



**FORMAT FOR REPORTING
ON IMPLEMENTATION OF THE UNECE STRATEGY FOR
EDUCATION FOR SUSTAINABLE DEVELOPMENT**

*Within the framework of the
United Nations Decade of Education for Sustainable Development (2005–2014)*

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

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- 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; on 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.

Governmental institutions (*please specify*): Ministry of Environmental Protection of the Republic of

Kazakhstan, Ministry of Education and Science of the Republic of Kazakhstan

Stakeholders:

NGOs (please specify): Regional Environmental Centre for Central Asia (CAREC), public association «Coordination and Information Eco-Education Centre «EcoObraz», NGO public foundation «Baiterek», Sustainable Development Assistance Centre.

Academia (please specify) National Kazakh Academy of Education (named after I. Altynsarin)

Business (please specify) _____

Other (please specify) _____

The UNECE Strategy for Education for Sustainable Development in the Republic of Kazakhstan is implemented by the Ministry of Environmental Protection (MEP) and the Ministry of Education and Science (MES). The National report on the Strategy Implementation has been prepared with the direct participation of the Kazakh Academy of Education (named after I. Altynsarin) functioning under MES, Regional Environmental Centre for Central Asia (CAREC), public association «Coordination and Information Eco-Education Centre «EcoObraz», public foundation NGO «Baiterek» and Sustainable Development Assistance Centre. The whole process of data collection has been built up on a close cooperation and commitment of all the stakeholders, i.e. MES, MEP and public organizations involved in the sphere of eco-education (EE) and education for sustainable development (ESD). The final compilation of data and coordination of the process has been carried out by MEP.

The report has been built upon the data of the first voluntary national report on the Strategy implementation (2007), CAREC national and sub-regional reviews on ESD (2003-2009), outcomes of the pilot projects on ESD that had been executed in Kazakhstan and materials of the seminars, workshops and annual sub regional conferences on ESD that had been held in Kazakhstan and the CA.

The June sub-regional seminar on ESD (June 16-18, 2010), hosted by CAREC and held in cooperation and at the financial support from UNECE with the participation of CA countries has significantly contributed to preparation of the Report. The seminar was held with the participation of ESD focal points of ministries of environment protection and education, and public organizations of the five Central Asian (CA) countries. International and sub-regional experts held a professional training on preparing reports and filling out forms, which has also proved a big contribution to the process.

- 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.)

According to its geo-political division the Republic of Kazakhstan has 14 regions and two cities of the national level, i.e. the capital Astana and Almaty. Each region has a local (regional) department of education and territorial department of environmental protection. Respectively, the cities of Almaty and Astana have municipal departments of education and environmental protection. The Ministry of Environmental Protection of the Republic of Kazakhstan and the Ministry of Education and Science of the Republic of Kazakhstan have the status of national executive authorities.

The main obstacle to the Strategy implementation is financial constraints due to limited resources allocated from the state budget for ESD at both national and local levels, and insufficient level of awareness of responsible executive authorities about the process of implementation of the UN Decade of ESD, UNECE Strategy for ESD, and the commitments of the Strategy implementation.

TEMPLATE FOR REPORTING

ISSUE¹ 1. ENSURE THAT POLICY, REGULATORY AND OPERATIONAL FRAMEWORKS SUPPORT THE PROMOTION OF ESD	
<i>If necessary, provide relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).</i>	
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>UNECE Strategy for ESD is available in the state (Kazakh) and Russian languages.</i>
Sub-indicator 1.1.2	Have you appointed a national focal point to deal with the UNECE Strategy for ESD?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>There were two national focal points appointed, i.e. from the Ministry of Education and Science and Ministry of Environment Protection</i>
Sub-indicator 1.1.3	Do you have a coordinating body for implementation of ESD?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Please specify its mandate and coordinating mechanism. Please also specify whether its mandate covers implementation of the UNECE Strategy for ESD. Council for Sustainable Development (CSD) under the Government of the Republic of Kazakhstan, presided by the Prime-Minister of the Republic of Kazakhstan (RoK) and staffed with the members of governmental authorities, local executive bodies, and diverse public associations and non-governmental and international organizations. ESD is one of the responsibilities of CSD RoK.</i>
Sub-indicator 1.1.4	Do you have a national implementation plan for ESD?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Please specify whether this plan includes implementation of the UNECE Strategy for ESD. The Draft National Implementation Plan aims at reforming the national education system in RoK in view of ESD policy. The Plan development is planned to be accomplished by the end of 2010.</i>
Sub-indicator 1.1.5	Are there any synergies at the national level between UNECE ESD process, the UNESCO global process on the United Nations Decade of ESD, ³ and other policy processes relevant to ESD?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>1. The initiatives of the World Summit on Sustainable Development, UNESCO and UNECE for ESD met with vigorous support in the Central Asian countries. In 2003 CAREC launched a comprehensive CA Environmental Education Programme (EE) for sustainable development (SD), which in due course transformed into the CA ESD Programme. The practice of the CA sub-regional cooperation in the sphere of ESD has been named by our partners as one of the best in Europe and Asia. Commitment of the CA countries in development and implementation of the Strategy for ESD in Europe and Asia is a perfect basis for synergies between national and sub-regional programmes and global and regional processes. CAREC 2003 ESD Programme gave birth to a tradition of sub-regional ESD conferences hosted by the capitals of the CA countries. During the period of 2002 to 2009 CAREC held eight sub-regional conferences at the support of partners and donors (including EC, UNESCO, OSCE, Governments of European countries, and business companies), which signals of sustainability of the ESD process in the CA, and can be taken as a good practice of ESD, which gives a unique opportunity for new stakeholders to join the process. Most of annual conferences, i.e. 6 out of 9, were held in Almaty, and hosted by Kazakhstan. The outcomes of the conferences are being used by the CA countries in their education processes at both national and local levels through trainings, seminars and routine activities by teachers, government officers and NGOs. 2. The Action Plan Network Schedule of MES RoK is planned to include seminars, conferences, and round tables on priority directions of work. Thus, on November 13-14, 2008 the Preschool and Secondary Education Department under the Ministry of Education and Science of the Republic of</i>

¹ Issues 1 to 6 are in accordance with the objectives of the UNECE Strategy for ESD (CEP/AC.13/2005/3/Rev.1).

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.

³ The United Nations General Assembly in its resolution 57/254 of 20 December 2002 proclaimed the 10-year period beginning on 1 January 2005 the United Nations Decade of Education for Sustainable Development.

	<p><i>Kazakhstan in cooperation with UNESCO Cluster Office held a conference «Education for sustainable development in the system of formal and non-formal education» in Karaganda.</i></p> <p><i>Aim: consolidate effort in developing programmes and projects enhancing education for sustainable development.</i></p> <p><i>Participants: chiefs and officers of regional and municipal (Astana and Almaty) departments of education, regional advanced training centres, representatives of NGOs, head teachers and teachers of secondary schools.</i></p> <p><i>Practical brochure «Education for sustainable development» was compiled by the results of the conference.</i></p> <p><i>The brochure included work-outs of lessons and extracurricular classes.</i></p>
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p>Issues of ESD are reflected in the following national policy documents:</p> <p>Concept of Transition of the Republic of Kazakhstan to Sustainable Development for 2007-2024.</p> <p>Action Plan on implementation of the Concept of Transition of the Republic of Kazakhstan to Sustainable Development for the period 2007 – 2009.</p> <p>Environmental Code of RoK.</p>
Sub-indicator 1.2.2	Is ESD: (a) addressed in relevant national education legislation/regulatory document(s); and (b) included in your national curricula and/or national standards/ordinances/requirements; at all levels of formal education, as understood by your education system in accordance with ISCED? ⁵
(a) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (b) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>1. Law № 319-III LRK of the Republic of Kazakhstan on Education reflects such principles of ESD as continuing education, equal rights to quality education for all, respect of liberties and human rights, priority of civil values, life and wellbeing of people, democracy in education management. Within the context of education for sustainable development such principles of the national education policy should be mentioned as the priority of development in education system, humanistic and developmental nature of education, uniformity of education and attitude development. Though the Kazakh Law on education does not contain regulations on ESD, it sets common legislative basis to tackle such issues of education for sustainable development as, inter alia:</i></p> <ul style="list-style-type: none"> <i>- Integrating ESD in school curricula;</i> <i>- Building up the educational process in educational institutions on the basis of the sustainable development policy, including attestation and accreditation instruments;</i> <i>- Training, attestation and advanced special training of teachers in tackling the issues of education for sustainable development;</i> <i>- Ensuring availability of teaching materials in education for sustainable development;</i> <i>- Assisting in scientific research in education for sustainable development;</i> <i>- Enhancing international cooperation in the issues of ESD.</i> <p><i>Issues of ESD are included in the educational subject «Natural science» of the National Standard of Secondary Education, Note: (Order № 367 of MES RoK dated July 9, 2010 on Adoption of national standards of education and national curricula of primary, compulsory and secondary education.</i></p> <p><i>Due to modernization of the system of education and introduction of a 12-year-long schooling the issues of ESD will be included in the national standards of compulsory secondary education (basis: Draft Strategic Plan of MES RoK for 2011-2015). ESD is included in the subject «Natural science» of the teacher's methodological instruction on peculiarities of teaching basics of sciences in secondary schools of the Republic of Kazakhstan in the 2010-2011 school years.</i></p> <p><i>2. The legislative basis for ESD implementation in Kazakhstan has also been defined by eco-legislation. Here legislative bases are clearly stated with reference to environmental education and awareness raising, covering all levels of primary, secondary formal and informal education. However, current educational legislation allows approaching the issues of ESD with a much wider circle of stakeholders within formal secondary education. The key document of eco-legislation is the Environmental Code adopted on January 9, 2007. It contains Article 25 devoted to eco-education and awareness-raising, and special advanced professional training. The Environmental Code was developed with full account of regulations of the</i></p>

⁴ Policy documents may include national strategies, plans, programmes, guidelines and the like.

