

## **ECONOMIC COMMISSION FOR EUROPE**

### **COMMITTEE ON ENVIRONMENTAL POLICY**

UNECE Steering Committee on Education for Sustainable Development

Fourth meeting

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Items 2 and 5 of the provisional agenda

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### **ANSWERS TO THE QUESTIONNAIRE**

#### **ON PROGRESS MADE IN IMPLEMENTATION OF THE UNECE STRATEGY FOR ESD & ON ADDRESSING SUSTAINABLE CONSUMPTION THROUGH ESD<sup>1</sup>**

#### **Introduction**

During the phase II (2008-2010) of the UNECE Strategy for ESD, the implementation of the Strategy's provisions should be well under way. Countries should strengthen the initial measures for ESD, as well as start integrating Sustainable Development (SD) into learning programmes and curricula, review progress made in the implementation of the national strategies and revise these strategies if necessary.

Sustainable consumption and production (SCP) patterns are among the SD themes, explicitly mentioned in the Strategy. The issue of addressing sustainable consumption through ESD will be considered by the next meeting of the Steering Committee on ESD (Item 5 of the provisional agenda) with a view to identify existing gaps and share good practices in the region that address sustainable consumption through ESD.

This questionnaire aims to facilitate the exchange of experience among Governments and stakeholders by providing an overview of progress by country achieved since the Steering Committee's last meeting (Geneva, 31 March – 1 April 2008). It also aims to facilitate the collection of information from countries on how sustainable consumption is addressed through education systems at the national level, as well as through non-formal and informal education.

National Focal Points for ESD were invited to fill in the questionnaire and submit it to the Secretariat. The answers were compiled in the present paper and are made available for the meeting to facilitate the discussions under items 2 and 5 of the provisional agenda.

#### **I. QUESTIONNAIRE**

1. Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?

*Yes/No (if yes, then please specify. If relevant, please also specify whether you have specific mechanism(s) with respect to SCP. Please also specify the inter-institutional and multistakeholder aspects of this(these) mechanism(s).)*

2. Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?

*Yes/No (if yes, then please specify and provide a web link or an electronic copy of these documents; if no, then please indicate when you plan to develop such policy documents. Please also specify in case your country have integrated ESD in existing strategies and policy frameworks, such as in the national sustainable development strategy.)*

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<sup>1</sup> The document has not been formally edited.

3. What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?

*(Please specify and provide web links and/or electronic copies of such policy documents)*

4. Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions<sup>2</sup> in education?

*Yes/No (if yes, then please specify how. Please also specify whether and how SCP is integrated:*

*(a) through formal education systems?; (b) through non-formal education?; and (c) through informal education?)*

5. Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP<sup>3</sup>?

*Yes/No (if yes, then please specify how)*

6. What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?

*(Please specify the approach(es) and lessons learned. Please also specify approaches used with respect to SCP<sup>4</sup>)*

7. Does your country address the issue of developing adequate teaching tools and materials for ESD?

*Yes/No (if yes, then please specify how as well as whether any quality assessment tools are being used. Please also specify with respect to SCP.)*

8. Does your country address the issue of ensuring/assessing the quality of ESD?

*Yes/No (if yes, then please specify how. Please also specify with respect to SCP.)*

9. Does your country promote research and development with regard to ESD?

*Yes/No (if yes, then please specify how. Please also specify with respect to SCP.)*

10. Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?

*Yes/No (if yes, then please specify. Please also specify with respect to SCP.)*

11. Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.

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<sup>2</sup> It is considered that, of the three dimensions of SD, the environmental one has been best integrated in education than the economic and social ones.

<sup>3</sup> If relevant, please also specify the work done on building specific competences for the sustainable consumption component of SCP.

<sup>4</sup> If relevant, please also specify the approaches used with respect to addressing sustainable consumption in general and when targeting consumers in particular.

### III. ANSWERS TO THE QUESTIONNAIRE

#### AUSTRIA

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Yes, we started a multi-stakeholder process when developing the national ESD-strategy in 2005 and continued with annual stakeholder meetings organized by FORUM Umweltbildung and Zentrum POLIS. These stakeholders form the basis for an Austrian actors network (Allianz). To develop this network further is one of the main objectives of the ESD-strategy and one of the central tasks of the “Dekadenbüro”.

The “Dekadenbüro” is an institution on behalf of the Ministry of Education and the Ministry of Environment. It was established in order to support the respective implementation activities of the UNECE Strategy. In principle it should provide an information platform to all interested persons and organizations and ensure the integration / cross linking of all Austrian initiatives.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. Austria has a national Strategy on Education for Sustainable Development adopted by the Council of Ministers in November 2008.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

In Austria we have the cross curricular teaching principle " Economic education and consumer education = Wirtschaftserziehung und Verbraucher/innenbildung" which is therefore integral part of all curricula.

Based on this the topic of consumer education is integrated in a number of subjects of different lower and upper secondary schools.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Yes, certainly, see above cross curricular teaching principle.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Austria focuses on ESD competencies primary in the area of educators training. Herein the following lectures and courses are examples where ESD key-competencies are discussed and thought:

- “Summer academy” within the Programmes „Ecologisation of schools – Education for Sustainable Development”,
- Teacher in-service training course “Ecologisation of schools (at the Pädagogische Hochschule Wien = Post-secondary colleges for teacher training in Vienna),
- In-service training course for teacher trainers on ESD which involves all Austrian Post-secondary colleges for teacher training.
- Course on sustainability organized by the regional (mainly NGO) network on ESD in Salzburg in called SABINE.

