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

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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.

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Introduction

- 1. 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 reporting exercises in 2010 and 2014, the related reporting templates (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 Switzerland 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: Gisela Basler

Environmental Education Section

Signature: Gisela Basler

Date: 1. November 2018

Full name of the institution: Federal Office for the Environment FOEN

Postal address: CH-3003 BERN

Telephone: +41 58 463 03 06

Email: gisela.basler@bafu.admin.ch

Website: www.bafu.admin.ch

Contact officer for national report (if different from above):

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.

As a basis for this report the Federal Office for the Environment (FOEN) consulted the stakeholders listed below.

All of them, including the FOEN, were kindly asked to answer the UNECE prepared questionnaire according to their mostly partial knowledge and according to their partial area of involvement in the process of implementation of the UNECE strategy for ESD in Switzerland. Since the actual reporting period given by UNECE refers to 2017-2019, relevant ESD stakeholders in Switzerland were asked for their actual status (summer 2018) of ESD strategy implementation as well as for their planning regarding ESD until 2019.

Some of the consulted stakeholders answered by writing and filling in the questionnaire according to their involvement in the process, while others – the majority of addressed stakeholders - prefered to exchange their knowledge, experience, and involvment in ESD strategy implementation orally, in their language, either through face-to-face interviews or through being interviewed by phone. Only a very small number of consulted stakeholders did neither answer by writing nor orally; due to the small number of non-answers, reasoning have not been followed-up.

Furthermore, available information on websites and documents of relevant ESD-stakeholders in Switzerland have been consulted and taken into account for the actual period of ESD strategy implementation 2017-2019. The FOEN has synthesized document studies and survey data of current ESD stakeholders in Switzerland. For this report the FOEN has been keen at describing and illustrating well-balanced the prevailing cultural and language diversity as well as federal and diverse legal education references in this country.

☐ Governmental institutions (please specify):
Federal Office for the Environment (FOEN); Federal Department of Foreign Affairs/Swis Agency for Development and Cooperation (SDC); Federal Office of Public Health (FOPH) State Secretariat for Education, Research and Innovation (SERI), Swiss Conference of Cantonal Ministers of Education (EDK) including EDK's divisions of language region (CIIP and D-EDK).
Stakeholders:
NGOs (please specify)
Education Coalition NGO (Bildungskoalition NGO); Globe Switzerland;
Academia (please specify)
Swissuniversities: Chamber of universities of teacher education, Working Group BNE (AGBNE); University of Teacher Education Zurich (PH Zürich); University of Teacher

CDE (Centre for Development and Environment/University of Bern); Td-net (Network of Transdisciplinary Research/Swiss Academies of Arts and Sciences); Saguf (Swiss Academic Society for Environmental Research and Ecology); SFIVET (Swiss Federal Institute for Vocational Education and Training); Swiss Conference of Higher Professional Colleges (Schweiz. Konferenz Höherer Fachschulen).

Education Lucerne (PH Luzern); University of Teacher Education Thurgau (PH Thurgau), University of Teacher Education Vaud (HEP Vaud); IUFE (Institut Universitaire de

Formation des Enseignants/University of Geneva);

Business (please specify)
Sanu future learning ag (Bildung und Beratung für eine nachhaltige Entwicklung).
Other (please specify)
Éducation21 (Swiss national competence centre for ESD); Schoolnet21 (Swiss network for
health promoting and sustainable schools); ENSI, Switzerland (Environment and School
Initiatives, international network); Swiss Commission for UNESCO; Silviva Foundation
(Swiss organisation, specified on nature related environmental education).

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.)

There is no single national Ministry of Education, responsible for all education levels in Switzerland. The education system in Switzerland is based on federal principals, i.e. the 26 cantons of the country have the primary responsibility for education in their canton; this includes decision-making on educational policies, curricula implementation, etc. National and cantonal support for the education system are coordinated and aligned to the respective regulatory frameworks.

Hence, the Swiss Conference of Cantonal Ministers of Education (EDK) is the coordinating institution on the cantonal level. Compulsory education is largely rooted in the cantons and local municipalities. In post-compulsory education the cantons and the federal authorities each have their own responsibility. The State Secretariat for Education, Research and Innovation (SERI) acts as a regulatory and co-funding national authority of the Swiss tertiary education level, the promotion of different types of national and cantonal universities, for vocational education and training, as well as for continuing education. SERI fosters research and innovation in Switzerland and also internationally.

2015 the Swiss Federal Department of Economic Affairs, Education and Research (WBF) and the Swiss Conference of Cantonal Ministers of Education (EDK) have jointly declared a common education policy for Switzerland, in which ESD and political education (global citicenship education) have explicitly been mentioned.

With regard to ESD, the formerly established Swiss Coordinating Conference on ESD (SC ESD) has been replaced by a coordination body called Group ESD at the Federation's level (Gruppe BNE Bund); it consists of six federal offices (FOEN, SDC, FOPH, ARE, SERI, FSVO), coordinates and consolidates policy statements, official documents and reports on ESD as well as Swiss contributions for ESD activities in international organisations.

Education21 is the national competence centre for ESD in Switzerland. Mainly funded by EDK, SDC, FOEN, FOPH, ARE, SERI, FSVO, and FRB, éducation21 supports in cooperation with internal and external school and education specialists the implementation and further development of ESD in compulsory education as well as in teacher education, continuing education, and partly in vocational education and training.

Outside compulsory educational levels, there is not yet a systematic coverage approach on ESD for all lingual, regional, and educational groups in Switzerland. ESD is addressed punctually by ESD specialists and organisations in pre-school education, partly on secondary and tertiary education levels, in research as well as in non-formal and informal learning settings according to the different institution's area of expertise, regional ancorage, and education level respectively.

Issue¹ 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).

Because of the strong federal elements of the Swiss education system, most education legislation and curricula are decided on a cantonal level and therefore are different in each canton. For the reporting period (2017-2019) three new language and region based curricula have been developed for compulsory education. The process of implementation and adaption of these new curricula variies from canton to canton. SD and ESD are either explicitly mentioned or addressed in all these curricula, but mainly as an overall and/or transversal topic or approach to be targeted on different educational levels. Current teaching and learning practices that address SD and ESD therefore are mainly dependent on individual adaptation of schools, teachers and learners.

Indicator 1.1	Prerequisite measures are taken to support the promotion of ESD						
Sub-indicator 1.1.1	Is the UNECE Strategy for ESD available in your national ² language(s)?						
Yes 🛛 No 🗌	The UNECE Strategy for ESD is available in German, French and Italian.						
Sub-indicator 1.1.2 Have you appointed a national focal point to deal with the UNECE Strategy for ESD?							
Yes ⊠ No □	Mrs Gisela Basler, Environmental Education Section Federal Office for the Environment FOEN, CH - 3003 BERN Phone: +41 58 463 03 06; E-mail: gisela.basler@bafu.admin.ch						
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. The formerly established Swiss Coordinating Conference on ESD (SC ESD) has been dissolved in 2015. With regard to ESD a group of six national governmental bodies – named informally Confederation's Group ESD (Gruppe BNE Bund) – have taken up the former SC ESD's role to promote the implementation of ESD in compulsory education, and other relevant educational areas in Switzerland. However, in Switzerland neither a national strategy on ESD-promotion does (yet) exist, nor an explicit						

¹ 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).

² 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.

	implementation plan of the UNECE Strategy for ESD. Though, discussions on strategies and coordination mechanisms on a national level are on-going. The actual Confederation's Group on ESD consists of six federal offices: 1) Federal Office for the Environment (FOEN), 2) Swiss Agency for Development and Cooperation (SDC) 3) Federal Office of Public Health (FOPH) 4) Federal Office for Spatial Development (ARE), 5) Federal Food Safety and Veterinary Office (FSVO), and 6) the State Secretariat for Education, Research and Innovation (SERI); it coordinates and consolidates policy statements, official documents and reports on ESD as well as Swiss contributions for ESD activities in international organisations.
	The foundation éducation21 - operational in its current mandate since 2013 – has been established as national competence centre for ESD. Education21 is mandated and mainly funded by the General Secretariat of the Swiss Conference of Cantonal Ministers of Education (EDK), and national government bodies, such as SDC, FOEN, FOPH, ARE, SERI, FSVO and the specialist department on fighting racism (FRB). In cooperation with internal and external school and education specialists éducation21 supports implementation and further development of ESD in compulsory education as well as in teacher education, continuing education, and partly also in vocational education and training.
	A further national body, the Swiss Commission for UNESCO, supports the implementation of the Global Action Framework Education 2030 in Switzerland, in order to sensitize Swiss education stakeholders on the learning needs and competences as well as on the challenges for a sustainable development. For the legislation period 2016-2019, the Swiss Commission for UNESCO has set a focus on Global Citizenship Education in non-formal and informal education settings, promoting in particular national and international dialogue on this topic.
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 accessible.
	In the Sustainable Development Strategy (2016-2019) of the Swiss Federal Council, it is stated that Confederation and cantons are committed to implementing ESD in schools and educational curricula. This work previously concentrated on compulsory schooling but is now to be extended to cover other levels and areas of education, specifically foundation courses at vocational education and training, as well as secondary schools with an academic bias (Sustainable Development Strategy, 2016, p. 33).
	A master plan, i.e. a superior national or confederational strategy on ESD implementation does not (yet) exist in Switzerland. However, on a cantonal level, the focus lies on the adaptation and implementation of the new curricula in three linguistic regions of the country. In one or the other way ESD or citizenship education is mentioned as a transversal topic or as a holistic approach to be addressed on different educational levels in all three language and region based curricula of Switzerland: Lehrplan21 for the German speaking cantons, Plan d'Études Romand (PER) for the French speaking cantons, and Piano di Studio for the Italian speaking population in Switzerland.
	On the cantonal level it is currently a priority to decide on, adapt and implement the new curricula in the respective language region. Not all cantons have yet agreed upon the process and planning of implementing the new curricula for compulsory education. With regard to ESD, éducation21 is mandated by the EDK and the above mentioned government bodies to support the implementation process of the new curricula on cantonal levels, in particular to help operationalising ESD for the new curricula. In this sense, the strategy and planning of éducation21 is crucial for the implementation of ESD in Switzerland (see details under indicator 2.2).