⁵ International Standard Classification of Education (ISCED), UNESCO, 1997 (http://www.unesco.org/education/information/nfsunesco/doc/iscsed_1997.htm).

	<p><i>UNECE Strategy for ESD, including the goal of creating legislative, programme and normative bases for ESD. The law defines the goal of environmental education and awareness-raising as “development of an active civil attitude and eco-culture in the society, based on the principles of sustainable development. On the whole, eco-education and awareness raising, advanced training of specialists in environment protection have been granted a leading role in enhancing the comprehensive system of ESD, that would involve all the spheres of human activity, i.e. transition from environmental education and awareness raising to ESD.</i></p> <p><i>If yes, please specify for (a) and (b). Fill in the table by ticking (V) as appropriate.</i></p> <table border="1" data-bbox="940 358 1314 678"> <thead> <tr> <th data-bbox="940 358 1171 407">ISCED levels ⁶</th> <th data-bbox="1171 358 1247 407">(a)</th> <th data-bbox="1247 358 1314 407">(b)⁷</th> </tr> <tr> <td></td> <td data-bbox="1171 407 1247 440">Yes</td> <td data-bbox="1247 407 1314 440">Yes</td> </tr> </thead> <tbody> <tr> <td data-bbox="940 440 1171 472">0</td> <td data-bbox="1171 440 1247 472"></td> <td data-bbox="1247 440 1314 472"></td> </tr> <tr> <td data-bbox="940 472 1171 505">1</td> <td data-bbox="1171 472 1247 505">V</td> <td data-bbox="1247 472 1314 505">V</td> </tr> <tr> <td data-bbox="940 505 1171 537">2</td> <td data-bbox="1171 505 1247 537">V</td> <td data-bbox="1247 505 1314 537">V</td> </tr> <tr> <td data-bbox="940 537 1171 570">3</td> <td data-bbox="1171 537 1247 570">V</td> <td data-bbox="1247 537 1314 570">V</td> </tr> <tr> <td data-bbox="940 570 1171 602">4</td> <td data-bbox="1171 570 1247 602"></td> <td data-bbox="1247 570 1314 602"></td> </tr> <tr> <td data-bbox="940 602 1171 634">5⁸</td> <td data-bbox="1171 602 1247 634"></td> <td data-bbox="1247 602 1314 634"></td> </tr> <tr> <td data-bbox="940 634 1171 667">6</td> <td data-bbox="1171 634 1247 667"></td> <td data-bbox="1247 634 1314 667"></td> </tr> <tr> <td data-bbox="940 667 1171 683">Teacher education</td> <td data-bbox="1171 667 1247 683">V</td> <td data-bbox="1247 667 1314 683">V</td> </tr> </tbody> </table>	ISCED levels ⁶	(a)	(b) ⁷		Yes	Yes	0			1	V	V	2	V	V	3	V	V	4			5 ⁸			6			Teacher education	V	V
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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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>Concept contains a reference to a demand for development of informal ESD and consistent awareness-raising in ESD.</i>																														
Sub-indicator 1.2.4	Is public awareness in relation to ESD addressed in relevant national document(s)?																														
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Articles of the Concept of Transition of the Republic of Kazakhstan to Sustainable Development for 2007-2024.</i>																														
Sub-indicator 1.2.5	Does a formal structure for interdepartmental ⁹ cooperation relevant to ESD exist in your Government?																														
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Council for Sustainable Development (e.g. III Session of the Council for Sustainable Development of the Republic of Kazakhstan in April 2007 discussed the issue of education for sustainable development, including implementation of UN Decade of ESD and UNECE Strategy for ESD).</i>																														
Sub-indicator 1.2.6	Does a mechanism for multi-stakeholder cooperation on ESD exist with the involvement of your Government? ¹⁰																														
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<p><i>Bilateral agreements and MoU with the stakeholders of ESD in RoK. The Ministry of Environmental Protection concluded 15 MoU with NGOs and 19 MoU with institutes of higher education.</i></p> <p><i>The Ministry of Environmental Protection and the Ministry of Education and Science take part in the work of the CAREC Central Asian Working Group on ESD (CAWG) (launched in April 2003). CAWG on ESD include representatives of MEP and MES of five Central Asia countries. CAWG on ESD makes shared decisions and implements projects on EE and ESD in CA.</i></p> <p><i>The Working Group on EE and ESD. Its activities strengthen cooperation between establishments of education, environment protection, science and NGOs. The CA Network on ESD unites 5 countries of CA, Ministries of Education and Environment Protection, NGOs and the science. The leading</i></p>																														

⁶ Education level in accordance with ISCED.

⁷ National curricula and/or national standards/ordinances/requirements.

⁸ For higher education institutions when answering: (1) regarding national legislation: this objective is focusing equally at the first stage of tertiary education (Bachelor), the second stage (MSc) and the third stage (PhD) while covering various aspects such as **service agreements/contracts, national strategies of Research and Development, university organization and studies acts, or general laws of higher educations**; (2) regarding national

and/or subnational standards/ordinances/requirements: special attention shall be devoted to indications of linking systems of **quality assurance and accreditation** (with regard to the Bologna process; see http://www.coe.int/t/dg4/highereducation/EHEA2010/BolognaPedestrians_en.asp for information) for higher education institutions with ESD, as well as to **regulations of study programmes and study fields** which reflect the principles of ESD.

⁹ Between State bodies.

¹⁰ For explanation see paragraph 46 of the UNECE Strategy for ESD.

	<i>role in developing and maintaining this network belongs to Kazakhstan. CA has worked out various mechanisms of coordinating programmes and projects in the sphere of ESD with the involvement of all the stakeholders: Ministries of Education and Environment Protection, institutes of sciences, educational institutions, public and international organizations. A great number of organizations, schools, freelance experts and volunteers have developed a common programme on EE and ESD.</i>
Sub-indicator 1.2.7	Are public budgets and/or economic incentives available specifically to support ESD?
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>A number of regional local executive bodies support ESD within the framework of government contractual work in the sphere of public education, propaganda and awareness raising (e.g. the Karaganda region implemented the projects on a prevailing ESD programme for a 12-year-long schooling system, introduction of ESD into the system of secondary education, they are implementing programmes on introducing ESD in rural schools and introducing the idea of Eco-Schools as a comprehensive approach to introducing ESD in school practices).</i>
Indicator 1.3 National policies support synergies between processes related to SD and ESD	
Sub-indicator 1.3.1	Is ESD part of SD policy(s) if such exist in your country?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Concept of Transition of the Republic of Kazakhstan to Sustainable Development for 2007-2024. Action Plan on implementation of the Concept of Transition of the Republic of Kazakhstan to Sustainable Development for the period 2007 – 2009. The Action Plan Network Schedule of MES RoK.</i>
Issue 2. PROMOTE SD THROUGH FORMAL, NON-FORMAL AND INFORMAL LEARNING	
<i>If necessary, provide relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces). During 2008-2009 CAREC, Pavlodar National Pedagogical Institute, MES and MEP RoK with the participation of NGOs and in cooperation with the OSCE Centre in Astana developed and in 2009 introduced a compulsory higher education course «Ecology and Sustainable Development» (2 credits). The course reflects social, economic and environmental aspects of sustainable development. CAREC, MES and MEP RoK with the participation of NGOs and with support of Chevron developed on the basis of a pilot technical institute of higher education, Kazakh National Technical University (named after K. Satpaev) and recommended a new optional course (free electives) «Energy Efficiency and Sustainable Development», 3 credits, for higher technical education system of Kazakhstan. In 2006 secondary schools of RoK received an opportunity to join an international programme Eco-School, acknowledged by UNESCO as one of the most efficient instruments of introducing ESD in the system of school management. One of the largest projects in the sphere of informal education is SPARE (School Project for Application of Recourses and Energy), involving 200 secondary schools in the country (2.5% of total number) that implement projects on sustainable use of resources and public awareness-raising campaigns. The Young Reporters for the Environment Programme is being implemented through informal education and contributes to acquisition of knowledge and awareness of elder school children in sustainable development and the role of information awareness of the processes leading to SD. In 2007 institutions of advanced special training were offered a number of training modules for inclusion into their curricula, the modules were developed by local NGOs specifically for institutions of advanced teacher and school administration training.</i>	
Indicator 2.1 SD key themes are addressed in formal education	
Sub-indicator 2.1.1	Are key themes of SD ¹¹ addressed explicitly in the curriculum ¹² /programme of study at various levels of formal education?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>I. Basic Curriculum is a normative document which defines the basics of compulsory secondary education and sets invariant (basic) and variable (school, schooling) components of school hours of educational organizations. In accordance with compulsory curricula of primary, basic secondary and comprehensive education the environmental education and education for sustainable development is executed through environmentalization of the content of training courses within the framework of invariant component of the curricula. Primary education (1- 4 years of schooling) - environmental aspects are included in the content of courses of a school curriculum «Cognition of world» (2 lessons a week), «Mother tongue» (5 lessons a week). To organize the system of education that would meet the interests of sustainable development there has been developed and introduced into the</i>

¹¹ For explanation see paragraph 15 of the UNECE Strategy for ESD.

