

# **Economic and Social Council**

Distr.: General 22 February 2018

Original: English

## **Economic Commission for Europe**

Committee on Environmental Policy

**United Nations Economic Commission for Europe Steering Committee on Education for Sustainable Development** 

Thirteenth meeting
Geneva, 3 and 4 May 2018
Item 6 of the provisional agenda
Preparations for the next (2017–2019) mandatory
reporting cycle under the Strategy

Format for reporting on the implementation of the UNECE Strategy for Education for Sustainable Development (2017–2019)

### Summary

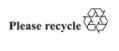
By its terms of reference, the United Nations Economic Commission for Europe (ECE) Steering Committee for Education for Sustainable Development is charged with monitoring progress in the implementation of the UNECE Strategy for Education for Sustainable Development (ECE/CEP/BATUMI.CONF/2016/11, annex II, para. 4 (d)).

On 1 November 2018, States participating in the Strategy are due to submit their national implementation reports. Reports are expected to reflect the progress made in the implementation of the Strategy at the national or State level during the next implementation phase (2017–2019). The present document sets out the format for reporting (annex I). The set of indicators, on which the reporting format is based, was developed by the ECE Expert Group on Indicators for Education for Sustainable Development. The reporting format has been updated by the secretariat in consultation with the Bureau to meet the reporting needs of the current phase.

Based on national reports submitted, the secretariat will prepare a synthesis report in 2019, highlighting progress made, identifying challenges and drawing up recommendations. The synthesis report is vital for monitoring the progress made since the previous implementation phases and setting future priorities for implementing the Strategy and is expected to be presented at the fourteenth meeting of the Steering Committee in 2019.

GE.18-02755(E)

\*1802755\*





ECE/CEP/AC.13/2018/4

## Contents

		Page
	Introduction	3
Annexes		
I.	Format for reporting on implementation of the UNECE Strategy for Education for Sustainable Development	7
II.	Proposed timeline for reporting	38

## Introduction

- The present document presents a format for reporting on implementation of the UNECE Strategy for Education for Sustainable Development for the next implementation phase (2017-2019). It was developed based on the procedure for the review of implementation of the Strategy contained in the draft workplan for 2017-2019 (ECE/CEP/AC.13/2018/3). The reporting format also takes into account the two previous exercises in 2010 and 2014, the related reporting (ECE/CEP/AC.13/2009/10 and ECE/CEP/AC.13/2014/5, respectively) and the feedback from countries following those exercises on the workability and feasibility of the indicators and the requested information for reporting.
- 2. In addition, the workplan for implementation of the current phase of the Strategy sets out the timeline for the reporting exercise in 2018 (ibid., para. 46).
- 3. The set of indicators was developed by the ECE Expert Group on Indicators for Education for Sustainable Development set up by the High-level Meeting of Environment and Education Ministries (Vilnius, 17–18 March 2005). Three complementary progress reports provide information on the development of the indicators (see CEP/AC.13/2005/9, ECE/CEP/AC.13/2006/5 and ECE/CEP/AC.13/2008/4).
- 4. In 2014, to reflect the requirements the third phase (2011–2015) of the Strategy's initial implementation period (2005–2015), in consultation with the Expert Group on Indicators the secretariat introduced the following changes to the reporting template developed by the Group:
- (a) The reporting template was updated to use the revised International Standard Classification of Education (ISCED), as adopted by United Nations Educational, Scientific and Cultural Organization (UNESCO) member States in 2011;
- (b) To gather important analytical information for the implementation of education for sustainable development (ESD) after the third phase of implementation came to an end, countries were given the possibility to add concluding remarks, i.e., on the main successes, challenges and implications for future implementation for each of the Strategy's objectives;
- (c) Where appropriate, references to educator competences in ESD as developed by the ECE Expert Group on Competences were added (indicator 3.1);
- (d) Where appropriate, references to the priority action areas as adopted by the Steering Committee at its seventh meeting (Geneva, 1–2 March 2012) (ECE/CEP/AC.13/2012/2, para. 48) were included (indicator 2.3);
- (e) Descriptive remarks on indicators that referred only to phases I and II of the first implementation period were revised to reflect the requirements of phase III, i.e., focusing on an analysis of implementation and implementation outcomes;
- (f) Issue 9 of the 2010 reporting template ("Describe any assistance needed to improve implementation") was revised to read "Future implementation of education for sustainable development", focusing on priorities for the future ESD implementation framework.
- 5. In 2018, to reflect the requirements and priorities of the 2017–2019 implementation phase, outlined in the framework for the future implementation of the Strategy (ECE/BATUMI.CONF/2016/11), in consultation with the Bureau, the secretariat has introduced the following changes to the 2014 reporting template developed by the Expert Group:

- (a) The tables with ISCED levels provided in the "yes/no" part of indicators 1.2.2, 2.2.1, 2.3.1, 2.3.2, 2.3.3, 2.4.1 and 4.2.2 have been updated to reflect the growing interest in technical and vocational education and training by adding the relevant ISCED programme orientation category for vocational education, as follows: 25. Lower secondary vocational education; 35. Upper secondary vocational education; 45. Post-secondary nontertiary vocational education; 55. Short-cycle tertiary vocational education. Similarly, the tables containing a breakdown by ISCED levels provided in appendixes I (a), (b) and (c) and appendix III have been also updated with the inclusion of these additional levels 25, 35, 45 and 55 for vocational education. Countries are invited to assess these levels if they have relevant information and data. Additional change was proposed during the thirteenth meeting of the Steering Committee (3-4 May 2018): where appropriate, the tables with ISCED levels have been updated by adding one option for the answer "9. No information available";
- (b) The title of indicator 1.3 "National policies support synergies between processes related to sustainable development (SD) and ESD" has been revised to read "National policies support synergies between processes related to the Sustainable Development Goals (SDGs), sustainable development (SD) and ESD";
- (c) A new sub-indicator 1.3.1 "Does your country have a stand-alone 'sustainable development', 'global understanding', 'international understanding' policy, plan or law in place, in each case using 'sustainable development' language?" has been added;
- (d) Former sub-indicator 1.3.1 "Is ESD part of SD policy(ies) if these exist in your country?" has been renamed as sub-indicator 1.3.2;
- (e) A new sub-indicator 2.4.2 "Which of the following dimensions of learning is your country planning to reinforce in student assessment or examinations in the next five years, in relation to ESD?" has been added, which includes the following options for an answer: (a) Knowledge; (b) Skills and competencies; (c) Values and attitudes; (d) Behaviours; (e) None; and (f) No information available;
- (f) Issue 9 of the 2014 reporting template ("Future implementation of education for sustainable development") has been revised to read "Describe any assistance needed in implementing the Strategy in your countries", as the political mandate for the future implementation of the Strategy has since been agreed at the High-level Meeting of Education and Environment Ministries in 2016;
- (g) Appendix I (a) has been revised and several new themes have been added to the listing of proposed themes, as follows: "Sustainable lifestyles"; "Gender equality"; "Oceans and sea"; "Renewable energy"; Sustainable cities and communities"; and "Culture's contribution to sustainable development". Also, several themes have been revised as follows: "Ethics and philosophy" has been revised to read "Environmental ethics and philosophy"; "Citizenship, democracy and governance" has been revised to read "Global citizenship, democracy and governance"; "Environmental protection (waste management, etc.) has been revised to read "Environmental protection (waste management, environmental monitoring, risk assessment, etc.)"; "Climate change" has been revised to read "Climate change and desertification"; and "Economics" has been revised to read "Economic growth and good jobs".
- 6. The main elements of the reporting procedure are as follows:
- (a) ECE member States should prepare reports through a transparent consultative process involving all relevant stakeholders at the national or State level;
- (b) Although the "yes/no" part of sub-indicators was required to be reported on in the initial phase I (2007) and the "descriptive" part in phase II (by 2010) and phase III

- (by 2015), countries are encouraged to report on the full set of indicators at the end of each phase, to the extent possible, in line with a country's progress in implementing the Strategy for ESD;
- (c) Thirty-eight member States reported on a voluntary basis by preparing reports for the Environment for Europe Ministerial Conference in Batumi in 2016. Thirty-six member States submitted national implementation reports for the Environment for Europe Ministerial Conference in Belgrade in 2007, and 36 member States responded to the first formal call for reporting in 2010. Countries are requested to prepare an updated version of their most recent report for 2018;
- (d) Reports should be submitted to the secretariat electronically in Word format. The text should be in English. Member States are also encouraged to provide the text in the two other official languages of ECE, French and Russian. Reports will be made available in the languages in which they are received. No editing will be provided;
- (e) The deadline for submission of reports to the secretariat, taking into account United Nations document management procedures, is 1 November 2018;
  - (f) The ECE secretariat will post the reports on its website;
- (g) The ECE secretariat will prepare a synthesis report for 2019, highlighting achievements, identifying challenges and drawing conclusions regarding future ESD implementation. It is expected that the reporting results will be presented at the fourteenth meeting of the Steering Committee in 2019;
- (h) Key stakeholders are encouraged to provide the secretariat with their reports on programmes or activities that support the implementation of the Strategy.
- 7. The key documents for the preparation of the 2018 national implementation reports include the following:
- (a) The UNECE Strategy for Education for Sustainable Development (CEP/AC.13/2005/3/Rev.1);
  - (b) The format for reporting presented in annex I to the present document;
- (c) The guidance for reporting on the implementation of the UNECE Strategy for Education for Sustainable Development (ECE/CEP/AC.13/2009/5);
- (d) The first progress report on the implementation of the Strategy (2005–2007), "Learning from each other: achievements, challenges and the way forward" (ECE/BELGRADE.CONF/2007/INF/3-ECE/CEP/AC.13/2007/2 and Add.1 and Corr.1);
- (e) The second evaluation report on the implementation of the Strategy (2008–2010), "Learning from each other: achievements, challenges and ways forward" (ECE/CEP/AC.13/2012/3);
- (f) The third evaluation report on the implementation of the Strategy (2011–2015), "Learning from each other: achievements, challenges and ways forward" (ECE/CEP/AC.13/2016/3);
- (g) The publication: Ten Years of the UNECE Strategy for Education for Development Evaluation Report on the Implementation of the UNECE Strategy for Education for Sustainable Development from 2005 to 2015 (ECE/CEP/179).
- 8. A proposed timeline for reporting is provided in annex II to the present document.

### Annex I

# Format for reporting on implementation of the UNECE Strategy for Education for Sustainable Development

Implementation phase: 2017-2019

The following report is submitted on behalf of the Government of ROMANIA in accordance with the decision of the ECE Steering Committee on Education for Sustainable Development.

Name of officer (national focal point) responsible for submitting the report: IONEL FLORIAN LIXANDRU, Secretary of State for the preuniversity education

Signature:

Date: 31.10.2018

Full name of the institution: Ministry of National Education, Romania

Postal address: Str. Gen. Berthelot 28-30, Sector 1, 010168

Telephone: +4021/405.62.00; +4021/405.63.00

Email: florian.lixandru@edu.gov.ro

Website: www.edu.ro

Contact officer for national report (if different from above): Nina Merluşcă, public manager, General Directorate for Strategic Management and Public Policies, nina.merlusca@edu.gov.ro

A. Provide brief information (not more than half a page) on the process by which this report has been prepared, including information on which types of public authorities were consulted or contributed to its preparation, how the stakeholders were consulted and how the outcome of this consultation was taken into account and on the material used as a basis for the report.

The consultation for the fourth cycle of the reporting on the implementation of the *UNECE Strategy for Education for Sustainable Development* was held at national level, with various stakeholders that have a contribution to education for sustainable development (ESD), as mentioned below:

☐ Governmental institutions (please specify)

Ministry of National Education (MoNE), who is the determining authority to report on Education for Sustainable Development (ESD) and is also among the authorities designated to implement the strategy. Under the auspices of the adoption by member States of the UN 2030 Agenda for Sustainable Development, MoNE created an intraministerial expert group to promote the SDGs, to provide feedback and information on public policies regarding sustainable development (SD), as well as to promote ESD. Besides the consultation and the inputs of the aforementioned member groups – who are part of the most relevant directorates and general directorates from the ministry as regard to this issue, information was collected also from the subordinated and coordinated institutions of the MoNE. (https://www.edu.ro/)

**Ministry of Environment**, who is one of the main partners for promoting ESD. The most valuable input from it was through its subordinated institutions, in particular from all the local environmental protection agencies. (http://www.mmediu.ro/)

Ministry of Research and Innovation is the central public administration institution that develops and coordinates the public policies in the sphere of scientific research, technological development and innovation, as well the national research and development institutes.

<b>Department for Sustainable Development</b> , created in 2017 (GD 313/2017), which is the coordinator at								
national 1	evel of	the implementa	ation of the 17 su	stainable develo	pment go	als (SD	OGs) of the	2030 Un
Agenda	for	Sustainable	Development,	functioning	under	the	prime	minister.
(http://dez	zvoltare	durabila.gov.ro/	web/about/)					

Stakeholders:	 	
NGOs (please specify)		

European Network for the Promotion of a Responsible Economy for the 21st Century (the REPER 21 Association) – who also gathered input from other NGOs whose work is related to ESD, under the project entitled ONG21. The REPER 21 Association is a non-profit, non-governmental association, created in 2006 as a space for dialogue, creation and action to promote social responsibility and sustainable development, aiming at enabling civil society organizations, public institutions and businesses to cooperatively identify "best practices" to jointly create and test social responsibility tools, methods and processes. The NGO also aims to contribute to transforming the Romanian education system to meet the challenges of today's society, in particular to teach them to live a good, harmonious life as people, and to develop together a model of sustainable development for their society. (https://reper21.ro/)

The Foundation for the Development of the Civil Society (FDCS) is an independent, non-governmental organization, established in 1994, following an initiative of the European Commission. FDSC is an "organization for organizations", sharing the belief that the very development of non-governmental organizations is an indicator of the progress of communities and citizens. FDSC is currently pursuing its mission by providing services not only to NGOs, but also to public administration, the business sector, journalists, academia. This is made through the help of grant programs, information services, consultancy and training, as well as advocacy, coalition and building interconnected platforms with a mutual added valued. FDSC is a partner of the REPER 21 Association in the project of building a public policy for ESD. (http://www.fdsc.ro/eng/)

New Horizons Foundation. The foundation, created in 2000, is an awarded non-governmental association who innovates and support models of education through experience that empower young people to develop themselves, the community and the world they live in. At national level, New Horizons Foundation develops educational programs such as: Impact - education through community-based service projects, Life - education through adventure, Community Schools - training courses, facilitation, financial support for school management, The Architects of Education - courses, resources and training for teachers. (https://www.noi-orizonturi.ro/)

Academia (please specify)

- The Bucharest University of Economic Studies
- University "Alexandru Ioan Cuza", Iași
- National Academy of Physical Education and Sport, Bucharest
- "Grigore T. Popa" University of Medicine and Pharmacy, Iași
- "Eftimie Murgu" University, Reşiţa
- "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine, Iași
- University of Agricultural Sciences and Veterinary Medicine, Cluj- Napoca
- "Ion Mincu" University of Architecture and Urbanism, Bucharest
- The "Nicolae Bălcescu" Land Forces Academy, Sibiu

•	"Petru Maior" University, Tîrgu Mureş
☐ Busi	ness (please specify)
Othe	r (please specify)

National Centre for the TVET Development, institution under the subordination of MoNE

B. Report any particular circumstances that help clarify the context of the report — for example, whether the decision-making structure is federal and/or decentralized, and whether financial constraints are a significant obstacle to implementation. (This information should not exceed half a page.)

The decision making structure is centralized – represented by MoNE - and has deconcentrated institutions in each county of the country – the county school inspectorates (summing up 42) – who are supervising and supporting the implementation of the national policies at the local level. However, the responsibility is shared with the local authorities, concerning the infrastructure of the preuniversity system (financed by the local public administration – local councils), as well as regarding the functioning of IVET which is made in cooperation with the local economic operators. At the level of the academia, even though the state universities are partially subsidized by MoNE and the national policy regarding higher education system is made by MoNE, the universities have their own autonomy.

ESD is cross-referenced in the formal curriculum of preuniversity education in Romania, but also in extracurricular and extracurricular activities, therefore there is no national budget set aside specifically for ESD but the manuals, national projects, school competitions, etc. are financed from the budget of the MoNE.

Projects funded under the new budget execution of the EU structural and investment funds (ESIF) 2014-2020 have the sustainable development and the equal opportunities among men and women aspects as horizontal themes. All projects, including those written and executed by MoNE must include the aforementioned dimensions, including after the end of the implementation, which is called the sustainability period of the project. All projects developed by MoNE are co-financed from the national budget. Thus, each project must include a minimum of measures to promote sustainable development awareness measures. During the implementation period, concepts of environmental protection, efficient use of resources and conservation of biodiversity, equal opportunities and treatment between men and women are promoted. Training sessions consider that each module includes sections devoted to awareness of the need to protect the environment for the purposes of sustainable development by reducing resource consumption.

#### Issue<sup>1</sup> 1. Ensure that policy, regulatory and operational frameworks support the promotion of ESD

If necessary, provide relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).

The basis for ESD is in the organic law of education, respectively the National Law of Education 1/2011 (NEL), with the subsequent modifications and completions. Subsequent to this legislation are the public policies that support the ESD in Romania, adopted by Government Decisions (secondary legislation), namely the *National Strategy for Sustainable Development*, *Horizon 2013 - 2020 - 2030* (GD no. 1460/2008), the education sectoral strategies, respectively the *National Strategy for Reducing Early School Leaving* (GD 417/2005), the *National Strategy for Tertiary Education 2015-2020* (GD 565/2015), the *National Strategy for Education and initial vocational Education from Romania* (GD 317/2016). In order the implement the aforementioned strategies, MoNE develops tertiary legislation like minister orders and instructions. At the MoNE level, all the sectoral strategies on education and training are being monitored yearly and annual implementations plans are made subsequently by technical working groups within the ministry.

On top of his, MoNE has numerous collaboration protocols with responsible authorities in industry, commerce, health, transport, agriculture, environment, local communities, NGOs, international organizations that help students learn how to become citizens who engage in social and environmental change activities.

Moreover, ESD is also envisaged in the 2018-2020 Governing Program, respectively at the chapter Policies in the educational field, Point 8, subitem Supporting those extra school and extracurricular education policies which, by completing approved school curricula, provide: health education, civic education, artistic and scientific cultural education, ecological education, education through sport, education for sustainable development.

Additionally, Romania is a signatory state of the United Nations 2030 Agenda for Sustainable Development, meaning that beyond making sure it reaches the targets of the Goal no. 4 Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all and other targets from other goals related to education, it will also specifically tackle target 4.7, respectively 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 non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development. Romania was also one of the states that submitted the Voluntary National Report on tracking progress on the implementation of the 2030 Agenda for Sustainable Development.

For the moment, ESD is cross-referenced in the formal curriculum of pre-university education in Romania, but also in extracurricular and extracurricular activities. However, having in regard the new context and the adoption of the 2030 Agenda, the Department for Sustainable Development has started in 2017 the revision of the National Strategy for Sustainable Development in order to be aligned with the 17 Sustainable Development Goals (SDGs). The strategy is now under interministerial approval and it will be adopted by the Government by the end of 2018. After this, a specific action plan is to be developed in order to achieve the targets set in the strategy, one of which is specifically oriented towards ESD.

## Indicator 1.1 Prerequisite measures are taken to support the promotion of ESD

<sup>&</sup>lt;sup>1</sup> Issues 1 to 6 herein are in accordance with the objectives (a)-(f) set out in the UNECE Strategy for ESD (CEP/AC.13/2005/3/Rev.1, para. 7).

Sub-indicator 1.1.1	Is the UNECE Strategy for ESD available in your national <sup>2</sup> language(s)?
Yes ⊠ No □	UNECE Strategy for ESD is available in Romanian language and published on MoNE's website. (https://www.edu.ro/sites/default/files/Strategia%20UNECE%20pentru%20EDD_versiunea%20in%20lb.%20romana.pdf). Likewise, for those interested, at the same webpage the strategy is also available in English. (https://www.edu.ro/sites/default/files/Strategia%20UNECE%20pentru%20EDD_versiunea%20in%20lb.%20engleza.pdf).
Sub-indicator 1.1.2	Have you appointed a national focal point to deal with the UNECE Strategy for ESD?
Yes ⊠ No □	If yes, please specify in which ministry(ies)/department(s) the focal point(s) is(are) located.  The National focal point for ESD is the Ministry of Environment, Department for Green Economy, Climate Change and Sustainable Development, Sustainable Development and Green Economy Unit. However, MoNE has the competency to implement the UNECE Strategy for ESD (coordinated by the Secretary of State for Pre-university Education), in partnership with the Ministry of Environment, with other governmental and non-governmental institutions, as well as businesses.
Sub-indicator 1.1.3	Do you have a coordinating body for implementation of ESD?
Yes 🛛 No 🗌	Please specify its mandate and coordinating mechanism. Please also specify whether its mandate covers implementation of the UNECE Strategy for ESD.
	A working group was established at the MoNE level, with representatives from the pre-university education general department, the IVET education centre, the higher education general department, the minorities' educations department, the international relations general department, the public policy general department and from the communication bureau in order to promote the Sustainable Development Goals of the 2030 UN Agenda and subsequently the ESD.
Sub-indicator 1.1.4	Do you have a national implementation plan for ESD?
Yes ⊠ * No □	Please specify whether this plan includes implementation of the UNECE Strategy for ESD and please indicate the Internet address where it is
In progress	At the moment MoNE has a partnership with the REPER 21 Association - who has gathered all the other relevant NGOs in the field of sustainable development - that will lead to the creation of a public policy for ESD, in particular an action plan. The Association has also the institutional support of the Ministry of Environment.  The national ESD implementation plan is currently under elaboration within an ESIF funded initiative for the empowerment of civil society to contribute to public policies. The initiative, called <i>ONG21 – Participation of NGOs to the ESD policy</i> , is implemented between April 2017 and June 2019 by the NGOs REPER21 (coordinator) and FDSC. The ESD implementation plan will be elaborated in a participatory way, with the contribution of over 100 Romanian NGOs that are reunited under the ONG21 Network, and will be ready by April 2019.  Additionally and complementarily, a Governmental action plan will also be developed after the adoption of the revised National Strategy for Sustainable Development 2030, that will build upon the policy produced by the aforementioned MoNE's partners in the area of SDG 4, target 4.7.

<sup>&</sup>lt;sup>2</sup> For countries with a federal government structure, all references to "national" apply to "State", as appropriate. In this context, "data at the national level" means aggregated data received from sub-State entities.

Sub-indicator 1.1.5	Are there any synergies at the national level between the ECE ESD process, the Global Action Programme on Education for Sustainable Development as follow-up to the United Nations Decade of Education for Sustainable Development after 2014, <sup>3</sup> and other policy processes relevant to ESD?
Yes 🛛 No 🗌	Please specify and list major documents.
	The new revised strategy on SD 2030 took into consideration the UN 2030 Agenda for Sustainable Development, the Global Action Programme on ESD and the EU Council Conclusion (20th of June 2017) and will be approved by Government Decision, replacing the former one (GD 1460/2008). By the new strategy, Romania will establish the national framework for supporting the 2030 UN Agenda and for implementation of the 17 set of Sustainable Development Goals (SDGs).  The national ESD plan that is currently under elaboration within the ONG21 initiative aims to respond to the engagements and objectives of the UNECE-ESD decade, to the Global Action Programme on ESD and to the 2016 Batumi engagements of the governments. More specifically, it will be built around the 6 vertical and horizontal objectives stated at Batumi and will answer to some of the most important ESD aspects.  In line with GAP for ESD the newly revised strategy for SD foresees the creation in each central public administration institution of nucleus for SD. Likewise, the Department for Sustainable Development, which coordinated the revision of the strategy, advanced to the ministry of Labour and Social Justice the introduction of a new occupation in the Romanian Code of Occupations— expert in sustainable development—regarding which the aforementioned ministry already gave a positive notification. After the finalization of this step, the public servants from the nucleus of SD from each ministry will be trained and gain more in depth knowledge, as well as the skills needed to manage successfully the SD/ESD policies.
Indicator 1.2	Policy, regulatory and operational frameworks support the promotion of ESD
Sub-indicator 1.2.1	Is ESD reflected in any national policy <sup>4</sup> document(s)?
Yes No 🗌	Please specify and list any major document(s).
	To begin with, ESD is assured by the education law.  ESD is also promoted in the Governance Programme 2018 – 2020 within the framework of increasing access to and quality of education, of supporting extracurricular education, including sustainable development.  Through the revised National Strategy for Sustainable Development, Romania will establish the national framework for supporting the 2030 UN Agenda and for implementation of the 17 set of Sustainable Development Goals (SDGs). According to the draft document, ESD is seen as an integral part of quality education and as being related to lifelong learning.  Relevant for ESD are also the sectoral strategies on education and training, respectively the <i>National Strategy for Sustainable Development</i> ,

<sup>&</sup>lt;sup>3</sup> See A/69/76.