Sub-indicator 1.1.5	Are there any synergies at the national level between the ECE ESD process, the Global Action Programme on ESD as follow-up to the United Nations Decade of Education for Sustainable Development after 2014, ³ and other policy processes relevant to ESD?						
Yes □ No ⊠	Please specify and list major documents. There is not (yet) a common coordination body at the national level for building synergies between international cooperation and global processes on ESD or between global and national processes on ESD. However, synergies on ESD arose from the voluntary and informal exchange and coordination between different ESD-stakeholders on the national level in Switzerland, mainly organised by éducation21, UNESCO and/or SDC. These fora very often include the participation and information exchange between national and international oriented ESD stakeholders, but not on an official policy development process.						
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 ⁴ document(s)?						
Yes 🛛 No 🗌	Please specify and list any major document(s). ESD is reflected in the following national policy documents:						
	a) The Swiss Federal Department of Economic Affairs, Education and Research (WBF), and the Swiss Conference of Cantonal Ministers of Education (EDK): <u>Declaration 2015 towards common education policy goals in Switzerland</u> (Bern, 18. May 2015): https://www.newsd.admin.ch/newsd/message/attachments/39420.pdf ESD and citizenship education are explicitly mentioned under chapter III.(4): ESD and political education (citizenship education) shall be promoted by federal and cantonal authorities on any educational level to develop self-contained, critical, responsible, and future oriented thinking and judgement of social, ecological, political and economic cohesion.						
	b) Swiss Federal Council: <u>Sustainable Development Strategy 2016-2019</u> (Bern, 27 th January 2016): https://www.are.adminch/are/en/home/sustainable-development/strategy-and-planning/sustainable-development-strategy-2016-2019.html The Confederation and the cantons are committed to implement ESD in schools and educational curricula. This work previously concentrated on compulsory schooling but is now to be extended to cover other levels and areas of education, specifically foundation courses at vocational education and training, as well as secondary schools with an academic bias. At the international level, the Confederation is committed to implementing the UNESCO Global Action Programme on ESD, which builds on the corresponding forerunner programme for 2005-2014 (SDS 2016-19, p. 33).						
	c) Federal Council and cantons: <u>The Swiss Education Report 2018</u> : ESD is subject of the Swiss education monitoring report 2018. Since sustainable development is a permanent component for the development of the Swiss education system, ESD in Switzerland is enforced (19th June, 2018): http://www.skbf-csre.ch/en/education-report/education-report/						
	d) Swiss Conference of Cantonal Ministers of Education (EDK): ESD and ESD relevant competences are integrated as transversal topics and approaches in the three regional and language based curricula of Switzerland: <u>Lehrplan21</u> (German): https://v-ef.lehrplan.ch/index.php?code=e%7c200%7c4; <u>Plan d'études romand PER</u> (French): http://www.plandetudes.ch/; <u>Piano di studio (Italian)</u> : http://www.pianodistudio.ch/						

See A/69/76.
 Policy documents may include national strategies, plans, programmes, guidelines and the like.

Sub-indicator 1.2.2		d in relevant national education legislation/regulatory documards, ordinances or requirements at all levels of formal education. ED? ⁵								
(a) Yes No No	No \boxtimes If yes, please specify details for (a) and (b).									
(b) Yes ⊠ No □	Please also fill in the table by ticking (\checkmark) as appropriate.									
		ISCED levels 2011	(a)	(b)						
		ISCED levels 2011	Yes	Yes						
		0. Early childhood education		(1)						
		1. Primary education	(/)	/						
		2. Lower secondary education	(/)	/						
		25. Lower secondary vocational education		(1)						
		3. Upper secondary education	(1)	/						
		35. Upper secondary vocational education								
		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		(V)						
		7. Master's or equivalent level		(1)						
		8. Doctoral or equivalent level		(1)						
		9. No information available								

a basic school level – ranging from 3-4 years – each situation is different. Regardless of the number of years the three lrb-curricula

⁵ See http://uis.unesco.org/en/topic/international-standard-classification-education-isced.

refer to the basic school level as 'education cycle 1', varying from 1-2 years pre-school (kindergarten) in combination with 1-2 years primary school. For the education cycle 1, ESD is mentioned rather as a general approach to be addressed to pupils, than an explicit teaching and learning objective allocated to one or more school subjects.

Level 1/2: According to the three lrb-curricula primary education is referred to as 'education cycle 2' and ranges mainly from primary 2 to primary 6, while 'education cycle 3' refers to secondary school S1-S3/S4. ESD is mentioned in the Lehrplan21 as guiding principle and appears both in cycle 2 and cycle 3 as an overall or transversal subject of seven school topics, which are: 1) politics, democracy, human rights, 2) natural environment and resources, 3.) gender and gender equality, 4) health, 5) global development and peace, 6) cultural identities and intercultural communication, 7) economy and consumption. Appropriate competences and competence levels for ESD are indicated for each topic. Lehrplan21 recommends three didactical principles to plan and implement classes in the sense of ESD: a) future orientation b) cross-linking learning, and c) participation.

In the PER as well as in the Piano di Studio, ESD is integrated in the so-called "general studies".

<u>Level 3</u>: There is no national education legislation with a reference to ESD. For 3 (a) and 3 (b) the Federal Act on Vocational and Professional Education and Training (Berufsbildungsgesetz, Art. 15 c) and the Ordinance on minimum general education requirements in VET programmes (Verordnung des SBFI über Mindestvorschriften für die Allgemeinbildung, Art. 2d) have an explicit reference to Sustainable Development as a learning objective. ESD is therefore part of the general studies curriculum (Rahmenlehrplan ABU, Allgemeinbildender Unterricht) for all apprentices in Switzerland. Additionally in many of the decrees for each profession there is a reference to ESD.

Level 4: (Post secondary, non-tertiary): There is no reference on a national level

Level 5: (Short-cycle tertiary): There is no reference on a national level

<u>Level 6 & 7</u>: There are no national curricula. The situation is different in each canton, and in each institution of higher education in Switzerland. Some study-programmes have a reference to ESD, others don't. This applies for Universities, Universities of Teacher Education, Universities of Applied Sciences, and Professional Education and Training Colleges, and other tertiary institutions. Level 8: There are no national curricula for PhD. Some PhD programmes have a reference to ESD, others do not refer to.

Sub-indicator 1.2.3	Are non-formal and informal ESD addressed in your relevant national policy and/or regulatory document(s) and operational frameworks?					
Yes 🗌 No 🛛	Please specify.					
	ESD in non-formal and informal education settings is punctually addressed, but not on national policy or regulatory documents and operational frameworks					
Sub-indicator 1.2.4	Is public awareness in relation to ESD addressed in relevant national document(s)?					
Yes 🗌 No 🛛	Please specify.					
	ESD is not specifically addressed for public awareness campaigns or communication strategies in relevant national document(s).					
Sub-indicator 1.2.5	Does a formal structure for interdepartmental ⁶ cooperation relevant to ESD exist in your Government?					
Yes 🛛 No 🗌	Please specify.					
	Six governmental bodies (federal councils and state secretariats) form the Confederation's group ESD, and a few more will join the group ESD as of 2019 are involved for the promotion of ESD; they belong to four different departments of the Swiss government; therefore this interdepartmental cooperation can be classified as whole-government approach.					
Sub-indicator 1.2.6	Does a mechanism for multi-stakeholder cooperation on ESD exist with the involvement of your Government? ⁷					
Yes No 🗌	Please specify.					
	There is no official, coordinated multi-stakeholder mechanism on ESD in place, but different existing and continuing assignments between governmental bodies and ESD relevant stakeholders (institutions and organisations) can be perceived as multi-stakeholder cooperation, e.g. éducation21, scholnet21, as well as other ESD relevant cooperation assignments.					
Sub-indicator 1.2.7	Are public budgets and/or economic incentives available specifically to support ESD?					
Yes No 🗌	Please specify.					
	Public budgets for the promotion, research, exchange and implementation of ESD in the education system of Switzerland are available.					

Between State bodies.
 For an explanation, see paragraph 46 of the UNECE Strategy for ESD.

Indicator 1.3 National policie development (S	es support synergies between processes related to the Sustainable Development Goals (SDGs), sustainable D) 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 □	Please specify. The Federal Constitution of the Swiss Confederation (Status as of 1. January 2018) addresses sustainable development as follows: "The Swiss Confederation shall promote the common welfare, sustainable development, internal cohesion and cultural diversity of the country" (Art. 2), "The Confederation and the Cantons shall endeavour to achieve a balanced and sustainable relationship between nature and its capacity to renew itself and the demands placed on it by the population" (Art. 73 Sustainable development). https://www.admin.ch/opc/en/classified-compilation/19995395/index.html
	By adopting the 2030 Agenda on Sustainable Development Goals (SDGs), all states, including Switzerland declared their willingness to join forces to achieve the 17 Sustainable Development Goals by 2030. In early 2016, the federal government embarked on an interdepartmental process to implement the 2030 Agenda. The Federal Council attaches great importance to the 2030 Agenda. Although it is not binding under international law, it is the Federal Council's intention to see it implemented both in Switzerland and globally. The objectives are to be achieved via existing instruments and policies, specifically the Sustainable Development Strategy, the Dispatch on Switzerland's International Cooperation 2017-20, and via existing national and international sectoral policies, including the related bilateral and multilateral conventions. https://www.eda.admin.ch/agenda2030/en/home/umsetzung/der-bund-setzt-sich-ein.html
Sub-indicator 1.3.2	Is ESD part of SD policy(ies) if these exist in your country?
Yes ⊠ No □	Please specify. The Sustainable Development Strategy (2016-2019) of the Swiss Federal Council includes ESD as a topic and states the Confederation's commitment to implement ESD in schools and educational curricula, including vocational education and training, and secondary schools with an academic bias. At the international level the Confederation is committed to implement the UNESCO Global Action Programme on ESD, which builds on the corresponding forerunner programme of the ESD decade (2005-2014). The Federal Office of Spatial Planning (ARE) is responsible for both sustainability policy at federal level and
	the Sustainable Development Strategy. Coordination within the federal government is handled by the Inter-departmental Sustainable Development Committee (ISDC), which unites representatives of around 35 federal agencies.
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?

The existence of a national Sustainable Development Strategy 2016-2019, addressing explicitly ESD, as well as the Federal Council's intention and commitment to implement the Agenda 2030 on sustainable development goals in Switzerland and globally, are positive signs from the Swiss national and policy level that Sustainable Development objectives are taken care of in Switzerland. With regard to the integration and implementation of ESD in the Swiss education system, the establishment of the national competence centre éducation21 is crucial and indispensable, in particular for the formal education system, but also for ESD stakeholders outside of the formal school system. The financial support for éducation21 by different government bodies can be highlighted too for the national commitment to implement ESD on different school levels and in the three language regions of Switzerland.

The process of developing and integrating ESD into the curricula for the three language based regions has been accomplished during this period of reporting. The focus now and in the future lies in adapting and implementing the new curricula on cantonal levels. The foundation éducation21 plays a crucial role in supporting educational authorities and stakeholders to address and implement ESD-principles, -approaches, -knowledge and -competences on the respective school levels according to the new curricula. The commitment of various Federal offices to fund éducation21 as per today as well as for its future strategic outline can be highlighted as well.

What challenges did your country encounter when implementing this objective?

The Swiss education system is organised federally. Decisions therefore are taken on cantonal levels, rather than on national level; for this reason national strategies and action plans, such as the UNECE-ESD strategy, can hardly be implemented by a national coordination body. Moreover, the confederation's group ESD has no overall political mandate to implement an education strategy on a national scheme. Based on the lack of public or political discourse on the necessity of ESD in Switzerland, the legitimisation of promoting an ESD-strategy, as well as for the process and work of national stakeholders on ESD, is weak. Secondly, the confederation's group ESD does not represent civil society, NGOs or the private sector, and therefore does not bring all necessary ESD-stakeholders in Switzerland together. Based on these limitations, the implementation process of ESD in the Swiss education system is rather dependent on individual commitments of the cantons and their respective education stakeholders, in- and outside of formal schooling.

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

In Switzerland éducation21 covers a wide range of ESD implementation support and services for the formal school levels, including teacher training and partly also for vocational education and training, but it does not cover all education levels and components of potential ESD-strategy implementation and further development in Switzerland. Therefore, other relevant ESD-stakeholders, in particular in the area of vocational education and training, in research and tertiary institutions as well as in non-formal and informal education settings need to be addressed and supported in order to gain more synergies and best practice experiences during future ESD implementation in Switzerland. With regard to the confederation's commitment and adaptation of the Agenda 2030 on sustainable development goals (SDGs) in Switzerland and globally, further enforcement of synergies and linkages between education stakeholders of national and international cooperation are therefore highly recommended.

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).

Switzerland has a federal education system, in which the education ministries of the 26 cantons have far-reaching responsibility to decide about the school system on all levels, including curricula and learning methods. For the reporting period it can be stated that three new language and region based curricula (Lehrplan21, Plan d'Études Roman, and Piano di Studio) for **ISCED** education levels 0-3 have been developed and by a majority of cantons accepted. Sustainable development is mentioned in all of these new curricula, but not as a school subject in itself, but rather as an overall or transversal topic and approach.