¹² At the State level, where relevant.

educational process of the primary level an environmental economic programme «Our home».

Basic secondary education (5-11 years of schooling) – issues of environmental education and attitude development are included in the content of the courses: «Chemistry», «Biology», «Geography», etc.

The above mentioned courses in the school curriculum are fundamental in the process of environmental education.

The contents of the courses include the issues of efficient use of natural resources, waste recycling, production of organic goods and materials, preservation of biological diversity and natural matter cycle in nature. School curricula make provisions for excursions to waterworks and other centres of chemical industry, laboratories of industrial and agricultural enterprises.

Extra-curricular school projects on «Biology» provide for activities on protection of flora (planting and care) and fauna (looking after animals in the wildlife centre).

II. Within the framework of variable component of the curricula environmental education and attitude development for sustainability is executed via lessons devoted to introduction into new school courses (optional classes, applied courses, free electives).

Within the curricular course «Natural science» such applied and practical lessons on topical and new vectors in ecology are possible as «Bionomics and human health», «Geology», «Chemistry and bionomics», etc.

III. Apart from opportunities provided by the basic school curricula the continuing environmental education and attitude development is implemented via involvement of students in school scientific societies, international eco-projects, contests, youth eco-centres, clubs and other forms of practical activity organization.

Information on teacher training in sustainable development for the system of technical and vocational education (TVE)

The course «Environment protection» (32-36 hours) aims at developing sufficient competences of all the professions and specializations of TVE in sustainable development.

In accordance with the Classifier of professions and specializations of technical and vocational post-secondary education such specializations in sustainable development are stipulated as:

1509000-Bionomics and nature conservation activity (by types of activity), 1514000–Bionomics and efficient use of natural resources (by branches of economy).

All the specializations meet national standards of compulsory education and have educational integrated and TVE curricula.

The standards require the use of competent approach based on student competence assessment in the form of basic learning results, opportunity to apply module forms of education.

The whole course of these specializations include such main disciplines as, inter alia:

General bionomics - 68 hours
 Environment protection and efficient use of natural resources - 86 hours
 Environment supervision and control – 98 hours
 Human bionomics - 56 hours
 Conservation of resources and land - 86 hours
 Management of specially protected natural territories – 86 hours
 Conservation of flora and fauna of specially protected natural territories - 86 hours
 Water protection - 86 hours
 Air protection - 86 hours
 Basics of general bionomics and issues of human bionomics - 99 hours
 Geo-environmental mapping -120 hours

Training in the above mentioned professions is provided in 22 educational institutions of TVE (4 vocational lycées and 18 colleges). There study 2,709 people, of whom 188 people study in vocational lycées and 2,521 people in colleges.

Phase II: Please specify in the table in appendix I (a) and use the scale. Indicate the results in the box below.

A	B	C	D	E	F
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Sub-indicator 2.1.2	Are learning outcomes (skills, attitudes and values) that support ESD addressed explicitly in the curriculum ¹³ /programme of study at various levels of formal education?												
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify in the table in appendix I (b) and use the scale. Indicate the results in the box below.</i></p> <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">A</td> <td style="width: 20px; height: 20px; text-align: center;">B</td> <td style="width: 20px; height: 20px; text-align: center;">C</td> <td style="width: 20px; height: 20px; text-align: center;">D</td> <td style="width: 20px; height: 20px; text-align: center;">E</td> <td style="width: 20px; height: 20px; text-align: center;">F</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table>	A	B	C	D	E	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								
Sub-indicator 2.1.3	Are teaching/learning methods that support ESD addressed explicitly in the curriculum ¹⁴ /programme of study at various levels of formal education?												
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Innovation methods of teaching, including those which aim at enhancing ESD, are studied at the advanced training courses of the National Advanced Training Institute for managerial and teaching staff of the education system (NATI ES), and regional advanced training institutes (ATI). One of the ways to upgrade the educational content of ESD-oriented natural-science disciplines is to apply practical training that facilitates development of a holistic picture of the world.</i></p> <p><i>Application of a practical training approach encourages integration of curricular courses, agglomeration of concepts pertaining to sustainable development: bionomics, economics, information and health preserving technologies.</i></p> <p><i>Phase II: Please specify in the table in appendix I (c) what methods are of particular significance in your country and use the scale. Indicate the results in the box below.</i></p> <table border="1" style="margin: auto;"> <tr> <td style="width: 20px; height: 20px; text-align: center;">A</td> <td style="width: 20px; height: 20px; text-align: center;">B</td> <td style="width: 20px; height: 20px; text-align: center;">C</td> <td style="width: 20px; height: 20px; text-align: center;">D</td> <td style="width: 20px; height: 20px; text-align: center;">E</td> <td style="width: 20px; height: 20px; text-align: center;">F</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> <p><i>Please also specify for non-formal and informal education, as appropriate. If relevant data are available please also specify (provide examples on how it is done).</i></p> <p><i>Environmental education and education for sustainability in non-formal and informal education.</i></p> <p><i>Information and communication, practical training, critical thinking, module technologies, multi-level education, health preserving.</i></p> <p><i>In the system of non-formal and informal education such methods of teaching are included in the teacher training curricula for the courses Eco-School, SPARE.</i></p> <p><i>For the last three years more than 250 teachers participated in seminars and trainings held by NGO "EcoObraz".</i></p> <p><i>A number of international projects on environmental education and education for sustainable development are being implemented at the organizational and coordinating support of the Ministry of Education and Science of the Republic of Kazakhstan.</i></p> <p><i>Eco-School is a course of eco-management and certification of secondary schools in implementation of environmental education and education for sustainability.</i></p> <p><i>Project operator: Public association «Coordination and Information Eco-Education Centre "EcoObraz" (Director M. Zhirkova)</i></p> <p><i>The programme Eco-School was acknowledged by UNESCO as one of the most efficient instruments of introducing ESD in education for sustainable development under the decade of education for sustainability. At the moment Kazakhstan is one of 50 countries that implement the programme. About a hundred schools are officially working under the programme.</i></p> <p><i>School project on the use of resources and energy.</i></p>	A	B	C	D	E	F	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A	B	C	D	E	F								
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>								

¹³ See footnote 12.

¹⁴ See footnote 12.

Project operator: Public association «Coordination and Information Eco-Education Centre "EcoObraz" (Deputy director I. Ignatovich). SPARE is a Kazakhstani part of the International education programme directed at raising students' and teachers' awareness in the problems of sustainable energy.

In the process of implementation the project has grown from a small-scale activity aimed at raising awareness of students in sources of energy and practical ways of energy-saving to a programme including a number of practical activities, research and development of teaching resources.

At the moment SPARE-Kazakhstan network combined more than 200 educational organizations, of which 79 are actively involved in this direction of work.

More than 800 schools use materials of the project while teaching «Geography», «Chemistry», «Physics», and in the work of eco-hobby clubs.

Holistic eco-economic course for primary school (1-4 school years) «Our home». Developer - Alternative education centre «Youth Achievement».

Indicator 2.2 Strategies to implement ESD are clearly identified

Sub-indicator 2.2.1

Is ESD addressed through:¹⁵ (a) existing subjects¹⁶only? (b) a cross-curriculum approach? (c) the provision of specific subject programmes and courses? (d) a stand-alone project?¹⁷ (e) other approaches?

- (a) Yes No
- (b) Yes No
- (c) Yes No
- (d) Yes No
- (e) Yes No

Under the current state of secondary schooling the environmental education for sustainable development is realized through environmentalization of curricular programmes and courses.

Strategies to implement ESD in the system of compulsory secondary education of the Republic of Kazakhstan.

1) Primary level of education - ESD issues are included in programmes of subjects «Cognition of world» (2 lessons a week), and holistic eco-economic course for primary school (1-4 school years) «Our home». The set of teaching materials contains a student's workbook, teacher's manual, visual aids, resource pack, video-cassettes. The course has been recommended by MES to integrate in the subject «Cognition of world», and to use as an extra-curricular course.

2) Compulsory secondary level of education – ESD issues are included in programmes of subjects «Geography», «Biology», «Chemistry», etc. The above mentioned courses in the school curriculum are fundamental in the process of ESD. The courses teach the systems of nature conservation concepts, e.g. efficient use of natural resources, wasteless technologies, waste recycling, production of organic goods and materials, preservation of biological diversity and natural matter cycle in nature, etc.

Most rationally the issue is tackled in lycées of a relevant type and math and natural-science schools. These types of schools in full accordance with their curricula can introduce optional courses, i.e. special courses of applied character.

Under the Programme on enhancing investment culture and financial literacy secondary schools introduced subjects of economics and financial literacy.

A number of regions, e.g. Karaganda, developed and implement the projects on prevailing ESD programmes focused on including SD into most subject courses. These programmes allow working out lesson plans with inclusion of SD issues.

Phase II: If yes, please specify for different levels of education system in accordance with ISCED by ticking (V) in the table as appropriate.