<sup>&</sup>lt;sup>4</sup> Policy documents may include national strategies, plans, programmes, guidelines and the like.

	(including farm visits, gardening, organizing thematic contests / Day dedicated to food consumption, extracurricular activities, thematic approaches within core curriculum/optional subject Health Education).  Relevant for ESD are the following national strategies in which the MoNE is cooperating:  • The National Strategy on Protection and Promoting the Child Rights for 2014-2020  • The National Strategy on Promoting Gender Equality and Preventing and Combating Domestic Violence for the period 2018-2021 as well as the Operational Plan for the period 2018-2021 for the implementation of the Strategy  • The Memorandum on National Strategic Directions for Sustainable Development of Disadvantaged Mountain Area 2014-2020  • The National Anti-drugs Strategy 2013-2020  • The National Strategy on Climate Change 2013-2020  • The National Strategy regarding immigration 2015-2018  • Government Emergency Ordinance no. 195/2005 on environmental protection, art. 85, a) adaptation of education plans and programs at all levels in order to acquire the notions and principles of environmental protection, awareness, training and education in this field.
Sub-indicator 1.2.2	Is ESD: (a) addressed in relevant national education legislation/regulatory document(s); and (b) included in your national curricula and/or national standards, ordinances or requirements at all levels of formal education, as understood by your education system in accordance with ISCED? <sup>5</sup>
(a) Yes No No	If yes, please specify details for (a)
(b) Yes No	(a) The key themes of sustainable development are included in the general provisions of NEL, being reflected in the principles (of equity in access to education, respect for national cultural identity and for intercultural dialogue, conservation and promoting the of national identity and of cultural values of the Romanian people, recognizing, conservation and ensuring rights for ethnic minorities with a view to development of their ethnic, cultural, linguistic and religious identity, social inclusion, promoting health education) which are governing Romanian education and also in the final educational outputs (personal development with a view to respecting for civic values and for natural, social and cultural environment, social integration, active citizenship, participation to sustainable economy development). According to NEL the sustainable development of the society together with plenary development of the individual are the main finalities of the lifelong learning.  According to NEL, the national curriculum for primary and lower - secondary education, is based on 8 domains of key-competences which determine the student's education profile: Romanian language and mother tongue communication competences, as well as for national minorities; foreign language communication competences; Elementary mathematics, science and technology competences; competences of using information technology as an instrument of learning and knowledge; social and civic competences; entrepreneurial competences; cultural expression competences; learning how to learn competences.  NEL also includes programmes/policies that incorporate SD into education and learning (The second chance for primary and secondary education — compensatory programme, "Scoala după scoală" (After School); both programmes are implemented on the basis of NEL subsequent legislation (Minister's Orders).  (b) The national curriculum for pre-university education including optional curriculum offered at national level is approved by Minister's Orders. There is no speci

 $<sup>^{5}\ \</sup> See\ http://uis.unesco.org/en/topic/international-standard-classification-education-isced.$ 

curriculum for early childhood education, primary and lower secondary education. The key themes for sustainable development addressed include poverty alleviation, citizenship, peace, ethics, responsibility, local and global context, democracy and governance, justice, security, human rights, health, gender equality, cultural diversity, development of rural and urban, economy, production and consumption patterns, civic responsibility, environmental protection, natural resource management, biological diversity and nature. Education for Sustainable Development is also non-formal and informal through the many partnerships that MEN has with central and local public authorities, economic operators and NGOs. The themes of these partnerships in terms of pre-university education relate to poverty reduction, civil rights and social responsibilities at local / regional / global level, child rights, equality and diversity, tolerance and respect, rural and urban development, environmental protection, resource management natural.

The **themes of the training courses for pre-university teachers** are: environmental education, experiential learning, education for sustainable development of society, environmental protection as part of the national curriculum, sustainable development and innovation, skills for sustainable development.

Concerning **initial technical and vocational education and training** provided in pre-university national education system, the training itself is made in accordance with the NEL provisions and subsequent updating regulations.

Recent specific IVET legal framework is ensured through:

- the Order no. 5033/29.08.2016 of the Ministry of Education and Research referring to the organization of the 3 - years long initial vocational education and training to be implemented and function from 2016-2017 and

- the Order no. 3554/29.03.2017 of the Ministry of Education referring to the organization of the initial vocational education and training in dual system to be implemented and function from 2017/2018.

The training for all IVET qualifications (irrespective of duration) is provided based on the Standards of Professional Training whose general structure contains **key competences and basic competences and specialized competences**. The Standards of Professional Training for EQF level 3 and 4 were revised and approved by order of the minister no. 4121/13.06.2016 to be implemented and function from 2016/2017. The new standards are defined by units of learning outcomes. Key competences are integrated into the units of general and specialized technical learning outcomes. **Key competences (problem solving, teamwork, personal development, entrepreneurial skills, environmental protection)** are integrated into the training modules. Entrepreneurial skills are also developed by an interactive learning method - the training firms method. All qualifications provided in vocational education and training and acquired after the certification exam correspond to level 3 in both National Qualification Framework and in the European Qualification Framework (skilled worker). Qualifications achieved through technical high-schools, with a 4-year duration, correspond to level 4 in both National Qualification Framework and in the European Qualification Framework.

The training provided based on the Standards of Professional Training has a modular structure and cover, through three types of competences (key, basic and specialized), integrated into the units of learning outcomes, aspects of education for sustainable development specific within various qualifications (economic profile, services, environment protection, health, etc.)

In terms of higher education, universities have begun to introduce elements of sustainable development, new disciplines in the compulsory curriculum or in the optional curriculum, depending on the curricula. Topics include climate change, social and economic change management, environmental economics, public policy and environmental management, alternative energies, wastewater, harm reduction, green technologies (over 240 undergraduate and master study programs). In addition to bachelor degree programs, a large number of universities have introduced master programs aimed at sustainable development training.

As an example, based on the legislation in force, the University of Agricultural Sciences and Veterinary Medicine from Iaşi has made a restructuring of the academic curriculum, taking into account the quality standards set out by the Romanian Agency for Quality Assurance in Higher Education. The educational process is centred on training professional and transversal competences. The dynamics of the social-economic and cultural life, the studies done regarding the degree of satisfaction of graduates, the permanent contact with the business

	practical training of students, or resources of the University. Th	this process of modernization of the academic curriculus f modernization of the material basis of the University and ere are many subjects in the curricula that aim to train cosmi important means of promoting a new educational parad	nd above of	everything o	else, of investing in the hig sustainable developmen	human nt, the
	Please also fill in the table by ti	cking (√) as appropriate.				
		ISCED levels 2011	(a)	(b)		
		ISCED levels 2011	Yes	Yes		
		0. Early childhood education	<b>√</b>	<b>√</b>		
		1. Primary education	<b>√</b>	<b>✓</b>	1	
		2. Lower secondary education	<b>√</b>	<b>√</b>	1	
		25. Lower secondary vocational education	<b>√</b>	<b>√</b>		
		3. Upper secondary education	<b>√</b>	<b>✓</b>	-	
		35. Upper secondary vocational education	<b>√</b>	<b>√</b>	-	
		4. Post secondary non-tertiary education	<b>√</b>	<b>√</b>	-	
		45. Post-secondary non-tertiary vocational education	<b>√</b>	<b>√</b>	-	
		5. Short-cycle tertiary education	<b>√</b>	<b>√</b>	-	
		55. Short-cycle tertiary vocational education	<b>√</b>	<b>√</b>	-	
		6. Bachelor's or equivalent level	<b>√</b>	<b>√</b>	-	
		7. Master's or equivalent level	<b>√</b>	<b>✓</b>	-	
		8. Doctoral or equivalent level	<b>√</b>	<b>√</b>		
		9. No information available				
Sub-indicator 1.2.3	Are non-formal and informal Es	SD addressed in your relevant national policy and/or regul	latory doc	cument(s) ar	nd operational framewor	ks?
Yes No D	following are worth mentioning  • The "Scoala altfel"("S starting with the scho	ormal contexts is included in the provisions of the NEL. R:  School in a different Way") programme is implemented of year 2011 – 2012; the aim of this national program the children/students; the key words describing the edu	ed in the	preuniversi develop le	ity education at national arning competency and	l level, socio-

16	disciplinary, learning by doing, partnership. The programme is stipulated in a Minister Order, together with the school year calendar and it includes educational activities for democratic citizenship, for promoting humanitarian values, for health and a healthy life style, activities of ecology and environmental protection  • Contests at county, regional and national level are organized (for example: National Contest for Environmental Projects; International Contest "Young People in European Forests – YPEF"; National Contest for Antidrug Projects ("Together" Projects); National Contests "Made for Europe", "Your gesture is important too"; "Earth is our home", "Children, save the Blue Planet", "Do everything to save Earth", "ledera, o piece of heaven", "Edelweiss", "Young are debating", "European School", "The Friends of the Nature", "The Friends of the Danube Delta"); the calendar of the contests is approved by the MoNE each school year  • The "Şcoala după şcoală" (After School) programme is implemented at local level, at primary and secondary education. This programme is implemented by schools in partnership with local public authorities and parent associations.  • An important direction of the non-formal activities at the higher education level is represented by the participation of academic staff and students to various scientific events centred on the issues raised by the education on sustainable development. We mention the congresses, symposiums, workshops, traineeships, meetings with representatives of business individuals, visits, study excursions. We may exemplify in this respect that the Students' League from USAMV Iaşi, who has initiated a varied range of cultural-educational activities, that target leisure activities as well as widening the cultural horizon of students.
Sub-indicator 1.2.4	Is public awareness in relation to ESD addressed in relevant national document(s)?
Yes 🛛 No 🗍	Public awareness on ESD is addressed in the <i>National Sustainable Development Strategy Romania 2013 - 2020-2030</i> .  Likewise, <i>Government Ordinance no. 195/2005 on environmental protection</i> states the modalities of implementing the principles and strategic elements: education, public awareness, participation in the elaboration and implementation of decisions regarding the environment; the competent authority for environmental protection, along with other central public administration authorities and local authorities, as appropriate, provide information, public participation in decisions on specific activities.  MoNE marked the <b>2018 World Environment Day</b> (Beat plastic pollution) by writing a press release with selected achievements of schools from all over Romania, from the pre-school level to upper secondary level and from local, county and regional to national level. In all the country round tables were organized, presentations, debates, exhibitions of drawings and other works on environmental protection, contests, watching documentaries, hiking, acts greening, planting of trees, etc. As an example, within the Recycling Patrol project organized by RoRec Romania, the Sântana Gymnasium School from Arad County collected 158.59 kg of electrical and electronic waste and 17.25 kg of batteries.  (https://www.edu.ro/numeroase-unit%C4%83%C8%9Bi-de-%C3%AEnv%C4%83%C8%9B%C4%83m%C3%A2nt-din-%C3%AEntreaga-%C8%9Bar%C4%83-au-s%C4%83rb%C4%83torit-ziua-mondial%C4%83-mediului)
Sub-indicator 1.2.5	Does a formal structure for interdepartmental <sup>6</sup> cooperation relevant to ESD exist in your Government?
	In 2017, by the Government Decision no. 313/2017 and in the context of the <i>UN 2030 Agenda for Sustainable Development</i> , the Department for Sustainable <i>Development</i> was created, which functions as part of the Prime Minister's Office and it is financed by the General Secretariat of the Government. The department acts as a liaison factor also for ESD. For instance, in line with engaging the youth and creating awareness, in 2017 the Department for Sustainable Development organized a competition entitled <i>A sustainable future with and for the youth</i> , where high school students had to present complex essays on the vision and

<sup>&</sup>lt;sup>6</sup> Between State bodies.

	the paradigm of sustainable development from their perspective. There were presented themes related to young people's perception, knowledge, awareness and action towards sustainable development, youth health, behaviour and education of past, present and future pupils' generation, as well as mechanisms for the implementation of sustainable development goals.
Sub-indicator 1.2.6	Does a mechanism for multi-stakeholder cooperation on ESD exist with the involvement of your Government? <sup>7</sup>
Yes ⊠ No □	<ul> <li>In order to develop the programs and implementing the national strategies, MoNE is involved in working groups with different stakeholders:         <ul> <li>ministries: The Ministry of Environment, The Ministry of Health, The Ministry of Internal Affairs, The Ministry of Agriculture and Rural Development, The Ministry of Waters and Forests;</li> <li>governmental bodies: National Anti-drugs Agency, National Agency for Tourism, National Environmental Guard, General Inspectorate for Emergency Situation, ROMSILVA;</li> <li>non-governmental organizations: Save the Children, Red Cross Romanian Society, Environ Association, RoRec Association for Recycling, New Horizon Foundation, REPER 21, FDSC, FOND, Eco Assist, InfoCons Association, Romanian Association for Cardiology;</li> <li>international bodies: UNICEF, UNESCO.</li> <li>businesses: at the level of VET, VET dual system, as well for the specializations within the higher education system</li> </ul> </li> <li>Within the initiative ONG21 - Participation of NGOs to the ESD policy, supported by MoNE and the Ministry of Environment, implemented between April 2017 and June 2019 by REPER21 (coordinator) and FDSC, an ESD network has been created, composed of approximately 100 Romanian NGOs and 20 institutional actors with ESD responsibilities.</li> </ul>
Sub-indicator 1.2.7	Are public budgets and/or economic incentives available specifically to support ESD?
Yes 🗌 No 🖂	Not specifically addressed to it, but to the transversal activities that fall under the umbrella of ESD.
	Other financial options, besides the ones from the state budget, include the European Financial and Investment Funds (EFIS), the European Economic Area (EEA) grants, ERASMUS+, the Swiss-Romanian Cooperation Programme and other fund donors.
	National policies support synergies between processes related to the Sustainable Development Goals (SDGs), sustainable development (SD) and ESD
Sub-indicator 1.3.1	Does your country have a stand-alone "sustainable development", "global understanding", "international understanding" policy, plan or law in place, in each case using "sustainable development" language?
Yes ⊠ No □	The National Sustainable Development Strategy Romania 2013 - 2020-2030 has a holistic approach regarding sustainable development, crossing all domains, from economy to education. Likewise in the newly Sustainable Development Strategy, which is at this point in the process of interministerial approval and will abolish the latter, will establish the national framework for supporting the 2030 UN Agenda and for implementation of the 17 set of Sustainable Development Goals (SDGs).
	The new Strategy, whose elaboration was coordinated by the Department for Sustainable Development, has a special chapter for education, in particular for SDG 4- Ensure inclusive and quality equitable education and promote lifelong learning opportunities for all. The strategy

<sup>&</sup>lt;sup>7</sup> For an explanation, see paragraph 46 of the UNECE Strategy for ESD.

18	also has a target to ensure that all learners acquire the knowledge and skills needed to promote sustainable development.			
	Likewise, the Programme for Schools of Romania 2017 - 2023 (GD 640/2017) can be seen as a synergic national policy related to SD and ESD. The programme is addressed to children in pre-school education and to students within primary and lower-secondary education, from both state and private schools, and contain 2 complementary types of measures: on the one hand, providing food products (fresh fruits and vegetables, milk/milk products) and educational activities related to/ in connection with these products (including farm visits, gardening, organizing thematic contests / Day dedicated to food consumption, extracurricular activities, thematic approaches within core curriculum/optional subject Health Education), etc.			
Sub-indicator 1.3.2	Is ESD part of SD policy(ies) if these exist in your country?			
Yes ⊠ No □	As mentioned previously ESD is part of the SD strategy in place and will be part of the next SD strategy. After the adoption of the normative act for the new strategy for SD (by Government Decision), a thorough action plan will be elaborated, including for SDG4 and for ESD, with the consultation of all the relevant stakeholders.  NEL also sets the regulatory framework for ESD.			
Concluding remarks on issue 1	Please provide any concluding remarks you may have concerning the implementation of issue 1, which corresponds to objective (a) under the Strategy, namely, to ensure that policy, regulatory and operational frameworks support the promotion of ESD			
	Please address in particular the following questions:			
	- Which actions and/or initiatives have been particularly successful and why?			
	- What challenges did your country encounter when implementing this objective?			
	- What other considerations have to be taken into account in future ESD implementation concerning this objective?			
Issue 2.	Promote SD through formal, non-formal and informal learning			

If necessary, provide relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces)

SD is cross-referenced in the formal curriculum of pre-university education in Romania, but also in extracurricular and extra school activities.

At the pre-university level, the key-themes of SD are tackled at both curricular and extra-curricular level starting with early childhood education till tertiary non-university education/post high school education of formal education, including VET. The key themes of SD are included/ integrated in disciplines in core curriculum or optional curriculum. There is no a specific discipline for SD.

A new curriculum for lower secondary education was approved in 2017 and implemented at 5th grade with beginning 2017/2018 school year. **The key themes of SD are included/ integrated in disciplines in core curriculum or optional curriculum** for lower secondary education, in terms of general or specific competencies, educational activities, learning contents. According with the curricula for pre-primary, primary and lower- secondary education, the content of the following compulsory subjects approach the above mentioned key-theme: Mathematics and Environmental Exploration (preparatory – 2<sup>nd</sup> grade), Nature Sciences and Civic Education (3<sup>rd</sup> – 4<sup>th</sup> grade, for both), Technologic Education and Practical Activities (5th – 8th grade), Critical thinking and Child Rights (5th grade), Intercultural Education (6th grade), Education for Democratic Citizenship (7th grade), Financial Education (8th grade), Biology (5th – 8th grade), Physics (6th – 8th grade), Chemistry (7th – 8th grade), History (4th – 8th grade), Geography (4th – 8th grade), Counselling and Personal Development (5th – 8th grade); examples of optional disciplines offered at national level for: primary education level - Character First, Ready for Life, Education for Life and Community, European Education, Financial Education, Education for Society, Health Education, Make Your Environment, lower secondary education level -

Character First, Health Education, Make Your Environment, Civic Education.

The policies that incorporate SD into education and learning developed by the Romanian Government/the MoNE are also including:

- Developing and implementing programs: The second chance for primary and secondary education, Education for Health in Romanian Schools;
- Developing and implementing national programs, like: "Education for Environment"," Eco-kindergarten" (since January 2004, for pre-primary and primary education);
- Organizing contests for pre-university education levels, like: "The Sciences of the Earth" (interdisciplinary), "Bussiness plan", "Culture and Civilisation in Romania", "The Memory of Holocaust";
- Implementing at local level, at primary and secondary education, of the "Şcoala după şcoală" (After School) programme, since school year 2011 2012 (Minister Order no. 5349/2011). This programme is implemented by schools in partnership with local public authorities and parent associations. The "Şcoala după şcoală" programme offer is designed by each school to meet the needs of all students and, as a priority, the needs of pupils belonging to disadvantaged groups. This program offers opportunities for formal and non-formal learning and aims to prevent school drop-out and early school leaving, increasing school performance, correcting learning, accelerating learning through educational, recreational and leisure activities, personal development and social integration, as well as keeping students in a secure, as an alternative to spending leisure time in environments with the potential to develop deviant behaviour. The programme can be organized in the available spaces of its own school or in other educational establishments, students' clubs, in other locations provided by local authorities, faith-based institutions, NGOs etc.

#### Regarding non-formal education related to SD:

- The "Scoala altfel" ("School in a Different Way") programme is implemented in pre/university education at national level, since school year 2011 2012; the aim of this national programme is to develop learning competency and socio-emotional abilities of the children/students; the key words describing the educational activities within the programme are trans- disciplinary, learning by doing, partnership. The programme is stipulated in a Minister Order, within the school year calendar;
- Contests at county, regional and national level are organized (for example: National Contest for Environmental Projects; International Contest "Young People in European Forests YPEF"; National Contest for Antidrug Projects ("Together" Projects); National Contests "Made for Europe", "Your gesture is important too"; "Earth is our home", "Children, save the Blue Planet", "Do everything to save Earth", "Iedera, o piece of heaven", "Edelweiss", "Young are debating", "European School", "The Friends of the Nature", "The Friends of the Danube Delta"); the calendar of the contests is approved by the MoNE each school year;
- Each school develops specific activities dedicated to events like: "The European Day for Citizenship through Education", "Earth Day", "International Day for Environment", "The Water Day", "The Tree Day", "The World Day for Animals";
- Programmes like "Eco-school", "Learning About Forests", "Young Reporters for Environment", "Blue Flag" are implemented at school level;
- Summer camps ("Danube Delta", "Terra is our home") are organized in cooperation with NGO's.

In terms of higher education, universities have begun to introduce elements of sustainable development, new disciplines in the compulsory curriculum or in the optional curriculum, depending on the curricula. Topics include climate change, social and economic change management, environmental economics, public policy and environmental management, alternative energies, wastewater, harm reduction, green technologies (over 240 undergraduate and master study programs). In addition to bachelor degree programs, a large number of universities have introduced master programs aimed at sustainable development training. For instance, at the level of the University of Agricultural Sciences and Veterinary Medicine, Iaşi the following objectives were targeted: promoting sustainable development through formal, non-formal and informal education, training teaching staff for creating the necessary competences for including sustainable development in the teaching activity; promoting research in the domain of education on sustainable development; ensuring the access to appropriate instruments and materials for the education on sustainable development; the development of cooperation at the regional level with other factors involved in realizing the sustainable development, especially in the agrarian field, the field of food safety, the training of students in the spirit of entrepreneurship, as well as other categories of staff involved in various programs of continuous training.

Sub-indicator 2.1.1 Are key themes of SD<sup>8</sup> addressed explicitly in the curriculum/programme of study at various levels<sup>9</sup> of formal education?

In pre-university education, the **key-themes of SD are addressed in the curriculum starting with early childhood education till post high school education of formal education, including VET**. The key-themes of SD, as they are written in the paragraph 15 of the UNECE Strategy for ESD, are addressed in the curricula in terms of: students' competences (general and specific), learning contents & domains, examples of activities to be developed at classroom level.

According to the curricula for pre-primary, primary and lower secondary education, the content of the following compulsory subjects approach the above mentioned key-theme: Mathematics and Environmental Exploration (preparatory – 2nd grade), Nature Sciences and Civic Education (3rd - 4th grade, for both), Technologic Education and Practical Activities (5th – 8th grade), Critical thinking and Child Rights (5th grade), Intercultural Education (6th grade), Education for Democratic Citizenship (7th grade), Financial Education (8th grade), Biology (5th – 8th grade), Physics (6th – 8th grade), Chemistry (7th – 8th grade), History (4th – 8th grade), Geography (4th – 8th grade), Counselling and Personal Development (5th – 8th grade); examples of optional disciplines offered at national level for: primary education level - Character First, Ready for Life, Education for Life and Community, European Education, Financial Education, Education for Society, Health Education, Make Your Environment, lower secondary education level - Character First, Health Education, Make Your Environment, Civic Education. As far as Humanities, at the gymnasium school syllabi (approved by Minister Order no. 3393/2017), as well as the high-school ones strike reference to the SD key themes by introducing them through topics specific to certain subjects (e.g. mother language/ foreign languages – global issues, green cities, healthy food, foreign cultures and civilizations, interculturalism, multiculturalism etc.).

In VET system, Local Development Curriculum (LDC) is part of the curriculum adapted to local development needs. It is developed by the school in partnership with the companies, taking into account the labour market trend and the local needs.

SD is also addressed in the formal curriculum of higher education institutions, at the level of Bachelor, Master degree and doctoral level. At the **Bucharest University of Economic Studies**, the curriculum of *Agro Food and Environmental Economics* Bachelor's programme (Faculty of Agro Food and Environmental Economics) includes the following major key themes of SD: economics; ethics; responsibility; rural development; environmental protection. The curriculum of *Economics and administration of agro food businesses* Master programme (Faculty of Agro Food and Environmental Economics, The Bucharest University of Economic Studies) includes the following major key themes of SD: economics; ethics; responsibility; consumption patterns; food security. The curriculum of *Ecological economics* Master programme (Faculty of Agro Food and Environmental Economics) includes the following major key themes of SD: economics; management of natural resources; ethics; responsibility; consumption patterns; biological diversity; environmental protection. The curriculum of *Management of rural and regional development* projects Master programme (Faculty of Agro Food and Environmental Economics) includes the following major key themes of SD: economics; rural development; environmental protection. Doctoral research themes of Doctoral School of Economics, Faculty of Agro Food and Environmental Economics, includes the following key themes of SD: economics; rural development; food security; production and consumption patterns; environmental protection; ethics.