Due to the lack of a national implementation strategy on ESD in the non-formal and informal education sector, the promotion of SD and ESD in non-formal and informal learning settings cannot be monitored systematically for Switzerland. Nevertheless, it is addressed and campaigned for in various programmes and projects aiming for SD and/or ESD in non-formal and informal education - mainly initiated or implemented by civil society organisations' engagement (partly on a volunteer basis) on a municipality or small-scale regional level in Switzerland.

Indicator	Indicator 2.1 SD key themes are addressed in formal education							
Sub- indicator 2.1.1	Are key themes of SD ⁸ addressed explicitly in the curriculum/programme of study at various levels ⁹ of formal education?							
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.							
	Despite the introduction of new curricula based on language regions in Switzerland, the process of applying and adapting these curricula into practice teaching and learning in formal education varies from canton to canton, sometimes even from municipality to municipality. Similar variations of relevant ESD-related topics occur in the curricula for upper secondary education as well as in general vocational education and the specialised professional vocational schools. To give a general overview on important SD and ESD-curricula based topics, these are: 1) politics, democracy and human rights, citizenship, 2) natural environment and resources, climate change, ecology, sustainable cities 3) gender and equality 4) health and personal well-being, nutrition, 5) global development and peace, 6) cultural diversity, identities and intercultural communication 7) economy and consumption. These topics related to ESD are addressed as three principals of competence-based learning and orientation: 1) orientation for the future, 2) comprehensive learning (interdependency of topics and dimensions), and 3) participation. ESD is in particular integrated in the above mentioned curricula as a superordinated educational objective within the general part of the curricula and therefore is not part to a specific subject curricula. Accordingly, Swiss pupils and students deal with the complexity of the world and its social, ecological and economical dimensions and developments, trying to comprehensively understand interrelations and dependencies of each dimension, and learning to act and to participate themselves for a sustainable development.							

⁸ For details, see paragraph 15 of the UNECE Strategy for ESD.

⁹ For the State or federal level, where relevant.

	1									
			table in appendix I s in the box below i							this sub-indicator, as appropriate, and
				A	В	С	D	Е	F]
										•
Sub- indicator 2.1.2		earning outco of formal ec		es and values)	that supp	ort ESD	addresse	ed explici	itly in the cur	rriculum ¹⁰ /programme of study at various
Yes ⊠ No □	Please specify what competences as learning outcomes are important in your country. Due to the federal system of curricula development and the on-going process of adopting curricula for the different language regions in Switzerland, the table in appendix I (b) broad areas of competence that support ESD can not be filled in in a meaningful way. As mentioned above under 2.1.1 the estimated learning outcomes of the foreseen language and region based curricula may be in general:									
		critical thinking and reflection, cooperative and problem-based learning, comprehensive understanding (linking different subjects and dimensions), communication skills, acceptance of diversity, and active participation for the development of a sustainable future.								
		Superordinated subject- and transversal competences in relation to SD/ESD are targeted within curricula of compulsory education and upper secondary level:								
	 systems-thinking competence: analyse complex systems across different domains and scales considering cascading effects, and other systemic features related to sustainability issues and problem solving, anticipatory competence: analyse, evaluate, and craft rich 'pictures' of the future related to sustainability issues and sustainability problem-solving frameworks; normative competence: map, specify, apply, reconcile, and negotiate sustainability values, principles, goals, and targets, strategic competence: design and implement interventions, transitions, and transformative governance strategies towards sustainability, interpersonal competence: motivate, enable and facilitate collaborative and participatory sustainability research and problem solving 									
		Please update the table in appendix I (b) that was used for implementation phases II and III under this sub-indicator, as appropriate, and indicate the results in the box below in accordance with the rating scale set out in the appendix.								
	I			A	В	С	D	Е	F	
										-

¹⁰ Idem.

Sub-indicator 2.1.3		hing and learning at various levels o			•	addresse	d explici	tly in the	curriculu	m ¹¹ or pro	ogramme
Yes □ No ⊠	formal ed Due to the different ESD can In the lar ly indica methods, cation 21	pecify which meth ducation, as appra- ne federal system of language regions not be filled in in nguage and region ted. However add hand-outs, and delta, hand-outs, and delta, or at different te diso update the tab priate, and indicate.	opriate. of currice in Switz in a meaning based coloressing to didactical eacher ecolor in app	ula devel verland, the ingful waturricula to ypical SI recommulucation in pendix I (a	opment a he table in a he tabl	and the on n appendi and learni opics, tea s on interr ns or educ	-going part of the second report report report of the second report repo	rocess of a aching/lea ods that su d trainers a bases and blisher ho implement	adopting marning marni	curricula ethods us SD are no erland car ns (include	a for the ed for t explicit- n find ling édu- and III,
			A	В	C	D	Е	F			
Indicator 2.2 Strategic	s to implement ESD are cl	learly identified									
Sub-indicator 2.2.1		ddressed through ic subject program									provision
(a) Yes ⊠ No □ (b) Yes ⊠ No □		pecify for differen appropriate.	t levels o	f educati	on syster	n in accor	dance wi	th ISCED	by tickii	ng (🗸) in	ı the
(c) Yes No		ISCED levels 2	Λ11			(a)	(b)	(c)	(d)	(e)	
(d) Yes 🛛 No 🗌		ISCED levels 2	U11			Yes	Yes	Yes	Yes	Yes	
(e) Yes 🛛 No 🗌		0. Early childho	od educa	ation			/			-	
		1. Primary educ	ation				/				
		2. Lower second	dary educ	cation		1	1				

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

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4

25. Lower secondary vocational education					
3. Upper secondary education	1	1		1	
35. Upper secondary vocational education	/	/		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			/	1	1
7. Master's or equivalent level			/	1	/
8. Doctoral or equivalent level					
9. No information available					
	.L			L	

All proposed approaches exist, though not on all ISCED levels. There are no binding general or specific guidelines on how to address and implement ESD, so the situation differs in each canton or even from institution to institution. In general and by trend it can be summarized for Switzerland:

Compulsory Education (ISCED-levels 1-3): According to regional and language based curricula (Lehrplan 21, PER and Piano di Studio) ESD is far most addressed through b) a cross-curriculum approach

<u>Upper Secondary Education (ISCED Level 4)</u>: For general vocational education curricula (ABU-Fächer) and gymnasia, ESD is addressed through a) subjects only (e.g. in ecology, geography) as well as in b) cross-curriculum approaches, and d) stand-alone projects (diploma studies, 'field studies on the job')

Tertiary Level (universities BA and MA), ISCED Levels 6-7): In particular programmes like U Change target students from swissuniversities through c) programmes and courses, as well as d) stand-alone BA or MA projects on sustainability issues, and also e) other, mainly individual approaches how ot address SD/ESD aspects in BA or MA programmes (e.g. research, field studies, practical and work-place based).

Please also provide information about the incentives on the national level for implementing (a), (b), (c), (d), and (e).

Since the Swiss education system is structured and organised on a cantonal level, national incentives for implementing ESD refer to the support of the national ESD competence centre éducation21 and its programmes, projects and networks on ESD. As a national centre of competence on ESD, acting on behalf of national as well as cantonal federal offices, éducation 21's mandate and role in particular is to anchor,

	There are a few schools on different educational levels in Switzerland which have become ESD-schools, adopting either a whole-institution approach or having initiated long-term ESD related projects or programmes. The schools are accredited by the foundation éducation21 and are presented on its website since 2013: http://www.education21.ch/de/node/4046
Yes ⊠ No □	The Steering Committee has adopted as one priority action area that every school adopts an ESD school plan by 2019. 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.
Sub-indicator 2.3.1	Do educational institutions ¹⁵ adopt a "whole-institution approach" to SD/ESD?
Indicator 2.3 A whole-institution app	proach ¹⁴ to SD/ESD is promoted
	implement and consolidate ESD in the formal education system of Switzerland, i.e. in particular on ISCED-levels 1-4 (primary, lower and upper secondary, including gymnasia and general vocational education and training). Éducation21 gets further support from civil society, economy and the private sector in Switzerland, collaborating with the relevant actors from these sectors. Éducation21 is a specialist agency of the Swiss Conference of Cantonal Ministers of Education (EDK) and therefore working in the legal frame of Swiss education law, respecting cantonal orientation and adaptation status to the regional and language based curricula. Acting also as a service centre éducation21 examines criteria based approaches, material, tools, methods, and instruments of different actors for schools and classes and edits ESD-relevant thematic clusters, products and information packages to be accessed at one hand through date-gates, -platforms and websites, on the other hand through participation and consultation of relevant ESD-specialists from various ESD-focused organisations, institutions and networks. In its systemic approach, éducation21 collaborates with ESD-multipliers from compulsory school as well as with educational actors from outside school in a practice-oriented way, using cooperation mechanisms to continuously further develop ESD concepts and achievements. Initiatives of ESD specialised institutions and organisations which cover target groups and areas of ESD which are not at the core of éducation21's mandate, get punctually support by governmental institutions and departments.

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).

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.

ECE/CEP/AC.13/2018/4

In 2017, the schoolnet21 (Swiss network of Health-promoting and Sustainable Schools) arose as a further development towards ESD from the Swiss network of health promoting schools (which exists since 1997); it currently consists of 21 cantonal and regional networks and more than 1'800 schools, being the largest school network in Switzerland. Schoolnet21 offers various services: consulting, networking events for schools and cantons, tools, guidelines, quality criteria (in process), "award panel", best practices reports, newsletter, some financial support, and a website with further information. Education21 is coordinating the schoolnet21 and has established a crucial platform contributing to ESD implementation on a whole-school approach in Switzerland. The objective of creating place and space at school in order to learn, apply and live for sustainable development on a daily basis contains the idea of integrating and anchoring ESD and related topics permanently in classes and in school. www.schulnetz21.ch / www.reseau-ecoles21.ch

The University of Bern: Few universities in Switzerland apply yet a whole-institution-approach, integrating SD or ESD topics in their curricula for all study programmes, involving students as well as academic staff at their institution. The University of Bern in particular has prepared and developed this approach continuously for the past few years, and is implementing the whole institution approach on SD with the support of the local government of Bern. Further details on: http://www.bne.unibe.ch/index_eng.html

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	/
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	
45. Post-secondary non-tertiary vocational education	
5. Short-cycle tertiary education	
55. Short-cycle tertiary vocational education	
6. Bachelor's or equivalent level	1
7. Master's or equivalent level	1
8. Doctoral or equivalent level	
9. No information available	

provided schools SD-school. Most ent, ecology and r sustainable deve- and sciences encou- evelopment. The thich are based on sustainable develop- s, universities have to
aches for the whole
of teacher education to their study pro- nt of universities at different university ESD between diffe- l level.
ch (PH Zurich) ation and engage- nded and also ruer-nachhaltigkeit/
ticking (🗸) in the
e craari

		25. Lower secondary vocational education		
		3. Upper secondary education	•	
		35. Upper secondary vocational education		
		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	/	
		8. Doctoral or equivalent level		-
		9. No information available		
		fy for non-formal and informal education, as appropriate also specify (provide examples).	e. If relevant in	formation is
Sub-indicator 2.3.3	Do institutions/le	arners develop their own SD/ESD indicators for their ins	titution/organi	zation?
Yes 🛛 No 🖂	Please specify (i.d. institutions.	e., provide examples of how this is done) for formal instit	tutions as well	as for non-formal
	tools, including in plementing qualit education are qui jects or courses a	sumed that educational institutions in Switzerland refer to adicators by the given quality assessment authority (formally assessment organisation. SD/ESD indicators for performance the rarely developed systematically, but rather for specificate implemented and assessed or when schools are applying bolnet 21. In this regard éducation 21 has developed a set	al school evaluance and ou occasions, e.g	uators) or the im- tcome in formal g. when ESD-pro- and ESD-school or