ISCED levels	(a)	(b)	(c)	(d)	(e)
	Yes	Yes	Yes	Yes	Yes
0					
1	V	V	V	V	V
2	V	V		V	V
3	V	V	V		V
4	V	V	V	V	V

¹⁵ For higher education institutions: These distinctions would be equal to: (a) **courses and disciplines**; (b) **interdisciplinary courses**; (c) **separate, specified SD courses or seminars**; and (d) **stand-alone projects** implemented by the department, faculty or inter-faculty structures.

¹⁶ E.g. geography or biology. For higher education, "subject" means "course".

¹⁷ A project is interpreted as a discrete activity with its own time allocation rather than a teaching/learning method.

	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr><td style="text-align: center;">5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td style="text-align: center;">6</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td style="text-align: center;">Teacher education</td><td style="text-align: center;">V</td><td style="text-align: center;">V</td><td style="text-align: center;">V</td><td style="text-align: center;">V</td><td style="text-align: center;">V</td></tr> </table> <p><i>If you ticked (e), please specify the approaches.</i> <i>Two new special courses were developed in Kazakhstan for the system of higher education: 1. Compulsory course «Ecology and sustainable development» (2 credits, 90 hours) within the block of liberal arts for Bachelors of all the sciences in all the higher education institutions in Kazakhstan (since 2008). 2. Free electives – variable course «Energy efficiency and sustainable development» (3 credits, 135 hours) for Bachelors of technical higher education institutions in Kazakhstan.</i> <i>In the regions there were created eco-centres, youth eco-clubs «EcoBioCentre» in East Kazakhstan, «Youth for eco-safety and sustainable development» in Kostanay, «Landscape» in West Kazakhstan, «Edelweiss» in Central Kazakhstan, etc.</i> <i>The above mentioned centres aim at developing basic skills and habits of students in nature conservation, developing new methodology and programmes, coordinating teachers' activity in the system of continuing environmental education and education for sustainable development.</i> <i>In 2007 was launched a National contest «School business projects» on environment for sustainable development. Each year educational materials are prepared by the results of the contest.</i></p>	5						6						Teacher education	V	V	V	V	V
5																			
6																			
Teacher education	V	V	V	V	V														
Indicator 2.3 A whole-institution approach¹⁸ to SD/ESD is promoted																			
Sub-indicator 2.3.1	Do educational institutions ¹⁹ adopt a “whole-institution approach” to SD/ESD?																		
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<p><i>"Eco-School" programme adopts a system approach involving schools at the level of whole-institution cooperation – from school administration to students, into the process of ESD introduction in the curriculum and annual action plan. At the moment about 20 schools are actively implementing the programme.</i></p> <p><i>Phase II: If yes, please specify for all levels of your education system in accordance with ISCED by ticking (V) in the table as appropriate.</i></p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">ISCED levels</th> <th style="text-align: center;">Yes</th> </tr> </thead> <tbody> <tr><td style="text-align: center;">0</td><td></td></tr> <tr><td style="text-align: center;">1</td><td></td></tr> <tr><td style="text-align: center;">2</td><td></td></tr> <tr><td style="text-align: center;">3</td><td></td></tr> <tr><td style="text-align: center;">4</td><td></td></tr> <tr><td style="text-align: center;">5</td><td></td></tr> <tr><td style="text-align: center;">6</td><td></td></tr> <tr><td style="text-align: center;">Teacher education</td><td></td></tr> </tbody> </table> <p><i>Please also specify for non-formal and informal education, as appropriate. If relevant data are available, please also specify (provide examples on how it is done).</i></p>	ISCED levels	Yes	0		1		2		3		4		5		6		Teacher education	
ISCED levels	Yes																		
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Teacher education																			
Sub-indicator 2.3.2	Are there any incentives (guidelines, award scheme, funding, technical support) that support “a whole institution approach to SD/ESD”?																		

¹⁸ A “whole institution approach” means that all aspects of an institution's internal operations and external relationships are reviewed and revised in 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).

¹⁹ For higher education institutions: **whole university, whole college or whole faculty approach** (including inter-faculty approaches).

<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p><i>The EcoSchools system is governed by the international standard of the programme, the symbol of highest efficiency is Green Flag. Most active participant of the programme in the Karaganda region are planned to hold conferences for representatives of eco-committees of these schools. Annual national laps of the international contest "Energy and environment" are held under SPARE.</i></p> <p><i>Phase II: If yes, please specify what schemes are available for all levels of your education system in accordance with ISCED by ticking (V) in the table as appropriate.</i></p> <table border="1" data-bbox="966 357 1291 641"> <thead> <tr> <th>ISCED levels</th> <th>Yes</th> </tr> </thead> <tbody> <tr> <td>0</td> <td></td> </tr> <tr> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td></td> </tr> <tr> <td>3</td> <td></td> </tr> <tr> <td>4</td> <td></td> </tr> <tr> <td>5</td> <td></td> </tr> <tr> <td>6</td> <td></td> </tr> <tr> <td>Teacher education</td> <td></td> </tr> </tbody> </table> <p><i>Please also specify for non-formal and informal education, as appropriate. If relevant data are available please also specify (provide examples on how it is done).</i></p>	ISCED levels	Yes	0		1		2		3		4		5		6		Teacher education	
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Teacher education																			
<p>Sub-indicator 2.3.3</p>	<p>Do institutions/learners develop their own SD/ESD indicators for their institution/organization?</p>																		

Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>A three-level system functions under EcoSchools, which allows the school, and students, making self-assessments on meeting the sustainability and ESD implementation criteria.</i></p> <p><i>Phase II: If yes, please specify for all levels of your education system in accordance with ISCED, by ticking (V) in the table as appropriate:</i></p> <p><i>(a) For formal institutions.</i></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px;">ISCED levels</th> <th style="padding: 2px;">Yes</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;">0</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">1</td><td style="padding: 2px;">V</td></tr> <tr><td style="padding: 2px;">2</td><td style="padding: 2px;">V</td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;">V</td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;">V</td></tr> <tr><td style="padding: 2px;">5</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">6</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">Teacher education</td><td style="padding: 2px;">V</td></tr> </tbody> </table> <p><i>(b) For non-formal institutions for non-formal and informal education.</i></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="padding: 2px;">ISCED levels</th> <th style="padding: 2px;">Yes</th> </tr> </thead> <tbody> <tr><td style="padding: 2px;">0</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">1</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">2</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">3</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">4</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">5</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">6</td><td style="padding: 2px;"></td></tr> <tr><td style="padding: 2px;">Teacher education</td><td style="padding: 2px;"></td></tr> </tbody> </table> <p><i>If relevant data are available, please also specify (i.e. provide examples on how it is done).</i></p>	ISCED levels	Yes	0		1	V	2	V	3	V	4	V	5		6		Teacher education	V	ISCED levels	Yes	0		1		2		3		4		5		6		Teacher education	
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Indicator 2.4 ESD is addressed by quality assessment/enhancement systems																																					
Sub-indicator 2.4.1	(a) Are there any education quality assessment/enhancement systems? (b) Do they address ESD ²⁰ ? (c) Are there any education quality assessment/enhancement systems that address ESD in national systems?																																				

²⁰ 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).