By its three faculties (Faculty of Architecture, Faculty of Urban Planning and Faculty of Interior Architecture) and two Doctoral Schools (Architecture, Urbanism), "Ion Mincu" University of Architecture and Urbanism from Bucharest has a various curriculum/programme

<sup>&</sup>lt;sup>8</sup> For details, see paragraph 15 of the UNECE Strategy for ESD.

<sup>&</sup>lt;sup>9</sup> For the State or federal level, where relevant.

including key themes of SD, at different study levels, as follows:

1. Faculty of Urban Planning

There are three themes that are addressed in a specific manner: rural and urban development, environment protection, biological and landscape diversity. Six other themes are addressed in a transversal manner: poverty alleviation; democracy and governance; cultural diversity; climate change; sustainable cities and communities; ecological principles/ecosystem approach.

Example of SD related themes in Bachelor curricula: Environment elements and Urbanism, The institutional framework of sustainable development, Geography and Urban Ecology, Urban Sociology and Demography. On-site study, Urban Statistics and Environmental Analysis. Data Analysis Studio, Landscape Design, Recycling of the Built Stock, Assessment of the anthropic and natural heritage, Mobility, Structural-Typological Land Morphology, Psychological Approach of the Urban Space, Public Administration and Urban/Landscape Management etc.

Example of SD related themes in Master Programs curricula: Sustainable Spatial Development, Protected Areas and Zones, Social analysis of communities in the territory, EU Policies and the Future of Regions, Urban Mobility, Urban Anthropology, Natural, Anthropogenic and Cultural Landscape (integrated project), Social analysis of communities in the territory, Landscape Design and the Green System - Mezzo-Landscape in the Masterplan, Urban and territorial policies for Landscape, Landscape and Macro-Landscape Site Design (Integrated Project), Cultural Landscape and Development, Sustainable Development and Landscape, Landscape and tourism development, Territorial Infrastructure in Landscape, Landscape Economics and Urban Agriculture, Guided Research on Landscape Issues, Urban Vulnerability and Sustainable Development, Town Protection Against Risks etc.

2. Faculty of Interior Architecture

Example of SD related themes: Ecology course, at specializations "Product Design" and "Furniture and Interior Design", Sociology course at specialization "Product Design"

3. Faculty of Architecture

Example of SD related themes: Architecture – Context - Landscape, Architecture – Context - Landscape etc.

Yes ⊠ No □

Please specify what SD issues are important in the country (i.e., biodiversity, gender, consumption/production, etc.) and how they are addressed in the curricula.

In pre-university education, the key-themes of SD are addressed in the curriculum starting with early childhood education till post high school education of formal education, including VET. The key-themes of SD, as they are written in the paragraph 15 of the UNECE Strategy for ESD, are addressed in the curricula in terms of: students' competences (general and specific), learning contents & domains, examples of activities to be developed at classroom level, attitudes and values.

According with the curricula for pre-primary, primary and lower secondary education, the content of the following compulsory subjects approach the above mentioned key-theme: Mathematics and Environmental Exploration(preparatory – 2nd grade), Nature Sciences and Civic Education (3rd – 4th grade, for both), Technologic Education and Practical Activities (5th – 8th grade), Critical thinking and Child Rights (5th grade), Intercultural Education (6th grade), Education for Democratic Citizenship (7th grade), Financial Education (8th grade), Biology (5th – 8th grade), Physics (6th – 8th grade), Chemistry (7th – 8th grade), History (4th – 8th grade), Geography (4th – 8th grade), Counselling and Personal Development (5th – 8th grade); examples of optional disciplines offered at national level for: primary education level -Character First, Ready for Life, Education for Life and Community, European Education, Financial Education, Education for Society, Health Education, Make Your Environment, Civic Education.

As a example of interinstitutional cooperation, a protocol that it's ongoing since 2013 (renewed in 2017) regards the development of the legal education in schools, concluded between MoNE, the Ministry of Justice, the Public Ministry, the Superior Council of Magistracy and the High Court of Cassation and Justice, having as their first objective the cooperation in order to "promote the legal education in the pre-

university education establishments, from the beginning of compulsory age school education and up to high school including ". Based on the protocol, pupils are learning the Constitution, the rule of law, their fundamental rights and obligations, citizenship, etc.

In line with the 17 SDGs, for the **Bucharest University of Economic Studies** the representative disciplines for the Bachelor programme *Agro Food and Environmental Economics* (2018-2021 study cycle) are: Economy of agro food and environmental organizations; Ecology; Entrepreneurship in agro food and environmental sectors; Food security and safety; Environment economics; Quantitative analysis in agro food and environmental economics (econometrics); Agro food and environment economic processes models; Ecomarketing; Regional and rural development; Economic and financial analysis in agro food and environmental organizations; Sustainable development; Academic ethics and integrity; The financing of agro food and environmental organizations; Performance and risk management in agro food and environmental organizations; Ecological reconstruction; Environmental information management.

In the same context, at the **Bucharest University of Economic Studies** the disciplines oriented towards sustainable development, in the 2018-2020 master study cycle are: Sustainable consumption strategies; Knowledge transfer economy (Economics and administration of agro food businesses programme); Ecological risk management; Natural capital evaluation; environmental policies; Environmental data analysis; natural resources economics; natural capital management; Sustainable consumption strategies; Ecological impact evaluation; Ecological networks management; Investment projects in environmental area (Ecological economics programme); Strategies and policies for regional development; Methodology and substantiation of rural and regional development projects; Strategies and policies for rural development; Rural and regional development planning and modelling; Financing rural and regional development projects (Management of rural and regional development projects programme).

Some of the key themes of SD addressed explicitly in the curriculum/programs of study of **University of Agricultural Sciences and Veterinary Medicine**, Iaşi – as well as from all the universities of Agricultural Sciences and Veterinary Medicine in the country - include: reducing poverty, citizen duty, peace, ethics, responsibility, in a local and global context, democracy and governing, justice, security, human rights, health, sex equality, cultural diversity, rural and urban development, economy, models of production and consumption, civic liability, environmental protection, natural resources management and the biological diversity of nature.

The subjects from the curriculum at the Bachelor level, which address the issues of the education on sustainable development (by faculties):

- Faculty of Agriculture: Ecology and Environmental Protection; Biotechnologies; Food Chemistry; Food Biotechnology; Food Quality Management; Pollution and Ecosystem Protection; Food Safety; Agrofood Biotechnologies; Techniques and Equipment for Investigating Environmental Factors; Monitoring Environmental Factors; Environmental Management; Consumer Protection Management; Global Food Safety Policies and Strategies; Legislation and Consumer Protection Services; Food safety and Consumer Protection; Food Authentication and Detection of Food Counterfeiting.
- Faculty of Horticulture: Ecology and Environmental Protection; Landscape Architecture; Hydrology and Hydrogeology; Environmental Chemistry; Management of ecological vegetable systems; Storage and waste recycling; Technologies and Equipment for decontamination; Planning and management of water resources; Management of ecological wine-growing systems; Monitoring and diagnosis of environmental quality.
- Faculty of Animal Sciences: Food Quality and Safety Management; Development strategies and policies in public food service and agritourism; Global policies and strategies of food safety; Food Biochemistry; Food Microbiology; Control and Quality Expertise of Meat and Meat products; Control and Quality Expertise of Milk and Dairy products; Quality and Food Safety Management.
- Faculty of Veterinary Medicine: Animal Welfare and Protection; Veterinary Hygiene and Environmental Protection; Inspection and Feed control; Infectious diseases; Preventive medicine and clinical lectures by species; Food hygiene and technology. The subjects

from the curriculum at the Master level, which address the issues of the education on sustainable development (by faculties):

- Faculty of Agriculture: Management and conservation of soil; Organic farm technologies; Expertise on food processing; Food safety and consumer protection; Advanced processing systems and quality control of agroalimentary products.
- Faculty of Horticulture: Ecological horticulture; Plant protection.
- Faculty of Animal Sciences: Animal nutrition and feeding; Quality and food safety management; Management of exploitations in aquaculture

At the "Ion Mincu" University of Architecture and Urbanism from Bucharest there are three themes that are addressed in a specific manner: rural and urban development, environment protection, biological and landscape diversity. Six other themes are addressed in a transversal manner: poverty alleviation; democracy and governance; cultural diversity; climate change; sustainable cities and communities; ecological principles/ecosystem approach etc.

For the "Nicolae Bălcescu" Land Forces Academy, Sibiu, the most important SD issues are citizenship, peace, ethics, responsibility in local and global contexts, democracy and governance, security, human rights, gender equity, cultural diversity, environmental protection, natural resource management.

For the **Petru Maior University of Tîrgu Mureș** issues such as biodiversity, gender studies, the problem of consumption and production are important and addressed accordingly by the curricula of all the Bachelor and Master degree programs. The themes of SD are addressed explicitly in the university's Bachelor and Master level study programs:

- Bachelor programs: Technology of Machine Building, Industrial Economics Engineering, Power Systems Engineering, Automation and Applied Informatics, Political Sciences, Communication and Public Relations, Security Studies;
- Master programs: Quality Systems Management, Computer Aided Design and Manufacturing, Power Systems Management, Industrial Processes Automatic Control Systems; Anglo-American Studies, History of Literary Criticism, World History and the System of International Relations.

All these subjects hold key-positions in both the theoretical and applied didactic activities defined by the syllabus of the courses and seminars. Important SD issues as sustainable production, renewable energy, waste management, and natural resources management are addressed in curricula by dedicated courses. For instance, at bachelor level: Natural Resources and their Use, Renewable Energy Sources, Waste and Waste Management Techniques, Environmental Legislation, Optimizing the Technologic Processes, Energetics and the Environment, Optimization of Electric Power Systems, International Protection of Human Rights; at master level: Distributed Generation of Renewable Energy Sources, Cogeneration Plant, Human Resources Management; and by dedicated themes included in following courses curricula: at bachelor level: General Economy, Materials Science and Engineering, Technology of Materials, Value Engineering, Engineering of Production Systems, Labour Law, Optimization of Production Systems, Industrial Design, Quality Management, Electric Networks, Electric and Thermal Energy Production, Optimization of Electric Power Systems. At master level: Quality Audit, Conformity Certification, Energy Management Systems, Intelligent and Adaptive process Control.

Petru Maior University represents one of the local groups of ESTIEM, an organization for European Students of Industrial Engineering and Management, who combine technological understanding with management skills. Students involved in ESTIEM develop all the skills required in the current labour market, open thinking, willingness to engage, are aware of new technologies and have developed linguistic skills. ESTIEM is the ideal place for students who want to develop their own ideas, having the opportunity to implement or develop projects at local and international level.

24	indicate the results in the box below in accordance with the rating scale set out in the appendix.							
	A B C D E F							
Sub-indicator 2.1.2	Are learning outcomes (skills, attitudes and values) that support ESD addressed explicitly in the curriculum 10/programme of study at various levels of formal education?							
	The national curriculum for primary and lower – secondary education is based on 8 domains of key-competences (approved by NEL) which determine the student's education profile: Romanian language and mother tongue communication competences, for national minorities; foreign language communication competences; Elementary mathematics, science and technology competences; competences of using information technology as an instrument of learning and knowledge; social and civic competences; entrepreneurial competences; cultural expression competences; learning how to learn competences. The key-themes of SD, as they are written in the paragraph 15 of the UNECE Strategy for ESD, are addressed in the curricula in terms of: students' competences (general and specific), learning contents & domains, examples of activities to be developed at classroom level.  The national curriculum for upper secondary education is going to be also revised in the further period, on the basis of NEL provisions.							
	Concerning the national IVET system, key competences are integrated into the units of general and specialized technical learning outcomes. For IVET qualifications the training is provided based on the Standards of Professional Training, described in terms of learning outcomes (skills, attitudes and values) which cover various competences and issues related to SD and which are specific for each qualification. They are part of the formal training programme.							
	As for the higher education system each of the disciplines that focus on the key themes of SD of both bachelor and master programs has a brief description that details the learning outcomes that support ESD.  For instance, at the <b>Bucharest University of Economic Studies</b> the professional skills of graduates <i>Agro Food and Environmental Economics</i> Bachelor programme that support ESD include: defining the concepts, theories, methodologies and indicators used in studying the economic and environmental problems; explaining indicators that characterizes the economic activity in interaction with the natural and social environmental; using the identified data to solve specific economic and environmental situations; adequate use of criteria and standard evaluation methods to collect, process and analyze economic and environmental data; making projects of economic process analysis in interaction with the natural and social environment; identifying the principles and methods of making strategies and programmes in agrifood and environmental economics; explaining and interpreting the methodological norms and economic and environmental programs' measures that have to be implemented; conceiving and organizing implementation actions of methodological norms and programs specific to agri-food and environmental economics; adequate use of criteria and standard evaluation methods of methodological norms, means and programs from agri-food and environmental economics field; using IT applications for solving well defined economic and environmental problems; selecting and using an adequate system of indicators to evaluate the economic activity and environmental monitoring. Professional skills of graduates <i>Economics and administration of agro-food businesses</i> Master programme that support ESD are: identifying and describing the procedures for elaboration of agro-food and rural development projects; explaining the procedures for exploration, diagnosis and evaluation of agro-food sector, and regional and rural economy; using appropriat							

<sup>10</sup> Idem.

agribusiness and rural economy; identification and detailed description of procedures for diagnosis and assessment regarding the opportunities for rural areas development; explaining advanced information and knowledge for modeling and predicting economic situations specific to the future development; elaboration of policies and programs for agro-food business development.

Professional skills of graduates *Ecological economics Master* programme that support ESD are: defining the advanced theoretical and methodological concepts, the modern practices applied in the field of ecological economics; explaining the concepts of ecological economics for the analysis, evaluation and interpretation of the new situations in the sustainable development context; choosing and integrated use of adequate research methods and tools for solving new issues in the sphere of eco-economy; identifying and defining the advanced methods and models of eco-economy specific management decisions' foundation; explanation and interpretation of eco-strategic decisions in new contexts related with the climate change; outlining and reasoning of proposals in order to increase the environmental performance of economic and social activity; designing mechanisms of valuing natural resources by the type of access and resource consumption, ethics of natural resources management.; definition and thorough argumentation of the theoretical and practical possibilities of the connection of environment, as system, to the economic mechanism, within the context of environmental restrictions; explanation and interpretation of decisions for capitalizing the natural resources in a wider context defined as regional and global concerns regarding environmental conservation; using the design and operationalizing parameters of environmental policies based on holistic environmental approach; assessment of an environmental project's rational from methodological and procedural points of view; drawing the implementation plans for the set of methodological norms and related measures of environmental programs; identifying and defining the procedures of strategic approach for the agro food development and the rural area in correlation with the environment; revealing and explaining the impact of environmental policies, based on the holistic approach, on the socio-economic system, as well as of the methods for their integration into overall development strategy; using methods and techniques in the assessment and analysis of protected areas in the context of the ecosystem approach of ecological networks; establishing the relevance of an environmental project from the perspective of strategic national and European development goals; developing and operationalizing the environmental policies; reasoned definition of the methodology and stages of the environmental impact assessment. explaining the methods for assessing the environmental impacts and interpreting their results in the new development conditions; integrating the ecological impact assessment in the system of the instruments used in environmental management; application of specific criteria and methods for adaptive ecosystem management in decision- making regarding socio-ecological complexes; preparation of action plans for species, habitats, and ecosystems conservation; identification and argumentation of the theoretical and methodological support for the assessment of natural capital; explaining and integrated interpretation of methods and techniques for the assessment of natural capital and for highlighting the ratio between its value and the social-economic performance; integration of economic and administrative tools for the conservation of natural capital under incomplete information conditions; using protected areas valuation and analysis methods and techniques for decisions-making regarding the management of natural capital; using the adequate quantitative and qualitative methods for grounding decisions on preventing the degradation of natural capital.

Professional skills of graduates *Management of rural and regional development projects* Master programme that support ESD include: deepening the advanced theoretical and practical concepts on regional and rural development policy both in Romania and in the European Union; explain the concepts related to rural and regional development policy analysis and evaluation of new situations in terms of Romania's integration in the European Union and achieving sustainable rural development; application and interpretation of the conceptual framework project management of rural and regional development; substantiation of decisions and proposals designed to improve the rate of access of regional and rural development funds in Romania; identifying and defining procedures for diagnosis and assessment of agro-food sector development, rural and developing regions; application and interpretation of rural and regional development policy in the European Union and the implications for Romanian rural and regional areas; using the conceptual and methodological framework in order to draw strategies for rural Romanian areas sustainable development; defining system of statistical indicators, and methodology necessary for a complex social and economic analysis, which reflects the strengths and weaknesses of Romanian rural area and the development regions; integration of

	and development strategies consistent; ar entire Romanian rural area; using concept	nalysis an ts for regionship ship and	d assess onal and advice t	ment of the rural develoriment in the rural of the improve	he develo elopment rural ent	ppment o project or prepreneu	f economic design and rship event	Romanian rural required to develop policies and social development of a region or the coordination; application and interpretation; using methods and techniques in order to s.	
Yes 🛛 No 🗌	Please specify what competences as learni	ing outcon	nes are	important	in your c	ountry.			
	The national curriculum for primary and lower – secondary education (now in course of revision on the basis of NEL 2011 provisions), is based on 8 domains of key-competences which determine the student's education profile: Romanian language and mother tongue communication competences, for national minorities; foreign language communication competences; Elementary mathematics, science and technology competences; competences of using information technology as an instrument of learning and knowledge; social and civic competences; entrepreneurial competences; cultural expression competences; learning how to learn competences. All in all, almost all subjects aim to build interpersonal, intercultural, social and civic competences, as well as cultural awareness as the key means to social inclusion.								
	Concerning the national IVET system, all key competences are important, but core competencies in mathematics, science and technology, entrepreneurial skills and social skills (teamwork) are more represented in the curriculum /programme of study. The curriculum provides an interdisciplinary teaching approach (especially in terms of curricular areas Man and Society, Mathematics and Natural sciences). Among the values promoted, may be mentioned: social justice, social responsibility, rejecting waste of resources, environmental protection, promoting of behaviour that emphasize sustainable development.								
	Regarding extracurricular activities, some of the most relevant are: partnerships between school and civil society aimed at environmental protection knowledge and proximity; the realization of concrete projects of sustainable development, seeking to include demographic, human rights issues, moral responsibility to future generations, etc.								
	Regarding higher education, as an example curriculum of all the study programs. These student's competence acquired after have outcomes competencies related to SD: appunder conditions of restricted autonomy applications, evaluation and self-evaluation At the "Ion Mincu" University of Architecture economic, historic and cultural, aesthetic, territory.	se are proving graduolication of and quant in decision of the contraction of the contract	vided wated a stated	ith evaluate specific concerning values in the second content of t	ion criter ourse. The ues and promoti promoti	ria and ar ne curric profession on of co	e essential ula of the nal ethics, r onvergent	in the configuration of the assessment of a program studies support, by its learning esponsible execution of professional tasks and divergent logical thinking, practical plinary and multilevel approach of social,	
	Please update the table in appendix I (b) the indicate the results in the box below in acc							this sub-indicator, as appropriate, and	
		A	В	С	D	Е	F		

Sub-indicator 2.1.3	Are teaching and learning methods that sur formal education?	port ESI	) address	ed explic	itly in th	e curricul	um <sup>11</sup> or pro	gramme of study at various levels of	
Yes 🛛 No 🗌	Please specify which methods are of partic	ular sign	ificance i	n your c	ountry. P	lease also	o specify for	r non-formal education, as appropriate.	
	The teaching and learning methods that support curriculum implementation for early childhood education, primary and lower secondary education, including ESD, are addressed explicitly in the specific chapter "Educational Methodologies and Evaluation Recommendation" within the curriculum for each core or optional discipline.  We exemplify below some of them: discussions, simulations, role playing, ICT, excursions and outdoor learning, learner-driven projects, problem-solving, inquiry, case studies, practical activities, working groups activity, conceptual and perceptual mapping.  The teaching/learning methods that support ESD applied in non-formal education include: study visits, excursions and outdoor learning, thematic projects/activities/workshops/camps, problem-solving, ICT, case studies, debates, volunteering, anti – alcohol/ anti- tobacco/ anti-pollution/preventing persons traffic campaigns, exchange of experience, activities dedicated to specific events (like: "The European Day for Citizenship through Education", "Earth Day", "International Day for Environment", "The Water Day", "The Tree Day", "The World Day for								
	Animals", "Let's do it!"). Schools either	develop available et Empl	and des resource ois verts	ign their es or par -Europea	own pr ticipate in Semir	ojects/ co in nation nar, Ecof	ompetitions al/internations iches <i>péda</i>	/activities (case studies, debates, outdoor onal programmes/ seminars (e. g. Global gogiques - Le français au sens proper –	
	Other significant teaching/learning methods that support ESD are also addressed explicitly in the curriculum for: <b>secondary education and post-secondary non-tertiary education, including VET</b> ("case studies" for subjects like Nature Sciences, Civic Education, History, Biology, Geography, Technologic Education, Sociology, Philosophy, Economy, Entrepreneurial Education, Civic and Entrepreneurial Culture), upper secondary education – technologic profile & vocational schools and post-secondary non-tertiary education – VET ("workplace experience").								
	visits, excursions and outdoor learning, the exchange of experience, activities dedica Volunteer Day, Meeting with the Employer	ies, good ce, teachi ematic protect to specifications.	practice ng/learni rojects/ac pecific ev	analyses ng meth- tivities/v vents lik	excursion ods that workshop e: Techn	ons, proje support F s/camps, ical Wor	cts, work p ESD applied problem-so kshop in L	lacements.  d in non-formal education includes: study olving, case studies, debates, volunteering, Development of Plastic Injection Molded,	
	Please also update the table in appendix I results in the box below in accordance with						ion phases	II and III, as appropriate, and indicate the	
		A	В	С	D	Е	F		

<sup>11</sup> Idem.

Indicator 2.2	Strategies to implement ESD are clearly identified									
Sub-indicator 2.2.1	Is ESD addressed through: (a) existing subjects <sup>12</sup> only?; (b) a cross-curriculum approach?; (c) the provision of specific subject programmes and courses?; (d) a stand-alone project? <sup>13</sup> ; (e) other approaches?									
(a) Yes 🛛 No 🗌	Please specify for different levels of education system in accordance with ISCED by ticking ( $\checkmark$ ) in the table as appropriate.									
(b) Yes 🛛 No 🗌		ISCED levels 2011 (a) (b) (c) (d) (e)								
(c) Yes 🛛 No 🗌	ICCED 1				Yes	Yes	Yes	-		
(d) Yes No No		0. Early childhood education		/	/	/		-		
(e) Yes 🛛 No 🗌		1. Primary education	1	1	1	1	1	-		
		2. Lower secondary education	1	1	1	1	1	-		
		25. Lower secondary vocational education	1	<b>√</b>	1			-		
		3. Upper secondary education	ļ	1		1	<del> </del>	-		
		35. Upper secondary vocational education	1	1	1		<u> </u>	1		
		4. Post-secondary non-tertiary education	/	1	1	/	1	-		
		45. Post-secondary non-tertiary vocational education		/	/			1		
		5. Short-cycle tertiary education		1	1					
		55. Short-cycle tertiary vocational education		1	1					
		6. Bachelor's or equivalent level	1	1	1	1	1	-		
		7. Master's or equivalent level	1	1	/	/	1			
		8. Doctoral or equivalent level	1	1	1	1	1			
		9. No information available								
		mation about the incentives on the national leve SD in pre-university education through existing			0 . , .		,		culum	

E.g., geography or biology. For higher education, "subject" means "course".
 A project is interpreted as a discrete activity with its own time allocation rather than a teaching or learning method.

	approach, through developing projects and through other approaches (contests, non-formal activities) is based on the provision of education legislative framework ensured by NEL, Orders of MoNE for curriculum approval and, if necessary, guidelines for application. The funding of implementation of ESD in pre-university education is ensured from state budget (based on per capita financing), local authorities' budget, programmes with national or European funding, sponsorships etc.
Indicator 2.3	A whole-institution approach <sup>14</sup> to SD/ESD is promoted
Sub-indicator 2.3.1	Do educational institutions <sup>15</sup> adopt a "whole-institution approach" to SD/ESD?
Yes 🛛 No 🗌	The Steering Committee has adopted as one priority action area that every school adopts an ESD school plan by 2019. 16 ESD school plans are one means to implement a whole-institution approach. Please provide information on the implementation of this priority action area in your country.
	According to the legislative framework every school within pre-university education has to annually elaborate and implement The School Institutional Developing Plan (SIDP) which is covering domains like: analysis of the internal/external environment, operational plan, educational school offer including local made (optional) curriculum, school's local, national and international partnerships (including educational network s& consortium participation).
	For the VET system, the School Action Plan (SAP) include the perspective of the school for which it is drawn: the mission of the school, promoted values, goals / strategic objectives, target areas (eg, school management, curriculum, extracurricular, human resources, material resources and financial programs education and training), major directions of activity, drawn from the SWOT analysis, educational school offer including local made curriculum, school's local, national and international partnerships (including educational network s& consortium participation). In particular, SAP for VET schools contains the analysis of school capacity to respond to the vocational training needs at the local community level, the priorities&targets&actions to be established/implemented in order to adapt school educational offer with a view to improve the quality of VET and also to increase the employment rate of the VET graduates. In addition, VET schools partnerships must include cooperation with economic agents, on the basis of contracts, in order to ensure the practical training for the students.
	Non-formal education related to ESD is also addressed in the SIDP/SAP and includes, among other: the elaboration and implementation of the "Scoala altfel" (School in a Different Way), school going in for contests/competitions organised at local, regional and national level (for example: National Contest for Environmental Projects; International Contest "Young People in European Forests – YPEF"; National Contest for Antidrug Projects ("Together" Projects); National Contests "Made for Europe", "Your gesture is important too"; "Earth is our home", "Children, save the Blue Planet", "Do everything to save Earth", "Iedera, o piece of heaven", "Edelweiss",

A "whole institution approach" means that all aspects of an institution's internal operations and external relationships are reviewed and revised in the light of SD/ESD principles. Within such an approach each institution would decide on its own actions, addressing the three overlapping spheres of Campus (management operations); Curriculum; and Community (external relationships).