(a) For formal institution	ns:
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ISCED levels 2011	Yes
0. Early childhood education	
1. Primary education	1
2. Lower secondary education	/
25. Lower secondary vocational education	
3. Upper secondary education	1
35. Upper secondary vocational education	
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	
8. Doctoral or equivalent level	
9. No information available	

(b) For non-formal institutions:

ISCED levels 2011	Yes
0. Early childhood education	
1. Primary education	
2. Lower secondary education	
25. Lower secondary vocational education	
3. Upper secondary education	
35. Upper secondary vocational education	
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	

			8. Doctoral or equivalent level		
			9. No information available		
		ļ. '		i	
Indicator 2.4	ESD is addressed by qual	ity assessment/enhance	ment systems		
Sub-indicator 2.4.1			on quality assessment/enhancement systems that the distribution assessment assessment systems that the distribution is a second of the distribution of the distribution and the distribution of the distributi		
(a) Yes No No		Please elaborate.			
(b) Yes No \(\square\)		a) Quality assessmen	t systems in formal education		
(c) Yes No		levels 1-3). Its impleme on levels 1-3 are require Quality assessment/enha	ancement systems do also exist for ISCE a though differ from institution to institu	ton. In some cantons ED levels 4-7. Regula	s quality assessments arity, frequency, and
		b) Quality assessmen	t, addressing ESD		
		quality assessment syste http://www.education21 http://upload.sitesystem - ENSI and SEED (Schodeveloped ESD quality - IQES is a voluntary or valid.), but it is not cove	Swiss Network of Health-promoting and m focused on health and sustainable devch/de/schulpraxis/gesamtschulischer-ar.ch/B2DBB48B7E/5B4613A676/F2FB8 pol Development through Environmental criteria for school assessments, which is aline quality self-assessment for school learing all aspects of ESD. cal College of Bern has introduced SD-arrangement for school services and college of Bern has introduced SD-arrangement.	velopment indicators nsatz BBD5F2.pdf 1 Education: http://se used at a few school evels 0-1 (Error! H	edlearn.org/) have s on a voluntary basis. yperlink reference not
			non-formal and informal education, as a data (i.e., provide examples on how the d		nt data are available,
			AG is applying education quality assessing spects for all its courses, including non-	The state of the s	O14001), which

¹⁷ 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).

es 🗌 No 🛛	ISCED levels 2011	(a)	(b)	(c)
	ISCED levels 2011	Yes	Yes	Yes
	0. Early childhood education			
	1. Primary education	/	/	
	2. Lower secondary education	1	/	
	25. Lower secondary vocational education	/	/	
	3. Upper secondary education	/	/	
	35. Upper secondary vocational education	/		
	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			
	8. Doctoral or equivalent level			
	9. No information available			

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 ⊠ No ☐ (b) Yes ⊠ No ☐ (c) Yes ⊠ No ☐	Please elaborate Also, please spec appropriate.	e. cify for various levels of your education system i	n accor	dance w	ith ISCE.	D, by tici	king (🗸)	in the tabl	le as
(d) Yes 🗌 No 🗌		ISCED levels 2011	(a)	(b)	(c)	(d)	(e)	(f)	
(e) Yes No (15022 101015 2011	Yes	Yes	Yes	Yes	Yes	Yes	
		0. Early childhood education							
		1. Primary education							
		2. Lower secondary education				1			
		25. Lower secondary vocational education							
		3. Upper secondary education							
		35. Upper secondary vocational education							
		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	1						
		7. Master's or equivalent level	/						
		8. Doctoral or equivalent level	/						
		9. No information available		/	/	/	/		
		cify for non-formal and informal education, as ap the examples on how the data was compiled).	oproprio	ate. If rei	levant da	ıta are av	vailable,	please also	specify thi

	s and instruments for non-formal and informal learning are in place to assess changes in ttitude 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
	Sustainable Development and Education for Sustainable Development are often subject to public press news, media fora, and communication channels of SD/ESD engaged institutions and organisations. In addition, network activities, conferences and continuing education events on SD/ESD often find their way to the public through press and internet fora. Since these activities and projects are mainly organised by the civil society (sometimes on a volunteer basis), and no national programme or government guidelines, e.g. a communication strategy is in place, focused and well-balanced public awareness raising on SD/ESD for non-formal and informal education is neither intended nor subject to these initiatives. Based on that, and due to a lack of funding mechanism for assessing non-formal and informal learning results and outcomes, the development of ESD assessing methods and instruments is yet beyond realistic thinking and planning.
	However, SD and ESD in non-formal and informal learning arrangements are addressed in a series of programmes, projects and campaigns with different implementation status, from preliminary concept to consolidating implementation phases. Two examples of best practices, are:
	- Jacobs Foundation is implementing a programme on 'educational lanscapes' in Switzerland since 2012. In order to give every child the opportunity for a comprehensive, high-quality education in school and beyond, the Jacobs Foundation has encouraged innovative, systematic cooperation between school-based and extracurricular actors and funded (as of 2018) the establishment of 22 municipality or regional based educational landscapes in Switzerland. Educational landscapes refers to networks of all those involved in caring for and educating children. That includes parents as well as preschool and elementary school teachers, social workers and coaches. Together, they create the necessary environments, in and outside of school, for children to acquire the skills they need for a successful education. ESD – although not predominantly mentioned for this concept- is at the core of this approach, linking formal, non-formal and informal learning arrangements at a local or regional level of cooperation. http://bildungslandschaften.ch/bildung-fuer-nachhaltige-entwicklung/
	- The Swiss Commission for UNESCO (SC UNESCO) aligning its education strategy 2016-2019 to the SDG Agenda 2030 (in particular to sub-goal 4.7 referring to education) has set two educational focal points, both addressing mainly non-formal and informal education: a) Early Childhood Education (ECE), and b) Global Citizenship Education (GCE). Defining relations to ESD is currently subject of conceptualizing GCE, planning to promote national and international dialogue, as well as on national level to build a network on GCE stakeholders in the area of non-formal and informal education. http://www.unesco.ch/education/education-a-la-citoyennete-mondiale/

	Further examples/best practises of addressing ESD also in non-formal and informal education settings are related to different Swiss networks, such as schoolnet21 (network of health promoting and sustainable schools), and four Swiss networks (RECI, FoBBIZ, NORRAG, and SDC focal point education), specialised in education in international cooperation (please refer to indicator 2.3. whole school approach, and indicator 2.6 multi-stakeholder process)
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.
	- Education21 iniated a project 'job place as a learning place for SD/ESD' in 2016 (BNE in KMU), and provided support for work-based learning for a few small and medium enterprises in Switzerland. Best practice examples are: the enterprise Swiss Metall Co. (Schweizer Metallbau AG) implemented project weeks and workshops for apprentices on energy and resource efficiency, climate change, and job security for youth. The enterprise Gfeller Electronics Co. (Gfeller Elektro AG) trained apprentices in consulting on balanced energy and electricity use in private households, providing them with energy measuring devices and support for consulting methods.
	- FOEN supports different companies specialised in SD and ESD for their services on work-based learning: a) sanu (sanu future learning ag) in offering courses and education on SD topics with a focus on small and medium enterprises (SME), municipality staff, associations, and the civil society; b) PUSCH (Praktischer Umweltschutz Schweiz – Environment Protection in Practice, Switzerland) in offering courses on SD with a focus on civil society and municipality staffs, c) United Against Waste in developing and maintaining a food-save App as a learning tool and offering economic and comprehensive ways on reducing food waste.
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.
	Research and development on ESD outcomes and impacts has recently been established at the Zurich University of Applied Sciences (ZHAW) in 2017. Swiss environmental education specialists from PUSCH, sanu future learning AG, SILVIVA, WWF Switzerland and the Institute for Environment and Natural Resources (IUNR, ZHAW) established a research focus group on outcome orientation of environmental education offers, but not specified for formal, non-formal or informal learning arrangements. The focus lies on the conceptionalisation of outcome orientation and logical comprehension for ESD-courses and learning arrangements, including the development of adequate methods and instruments to assess and evaluate outcomes of ESD (see: Outcome in Environmental Education. A Working Tool, Sept. 2017, in ger. and fre.). Systematic assessments of ESD-courses and learning arrangements have so far not been conducted or researched on in Switzerland, neither in formal nor in non-formal and informal learning settings.

Indicator 2.6 ESD implement	ation is a multi-stakeholder process ¹⁸
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.
	Implementing ESD in educational institutions or in the non-formal education sector is far most a multi-stakeholder process. A relatively wide range of stakeholders is involved in the ESD implementation process in Switzerland, e.g. éducation21, the schoolnet21, universities of teacher education, universities, schools of different educational levels, NGOs, and other ESD related organisations. However, in the official decision making process guiding ESD implementation, mainly government bodies are involved; and they have mandated pre-dominantly one institution – the foundation éducation21 as the national competence centre for ESD - to guide and support ESD implementation processes in Switzerland.
	With regard to international cooperation and finding synergies by aligning SDG goals of the Agenda 2030 with both, national and international contexts, SDC initiated in Sept. 2018 an exchange between educational experts and practicioners in the Swiss education system with educational experts for international cooperation and research. Although ESD is so far only marginally addressed within the existing Swiss networks on international cooperation in basic education (RECI) and vocational education and training (FoBBIZ) and research (Norrag), the SDG Agenda raises opportunities to establish synergies and multi-stakeholder processes on ESD between respective network members and organisations from civil society and Swiss educational institutions.
	In addition, SDC also supports a few institutions and organisations in Switzerland directly for their sensitization programmes in schools. Though ESD in these programmes for schools is only addressed marginally.
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? ESD is explicitly addressed in all three regional and language based curricula for compulsory education.
	Education 21, the national competence centre for ESD, has a clear mandate to implement ESD on formal school levels providing and supporting relevant actors in formal education for learning, teaching, exchange,

¹⁸ 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).

and further development on ESD. This process is often a multi-stakeholder process and has lead and will still lead to good opportunities of cooperation, networking and implementation of different ESD-approaches on formal education levels.

The established data-base on ESD topics and areas by éducation 21 is a further highlight to be reported for this monitoring period; it makes access to relevant ESD information on a thematic and on a learning competence level a lot easier for teachers as well as for learners.

It is noteworthy that the number of networks on specific topics of ESD, initiated and further developed by éducation21, has increased. Thereby opportunities have arosen for different education levels and fields to develop and exchange ESD implementation. The increasing number of 'ESD-schools', and also the applications for a whole-school approach through the established schoolnet21 is remarkable too.

At the level of universities, the U Change programme, and other initiatives have put SD and ESD also at the tertiary education level more often and powerful on the agenda of swiss universities.

What challenges did your country encounter when implementing this objective?

To address ESD outside the formal education system, i.e. in non-formal education and informal learning settings has become more difficult since awareness-raising activities and funding mechanisms are rather channelled almost exclusively to formal education. This includes lower and upper vocational education, in particular for certain trades which usually don't emphasize on SD or ESD aspects at all.

Since ESD is anchored on a superordinated subject level in the curricula of formal education, ESD has consequently even in compulsory education a certain handicap to be implemented. Without volunteer commitment and engagement of relevant school-based actors, ESD can still be neglected.