<p>(a) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>(b) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>(c) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>National Test Centre for MES RoK</i></p> <p><i>One of basic instruments ensuring efficiency of education system management is an independent audit of education quality which is based on real and cross-referenced data.</i></p> <p><i>Independent external control in the form of common national testing (CNT) and intermediate state control (ISC) are used in Kazakhstan to assess the quality of knowledge of students.</i></p> <p><i>The common national testing is held annually under supervision of national committees and representatives from the Ministry.</i></p> <p><i>There is organized a field consultation and explanatory work on the procedure of the common national testing, briefings with national and commercial mass media.</i></p> <p><i>The results of each procedure are analyzed at the National Centre for Quality Assessment in Education, and are reflected in the National Report.</i></p> <p><i>CNT plays an important role in enhancing the quality of education services at the level of compulsory secondary education. The results of these tests are analyzed and used in reviewing and upgrading the school teaching process, standards of education and school curricula, in organizing teacher training and advanced teacher training.</i></p> <p><i>Intermediate state control (ISC) aims at assessing the quality of education services and the level of students' mastering the school curricula of primary and compulsory secondary levels of education.</i></p> <p><i>The results of ISC are also analyzed at the National Centre for Quality Assessment in Education, and are reflected in the National Report.</i></p> <p><i>Being a procedure of independent external control the ISC provides a vast opportunity to enhance efficiency of education quality management and to make relevant management decisions at various levels of education management.</i></p> <p><i>Phase II: If yes, please specify for various levels of your education system in accordance with ISCED, by ticking (V) in the table as appropriate.</i></p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse; text-align: center;"> <thead> <tr> <th style="border: none;">ISCED levels</th> <th style="border: none;">(a) Yes</th> <th style="border: none;">(b) Ye</th> <th style="border: none;">(c) Yes</th> </tr> </thead> <tbody> <tr> <td style="border: none;">0</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">1</td> <td style="border: none;">V</td> <td style="border: none;">V</td> <td style="border: none;">V</td> </tr> <tr> <td style="border: none;">2</td> <td style="border: none;">V</td> <td style="border: none;">V</td> <td style="border: none;">V</td> </tr> <tr> <td style="border: none;">3</td> <td style="border: none;">V</td> <td style="border: none;">V</td> <td style="border: none;">V</td> </tr> <tr> <td style="border: none;">4</td> <td style="border: none;">V</td> <td style="border: none;">V</td> <td style="border: none;">V</td> </tr> <tr> <td style="border: none;">5</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">6</td> <td style="border: none;"></td> <td style="border: none;"></td> <td style="border: none;"></td> </tr> <tr> <td style="border: none;">Teacher education</td> <td style="border: none;">V</td> <td style="border: none;">V</td> <td style="border: none;">V</td> </tr> </tbody> </table> <p><i>Please also specify for non-formal and informal education, as appropriate. If relevant data are available, please also specify this data (i.e. provide examples on how the data was compiled).</i></p>	ISCED levels	(a) Yes	(b) Ye	(c) Yes	0				1	V	V	V	2	V	V	V	3	V	V	V	4	V	V	V	5				6				Teacher education	V	V	V
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4	V	V	V																																		
5																																					
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Teacher education	V	V	V																																		
Indicator 2.5	ESD methods and instruments for non-formal and informal learning are in place to assess changes in knowledge, attitude and practice																																				
Sub-indicator 2.5.1	Are SD issues addressed in informal and public awareness-raising activities?																																				
<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p><i>Phase II: The OSCE-supported Aarhus Centre under «MEP Environment Protection Information and Analytical Centre», Aarhus Centre in Atyrau, West Kazakhstan, covering the whole region of the Caspian Sea.</i></p> <p><i>CAREC Information Programme is a regular data distribution in Kazakhstan and widely in the CA region on environment protection and key issues of SD, including that on ESD, via e-mail, web-sites, information bulletin and regular publications, i.e. networks of CAREC and the partners - EKOIS KG, CARNet: news, CARESDNet CA, EKOIS RU, ECOPRAVDA RK, Youth network TJ, YELnet, state bodies of CA, NGOs CA, CA ESD network, CA LEAP network, EcoForum of NGOs RK, MEP Press, international organizations: WB, OSCE Centre in Astana, EC).</i></p> <p><i>Within the projects of such public organizations as Eco-School, Young Reporters for the Environment, SPARE - School Project for Application of Recourses and Energy, there are held seminars and trainings, presentations and consultations for local communities and local authorities. When a</i></p>																																				

	<p><i>schoolchild takes an active part in a project it normally finds a good response among the public mostly due to involvement of their parents and relatives into practical and educational activity. The youth eco-magazine "I and the Planet", which is created and edited by young people, students and schoolchildren, highlights issues of environmental situation and SD.</i></p> <p><i>For the last three years the Centre «Assistance in Sustainable Development» has held more than 30 seminars for users of natural resources, and the problems of ESD were discussed at each seminar. There were also held special seminars on ESD:</i></p> <ul style="list-style-type: none"> • <i>Training seminar «Sustainable development: company leadership and business practice», November 24-27, 2008, Almaty.</i> • <i>Seminar «Business community capacity building in the sphere of sustainable development», December 22, 2008.</i> <p><i>Lecture of the representative of the Ministry of Environment Protection of RoK «Implementation of the Concept of Transition of the Republic of Kazakhstan to Sustainable Development for 2007-2024», March 4, 2009.²¹</i></p>																																				
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Courses of «MEP Environment Protection Information and Analytical Centre» on various key issues of SD for a business sector, etc., target groups.</i></p> <p><i>Seminars organized by the Centre «Assistance in Sustainable Development» are open for participation of all the above mentioned organizations.</i></p>																																				
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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify, including the results available for (a) attitude, skills and values, and (b) knowledge.</i></p> <p><i>Annual CA Reviews, including Kazakhstan, on education for sustainable development are regularly executed by CAREC ESD Programme (as self-assessment in ESD – where are we, what are our achievements and problems, where shall we move on?).</i></p> <p><i>List of reviews and their progress during 2003 - 2009:</i></p> <ol style="list-style-type: none"> 1. <i>«Current state, prospects and progress of Environmental Education in the countries of Central Asia», 2003.</i> 2. <i>«Case-study of ESD in Central Asia» under Review of ESD in the Asia Pacific region on key issues of sustainable development for APR, 2005. (UNESCO-Bangkok, UNESCO-Almaty).</i> 3. <i>«Review of ESD Progress in the Central Asia» on the basis of indicators developed by the UNECE expert group, 2006 (baseline report, on the basis of UNECE ESD indicators).</i> 4. <i>«Review of ESD progress in Central Asia: progress, good practice and future prospects», 2007 (under preparation for the Belgrade Conference).</i> 5. <i>«Best practice in ESD in Central Asia in the light of implementation of UN Decade of ESD and UNECE Strategy for ESD. Review. », 2009 (on the basis of UNECE ESD indicators).</i> <p><i>Project efficiency auditing.</i></p> <p><i>Annual reports of EcoSchools allow assessing the progress of competence and awareness of participants in the process of programme implementation.</i></p> <p><i>Level of knowledge is assessed with tests at the seminars of the Centre «Assistance in Sustainable Development».</i></p>																																				
Indicator 2.6 ESD implementation is a multi-stakeholder process²²																																					
Sub-indicator 2.6.1	Is ESD implementation a multi-stakeholder process?																																				
Yes <input type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify in the table in appendix II (a) and (b) and use the scale. Indicate the results in the boxes below.</i></p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="6" style="text-align: left; border-bottom: 1px dashed black;">(a) According to the UNECE Strategy on ESD</th> <th colspan="6" style="text-align: left; border-bottom: 1px dashed black;">(b) According to the UN DESD</th> </tr> <tr> <th style="border: 1px dashed black;">A</th> <th style="border: 1px dashed black;">B</th> <th style="border: 1px dashed black;">C</th> <th style="border: 1px dashed black;">D</th> <th style="border: 1px dashed black;">E</th> <th style="border: 1px dashed black;">F</th> <th style="border: 1px dashed black;">A</th> <th style="border: 1px dashed black;">B</th> <th style="border: 1px dashed black;">C</th> <th style="border: 1px dashed black;">D</th> <th style="border: 1px dashed black;">E</th> <th style="border: 1px dashed black;">F</th> </tr> </thead> <tbody> <tr> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input checked="" type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input checked="" type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> <td style="border: 1px dashed black; text-align: center;"><input type="checkbox"/></td> </tr> </tbody> </table>	(a) According to the UNECE Strategy on ESD						(b) According to the UN DESD						A	B	C	D	E	F	A	B	C	D	E	F	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(a) According to the UNECE Strategy on ESD						(b) According to the UN DESD																															
A	B	C	D	E	F	A	B	C	D	E	F																										
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																										

²¹ Please describe how this is done, e.g. in press articles, TV and radio programmes or public lectures promoting environmentally friendly goods and services, sustainable lifestyles.

²² 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).

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).

Indicator 3.1 ESD is included in the training²³ of educators

Sub-indicator 3.1.1	Is ESD a part of educators' initial training? ²⁴
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Phase II: Please specify by filling in the table in appendix III. ESD is a part of educators' training courses of PATICO and regional advanced professional training institutes</i>
Sub-indicator 3.1.2	Is ESD a part of the educators' in-service training? ²⁵
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Phase II: Please specify by filling in the table in appendix III.</i>
Sub-indicator 3.1.3	Is ESD a part of training of leaders and administrators of educational institutions?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Phase II: Please specify by filling in the table in appendix III.</i>

Indicator 3.2 Opportunities exist for educators to cooperate on ESD

Sub-indicator 3.2.1	Are there any networks/platforms of educators and/or leaders/administrators who are involved in ESD in your country?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Phase II: Please specify (provide examples on how this is done). Within the framework of Eco-School programme the teachers cooperate with the administrators in introducing ESD into school practice, sustainable human behavior and vital activity. The schools received an opportunity to communicate via the programme web-site (including with the participants of the programme from other countries), at meetings and seminars. The Karaganda region hosts an annual conference "Bionomics and Children", where educators receive an opportunity to discuss approaches, problems and prospects of ESD, and study good practices in the field. The Centre «Assistance in Sustainable Development» incorporated universities that have the course «Integrated Water Resources Management» (IWRM) and adjacent courses. These universities exchange best practice in teaching IWRM courses, hold joined seminars, round tables and other events, mostly devoted to various dates, e.g. World Day for Water. Within the project «Posters and video on climate change» CAREC build up a network of secondary schools in Kazakhstan and CA countries on ESD and climate change. - Teachers' Network within the ATI system in Kazakhstan. In February-March 2009 and in August, October-November 2010 the Almaty Advanced Teacher Training Institute in cooperation with CAREC held a series of training seminars for Almaty secondary school teachers on sustainable development and ESD.</i>
Sub-indicator 3.2.2	Are ESD networks/platforms supported by the government in any way? ²⁶
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Please specify how, listing the major ones, and describing them as appropriate. Such programmes as Eco-School, Young Reporters for the Environment and SPARE-School Project for Application of Recourses and Energy have letters of support from the MES RoK. Eco-School and Young Reporters for the Environment are included into the 2010 government contractual work schedule in the Karaganda region.</i>

Issue 4. ENSURE THAT ADEQUATE TOOLS AND MATERIALS FOR ESD ARE ACCESSIBLE

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

650 sets of instruction materials on introduction of a prevailing programme on ESD, ESD teaching manuals, EcoSchool programme and other teaching and informational

²³ ESD is addressed by content and/or by methodology.