<sup>(</sup>external relationships).

15 For higher education institutions: whole-university, whole-college or whole-faculty approach (including inter-faculty approaches).

See paragraph 20 of the framework for the future implementation of the UNECE Strategy for Education for Sustainable Development.

"Young are debating", "European School", "The Friends of the Nature", "The Friends of the Danube Delta"); the calendar of the contests is approved by the MoNE each school year.

Within the initiative *ONG21 – Participation of NGOs to the ESD policy* implemented between April 2017 and June 2019 by REPER21 (coordinator) and FDSC), an ESD implementation plan will be elaborated. It will encompass among others recommendations for the adoption of a national ESD labels for schools that will respond to the first Batumi priority. The label will be offered to schools that will deploy ESD on 4 pillars: 1) management of the school; 2) curriculum; 3) life in the school and 4) partnerships and openness towards the community.

Moreover, in the project *Prof21* dedicated to teachers, implemented by the same associations through European funding, REPER21 and FDSC are working systematically between 2018 and 2021 in 23 disadvantaged schools all over Romania. One of the objectives is to highlight the role that ESD can bring in increasing the quality of education, its attractiveness for teachers and students and in building the community resilience. These 23 schools, whose teachers attended the programme of life skills development in the context of sustainable development, enter since Autumn 2018 in a large programme, called "Sustainable schools", in which they will develop and deploy programmes for ESD, a part of them being financed by Prof21 project. The 23 schools will be also the first ones that will benefit from the **label "Sustainable schools"** developed in ONG21.

At the **higher education level**, "Petru Maior" University seeks to implement ESD plans at all levels of education in the next two to three years.

Also, please provide information for all levels of your education system in accordance with ISCED by ticking ( $\checkmark$ ) in the table as appropriate and specify for non-formal and informal education, as appropriate.

ISCED levels 2011	Yes
0. Early childhood education	
1. Primary education	1
2. Lower secondary education	1
25. Lower secondary vocational education	/
3. Upper secondary education	1
35. Upper secondary vocational education	1
4. Post secondary non-tertiary education	1
45. Post-secondary non-tertiary vocational education	1
5. Short-cycle tertiary education	1
55. Short-cycle tertiary vocational education	1

E	
Ħ	
ECE/CE	
돌	
À	
Ċ	
13	
13/20	
_	
8/4	

	1			
		6. Bachelor's or equivalent level	<b>√</b>	
		7. Master's or equivalent level	/	
		8. Doctoral or equivalent level	1	
		9. No information available		
Sub-indicator 2.3.2	Are there any incentives (guidelines, including the implementation of ESD	award scheme, funding, technical support) that suppose of school plans?	oort a whole-ins	titution approach to SD/ESD,
Yes 🛛 No 🗌	If yes, please specify what schemes a	re available for all levels of your education system.		
	referring to ESD/ESD school plan, i national or European funding, sponsor.  The National Centre for TVET Deve Revised Curriculum in Technica on the training needs signaled by needs;  Teacher training in the field of Value Linking VET provision with labe Active school-enterprise partner. Improve the quality of Technica Training of teachers in vocation interactive learning method « the Develop and propose new training EQF level 5 + by FIT2COM procurrently, at the Petru Maior University.	lopment implemented several projects containing an all and Vocational Education and Training- focused of a comparative analysis between the present training vocational skills assessment focused on teacher training our market demands as ships to improve initial vocational education and training through partial and Vocational Education and Training through partial and technical education and training system, for the training firm where developing the entrepreneurship congrams (operator renewable energy, EQF level opject)	and based on prinon improving the goffer and the sing on modern a sining - STEPS artnership networks service profil impetences of your street of the service profil in	authorities' budget, programmes with ciples of SD: e training offer (curriculum) based European and national training assessment of learning outcomes; in initial VET orks le to use and extend the modern oung people, etc. project, comfortable footwear expert, and its implementation in the curricula
	development, an innovative solution,  e Qvet-us framework - contain fields oriented to the VET providers development: social, economic and e  e Qvet-us practice set consist http://eqvet-us.upm.ro/.	ing in: a guide for implementing, evaluation, revie	sed of: eans to set up q phases of VET ew; and a self-o	quality assurance systems in different delivery, on 3 pillars of sustainable diagnostic tool. For more details see:
	Please also provide information on a	ıll education levels in accordance with ISCED by tic	king (🗸) in the	table as appropriate.
31		ISCED levels 2011	Yes	

		<del></del>	1			
	0. Early childhood education	1				
	1. Primary education	1				
	2. Lower secondary education	1				
	25. Lower secondary vocational education	1				
	3. Upper secondary education	1				
	35. Upper secondary vocational education	1				
	4. Post secondary non-tertiary education	1				
	45. Post-secondary non-tertiary vocational education	1				
	5. Short-cycle tertiary education	1				
	55. Short-cycle tertiary vocational education	1				
	6. Bachelor's or equivalent level	1				
	7. Master's or equivalent level	1				
	8. Doctoral or equivalent level	1				
	9. No information available					
Please also specify for non-forma examples).	l and informal education, as appropriate. If relevant info	rmation is ava	ilable please also specify (provide			
Do institutions/learners develop the	heir own SD/ESD indicators for their institution/organiza	tion?				
Please specify (i.e., provide exam	ples of how this is done) for formal institutions as well as	for non-forma	l institutions.			
The SIDP/SAP contains objectives and targets in line with regional/national priorities, aims, benchmarks mentioned in national strategies on educational domain (The National Strategy on LLL, The National Strategy on Early School Leaving, the National Strategy on IVET).						
At the level of Petru Maior University, the eQvet-us framework - contains a list of questions, indicators and examples of means to set up quality assurance systems in different fields oriented to the VET providers needs in the implementing, evaluation and review phases of VET delivery, on 3 pillars of sustainable development: social, economic and environmental.						
As regard to the SDGs MoNF ca	n report on most of the indicators related to the SDG 4 a	nd the ones fro	m other SDGs related to education			
	examples).  Do institutions/learners develop the Please specify (i.e., provide examples).  The SIDP/SAP contains objective on educational domain (The National At the level of Petru Maior University assurance systems in different delivery, on 3 pillars of sustainables. At the University of Agricultural University, faculties and programs	1. Primary education 2. Lower secondary vocational education 3. Upper secondary vocational education 3. Upper secondary vocational education 4. Post secondary non-tertiary education 4. Post secondary non-tertiary education 4. Post-secondary non-tertiary vocational education 5. Short-cycle tertiary education 5. Short-cycle tertiary vocational education 6. Bachelor's or equivalent level 7. Master's or equivalent level 8. Doctoral or equivalent level 9. No information available  Please also specify for non-formal and informal education, as appropriate. If relevant info examples).  Do institutions/learners develop their own SD/ESD indicators for their institutions as well as The SIDP/SAP contains objectives and targets in line with regional/national priorities, ai on educational domain (The National Strategy on LLL, The National Strategy on Early Sci At the level of Petru Maior University, the eQvet-us framework - contains a list of quest quality assurance systems in different fields oriented to the VET providers needs in the im delivery, on 3 pillars of sustainable development: social, economic and environmental.  At the University of Agricultural Sciences and Veterinary Medicine of Iaşi, in the conte University, faculties and programs of study, there is also taken into account the way in whi	1. Primary education 2. Lower secondary education 2. Lower secondary vocational education 3. Upper secondary vocational education 3. Upper secondary vocational education 4. Post secondary non-tertiary education 4. Post secondary non-tertiary vocational education 5. Short-cycle tertiary education 5. Short-cycle tertiary vocational education 6. Bachelor's or equivalent level 7. Master's or equivalent level 8. Doctoral or equivalent level 9. No information available  Please also specify for non-formal and informal education, as appropriate. If relevant information is avacexamples).  Do institutions/learners develop their own SD/ESD indicators for their institutions as well as for non-forma the SIDP/SAP contains objectives and targets in line with regional/national priorities, aims, benchmarl on educational domain (The National Strategy on LLL, The National Strategy on Early School Leaving, the level of Petru Maior University, the eQvet-us framework - contains a list of questions, indicator quality assurance systems in different fields oriented to the VET providers needs in the implementing, even			

As for the ones that cannot be covered, they will be developed in the near future by the National Statistics Institute in partnership with the relevant stakeholders.

Please also indicate for all levels of your education system in accordance with ISCED, by ticking ( $\checkmark$ ) in the table as appropriate:

(a) For formal institutions:

ISCED levels 2011	Yes
0. Early childhood education	1
1. Primary education	1
2. Lower secondary education	1
25. Lower secondary vocational education	/
3. Upper secondary education	1
35. Upper secondary vocational education	/
4. Post secondary non-tertiary education	1
45. Post-secondary non-tertiary vocational education	1
5. Short-cycle tertiary education	1
55. Short-cycle tertiary vocational education	1
6. Bachelor's or equivalent level	1
7. Master's or equivalent level	1
8. Doctoral or equivalent level	1
9. No information available	

(b) For non-formal institutions:

ISCED levels 2011	Yes
0. Early childhood education	
1. Primary education	/
2. Lower secondary education	/

34		25. Lower secondary vocational education	1				
		3. Upper secondary education	/				
		35. Upper secondary vocational education	1				
		4. Post secondary non-tertiary education	1				
		45. Post-secondary non-tertiary vocational education	1				
		5. Short-cycle tertiary education	1				
		55. Short-cycle tertiary vocational education	1				
		6. Bachelor's or equivalent level	1				
		7. Master's or equivalent level	1				
		8. Doctoral or equivalent level	1				
		9. No information available					
Indicator 2.4	ESD is addressed by quality assessmen	nt/enhancement systems	***************************************				
Sub-indicator 2.4.1	(a) Are there any education quality assess assessment/enhancement systems that ad	ment/enhancement systems?: <sup>17</sup> (b) Do they address Idress ESD in national systems?	ESD?; (c) A	are there any education quality			
a) Yes 🛛 No 🗌	Please elaborate.						
(b) Yes ⊠* No		both pre-university and higher education. For the					
(c) Yes ⊠* No  ☐  Yes, partially addressed, but	Romanian Agency for Quality Assurance in Pre-university Education and for the higher education - The Romanian Agency for Quality Assurance in Higher Education. Concerning the initial TVET system all schools comply with the quality assurance requirements. For each level there have been elaborated quality standards and every 5 years there are regular evaluations in order to see if the quality standards are respected. School Action Plans ensure the school management process and they are the instruments that initial TVET schools are compelled to elaborate and ensure the quality criteria. These criteria are commonly agreed also with the National Agency for Quality Assurance in Pre-university Education.						
quality assurance is not specifically connected to ESD/SD.	USAMV Iaşi functions a Council of C Assurance of USAMV Iaşi, which carri quality assurance in education (http: university the QA is not specifically com	gher education international experts and students Coordination of the Department for Quality Assuries out their activity based on its own regulations //www.uaiasi.ro/index.php?lang=ro&pagina=paginnected to ESD/SD. At the level of formal education tion oriented and attitude oriented dimensions, in	rance, a C and a Ma i/9_DAC_s i, the evalu	committee for Evaluation and Quality nual of procedures for evaluation and structura.html). At the level of the ation component is part of the program			

<sup>&</sup>lt;sup>17</sup> For higher education institutions: either national centres for quality assessment in higher education or cooperation with general quality assessment agencies, such as the European Foundation for Quality Management (EFQM).

ESD/SD.

At the Petru Maior University there is a University compartment dedicated to Quality Assurance and it also focuses, among other issues, on ESD. The implementation of the quality management system has the effect of creating new models of thinking and behaviour that lead to the continuous improvement of all educational and research processes in Petru Maior University. Evaluating and ensuring the quality of all areas of university activity is an absolute priority for the university's mission.

Also, please specify for various levels of your education system in accordance with ISCED, by ticking  $(\checkmark)$  in the table as appropriate.

ISCED levels 2011	(a)	(b)	(c)
ISCED levels 2011	Yes	Yes	Yes
0. Early childhood education			
1. Primary education	1		
2. Lower secondary education	1		
25. Lower secondary vocational education	1		
3. Upper secondary education	1		
35. Upper secondary vocational education	1		
4. Post-secondary non-tertiary education	1		
45. Post-secondary non-tertiary vocational education	1		
5. Short-cycle tertiary education	1		
55. Short-cycle tertiary vocational education	1		
6. Bachelor's or equivalent level	1	1	1
7. Master's or equivalent level	/	1	1
8. Doctoral or equivalent level	1	1	1
9. No information available			

Please also specify for non-formal and informal education, as appropriate. If relevant data are available, please also specify this data (i.e., provide examples on how the data was compiled).

The Romanian Agency for Quality Assurance in Pre-university Education has role in assessment and quality assurance of the extracurricular institutions.

At the USAMV Iasi students participate to a varied range of non-formal and informal activities. The quality evaluation depends on every activity in part. For example, at the national sports competition "Agronomiada", there is a rigorous evaluation with specific academic

36	standards in place. "Agronomiada" aims to promote the competition ideas and performance of the study at the disciplines provided in the curricula and addresses the students with special skills, inclinations and interests for the fields and disciplines studied. The professional scientific and sports competition "Agronomiada" is organized annually by one of the USAMVs, the Faculty of Agronomy and Horticulture in the city of Craiova and the State Agrarian University of Moldova. In organizing this event an important role is played by the leagues of agronomic universities students.											
Sub-indicator 2.4.2	Which of the following dimensions of learning is your country planning to reinforce in student assessment/examinations in the next five years, in relation to ESD?: (a) Knowledge, (b) Skills and competencies; (c) Values and attitudes; (d) Behaviours; (e) None; (f) No information available.											
(a) Yes	Assembly to the manifolding of NEL a new structure of the National Evaluation/assessment addressed to the analysts of layer secondary											
		Early childhood education     Primary education				-	<u> </u>					
									i			

		2. Lower secondary education	1	1	1	1		
		25. Lower secondary vocational education	1	1	/	1		
		3. Upper secondary education		1	/	1		
		35. Upper secondary vocational education	1	1	/			
		4. Post-secondary non-tertiary education	/	/				
		45. Post-secondary non-tertiary vocational education	/	•				
		5. Short-cycle tertiary education	/	/				
		55. Short-cycle tertiary vocational education	/	/				
		6. Bachelor's or equivalent level	/	/	/	/		
		7. Master's or equivalent level	1	1	1	1		
		8. Doctoral or equivalent level	1	1	1	1		
		9. No information available						
In diseases 2.5	provide examples of	for non-formal and informal education, as appropriate the data was compiled).					e also sp	ecify this data (i.e.,
Indicator 2.5	ESD methods and instruments for non-formal and informal learning are in place to assess changes in knowledge, attitude and practice							
Sub-indicator 2.5.1	Are SD issues addressed in informal and public awareness-raising activities?							
Yes 🛛 No 🗌	Please specify and provide information on new developments and good practice examples.							
	Public awareness – raising activities regarding SD/ESD in pre-university education are put in place mainly at local (school and community) level but also at national level when mass-media is used in promotion of specific thematic activities/events/projects outcomes/awarding, through involvement as partners of as many as possible categories of participants in ESD activities implemented at school level (parents, NGOs, local public authorities, representatives of environmental protection/public health agencies, volunteers, cultural and scientific institutions etc.) and also through the activities included in "Scoala altfel" Programme. The schools and the county school inspectorates are encouraged to promote the best/most interesting activities/projects outcomes/the benefits of the programme for the community by using a wide range of methods: on schools/county school inspectorates/involved partners web sites, in press articles, in local/central mass-media, by organizing public electronic vote etc. The best 10 activities (established on the basis of assessment criteria and specific tools developed at county level) implemented in each county are included in a national competition which is ending with awarding.							
37	Likewise, after the adoption of the Agenda 2030, schools have been encouraged every year by MoNE, through the country schools							

inspectorates, to introduce pupils to the 17 SDGs, especially through the platform World's Largest Lesson, developed by Project Everyone in partnership with UNICEF, who have created lesson plans and resources for each SDG.

In the last years in Romania, activities related to sustainable development have expanded constantly, being centred on specific campaigns, various projects, partnerships between local authorities, NGOs, private sector, etc.

For instance in its youth-led IMPACT clubs program, which is the most relevant for this indicator, NHF (New Horizons Foundation) uses two main methodologies to work with young people aged 12-19:

- 1. Non-formal/experiential education and 2. Service learning community service learning projects.
- 1. Using experiential learning methods (games and stories, group work, discussions, reflection games), young people go through a curriculum that comprises 4 modules directly related to the sustainable development topics: 1. Active Citizenship Me and My Community, Diversity, The environment, Violence, Health, Advocacy and Civic participation, Relationships. 2 Leadership 3. Social Entrepreneurship 4. Employment
- In Romania, NHF has a network of approximately 180 clubs and, annually, a number of approximately 3600 adolescents learning skills, knowledge and values related to the topics mentioned above. Also, the club leaders (98% teachers) acquire skills, knowledge and values needed to work with youths on SD topics.
- 2. Community service learning projects (CSLP) youths decide their own future and the future of their communities by designing and implementing projects benefiting all community members. Annually, each NHF clubs implements at least two CSLPs on topics of Environment and patrimony preservation/protection, Support for vulnerable groups, Health, Eco-Tourism etc, supporting their communities to become wealthier and more well-known.

Concrete examples:

- 1. Green IMPACT a network of 32 youth clubs in eco-touristic destinations. They are learning by implementing projects that highlight the local natural and/or cultural patrimony in order to attract tourists. Some examples: organizing events (folklore festivals, gastronomic festivals), marking trails and setting up info boards, editing touristic guides or recipe books, creating a touristic circuit of sheepfolds or water springs, etc. This way they are promoting a more sustainable tourism and contribute to the local development.
- 2. The last project competition launched for the IMPACT clubs, in which the youths will implement projects under the umbrella of SDG1.

Through these CSLPs, youth become ambassadors of sustainable development in their own communities and nationally.

At the higher education system seminars, workshops, debates, information sessions on the plans / methodologies to be implemented, public consultation organized are taking place to raise awareness on SD.

For instance at the University of Medicine and Pharmacy "Grigore T. Popa" from Iaşi there are important nonformal and informal public awareness activities like:

1) The *Healthy Bag Program* was launched in Iasi in 2012. It is an **educational program** dedicated to children and their families who promote a healthy lifestyle while respecting local traditions. It is based on scientific evidence and is coordinated by experts from the University of Medicine and Pharmacy "Grigore T. Popa" from Iaşi. It is recognized internationally, being included in the largest organization for the fight against paediatric obesity, EPODE International Network (EIN), along with programs from over 25 countries (http://www.traistacusanatate.ro/). In this program, children learn easy what are the elements of a healthy lifestyle helped by a charmed tray - *Healthy bag?* Together with folk tale folk, goat and three kids, the children will discover what is good for their health: clean water, healthy food and much movement!

X
$\Box$
Ę
Ò
$\pm$
₻
$\triangleright$
$\mathbf{C}$
3/
5
=
∞
4

	2) Last conference: Conference <i>Prevention of Obesity in Childhood - Healthy Traditions in Obesity Prevention</i> , 6th Edition, "Healthy Tray. Healthy Traditions for Healthy Children", May 19 <sup>th</sup> , 2018 at Grigore T. Popa University of Medicine and Pharmacy in Iaşi. The conference marks the <i>European Day for the Prevention of Obesity</i> and aims to bring together an interdisciplinary group of professionals and decision-makers interested in <i>obesity prevention</i> at the age of childhood and adolescence (doctors, teachers, medicine students, parents, local authorities etc.).3  3) The <i>Caravan of Prophylactics</i> is a yearly event launched in Iasi in 2008. It is a screening program which contributes at the increasing of the oral health level in the area of Moldavia (North-East Romania); every year, for one day, the teaching staff and the students from the Faculty of Dental Medicine from UMP Iaşi have provided free consultations for the people from Iaşi city and the villages around Iaşi, giving also educational materials to promote the oral health and free tooth paste, toothbrushes and dental floss.
	At the level of <b>USAMV Iasi</b> students are involved in volunteering activities, internships in various companies, farms, NGOs, which allow the direct contact with the social and economic reality, the way in which farmers in the area are involved in realizing a sustainable development. At the level of the university there are various meetings organized with successful business individuals, graduates of USAMV Iași.
	The Department for Sustainable Development is constantly organizing actions for raising awareness on SD at national and local level. For instance, a recent one (on October the 9 <sup>th</sup> 2018) was on how the textile industry can be an engine for circular economy and subsequently, to sustainable development. The event also included fashion shows with garments made only from recycled fabrics. (http://dezvoltaredurabila.gov.ro/web/news/laszlo-borbely-industria-textila-poate-fi-un-promotor-al-economiei-circulare-in-romania-pentru-un-viitor-sustenabil-2030-incepe-acum/)
Sub-indicator 2.5.2	Is there any support for work-based learning (e.g., for small companies, farmers, trade unions, associations) which addresses SD issues?
Yes 🛛 No 🗌	Please specify and provide information on new developments and good practice examples.
	All the companies in Romania are required by law to provide training to the employees. There are also accredited courses by the National Qualifications Authority on sustainable development that can be provided to the employees.
	Likewise, the Ministry of Labour and Social Justice offers programmes that contribute to the achievements of the SDGs, in order to insert/reinsert unemployed people/youth on the labour market through apprenticeships, internships, counselling and other schemes.
39	At the university level, starting with 2014, the legal framework for the organization and operation of Career Counselling and Career Centres in Higher Education has been established. For example, in 2017 there were 34,883 students, 42,422 students and 12,216 university graduates who benefited from career counselling and guidance services.  In 2017, the legal framework for the organization and functioning of student entrepreneurial societies (SES) was provided as a mechanism for supporting, developing and encouraging entrepreneurship in the university environment, in order to increase the competitiveness of Romanian universities. SES have the following tasks: developing materials for informing and guiding students in the development of business plans and / or financing projects, organizing mentoring activities for students who want to set up a start-up, encouraging mentor-student collaboration, organizing sessions start-up projects, business ideas, organizing competitions to attract funding, coordinating the work of all business incubators, simulated enterprises and other entrepreneurial entities within the higher education institution. Some universities already got involved in creating SES.
9	Likewise, according to the law, all the students from every faculty are required, at the end of the year, to make an internship. Additionally,

highly specialized fields, like medicine for example, require years of practice along with the academic courses.

Other examples include USAMV Iasi, where, at the farms in Trifeşti (Iaşi county), managed by a graduate of USAMV Iaşi, agronomy engineer, students may see how a good management has led to creating a functional irrigation system, which ensures the irrigation of thousands of hectares of corn for grains, including the irrigation of vineyards. At the farms from the Bivolari commune (Iaşi county), students may be trained in applying new alternative technologies of cultivating ecological vegetables. The best students of our University are hired in the prestigious farms from the agrarian field.

In 2018, employees of MoNE undertook a training regarding *Reducing Food waste*, which subscribes to SDG 12, delivered by the National Association for Consumer Protection and Promotion of Programs and Strategies in Romania (InfoCons) – member of the Consumers International World Organization – a course that informing them about the global impact on food waste and its environmental impact. Likewise, through EFIS funding, MoNE within the project *Monitoring and evaluating the ex-ante conditionality strategies in education and improving decision-making by monitoring institutional performance at central and local level* – code SIPOCA 17 developed the administrative capacity of the ministry, by training the staff on monitoring and evaluation of the education and training strategies.