A number of ESD specialised organisations from civil society report to struggle for asseignments of ESD implementation at a larger scale since in their perspective most available funds for ESD implementation are channelled through the national competence centre on ESD.

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

ESD is rather an approach than a single subject. It involves interdisciplinary and transformal learning. This needs to be taken into account for the establishment of relevant learning and teaching settings as well as the necessary competences to be addressed for ESD. Traditional teaching and learning arrangements are some-

how limiting sound ESD implementation in school, it therefore might need more learning settings which allow transdisciplinary approaches, instruments and methods to be applied, as well as projects of active participation of all involved pupils, students, teachers, school heads and ESD experts.

A number of ESD specialised organisations from civil society report to struggle for asseignments of ESD implementation at a larger scale since in their perspective most available funds for ESD implementation are channelled through the national competence centre on ESD. National funding mechanisms also need to be put in place, considering the educational actors and areas which are not covered by éducation21.

Synergies on ESD implementation in Switzerland and in other partner countries of international cooperation need to be further explored and exchanged on. The alignment to the SDG Education Agenda 2030 may both have innovative effects for national as well as for international cooperation on ESD.

Issue 3. Equip educators with the competence to include SD in their teaching

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

In teacher education of Switzerland, the 2010 established Cohep Consortium ESD managed to set a basis for future integration of ESD in teacher education, through: 1) an assessment of existing practices, methods and courses, including contents, 2) didactical concepts on ESD as a support for educators in initial and in-service training, and 3) a recommended guideline of seven measures how to integrate ESD in teacher education. ESD has substantially reached teacher education in Switzerland, but yet without binding character for all teacher education institutions, due to the Swiss federal education system.

Since January 2015 the former rector's conferences of Swiss universities, universities of applied sciences and teacher education universities merged into a single coordination body called **swissuniversities**. Within swissuniversities each type of higher education institution has constituted its own chamber to set up task or issue-specific commissions. In 2018, the Chamber of teacher education universities (TE Chamber – PH Kammer) mandated the Working Group ESD to follow-up the integration of ESD into teacher education, initiated by the former Cohep Consortium ESD. This officially established **Working Group ESD (AG BNE)** consists of one representative of each Swiss teacher education university, as well as of permanent guests, such as the foundation éducation21, the Swiss Federal Institute for Vocational Education and Training (SFIVET), and the Swiss Federal Institute of Sport Magglingen (SFISM); The mandate of the Working Group ESD mainly refers to professional exchange and development of ESD in close cooperation with éducation21.

Indicator 3.1 ESD is included in the training ¹⁹ of educators		
Sub-indicator 3.1.1	Is ESD a part of educators' initial training? ²⁰	
Yes 🛛 No 🗌	In particular specify which ESD competences ²¹ are explicitly included in the study programmes.	
	Due to the federal system in Switzerland there are no national binding guidelines or curricula on ESD in teacher education. It is still up to each TE-institution and the respective cantons to define the measures and the degree of how to integrate ESD in their TE-institution and/or study programme.	
	However, as of 2018, most teacher education universities in Switzerland have partly integrated ESD in their initial training and study programmes for compulsory education levels and also for upper secondary education levels, including general education in vocational education and training. Since ESD is also included in respecttive language and region based curricula for compulsory education, the Working Group ESD foresees good opportunities to integrate ESD consistently and systematically during the process of language and region based curricula adoption and implementation on cantonal levels.	
	For the reporting period 2017-19 the TE-Chamber Working Group ESD (WG ESD) has given priority to the development of competence based didactical concepts on ESD-topics to be applied for in initial and	

¹⁹ ESD is addressed by content and/or by methodology.

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

²¹ 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.

	in-service training of teacher education, as well as for teaching on upper secondary and general vocational education levels. In its current strategy the WG ESD underlines the importance of teachers and ESD-experts to become multipliers of sustainable development. Close cooperation has also been established with éducation21, including the development of theoretical background of practical examples of ESD-didactics, communication and organisation of ESD-conferences and seminars for professional groups, and administrative support. For further integration of ESD on compulsory education levels the aim is also in future to develop model courses on ESD. ESC-competences that are targeted for initial teacher training are not very specific; they include subject based knowledge competences, transfer or comprehensive competences between different subjects, multiperspective approaches, global learning, differentiating between factual information and subjective argumentation, and ethical, normative and value based competences.
Sub-indicator 3.1.2	Is ESD a part of the educators' in-service training? ²²
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. Please also update the information provided under the phase III national implementation reporting in appendix III. Similar findings as for the initial TE-training can be stated for the in-service training in teacher education.
	Punctual ESD courses, projects- and programmes can be found at several teacher education institutions - pre-dominantly in the German speaking part of Switzerland - or at other higher education institutions but without binding character for teacher's education study programmes. In-service training for teacher students or professional teachers is offered by ESD-specialists and experts inside and also outside of teacher education organisations (including éducation21), and covers ISCED educational levels from 0-7. Emphasizing the multiplier's role of teachers and ESD-expert teaching staff, specific ESD competences addressed range from outdoor and out-of-school discovering of the natural environment to specialised subject didactics for comprehensive and transversal learning competences, such as personal self-competences for orientation, comprehensive inter-disciplinary competences, and practical competences through implementation of single or group-work based ESD projects and practical experiences (including school-based projects and programmes).
	The combination of ESD specific and non-specific competences might illustrate well the anchorage of inservice training for teacher students and academic staff too. E.g. in the support programme U Change teachers and other students are addressed to implement a project on sustainable development, aiming for competences of different subject specialisations for comprehensive application and participation, for practical and sound contributions to (local–global) development, for networking competences in a potential professional area in the future, and for experiencing project management and entrepreneurship activities.

²² 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.

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.	
	Besides educational institutions which focus on a whole-school or whole-institution approach, ESD is rarely addressed specifically in trainings for leaders and administrative staff. Individual educational leaders or administrative staff of educational institutions though report to have participated in trainings, in which ESD was addressed.	
	However, a systematic overview for the Swiss educational landscape on which educational institutions have integrated or focused on ESD in their trainings for leaders and administrators, can't be given here. It is assumed, despite aiming for an ESD whole-school or whole institution approach would necessitate trainings of this kind, the number of ESD-addressed trainings for educational leaders and administrators in Switzerland is rather small.	
Indicator 3.2 Opportunities exist for ed	lucators 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.	
	Éducation21 offers and coordinates a series of ESD-networks, programmes and conferences, targeting educators as well as other professionals on ESD:	
	 Schoolnet21, which is the Swiss network of health promoting and sustainable schools with more than 1800 member schools which aim at creating healthy and sustainable learning, living and working spaces at their schools; they address topics such as school environment (natural, social and economic), psycho-social well-being of pupils and teachers, health nutrition and physical activities, participation, cooperation with local enterprises and organisations, fair and eco-friendly trading. The ESD network for German-speaking teacher education universities, covering ESD specific topics for information exchange and professional development for all education levels and school subjects within TE; currently it consists of approximately 100 members who meet at least once per year. The ESD network of 'school external actors' (Ausserschulische Akteure) with decentralized offices and conferences in each language region of Switzerland. It consists of currently more than 75 ESD attached NGOs, museums, natural parks, and other organisations and networks. In the Network it is aimed at exchanging knowledge, information and practical experiences on conducting ESD-courses and projects in schools and educational institutions, as well as to improve and contribute on the cooperation with schools and contribute to enhance quality development on ESD-offers for schools. ESD for vocational education and training: fora, conferences, working group meetings in order to integrate ESD in vocational education and training, including learning arrangements in companies and at work places. Just recently (June 2018) éducation21 in cooperation with five organisations of voca- 	

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²³ Including assistance through direct funding, in-kind help, political and institutional support.

	In the area of international cooperation, in particular Swiss education networks and fora focussing on the Education Agenda 2030 offer opportunities to be involved for ESD discourse both on national and international level. In this regard the Swiss Agency for Development and Cooperaton (SDC) and the Swiss Commission for UNESCO are leading agencies to host network conferences and seminars with the civil society, academic institutions and also the private sector in Switzerland. ESD though is only subject to selected thematic conferences and gatherings within these networks; a specific WG ESD has not yet been built.
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 initiation and agendas of several working groups and networks which focus on ESD for educators – mainly coordinated and organised by éducation21 – can certainly be stated as successful and productive in the sense of exchange and development of ESD approaches and activities in teacher education among ESD experts and stakeholders. The follow-up and continuation of the former Cohep Consortium on ESD, currently officially mandated by the swissuniversities chamber of teacher education as ESD Working Group, rises hope to keep ESD focussed for TE, and helps implementing ESD into initial and in-service training of teacher education, while on cantonal level adopting language and region based curricula into practice teaching takes place.
	– What challenges did your country encounter when implementing this objective?
	The implementation of ESD in teacher education also faces federal constraints, i.e. cantonal decision-making processes can push or hamper ESD-implementation in teacher education. The lack of national or cantonal guidelines and liability on ESD implementation makes TE-educational management dependant on each TE-institution's own engagement with regard to ESD. The directorates and top management positions of TE-institutions could be involved only punctually on ESD-implementation, concepts and discussions. The promotion of developing ESD-didactics and ESD-project support at teacher education institutions has been neglected so far, and a monitoring system or assessment of current ESD teaching practices, methods and courses is still not in place at teacher education institutions.
	— What other considerations have to be taken into account in future ESD impl'tion conc. this objective? In order to mainstream ESD in teacher education, every TE-institution should appoint a management position for an SD/ESD-strategy at the own institution. A monitoring system on best practices and concepts of ESD-implementation in TE would help to evaluate and improve implementation mechanisms at TE-institutions. The ESD Working group as well as some of the meaningful networks on ESD in Switzerland, initiated by éducation21, shall further be supported to develop concepts and guidelines on how to implement ESD at their represented teacher education institution. Further ESD networks, platforms or working groups for upper secondary education should be created, to stimulate ESD-implementation also at this educational level, both in teacher education and on upper secondary school level.

Issue 4.	Ensure that adequate tools and materials for ESD are accessible			
If necessary, provid	If necessary, provide relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).			
Indicator 4.1	Teaching tools and materials for ESD are produced			
Sub-indicator 4.1.1	Does a national strategy/mechanism for encouragement of the development and production of ESD and materials exist?			
Yes 🛛 No 🗌		Please describe.		
		Éducation21 acts as a national service centre on national, language region, cantonal and educational levels. It can provide teachers, school boards and other involved parties with pedagogically tested teaching media, information and advice as well as financial support for school and class projects. As far as teacher training and further education is concerned, éducation21 works with higher education centres as well as training and further education colleges for teaching staff. Éducation21 is focussing on ESD expertise and cooperates with NGOs and publisher houses specialised for school and teaching manuals and material. Based on the new language and region based curricula éducation21 is mandated to integrate and link ESD 'ideas', models and didactics into school subject teaching material, including transversal and overall school subject thinking and approaches. Examples of published teaching materials are 'world views' (Weltsichten) for geography subjects or 'transversal views' (Querblicke) as ESD teaching material for compulsory education. Since online consultation of suitable teaching tools and material has increased tremendously for the past 3-4		
		years, éducation21 also established online data-bases linking ESD-teaching material and thematic concepts to curricula based competences of each education level. In cooperation with other editors, access and downloads to the approved ESD-material are discussed and regulated accordingly.		
		On behalf of the Swiss conferences of cantonal ministers of education for the three language (EDK, CIIP) teaching tools and material on ESD, as well as online data-bases have also been established in cooperation with experts and teacher education institutions of the respective language region. In the French part of Switzerland an international guide on the integration of ESD in school manuals has been established too.		
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.		
		Different federal offices and governmental agencies support éducation 21 for the development of teaching materials and the criteria based quality control of new or existing ESD teaching tools and material. In addition to that, éducation 21 gets contributions from the Swiss conferences of cantonal ministers of education of the three language regions (EDK, CIIP), from cantons and civil society as well as funds generated by éducation 21 itself, e.g. through the marketing of learning media.		