²⁴ For higher education institutions: The focus is here on existing **teacher training at universities/colleges** regarding SD and ESD for university/college teachers.

²⁵ 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.

²⁶ Including assistance through direct funding, in-kind help, political and institutional support.

<i>materials have been prepared in the Karaganda region, all of which can be found at www.ecoobraz.kz</i>	
Indicator 4.1 Teaching tools and materials for ESD are produced	
Sub-indicator 4.1.1	Does a national strategy/mechanism for encouragement of development and production of ESD tools and materials exist?
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>Please describe.</i>
Sub-indicator 4.1.2	Is public (national, subnational, local) authority money invested in this activity?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify to what extent public money is invested in this activity, by providing an indication of the amount (in USD) for annual expenditures on ESD-related research and development.</i></p> <p><i>National state-run public enterprise «National science centre “Uchebnik” - “Manual» functions under the MES RoK.</i></p> <p><i>Basic directions of «Manual» activity include expert examination of teaching textbooks for all levels of education, including e-textbooks, testing textbooks in pilot organizations of education and organizing trainings for authors of textbooks and other categories of educators.</i></p> <p><i>Among the textbooks on ESD approved and recommended by the centre – a set of teaching materials «Environment for future generations», posters and videos on climate change created by CAREC and its partners in cooperation with the MES RoK.</i></p> <p><i>Department of natural resources and control over the use of natural resources of the Mangistau region initiated the programme of continuing education in the sphere of bionomics and sustainable development, with allocation of financial resources in the amount of \$25,000.</i></p> <p><i>Within the framework of government contractual work the Department of natural resources and control over the use of natural resources of the Karaganda region finance development and publication of materials on ESD, including locally oriented.</i></p>
Indicator 4.2 Quality control mechanisms for teaching tools and materials for ESD exist	
Sub-indicator 4.2.1	Do you have quality criteria and/or quality guidelines for ESD-related teaching tools and materials that are: (a) supported by public authorities? (b) approved by public authorities? (c) tested and recommended for selection by educational institutions?
(a) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (b) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (c) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase I: For (a) and (b), please describe.</i></p> <p><i>National Science and Methodology Centre</i></p> <p><i>Phase II: Please specify for (a), (b) and (c) for formal, informal and non-formal education. For (c), please also describe. Please also provide your own examples, as appropriate.</i></p> <p><i>National Science and Methodology Centre</i></p>
Sub-indicator 4.2.2	Are ESD teaching tools/materials available: (a) in national languages? (b) for all levels of education according to ISCED?
(a) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> (b) Yes <input type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase I: For (a) please specify.</i></p> <ol style="list-style-type: none"> 1) Prevailing ESD programme developed in Karaganda region – in the Kazakh and Russian languages. 2) Teaching materials for EcoSchools on work in the programme – in the Kazakh and Russian languages. 3) Teaching manual "Environment for future generations" – in the Kazakh and Russian languages. 4) Posters and videos on climate change – in the Kazakh and Russian languages.

Phase II: If yes for (b), please specify by ticking (V) in the table as appropriate.

ISCED levels	(b) Yes
0	
1	
2	V
3	
4	V
5	
6	
Teacher education	

The Karaganda region has developed and introduces a prevailing course on education for sustainable development, in the Kazakh and Russian languages.

The Centre «Assistance in Sustainable Development» at the support of the Department of natural resources and control over the use of natural resources of the Mangistau region developed a Programme of continuing education in the sphere of bionomics and sustainable development and a set of teaching manuals for the four levels of school education in the Kazakh and Russian languages, 2008-2010.

The Centre «Assistance in Sustainable Development» at the support of UNESCO Almaty Cluster Office developed a university course «Integrated Water Resources Management», 2008-2009.

In 2004-2005 CAREC at the support of the British Embassy in Kazakhstan developed a set of teaching materials – teaching manual «Environment for future generations», five posters, a teacher's manual and a video-film on climate change in Russian, which were distributed during trainings at secondary schools (SS) in Kazakhstan and the CA countries. In 2005 CAREC received a grant for adaptation, translation and distribution of the set in the national languages of the CA countries with the support of the UK organizations FSCEE, Climate Care and the Norway school-project SPARE (School Project for Application of Recourses and Energy). The outcome of the project was release of posters and video-film on climate change adapted and translated into the languages of the CA countries, and introduction of energy-saving bulbs in the pilot schools of Kazakhstan. Thus, teachers and students of pilot SS in Kazakhstan and CA received both a set of theoretical materials and took part in practical work on energy-saving. The set of teaching materials was translated into the Kazakh language and languages of the CA countries and distributed during trainings organized for SS teachers. Each year CAREC, at the support of new donors – UNESCO, EC, UNDP GEF Small Grant Programme, AGIP, etc., raises funds for additional printing-out and distribution of these materials in SS in Kazakhstan and CA countries.

At present CAREC in cooperation with the designer of the resource – REC for Central and Eastern Europe, at the financial support of Chevron, UNESCO Cluster Office, OSCE Central Office in Astana and UNDP/GEF SGP develop a multimedia course for secondary schools «Green Pack» CD-ROM for Central Asia in the Russian language. At the next stage it is planned to be adapted to the demands and priorities of the system of education in RoK and translated into the Kazakh language.

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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Phase II: Please describe. Teaching materials on ESD are disseminated in organizations of education in accordance with the current legislation. On common bases. In the system of informal and non-formal education the materials are disseminated as widely as possible.
Sub-indicator 4.3.2	Is public authority money invested in this activity?
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Please specify to what extent by providing an indication of the amount in USD, giving the annual expenditures for ESD-related research and development.
Sub-indicator 4.3.3	Are approved ESD teaching materials available through the Internet?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Please describe. The materials of "EcoObraz" projects (~15 publications) are available through the Internet in PDF-formate in the Kazakh and Russian languages.

	<i>The university course «Integrated Water Resources Management» is available through the Internet. Publications and teaching materials on ESD at CAREC Internet site www.carecnet.org</i>
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 <input type="checkbox"/> No <input checked="" type="checkbox"/> (b) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>For (a) and (b) please specify.</i>
Issue 5. PROMOTE RESEARCH ON AND DEVELOPMENT OF ESD	
<i>If necessary, provide relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).</i>	
Indicator 5.1 Research²⁷ on ESD is promoted	
Sub-indicator 5.1.1	Is research that addresses content and methods for ESD ²⁸ supported?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Phase II: Please specify what kind of research (content and methods). Please provide the total amount annually over the reporting period, and if feasible, as a percentage of the total research budget. In the framework of fundamental research carried out by order from MES RoK four projects were held in 2006-2008 devoted to one topic «Methodical fundamentals of the national education system in the Republic of Kazakhstan», the reports on two of them contain description of various methodological issues of ESD. In 2009-2011 the National centre for education quality assessment implements eight projects on fundamental research «Theory and methodology of the continuing education system development in the Republic of Kazakhstan as a basis of human resource development in the country». Four of eight projects are devoted to increasing the quality of education and restructuring methodology of education in SD context. Total annual amount of financing is KZT30,000,000 (€146,114) In 2008 Kazakhstan hosted an International conference «Education for sustainable development». The conference brochure contains 22 articles of scientists from Kazakhstan and CA countries on various ESD issues.</i>
Sub-indicator 5.1.2	Does any research evaluate the outcome of the implementation of the UNECE Strategy for ESD?
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>Please specify what kind of research (content and methods). The outcome of the implementation of the UNECE Strategy for ESD is not reflected in scientific research papers, as it is not a part of MEP assessment criteria. However, certain research is carried out within the framework of Annual National Report prepared by the National Centre for education quality assessment.</i>
Sub-indicator 5.1.3	Are post-graduate programmes available: (1) on ESD: ²⁹ (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 <input type="checkbox"/> No <input checked="" type="checkbox"/> (b) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (2) (a) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (b) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>Phase II: Please specify what kind of programmes are available for (1) (a) and (b); (2) (a) and (b).</i>
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?

²⁷ These include support from various sources, such as State, local authorities, business and non-governmental sources.

²⁸ E.g. concepts; formation of attitudes and values; development of competencies, teaching and learning; school development; implementation of information communications technology; means of evaluation including socio-economic impacts.

²⁹ ESD is addressed by substance and/or by approach.