At the level of the Ministry of Environment 13 training sessions for the staff of the environmental protection authorities, of the Operational Programme High Infrastructure, Regional Occupation Programme, Operational Programme for Fisheries and Maritime Affairs, Operational Programme for National Rural Development, management authorities as well as the intermediate bodies took place, in the project entitled *Training of staff of the competent environmental protection authorities on environmental impact assessment and environmental assessment for 2014-2020*, stage 2, funded by EFIS. The project was co-funded by the European Union through the European Regional Development Fund, within the framework of the 2014-2020 Technical Assistance Operational Program. In order to access European funds in the period 2014-2020 and meet the strategic requirements of future European funding, it has proved necessary to deepen the training of the authorities whose staff is involved in the implementation of Directive 2011/92 / EU on the assessment of the effects of certain public and private projects on the environment (EIA) and Directive 2001/42 / EC on the assessment of the effects of certain plans and programs on the environment (SEA).

Still at the level of the Ministry of Environment the project Elaboration of Guidelines for Improving the Administrative Capacity of Environmental Protection Authorities for the unitary application of the environmental impact assessment procedure - EGEIA, code SIPOCA 19, conducted for a period of 23 months, non-reimbursable community assistance being provided by the European Social and Investment Fund (ESIF) through the 2014-2020 Administrative Capacity Operational Program. One of the project's specific objectives is ensuring the quality and coherent assessment of environmental impact by developing methodological guidelines for environmental authorities, a brochure with the presentation of the guidelines, dissemination of these guides to other target groups outside the environment community. One other goal of the project is to ensure the monitoring of the unitary and coherent application of the methodological guides at the level of the environmental authorities by carrying out a study on the ex-ante evaluation of the impact of their implementation. The project also aims to improve knowledge and skills in order to increase the quality of the analysis of the documentation necessary for the ongoing assessment procedure for the environmental impact and the content of the environmental impact reports, by training the staff of the environmental authorities. The project will contribute to solve the identified problems at the level of target groups by developing 7 general and specific methodological guides, as well as by training, in the framework of 5 training sessions, some 135 persons from the competent authorities for environmental protection on the themes of these guides. Also, the 7 methodological guides will be disseminated in 5 dissemination sessions through a presentation brochure for approximately 425 people and 150 people from central and local public authorities, 100 consultants / developers of environmental impact reports, 150 central and local public (potential project beneficiaries / beneficiaries) and 25 administrators / custodians of protected areas of community interest.

The National Environmental Protection Agency (NEPA) has started a project with the updating pourpose of the Integrated Environmental Information System (EIS) - Maintenance services, updating HW / SW infrastructure, software expansion / development for integrated subsystems (adaptations to legislative changes, organizational changes updates, improvements of the existing modules), support and technical support for the Integrated Environmental System, evolving maintenance, installation, configuration, testing and related services (including training) for other requirements and upgrades related to the NEPA IT & C infrastructure. This system ensures collection and processing of environmental data on the areas for which the County Environmental Protection Agencies and the NEPA are responsible for reporting to the European bodies in close correlation and transparency with the local and central regulatory activity. The project has both a training component (for the staff involved for both the basic hardware and software infrastructure and the use of new applications developed within the project) as well as an awareness component through the openness that this system offers the public interested in accessing the data held by the NEPA. (Auction no: 183301 / 08.03.2018).

At the level of the Environment Protection Agency of Bucharest, the project Independent Evaluation and Rehabilitation of Contaminated Sites in the Petrochemical Industry of Romania/Consultative Assistance Program of the German Federal Environment Agency is ongoing, implemented under the Memorandum of Understanding between the German Ministry of Environment and the Romanian Ministry of Environment, which has as its objectives: development of a guidance manual to support the technical and administrative management of contaminated sites management in Romania; making guidelines for contaminated sites management and training seminars as well as a final conference.

At the Environment Protection Agency of Alba the project **Development of 3 management plans for the Natura 2000 sites from Alba Country/LIOP/Oct.2017 – april 2019** is being implemented. EPA Alba is a partner in this project, and the beneficiary is BIOUNIVERS Association Valisoara. The objective of the project is to improve the conservation and protection status of the species and habitats of community importance from 3 protected areas. Among the project activities are found: drawing management plans; organizing 3 public debates in the sight to present plans and reports on the environment; organizing mandatory meetings with stakeholders during the drawing of management plans; the achievement of promotional materials used in awareness-raising activities; visits by a number of 192 children on the Natura2000 sites targeted by the project.

At the Environment Protection Agency of Covasna the project *Implement the best practices for in-situ conservation of the species Canis lupus at the level of the Eastern Carpathians/European Commission through the Life Nature program/01.07.2014 - 30.04.2018 - WolfLife LIFE13NAT/RO/000205* is being implemented. *Among the project activities are counting*: analysing the attitude of the general public, hunters and livestock farmers towards wolves and their management; implementing best practices and demonstration actions in order to reduce conflicts between farmers and wolves; making a documentary about wolves and coexistence with wolves; training the personnel that manage the protected areas overlapped with the project area; promoting the concepts of wolves' protection in schools.

At the Environment Protection Agency of Gorj the project LIFE – Nature and LIFE16 NAT Biodiversity/RO/000778 Restoration of migratory corridors and habitats for rheophilic fish species in the Gilort River (the contract with the European Commission was signed) is being implemented. One of the specific objectives of the project is: Increasing institutional capacity for water management and Nature 2000 network in Romania, for conservation of reophyll fish species through integrated aquifer deposits management.

Within the project "Implement the best practices for in-situ conservation of the Canis lupus species in the Eastern Carpathians", financed by the LIFE+ program, 01/07/2014-30/04/2018, EPA Harghita is an associated beneficiary. Among the activities of the project are: the transfer of expertise to the team and the project partners as well as its dissemination at regional and national level in order to ensure the development of the human resource involved in species conservation; changing the perception of the general public and stakeholders of the species through awareness-raising campaigns dedicated to the stakeholder groups; implementing an educational and awareness campaign on wolves; educational campaign among wolf hunters.

At the Environment Protection Agency of Hunedoara "Drawing the management plan for ROSC10373 Râul Mureş between Brănişca and Ilia and the management plan for ROSPA0132 Metaliferi Mountains and related protected natural areas", applied for funding under the LIOP - Priority Axis 4 - Environmental protection through biodiversity conservation measures, air quality monitoring and decontamination of historically polluted sites is being implemented. In 2017 was signed the financing contract no.134/26.10.2017, EPA Hunedoara having the quality of Partner. The objective of the project consists in improving the conservation status of species and habitats of conservation importance from protected natural areas ROSC10373 Râul Mureş between Brănişca and Ilia and ROSPA0132 Metaliferi Mountains and related protected natural areas, as well as increasing the participation rank of the population in the sustainable development of the region and the involvement of local communities in the nature conservation activity, through the drawing and the approval of their integrated management plan and through awareness actions, consciousness and consultation.

At the Environment Protection Agency of Mehedinti the project "Efficient and participatory management for the Nature 2000 site ROSCI 0432 Prunişor" within Large Infrastructure Operational Program 2014-2020, Priority Axis 4 – Environmental protection through biodiversity conservation measures, air quality monitoring and decontamination of historically polluted sites as Project Partners, Specific Objective 4.1 "Enhancing biodiversity conservation protection through suitable management measures and restoration of degraded ecosystems", the implementation period of the project is 28 months (15.05.2017-14.09.2019) is undergoing. The aim of the project is to increase the protection and the conservation of biodiversity and the natural heritage of NATURE 2000 ROSCI0432 Prunişor by drawing the management plan, consciousness of the target group and increasing the institutional capacity of Mehedinti Environmental Protection Agency, enhancing the level of education and conciousness regarding the conservation and the improvement of the conservation status of the site.

At the same EPA the project "Drawing of the management plan for the site of community importance ROSCI 0405 Strehaia-Bâtlanele Hills" is implemented within Large Infrastructure Operational Program 2014-2020, Priority Axis 4 – Environmental protection through biodiversity conservation measures, air quality monitoring and decontamination of historically polluted sites as Project Partners, Specific Objective 4.1 "Enhancing biodiversity conservation protection through suitable management measures and restoration of degraded ecosystems", the implementation period of the project is 24 months. The aim of the project is to increase the protection and the conservation of biodiversity and the natural heritage of NATURE 2000 ROSCI0405 Strehaia-Bâtlanele Hills by drawing the management plan, consciousness of the target group and increasing the institutional capacity of Mehedinti Environmental Protection Agency, one of the activities of the project consisting in strengthening the administrative capacity of the EPA Mehedinti by training the personnel.

At the Environment Protection Agency of Satu Mare - Conservation of the European Roller (Coracias garrulus) in the Carpathian Basin – ROLLERLIFE+ (LIFE13 NAT/HU/000081) /LIFE+NATURA/01.09.2014-31.03.2020/. Note that EPA Satu Mare is the Romanian implementing authority of this project, as a partner since 2015. The coordinating beneficiary is MME-Birdlife Hungary. The goal of the project is the enhancement of Roller population in the Carpathian Basin in order to ensure a favorable long-term conservation of these populations through the implementation of the appropriate conservation measures. Organizing debates on the project findings in schools is among the main activities of the project.

At the Environment Protection Agency of Sibiu - Conservation of the 8310 habitat in Natura 2000 site Nera - Beuşniţa - LIFE13 NAT / RO / 001 488. Source financing: 50% LIFE + and 50% state budget, implementation period 01.07.2014-31.12.2018. Within the project activities was set up the campaign "caves Friends", which conducted educational activities with students from the schools founded in the project area in 2015, 2016, 2017.

At the Environment Protection Agency of Vrancea - *The implementation of best practices for the in-situ preservation of the Canis lupus species in the Eastern Carpathians*. LIFE .01 / 07/2014 - 28.02.2019. The project carried out activities related to: the attitude of the general

	public, hunters and breeders to wolves and their management; training of the staff involved in the administration of the protected areas overlapping project areas; promoting at the school level the concepts about wolves' protection.
Sub-indicator 2.5.3	Are there any instruments (e.g., research, surveys, etc.) in place to assess the outcomes of ESD as a result of non-formal and informal learning?
Yes 🛛 No 🗌	Please specify in particular which instruments were the most effective in assessing the outcomes of ESD as a result of non-formal or informal learning.
	The most effective instruments in assessing the outcomes of ESD as a result of non/formal learning are developed and used within the "Scoala altfel" Programme. The activities implemented within this programme are assessed on the basis of indicators and evaluation criteria elaborated at school/county school inspectorate/MoNE level. MoNE is organising a competition at national level where the first 10 best activities from each county are participating. For each level (school, local, national) of assessment the best activities are awarded. The implementation of the activities/programme is monitored at school, county and national level, written reports are elaborated. The county school inspectorates must include a specific chapter regarding the implementation/outcomes of this programme in the annually Educational State of Play (public document).
	Between 2014 and 2016 REPER21 and FDSC implemented the first edition of <i>Prof21</i> programme dedicated to the formation of teachers on life skills development in context of sustainable development, within which 1,000 teachers have been trained. The programme results have been assessed by the number of projects that have been deployed in schools in ESD and the results have highlighted that over 4% teachers implemented systematic ESD programmes.
	New Horizons Foundation carried out periodic survey to measure the competencies of young people who participated in the IMPACT clubs. In these surveys they have focused on a few dimensions: Critical thinking, Self-efficacy, Self-Esteem, and Leadership Efficacy, Attitudes towards citizenship, Financial efficacy, and Conflict resolution. They used online questionnaires, that are self-administered, and self-reflection tools such as Map of experiences, IMPACT passport, DIXIT etc. They are currently conducting a qualitative research survey on the 4 oldest GreenIMPACT clubs (2 years of activity) called "the Most Significant Change." It consists of a series of interviews with the major stakeholders of the project: club members, clubs coordinators, local authorities, NGOs, businesses, etc. It aims to identify the most significant change that the project determined in the community.
Indicator 2.6	ESD implementation is a multi-stakeholder process <sup>18</sup>
Sub-indicator 2.6.1	Is ESD implementation a multi-stakeholder process?
Yes 🛛 No 🗌	Please specify the main stakeholders and the main impacts that those stakeholders had/have on implementation. Please update the information provided in the previous table for appendix II as appropriate.
	As main stakeholders in ESD implementation, besides central institution (ministries, agencies), we have to mention:  - The labour unions and employers representatives, private sector (with role in approval of curriculum for initial VET)  - NGOs and community (parents) - with role in elaboration of optional/school decision curriculum

For higher education institutions: this covers the issue of university "outreach" (meaning a wide spectrum from regional integration, business cooperation and transdisciplinarity to eco-procurement and research-education-cooperation).

### Local government, private sector, labour unions and employers representatives and NGOs (with role in external assessment in qualifications certification exams with a view to quality assurance in VET) Private sector (role in work-place training for students in initial VET) Local government, community, NGOs, private sector, media (practical involvement/partners and public awareness in non/formal ESD learning). Small and medium enterprises, chambers of commerce. In addition, the VET dual system is strongly anchored in the development of skills necessary for the labour market. The dual training system has the following characteristics: is organized at the initiative of interested economic operators, as potential employers and practice partners; provides increased opportunities for education and professional training based on a partnership agreement and individual training contracts through practical training organized under the primary responsibility of economic operators; the economic operators ensure the practical training of the students, the scholarship and other expenditure for quality training students: facilitates the involvement of economic operators in decision - making mechanisms at the level of the school. The higher education institutions' collaboration spectrum is much larger, cooperating nationally, transnationally and internationally with all the aforementioned stakeholders. For instance USAMV Iaşi promotes the paradigm of a university actively involved in ensuring a SD of the North-East Region, mainly. This finality was only possible through ensuring a partnership done with the main actors in the region: the management factors at the county and local level, the institutes of research and the research stations, farmers, business people, NGOs, associations, etc. The involvement of the academic staff of USAMV Iași in various projects of SD of the region represents a guarantee of success of these actions. In turn, these partners support our University in our efforts to ensure the training of specialists for the 21st century that would involve advanced and modern technologies. At the Petru Maior University local companies support the ESD of engineering students by providing: work placements, good practice examples, sponsorships for different SD related competitions. As examples EON company supports a competition named EON Energy Challenge – dedicated to team of students to develop new energy generation and delivery solutions; Bosch Rexroth supports a competition named Pneumobile –dedicated to team of students to develop new means of transportation powered by non-conventional engines; Experiments with students at different bachelor's degree programs (Political Studies, Communication and PR) or master's degree programs

(especially Anglo-American Studies) are focusing on gender, biodiversity and production/consumption issues.

### Concluding remarks on issue 2

Please provide any concluding remarks you may have concerning the implementation of issue 2, which corresponds to objective (b) under the Strategy, namely to promote sustainable development through formal, non-formal and informal learning.

Please address in particular the following questions:

Which actions and/or initiatives have been particularly successful and why?

Important in promoting the sustainable development through formal and non-formal learning in pre-university education we underline:

- The elaboration and implementation of curriculum for primary and lower secondary education based on the 8 domains of key-competence which determine the student's education profile;
- The implementation of the "Scoala altfel" (School in a Different Way) programme in pre-university education and valuing the good practices within this national programme through awarded local/national competitions and public awareness;

- Organisation of thematic contest/competitions at local/regional/national level financed from public budget (practical examples: "The Sciences of the Earth" (interdisciplinary), "Business Plan", "Company of the Year", National Contest for Environmental Projects; International Contest "Young People in European Forests – YPEF"; National Contest for Antidrug Projects ("Together" Projects); National Contests "Made for Europe", "Your gesture is important too"; "Earth is our home", "Children, save the Blue Planet", "Do everything to save Earth", "Iedera, o piece of heaven", "Edelweiss", "Young are debating", "European School", "European Parliament Ambassador School", "The Friends of the Nature", "The Friends of the Danube Delta").

At the level of the **University of Agricultural Sciences and Veterinary Medicine (UASVM) of Cluj- Napoca** the introduction of new disciplines related to *SD* in the compulsory or optional curriculum, depending on the curriculum, was a successful initiative. The themes concern climate change, social and economic change management, environmental economics, public policy and environmental management, alternative energies, wastewater, harm reduction, green technologies.

At the **UASVM Iasi** we mention an action of already established tradition ("Agralim"), an event that includes the organization of expositions for farmers, as well as workshops with the participation of specialists in the domain, including students from UASVM Iaşi. Partnership is the key to the success of this event as well.

What challenges did your country encounter when implementing this objective?

The main challenge would be the elaboration of a strategic document at the level of the country and of each institution in part, that would be centred on ensuring ESD. Secondly, the financial and material components of the efforts to realize the ESD objectives should not be neglected.

- What other considerations have to be taken into account in future ESD implementation concerning this objective?

ESD can firstly be achieved by developing the cross-cutting sustainability skills needed to address many different sustainability challenges and linking different SDGs to each other. Secondly, ESD can equip students with specific cognitive, socio-emotional and behavioural learning outcomes that enable them to address specific challenges, promote the development of sustainability skills, and develop specific learning outcomes for all ODD-s. That is why it is vital to use transformative action oriented pedagogy. Likewise, learning about examples of good practices and their appropriate implementation in Romania and abroad would be of great help.

Issue 3.	Equip educators with the competence to include SD in their teaching	
If necessary, provide	e relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).	
Indicator 3.1	ESD is included in the training <sup>19</sup> of educators	
Sub-indicator 3.1.1	Is ESD a part of educators' initial training? <sup>20</sup>	
Yes No No	In particular specify which ESD competences <sup>21</sup> are explicitly included in the study programmes	

<sup>&</sup>lt;sup>19</sup> ESD is addressed by content and/or by methodology.

<sup>&</sup>lt;sup>20</sup> For higher education institutions: the focus is here on existing teacher training at universities/colleges regarding SD and ESD for university/college teachers.

In Romania, at the level of each university there is the Department for Teacher Training, a specialized department for the initial and continuous training of teachers. The legislation in force imposes two levels of initial training: Level 1, which targets the training of teachers for the mandatory education system (up to class 10); Level 2, which must train competences for the high school (secondary), post-secondary and higher (tertiary) education systems (Order No. 3850/02.05.2017; Order No. 4129/16.07.2018). The current academic curriculum for the psycho-pedagogical training programs allow the training of key competences for the future teachers. The competences specific for these programs are: psycho-pedagogical competences, didactic-methodological competences, communication and inter-relation competences, organization and management of a classroom, competence regarding the evaluation of the didactic activity and various educational activities, reflection and critical competences, competences of innovating the educational practices, competences regarding the initiation and promotion of the partnership between school-local community, promoting the European values (according to the Programs for the full-time professional degree and the second didactic degree, 2008). The set of competences for ESD includes: Learning to know; Learning to do, Learning to live together; Learning to be (Learning for the future: Competences in education for Sustainable Development, 2011). The development of these competences implies a new inter and transdisciplinary educational paradigm. Is ESD a part of the educators' in-service training?<sup>22</sup> Sub-indicator 3.1.2 Yes ⊠ No □ In particular specify which ESD competences are explicitly included in training programmes. Please also specify to what extent the training programmes are mandatory or optional. Continuous training for educators is mandatory. Trainings can be offered by the Teacher Houses (accredited by MoNE), by the universities or other providers. Training offered by Teachers Houses, approved annually by the Ministry, include the organization of courses, seminars, workshops. The current accredited courses by MoNE for SD include: Education for sustainable development: Developing life abilities, Education for Sustainable Development: School-Family- Community Partnership, Environmental protection: the main criterion for a sustainable lifestyle, Integrating critical thinking in the curriculum, Sustainability in the protection of the environment: integral part of the educational process, Developing the life skills of pupils in the context of sustainable development, Education for democracy, Methods of critical thinking, Learning strategies for critical thinking, Volunteering for the environment: present and perspectives, Education for gender equality: strategies for prevention and active intervention in the school environment, Education for the environment: ways of doing it. As an example of inter-countries cooperation regarding teacher training, in the school year 2016-2017, a number of 28 Romanian teachers participated in 13 training courses organized within the framework of the Council of Europe Pestalozzi Program, aimed at the training of teachers in pre-university education. The themes addressed have focused on priority areas such as: protecting human rights, democratic citizenship, promoting national values and encouraging the development of Europe's cultural diversity, strengthening democratic stability in Europe, finding common solutions to the challenges facing European society.

<sup>&</sup>lt;sup>21</sup> For a set of core competences in ESD please see the report by the ECE Expert Group on Competences, *Learning for the future: Competences in Education for Sustainable Development* (ECE/CEP/AC.13/2011/6), available online from http://www.unece.org/education-for-sustainable-development-esd/publications.html.

<sup>&</sup>lt;sup>22</sup> For higher education institutions: the focus is here on existing in-service training programmes regarding SD and ESD for university/college teachers in their own universities/colleges.

	Since 2015, the NGOs REPER21 and FDSC are offering in Romania an accredited programme for teachers, called "development of life skills in the context of sustainable development". Until now, over 1,300 teachers benefited of the 10 days training. The curricula consists in 3 modules, divided as it follows:
	1) a 3 days online module dedicated to ESD (available upon request on www.prof21.ro), within which the teachers are familiarized with ESD, its history, actors etc, priority themes (environmental – climate change, biodiversity, resources; economic – modules of consumption and production, financial system; social – social justice, disasters and resilience, global governance) and key skills accordingly to UNECE (such as prospective, critical, systemic thinking);
	2) a 3 days module dedicated to the development of life skills prioritary for ESD (face to face); 3) a 4 days module dedicated to practice, within which the teachers draft a school project on ESD and life skills. One day of this module is dedicated to prospective in education – "How to build the resilience of the school in 2030?"
	The programme is optional and it is free of charge, delivery depends on external funding.
	At the universities the important competences for teacher training are learning to understand the challenges facing society both locally and globally, developing practical skills, to act in a team, respect each other to address interdisciplinary competence development issues. At the UASVM Iasi, within the program of initial training a holistic approach was ensured, of curricular type, of the education process (for the psycho-pedagogical subjects), doubled by practical efforts towards promoting some interdisciplinary actions. The Teacher Training Department of UASVM Iaşi has integrated the 3D laboratories of the university in the process of initial. Also, the department has carried out inter and transdisciplinary educational projects in partnership with pre-tertiary education units.
	Please also update the information provided under the phase III national implementation reporting in appendix III.
Sub-indicator 3.1.3	Is ESD a part of training of leaders and administrators of educational institutions?
Yes ⊠ No □	Please specify which ESD competences are explicitly included in training programmes. Please also specify to what extent the training programmes are accessible and whether they are mandatory or optional.
	The training is mandatory. Continuing education programs and activities organized by Teachers Houses with management, guidance and control personnel included the following topics: project development to schools, school administration, leadership, communication and organizational culture, training and team management, resource development, conflict management. All the school directors are part of the Nation Body of Experts in Educational Management.
	UASVM Iaşi has been involved in carrying out continuing training programs for the tertiary teaching staff, as well as school directors and inspectors from the North-East Region, which have targeted the training of competences in the ESD/SD domain.
Indicator 3.2	Opportunities exist for educators to cooperate on ESD
Sub-indicator 3.2.1	Are there any networks/platforms of educators and/or leaders/administrators who are involved in ESD in your country?
Yes 🛛 No 🗌	Please specify.
	The platform www.prof21.ro was created within the project Prof 21 (2018- 2020) by the network ONG21 where teachers are equipped with life skills in the context of sustainable development. Likewise, the goal of the project is to also to train school managers.
	and sains in the context of sustainable development. Enterwise, the goar of the project is to also to train school managers.

48	cooperation for education for citizenship, rights human, cultural diversity and the development of specific educational materials. Teachers have access to online courses, materials, resources and can also publish articles.
Sub-indicator 3.2.2	Are ESD networks/platforms supported by the Government in any way? <sup>23</sup>
Yes 🛛 No 🗌	Please specify how, listing the major ones, and describing them as appropriate.
	The programme "Development of life skills in the context of sustainable development" offered in Prof21 has been accredited by the Ministry of Education, whereas the network ONG21 is officially supported by the Ministry of Education.
Concluding remarks issue 3	Please provide any concluding remarks you may have concerning the implementation of issue 3, which corresponds to objective (c) under the Strategy, namely to equip educators with the competence to include sustainable development in their teaching.
	Please address in particular the following questions:  - Which actions and/or initiatives have been particularly successful and why?  The integration of the 3D laboratories in the process of continuous training for teacher at the USAMV Iasi, as well as inter and transdisciplinary approaches in partnership with pre-tertiary education units.
	<ul> <li>What challenges did your country encounter when implementing this objective?</li> <li>What other considerations have to be taken into account in future ESD implementation concerning this objective?</li> </ul>
	Funding for education that would support these efforts towards an educational reform in the 21st century.
Issue 4.	Ensure that adequate tools and materials for ESD are accessible
	Ensure that adequate tools and materials for ESD are accessible
If necessary, provide	Ensure that adequate tools and materials for ESD are accessible  relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).
If necessary, provide Indicator 4.1	Ensure that adequate tools and materials for ESD are accessible  relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).  Teaching tools and materials for ESD are produced
If necessary, provide Indicator 4.1 Sub-indicator 4.1.1	Ensure that adequate tools and materials for ESD are accessible  relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).  Teaching tools and materials for ESD are produced  Does a national strategy/mechanism for encouragement of the development and production of ESD tools and materials exist?

