer JH. and Borgemeister C., [‘Sustainable development education in the context of the 2030 Agenda for sustainable development’](#), *International Journal of Sustainable Development & World Ecology*, Vol 27, No 5, 2020, pp. 458-468.
- Shulla, K., Leal Filho, W., Lardjane, S., Sommer JH., Lange Salvia, A. and Borgemeister C., [‘Channels of collaboration for citizen science and the sustainable development goals’](#), *Journal of Cleaner Production*, 2019.
- Shulla, K., Voigt BF., Cibian, S., Scandone, G., Martinez, E. et al., [‘Effects of COVID-19 on the Sustainable Development Goals \(SDGs\)’](#), 2020.
- Smil, V., *How the world really works – a scientist’s guide to our past, present and future*, Viking, New York, 2022.
- Sodergren, M-C., Kapsos, S. and Karkee, V., [‘COVID-19 and the Sustainable Development Goals: Reversing progress towards decent work for all’](#), *International Labour Organisation*, 2022.
- Soergel, B., Kriegler, E., Weindl, I. et al., [‘A sustainable development pathway for climate action within the UN 2030 Agenda’](#), *Nature Climate Change*, Vol 11, No 8, 2021, pp. 656-664.
- Spotlight on Sustainable Development, [‘Demanding justice beyond rhetoric’](#), 2021.
- Sustainable Development Report, [A Global Plan to Finance the Sustainable Development Goals](#), 2022.
- Taleb, N.N., *Antifragile - things that gain from disorder*, Penguin Books, London, 2012.
- Taleb, N.N., *The Black Swan - the impact of the highly improbable*, Penguin Books, London, 2007.
- Teebken, J., Jacob K., Petrova, M. and Wolff F., [‘Towards a joint implementation of the 2030 Agenda / SDGs and the Paris Agreement’](#), *Umwelt Bundesamt*, Conceptual and analytic paper, Vol 46, 2021.
- The Lancet Respiratory Medicine, [‘Future pandemics: failing to prepare means preparing to fail’](#), Vol 10, No 3, 2022, pp. 221–222.
- The World in 2050, [Transformations to Achieve the Sustainable Development Goals](#), Report, *International Institute for Applied Systems Analysis*, 2018.
- UNCTAD, [World Investment Report 2014: Investing in the SDGs: An Action Plan](#), 2014.
- United Nations Economic Commission for Europe and UN Environment Programme, [Europe’s Environment The Seventh Pan-European Environmental Assessment: Summary for policymakers](#), 2022.
- United Nations Educational, Scientific and Cultural Organization, [‘Sustainable Development begins with education: How education can contribute to the proposed post-2015 goals’](#), United Nations Educational, Scientific and Cultural Organization, Paris, 2014.
- United Nations General Assembly, [‘Transforming our world: the 2030 Agenda for Sustainable Development’](#), Resolution A/RES/70/1, 21 October 2015.
- UN Inter-Agency Task Force on Financing for Development, [Financing for Sustainable Development Report 2022](#), United Nations Report, 2022.
- United Nations Statistical Commission, [‘Cape Town Global Action Plan for Sustainable Development Data’](#), 2017.
- United Nations, [‘Young people key for COVID recovery and a sustainable future’](#), 2022.

United Nations, ['ECOSOC Youth Forum'](#), 2022a.

United Nations, [The Sustainable Development Goals Report 2022](#), UN Stats, 2022b.

United Nations, ['Remarks to High-Level Political Forum on Sustainable Development: António Guterres'](#), 2019.

United Nations, [Addis Ababa Action Agenda](#), Sustainable Development Goals Knowledge Platform, 2015a.

United Nations, [The Millennium Development Goals Report 2015](#), 2015b.

United Nations, ['Women, Peace and Security'](#), 2000.

Vilella, M., ['Zero Waste Circular Economy A Systemic Game-Changer to Climate Change'](#), *Heinrich Böll Foundation*, Vol 44.3, Series Ecology, 2018, p.21-22.

Weitz, N., Carlsen, H., Nilsson, M. and Skånberg K., ['Towards systemic and contextual priority setting for implementing the 2030 Agenda'](#), *Sustainability Science*, Vol 13, 2018, pp. 531-548.

Wignaraja, K., ['The case for a universal basic income'](#), United Nations Development Programme, 2020.

World Bank, ["War in the Region" Europe and Central Asia Economic Update \(Spring\)](#), Washington, DC: World Bank, 2022.

World Economic Forum, ['Inclusive digital infrastructure can help achieve the SDGs. Here's how'](#), 2022.

World Wildlife Fund, ['Implementation and delivery of the Sustainable Development Goals: WWF recommendations to the European Parliament resolution'](#), 28 March 2022.

Wright, K. A. M., ['Where is Women, Peace and Security? NATO's response to the Russia-Ukraine war'](#), *European Journal of Politics and Gender*, Vol 5, No 2, 2022, pp. 275-277.

Wucker, M., *'The gray rhino – How we recognize and act on the obvious dangers we ignore'*, St. Martin's Press, New York, 2016.

Zyoud, S. H., ['Analyzing and visualizing global research trends on COVID-19 linked to sustainable development goals'](#), *Environment, Development and Sustainability*, 2022, pp. 1-35.