Indicator 4.2	Quality control mechanism	ns 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 C (b) Yes No No C (c) Yes No C		Please specify. Éducation 21 is also mandated to examine criteria based ESD teaching tools and school material. The selection and quality criteria are based on ten full or partial ESD competences. At the core of these competences is comprehensive thinking focussing on linkages of different subject areas, but also the production of misterys and ESD related movies are methods to be developed in this regard. The applied quality control mechanism for all teaching tools and learning media according to developed quality indicators is published on éducation 21's website in different national languages. The selection for ESD materials are based on methodological, didactical and content related criteria. The recommend-dations of teaching material for educational institutions can also be organised individually, on demand.			
Sub-indicator 4.2.2			ols and materials available: (a) in national languages?; (b)		•
		French, and in I b) For all levels of	and materials are available in three official languages of Satalian. If formal education, including the tertiary level, some ESD eaching tools for ISCED levels 4, 5 and 8 might not be available.	tools an	
			ISCED levels 2011	Yes	
			0. Early childhood education		
			1. Primary education	/	
			2. Lower secondary education	/	
			25. Lower secondary vocational education	1	
			3. Upper secondary education	/	
			35. Upper secondary vocational education	/	
			4. Post secondary non-tertiary education		
			45. Post-secondary non-tertiary vocational education		
			5. Short-cycle tertiary education	/	
			55. Short-cycle tertiary vocational education6. Bachelor's or equivalent level		
			7. Master's or equivalent level	1	
			8. Doctoral or equivalent level	· ·	
			o. Doctoral of equivalent level	İ	

Indicator 4.3 Teaching tools and materials for ESD 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 highlight which measures are the most efficient for dissemination.	
	Since online data-bases for teaching tools and material on ESD are accessible, it has to be considered as most efficient for dissemination. See in German: http://www.education21.ch/de/lernmedien/katalog; in French: http://www.education21.ch/fr/ressources/catalogue; in Italian: http://www.education21.ch/it/materiali-didattici	
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.	
	Éducation21 is funded by federal and cantonal government bodies, but from the overall budget specific allocation to the dissemination of ESD tools and materials cannot be extracted.	
Sub-indicator 4.3.3	Are approved ESD teaching materials available through the Internet?	
Yes No No	Please describe and name in particular official Internet sites.	
	Several teaching materials, guidelines and modul descriptions are available on the website of éducation21, either for free download or for acquisition through the media shop of éducation21: http://www.education21.ch/de/produktionen (also available in French or Italian). For the here sited link to the website of éducation21, the approved ESD teaching material for global learning, environmental education, and international cooperation in education are available by free download. The material is also available on the respective website of the funding agency (mostly public authorities) for the development and production of the teaching material.	
	The online data-base related to ESD is also accessible in German, French and Italian, see links in 4.3.1	
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 □	 A database of ESD teaching tools and materials is available on the website of éducation21: http://www.education21.ch/de/lernmedien/katalog in German, French and Italian. 	
	b) Other channels of ESD teaching tools are available for example through online libraries of Teacher education institutions in the respective languages. Or also on D-EDK. Public access though is not guaranteed, and the available media depend qualitatively and quantitatively on the size and anchorage of ESD at the respective institution.	

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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?
	Access and availability of ESD teaching tools and materials in Switzerland is high and of good quality. Éducation21 is a reliable source and database for this, and gets adequate public financial support for development and production of these materials.
	What challenges did your country encounter when implementing this objective?
	While the production of ESD teaching material is high, the demand for it has not been too much addressed and it's assumed to be lower than the production. Without institutional support for a broad ESD implementation in schools or other educational institutions, the use of teaching material on ESD often remains with only a few teachers, trainers or instructors – and some of them might even refer to own developed teaching material.
	What other considerations have to be taken into account in future ESD implementation concerning this objective?
	For the future production of ESD teaching tools and materials, a needs assessment, also in quantitative terms, is required. Linking production of teaching material with Professional teacher education could also be an asset for the integration of ESD in TE.

Issue 5. Promote research on and development of ESD

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

Scientific research focussing on ESD is not very common and widespread in Switzerland. ESD-related topics or disciplines, e.g. sustainable development, environment, ecology, global development, health, and others are more common for substantial research and studies. One reason for this might be that ESD in general but also specifically within a scientific community of a related topic/or discipline – including education studies and pedagogy – plays a rather marginal role. Secondly, since ESD is a transversal topic, requiring transdisciplinary approaches also in research, it is assumed to be more resource and time intensive; additionally, outcome analysis in the area of ESD tends to be hardly measurable. There might be other reasons too for avoiding or neglect-ting research on ESD in Switzerland, but this can't be further analysed here for this report.

A different picture is given for development projects and approaches on ESD who seem to be far more attractive than pure research projects. In particular teacher education universities, but also other education institutions on upper secondary or tertiary levels are keen to promote those kinds of projects in order to promote and integrate ESD-approaches in their respective curricula. It is assumed – without further analysis – that development projects on ESD are attractive for education institutions and researchers by their tangible results, their outreach and their conceptual proximity to practice teaching and learning, e.g. outdoor classes, interdisciplinary cooperation, testing new teaching tools, methods and didactical guidelines, running own projects (cooperative learning and participation), etc.

Indicator 5.1	Research ²⁴ on ESD is promoted
Sub-indicator 5.1.1	Is research that addresses content and methods for ESD ²⁵ supported?
Yes ⊠ No □	Please specify in particular the most important outcomes of supported research. Centre for Development and Environment (CDE)/University of Bern: CDE's focus in research and development on ESD is on collaborative transformative learning. Findings from CDE's ongoing research in different fields of sustainability science and in various regions around the world constitute a major source of first-hand insights conveyed in their courses; current ongoing research projects are: "Education for a sufficient lifestyle": The overall aim of the research project is to promote a transformation of values towards a sufficient lifestyle, through appropriate educational work. This is done at the conceptual level (by developing a didactic concept with implementation methods, "DiKomUm") as well as at the practical level (by implementing selected lesson units). The key point is the connection between a sufficient lifestyle and a good life, which is made visible, experienced, reflected on, and put to discussion. http://www.cde.unibe.ch/research/projects/education_for_a_sufficient_lifestyle/index_eng.html

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

²⁵ 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.

Yes ⊠ No □	"Language Compass on Sufficiency": This research project examines key German-language terms used to describe our habits regarding transport, travel, and food. The project team is investigating how language shapes our perception of these issues and leads us to think and act in line with the principles of sufficiency – or hinders us from doing so. The aim is to promote reflection on values and attitudes that foster sustainable consumer behaviour. (http://www.cde.unibe.ch/research/projects/language_compass_on_sufficiency/index_eng.html) Saguf – swiss academic society for environmental research and ecology: The focus of saguf's ESD Working Group is on Transformative Learning and Education for Sustainable Development. On the basis of understanding that in order to achieve sustainable development (in the manifold aspects and domains currently discussed), transformative learning is needed rather than only conformative and reformative learning. At the core of this research the relationship between transformative learning and higher ESD is examined. Is higher (academic, professional, and continuing) education capable of promoting such learning for change)? Which conditions can accelerate current progress? Can transformative learning nurture spaces for innovation in ESD. The authors of different Swiss university background, state: "Our main message is that ESD must build on transformative learning, and that greater attention to transformative learning requires taking into account, and critiquing, the social and normative context in which teaching takes place" (saguf, Gaia 26/4 (2017).
	Research and development projects related to ESD are also conducted at universities of teacher education in all three language regions of Switzerland. They are mainly initiated by SD-related didactical subject departments and associated research and development institutes. ESD and SD are both, explicitly mentioned and implicitly framed for projects, sometimes only indirectly targeted as a side-effect. Since these research and development activities on SD and ESD are not accessible on a central data-base, an overview for this report can't be given.
	Currently there is a PhD project at the University of Teacher Education Zurich:
	Baumann, Stefan: Integration of ESD into thematical didactics: Conception – Implementation – Evaluation – Transfer" on behalf of the Anthropocene Learning Lab 'Science & Sustainability Education in the Anthropocene.
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.

Sub-indicator 5.1.3	Are post-graduate programmes available: (1) On ESD: ²⁶ (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) (a) Yes ⋈ No □ (b) Yes □ No ⋈ (2) (a) Yes ⋈ No □ (b) Yes ⋈ No □	Please specify what programmes are available and list the most important academic dissertations that address ESD. 1a) Master Fachdidaktik NMG+NE: The Teacher Education Universities Bern and Luzern in cooperation with the Centre for Development and Environment (CDE) of the University Bern have launched in fall 2018 a new specialised Masters of Arts on didactics in 'Nature, Human, Society' and Sustainable Development. Courses are taking place altering at the three partner universities in Bern and Luzern. Targeted students of this Master programme are: Teachers of any educational level, including from teacher education institutions, as well as professional staff working in education and/or related subjects of natural and social sciences. https://www.phbern.ch/studiengaenge/master-fachdidaktik/ma-fachdidaktik-nmg-ne/zulassung-und-anmeldung/voraussetzungen.html
	The Centre for Development and Environment (CDE) is offering a Master Minor in Sustainable Development at the University of Bern (MSc Mi NE), targeting inter- and transdisciplinary studies on Sustainable Development with an orientation to transfer knowledge and competences into practice. http://www.phil-nat.unibe.ch/studium/studienprogramme/master_nachhaltige_entwicklung_nur_minor/index_ger.html 1b) There is no specific PhD or research programme for PhD students on ESD.
	2a) There are various Master programmes or parts of study programmes related to ESD at the Teacher Education universities of the three language regions in Switzerland, e.g. at the Master's level of HEP Vaud, interdisciplinary modules related to ESD are: - Intercultural exchange around ESD (with India) - Outdoor teaching: laboratory for outdoor learning - Nature in the city and education in the perspective of sustainable development
	Equally, there is a variety of accepted master thesis at different universities and teacher education universities which are related to ESD and/or SD, e.g.: Curnier, D. (2017). Which role for the school in the ecological transition? Sketch of a political and environmental sociology and anticipated necessary curriculum? Due to the quantity of possible thematic links and relations to ESD / SD at different universities, an overview of Master programmes and thesis can't be given here for this report.

²⁶ ESD is addressed by substance and/or by approach.

	2 b): The same applies for PhD programmes or doctoral research projects in Switzerland, to which it is assumed that the quantity related to ESD might not be very high. The record of published PhD research related to ESD is not easy accessible. The IGS North-South (International graduate school North-South on global change, innovation, and sus-
	tainable development) is dedicated to establish a leading international research network that analyses the impacts of global change, with a view to advancing sustainable development worldwide. It emphasizes an integrative, partnership-based research approach encompassing higher education at the PhD level, innovation, and application. The IGS North-South is currently training over 100 students from eight regions in Africa, Asia, Latin America, and Europe. http://www.igs-north-south.ch/Pages/Mission.aspx
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 ☒ (b) Yes ☐ No ☒	Please provide information on (a) and (b).
Indicator 5.2 Development of ESD is pr	romoted
Sub-indicator 5.2.1	Is there any support for innovation and capacity-building in ESD practice? ²⁷
Yes ⊠ No □	Please specify what main projects were/are being implemented to that end. Td-net (Network for Transdisciplinary Research) / Swiss academies of arts and sciences: "U Change". The support programme 'U-Change' (2017-2020) fosters students' initiatives and projects for sustainable development. The programme aims at encouraging students of different universities, faculties and disciplines to initiate and implement cooperative projects on SD and ESD. Through project implement-tation students learn from the cooperation among different students, with actors of civil society and with the private sector. A series of currently 21 students' projects (as of June 2018) are allocated into two categories: a) student's development and action-based projects (14), and b) web-based support-platforms for students' projects (7); the support platforms are used for student's exchange, thematic information and communication, organisation with involved project stakeholders as well as for coaching and mentoring. The list and short descriptions of promoted U Change projects and platforms can be consulted at the website of td-net: http://www.u-change.ch/en/sd-universities/U-Change-2017-20/Projekte.html Centre for Development and Environment (CDE)/University of Bern: The CDE understands sustainable development as a continuous process of searching, learning, and shaping alternative pathways. Actors must be equipped with relevant knowledge and skills to be able to actively participate and take responsibility. University graduates can play key roles as citizens, entrepreneurs, policymakers, researchers, and in many other functions. To build knowledge and foster skills relevant to sustainable development

²⁷ Activities may include projects, action research, social learning and multi-stakeholder teams.