<sup>&</sup>lt;sup>23</sup> Including assistance through direct funding, in-kind help, political and institutional support.

	elaboration and approval of an OER procedure.
	(https://www.edu.ro/educa%C8%9Bie-pentru-dezvoltare-durabil%C4%83)
Sub-indicator 4.1.2	Is public (national, subnational, local) authority money invested in this activity?
Yes 🛛 No 🗌	Please specify to what extent public money is invested in this activity, by providing an indication of the amount (in United States dollars (USD)) for annual expenditures on ESD-related research and development.
	The textbooks for compulsory education are provided for free, funded by the public budget. Likewise, the teachers' trainings made at the Teacher Houses are also financed from the MoNE's budget.
	As for the translated materials mentioned at sub-indicator 4.1.1., the activity was finalized – most of it – without any budgetary inputs.
Indicator 4.2	Quality control mechanisms for teaching tools and materials for ESD exist
Sub-indicator 4.2.1	Do you have quality criteria and/or quality guidelines for ESD-related teaching tools and materials that are: (a) supported by public authorities?; (b) approved by public authorities?; (c) tested and recommended for selection by educational institutions?
(a) Yes  No  (1) (b) Yes  No  (1) (c) Yes  No  (1)	Please specify.  The Ministry of National Education is supporting and approving by Minister' Order:  The textbooks – National Centre for Examination and Evaluation  The Framework methodology related to homologation of the educational means for pre-university education  The Framework methodology for regulating the auxiliary teaching materials use in pre-university education  The Framework methodology for regulating the auxiliary teaching materials use in pre-university education  The Framework methodology for regulating the auxiliary teaching materials use in pre-university education  The Framework methodology for regulating the auxiliary teaching materials use in pre-university education  The preuniversity system QA is assured by the Romanian Agency of Quality Assurance in the Preuniversity System (under MoNE subordination) and in the higher education the responsible, independent institution is the Romanian Agency of Quality Assurance in Higher Education (RAQAHE) - a full member of the European Association for Quality Assurance in Higher Education – ENQA and enrolled in the European Quality Assurance Register for Higher Education – EQAR.  For the university as a whole (teaching, research and quality) "Grigore T. Popa" University of Medicine and Pharmacy Iaşi has designed, documented and implemented a quality management system (http://www.umfiasi.ro/organizare/Pages/Managementul calitatii.aspx), according to the SR EN ISO 9001: 2008 standard. The University's performance in terms of the quality of the services offered is officially recognized by certifying this quality management system in March 2008 by CERTIND SA ("one of the most important certification bodies with Romanian capital and we provide trust through evaluation, certification and training services").  Each year internal evaluation regarding the quality control in education is realized by Commission for Quality Evaluation and Quality Assurance in Higher Education and the final annual report becomes public after submission and approval in the Universit

50		Training in quality management for the board of Univerquality management systems, from ISO 9001: 2008 to IS		
Sub-indicator 4.2.2	Are ESD teaching tools and materials	available: (a) in national languages?; (b) for all levels of e	ducation accordi	ng to ISCED?
(a) Yes No \( \square\)	Please specify. If the answer is yes for (b), please specify by ticking ( $\checkmark$ ) in the table as appropriate.			
(b) Yes No 🗌		ISCED levels 2011	Yes	
		0. Early childhood education	1	
		1. Primary education	1	
		2. Lower secondary education	1	
		25. Lower secondary vocational education	1	
		3. Upper secondary education	1	
		35. Upper secondary vocational education	1	
		4. Post secondary non-tertiary education	1	
		45. Post-secondary non-tertiary vocational education	1	
		5. Short-cycle tertiary education	1	
		55. Short-cycle tertiary vocational education	1	
		6. Bachelor's or equivalent level	1	
		7. Master's or equivalent level	1	
		8. Doctoral or equivalent level	1	
		9. No information available		
Indicator 4.3	Teaching tools and materials for ES	D are accessible		
Sub-indicator 4.3.1	Does a national strategy/mechanism for dissemination of ESD tools and materials exist?			
Yes 🛛 No 🗌	Please describe and in particular high	light which measures are the most efficient for dissemina	tion.	
	the latter, ESD dissemination is even	d in the National Strategy for Sustainable Development 2 more enhanced, which also stipulates tools and materials after the approval of the new Strategy for Sustainable De	Later on, new to	ools will be developed based

	Textbooks and educational materials corresponding to core/optional curriculum, including those referring to SD, are developed and disseminated at national level.
	"Grigore T. Popa" University of Medicine and Pharmacy Iaşi has an E-learning platform for formal education (in Romanian, English and French) for bachelor students, master and PhD students and for training of medical doctor and pharmacists (residents) (http://www.umfiasi.ro/ProgrameEuropene/Pages/E-learning.aspx) From all scheduled postgraduate courses the ones related with SD according with the Agenda 2030:  Academic year 2017-2018: (http://www.umfiasi.ro/EMC/Documents/cursuri_postuniversitare_2017_2018/Facultatea%20de%20Bioinginerie%20Medicală%202017-2018.pdf)  1) Health-care associated Infections from Regulations to Practice (March-May 2018, 21 participants); 2) The current approach to malnutrition: from classical malnutrition to obesity (November-December 2017, sustained in Constanța; 23 participants); 3) Information technology, quality and human resources in the health organization (April-May 2018, 24 participants); 4) Culture, Communication and Coaching in the Management of the Health Organization (November 2017, 24 participants).
	Academic year 2016-2017: the selected focused courses from the above themes (http://www.umfiasi.ro/EMC/Documents/Cursuri%20postuniversitare%202016-2017/Facultatea%20de%20Medicină.pdf)  1) Current News in Vaccinology (March-May 2017, 41 participants);  Transfer of atmospheric pollutants from outside to buildings (May-June 2017, 25 participants).
	Informal education The UMP Iaşi through <i>The Society of Medical Students</i> from the university, a member of the Federation of Medical Students' Associations in Romania, supported the campaign, "Vaccine Informed!" in March 2018, in the context of decreasing the vaccine cover and the measles epidemic (http://www.fasmr.org/2018/03/13/comunicat-vaccinare/).  The project was sustained by Secretary of state from the Ministry of Health, Raed Arafat (https://www.facebook.com/FASMR/videos/1890915680943423/) and by director of "Cantacuzino" National Institute of Medical-Military Research and Development (https://www.facebook.com/ FASMR/videos/ 1901336659901325/)
Sub-indicator 4.3.2	Is public authority money invested in this activity?
Yes 🛛 No 🗌	Please specify to what extent by providing an indication of the amount in USD, and please also mention any other significant sources of funding.
	The materials disseminated to teacher during training for ESD are free, funded from MoNE's budget (if they are provided by the Teachers's Houses). Likewise, many trainings for ESD covered from European funding and delivered by NGOs or other entities are also free.
	Textbooks for core curriculum the cover SD themes are also free, funded by the MoNE's budget.
Sub-indicator 4.3.3	Are approved ESD teaching materials available through the Internet?
Yes ⊠ No □	Please describe and name in particular official Internet sites.  All the textbooks, including those that cover SD are available on https://www.manuale.edu.ro/, administered by MoNE.  Other ESD resources are found on the MoNE website, on the category for ESD: https://www.edu.ro/educa%C8%9Bie-pentru-dezvoltare-

52	durabil%C4%83 ESD materials are available on www.prof21.ro for the teachers, developed in the context of the project Prof21, "Development of life skills in the context of sustainable development", implemented since 2014 by REPER21 and FDSC.				
Sub-indicator 4.3.4	Is a register or database of ESD teaching tools and materials in the national language(s): (a) accessible through the Internet?; (b) provided through other channels?				
(a) Yes 🛛 No 🗌	For (a) and (b) please specify and mention by whom it was established and by whom it is managed.				
(b) Yes ⊠ No □	ESD materials are available on www.prof21.ro for the teachers, developed in the context of the project Prof21, "Development of life skills in the context of sustainable development", implemented since 2014 by REPER21 and FDSC, who manage them. A selection of ESD methods and projects is also available on the website.				
	E-learning platform of the "Grigore T. Popa" University of Medicine and Pharmacy Iași (in Romanian, English and French) for bachelor students, master and PhD students and for training of medical doctor and pharmacists (residents) (http://www.umfiasi.ro/ProgrameEuropene/Pages/E-learning.aspx)				
Concluding remarks issue 4	Please provide any concluding remarks you may have concerning the implementation of issue 4, which corresponds to objective (d) under the Strategy, namely, to ensure that adequate tools and materials for ESD are accessible.				
	Please address in particular the following questions:  - Which actions and/or initiatives have been particularly successful and why?  - What challenges did your country encounter when implementing this objective?  - What other considerations have to be taken into account in future ESD implementation concerning this objective?				
Issue 5.	Promote research on and development of ESD				
If necessary, provide	e relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).				
Indicator 5.1	Research <sup>24</sup> on ESD is promoted				
Sub-indicator 5.1.1	Is research that addresses content and methods for ESD <sup>25</sup> supported?				
Yes 🛛 No 🗌	Please specify in particular the most important outcomes of supported research.				
	Research for ESD is partially addressed by  • National Scientific Research Institute for labour and social protection				

<sup>24</sup> These include support from various sources, such as State, local authorities, business and non-governmental organizations or institutions.

E.g., concepts; formation of attitudes and values; development of competencies, teaching and learning; school development; implementation of information communications technology; and means of evaluation, including socioeconomic impacts.

National Research and development institute of occupational safety - "Alexandru Darabont"

Indirectly via the missions of some R&D organizations that include the policy for human resources on sustainable development issues:

- with activity oriented on environmental protection: National Institute for Reseach and Development ECOIND, GEOECOMAR (R&D institute focused on geology, geophysics and geoecology with an emphasis on aquatic, marine, delta and fluvial environments), R&D Institute Danube Delta, R&D Institute Grigore Antipa (Constanta), R&D Institute for Environmental Protection, R&D Institute for Soil Science, Agrochemistry and Environment
- with energy-oriented activity: ICEMENERG (Energy Institute), ICPE-CA (Electrical Engineering), ICSI Râmnicu Valcea (cryogenic and isotopic technologies)

As for R&D in universities, in order to promote the technological transfer potential the USAMV Cluj-Napoca became a partner in several innovative clusters, with adjacent and interesting objectives for the university, namely: The Advanced Materials, Micro and Nanotechnologies Association - ADMATECH: the objective of which is to stimulate innovative activity by promoting the sharing of equipment and knowledge sharing in the field of advanced materials, micro and nanotechnologies, innovative processes and products such as and technology transfer. Partners: Technical University of Cluj-Napoca, National Institute for Research on Isotopic and Molecular Technologies Development - INCDTIM, University of Medicine and Pharmacy "Iuliu Haţieganu" Cluj-Napoca, Babeş-Bolyai University, BETAK SA"Transylvanian tastes" cluster - emerging cluster in the following fields: gastronomy - culinary art, nutrition - health, maintenance - treatment, design - ambient, life style, research - innovation, life sciences, supporting the participation of freelancers, entrepreneurs, small and medium-sized enterprises (SMEs) and R & D-innovation units in innovative projects concerning the development and introduction of new technologies and living standards. Partners: APM (Association of Workers and Craftsmen Cluj), ARIES Transylvania, Transylvania Business Center, Association of Business Women (AFA) Cluj. AgroTransilvania Cluster (Cluster Agro-Food-Ind Napoca). The mission of the Agro-Food-Ind. Napoca Cluster is to promote collaboration and cooperation between business entities, the agro-industrial sector, academia and research, as well as encouraging the competitive restructuring of the sector and ensuring participation in multiple national, international. Partners: Economic agents, RDI organizations, Public institutions. Cluster "Cluj IT". The Cluj IT Cluster's ambition is to increase the competitiveness of the IT sector and to position the Cluj IT brand and, implicitly, Romania, as a provider of renowned software solutions in Eastern Europe. Partners: Economic agents, RDI organizations, Public institutions. Danube Transfer Center Cluj-Napoca. The DTC Cluj-Napoca objectives are: encouraging and supporting a culture of communication and cooperation between universities and companies at organizational and individual level; Facilitate the development of solutions for specific issues (especially for SMEs) through innovation, knowledge transfer and technology transfer, between academia and the socio-economic environment; Providing fast access to transnational and international R & D partnerships and innovation projects. Partners: Technical University of Cluj-Napoca, Iuliu Hațieganu University of Medicine and Pharmacy Cluj-Napoca, Babeş-Bolyai University, IPA - CIFATT SA.

In the period 2017-2020 at the USAMV Cluj-Napoca the following strategic goals are defined in the research-development-innovation activity: Increasing the quality and the number of scientific papers, patents for inventions, participation in scientific manifestations in the country and abroad; research and consultancy at the laboratory / center / institute level. USAMV Cluj-Napoca, through the research directions approached is directly interested in the promotion of inventions resulting from the activation of research and development. The procedure established by the University's Technology Transfer Center is used to identify inventions within the USAMVCN.

CEMEX - "Grigore T. Popa" University of Medicine and Pharmacy from Iasi, is the beneficiary, of the project "Advanced Center for Research and Development in Experimental Medicine - CEMEX", starting with 13.03.2014, co-financed by the European Regional Development Fund, priority axis 2 "Competitiveness through Research, Technological Development and Innovation" 2.2.1 - "Development of the existing R & D infrastructure and creation of new infrastructure", based on the financing contract no. 635 / 12.03.2014, code SMIS-CSNR 48880, concluded with the Ministry of National Education as an Intermediate Body on behalf of and for the Ministry of European

Funds as Managing Authority for the Sectorial Operational Program "Increasing Economic Competitiveness".

The total value of the project was 30,883,856 lei, of which the non-reimbursable financial assistance is 25,000,000 lei, granted as follows: 21,315,000 lei from the ERDF and 3,685,000 lei from the national budget.

The project is being implemented in Iasi and was opened in June 2016. The *overall objective* of the project: to increase the quality and efficiency of R & D in the medical field in order to improve health services and promote economic competitiveness with impact in the pharmaceutical industry. (http://www.cemex.umfiasi.ro/#) SOD Health and wellness

1) Online courses with videos for the field of veterinary communication dealing with prevention, diagnosis and treatment of diseases transferable from animals to humans

Ref. no: 2016-1-RO01-KA203-024732 (http://zoeproject.eu/)

Coordinator: University of Veterinary Medicine "Ion Ionescu de la Brad". Partners: "Grigore T Popa" University of Medicine and Pharmacy Iaşi, "Alexandru Ioan Cuza" University, EuroEd (NGO) (Romania), University of Zagreb - Faculty of Veterinary Medicine (Croatia), Vilniaus kolegija / University of Applied Sciences, Soros International House (Lithuania), Instituto Zooprofilattico Sperimentale de ll'Abruzzo e del Molise "G. Caporale" di Teramo, Pixel Associazione, Connectis (Italy). Period: 2017-2019.

Project brings together 5 educational sectors, all with impact in 5 different end beneficiaries groups

SOD: Gender equality, Health and wellness

2) Project: Lights, camera and action AGAINST DATING VIOLENCE (Lights4Violence) (http://www.lights4violence.eu/)

**Period:** 2015-2017

Coordinator: ALICANTE UNIVERSITY (Spain)

Partners: INSTITUTO DE SALUD CARLOS III (Spain, MAIEUTICA COOPERATIVA DE ENSINO SUPERIOR CRL (Portugal), WYZSZA SZKOLA EKONOMII I INNOWACJI W LUBLINIE (Poland), LIBERA UNIVERSITA MARIA SS. ASSUNTA DI ROMA (Italy), GRIGORE T. POPA UNIVERSI OF MEDICINE AND PHARMACY IASI (Romania), CARDIFF METROPOLITAN UNIVERSITY (UK)

#### Abstract

This project is focused on promoting adolescents' capabilities to improve their intimate relationships with their peers through different activities that aim to: 1) Enable adolescents to acknowledge IPV-related protective factors that are present in themselves, their families, the school and other closed settings, and to know how to properly use them, 2) Contribute to education and awareness-raising about the importance of positive interpersonal relationships based on self-esteem and trust, 3) Endorse adolescents in challenging sexist and tolerant attitudes towards gender-based violence and dating violence, 4) Promote skills to manage problems and conflicts through interpersonal communication, mediation and negotiation among youth, and 5) Empower young people to claim their rights and those of their peers to be held in esteem and to protect themselves from at-risk or abusive relationships.

Main Activities • Seminar with teachers: "Promoting Protective Assets Related to Violence Together". • Workshop with adolescents: "Filming Together to See Ourselves in a New Present". • Short film exhibitions with participants, their families, authorities and other stakeholders. • Teaching guides for the use of short films. • Computer-based evaluation system. • International Final Conference: "Dating Violence and the Role of Education

Type and number of persons benefiting from the project 600 to 700 adolescents (boys and girls), aged 14 to 15 years, enrolled in secondary education schools from Alicante (Spain), Rome (Italy), Cardiff (UK), Iasi (Romania), Porto (Portugal) and Lublin (Poland).

Expected results: 1) Increased adolescent awareness about the importance of positive interpersonal relationships based on esteem and trust; 2) Improved adolescent attitudes against sexism, intolerance towards intimate partner violence and other forms of violence against peers;

- and, 3) Improved adolescent skills for managing conflicts through interpersonal communication, mediation (https://ieg.ua.es/en/investigacion/proyectos/lights-camera-and-action-against-dating-violence.html)
- 3) Project: Promoting implementation of recommendations on policy, information and data for rare diseases (RD-ACTION) (http://www.rd-action.eu/wp-content/uploads/2016/05/RD-ACTION leaflet0516web.pdf)

Coordinator: Institut National de la Santé et de la Recherche Mèdicale (INSERM), France

Partners from 24 countries (from Romania "Grigore T Popa" University of Medicine and Pharmacy Iași)( http://www.umfiasi.ro/Cercetare/Granturi/Pages/ProiecteInternationale.aspx)

Period: June 2015-May 2018

The project had 34 beneficiaries and 30 collaborating partners from 40 countries.

**Brief presentation:** the project "work on priority issues for people living with rare diseases by implementing the actions identified in the European Council Recommendation on an action in the field of rare diseases. Ensure the *sustainability of these actions and supportive work* of the European Commission Expert Group on rare Diseases" (3<sup>rd</sup> objective of the project). Related with activities, WP2, *Communication*: "disseminate diseases-related information...and facilitate the integration of EU developments in national systems through European national workshops. *Promote sustainable health systems for rare diseases*".

WP 6 – *Policy Development*: support the development of new policy guidance in the field of rare diseases, on a broad range of topics, for delivery to the commission Expert Group on Rare Diseases, the Member States, and all relevant stakeholders. Develop the 'State of the Art of Rare Diseases Activities in Europe', into a dynamic, web-based resource, to inform rare diseases stakeholders". (source: http://www.rd-action.eu/wp-content/uploads/2016/05/RD-ACTION leaflet0516web.pdf)

# 4) Project: Professional Counselling for Medical Students and Integrated Program of Practice in the Field of General and Dental Medicine

A project co-financed by the European Social Fund, through the Regional Operational Program "Development of Human Resources" 2007 – 2013, Priority axis 2 "The correlation between the life-time learning and the labour market", Major intervention field 2.1 "Transition from school to active life",

Contract identification number: POSDRU/160/2.1/S/139881

Coordinator: Grigore T. Popa University of Medicine and Pharmacy Iasi

5) Project: The prevention of school dropout and counselling in choosing the right career path for students in the 1<sup>st</sup> year at Dental Medicine and Dental Technique

Project belonging to the Romanian secondary education projects - ROSE

Contract no. 28/SGU/NC/I from 17.10.2017

Beneficiary: Grigore T. Popa University of Medicine and Pharmacy Iasi

**General objective:** The improving of transition from high school to the academic education and the increasing of degree of graduates in the first year of academic education within the institutions financed through the project.

At the "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine of Iaşi, or where the university is partner the following R&D activities occurred:

- The founding of the Institute of Research for Agriculture and Environment, coordinator Prof. dr. Gerard Jităreanu (2015, from European funds, http://icamiasi.ro/)

the creation of the first Regional Cluster for Research, Innovation and Technological Transfer in Agriculture and Food Safety, coordinator

56	Prof. dr. Vasile Vîntu (http://www.uaiasi.ro/index.php?lang=ro&pagina=pagini/4_CITTASA.html).  - Innovative technologies and equipment for implementation of modern concept of fertigation in irrigated agriculture – FERTIRIG, Contract No: 158/2014 Submission ID: PN-II-PT-PCCA-2013-4-0114, cordinator Prof. dr. Ioan Ţenu (http://www.ihp.ro/fertirig/objectives.htm)  - Using renewable energy resources for increasing the energy independence of mini-greenhouses, ENERGSER, PN-II-PT-PCCA-2013-4-0221, Contract no.: 67/01.07.2014, coordinator University Politehnica of Bucharest, USAMV Iași -partner, coordinator Prof. dr. Neculai Munteanu (http://ccdsb.pub.ro/energser.htm).  - Institute for Nuclear Research (IUCN) in Dubna (Moscow region), UASMV Iași-partner, Prof. dr. Liviu Miron, coordinator, 04-4-1069-2009/2011, 2011-2017 (http://www.nipne.ro/international/cooperations/jinr.php).  - The Regional Center for Advanced Research for Emergent Diseases, Zoonoses and Food Safety, ROVETEMERG, POC 143/13.10.2016 ID P-36-598 Cod SMIS 107563, 2016-2019, coordinator Prof. Dr. Gheorghe Savuta, USAMV Iași (http://www.uaiasi.ro/POC/ROVETEMERG/).
Sub-indicator 5.1.2	Does any research evaluate the outcome of the implementation of the UNECE Strategy for ESD?
Yes 🛛 No 🗌	Please specify which subjects were investigated and list major reports.  Research is evaluated by institutional self reports.
Sub-indicator 5.1.3	Are post-graduate programmes available: (1) On ESD: <sup>26</sup> (a) for the master's level?; (b) for the doctorate level?; (2) Addressing ESD: (a) for the master's level?; (b) for the doctorate level?
(1)	Please specify what programmes are available and list the most important academic dissertations that address ESD.
(a) Yes ⊠ No ☐ (b) Yes ⊠ No ☐ (2) (a) Yes ⊠ No ☐	At the level of Ministry of Research and Innovation, there is the national RD&I Plan 2015-2020, Programme Development of the national RD system, Subprogramme 1.1 Human resources, instruments, that supports:  • Postdoctoral Research Projects • Research projects to stimulate young independent teams • Awarding Research Results – articles or patents
(b) Yes ⊠ No □	At the University of Agriculture and Veterinary Medicine of Cluj- Napoca the specializations covering ESD are:  Organic agriculture  Natural and agro-touristic resources in mountain area  Rural development  Plant protection  Agriculture, climate changes and food security  Biology of agroecosystems  Protection of natural and anthropic systems  Agribusiness

<sup>&</sup>lt;sup>26</sup> ESD is addressed by substance and/or by approach.

- Agrofood economy
- Biodiversity and biopreservation
- Genetic engineering and plant breeding
- Technology of special wines and derivative products production and exploitation
- Agribusiness
- Forest Ecosystems Management
- Animal husbandry management and aquaculture
- Management of animal product quality
- Applied biotechnologies
- Food quality management (English: Food Quality Management)
- Processing systems and animal product quality control
- Food security and consumer's protection
- Gastronomy, Nutrition and Food Dietetics

### At the Grigore T Popa University of medicine and Pharmacy Iași:

1) (a) Master: Management of health services in the medical-pharmaceutical field, by approach, as follows:

2 years master, 120 credits

Topics Ist year relevant for *health promotion* (Thematic Areas for Education for Sustainable Development-Theme 7 – UNESCO)

- Phenomena of Positive Influence on Population Reproduction (SOD health and wellness)
- Phenomena of Negative Influence on Population Reproduction (SOD health and wellness)
- Health education and health promotion

Topics for II<sup>nd</sup> year relevant for *health promotion* 

- Vulnerable groups in public health
- Management of human resources in the sanitary field
- Ethics and legislation
- Ethics and academic integrity
- b) PhD students training supported by projects that offered the optimum resources for ESD substance through the objectives and activities of those projects.