(a) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (b) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>Phase II: Please specify for (a) and (b).</i>
Indicator 5.2 Development of ESD is promoted	
Sub-indicator 5.2.1	Is there any support for innovation and capacity-building in ESD practice? ³⁰
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify and provide the total amount annually over the reporting period.</i></p> <p><i>The Centre «Assistance in Sustainable Development» developed the following projects that support introduction of innovations in ESD practice:</i></p> <ul style="list-style-type: none"> • <i>University course «Integrated Water Resources Management», 2008-2009.</i> • <i>Programme of continuing education in bionomics and sustainable development and a set of teaching manuals for the four levels of school education in the Kazakh and Russian languages, 2008-2010.</i> • <i>Training module and pilot training for business managers «Sustainable development: company leadership and business practice», 2008.</i> <p><i>In 2007-2008 CAREC with the financial support of the OSCE Centre in Astana executed a project «Promotion of education for sustainable development in the system of higher education» and developed a course «Ecology and Sustainable Development» for institutes of higher education in Kazakhstan. Pavlodar national pedagogic institute organized a series of capacity building trainings in SD and ESD for educators and students and a seminar on dissemination of the practice. MES RoK recommended introducing a new compulsory discipline into the system of higher education of RoK, and in 2009 all the higher education institutions of RoK introduced a new compulsory discipline.</i></p> <p><i>In 2008-2009 CAREC with the financial support of Chevron, GEF UNDP Small Grant Programme, KazNTU and NGO «Baiterek» executed a project «Education for sustainable development and energy efficiency for promotion of ESD methodology and SD topics, energy efficiency and energy-saving into the system of higher technical education in Kazakhstan». A set of teaching materials (teacher's manual and e-manual) were developed to facilitate introduction of «Energy efficiency and Sustainable Development». A series of capacity-building trainings were held for educators and students at KazNTU on the issues of SD, climate change and energy efficiency, and a roundup National methodology seminar for technical higher education institutions in Kazakhstan.</i></p>
Indicator 5.3 Dissemination of research results on ESD is promoted	
Sub-indicator 5.3.1	Is there any public authority support for mechanisms ³¹ to share the results of research and examples of good practices in ESD ³² among authorities and stakeholders?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify and provide the total amount annually over the reporting period.</i></p> <p>The Ministries support the work of non-governmental organizations on ESD: joined round tables, meetings, seminars, visual aids on ESD are provided free for the events. Besides, non-governmental organizations functioning in the sphere of ESD give lectures at the ministerial events to present ESD and new teaching materials.</p>
Sub-indicator 5.3.2	Are there any scientific publications: (a) specifically on ESD? (b) addressing ESD?
(a) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> (b) Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase I: For (a), if feasible, please provide the number on annual basis over the reporting period. Please list the major ones.</i></p> <p><i>Phase II: For (b), if feasible, please provide the number on annual basis over the reporting period. Please list the major ones.</i></p> <ol style="list-style-type: none"> 1) <i>Journal «Bionomics in Kazakhstan» published monthly by "EP IAC", Ministry of Environmental Protection of the Republic of Kazakhstan</i> 2) <i>«Environmentalist» a weekly periodical</i> 3) <i>«Eco Bulletin» a monthly periodical</i> 4) <i>«Eco Herald» published twice a month</i> 5) <i>Magazine «ECO» a monthly periodical</i>

³⁰ Activities may include pilot projects, action research, social learning and multi-stakeholder teams.

³¹ E.g. conferences, summer schools, journals, periodicals, networks.

³² 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.

	<p>6) «Bionomics and society» a monthly periodical 7) Academic journal «Open school» 8) Journal «Teacher in Kazakhstan» 9) Academic journal «Eco-education in Kazakhstan» 10) «I and the Planet»</p>
Issue 6. STRENGTHEN COOPERATION ON ESD AT ALL LEVELS WITHIN THE UNECE REGION	
<i>If necessary, provide relevant information on your country situation regarding this specific objective (up to 1,500 characters with spaces).</i>	
Indicator 6.1 International cooperation on ESD is strengthened within the UNECE region and beyond	
Sub-indicator 6.1.1	Do your public authorities cooperate in/support international ³³ networks on ESD?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify for national, subnational and local levels and list major networks.</i> <i>Participation in national and regional seminars, annual CA conferences on ESD, work of CAWG on ESD in preparing reports.</i></p>
Sub-indicator 6.1.2	Do educational institutions/organisations (formal and non-formal) in your country participate in international networks related to ESD?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Please specify. List major networks.</i> <i>- UNESCO schools,</i> <i>- Eco-Schools,</i> <i>- School network SPARE.</i> <i>- Network of pilot schools in Kazakhstan and Central Asia on climate change and energy efficiency, using in their teaching process a set of educational resources on climate change (teaching manual, posters, video on climate change) in 5 languages. The network was launched in 2004-2005 and functions at the support of CAREC.</i> <i>- Centre «Assistance in Sustainable Development» works with Kyrgyz and Tajik institutes of higher education on Integrated Water Resources Management.</i> <i>Public association "EcoObraz" represents RoK in the International organizations on environmental education (Foundation for Environmental Education - FEE) since 2006.</i> <i>- Almaty Teachers' Network for teachers studying SD at Almaty Advanced Teachers' Training Institution.</i></p>
Sub-indicator 6.1.3	Are there any state, bilateral and/or multilateral cooperation mechanisms/agreements that include an explicit ESD component?
Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<p><i>Phase II: Please specify and list the major ones.</i> <i>1) The Central Asian ESD Network was founded in April 2003, its coordinator – CAREC CA Programme on ESD: the Ministry of Environmental Protection of the Republic of Kazakhstan, the Ministry of Education and Science, National Academy of education, NGOs, institutes of higher education, schools, Academy of education.</i> <i>2) Eco-School Network, coordinator - NGO "EcoObraz</i> <i>3) UNESCO Associated Schools Project Network</i> <i>4) "EcoObraz" SPARE</i> <i>5) CA secondary schools network on climate change (the process is built on a set of teaching materials on climate change – posters, video, teachers' manual), coordinator - CAREC.</i> <i>6) "Course for Sustainability for Kazakh high-level governmental officials" alumniees' Network. Regional Environmental Centre for Central and Eastern Europe (REC), CAREC, Venice International University (VIP) at the support of Agroinnova, and the Central European University (CEU) at the support of the Italian Ministry for the Environment, the Land and the Sea (IMELS) and BG-Group, 40 governmental officials took part in the seminar, trainings and received international certificates.</i></p>

³³ In this context, international associations, working groups, programmes, partnerships, etc. means those at the global, regional and subregional levels.

	<i>7). The International Network of Teacher Education Institutions for ESD. In 2010 CAREC joined the network with HQ at UNESCO - Paris. Network includes educational institutions, universities, NGOs, Centres of education, etc.</i>
Sub-indicator 6.1.4	Does your Government take any steps to promote ESD in international forums outside the UNECE region?
Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<i>Please list and describe.</i>
Issue 7. FOSTER CONSERVATION, USE AND PROMOTION OF KNOWLEDGE OF INDIGENOUS PEOPLES, AS WELL AS LOCAL AND TRADITIONAL KNOWLEDGE, IN ESD	
<i>Provide relevant information on your country situation regarding this specific issue (up to 2,000 characters with spaces). Please be as specific as possible.</i> <i>SPARE – published a brochure on traditional approaches to energy-saving.</i>	
<i>Phase II: Please provide the updated information to indicate changes over time.</i> <i>Programme on continuing education in environment and sustainable development, and a set of teaching materials for four levels of secondary education in the Kazakh and Russian languages were developed with account of the local material and local knowledge.</i>	
<i>Phase III: Please provide the updated information to indicate changes over time.</i>	
Issue 8. DESCRIBE ANY CHALLENGES AND OBSTACLES ENCOUNTERED IN THE IMPLEMENTATION OF THE STRATEGY	
<i>Provide relevant information on your country situation regarding this specific issue (up to 1,500 characters with spaces). Please be as specific as possible.</i> <i>Phase I. At the first stage of the Strategy implementation such obstacles occurred as promotion of ESD in legislative and normative documents and the system of formal education. During this period at the support of international partners and donors pilot projects were actively executed in the system of informal education and secondary formal education (Eco-School, SPARE, teaching set on climate change, annual conferences, trainings on ESD for NGOs and teacher trainers, etc.). However, upon adoption in November 2006 of the Concept on Transition of the Republic of Kazakhstan to SD for 2007-2024, ESD received great support of public authorities – MEP, MES, the Parliament and the Government of Kazakhstan. Adoption of the Environmental Code in January 2007 made a significant contribution in promotion of ESD at the national level. This period was marked by an increased interest of local and regional donors to support ESD in Kazakhstan.</i>	
<i>Phase II: Please provide the updated information to indicate changes over time.</i> <i>The second phase of the Strategy implementation went through difficulties in development and adoption of the National Plan on re-orienting the system of education in RoK to sustainable development. Draft National Plan on ESD was developed in 2007, but it has not been adopted yet. Its adoption is planned at the end of 2010. The second phase started with execution of pilot projects in the system of formal education: both secondary and higher. At this stage great support was provided by MEP RoK, MES RoK, educational institutions, including advanced teacher training institutes (ATI). During this period CAREC executed two most successful projects in the system of high education of RoK. In 2007-2008 at the support of the OSCE Centre in Astana the project «Promotion of education for sustainable development in the system of higher education» was executed and the course "Ecology and Sustainable Development" was developed for the institutes of higher education in Kazakhstan. MES RoK recommended implementation of a new compulsory discipline in the system of higher education of RoK, and in 2009 all the higher education institutions of RoK introduced the discipline in their curricula. In 2008-2009 at the support of Chevron, GEF UNDP Small Grant Programme, and NGO «Baiterek» there was executed the project «Education for sustainable development and energy efficiency» aimed at promotion of ESD methodology and SD topics, energy efficiency and energy-saving in the system of higher technical education in Kazakhstan. A set of teaching materials (teacher's manual and e-manual) were developed to facilitate introduction of «Energy efficiency and sustainable development». At this phase in 2007-2008 the interest of local donors to support ESD in Kazakhstan was rather high, but in 2008-2009 it plummeted. For a change private business, e.g. Chevron, took much interest in supporting projects in ESD and climate change and energy efficiency.</i>	
<i>Phase III: Please provide the updated information to indicate changes over time.</i> <i>Much hope is laid upon phase III of the Strategy implementation in RoK, when the National Plan on ESD is planned to be finalized and adopted, as well as further promotion of ESD in national policy and legislation, and scientific research in ESD carried out. Regretfully, we have to state that the ESD topics lose their priority status among most donors, and Kazakhstan will so far not manage without their support at the third stage of the Strategy implementation.</i>	
Issue 9. DESCRIBE ANY ASSISTANCE NEEDED TO IMPROVE IMPLEMENTATION	
<i>Provide relevant information on your country situation regarding this specific issue (up to 1,500 characters with spaces). Please be as specific as possible.</i> <i>Introduction of sustainability criteria for secondary schools could enhance efficient implementation of ESD by school administration, and such programmes as EcoSchools could assist schools in advancing these criteria.</i>	

Phase II: Please provide the updated information to indicate changes over time.

