4 Positioning education as a strategic sector for the transition to greener societies

Education must be at the forefront of strategic and short-term planning for economic and broader green transformation. Education shapes individuals' behaviours, values, and purposes. It inspires community action and influences local economies. At systemic level, it drives global economies and policy agendas. Adopting the lens of policy implementation, this chapter explores the role the education sector currently plays in the transition to greener and fairer societies, perceptions of this role and collaborations with other sectors, and ways in which education can be better positioned for greater impact in the shorter term, with policy pointers for 2024.

In Brief

Positioning education as a strategic sector for the transition to greener societies

In 2024, education is crucial for driving the transition to greener and fairer societies. It operates on multiple levels: at the individual level, it shapes behaviours, values, and shared purposes; within communities, it inspires collective actions and influences local economies; and at the systemic level, it drives global economies and policy agendas. Education bridges research, policy, and action, facilitating the diffusion of new technologies and supporting policy action. Moreover, it enhances community resilience, enabling societies to address various challenges. Overall, education is a powerful ally for other government sectors in promoting sustainable policy changes and is essential for achieving a more equitable and environmentally conscious future.

Yet evidence collected by the *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green* (EPO Survey 2023) indicates that collaboration of education ministries with other actors is varied for the transition to greener and fairer societies. While 71% of participating education ministries reported collaboration to a great extent with ministries of environment, fewer than one-quarter reported the same for other key actors such as ministries of finance, ministries of employment/labour, the general public or industry, business and employers (see Figure 4.1).

Figure 4.1. Perceptions of education ministries of collaborations to a great extent with other actors for the transition to greener and fairer societies (2023)

Percentage of participating education ministries reporting that collaborations happen 'to a great extent' with the following actor
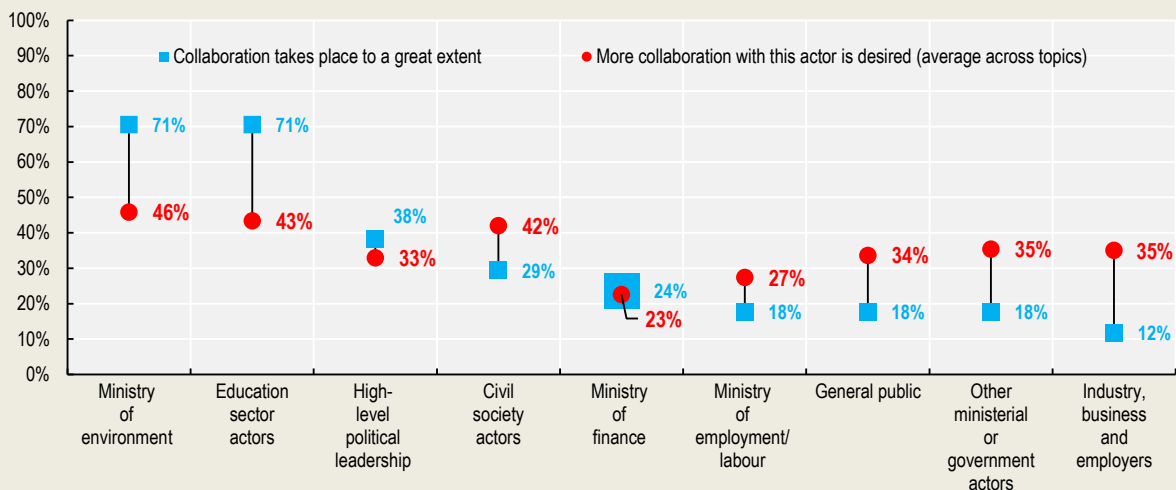
Note: Values are ranked by descending order of the percentage of education ministries reporting that collaboration happens to a great extent with these actors. Figure prepared with responses from 34 education systems.
Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green*.
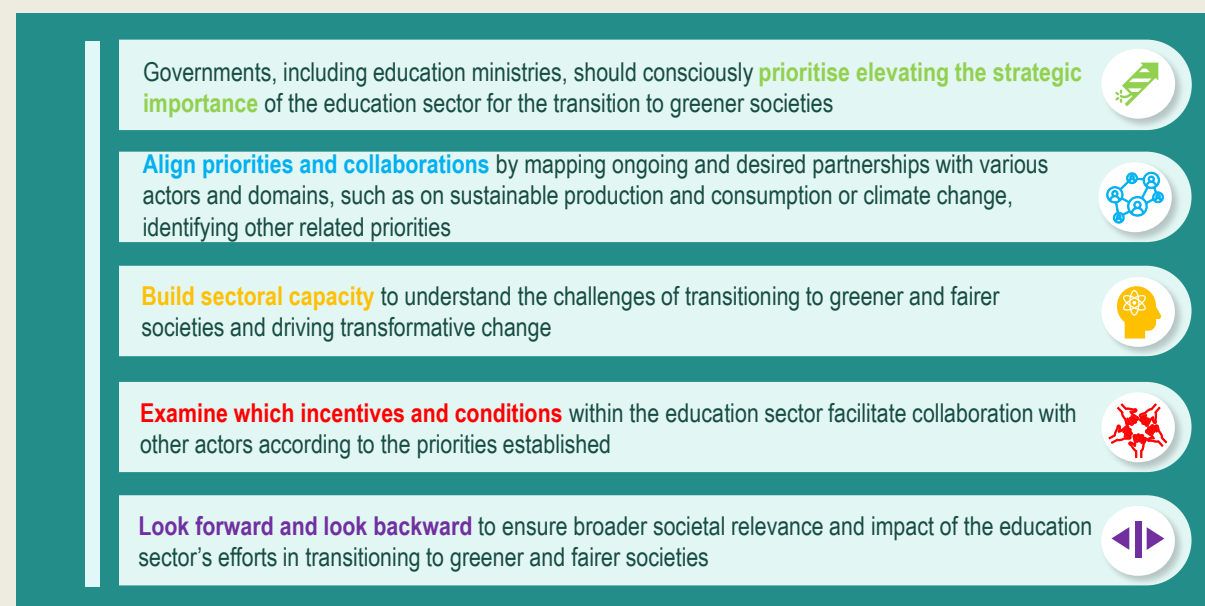
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Increasing collaborations with these and other actors will be important moving forward. The chapter explores some **relevant policy efforts** taking place across participating education systems, predominantly since 2020, to help the education sector collaborate in broader green transitions:

- **Instruments in place**: Many education ministries have integrated environmental and sustainability education into their education strategies and goals, along with climate change or green transition strategies. Also, about 60% of them have implemented strategic measures related to skills development, Sustainable Development Goals (SDGs), or overall development strategies. System-level strategies for environmental and sustainability education are relatively common, yet often associated with other education-specific or cross-sectoral strategies.

- **Scope of policy efforts**: Various measures, including common objectives, roadmaps, and guidance, are implemented by countries to promote collaboration within the education sector and across government sectors. These measures often aim to align with others, such as the Sustainable Development Goals. While emphasising the importance of comprehensive approaches and multi-stakeholder collaboration for greener and fairer societies, there appears to be room in these measures for promoting adaptability to specific contexts, considering lifelong learning and socio-cultural sensitivities.

Some **policy lessons** to help policy makers position education as a strategic sector in the transition to greener and fairer societies emerge. Governments must prioritise elevating the education sector's strategic importance, securing high-level political and financial support for cross-sectoral collaboration. Alignment of priorities, mapping collaborations, especially with the private sector and finance ministries, are crucial. Capacity-building within the education sector, including formal, non-formal and informal learning, should focus on understanding the challenges and evidence for sustainability. Incentives and dedicated resources for inter-sectoral collaboration also matter. Additionally, enhancing foresight and evaluating inter-sectoral collaborations can boost education's impact and relevance in this transition (see Infographic 4.1).

Infographic 4.1. Positioning education as a strategic sector for broader transformation

Relevant policy lessons to support education systems in the transition to greener and fairer societies

Governments, including education ministries, should consciously **prioritise elevating the strategic importance** of the education sector for the transition to greener societies

Align priorities and collaborations by mapping ongoing and desired partnerships with various actors and domains, such as on sustainable production and consumption or climate change, identifying other related priorities

Build sectoral capacity to understand the challenges of transitioning to greener and fairer societies and driving transformative change

Examine which incentives and conditions within the education sector facilitate collaboration with other actors according to the priorities established

Look forward and look backward to ensure broader societal relevance and impact of the education sector's efforts in transitioning to greener and fairer societies

Introduction

Human activity has pushed our planet to the brink, jeopardising the delicate balance of ecosystems. In the face of this pressing challenge, societies and economies need to fundamentally reshape their way of life, both in the present and in their vision for the future (OECD, 2022[2]; WEF, 2023[3]). This requires a comprehensive effort that brings together different sectors, including the economy, finance, health, and education. While promising policy solutions already exist, realising their full potential demands coordinated, cross-sectoral efforts that span from local to global policy environments (United Nations Climate Change Secretariat, 2018[4]).

Meeting this challenge on a global scale will demand visionary political leadership, technical expertise, and widespread public engagement and commitment to change. It is within this context that education ministers and representatives from both OECD and non-OECD countries and economies, through the *Declaration on Building Equitable Societies Through Education*, made a significant commitment on December 8, 2022. Through it, they pledged to assist learners in developing the skills required for a digital, sustainable, inclusive, and democratic world that harmonises individual growth with the economic, social, and environmental well-being of societies (OECD, 2022[5]).