(http://www.umfiasi.ro/ScoalaDoctorala/bursedoctorale/Pages/default.aspx)

### 2. b) Doctorat level

For PhD training in the last years in "Grigore T. Popa" UMP Iaşi, different themes of doctoral thesis have approached to ESD domain as: prevention of obesity, identification of risk factors and their prevention for chronic diseases (cardiovascular, diabetes, inflammatory bowel diseases, hypertension etc.), the improvement of health care services in Romania, themes dedicate to different populations with high risk factors (geriatric population, persons from penitentiaries)

Below there are a few examples of doctoral thesis from the last 4 years that are related with ESD:

#### 2017 - 2018

- 1. Studies regarding the impact of communication in the healthcare system
- 2. Non-invasive assessment of non-alcoholic fatty liver disease in morbid obese patients
- 3. Epidemiological, clinical and prognostic aspects of celiac disease
- 4. The contribution of the infectious and non-infectious factors on the progression of atherosclerosis with impact on the quality of life among

55	the studied population  2016 – 2017  1. Determinants of subclinical atherosclerosis in overweight patients  2. Non-alcoholic fatty liver disease, type 2 diabetes mellitus and cardiovascular risk  3. Epidemiological and clinical aspects of <i>Clostridium difficile</i> infection in inflammatory bowel disease
	At the "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine of Iaşi Masters' level, the following masters are specifically on SD:  • Faculty of Agriculture: Management and conservation of soil; Organic farm technologies; Expertise on food processing; Food safety and consumer protection; Advanced processing systems and quality control of agroalimentary products.  • Faculty of Horticulture: Ecological horticulture; Plant protection;  • Faculty of Animal Sciences: Animal nutrition and feeding; Quality and food safety management; Management of exploitations in aquaculture.  PhD theses address concrete issues of SD and propose solutions in this respect (Specializations and PhD Coordinators, http://www.uaiasi.ro/index.php?lang=en&pagina=pagini/7_domenii.html)
	All of the "Ion Mincu" University of Architecture and Urbanism Master Study Programmes are addressing sustainable development issues: Territorial Planning and Regional Development, Urban Mobility, Urban Management for Competitive Cities, Landscape and Territory, Urban Design, Urbanism and Public Policies. The doctoral schools with core subjects in the fields of Architecture and Urbanism, include themes that address ESD. Examples of PHD themes include: Monitoring of Sustainable Territorial Development, Instrument for better Governance; Urban Mobility from the Perspective of Smart Transport in the Context of Urban Development; Ecodistrict in the Perspective of Sustainable Development, The Relationship between Nature, Technology and the Built Environment; Models of Regional Development in the Context of a Circular Economy; Modelling and Integration of Environmental Risks in Territorial Development Strategies; Landscape of the Transition Area. Study of the Transition Area between the City and the Surrounding Area of Bucharest etc.
Sub-indicator 5.1.4	Are there any scholarships supported by public authorities for post-graduate research in ESD: (a) for the master's level; (b) for the doctorate level?
(a) Yes No 🗌	Please provide information on (a) and (b).
(b) Yes 🛛 No 🗌	Scholarships are offered by MoNE or through European funding for both master level and doctoral level, for coursework and/or research on SD. Student motilities within the EU are also possible through the Erasmus+ Programme, governed by an agency under MoNE's subordination. Likewise, abroad scholarships offered to Romanians are managed by another agency under MoNE's subordination, respectively the Agency for Credits and Scholarships.
	Scholarships are also awarded through the National RD&I Plan 2015-2020, Programme Development of the national RD system, Subprogramme 1.1 Human resources, instruments, managed by the Executive Unit for Financing Higher Education, Research and Development, institution subordinated to MoNE, like:  - Young researcher scholarship  - Scholarships "Stefan Odobleja"  - "Spiru Haret" Research Scholarships

Indicator 5.2	Development of ESD is promoted
Sub-indicator 5.2.1	Is there any support for innovation and capacity-building in ESD practice? <sup>27</sup>
Yes 🛛 No 🗌	Please specify what main projects were/are being implemented to that end.
	Additional support comes from the Executive Unit for Financing the Higher Education, Research and Innovation, from projects of the Ministry of Research and Innovation and its subordinated research institutes and from the European funding available for R&D. The recommendations from the RAQAHE external evaluation are also being taken into consideration.
	For instance, with European funding support, the NGOs REPER21 and FDSC have accredited a training programme dedicated to school teachers, "Development of life skills in the context of sustainable development" that is addressing ESD for the long-life learning programmes of teachers. Likewise, ONG21, another programme through which the national ESD plan is realized with the contribution of over 100 NGOs, is implemented by the same organizations with European funding support.
	USAMV Iasi organizes various annual student symposiums in support of the R&D in SD. (http://www.uaiasi.ro/index.php?lang=ro&pagina=pgini/simpozion-studentesc.html)  Faculty of Horticulture
	Symposium of HORTICULTURE AND ENVIRONMENTAL ENGINEERING: Horticulture – Science, Quality, Diversity and Harmony, (http://www.uaiasi.ro/simpozion_horti/2018-en/)
	Faculty of Animal Husbandry – Food Safety and Durable Development (http://www.uaiasi.ro/Zootehnie/en/symposium.html)
	Faculty of Veterinary Medicine (http://www.uaiasi.ro/congres/index.php?lang=en&pagina=home.html) The Congress "Life sciences, a challenge for the future",18-19.10.2018;
	(http://www.uaiasi.ro/congres/index.php?lang=en&pagina=home.html)
	Workshops, conferences, competitions (http://www.uaiasi.ro/index.php?lang=en&pagina=home.html) (http://www.uaiasi.ro/simpozion/index.php/lang=en&pagina=home.html)
	The Center for Research, Design, Building Evaluation and Consulting (CCPEC) of "Ion Mincu" University of Architecture and Urbanism is running research projects that address EDS.  Examples of project themes:
	• URBASRISK - Urban Blocks in Protected Central Areas Exposed to Multiple Hazards - Assessment, Mapping and Risk Reduction Strategy; Case Study Bucharest: the Area Destroyed by Communist Regime Demolitions;
	<ul> <li>Economic Coordinates and Dimensions of Social Cohesion in Sustainable Metropolitan Development;</li> <li>Technological Development and Urban Form - A Strategy of Sustainable Development for Cities of Romania for Adaptation to the Technological Impact - Illustration Studies Documentation studies (CNCSIS);</li> </ul>

<sup>&</sup>lt;sup>27</sup> Activities may include projects, action research, social learning and multi-stakeholder teams.

Indicator 5.3 Sub-indicator 5.3.1	<ul> <li>Methodology for Reconfiguring the Spatial Base of Territory Planning Plans for EU Integration CNCSIS);</li> <li>Methodology Framework for Elaboration of Territorial Strategic Planning Documents at National and Regional Level, According to European Practices in the Field etc.</li> <li>Also, currently "Ion Mincu" University of Architecture and Urbanism is part of VVITA project. VVITA is an Erasmus+ project in the field of Strategic Partnerships for higher education whose main objective is the development of Innovation, through cooperation and the exchange of good practices. VVITA theme is about Modernizing Learning and Teaching for Architecture through Smart and Longlasting Partnerships leading to sustainable and inclusive development strategies to Vitalize heritage Villages through Innovative Technologies.</li> <li>Dissemination of research results on ESD is promoted</li> </ul>
Sub-indicator 5.5.1	authorities and stakeholders?
Yes ⊠ No □	Please specify and provide information about where published research and dissertations are accessible.  The Executive Unit for Financing the Higher Education, Research and Innovation, the National Council of Scientific Research, the National Council for Financing the Higher Education.  Likewise, all professors from the universities publish periodically their researches results in Romanian journals and abroad publications. https://uefiscdi.ro/publicatii-1  http://www.cncs-nrc.ro/  http://www.cercetare.usamvcluj.ro/wordpress/documente-publice/ https://www.revmedchir.ro/index.php/revmedchir/about http://www.uaiasi.ro/index.php?lang=en&pagina=pagini/9_editura.html http://www.uaiasi.ro/CERCET_AGROMOLD/en-home http://www.uaiasi.ro/revagrois/index.php?pagina=⟨=en http://www.uaiasi.ro/revista_horti-en/ http://www.uaiasi.ro/zootehnie/revista.html http://www.uaiasi.ro/simpozion_med/Revista/index-en.php
Sub-indicator 5.3.2	Are there any scientific publications: (a) specifically on ESD?;(b) addressing ESD?
(a) Yes 🛛 No 🗌	Please name the major publications for (a) and (b).
(b) Yes ⊠ No □	<ul> <li>USAMV Cluj Napoca:</li> <li>Notulae Botanicae Horti Agrobotanici Cluj-Napoca</li> <li>Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Agriculture</li> <li>Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Horticulture</li> <li>Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Animal Science and Biotechnology</li> <li>Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Veterinary Medicine</li> </ul>

E.g., conferences, summer schools, journals, periodicals, networks.
 E.g., the "participatory approach"; links to local, regional and global problems; an integrative approach to environmental, economic and social issues; an orientation to understanding, preventing and solving problems.

- Bulletin of University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca. Food Science and Technology
- ProEnvironment/ProMediu
- Agricultura revistă de ştiință şi practică agricolă
- Notulae Scientia Biologicae
- Hortus Agrobotanicus Napocensis Index Seminum
- Clujul Medical Veterinar
- Scientia Parasitologica
- Hop and Medicinal Plants

#### "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine of Iași (2016-2017)

-Bucur D., 2017 - *Current Perspective to Predict Actual Evapotranspiration*, InTech, Rijeka, 114 pages, ISBN 978-953-51-3173-1. (https://www.intechopen.com/books/current-perspective-to-predict-actual-evapotranspiration).

-Roșca Radu, Cârlescu Petru, Țenu Ioan, 2017 - Food Chilling Methods and CFD analysis of a Refrigeration Cabinet as a Case Study. în Refrigeration (cap. 3, pp. 45-73), InTech, Janeza Trdine 9, 51000 Rijeka, Croatia, ISBN 978-953-51-5417-4

-Cazacu Ana, Chapter 10 (p. 159-174) - Role of UV-VIS Radiations in Analysis of Polymer Systems for Drug Delivery Applications in Electromagnetic Radiation in Analysis and Design of Organic Materials: Electronic and Biotechnology Applications, edited by Dorohoi, D.O., Barzic, A., Aflori, M., Taylor & Francis Group, CRC Press, January 25, 2017, ISBN: 978-1-4987-7580-9, 233 Pages.

http://dx.doi.org/10.1201/9781315164984 https://www.crcpress.com/Electromagnetic-Radiation-in-Analysis-and-Design-of-Organic-Materials-Electronic/Dorohoi-Barzic-Aflori/p/book/9781498775809

-Grădinaru A. C., 2017 - Antibiotics – between usefulness and factors of environmental pressure due to their residues in milk, In: A.Ozunu, I.A.Nistor, D.C.Petrescu, P.Burny, & R.M.Petrescu-Mag, eds., Resilient Society. Environment and Human Action Series, Gembloux, Belgium; Cluj-Napoca, Romania: Les Presses Agronomiques de Gembloux (ISBN 978-2-87016-148-7); Bioflux (ISBN 978-606-8887-08-1), pp. 69-79.

Sîrbu C., Oprea A., Doroftei M. 2016 - *Invasive terrestrial plant species in Romania*. pp. 17-29; *Management and control of invasive terrestrial plant species in Romania*. pp. 103-112, In: Dumitrascu M. & Grigorescu I. (eds), Invasive terrestrial plant species in the Romanian protected areas. Bucuresti: Edit. Acad. Române, ISBN 978-973-27-2647-1.

-Ungureanu Elena, 2017 - *Coloizi în industria alimentară*, Editura PIM, Iași, 171 pagini, ISBN 978-606-13-3777-4

-Beschea I. S., 2017 - Toxicologie veterinară. Editura "Ion Ionescu de la Brad", 212 p ISBN 978-973-147-256-0

-Olimpia C. Iacob, Wael El-Deeb, Gheorghe Solcan and Geta Pavel. 2016 - Parasite burdens in

Carpathian goats in Romania and associated haematological and biochemical parameters. In

FAO BOOK –Sustainable goat breeding and goat farming in Central and Eastern European countries. pp: 227-235, ISBN: 978-92-5-109123-4, Edited by Sandor Kukovics, Rome-Italy

(chapter);

-Harsimran Kaur Gill, Gaurav Goyal, Ugur Gozel, Cigdem Pojar-Fenesan, Ana Balea, Than-Danh Nguyen, Chi-Hien Dang, Cong-Hao Nguyen, Chan Im, **Vasile Stoleru**, Vincenzo Michele Sellito, Yelitza Coromoto Colmenárez, Carlos Vásquez, Natalia Corniani, Javier Franco, TomislavCurkovic, Vladimir Puza, ZdenekMracek, JiříNermut', 2016 – *Integrated Pest Management (IPM): Environmentally Sound Pest Management, Chapter 2: Pest Control in Organic Systems*, Editura Intech, Print ISBN 978-953-51-2612-6, http://dx.doi.org/10.5772/64457.

-Ailincai Costică, 2016 - Mijloace agrotehnice pentru creșterea producției și ameliorarea fertilității solului, Edit. "Ion Ionescu de la Brad",

62	220 pag, ISBN 978-973-147-216-4.
Concluding remarks on issue 5	Please provide any concluding remarks you may have concerning the implementation of issue 5, which corresponds to objective (e) under the Strategy, namely, to promote research on and development of ESD.
	<ul> <li>Which actions and/or initiatives have been particularly successful and why?</li> <li>What challenges did your country encounter when implementing this objective?</li> <li>What other considerations have to be taken into account in future ESD implementation concerning this objective?</li> </ul>
	Increasing the quality and number of scientific papers, patents for inventions, participation in scientific events in the country and abroad. Consolidation of existing research fields within the USAMV Cluj-Napoca and definition of new research areas within the intelligent specialization directions promoted through the European Research Strategy 2014-2020 (Bioeconomy, Information and Communication Technology, Space and Security, Energy, Environment and climate change, Eco-nano-technologies and advanced materials), complemented by the three priority public domains (Health, Heritage and Cultural Identity). USAMV Cluj-Napoca is concerned both with providing services to beneficiaries with a purely entrepreneurial perspective, as well as with providing innovative services to the community so that inventions become innovations. The research units (laboratories, centers, institutes) will submit the analysis / concourse offers according to a procedure established by the Innovation Development Research Council. The Technology Transfer Center at USAMV CN will present patents with innovation potential and will be responsible for the effective implementation of innovative services to the community.
Issue 6.	Strengthen cooperation on ESD at all levels within the ECE region
If necessary, provide	e relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).
Indicator 6.1	International cooperation on ESD is strengthened within the ECE region and beyond
Sub-indicator 6.1.1	Do your public authorities cooperate in or support international <sup>30</sup> networks on ESD?
Yes ⊠* No □	Please specify concrete networks and explain who supports these networks.
Indirectly	University of Agriculture and Veterinary Medicine of Cluj- Napoca:  Establishment of regional and European partnerships for accessing Horizon 2020 projects within the Intelligent Specialization Directorates promoted through the European Research Strategy 2014-2020 (Bio-Economy, Information and Communication Technology, Energy and Environment and Eco-technologies), complemented by the 3 priorities of public interest (Health, Space and Security and Patrimony);  Development of applied research, innovation and technology transfer through:  -building and operationalizing a communication platform between the university and the economic environment to facilitate rapid interaction;

<sup>&</sup>lt;sup>30</sup> In this context, international associations, working groups, programmes, partnerships, etc., means those at the global, regional and subregional levels.

construction of RDI partnerships and technology transfer with the private environment; value and diversify partner-based university partnerships on a project basis with European and Euro-Atlantic partners; valorisation of research results through an entrepreneurial approach (eg. marketable patents, access to national research programs and research valorisation programs such as the Competitiveness Operational Program); creation and promotion of forms of professional training and research under the form of tripartite partnerships (eg university - master / doctoral student / post-doctoral student - economic agent) and attracting private scholarships for research; Grigore T Popa University of medicine and Pharmacy Iași The university is a member in ORPHEUS (Organization for Ph. D. Education in Biomedicine and Health Sciences in the European System), CIDMEF (Conférence Internationale des Dovens et des Facultés de Médecine d'Expression Francaise) and CIDCDF (La conférence internationale des Doyens des facultés de chirurgie dentaire d'expression totalement ou partiellement française). CEMED2018 is co-financed by the Institutional Development Fund 2018, "Improving the quality of teaching activity, including respecting academic ethics and deontology. "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine of Iasi Project LIFE, High resolution study of vinicultural adaptation and mitigation scenarios, in the current context of climate change (http://www.adviclim.eu/partners/) Sub-indicator 6.1.2 Do educational institutions or organizations (formal and non-formal) in your country participate in international networks related to ESD? Yes ⊠ No □ Please specify. List major networks. NHF (New Horizons Foundation) is part of FOND – the Romanian platform of NDGO, and actively participates in the Global Education Hub organised under the umbrella of FOND. FOND is member of CONCORD, which debates GE/ED topic in the HUB 4, focusing on issues that are relevant at the European and international level. Also, NHF has "exported" its IMPACT club program in more the 20 countries, through 3 main partners – World Vision, Young Life and Resonate Global, and actively coaches/participates in discussions about the relevance and particularities of the sustainable development topics for young people and communities across the globe. The current cross boarder cooperation projects of the "Grigore T Popa" University of medicine and Pharmacy Iași are: Education (non-formal education) and health and wellness 1) Creation of a regional university network in the field of health, nutrition and food security (Original name: Création d'un réseau universitaire régionale dans le domaine de la santé, la nutrition et la sécurité alimentaire). Members: "Grigore T. Popa" University of Medicine and Pharmacy Iaşi, University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, + Medical University of Ploydiy, + Technical University of Moldoya, + Dunărea University of Jos de Galati, University of Food Technologies, State University of Medicine and Pharmacy "Nicolae Testemitanu" of Moldova Republic, Technical University of Cluj-Napoca, University of Bucharest, University of Medicine and Pharmacy "Iuliu Haţieganu" of Cluj-Napoca, University of Agricultural Sciences and Veterinary Medicine Ion Ionescu de la Brad de Iași, + Babeș-Bolyai University. Axis (s)+ Development, + Training, + Research (2017-2019) Period: 2017-2019, Budget UMP Iasi: 6000 Euro, Funding: AUF (Agence Universitaire de la Francophonie) 63 (https://www.auf.org/nos-actions/toutes-nos-actions/creation-dun-reseau-universitaire-regional-dans-le-domaine-de-la-sante-la-nutrition-et64

la-securite-alimentaire/)

#### Objectives:

- Work with health stakeholders to address the issue of nutrition and beneficiaries through seminars, seminars, training, brochures, leaflets, media, etc.;
- Participate in field activities (open houses, information days, etc.)
- Raise public awareness, to act on environmental and public health factors through an appropriate legislative framework.

**PERIOD**: 2017 - 2019

TARGET AUDIENCE: Students, teachers and researchers from Central and Eastern Europe

COUNTRY OF INTERVENTION: Countries in Central and Eastern Europe

Device: *The University Agency of La Francophonie* (AUF) in Central and Eastern Europe supports the creation of a regional network in the field of nutrition, health and food security. A Scientific Committee was formed and had its first meeting in June 2017.

Thematic areas: Biomedical; Socio-economic and territorial, public policies; Food Technolog; Ecological agriculture.

Action Directions: Education-Training; Research-innovation; Mobilities, colloquiums, publications; Transversals (digital platform, others). ROLE OF AUF IN THIS ACTION: Coordination of the activities included in the action plans, proposed by the Scientific Committee and approved by the Steering Committee.

FINANCIAL PARTNERS:

Universities members of the project consortium:

- in Romania: "Babes-Bolyai" University of Cluj-Napoca, "Dunarea de Jos" University of Galati, University of Bucharest, West University of Timisoara, University of Medicine and Pharmacy "Grigore T. Popa" of Iasi, University of Medicine and Pharmacy "Iuliu Hatieganu" of Cluj-Napoca, University of Agricultural Sciences and Veterinary Medicine "Ion Ionescu de la Brad" of Iasi, University of Agricultural Sciences and Veterinary Medicine of Cluj-Napoca, University of Agricultural Sciences and of Veterinary Medicine of Bucharest, Technical University of Cluj-Napoca
- in Moldova: Nicolae Testemitanu State University of Medicine and Pharmacy, Technical University of Moldova
- in Bulgaria: Plovdiv Medical University, Plovdiv University of Food Technology

OPERATIONAL PARTNERS:

Promoting institutions, embassies of Francophone countries in the region, companies, Ministries of Education of the region

**Budget**: 120 000 euros Main expected results:

- Networking of French-speaking researchers in the region through the creation of a scientific community in the field;
- Creation of a regional training platform;
- Creation of consortia to propose European projects.

PERIOD: 2017 - 2019

CONTACT: nutrition-eco@auf.org

TO KNOW MORE: https://reseau-sain.org/

2) Massive open online courses with videos for palliative clinical field and intercultural and multilingual medical communication. Ref. no.: 2014-1-RO01-KA203-002940 (http://medlang.eu/)

Parteners: "Grigore T. Popa" University of Medicine and Pharmacy, Transilvania University, EuroEd, IRO Iasi (Romania), Karel De Grote Hogeschool Katholieke Hogeschool (Belgium), Universidad Europea De Madrid SL (Spain), Azienda Sanitaria Locale TO3, Pixel Associazione Culturale, Connectis,(Italy)

NEW SERIES: HOSPICE AND PALLIATIVE CARE IN EASTERN AND CENTRAL EUROPE Romania is one of four countries leading an innovative project to improve palliative care education in Europe that is available in six languages.