Indicator 5.3	Dissemination of research results on ESD is promoted	
Sub-indicator 5.3.1	Is there any public authority support for mechanisms ²⁸ to share the results of research and examples of good practices in ESD ²⁹ among authorities and stakeholders?	
Yes 🗌 No 🖂		Please specify and provide information about where published research and dissertations are accessible.

²⁸ E.g., conferences, summer schools, journals, periodicals, networks.

²⁹ 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.

Sub-indicator 5.3.2	Are there any scientific publications: (a) specifically on ESD?; (b) addressing ESD?
(a) Yes ⊠ No □ (b) Yes ⊠ No □	Please name the major publications for (a) and (b). Publications for a):
	Affolter, C., Varga, A. (2018). Environment and School Initiatives. Lessons from the ENSI Network – Past, Present and Future. Publisher: Environment and School Initiatives, Vienna and Eszterhazy Karoly University, Budapest.
	Affolter, C., Mathar, R. (2016). "Environment and School Initiatives – ENSI: A precious network for thirty years!", in: Landrechts, W., Hindson J. (Eds.). Research and Innovation in Education for Sustainable Development. Exploring collaborative networks, critical characteristics and evaluation practices. Publisher: Environment and School Initiatives – ENSI, Vienna, Austria.
	Balsiger, J., Förster, R., Mader, C., Nagel, U., Sironi H., Wilhelm, S., Zimmermann A.: Transformative Learning and Education for Sustainable Development, in GAIA 26/4 (2017) Ecological perspectives for science and society, p. 357-359.
	Hammer, T., and Pfäffli J. (2018): Kompetenzen einer Bildung für Nachhaltige Entwicklung auf Universitätsstufe. Aus der Sicht von Studierenden der Rechts-, Sozial- und Wirtschaftswissenschaften. (CDE Report 2018). Bern, Schweiz: Centre for Development and Environment (CDE), Universität Bern; Bern Open Publishing (BOP)
	Herweg, K., Zimmermann, A.B., Lundsgaard Hansen, L., Tribelhorn, T, Hammer, T, Tanner, R.P., Trechsel, L.J. et al. (2017). Integrating Sustainable Development into Higher Education-Guidelines with Indepth Modules for the University of Bern. Foundations. Bern_University of Bern and Bern Open Publishing (BOP).
	Herweg, K. and Moser, S. (2017) 'Vom Homo sapiens zum Homo faber. Die Menschheit steht vor der grössten Herausforderung ihrer Geschichte – dem Aufbau einer nachhaltigen Gesellschaft. Umweltpsyychologie 3: p. 14-17.
	Lehman, M., Künzli C., Bertschy, F. (2017). Professionelle Handlungskompetenz von Lehrpersonen für die Entwicklung, Durchführung und Evaluation von BNE Unterrichtsangeboten in Kindergarten und Primarschule. Publikation éducation21, Bern.
	Pache, A., Hertig, P., et Curnier, D. (2017). Approches de la complexité dans le contexte de l'éducation en vue du développement durable: quelles perspectives pour la didactique de la géographie ? Les Sciences de l'éducation. Pour l'Ere nouvelle, 49(4), 15-40.
	Pache, A., Curnier, D., Honoré, E., et Hertig, P. (2016). Penser l'avenir de manière créative: un enjeu central de l'éducation en vue du développement durable. <i>Revue française de pédagogie. Recherches en éducation</i> , 4(197), 51-62.
	Schmid, Leonie; Zimmermann, Anne B.; Herweg, Karl (2018). Baseline-Bericht zuhanden des Vizerektorats Qualität: Integration der nachhaltigen Entwicklung in der Lehre an der Universität Bern, akademisches Jahr 2017/2018. (CDE Report). Bern: Centre for Development and Environment, BOP.

(b) Yes ⊠ No □	Publications for b):
	Reinfried, Sibylle; Probst, Matthias; Adamina, Marco; Hertig, Philippe & Stucki, Peter (2018). Klimabildung in allen Zyklen der Volksschule und in der Sekundarstufe II. Zusammenfassung der CCESO-Projekt-phase I 2016-2017. (Bericht). Globe Schweiz (Bericht), Bern.
	Schneider, P., Di Salvo G., Paulin, N. (2018). "Sustainability at Swiss Universities. Best Practice Nachhaltigkeitswoche Zürich", in GAIA 27/3 (2018) Ecological perspectives for science and society, p. 324-326. Wilhelm, Markus & Kalcsics, Katharina (2017). LERNWELTEN Natur – Mensch – Gesellschaft – Aus-
	bildung– 3. Zyklus. Bern: Schulverlag Plus.
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.
	Please address in particular the following questions:
	– Which actions and/or initiatives have been particularly successful and why?
	The recent start of a special Master programme on didactics in 'Nature, Human, Society, and Sustainable Development, can be highlighted for the current reporting period. It is a result of long-term cooperation, of research and development on ESD of two teacher education universities (Luzern and Bern), and a specialised centre for sustainability and environment (CDE), University of Bern. It's the first Master programme addressing SD and ESD at the core of its study programme. In addition the whole-institution approach of ESD at the University of Bern, supported by the local government, builds synergies and bridges to the above mentioned Master programme Fachdidaktik NMG+NE. In this regard the University of Bern is the first higher education institution in Switzerland to integrate SD/ESD at the whole institution. Both innovations might be the reason for increased research and development activities on ESD and on related topics for the involved partner institutions. Thematically, research and development projects show a focus on transformative learning as well as transdisciplinary activities concerning ESD. It is noteworthy to point another successful programme U Change which is disposing to transdisciplinary cooperation on ESD by student's initiatives.
	- What challenges did your country encounter when implementing this objective?
	In the area of research on ESD in Switzerland, it is difficult to gain an overview of who is doing what, since there are no national or regional funding channels that could lay ground for national coordination. The area of ESD-research involves stakeholders of academia and practitioners in formal education. Substantial research on ESD in this regard is rather weak.
	On the other hand, development projects on ESD are far more attractive for the involved actors and institutions, since practice teaching and learning are involed. Nevertheless, since national funding on research and development is low, ESD research still remains dependent on institutional and personal commitment.
	 What other considerations have to be taken into account in future ESD impl'tion conc. this objective? Creating national funding channels and e.g. language-based regional focal points for research and development on ESD could help broaden the manifold topics on ESD to be further analysed, e.g. ESD in nonformal education, or innovative approaches in ESD for less focused target groups within the Swiss educational landscape.

Strengthen cooperation or	ESD at all levels within the ECE region
relevant information on you	ur country situation regarding this specific objective (up to 1,500 characters with spaces).
International cooperation on	ESD is strengthened within the ECE region and beyond
	Do your public authorities cooperate in or support international ³⁰ networks on ESD?
	Please specify concrete networks and explain who supports these networks. - ENSI – Environment and School Initiatives (1986-2018). ENSI was an international network, offering a platform for cooperation among practitioners, researchers and policy makers in the fields of environmental education and education for sustainable development. Innovative environmental projects, action research, quality criteria for ESD-schools, teacher competencies and the whole school approach are main features that ENSI promoted throughout its lifespan. Switzerland was a member of ENSI, which is under the umbrella of OECD/CERI. ENSI Switzerland is/was part of the society supporting the implementation and consolidation of ESD in Switzerland (education21), focussing on curriculum development, teacher training and quality improvements of schools. https://www.ensi.org/About_us/ - UNESCO- network-activities of member states and associated members on ESD (see also under 6.1.4). - The Swiss Agency for Development Cooperation (SDC) does in general not explicitly or exclusively support international ESD-networks or programmes, but promotes ESD as part of its basic education and vocational skills development programme, as well as through related education components in programmes of other sectors, and through policy dialogue (SDC global and bilateral programmes across sectors). In its strategic orientation for the education sector SDC points out to make use of the transformative role of ESD, civic participation, social cohesion and resilience (2017). SDC has co-funded a project that aims to mainstream ESD principles in Mongolian schools (2013-2018) (see Indicator 6.1.3) https://www.eda.admin.ch/deza/en/home/themes-sdc/basic-education-vocational-training.html
	relevant information on you International cooperation on

³⁰ In this context, international associations, working groups, programmes, partnerships, etc., means those at the global, regional and subregional levels.

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.
	- LeNa - Deutschsprachiges Netzwerk "LehrerInnenbildung für eine nachhaltige Entwicklung": Network of German speaking Teacher Education institutions from Germany, Austria and Switzerland, founded in January 2013 and headed by Prof. Dr. Ute Stoltenberg from the Leuphana-University, Lüneburg (Germany). This network focuses on integration of ESD in Teacher Education, it was awarded by the German Council for Sustainability in 2017. Swiss Teacher Education institutions, and other educational institutions from the three German-speaking countries, including Switzerland, are engaged members of this network which consists of a total of approx 35 member institutions from Germany, Austria and Switzerland. https://www.leuphana.de/lena/mitgliedschaft.html
	- EERA-ESER Network No 30 - European Educational Research Association (EERA) - Environmental and Sustainability Education Research (ESER) Network: The academic work of EERA and especially the European Conference on Educational Research (ECER) is organised in 32 networks (as of 2017); they are either discipline oriented or focus on certain research themes within educational research. There is a number of Swiss researchers, mainly affiliated to Swiss Teacher Education Universities (e.g. TE Basel, TE Bern, TE Solothurn, TE Vaud) who are members of ESER network. Its focus is on research in the theory/practice of environmental and sustainability education, environmental education, education for sustainable development, outdoor education, place-based education, global education, socio-scientific issues in science education. Research shall also be enhanced in formal, informal and non-formal education connected to educational policy, institutional and curriculum development, pedagogical practice, professional development, and learner empowerment. https://eera-ecer.de/networks/30-environmental-and-sustainability-education-research-eser/
	SHE – Schools for Health in Europe is a European network foundation, focusing on making school health promotion an integral part of policy development in the health and education sector in EU member states. SHE encourages each member country to develop and implement a national policy on school health promotion, building on the experiences within the country, within Europe and globally. The Swiss network of Health promoting and sustainable schools (Schoolnet21) is a member of SHE. http://www.schools-for-health.eu/she-network/member-countries/44/switzerland.html

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.
	- The Swiss Agency for Development and Cooperation (SDC) has co-funded the project Education for Sustainable Development (ESD) from 2013-2018in bilateral agreement with the government of Mongolia. The project aimed at mainstreaming ESD principles in Mongolia, supporting and creating legal and institutional framework that is conducive for sustainable development. Government organisations, private sector and civil society organisations in collaboration with more than 600 schools in Mongolia aimed at integrating ESD in the Mongolian school system (curriculum adjustment 1-12 grade), and awareness-raising among leaders and the people (adults, youth, parents, community, and organisations). Additionally they established an institutional, legal, and organisational framework for sustainable and green development (SD and GD).
	- The International Graduate School North-South on global change, innovation, and sustainable development was developed within the National Centre of Competence in Research (NCCR) North-South. It is based on an inter-university agreement between the universities of Basel, Bern, Lausanne and Zurich in Switzerland as well as on selected cooperation agreements with leading universities from countries in the South and East (see also under indicator 5.1.3) http://www.igs-north-south.ch/Pages/Mission.aspx
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.
	- UNESCO- 'Technical consultation meeting on the future of ESD', aiming at mobilizing UNESCO-member states and associate members for further ESD action and support. As a follow up of the Decade on ESD, which ended in 2014, UNESCO launched the Global Action Programme (GAP) on ESD, 2015 in Japan. The 5-year timeframe of UNESCOs Global Action Programme is due to end in 2019. To build a post-GAP vision, a draft position paper has been prepared through a series of experts' meetings as well as a desk review of related literature and results of the mid-term GAP implementation. Switzerland as a UNESCO member state was nominated to participate on the consultation of the drafted post-GAP position paper at the UNESCO-Conference, held in Bangkok in July 2018. Switzerland participated at this conference by two representatives of SERI and SDC.