The role that education can potentially play in driving this change makes critical for the education sector to explore how to effectively transform this potential into action. Among the education ministries who participated in the Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green (*EPO Survey 2023*), only 43% indicated that elevating the importance of the education sector in governmental efforts for the transition towards greener and fairer societies is considered a top policy priority to a great extent (Figure 4.2) (see also Chapter 1). This underscores the imperative for education actors to reflect on how they can position the education sector more strategically and be supported for it.

Figure 4.2. Making the education sector more important in the transition towards greener and fairer societies (2024-28)

Percentage of education ministries reporting this priority for attention and by education level

To what extent is this considered a policy priority for attention in the next 5 years?

| Great extent | Moderate extent | Small extent |
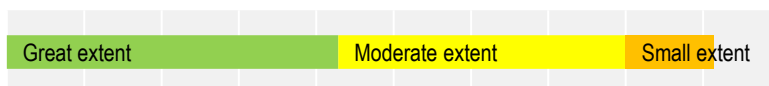
At which education levels is this considered a priority?
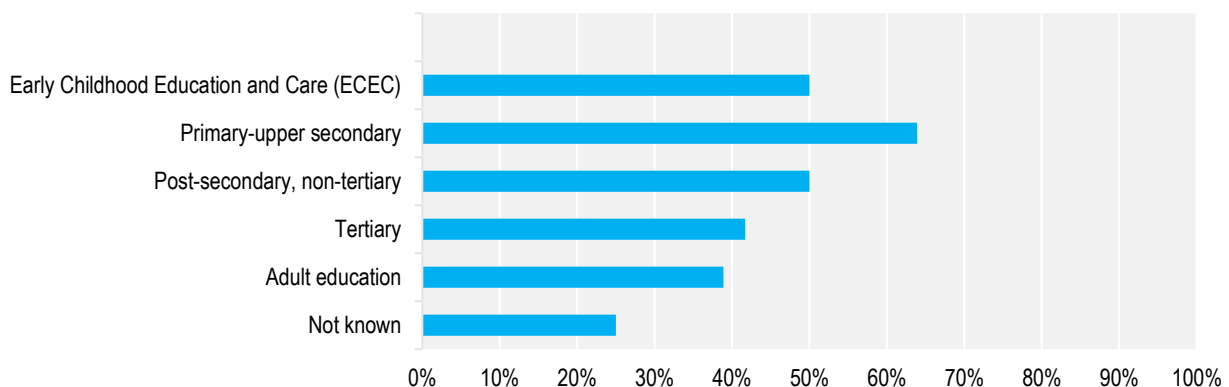
Note: Figure prepared with responses from 34 education systems.
Source: OECD (2023[1]), Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.

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It could be thought that education ministries' direct actions to elevate the importance of the education sector are more directed at upper levels of education, which in principle are more related to economic transformation (e.g. through research to develop new technologies or ways to curb climate change). However, responses from participating education ministries suggest that these also tend to take place mainly in the scope of younger populations. Among education ministries who reported that this is a priority to a large extent, those who reported that this priority is being addressed at post-secondary levels (including higher education and adult education), also tended to report this for younger population ages. This was the case for Bulgaria, Colombia, Germany, Iceland, Italy, Romania, England (United Kingdom), and Scotland (United Kingdom).

To effectively help drive the transition towards greener and fairer societies, the education sector needs a clear understanding of its current strategic relevance in this transformation and how it can maximise its potential. Through the lens of education policy implementation, this chapter therefore investigates:

- The current role of the education sector as a key enabler in the transition towards greener and fairer societies, as perceived by education ministries. This includes an assessment of the importance attributed to the education sector by other stakeholders and the level of perceived collaboration between ministries and these stakeholders on various issues.

- How the education sector can be better positioned as a strategic actor, examining the desired collaborations of education ministries and identifying factors that could enhance the strategic role of the education sector.

For each policy area, this chapter analyses responses from education ministries participating in the *EPO Survey 2023*, as well as relevant policy initiatives. This analysis leads to some policy pointers to guide policy makers' short-term efforts to advance the agenda set out in the *Declaration on Building Equitable Societies Through Education* (OECD, 2022[5]).

The education sector is a key enabler for the transition towards greener and fairer societies, currently with room to do more

For change to be both viable, effective and continuous, education must take a prominent position in both long-term strategic planning and short-term actions aimed at broader economic and social transformation. Education is instrumental in equipping countries and economies with the competencies necessary to adopt and implement sustainable development approaches today and in the future. It holds significant potential at all levels of society, extending beyond its immediate purview (OECD, 2023[6]):

- At individual level, education has the power to transcend diverse social, economic, and cultural backgrounds, shaping our behaviours, beliefs, skills, values, and knowledge. These factors influence the way we consume, the education or training opportunities we later undertake, the jobs we do, and our lifestyles in general, including the causes we champion. In this way, education can also foster a common "big picture" or shared purpose that guides our collective actions towards greener and fairer societies (Bolstad, 2020[7]; OECD, 2021[8]; OECD, 2021[8]).

- In our communities, whether through formal, non-formal, or informal means, education can extend beyond traditional classrooms and learning processes to inspire collective actions like volunteering and community service, while also influencing business practices. Consequently, education has the potential to shape local economies and community life in profound and tangible ways.

- At system-level, education can shape global economies and drive citizens' commitment to political agendas, including funding commitments and policy priorities for broad-based transformation (OECD, 2023[6]). By bridging the realms of research, policy, and action, education facilitates the diffusion of new technologies throughout society, altering the range of opportunities available.

Additionally, education, as noted by Sarabhai and Vyas (2017[9]), plays a comprehensive role in pivotal stages of policy making, beginning with aspects leading to and stemming from decision making. It provides the necessary training, capacity-building, and evidence generation required to support policy implementation and scalability. Furthermore, education contributes to communication, dissemination, and engagement processes that enhance policy impact, extending beyond specific policy measures. Finally, the lessons collected from evaluative exercises conducted provide valuable educational opportunities. This positions education as a critical ally for policymakers in promoting sustainable policy changes.

Education can also bolster community resilience by offering various resources—technological, curricular, and pedagogical—that empower individuals to engage in complex adaptive decision making and continuous learning (Feinstein and Mach, 2019[10]). This, in turn, equips societies to anticipate, maximise learning, and address social challenges resulting from shocks and disruptions (e.g. natural disasters or pandemics) or accelerated longer-term trends (e.g. the implications of new technologies, or equity-related dynamics) (see Chapter 1).

This section analyses mechanisms in place to facilitate these processes, explores collaboration between education ministries and other stakeholders, and provides examples of policy initiatives.

Countries and economies often have multiple and connected measures in place

A precondition for education to gain relevance in the transition to greener and fairer societies is the integration of environmental and sustainability objectives into the governance structures of educational systems. The majority of education ministries within participating education ministries that responded to the *EPO Survey 2023* reported implementing various measures related to environmental and sustainability education. These measures are often incorporated into national or jurisdiction-level frameworks (Figure 4.3).

Figure 4.3. Strategic measures in place for defining education's role in the transition to greener and fairer societies (2023)

Percentage of participating education systems reporting the following measures in place at national/jurisdiction-level
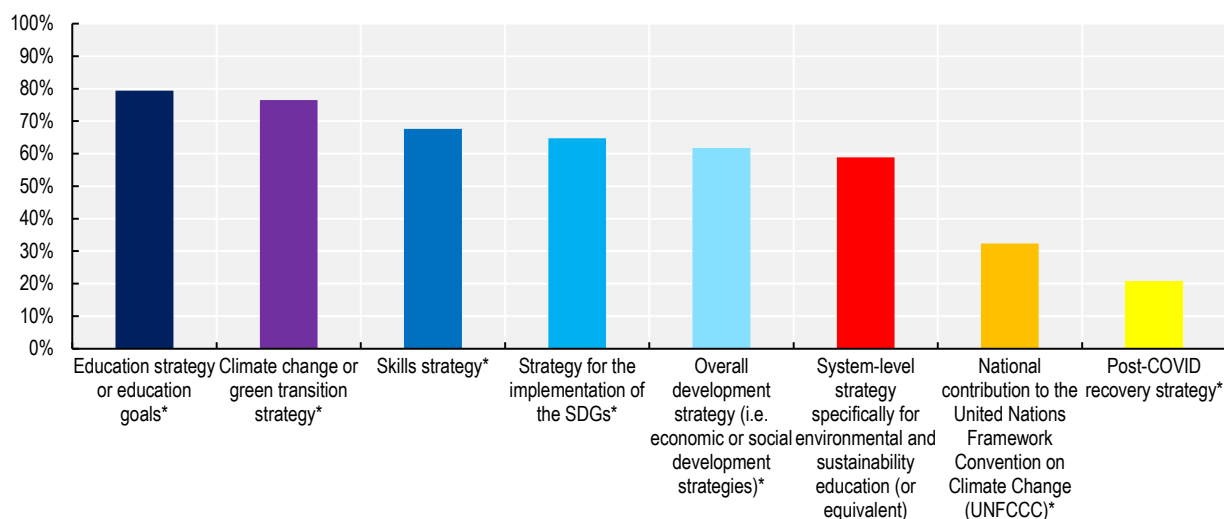
Note: [*] Environmental and sustainability education (or equivalent) is incorporated into these at either national-/jurisdiction-level. Figure prepared with responses from 36 education systems.
Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.*

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Among the strategic measures surveyed, a large share of education ministries reported that environmental and sustainability education is incorporated into education strategies/education goals, as well as climate change or green transition strategies (with 79% and 76% of education ministries reporting these for both types of strategic measures). This finding aligns with reports from education systems in the Programme for International Student Assessment, where almost 90% of students where in schools where school principals reported that their formal curriculum includes aspects of climate change and global warming (OECD, 2023[6]). Additionally, more than half of participating education ministries reported the presence of both policy measures. Furthermore, around 60% of education ministries reported the existence of strategic measures related to skills development, strategies for implementing Sustainable Development Goals (SDGs), or overall development strategies.