Medlang is a Massive Open Online Course (MOOC), funded by the European Commission, and is a practical answer to the context of the

$\pm$
$\Box$
Ę
Ò
$\pm$
P
$\triangleright$
i
3
20
$\equiv$
8
4

ageing population in Europe. Using explanatory videos in six languages, the course aims to improve education and training in palliative care through intercultural and multilingual medical communication. The needs of the beneficiaries targeted, and then involved in the project, showed that qualified medical assistance for palliative medicine in the partner countries was scarce. Also, in many situations, palliative healthcare assistants acquired basic knowledge and skills on the job. The need to train qualified medical staff to meet the growing demand of assistance in the field of palliation in Europe is a must. How to do this in a qualified, standardised way – and with knowledge and skills aligned to the most recent research findings in the field – was the practical challenge to be met and fulfilled by the project. **Target groups**: MedLang addresses the community at large. As well as health and social care practitioners, lecturers and medical students, it is aimed at language teachers working in medical institutions, volunteers, education centers and companies involved in social corporate responsibility (https://eapcnet.wordpress.com/2018/07/02/medlang-palliative-care-new-digital-tool-to-advance-education-and-training-in-europe/). **Period**: 2014-2017 **Budget**: Total 312.220 euro / UMP Iasi 60.772 euro Other programmes and networks include: -Erasmus+; -LIFE; Institute for Nuclear Research (IUCN) in Dubna; Réseau régional francophone sur la santé, la nutrition et la sécurité alimentaire (SaIN), coordinator Lect. dr. Antoanela Patraș, USAMV Iași https://reseau-sain.org/); CASEE (The ICA Regional Network for Central and South Eastern Europe (http://www.ica-casee.eu/) EAEVE (The European Association of Establishments for Veterinary Education (https://www.eaeve.org/); USAMV Iași is founding member of IAESTE Romania (The International Association for the Exchange of Students for Technical Experience) (https://iaeste.org/); RIFEFF (Réseau International Francophone des Etablissements de Formation de Formateurs) (http://www.rifeff.org/membres dynamique.php). ECLAS, LE NOTRE, UNISCAPE, AESOP, RIBA, EFLA/IFLA, ECTP, AEEA Sub-indicator 6.1.3 Are there any state, bilateral and/or multilateral cooperation mechanisms or agreements that include an explicit ESD component? Yes ⊠ No □ Please specify and list the major ones. In December 2016, Romania participated in Nicosia, Cyprus, at the Ministerial Conference on the Action Plan for Education for Sustainable Development in the Mediterranean. Mediterranean Strategy on Education for Sustainable Development, that serves as a flexible framework, encourages countries of the Mediterranean, but also other countries, to develop and incorporate ESD into their formal, non-formal and informal educational systems. The strategy is compatible with the UNECE Strategy for Education for Sustainable Development. The Ministers of Education and delegations were invited to adopt an action plan for implementing the strategy. Additionally, Romania is part of the North-South Centre of the Council of Europe, that is a joint programme between the European Union (EU) and the Council of Europe to promote Global Development Education (GDE), bringing practitioners, educators and decision makers to pursue a cycle of regional seminars and follow-up meetings to promote and monitor the recognition and implementation of GDE in the Balkan, Baltic, South-East Europe and Mediterranean and Visegrad countries between 2016-2019. It started in 2016 and in 2017 Romania hosted it. It is also in line with the Council of Europe and UNESCO efforts to make progress towards Target 4.7 referring to Global Citizenship Education monitoring, in the framework of UN 2030 Agenda for Sustainable Development. At the next reunion, in Slovenia, in November 2018, approximately 45 practitioners, educators and decision makers from Bulgaria, Cyprus, Malta, Romania and Sloveniawil meet to monitor the level of implementation of the recommendations agreed during the SEE-Med Regional Seminar on GDE (Sofia,

66	Bulgaria, December 2016) and to update during the first follow-up meeting held in Bucharest in November 2017, in the field of GDE policy and curricula development, pedagogical support and advocacy, in accordance with the Zagreb Congress strategic recommendations.
	The Interreg V-A Romania-Hungary Programme carries on the financing of cross-border cooperation initiatives in the Romanian-Hungarian border area, with the support of European Union, through European Regional Development Fund and with the contribution of the Governments of both Romania and Hungary. The programme thematic objectives include Environment and Resource Efficiency, Sustainable Transport, Employment and Mobility, Social Inclusion, Combating climate change and Better Public Administration. One of the six components of the cooperation is Cooperating on risk prevention and disaster management. On the 2018 World Environment Day the "Green Corridor without Frontiers" project took place, where schools from Romania and from Csenger (Hungary), in partnership with NGOs, collected 21 bottles for the creation of a symbolic bridge over the Romanian river Somes.
	At the level of <b>higher education</b> , universities participate in ERASMUS+ mobilities. Additionally, they have their own inter-university agreements, like the ones of "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine of Iaşi (http://www.uaiasi.ro/index.php?lang=ro&pagina=pagini/5_acorduri_int.html), or the ones of <b>Grigore T Popa University of medicine and Pharmacy</b> Iaşi who cooperates with: Spain, Italy, UK, and Lithuania (http://aidpath.eu/?page_id=743) FP7-People-2013-IAPP Marie Curie, 77/2006, "Academia and Industry Collaboration for Digital Pathology (AIDPATH) (http://aidpath.eu/) Founded period: 01.11.2013 – 31.10.2017 Budget (UMP Iaşi): 108.528 euro
	Coordonator: Universitat de Castilla - La Mancha Partner: Regional Institute of Oncology Iași and <b>UMF Iași</b> (Romania), Loughbourgh University (UK), Vilniaus Universiteto Ligoninė Santaros Klinikos (Lithuania), Universita deli study di Udine (Italy).  Objectives:
	The AIDPATH project addresses digital pathology through a focused research, including research training aiming to knowledge sharing and career development in this emerging multidisciplinary field. AIDPATH will research and develop: a) state of the art medical image display technology for digital pathology, b) novel image analysis solutions and knowledge discovery tools for future pathology diagnosis and research and c) state of the art solutions for biomarker evaluation and quantification. The first application will be breast cancer, though the applicability of the implemented methods and tools to other major diseases will be analysed.
	Additionally, all mobility instruments below state education for research as common objective:  National RD&I Plan 2015-2020, Programme 1 Development of the national CD system, Subprogramme 1.1 Human resources, instruments  Mobility projects for researchers  Mobility projects for researchers with diaspora experience  Mobility projects for young scientists from the diaspora  National RD&I Plan 2015-2020, Programme 3 International cooperation, Subprogramme 3.1 Bilateral/multilateral  Instrument Mobility projects
Sub-indicator 6.1.4	Does your Government take any steps to promote ESD in international forums outside the ECE region?
Yes 🗌 No 🖂	Please list and describe.
	Not for the moment. However, starting with 1 <sup>st</sup> of January 2019 Romania will hold the presidency of the Council of the European Union for a period of six months. One of the main actions promoted by Romania is sustainable development, reduction of disparities, convergence, employment and social rights.

$ar{ar{ar{ar{ar{ar{ar{ar{ar{ar{$
$\Box$
Ę
Õ
$\pm$
Ţ
$\triangleright$
$\hat{\mathbf{C}}$
_
س
$\tilde{\mathbf{c}}$
9
8
Ž

Concluding remarks on issue 6	Please provide any concluding remarks you may have concerning the implementation of issue 6, which corresponds to objective (f) under the Strategy, namely, to strengthen cooperation on ESD at all levels within the ECE region
	Please address in particular the following questions:  - Which actions and/or initiatives have been particularly successful and why?  - What challenges did your country encounter when implementing this objective?  - What other considerations have to be taken into account in future ESD implementation concerning this objective?
Issue 7.	Foster conservation, use and promotion of knowledge of indigenous peoples, as well as local and traditional knowledge, in ESD

Provide relevant information on your country situation regarding this specific issue (up to 2,000 characters with spaces). Please be as specific as possible.

With a view to fostering conservation, use and promotion of knowledge of indigenous peoples, as well as local and traditional knowledge, in ESD we underline:

- The general provisions of the National Education Law referring to the principles which are governing Romanian education: of equity in access to education, respect for national cultural identity and for intercultural dialogue, conservation and promoting the of national identity and of cultural values of the Romanian people, recognising, conservation and ensuring rights for ethnic minorities with a view to development of their ethnic, cultural, linguistic and religious identity, social inclusion etc.
- According to the National Education Law no.1/2011, the national curriculum for primary and lower secondary education, is based on 8 domains of key-competences which determine the student's education profile, out of which relevant for this issue are: Romanian language and mother tongue communicate on competences for national minorities; social and civic competences; cultural expression competences;

We exemplify compulsory disciplines relevant for this issue: "Personal Development" (for primary education), "History" and "Geography" (for primary and lower secondary education), "Technological Education and practical activities" and "Counselling and Personal Development" (for lower secondary education)

-Curriculum development by each school, as optional curriculum, at all levels in pre-university education;

-Curriculum for the subject" Language and literature for mother tongue" are available in national minorities' languages (Hungarian, German, Russian, Turkish, RRomani, Polish etc.) with beginning of early childhood education till upper secondary education.

- Extracurricular activities on folklore, crafts and tradition preservation

Likewise, in this respect, the USAMV Iasi organizes:

- Folklore Festival at (www.uaiasi.ro/ro/files/promovare/.../2017-05-09 Festival.pdf);

International Student Folklore Festival at USAMV Iasi (www.uaiasi.ro/.../2018-05-17 Comunicat festival folcloric 2018.pdf);

-The ensemble "Mugurelul" UŞAMV Iaşi is present in Poland (www.uaiasi.ro/ro/files/.../2018-07-19\_Mugurelul\_Polonia.pdf);

-Christmas celebration (http://www.uaiasi.ro/medicina/files/evenimente/2017/Serbare-Craciun.png).

What role does this issue play in ESD implementation in your country? Please provide updated information to indicate changes over time.

Fostering conservation, use and promotion of knowledge of indigenous peoples, as well as local and traditional knowledge have an important role with a view to ESD implementation taking into account the key competences which determine the student's education profile included in the NEL: Romanian language and mother tongue communicate on competences, for national minorities, social and civic competences, cultural expression competences.

### Issue 8. Describe any challenges and obstacles encountered in the implementation of the Strategy

Provide relevant information on your country situation regarding this specific issue (up to 2,000 characters with spaces). Please be as specific as possible.

Please in particular discuss any challenges and obstacles encountered that were not yet mentioned in the concluding remarks on the implementation of the

Sategy's main objectives (issues 1–6).

### Issue 9. Describe any assistance needed in implementing the Strategy in your countries

Provide relevant information on your country situation regarding this specific issue (up to 2,000 characters with spaces). Please be as specific as possible.

## Appendix I (a)

### Indicator 2.1, sub-indicator 2.1.1

Please specify which key themes of SD are addressed explicitly in the curriculum/programme of study at various levels of formal education by filling in the table below. (Please tick ( ) relevant themes for each level. Use the blank rows to insert additional themes that are considered to be key themes in addressing learning for SD.)

Also, could you specify which specific themes are of critical importance in your country and why?

	ISCED Levels 2011												
Some key themes covered by sustainable development	0	1	2	25	3	35	4	45	5	55	6	7	8
Peace studies (e.g., international relations, security and conflict resolution, partnerships)		✓	✓		✓		✓				✓	✓	✓
Environmental ethics and philosophy		<b>√</b>	✓		✓						✓	<b>√</b>	<b>√</b>
Global citizenship, democracy and governance	✓	✓	✓		✓		✓				✓	✓	<b>√</b>
Sustainable lifestyles		✓	✓		<b>√</b>						✓	✓	✓
Human rights (e.g., gender and racial and intergenerational equity)	<b>√</b>	✓	✓		✓		✓				<b>√</b>	✓	✓
Poverty alleviation			√								<b>√</b>	<b>√</b>	✓
Cultural diversity	<b>√</b>	✓	✓		<b>√</b>						<b>√</b>	<b>√</b>	<b>√</b>
Gender equality			√		<b>√</b>						<b>√</b>	✓	✓
Biological and landscape diversity	<b>√</b>	✓	√		<b>√</b>						<b>√</b>	✓	✓
Environmental protection (waste management, environmental monitoring, risk assessment, etc.)	√	✓	✓		✓		✓				✓	✓	✓
Ecological principles/ecosystem approach		✓	✓		<b>√</b>		✓				<b>√</b>	<b>√</b>	<b>√</b>
Natural resource management (e.g., water, soil, mineral, fossil fuels)	✓	✓	✓		✓		✓				<b>√</b>	<b>√</b>	✓
Climate change and desertification		✓	✓		✓						✓	✓	✓

		ISCED Levels 2011											
Some key themes covered by sustainable development	0	1	2	25	3	35	4	45	5	55	6	7	8
Personal and family health (e.g., HIV/AIDS, drug abuse)	✓	✓	✓		√		✓				✓	✓	✓
Environmental health (e.g., food and drinking; water quality; pollution)	✓	✓	✓		√						<b>√</b>	<b>√</b>	<b>√</b>
Corporate social responsibility			<b>√</b>		✓		✓				<b>√</b>	<b>√</b>	<b>√</b>
Production and/or consumption patterns			<b>√</b>		✓						<b>✓</b>	✓	<b>√</b>
Economic growth and good jobs			<b>√</b>		✓		✓				<b>✓</b>	<b>✓</b>	<b>V</b>
Rural/urban development			<b>√</b>	ļ	✓			ļ		ļ	<b>✓</b>	<b>✓</b>	<b>V</b>
Oceans and sea			√		✓						<b>√</b>	✓	✓
Renewable energy		<b>√</b>	√		✓		✓				<b>√</b>	✓	<b>√</b>
Sustainable cities and communities			<b>√</b>		✓						<b>√</b>	✓	<b>√</b>
Culture's contribution to sustainable development		✓	√		√						✓	<b>√</b>	<b>√</b>
Total													
Other (countries to add as many as needed)													

*Note*: Your response will reflect the variety of ESD themes distributed across the ISCED levels. The distribution is more important than the raw number of ticks. The number of ticks may be used for your own monitoring purposes.

The scoring key for this table (maximum 153 ticks; "other" categories not counted) is:

	0–9	10–16	17–39	40–75	76–112	
Scale	A	В	C	D	Е	F

### Appendix I (b)

### **Indicator 2.1, sub-indicator 2.1.2**

Please specify the extent to which the following broad areas of competence that support ESD are addressed explicitly in the curriculum<sup>31</sup> or programme of study at various levels of formal education, by filling in the table below. (Please tick ( $\checkmark$ ) relevant expected learning outcomes for each level. Use the blank rows to insert additional learning outcomes (skills, attitudes and values) that are considered to be key outcomes in your country in learning for SD.)

### Table of learning outcomes

	ISCED Levels													
Competence	Expected outcomes	0	1	2	25	3	35	4	45	5	55	6	7	8
Learning to learn	- posing analytical questions/critical thinking?	/	/	/		1	,	/		✓	,	/	✓	<b>✓</b>
Does education at each level	- understanding complexity/systemic thinking?		1	/		✓	,	/		✓	ļ,	/	✓	✓
enhance learners' capacity for:	- overcoming obstacles/problem-solving?	/	1	/		1	,	/		✓	,	/	✓	1
	- managing change/problem-setting?		/	/							,	/	✓	✓
	- creative thinking/future-oriented thinking?	1	1	/		1					,	1	✓	✓
	<ul> <li>understanding interrelationships across disciplines/holistic approach?</li> </ul>	/	/	/		<b>√</b>					,	1	✓	1
	Total													
	- other? (countries to add as many as needed)													
Learning to do	- applying learning in a variety of life-wide contexts?	/	1	/		✓	,	/		✓		/	✓	✓
Does education at each level	- decision-making, including in situations of uncertainty?		1	/			,	1	ŀ	✓	,	/	✓	1
enhance learners' capacity for:	- dealing with crises and risks?		/	/							,	/	✓	1
	- acting responsibly?	1	1	1		1	,	/	,	1	,	/	✓	1
	- acting with self-respect?	1	/	/							,	/	✓	1
	- acting with determination?		/	1							,	/	✓	1
	Total													

<sup>31</sup> At the state level, where relevant.

					]	[SC]	E <b>D</b> I	Leve	ls				
Competence	Expected outcomes	0	j	2 2	25 3	3.	5 4	45	5	55	6	7	8
	- other? (countries to add as many as needed)												

						IS	CE	D L	evel	ls				
Competence	Expected outcomes	0	1	2	25	3	35	4	45	5	55	6	7	8
Learning to be	- self-confidence?	1	/	/		/						1	✓	<b>√</b>
Does education at each level enhance learners' capacity for:	- self-expression and communication?	/	/	/		/		/		/		1	1	1
1 7	- coping under stress?		/	/								1	1	1
	- ability to identify and clarify values?	/	/	/				/		/		✓	✓	1
	Total													
	- other? (countries to add as many as needed)													
Learning to live and work	- acting with responsibility (locally and globally)?	/	/	/		/		/		/		1	1	1
together  Does education at each level	- acting with respect for others?	/	/	/		/		/		/		1	1	1
enhance learners' capacity for:	- identifying stakeholders and their interests?		/	/								✓	1	1
	- collaboration/team working?	/	/	/		/		/		/		1	1	1
	- participation in democratic decision-making?	1	/	1								1	1	1
	- negotiation and consensus-building?		/	/		/						1	1	1
	- distributing responsibilities (subsidiarity)?	/	/	/				/		/		1	1	1
	Total													
	- other? (countries to add as many as needed)													

*Note*: Your response will reflect the variety of ESD themes distributed across the ISCED levels. The distribution is more important than the raw number of ticks. The number of ticks may be used for your own monitoring purposes.

The scoring key for this table (maximum 207 ticks; "other" not counted) is:

No. of ticks	0–11	12-21	22-53	54–105	106-156	157–207
Scale	A	В	C	D	Е	F

### Appendix I (c)

### Indicator 2.1, sub-indicator 2.1.3

Please indicate the teaching/learning methods used for ESD at the different ISCED levels. (Please tick ( ) relevant teaching or learning methods for each level. Use the blank rows to insert additional teaching or learning methods that are considered to be key methods in your country in teaching and learning for sustainable development.)

### Table of teaching-learning methods

						ISC	CED I	Levels					
Some key ESD teaching/learning methods proposed by the Strategy <sup>a</sup>	0	1	2	25	3	35	4	45	5	55	6	7	8
Discussions	1	1	1		1						1	1	1
Conceptual and perceptual mapping	1	1	1		1						1	✓	1
Philosophical inquiry											✓	✓	1
Value clarification			1								1	1	1
Simulations; role playing; games	1	1	1		1		1		1		✓	✓	1
Scenarios; modelling	1	1	1		1						1	✓	1
Information and communication technology (ICT)	1	1	1		1		1		1		1	1	1
Surveys											✓	✓	1
Case studies			1		1		1		1		✓	1	1
Excursions and outdoor learning	1	1	1		1						✓	✓	✓
Learner-driven projects		1	1		1						✓	✓	1
Good practice analyses											✓	✓	✓
Workplace experience			1		1		1		1		1	✓	1
Problem-solving	1	1	1		1		1		1		✓	✓	1
Total													
Other (countries to add as many as needed)													
Inquiry	<b>/</b>	✓	✓							}			

*Note*: Your response will reflect the variety of ESD themes distributed across the ISCED levels. The distribution is more important than the raw number of ticks. The number of ticks may be used for your own monitoring purposes.

The scoring key for this table (maximum 126 ticks; "other" not counted) is:

No of ticks	0_8	9_42	43_53	54_76	77_98	99_126
NO. Of ficks	0-0	9—4∠	45-55	J <del>4</del> -/0	11-20	99 <b>-</b> 120

<sup>&</sup>lt;sup>a</sup> Please refer to paragraph 33 (e) of the UNECE Strategy for ESD.

Scale A B C D E F

## **Appendix II**

### Indicator 2.6, sub-indicator 2.6.1

Please specify to what extent ESD implementation is a multi-stakeholder process by filling in the table below. Please provide examples of good practice. (Please tick () in both tables (a) and (b) to indicate what types of education stakeholders are involved.)

Table (a)
According to the UNECE Strategy for ESD

	Classificatio	n by UNECE Sti	ategy for ESD
Stakeholders	Formal	Non-formal	Informal
NGOs	1	<b>√</b>	✓
Local government	1	1	✓
Organized labour	<b>√</b>	1	1
Private sector	✓	1	✓
Community-based	1	1	✓
Faith-based	✓	1	✓
Media	1	1	✓
Total			
Other (countries to add as many as needed)			

The scoring key for this table (maximum 21 ticks; "other" not counted) is:

No. of ticks	0–1	2	55	6–10	11 15	16–21
Scale	A	В	С	D	Е	F

# Table (b) According to United Nations Decade of ESD

		Classification	by United Nations	s Decade of ESD	
Stakeholders	Public awareness	Quality education	Reorienting education	Training	Social learning
NGOs	1	✓	✓	1	1
Local government	<b>✓</b>	1	<b>✓</b>	1	1
Organized labour	1	1	1	1	1
Private sector	1	1	1	1	1
Community-based	<b>✓</b>	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Faith-based	1	1	1	1	1
Media	✓	<b>√</b>	<b>✓</b>	<b>✓</b>	<b>✓</b>
Total					
Other (countries to add as many as needed)					

The scoring key for this table (maximum 35 ticks; "other" not counted) is:

No. of ticks	0–5	6–11	12–17	18–23	24–29	30–35
Scale	A	В	С	D	Е	F

### **Indicator 3.1, sub-indicator 3.1.3**

Please specify to what extent ESD is a part of the initial and/or in-service educator's training, by filling in the table below by ticking ( $\checkmark$ ) as appropriate.

					Perce	entage		ication integr						l trainii	ngª					
						Edu	cators							Lea	ders/ad	ministr	rators <sup>b</sup>			
			Ini	tial <sup>c</sup>					In se	rvice <sup>d</sup>			In service <sup>e</sup>							
ISCED levels	A	В	C	D	E	F	A	В	C	D	E	F	A	В	C	D	E	F		
0. Early childhood education							/	•					/	/						
1. Primary education							1	/					1	/						
Lower secondary education	/	1	/				1	/					/	1						
25. Lower secondary vocational education							1	/					1	1						
3. Upper secondary education	•		/				1	/					/	1						
35. Upper secondary vocational education		/	/				/	•					•	1						
4. Post-secondary non- tertiary education	•	1					1	•					•	1						
45. Post-secondary non- tertiary vocational education				•			/	/					<b>'</b>	•						
5. Short-cycle tertiary education			/				/	/					/	1						
55. Short-cycle tertiary vocational education				1			1	/					/	/						
6. Bachelor's or equivalent level	/				1															

					Perce	entage		cation integra						trainii	ıgª			
						Edu	cators							Lead	ders/ad	minist	rators <sup>b</sup>	
			Ini	tial <sup>c</sup>					In se	rvice <sup>d</sup>					In se	ervice <sup>e</sup>		
ISCED levels	A	В	C	D	E	F	A	В	C	D	E	F	A	В	C	D	E	F
7. Master's or equivalent level	/			1	1						1					1	/	
8. Doctoral or equivalent level	•			/		1						1						1
9. No information available																		
Non-formal							/	1					/	/				
Informal		/					1	/					/	/				

<sup>&</sup>lt;sup>a</sup> Training is understood to include at least one day (a minimum of five contact hours).

The scoring key for this table (maximum 100%) is:

Percentage of educated trainers	0–5	6–10	11–25	26-50	51–75	76–100
Scale	A	В	C	D	Е	F

<sup>&</sup>lt;sup>b</sup> See paras. 54 and 55 of the UNECE Strategy for ESD.

<sup>&</sup>lt;sup>c</sup> Please indicate the number of educators who have received initial training on ESD as a percentage of the total number of educators by the reporting date.

<sup>&</sup>lt;sup>d</sup> Please indicate the number of educators who have received training on ESD as a percentage of the total number of educators who received in-service teacher training by the reporting date.

<sup>&</sup>lt;sup>e</sup> Please indicate the number of leaders/administrators who have received training on ESD as a percentage of total number of leaders/administrators who received in-service teacher training by the reporting date.

## Appendix IV

### **Summary and self-assessment by countries**

Please specify the status of efforts to implement the sub-indicators listed in the table below by ticking ( $\checkmark$ ) as appropriate.

On the basis of the answers to the sub-indicators, please self-assess the status of the implementation of the respective indicator in your country. If feasible, please specify the methodology used for the self-assessment.

Indicator 1.1	Prerequisite measures are taken to support the promotion of ESD	☐ Not started ☐ In progress ☐ Developing ☐ Completed
Indicator 1.2	Policy, regulatory and operational frameworks support the promotion of ESD	☐ Not started ☐ In progress ☒ Developing ☐ Completed
Indicator 1.3	National policies support synergies between processes related to SD and ESD	☐ Not started ☐ In progress ☒ Developing ☐ Completed
Indicator 2.1	SD key themes are addressed in formal education	☐ Not started ☐ In progress ☐ Developing ☐ Completed
Indicator 2.2	Strategies to implement ESD are clearly identified	☐ Not started ☐ In progress ☒ Developing ☐ Completed
Indicator 2.3	A whole-institution approach to ESD/SD is promoted	☐ Not started ☑ In progress ☐ Developing ☐ Completed
Indicator 2.4	ESD is addressed by quality assessment/enhancement systems	☐ Not started ☑ In progress ☐ Developing ☐ Completed
Indicator 2.5	ESD methods and instruments for non-formal and informal learning are in place to assess changes in knowledge, attitude and practice	☐ Not started ☑ In progress ☐ Developing ☐ Completed
Indicator 2.6	ESD implementation is a multi-stakeholder process	☐ Not started ☐ In progress ☒ Developing ☐ Completed
Indicator 3.1	ESD is included in the training of educators	☐ Not started ☐ In progress ☒ Developing ☐ Completed
Indicator 3.2	Opportunities exist for educators to cooperate on ESD	☐ Not started ☐ In progress ☒ Developing ☐ Completed
Indicator 4.1	Teaching tools and materials for ESD are produced	☐ Not started ☐ In progress ☐ Developing ☐ Completed
Indicator 4.2	Quality control mechanisms for teaching tools and materials for ESD exist	☐ Not started ☑ In progress ☐ Developing ☐ Completed
Indicator 4.3	Teaching tools and materials for ESD are accessible	☐ Not started ☐ In progress ☐ Developing ☐ Completed
Indicator 5.1	Research on ESD is promoted	☐ Not started ☑ In progress ☐ Developing ☐ Completed
Indicator 5.2	Development of ESD is promoted	☐ Not started ☐ In progress ☐ Developing ☐ Completed
Indicator 5.3	Dissemination of research results on ESD is promoted	☐ Not started ☐ In progress ☐ Developing ☐ Completed
Indicator 6.1	International cooperation on ESD is strengthened within the ECE region and beyond	☐ Not started ☑ In progress ☐ Developing ☐ Completed

### **Annex II**

### **Proposed timeline for reporting**

The proposed timeline for the preparation and submission of national implementation reports set out below aims to facilitate the reporting exercise at the national level. Member States are asked to respect the deadline of 1 November 2018 to ensure sufficient time for the preparation of the report on progress in implementation during the first post-2015 phase of implementation of the Strategy at the regional level, and the reflection of any review of implementation in the discussions on education for sustainable development within the framework of the Steering Committee.

National preparation process	Time required	Tentative timing
First draft of the report	1 month	June 2018
Multi-stakeholder consultation on the draft	1–3 months	July-September 2018
Final report preparation (including translation, where required)	1 month	October 2018
Deadline for submission of national implementation reports to ECE		1 November 2018