## 8 Annexes

### 8.1 Annex 1: The European Commission's priorities on sustainable development

See European Commission, [Sustainable development in the European Union: Monitoring report on progress towards the SDGs in an EU context: 2022 edition](#), Report, 2022c.

Priorities	SDGs	Additional information
<p><b>European Green Deal</b></p> <p>Striving to be the first climate-neutral continent</p>		<p>European Commission, <a href="#">“Fit for 55”: delivering the EU’s 2030 Climate Target on the way to climate neutrality</a>, COM(2021) 550 final, 14 July 2021.</p>
<p><b>An Economy that works for people</b></p> <p>Working for social fairness and prosperity</p>		<p>More information is available at: European Commission, ‘An economy that works for people’, <a href="#">webpage</a>.</p>
<p><b>Europe fit for the digital age</b></p> <p>Empowering people with a new generation of technologies</p>		<p>More information is available at: European Commission, ‘A Europe fit for the digital age’, <a href="#">webpage</a>.</p>
<p><b>The European way of life</b></p> <p>Protecting our citizens and our values</p>		<p>More information is available at: European Commission, ‘Promoting our European way of life’, <a href="#">webpage</a>.</p>

<p><b>A stronger Europe in the world</b></p> <p>Reinforcing responsible leadership</p> <p>our global</p>		<p>More information is available at: European Commission, 'A stronger Europe in the world', <a href="#">webpage</a>.</p> 
<p><b>European democracy</b></p> <p>Nurturing, protecting and strengthening our democracy</p>		<p>More information is available at: European Commission, 'A new push for European democracy', <a href="#">webpage</a>.</p> 

Source: Author's own compilation.

Note: The SDG logos are freely available on the United Nations [website](#) and the images are in 'Additional information' and available at the respective indicated European Commission websites (See column 3).

## 8.2 Annex 2: Instruments, initiatives and policies produced by the European Commission to implement the 2030 Agenda

- **The Circular Economy Action Plan**, paves the way for a cleaner and more competitive Europe (European Commission, 2020c);
- **The Farm to Fork strategy**, for a fair, healthy and environmentally-friendly food system (European Commission, 2020e);
- **The Biodiversity strategy for 2030**, is a comprehensive, ambitious and long-term plan to protect nature and reverse the degradation of ecosystems (European Commission, 2020b);
- **The 2030 Climate Target Plan**, proposes to increase the EU's ambition on reducing GHG emissions and set this more ambitious path for the next 10 years (European Commission, 2020a);
- **The European Climate Law**, writes into law the goal set out in the European Green Deal for Europe's economy and society to become climate-neutral by 2050 (European Commission, 2021e);
- **The European Green Deal**, intends to make Europe the first climate-neutral continent in the world as a goal (European Commission, 2021c);
- **The guide for a fair transition towards climate neutrality**, issuing additional policy guidance for a fair and inclusive transition towards climate (European Commission, 2021b);
- **The Sustainable and Smart Mobility Strategy**, including a target to reduce transport-related GHG emissions by 90 by 2050 (European Commission, 2020f);
- **The Zero pollution action plan**, towards zero pollution for air, water and soil (European Commission, 2021j);
- **The European Pillar of Social Rights Action Plan**, sets out 20 key principles and rights essential for fair and well-functioning labour markets and social protection systems (European Commission, 2017);
- **The European industrial strategy**, supports the twin transition to a green and digital economy, makes EU industry more competitive globally and enhances Europe's open strategic autonomy (European Commission, 2021g);
- **The Environment action programme to 2030**, reiterates the EU's long-term vision for 2050 of living well, within planetary boundaries (European Parliament and Council, 2022);
- **The Global Gateway**, stands for sustainable and trusted connections that work for people and the planet, assisting to tackle the most pressing global challenges, from fighting climate change to improving health systems, and boosting competitiveness and security of global supply chains (European Commission, 2021h);
- **The Team Europe**, aims at saving lives by providing quick and targeted support to our partners to face the COVID-19 pandemic, combining resources from the EU, Member States and financial institutions, in particular, the European Investment Bank and the European Bank for Reconstruction and Development, to support partner countries and address their short-term needs as well as the longer-term structural impacts on societies and the economy (European Commission, 2020g);
- **The European Democracy Action Plan**, is designed to empower citizens and build more resilient democracies across the EU (European Commission, 2020d);

- **The Cohesion Policy 2021-2027**, strengthens economic, social and territorial cohesion in the EU, correcting imbalances between countries and regions (European Commission, 2021a);
- **The Political guidelines** (European Commission 2019-2024)<sup>21</sup>;
- **The European Semester**, the framework for integrated surveillance and coordination of economic and employment policies across the European Union (European Union, 2022a);
- **The Annual sustainable growth survey** (European Union, 2021);
- **The European Semester cycle**, resumes its broad economic and employment policy coordination, while further adapting, in line with the implementation requirements of the Recovery and Resilience Facility (European Union, 2022b);
- **The Recovery and Resilience Facility**, aims to mitigate the economic and social impact of the coronavirus pandemic and make European economies and societies more sustainable, resilient and better prepared for the challenges and opportunities of the green and digital transitions (European Commission, 2021i).

<sup>21</sup> European Commission, 'The European Commission's priorities: 6 Commission priorities for 2019-24', [webpage](#), n.d.

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