Responses from participating education ministries show variations among education systems. Specifically, Colombia, France, Greece, and Korea are the only reporting that all eight surveyed instruments are in place. In contrast, only about half of the participating education ministries indicated having at least four of these instruments. Notably, education ministries from the Netherlands and Northern Ireland (United Kingdom) did not report any of these national measures, primarily due to governance arrangements. Instead, they implement other targeted efforts within the education system.

System-level strategies dedicated to environmental and sustainability education (or equivalent) are relatively common, with approximately 59% of participating education ministries reporting their implementation. However, analysis shows that these strategies tend to be more connected with other efforts within education ministries, exhibiting correlations above 0.33 with at least 6 other surveyed instruments. In contrast, other surveyed instruments typically have correlations above 0.33 with a maximum of 3 instruments (see Figure 4.4).

Countries with these strategies in place often incorporate other cross-sectoral (in pink contour) or education and skills-specific (in yellow contour) strategies. Conversely, post-COVID-19 recovery strategies (response-specific efforts, in blue contour) are more commonly implemented in countries and economies where a Skills Strategy is also in place. This emphasises the need for further exploration of system-level strategies specifically dedicated for environmental and sustainability in education. Understanding how synergies between these and other types of instruments can be promoted will help education systems operate more efficiently, extend their focus beyond curriculum or other goals, and enhance their societal impact in creating greener and fairer societies.

Moreover, analysis for this chapter reveals that government measures to facilitate the transition to greener and fairer societies can differ widely in scope, depending on the context. These measures may aim to establish common objectives within the education sector or across government sectors, define detailed roadmaps for various stakeholders, or provide specific guidance on actions. Additionally, these measures often interconnect as shown earlier, such as follow-up measures aligned with the Sustainable Development Goals. Notable examples include the **French Community of Belgium**'s Transversal Ecological Transition Plan for the Wallonie-Brussels Federation (Ministry of The Wallonia-Brussels Federation, 2021[11]), the **Flemish Community of Belgium**'s Energy and Climate Plan 2021-2030 and the Flemish Sustainable Development Strategy 4 (Government of Flanders, 2023[12]) (Government of Flanders, 2021[13]), and **Bulgaria**'s National Climate Change Adaptation Strategy and Action Plan (Dale and Zhekova, 2019[14]).

Figure 4.4. System-level strategies specifically for environmental and sustainability education appear key driving instruments across participating education systems

Correlations of instruments most typically put in place according to reports from education ministries
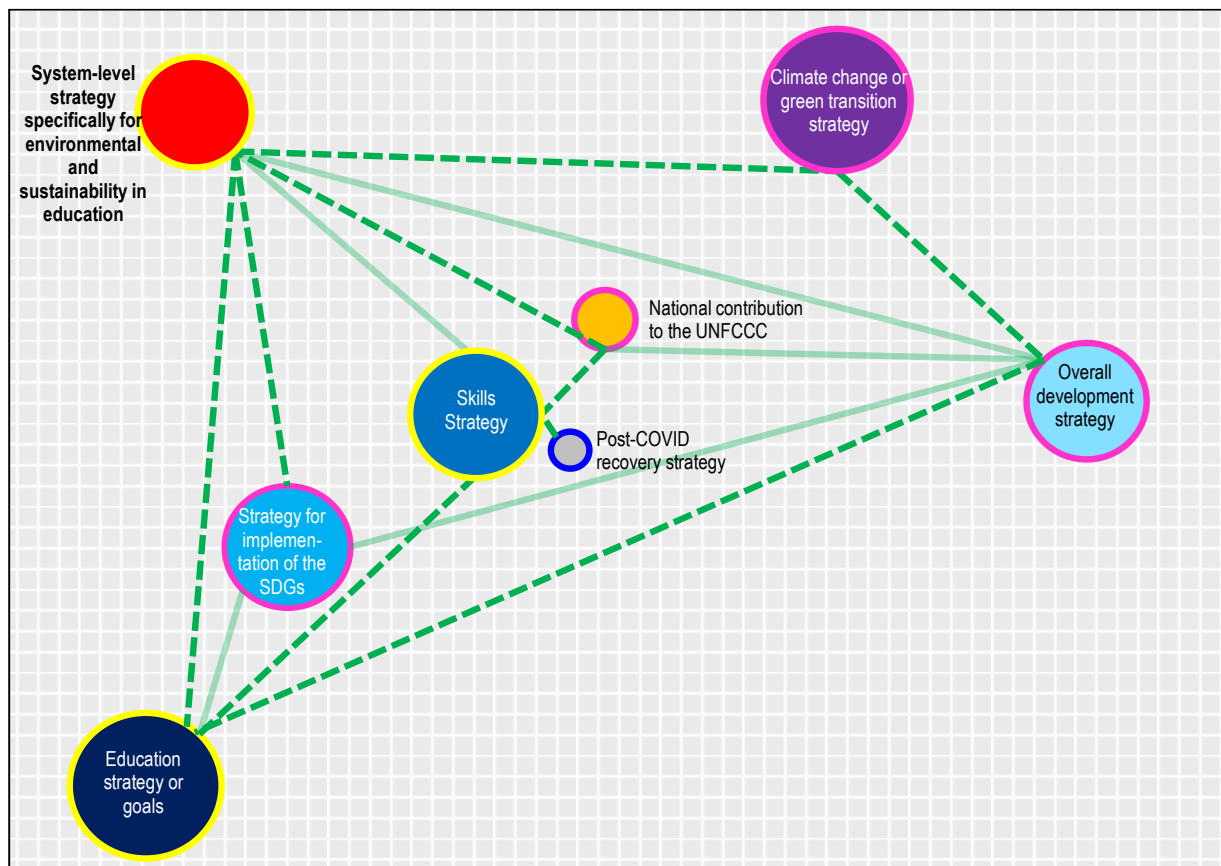
Note: The graphic shows the most common combinations of instruments typically put in place within countries or economies. The size of the bubble indicates the share of education ministries reporting the instrument is in place. Correlations above 0.33 are marked by connecting lines and doted lines show correlations above 0.5. All correlations were positive. Figure prepared with responses from 36 education systems.
Source: OECD (2023[1]), Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.

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Other noteworthy examples with a strong emphasis on education and targeting a broader population include initiatives in **Estonia**, the **Netherlands**, **Sweden** and **Ireland**. Estonia's Environmental Education and Awareness Plan 2023-2025, jointly led by the Ministry of Education and the Ministry of the Environment, focuses on the entire population (Estonian Ministry of Environment & Estonian Ministry of Education, 2023[15]). The Netherlands has aimed to take a comprehensive approach, aligning long-term objectives, such as enhancing labour market productivity growth through the integration of technology across all education levels, with practical short-term goals. These include addressing emerging shortages in technology and information communication technology (ICT). Initiatives like hybrid learning, the training of hybrid teachers, and investments in technology promotion aim to produce over 1 million ICT-skilled workers by 2030, concurrently contributing to greenhouse emission reduction by that year (Adriaansens et al., 2023[16]). Furthermore, its Catalyst for Lifelong Learning is promoting an ecosystem of green lifelong learning, as shown in Chapter 3.

Similarly, in Sweden the National Agency of Higher Vocational Education and Training (VET) has prioritised programmes supporting the 2030 Sustainable Development Agenda, as part of a mandate from

the government to contribute to these goals. The higher VET scheme is an example of a field targeted by such initiatives. Ireland has developed national strategies for sustainable development spanning various education levels. These strategies are included in documents such as the Statements of Strategy 2021-2023 and the Second National Strategy on Education for Sustainable Development (Irish Department of Education, 2021[17]; Irish Department of Further and Higher Education, Research, Innovation and Science, 2021[18]; Irish Department of Education, 2022[19]).

Most of the measures implemented by countries and economies emphasise the need for greater coherence and collaboration across different sectors to harness synergies. For example, **Iceland**'s Climate Action Plan, a culmination of collaborative efforts involving various stakeholders, including youth climate activists, underscores the significance of transparency, consultation with local authorities and stakeholders, and the establishment of clear objectives (Icelandic Ministry for the Environment and Natural Resources, 2020[20]). Similarly, **Romania**'s National Strategy for Research, Innovation, and Smart Specialization 2021-2027 advocates for participation and has been shaped through extensive consultations using a Dynamic Argumentative Delphi (DAD) approach, involving approximately 2 350 participants in at least one field of the survey (Romanian Ministry of Research, Innovation and Digitalization, 2021[21]). These initiatives underscore the importance of comprehensive approaches and inclusive, multi-stakeholder collaboration to drive progress toward greener and fairer societies.

Analysis of overall measures collected for this report suggests that while a broad range of instruments reported by participating education ministries promote cross-sectoral collaboration, they could further strengthen lifelong learning, socio-economically, culturally sensitive specifications. Such specifications could enhance their adaptability to specific contexts.