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? The Swiss participation in international networks focusing on ESD, such as ENSI, UNESCO-conferences, Schools for Health in Europe can be highlighted for the current reporting period. In addition, other international networks, such as Lena, EERA-ESER, and ISG North-South are focusing on research and development on ESD. They are attractive and crucial for individual researchers as well as for educational institutions to link up with current theoretical and practice based implementation processes of ESD, in particular for Teacher education institutions, but also for universities and educational institutions who are focussing on ESD research and development.
	- What challenges did your country encounter when implementing this objective? ESD is often only part of the education and development strategy of international organisations, networks and programmes. There are only limited opportunities for Swiss educational institutions to be part of international ESD focussing networks and programmes. In Switzerland too, the focus is on national or regional based networks and exchange on ESD research and development.
	- What other considerations have to be taken into account in future ESD implementation concerning this objective?
	The need for networks and exchange on ESD will remain to be a priority on national and regional level in Switzerland. This does not imply that international exchange and programmes focusing on ESD should be neglected, but depending on strategies, resources and expected results from the participation in international ESD-networks, Swiss educational institutions have to weigh thouroughly participation costs and added value to their programmes and activities. International network activities on ESD, including research and development seem to be periodically attractive, and more on an individual basis than on institutional level (in tendency). Future investments in participation of international networks on ESD needs take this into account at an institutional level as well as on the network organisational level.

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.

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

The promotion of knowledge of indigenous peoples and traditional knowledge for ESD is hardly a topic that is discussed in Switzerland on a national level. There are several Swiss organisations (NGO, civil society) engaged in international cooperation which address indigenous or traditional knowledge to be enhanced or respected in their project context of developing countries or of countries in transition. However, the monitoring of whether their link of programme/project content is aimed for ESD and how far their experiences can be linked to Switzerland may lead too far beyond the scope of this report.

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

There is quite a number of schools and institutions which report to have not enough support from local political authorities or from school heads to push forward the implementation of ESD at their institution. Thus, lack of time and financial resources at a given school context leaves teaching on ESD often at the disposal of individual engagement and will to integrate ESD into school and classes.

Due to the anchorage of ESD on a superordinary subject level in most of the curricula, there is yet no binding character of ESD integration in teaching and learning. As a result of that, priorities in teaching and learning may focus on current trends which are not necessarily ESD-related. E.g. currently there is a public debate and trend in education on the topic 'digitalisation'; thus, it competes for getting more attraction than other topics - e.g. ESD - on different education levels.

Research and evidence-based studies on the learning outcomes of ESD-implementation on different educational levels as well as in projects and programmes are rather weak. Based on this lack of outcome analysis, a) the legitimisation or added value of applying ESD approaches in schools and educational institutions remains to be vague and experimental. b) Evidence-based links between ESD-implementation on different educational levels and changing attitudes and behaviour related to ESD after compulsory education can hardly be found, and in addition challenges the broad implementation of ESD.

Channeling the biggest part of resources available for ESD through one institution, challenges other initiatives on ESD, developed by other educational institutions and organisations.

The variety of topics and actors on ESD, as well as decision-making processes on the cantonal levels lead to:

- a) higher coordination costs of ESD implementation
- b) cantonal differences in implementing the ESD strategy
- c) institutional uncertainties whether and how to promote or implement ESD.

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.

With the launch of new region and language based curricula for formal education levels, and with a clear mandate for éducation21, the Swiss established national competence centre on ESD, the implementation process of ESD in formal education proceeds considerably well. Though further development of ESD-approaches, emphasizing on vocational education, in apprenticeship learning on the job and in non-formal and informal learning arrangements is needed, and explored on for extra-funding mechanisms.

Since there is oviously a lack of research and evaluation on the learning outcomes of ESD in formal and non-formal education, assistance is needed, on how to find incentives and funding mechanisms for academia and the private sector to invest in research and evidence based ESD-implementation outcomes.

While ESD is addressed in most teacher education universities in Switzerland, in other higher education institutions ESD so far is only partially addressed and implemented at individual universities and universities of applied sciences. Assistance might be needed in future how to attract those institutions of tertiary education levels to put more efforts for implementing SD and ESD strategies at their institutions and study programmes.

With regard to the confederation's commitment and adaptation of the Agenda 2030 on sustainable development goals (SDGs) in Switzerland and globally, further enforcement of synergies and linkages between education stakeholders of national and international cooperation are highly recommended too.

ECE/CEP/AC.13/2018/4

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 (\checkmark) 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)			1										
Environmental ethics and philosophy		1	1		 								<u> </u>
Global citizenship, democracy and governance		1	1			-							
Sustainable lifestyles													<u> </u>
Human rights (e.g., gender and racial and intergenerational equity)			1										<u> </u>
Poverty alleviation													
Cultural diversity		/	1										<u> </u>
Gender equality		†											<u> </u>
Biological and landscape diversity													T
Environmental protection (waste management, environmental monitoring, risk assessment, etc.)		/	1	/									
Ecological principles/ecosystem approach			1	/		-							
Natural resource management (e.g., water, soil, mineral, fossil fuels)													†
Climate change and desertification		<u> </u>			 					†			<u> </u>
Personal and family health (e.g., HIV/AIDS, drug abuse)										†			†

		ISCED Levels 2011											
Some key themes covered by sustainable development	0	1	2	25	3	35	4	45	5	55	6	7	8
Environmental health (e.g., food and drinking; water quality; pollution)			/										
Corporate social responsibility			 							<u> </u>			†
Production and/or consumption patterns			/	/						<u> </u>			†
Economic growth and good jobs										T			<u> </u>
Rural/urban development										<u> </u>			†
Oceans and sea		/	/							<u> </u>			†
Renewable energy													
Sustainable cities and communities			<u> </u>	-			ļ	T		†			†
Culture's contribution to sustainable development										<u> </u>			
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:

1	No. of ticks	0–9	10–16	17–39	40–75	76–112	113–153
1	Scale	A	В	<mark>C</mark>	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 curriculum³¹ 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 4	15	5	55	6	7	8
Learning to learn	- posing analytical questions/critical thinking?													
Does education at each level	- understanding complexity/systemic thinking?													
enhance learners' capacity for:	- overcoming obstacles/problem-solving?													
	- managing change/problem-setting?													
	- creative thinking/future-oriented thinking?													
	 understanding interrelationships across disciplines/holistic approach? 													
	Total													
	- other? (countries to add as many as needed)													
Learning to do	 applying learning in a variety of life-wide contexts? 													
Does education at each level	- decision-making, including in situations of uncertainty?													
enhance learners' capacity for:	- dealing with crises and risks?													
	- acting responsibly?													
	- acting with self-respect?		ļ											
	- acting with determination?													
	Total													
	- other? (countries to add as many as needed)													

³¹ At the state level, where relevant.

		ISCED Levels												
Competence	Expected outcomes	0	1	2	25	3	35	4	45	5	55	6	7	8
Learning to be	- self-confidence?													
Does education at each level enhance learners' capacity for:	- self-expression and communication?													
children rearriers capacity for.	- coping under stress?													
	- ability to identify and clarify values?													
	Total													
	- other? (countries to add as many as needed)													
Learning to live and work	- acting with responsibility (locally and globally)?													
together	- acting with respect for others?													
Does education at each level enhance learners' capacity for:	- identifying stakeholders and their interests?													
cimanice realities capacity for:	- collaboration/team working?													
	- participation in democratic decision-making?					ļ		ļ						
	- negotiation and consensus-building?													
	- distributing responsibilities (subsidiarity)?													
	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 ^a	0	1	2	25	3	35	4	45	5	55	6	7	8
Discussions													
Conceptual and perceptual mapping													
Philosophical inquiry						T							
Value clarification						T							
Simulations; role playing; games						T							
Scenarios; modelling						T							
Information and communication technology (ICT)						T							
Surveys						T							
Case studies													
Excursions and outdoor learning						T							
Learner-driven projects						T							
Good practice analyses						T							
Workplace experience						T							
Problem-solving													
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 126 ticks; "other" not counted) is:

No. of ticks	0–8	9–42	+5-55	54–76	77–98	99–126
Scale	A	В	C	D	Е	F

^a Please refer to paragraph 33 (e) of the UNECE Strategy for ESD.

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 (\checkmark) in both tables (a) and (b) to indicate what types of education stakeholders are involved.)

Table (a)
According to the UNECE Strategy for ESD

	Classification	by UNECE Str	rategy for ESD
Stakeholders	Formal	Non-formal	Informal
NGOs	1	1	
Local government	1		
Organized labour			
Private sector	1	1	
Community-based			
Faith-based			
Media	✓		
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	3–5	6–10	11–15	16–21
Scale	A	В	C	<mark>D</mark>	Е	F

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Table (b)
According to United Nations Decade of ESD

	Classification by United Nations Decade of ESD										
Stakeholders	Public awareness	Quality education	Reorienting education	Training	Social learning						
NGOs	1	1	1	1	1						
Local government	/	1		/	1						
Organized labour											
Private sector	/	1	1	/	1						
Community-based	1				1						
Faith-based											
Media	1		1								
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

Appendix III

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		cation ; integra					ceived	trainir	ng ^a					
						Edu	cators						Leaders/administrators ^b							
			Init	$tial^c$					In se	$rvice^d$					In se	ervice ^e				
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																				
2. Lower secondary education																				
25. Lower secondary vocational education																				
3. Upper secondary education																				
35. Upper secondary vocational education																				
4. Post-secondary non- tertiary education																				
45. Post-secondary non- tertiary vocational education																				
5. Short-cycle tertiary education																				
55. Short-cycle tertiary vocational education																				

		Percentage of education professionals who have received training ^a to integrate ESD into their practice																
						Educ	cators						Leaders/administrators ^b					
			Init	ial^c					In se	$rvice^d$					In se	ervice ^e		
ISCED levels	A	В	C	D	E	F	A	В	C	D	E	F	A	В	C	D	E	F
6. Bachelor's or equivalent level																		
7. Master's or equivalent level																		
8. Doctoral or equivalent level																		
9. No information available																		
Non-formal																		
Informal																		

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

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

Training is understood to include at least one day (a minimum of five contact hours).
 See paras. 54 and 55 of the UNECE Strategy for ESD.
 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.

^d 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.

^e 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