Organize national conferences on ESD at various universities with the participation of all the stakeholders and NGOs functioning within the framework of ESD in the system of education.

Phase III: Please provide the updated information to indicate changes over time.

Much hope is laid upon phase III of the Strategy implementation in RoK, when the National Plan on ESD is planned to be finalized and adopted, as well as further promotion of ESD in national policy and legislation, and scientific research in ESD carried out. Regretfully, we have to state that the ESD topics lose their priority status among most donors, and Kazakhstan will so far not manage without their support at the third stage of the Strategy implementation.

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 (V) 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.)

Some key themes covered by sustainable development	ISCED Levels					
	0	1	2	3	4	5
Peace studies (e.g. international relations, security and conflict resolution, partnerships)					V	V
Ethics and philosophy					V	V
Citizenship, democracy and governance					V	V
Human rights (e.g. gender and racial and inter-generational equity)					V	V
Poverty alleviation					V	V
Cultural diversity					V	V
Biological and landscape diversity			V	V	V	V
Environmental protection (waste management, etc.)					V	V
Ecological principles/ecosystem approach					V	V
Natural resource management (e.g. water, soil, mineral, fossil fuels)					V	V
Climate change			V	V	V	V
Personal and family health (e.g. HIV/AIDS, drug abuse)			V	V	V	V
Environmental health (e.g. food and drinking; water quality; pollution)			V	V	V	V
Corporate social responsibility						
Production and/or consumption patterns						
Economics					V	V
Rural/urban development					V	V
Total						
Other (countries to add as many as needed)						

NB: 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 (max. 102 ticks; "other" not counted) is:

No. of ticks	0-5	6-10	11-25	26-50	51-75	76-100
Scale	A	B	C	D	E	F

Could you specify which specific themes are of critical important in your countries and why? Please specify for different ISCED levels, as appropriate.

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 curriculum³⁴/programme of study at various levels of formal education, by filling in the table below.

(Please tick (V) 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

Competence	Expected outcomes	ISCED Levels					
		0	1	2	3	4	5
Learning to learn Does education at each level enhance learners' capacity for:	- posing analytical questions/critical thinking?			V		V	V
	- understanding complexity/systemic thinking?					V	V
	- overcoming obstacles/problem-solving?					V	V
	- managing change/problem-setting?						
	- creative thinking/future-oriented thinking?			V		V	V
	- understanding interrelationships across disciplines/holistic approach?					V	V
	Total						
	- other (countries to add as many as needed)?						
-							
Learning to do Does education at each level enhance learners' capacity for:	- applying learning in a variety of life-wide contexts?					V	V
	- decision-making, including in situations of uncertainty?					V	V
	- dealing with crises and risks?						V
	- acting responsibly?					V	V
	- acting with self-respect ?					V	V
	- acting with determination?					V	V
	Total						
	- other (countries to add as many as needed)?						
-							
Learning to be Does education at each level enhance learners' capacity for:	- self-confidence?					V	V
	- self-expression and communication?					V	V
	- coping under stress?					V	V
	- ability to identify and clarify values (for phase III)?						V
	Total						
	- other (countries to add as many as needed)?						
-							

³⁴ At the State level, where relevant.

	Expected outcomes	0	1	2	3	4	5
		- acting with responsibility (locally and globally)?					V
- acting with respect for others?						V	V
- identifying stakeholders and their interests?						V	V
- collaboration/team working?						V	V
- participation in democratic decision-making?						V	V
- negotiation and consensus-building?						V	V
- distributing responsibilities (subsidiarity)?							V
Total							
- other (<i>countries to add as many as needed</i>)?							
-							

NB: Your response will reflect the variety of ESD learning outcomes 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 (max. 138 ticks; “other” not counted) is:

No. of ticks	0–7	8–14	15–35	36–70	71–104	105–138
Scale	A	B	C	D	E	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 (V) relevant teaching/learning methods for each level. Use the blank rows to insert additional teaching/learning methods that are considered to be key methods in your country in teaching-learning for sustainable development.)

Table of teaching-learning methods

Some key ESD teaching/learning methods proposed by the Strategy ³⁵	ISCED Levels					
	0	1	2	3	4	5
Discussions				V	V	V
Conceptual and perceptual mapping					V	V
Philosophical inquiry					V	V
Value clarification					V	V
Simulations; role playing; games		V	V	V	V	V
Scenarios; modeling		V	V	V	V	V
Information and communication technology (ICT)			V	V	V	V
Surveys						
Case studies				V	V	V
Excursions and outdoor learning		V	V	V	V	V
Learner-driven projects				V	V	V
Good practice analyses				V	V	V
Workplace experience					V	V
Problem-solving				V	V	V
Total						
Other <i>(countries to add as many as needed)</i>						

NB: Your response will reflect the variety of ESD teaching/learning methods 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 (max. 84 ticks; “other” not counted) is:

No. of ticks	0–5	6–28	29–35	36–50	51–65	66–84
Scale	A	B	C	D	E	F

³⁵ 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 is ESD implementation a multi-stakeholder process by filling in the table below. Please provide examples of good practice. (Please tick (V) in both (a) and (b) template-tables to indicate what types of education stakeholders are involved.)

Table (a) According to the UNECE Strategy for ESD

Stakeholders	Classification by UNECE Strategy for ESD		
	Formal	Non-formal	Informal
NGOs	V	V	V
Local government		V	
Organized labour			
Private sector	V	V	
Community-based	V	V	V
Faith-based			
Media		V	V
Total			
Other (countries to add as many as needed)			

The scoring key for this table (max. 21 ticks; “other” not counted) is:

No. of ticks	0–1	2	3–5	6–10	11–15	16–21
Scale	A	B	C	D	E	F

Table (b) According to United Nations Decade of ESD

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

The scoring key for this table (max. 35 ticks; “other” not counted) is:

No. of ticks	0–5	6–11	12–17	18–23	24–29	30–35
Scale	A	B	C	D	E	F

Appendix III

Indicator 3.1, sub-indicator 3.1.3

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

ISCED levels	Percentage of education professionals who have received training ³⁶ to integrate ESD into their practice: (see key below)																	
	Educators												Leaders/administrators ³⁷					
	Initial*						In service**						In service***					
	A	B	C	D	E	F	A	B	C	D	E	F	A	B	C	D	E	F
0																		
1								V						V				
2								V						V				
3								V						V				
4																		
5		V																
6				V														
Non-formal		V																
Informal																		

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

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

- * 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.
- ** 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.
- *** 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.

³⁶ Training is understood to include at least one day (a minimum of five contact hours).

³⁷ See paragraphs 54 and 55 of the UNECE Strategy for ESD.

Appendix IV

Summary and self-assessment³⁸ by countries:

1	Indicator 1.1	Prerequisite measures are taken to support the promotion of ESD	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
2	Indicator 1.2	Policy, regulatory and operational frameworks support the promotion of ESD	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
3	Indicator 1.3	National policies support synergies between processes related to SD and ESD	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
4	Indicator 2.1	SD key themes are addressed in formal education	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
5	Indicator 2.2	Strategies to implement ESD are clearly identified	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
6	Indicator 2.3	A whole-institution approach to ESD/SD is promoted	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
7	Indicator 2.4	ESD is addressed by quality assessment / enhancement systems	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
8	Indicator 2.5	ESD methods and instruments for non-formal and informal learning are in place to assess changes in knowledge, attitude and practice	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
9	Indicator 2.6	ESD implementation is a multi-stakeholder process	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
10	Indicator 3.1	ESD is included in the training of educators	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
11	Indicator 3.2	Opportunities exist for educators to cooperate on ESD	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
12	Indicator 4.1	Teaching tools and materials for ESD are produced	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
13	Indicator 4.2	Quality control mechanisms for teaching tools and materials for ESD exist	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
14	Indicator 4.3	Teaching tools and materials for ESD are accessible	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
15	Indicator 5.1	Research on ESD is promoted	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
16	Indicator 5.2	Development of ESD is promoted	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
17	Indicator 5.3	Dissemination of research results on ESD is promoted	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed
18	Indicator 6.1	International cooperation on ESD is strengthened within the UNECE region and beyond	<input type="checkbox"/> Not started	<input type="checkbox"/> In progress	<input type="checkbox"/> Developing	<input type="checkbox"/> Completed

³⁸ 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.