To provide further context regarding collaborative efforts in applying these instruments, the section below explores education ministries' perceptions of their capacity to collaborate with various stakeholders.

Ministries of environment stand out as strong perceived partners of education ministries, while collaborations with other actors could be strengthened

How do education ministries perceive support and collaboration with other actors in the transition to greener and fairer societies? According to responses from participating education ministries in the *EPO Survey 2023*, both the perceived importance that other actors assign to the education sector and the extent of collaboration between the ministry of education and these actors tend to align. The gap is larger for other ministerial or government actors, where only 44% believed that these actors attach high importance to the education sector and 68% reported at least moderate collaboration, probably because of the diversity of this group.

In the responses to the *EPO Survey 2023*, ministries of the environment emerge as highly supportive actors, surpassing education-specific actors in perceived importance and collaboration. Approximately 88% of participating education ministries considered ministries of the environment attach high importance to the education sector's role, with also 88% reporting high collaboration in the transition to greener and fairer societies. Civil society actors also stand out, with 76% perceiving high importance and 74% reporting extensive collaboration (Figure 4.5).

Conversely, a relatively lower share of participating education ministries believe they receive support from actors from the world of work, which are traditionally closely associated with the education sector. Only about half of them consider the ministry of employment/labour (or equivalent) to attach high importance to the education sector (50%), or that collaboration with them occurs at least to a moderate extent (53%). Slightly more education ministries report this for industry, business, and employers, with 56% and 65%, respectively. Only the ministries of education of Latvia, Estonia, New Zealand, Greece, Portugal, Scotland (United Kingdom) and Sweden, reported at least a sense of high importance provided and at least

collaboration to a moderate extent with both of these actors. Notably, only Estonia, Greece and Sweden reported a sense of high importance and high collaboration with both of these actors.

Figure 4.5. Beyond education-specific actors, the ministries of environment are seen as particularly strong collaborators of education ministries compared to other actors (2023)

Percentage of education ministries reporting how different actors perceive the role currently played by the education sector and the extent of collaboration with those sectors in the transition to greener and fairer societies
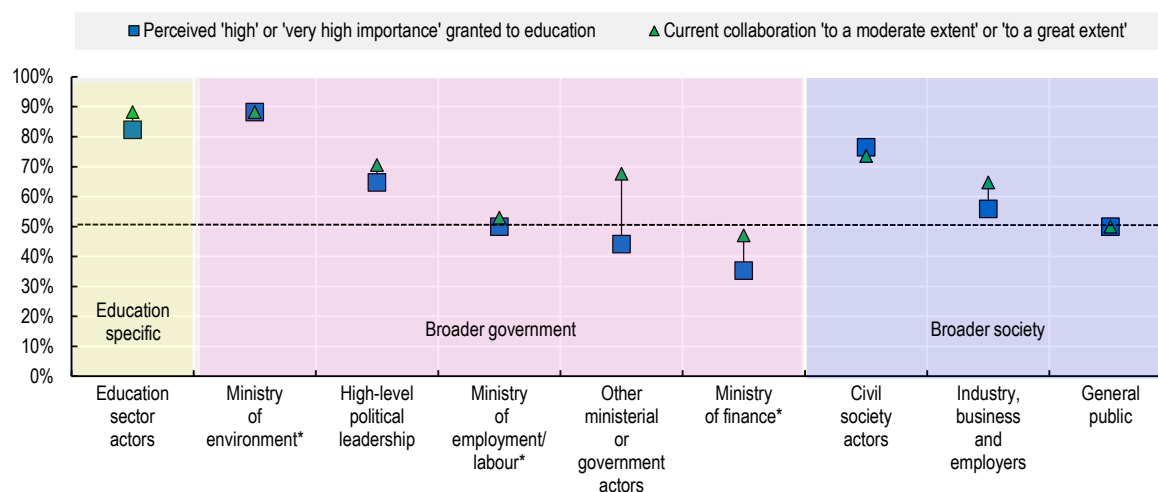
Note: Actors are ranked by descending order of 'High importance' to 'Very high importance'Figure prepared with responses from 34 education systems.
Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green*

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These actors play critical roles in shaping the education sector's actions and impact. To promote a coherent lifelong learning perspective in the transition to greener and fairer societies, governments should explore strategies to enhance synergies between the education sector and the workforce.

Additionally, opportunities for broader impact beyond the education sector are apparent. Only about half of participating education ministries believe the general public and, particularly, ministries of finance attach high importance to the education sector's role and collaborate to a moderate extent in the transition to greener and fairer societies. Only Estonia, Romania, New Zealand, Greece and Sweden reported at least a sense of high importance and at least moderate collaboration with both of these actors. Estonia, Romania and Sweden further reported that these two actors assign very high importance to the education sector, with collaboration at a significant extent.

These actors also hold substantial influence over the education sector's actions. Ministries of finance can magnify the scope of education ministries' initiatives, while strong relations with the general public are essential for ensuring long-lasting social, cultural, and economic impact of efforts for change.

Education ministries tend to collaborate more with other actors during the design of policies related to the transition to greener and fairer societies, but less during their implementation or evaluation

Effective collaboration with relevant actors throughout the policy process is crucial for education policies to have a greater impact. The nature of engagement can vary significantly, influenced by factors such as the level of involvement, communication flows, normative or pragmatic participation, objectives, and more. Similarly, the quality of participation depends on societies going beyond mere toolkits to focus on processes that empower, promote equity, build trust, and facilitate learning among identified stakeholders (Viennet and Pont, 2017[22]; Reed, 2008[23]). While empirical evidence on participation processes is limited, these principles should apply to both individuals and institutions. Responses from education ministries in the *EPO Survey 2023* indicate that achieving effective collaboration remains a shared challenge.

The survey inquired about the extent of collaboration with various actors (e.g. high-level political leadership, ministry of employment/labour, other government actors, civil society, ministries of finance, industry, business, employers, and the general public) during policy development, implementation, and evaluation related to the transition to greener and fairer societies.

Education ministries reported more frequent collaboration with other actors during policy development (67% on average), followed by less during policy implementation (54% on average), and even less during policy evaluation (42% on average). During policy development, Greece, Hungary, Kazakhstan, Latvia, the Netherlands, New Zealand, Romania, Sweden and England (United Kingdom) reported collaborations with all nine surveyed actors. Furthermore, a large majority of participating education ministries, with available data, reported collaborations with at least half of these actors during this policy stage (see Figure 4.6). Ministries of environment once again emerged as key collaborators during policy development, with 76% of education ministries referencing their involvement, closely followed by education sector actors (74%) (see Figure 4.7).

Figure 4.6. Education ministries' collaboration with other actors tends to decrease past the development process (By type of actor, 2023)

Percentage of education ministries (or equivalent) reporting collaborations with other actors on matters related to the transition to greener and fairer societies, by moment when they commonly take place
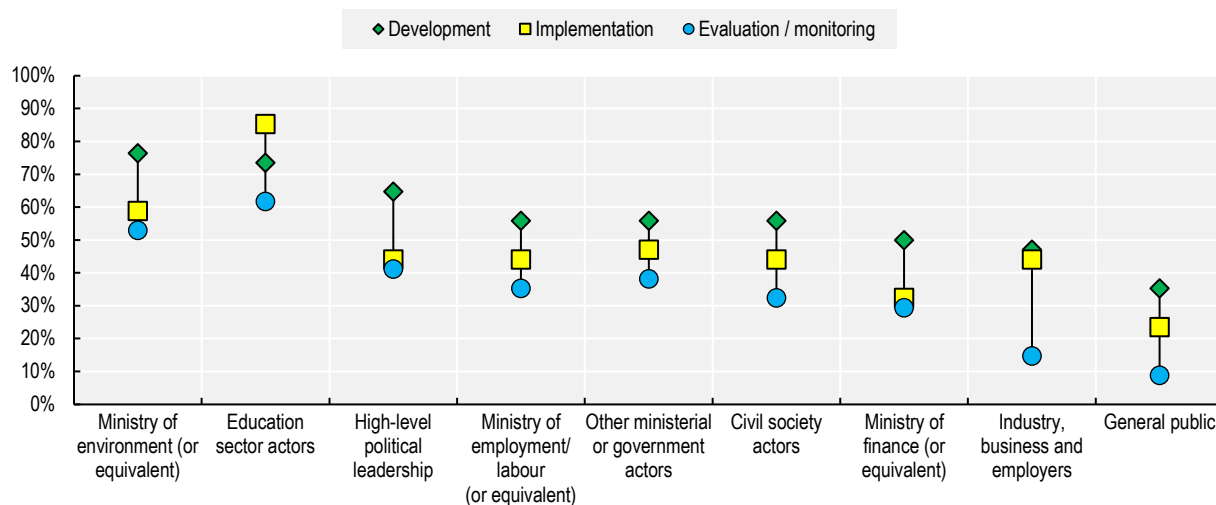
Note: Data ranked by percentage of education systems reporting that collaborations with other actors commonly take place during policy design. Figure prepared with responses from 34 education systems.

Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.*

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Figure 4.7. Education ministries' collaboration with other actors tends to decrease past the development process (By country or economy, 2023)

Percentage of education ministries (or equivalent) reporting collaborations with other actors on matters related to the transition to greener and fairer societies, by moment when they commonly take place

Note: The percentage of collaboration during 'policy development', 'policy implementation', 'policy evaluation', is measured as the share of collaborations reported by participating education ministries with the nine actors included in the survey, during the respective policy stages (excluding 'not known' or 'not applicable'). Figure prepared with responses from 31 education systems.
Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.*
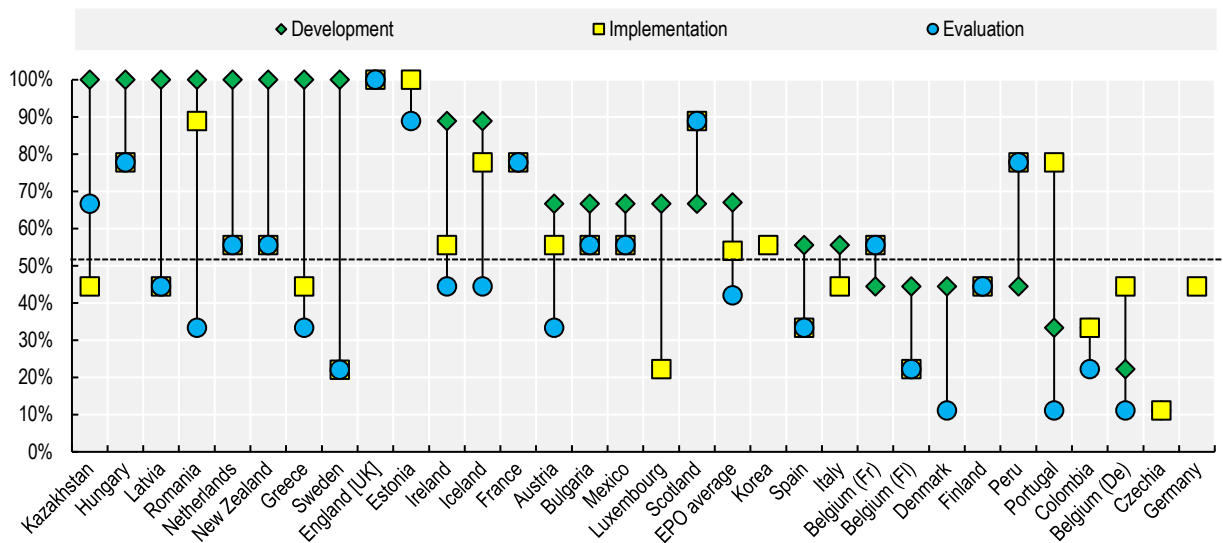
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Collaboration during policy implementation related to greener and fairer societies tends to happen to a lesser extent, except for education sector actors, with whom 85% on average reported collaboration. Collaborations with ministries of the environment (reported by 59% of education ministries) were the only other large collaborations during this policy stage. Estonia was the only country reporting collaboration with all actors during policy implementation. France, Hungary, Iceland, Peru, Portugal, Romania, and Scotland (United Kingdom) were among the education ministries that reported collaborations with at least two-thirds of the actors during this stage.

In the same way, collaboration for policy evaluation processes ranged from 62% on average with education sector actors to only 9% with the general public. Ministries of education in Estonia, England (United Kingdom), France, Hungary, Peru, Portugal, and Scotland (United Kingdom) reported collaborations with at least two-thirds of the education actors during this stage. These findings suggest that there is room for education ministries to develop evaluation processes that effectively capture a broader range of experiences in their policy efforts, facilitating more strategic decisions in the future.

Across the three stages of the policy process considered in the *EPO Survey 2023* (development, implementation, and evaluation), the extent of collaboration reported by ministries is lower than anticipated. This highlights the need for education ministries to seek ways to strengthen dialogue with these actors, enabling the development, implementation, and evaluation of policies that are more relevant, useful, and impactful for society as a whole. Further analysis can also provide insights into how these reported collaborations take place and their potential for impactful engagement.

Education systems need to pursue more strategic collaborations with other actors

In the modern context, education transcends its traditional role as a transmissive agent—simply transmitting knowledge and values to learners, often based on a fixed curriculum. Instead, it must embrace its transformative potential as a means through which learners of all ages co-construct new knowledge, engaging with it to shape democratic and sustainable societies. This transformative role, particularly in the post-industrial age, requires meaningful engagement between the education sector and other sectors. Education should not only facilitate critical thinking and action but also promote democratic, participatory, evidence-based dialogues that encourage diverse forms of collaboration that facilitate the transition to greener and fairer societies. These dialogues should also enable reflection on the global implications of decisions, transcending people's own societies (Jickling and Wals, 2008[24]; Tilbury et al, 2002[25]; Tilbury et al, 2002[25]).

In practice, this calls for democratic, participatory processes that operate both laterally, engaging various government sectors and actors in meaningful ways, and vertically, providing relevant formal and informal social stakeholders with the opportunity to contribute, depending on the specific policy context (Viennet and Pont, 2017[22]). Furthermore, the practical constraints that education ministries face daily make collaboration with all actors, at all times, unrealistic. Therefore, it is valuable to discern where collaboration tends to occur more frequently and where involving additional actors could yield greater impact.

The following section explores with whom education ministries currently engage in broader collaborations, identifies areas where they desire more collaboration, and explores potential facilitators of such collaboration, based on their perspectives.

'Climate change' is a key topic of collaboration for education ministries with most actors

Collaborations involving various actors in the transition to greener and fairer societies were examined across several topics, including climate change, biodiversity, water, air, soil quality, sustainable production, renewable energy, and disaster risk reduction. Education ministries from countries such as France, Germany, Greece, Kazakhstan, Peru, Romania, and Türkiye frequently reported collaborations with different actors across these topics. Germany was the sole entity reporting collaboration with all actors across all surveyed topics. Notably, climate change emerged as the primary focus of collaboration, although the extent of collaboration varied among different actors (see Figure 4.8).

Across these topics, education ministries commonly cited their ministries of environment as key collaborators, followed by education sector actors and civil society actors. Collaboration with high-level political leadership, other ministerial or government actors, and the general public was reported less frequently. Moreover, collaboration with industry, businesses, employers, ministries of employment, and particularly ministries of finance was relatively limited.

A higher share of participating education ministries tended to report a greater range of actors with whom at least moderate collaboration happens on aspects related to sustainable production and consumption. Still, there is potential for increased collaboration, particularly in areas traditionally linked to certain actors. Education ministries could benefit from stronger collaboration with industry, businesses, employers, and ministries of employment/labour, which are closely related to sustainable production and consumption.

Furthermore, ministries of finance play a pivotal role in supporting the implementation of a policy measure, or even its scaling up. For this actor, collaborations appear very targeted, such as in **Finland**, where this takes place in the context of funding allocated to specific programmes.

Figure 4.8. Climate change appears a topic of relatively broader collaboration between the education sector and other actors, compared to other topics (2023)

Percentage of education ministries reporting collaborations by topic and actor on matters related to the transition to greener and fairer societies
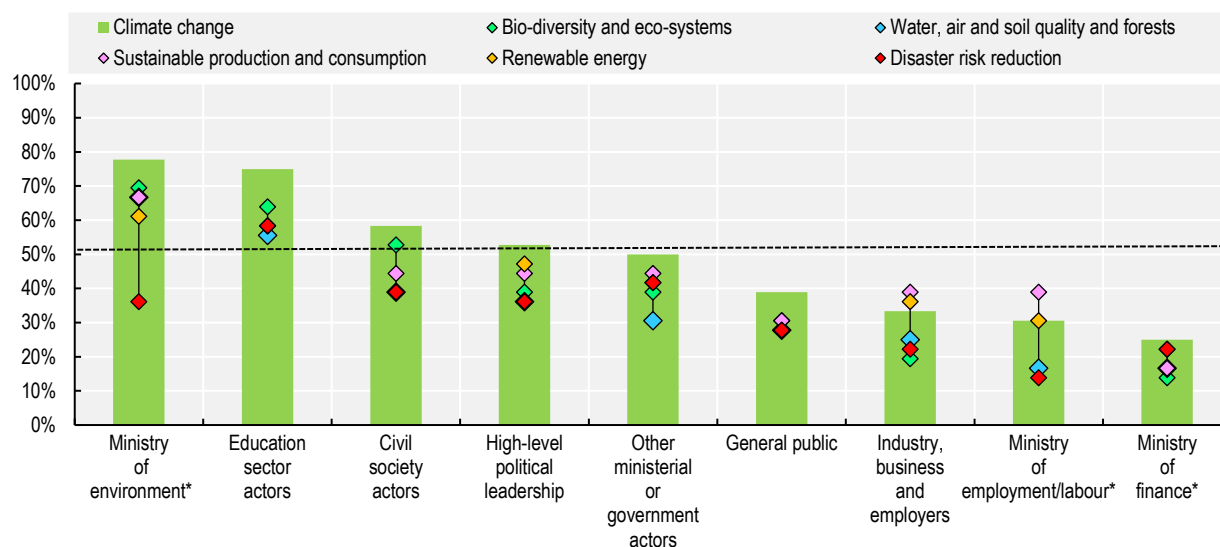
Note: Some markers have been resized to allow visibility where data is similar. Figure prepared with responses from 34 education systems.
Source: OECD (2023[1]), Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.

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Other noteworthy examples highlight existing collaborations in education and sustainability. Current efforts to support aspects related to the transition towards greener and fairer economies include collaborations with specialised agencies or foundations working on aspects of sustainable development, such as in **France**, with over 20 partnerships signed between 2021-22 by the education ministry and multiple agencies.

Coordination among national and subnational levels was also reported by **Germany** or **Colombia**. In Germany, this collaboration has allowed the Federal Ministry of Education and Research (BMBF) to produce an interim report regarding the implementation of the ESD in the German education system. To produce it, analysis of over 2 300 documents was carried out, including educational plans, curricula, and sustainability reports. Findings from this report point that although some references to ESD exist in these documents, the integration is still not widespread or explicit. The document calls for a more systematic and long-term approach to integrating ESD into the education system and the importance of active support from educational authorities for successful implementation (German Federal Ministry of Education and Research, 2020[26]).

Looking beyond education, in Colombia, the Inter-Institutional Technical Committees of Environmental Education (CIDEA, 2014) operate within subnational jurisdictions to support the implementation of the national Policy for Environmental Education at regional level. Acting as subnational platforms, they establish plans of action for this and promote collaboration between different sectors, including education institutions and civil society, on aspects related to environmental education. Along with guiding the contextualisation of the national environmental education policies at regional level, tasks carried out by the CIDEA may vary as well (e.g. keeping track of the projects and institutions undertaking environmental education projects; providing guidance for the development of related initiatives; or establishing communication strategies (CDA, 2023[27]) Moving forward, the CIDEA need to balance the challenge of helping local level institutions go beyond siloed approaches and connect as a community to national goals,

while remaining sensitive and relevant to local needs (MInistry of Environment and Sustainable Development of Colombia and Ministry of National Education of Colombia, 2003[28]).

More targeted collaborations engaging education and external actors also happen in **Austria**, the **French Community of Belgium** and **Luxembourg**. In Austria, the FORUM Environmental Education (FORUM Umweltbildung) is a joint project of the Federal Ministry of Climate Action, Environment, Energy, Mobility, Innovation and Technology and the Federal Ministry of Education, Science and Research. The FORUM has the objective of developing different types of tools and materials, for further engagement in aspects related to ESD on topics defined every year. Although education and youth actors within the sector are in principle the main beneficiaries of these activities, they may also be open to the broader public (FORUM Umweltbildung, 2023[29]). A similar effort exists in Luxembourg, where the ministries of Education, Environment, Co-operation and Civil Society actors collaborate on a yearly basis for the organisation of a national fair on topics related to ESD that involves actors of civil society (Coalition Parties of Luxembourg, 2018[30]).

Education ministries desire more collaboration on 'sustainable production and consumption'

The *EPO Survey 2023* also inquired about education ministries' preferences for greater collaboration in transitioning towards greener and fairer societies. "Sustainable production and consumption" emerged as the topic where most education ministries expressed a need for enhanced collaboration across various actors. Over 50% of education systems desired more collaboration in this area, particularly with ministries of environment, education sector actors, civil society, and industry, businesses, and employers (see Figure 4.9).

Figure 4.9. Education ministries wish to enhance collaboration with other actors

Percentage of education ministries reporting a desire for greater collaboration by topic and actor on matters related to the transition to greener and fairer societies
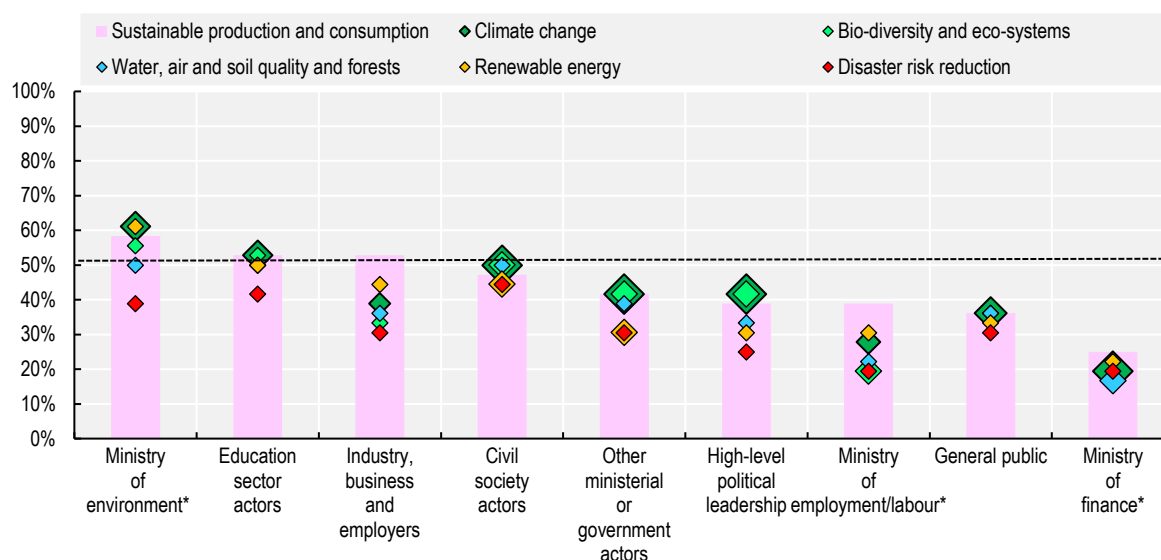
Note: Data are ranked from highest to lowest values on 'desired collaboration' in sustainable production and consumption. Figure prepared with responses from 34 education systems.
Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.*

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"Climate change" also ranked as the second most prominent area for which education ministries sought increased collaboration. In this domain, more than half of participating education ministries wished to collaborate further with their ministries of environment, education sector actors, and civil society. Austria, the Flemish and German Communities of Belgium, Colombia, Czechia, Greece, Iceland, Ireland, Korea, Latvia, Mexico, Peru, Portugal, and Scotland (United Kingdom) reported similar preferences for all these actors.

However, in the same way, preferences for increased collaboration did not always match in topics where synergies could be beneficial. For instance, despite the potential relationship between "Renewable energy" and "Sustainable production and consumption," education ministries did not express the same extent of desire for collaboration in both areas.

Figure 4.10 shows the disparity between where education ministries see a need for more collaboration and where they currently collaborate. "Industry, business, and employers" consistently stood out as actors for whom ministries expressed a higher desire for collaboration compared to perceived ongoing collaboration across all surveyed topics. The gap between desired and perceived current collaboration with industry, business, and employers was especially pronounced in the "Sustainable production and consumption" and "Biodiversity and eco-systems" categories, with a difference of around 15 percentage points. However, the gap between current and desired collaboration with "Ministries of employment/labour" was minimal (maximum 6 percentage points difference) on topics related to "Water, air, and soil quality and forests."

Education ministries shared several reasons for the desire to collaborate more with other actors. **Latvia**, **Estonia**, and **Italy** expressed interest in collaborating on skills development, research, dissemination, and building awareness. The **Flemish Community of Belgium** aimed to develop a broader vision, including ESD competencies through collaborations between sustainability education actors and those working on technical aspects related to Green skills/competencies. **Korea** referred to collaborations with high-level leadership in defining mid to long-term visions. Greater collaboration was also seen as essential to optimising mobility around schools (**French Community of Belgium**), enhancing the interinstitutional skills strategy (**Bulgaria**), and improving articulation across education levels (**France**).

Education ministries can benefit from strategically considering with whom to enhance collaboration based on specific topics to achieve more impactful education measures over short-, mid-, and long-term periods. For example, on aspects related to sustainable production and consumption and renewable energy, greater shares of ongoing and desired collaboration expressed by ministries would have been expected with their industry, business and employers, their ministries of employment/labour, or their ministries of finance. However, across these topics, fewer than half of countries tended to express this.

Moreover, topics related to "Disaster risk reduction" appeared to receive less priority, with less than half of participating education ministries (44%) desiring more collaboration with civil society actors. Recent global shocks, such as the COVID-19 pandemic and natural disasters, highlight the need for preparedness approaches in education systems to address crises effectively.

In the same way, polycrises are also likely to increase as climate change exacerbates. Education ministries could benefit from developing preparedness approaches that help increase quality and relevance of education and training approaches in the context of broader desired societal transformation at the same time (OECD, 2021[8]; WEF, 2023[3]; UNICEF, 2023[31]) (see Chapter 1). Governance arrangements also play a role, with the relevance of high-level political leadership varying in centralised and decentralised education systems. In more decentralised systems, lateral actors like other ministerial or government actors, civil society, and the general public may become more critical for collaboration. However, regarding the general public, it is concerning that fewer than half of education ministries on average expressed ongoing or desired collaboration across the surveyed topics.

Figure 4.10. Comparing current and further desired collaboration on aspects related to the transition to greener and fairer societies (2023)

Percentage of education ministries reporting current collaboration or more desired collaboration, by actor and topic
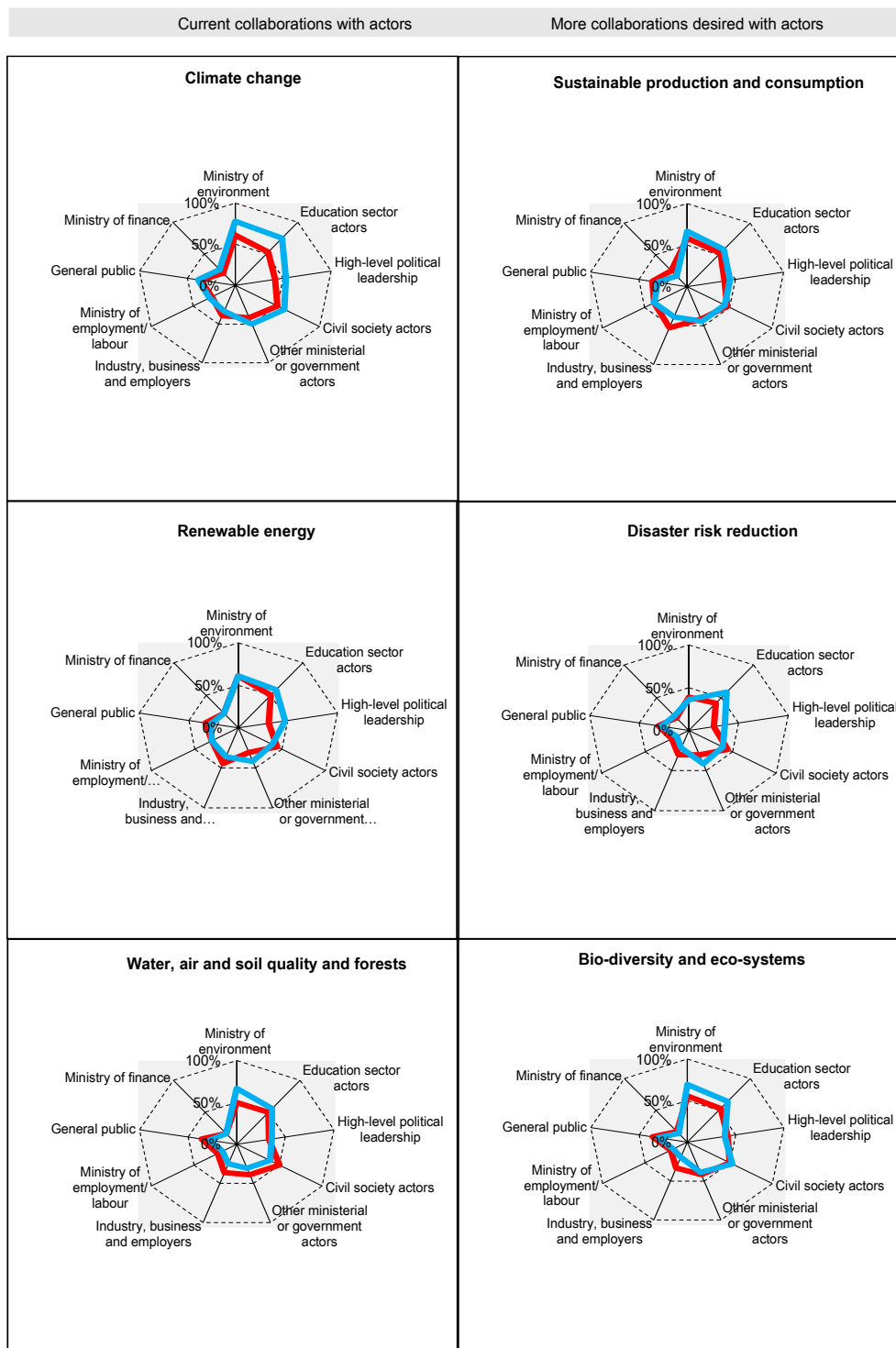
Note: Figure prepared with responses from 34 education systems.
Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.*

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Education ministries see high-level backing and capacity as important factors of influence, but ongoing or desired collaborations may not be aligned

Education ministries were also asked about factors that could elevate the role of the education sector and support collaboration with other actors in transitioning to greener and fairer societies. The top three factors they identified on average as of great importance related to high-level backing for education in both political (39%) and financial (31%) terms, as well as strengthening institutional capacity within education (28%). Some pointed out that good initiatives may fail without the necessary financial and human resources, including the time required for implementation. Figure 4.11 provides a sense of their preferences.

About 19% of participating education ministries also emphasised the need to incentivise education actors to collaborate with other sectors and enhance foresight and anticipatory governance capacity within education. Foresight and anticipatory governance capacity were seen as crucial for proactive decision making and changing mindsets in planning processes.

Interestingly, although a high share of education ministries referred to the importance of high-level financial backing, only 14% of education ministries considered having more resources for inter-sectoral collaboration and a similar share mentioned strengthening knowledge or data exchanges to be of very high importance. They also referred to the importance of coherence beyond education institutions to foster innovation in educational settings and support the implementation of education for sustainable development practices. As pointed out by one participating education ministry, within schools the joint design of a learning environment that encourages reflection and action for sustainability is an important leverage for ESD.

Figure 4.11. High-level backing and institutional capacity are among the top factors to enhance the role of the education sector

Perceptions from ministries/organisations on important factors in helping to elevate the role of the education sector and support collaboration with other actors on matters related to the transition to a green and fair society
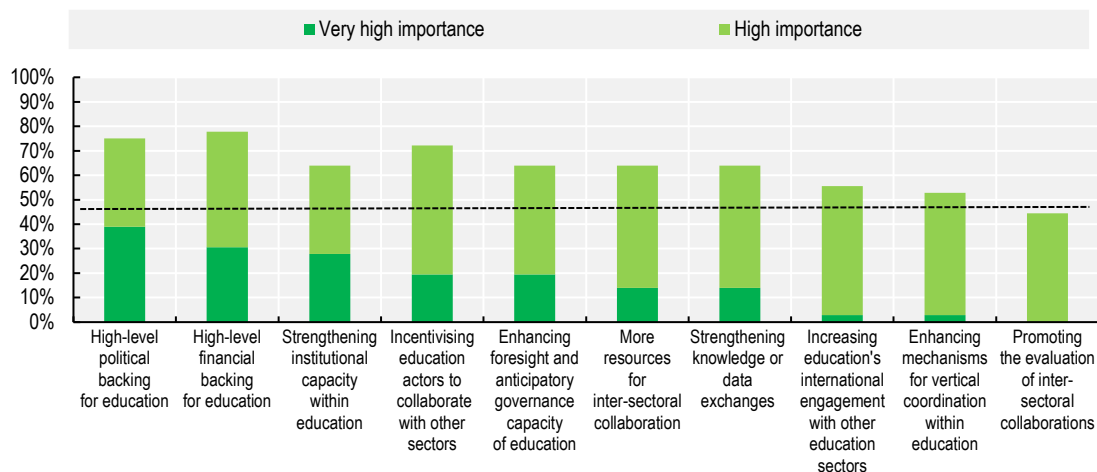
Note: For 'very high importance', participating education ministries could only select a maximum of three factors. Data is ranked according to the share of education ministries reporting a factor as of "very high importance". Figure prepared with responses from 32 education systems.
Source: OECD (2023[1]), Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.

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In contrast, only 3% of participating education ministries mentioned increasing education's international engagement with other education sectors or enhancing mechanisms for vertical coordination within education as a factor of very high importance. In the same way, none referred to promoting the evaluation of inter-sectoral collaborations as being of very high importance. Interestingly, only 50% of education ministries considered promoting the evaluation of inter-sectoral collaboration processes as of at least high importance. This was also the factor which the highest share of education ministries identified as of low or moderate importance (41%) among those surveyed. Being able to learn from experiences of inter-sectoral collaborations could be a matter of further attention to education ministries. Those who did prioritise evaluation tended to focus on enhancing foresight and anticipatory governance capacity and mechanisms for vertical collaboration as well. Examples of these ministries are the Flemish and German-speaking Communities of Belgium, Colombia, Estonia, Latvia, New Zealand, Peru, as well as Scotland (United Kingdom) and Northern Ireland (United Kingdom).

The responses indicated a need for better alignment between priorities and ongoing and desired collaborations with actors who could support the education sector. While a large share of education ministries referred to high-level financial backing and providing more resources for inter-sectoral collaboration as highly important in their contexts, these areas had very little ongoing or desired collaboration with high-level political leadership and ministries of finance, as expressed earlier in this chapter. Responses from education ministries suggest they are aware of the importance of cross-sectoral collaboration to help education become more strategic. Moving forward, they could benefit from mapping priority areas and collaborations beyond the education sector to promote synergies.

Some policy lessons emerge on how education systems can increase their strategic importance for the transition to greener societies

Recent data and analysis from responses to the *EPO Survey 2023*, along with these and other policy experiences to help the education sector play a more strategic role in the broader societal green transformation offer some lessons to help guide education systems' efforts in 2024.

1. Governments, including education ministries, should consciously prioritise elevating the strategic importance of the education sector for the transition to greener societies.

- Education plays a crucial role in fostering greener and fairer societies, influencing individuals, communities, and policy processes. Given the urgency of transitioning to greener and fairer societies today and the cross-sectoral support that education can provide, it is essential to potentialise this role.

- In the context of strategic instruments for this transition, including dedicated system-level strategies for environmental and sustainability education, ensuring high-level political and financial backing for education to facilitate exchanges with other sectors is crucial, as indicated by education ministries. However, responses to the EPO Survey 2023 show that governments and education systems need to be more attentive to possible collaborations to make this happen.

2. Align priorities and collaborations by mapping ongoing and desired partnerships with various actors and domains, such as on sustainable production and consumption or climate change, identifying other related priorities.

- Governments should ensure that national priorities align with ongoing and desired collaborations. In the EPO Survey 2023, 'Sustainable production and consumption' and 'Climate change' emerged as top priorities for education systems, yet less than 50% of participating education ministries reported ongoing collaborations with most actors surveyed on these topics.

- Education ministries should map collaborations to assess where to allocate efforts more efficiently (e.g. collaborations with including industry, business and employers, the Ministry of Employment, or the Ministry of Finance).
- Additionally, in a context of increasing future policrises associated with the challenge of climate change, priorities such as disaster preparedness also require the attention from education ministries (see also Chapter 1).

Build the capacity of the education sector to understand the key challenges and opportunities of transitioning to greener and fairer societies and driving transformative change.

- The EPO Survey 2023 identified strengthening institutional capacity within education and incentivising education actors to collaborate with other sectors as crucial factors related to this transition. The education sector must enhance its capacity to comprehend the evidence behind these challenges and increasingly engage with other actors through formal, non-formal or informal learning. Exploring possibilities for training, research and infrastructure will be essential (see Chapters 2 and 3).
- Similarly, governments need to facilitate knowledge and data exchange within and beyond education related to education for sustainable development. Survey responses suggest that these are areas that receive little attention or are seen as less relevant by education ministries.

Examine which incentives and conditions within the education sector facilitate collaboration for green transformation according to the priorities established.

- Governments should assess the conditions that hinder or enable education actors' engagement in aspects related to the transition to greener and fairer societies and provide incentives that emphasise it as a transversal objective. This includes revising the existing instruments in place to assess what related existing or new incentives can establish this transition as a transversal priority as well as the resources needed to facilitate cross-government collaboration. Establishing dedicated funding mechanisms, staffing, and digital platforms to facilitate collaboration across government departments is essential.

Look forward and look backward to ensure broader societal relevance and impact of the education sector's efforts in transitioning to greener and fairer societies.

- In the EPO Survey 2023, only 50% of education ministries considered evaluating inter-sectoral collaboration processes to be of at least high importance and none considered it of very high importance. Prioritising evaluations of inter-sectoral collaborations on aspects related to the transition to greener and fairer societies, along with the sharing of knowledge and data, is critical to enhance the relevance, impact and value for money of ongoing and future efforts.
- Education ministries should also enhance foresight and anticipatory governance mechanisms to identify where future policy efforts and collaborations can be most helpful for the transition to greener and fairer societies, such as in the implementation or reform of instruments and enhancing synergies to support this transition.

Key messages

In 2024, policy lessons and examples of policy efforts identified in this chapter can help education actors elevate the importance of the education sector (see Figure 4.12).

Figure 4.12. Summary of policy lessons on how education systems can increase their strategic importance for broader societal green transformation

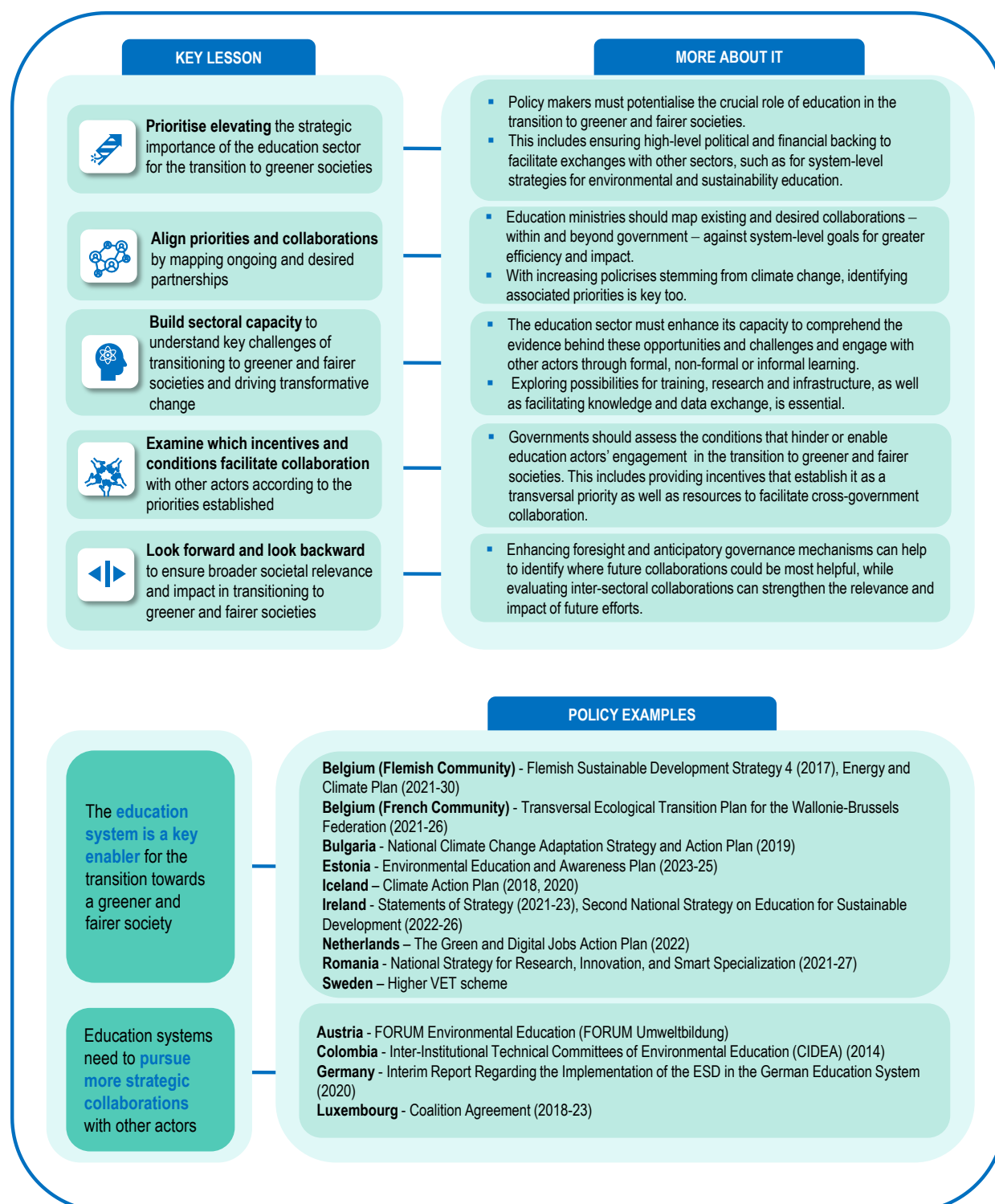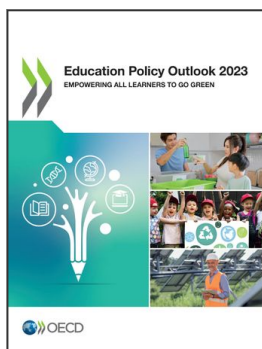| KEY LESSON	MORE ABOUT IT
Prioritise elevating the strategic importance of the education sector for the transition to greener societies	▪ Policy makers must potentialise the crucial role of education in the transition to greener and fairer societies. ▪ This includes ensuring high-level political and financial backing to facilitate exchanges with other sectors, such as for system-level strategies for environmental and sustainability education.
Align priorities and collaborations by mapping ongoing and desired partnerships	▪ Education ministries should map existing and desired collaborations – within and beyond government – against system-level goals for greater efficiency and impact. ▪ With increasing policrises stemming from climate change, identifying associated priorities is key too.
Build sectoral capacity to understand key challenges of transitioning to greener and fairer societies and driving transformative change	▪ The education sector must enhance its capacity to comprehend the evidence behind these opportunities and challenges and engage with other actors through formal, non-formal or informal learning. ▪ Exploring possibilities for training, research and infrastructure, as well as facilitating knowledge and data exchange, is essential.
Examine which incentives and conditions facilitate collaboration with other actors according to the priorities established	▪ Governments should assess the conditions that hinder or enable education actors' engagement in the transition to greener and fairer societies. This includes providing incentives that establish it as a transversal priority as well as resources to facilitate cross-government collaboration.
Look forward and look backward to ensure broader societal relevance and impact in transitioning to greener and fairer societies	▪ Enhancing foresight and anticipatory governance mechanisms can help to identify where future collaborations could be most helpful, while evaluating inter-sectoral collaborations can strengthen the relevance and impact of future efforts.

POLICY EXAMPLES

The **education system is a key enabler** for the transition towards a greener and fairer society	**Belgium (Flemish Community)** - Flemish Sustainable Development Strategy 4 (2017), Energy and Climate Plan (2021-30) **Belgium (French Community)** - Transversal Ecological Transition Plan for the Wallonie-Brussels Federation (2021-26) **Bulgaria** - National Climate Change Adaptation Strategy and Action Plan (2019) **Estonia** - Environmental Education and Awareness Plan (2023-25) **Iceland** – Climate Action Plan (2018, 2020) **Ireland** - Statements of Strategy (2021-23), Second National Strategy on Education for Sustainable Development (2022-26) **Netherlands** – The Green and Digital Jobs Action Plan (2022) **Romania** - National Strategy for Research, Innovation, and Smart Specialization (2021-27) **Sweden** – Higher VET scheme
Education systems need to **pursue more strategic collaborations** with other actors	**Austria** - FORUM Environmental Education (FORUM Umweltbildung) **Colombia** - Inter-Institutional Technical Committees of Environmental Education (CIDEA) (2014) **Germany** - Interim Report Regarding the Implementation of the ESD in the German Education System (2020) **Luxembourg** - Coalition Agreement (2018-23)

Source: OECD (2023[1]), *Education Policy Outlook National Survey for Comparative Policy Analysis 2023: Empowering All Learners to go Green.*

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