The promotion of SCP is in progress; especially it is referred to in the programme of work of the new Austrian government (November 2008).

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

In general, a cross-subject – cross-curricula approach to ESD is used in Austria’s formal education sector. This includes also SCP (see above). Hereby, ESD faces top down projects as well as bottom up discussions, concentrating on new ways of education in the sense of sustainable development. Unfortunately these two processes so far are linked just punctually, e.g. by consultation meetings between stakeholders and representatives of the administration. Education for sustainable development is still far from being a general guideline. On the other hand numerous topics of the decade can be referred to a long tradition and a good formal anchorage within the educational system: Environmental education, Gender equality, Health education or Political education are well established cross-subject and cross curricular instruction principles; numerous projects being organized in many schools prove that these topics are integrated in educational practise. They these curricular instruction principles have been established a long time before the decade started the task is to integrate them into ESD.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. In Austria, Germany and Switzerland educational materials for ESD have been produced by public programmes and/or initiatives e.g. in Austria the FORUM Umweltbildung and the Zentrum POLIS. These materials are broadly used in all German speaking regions including Luxemburg and Belgium/Eupen. This includes also SCP (see above).

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

Yes. There exists a range of quality control mechanisms and instruments within the formal school education provided by the Ministry of Education which reflect key principles of ESD like:

- a. Commission on Text Books
- b. Commission on Media
- c. Programme “Quality in Schools” ([www.qis.at](http://www.qis.at))
- d. Programme “Qualität in der Berufsbildung QIBB”([www.qibb.at](http://www.qibb.at))

The publication “Quality Criteria for ESD Schools” (Breiting, Mayer, Mogensen, 2005 <http://seed.schule.at/products/publications>) has been widely distributed in Austrian schools and has been topic of teacher in-service training work shops. However, there is still a need to develop an overlapping set of quality criteria.

9. *Does your country promote research and development with regard to ESD?*

Yes, we have started. The following examples can be listed:

- a. Project Seed/ENSI ([www.ensi.org/](http://www.ensi.org/))
- b. Project Research & Development for ESD – FORUM Umweltbildung ([www.umweltbildung.at](http://www.umweltbildung.at))

For SCP the Ministry of Labour, Social affairs and Consumer Protection takes initiatives.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Within the national strategy for sustainability, information and education play an important role. A wide range of activities of public authorities and private organisations is carried out in order to raise public awareness. E.g. climate change, rural development, ecological footprint are topics of high priority in Austrian's media. Additionally, companies are informed about programs for corporate social responsibility (CSR) by public corporations (Chamber of Industry and Chamber of Commerce).

On regional level in Vorarlberg (one of the nine federal states) a "public office for "future affairs" (Büro für Zukunftsfragen) provides information about SD-topics and supports and promotes SD-development projects. On a national level, the Committee for Sustainable Austria and the National Expert Group for Sustainability (Forum Nachhaltiges Österreich) provide information especially for experts and stakeholders.

Non-formal learning is covered by a large variety of organisations in Austria: market-driven companies as well as non profit organisations offer training, teaching and information activities. Some of them are supported by churches, others by labour or employer organisations or communities. Therefore there exists also a large variety of approaches to ESD-topics: some focus on social, others on economical or ecological topics of ESD.

For SCP the Zentrum POLIS (<http://www.politik-lernen.at/>) promotes and provides teaching materials on behalf of the Austrian Federal Ministry for Education, Arts and Culture.

## BULGARIA

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

An Interinstitutional Consultative ESD Committee has been established to plan measures and activities including ESD ones. Among the committee members are ministers and deputy-ministers of various ministries. With it and Organizational Secretariat has been established to prepare and coordinate positions, directions and other documents on SD issues, including ESD ones. The Headquarters of the Committee and the Organizational Secretariat is in the Ministry of economics and energy resources.

In developing mechanisms for ESD scope broadening the positions of NGOs are taken into consideration too, for example together with the 'Nature on Loan' Association an ESD Supporting Programme has been developed: <http://www2.moew.government.bg/home.php?action=fullnews&id=357>

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

National SD Strategy draft has been worked out with ESD integrated in it ([http://www2.moew.government.bg/strateg\\_plans/index.html](http://www2.moew.government.bg/strateg_plans/index.html)) as well as National SD Plan draft.

National Environment Strategy and Action Plan 2000-2006 were developed.

In 2004 the Ministry of Education and Science and the Ministry of Environment and Waters signed a memorandum for common activities as to ecological education and ESD. The envisaged mutual assistance and cooperation take the form mainly of: training of teachers and experts to work with supplementary study materials and manuals by experienced experts from both institutions; dissemination of environmental and SD education in order to raise public awareness; broadening the scope of opportunities for environmental and SD integrated education within the educational system.

As of 2005 a Program to support ESD is in effect. It serves as a basis for developing the national and regional ESD strategies. The Program takes into consideration all national and international documents and agreements concerning environment and ESD. It is meant to facilitate the application of the basic guidelines of the ESD Strategy of the European Economic Committee of the UN. The Program views ESD in terms of Environmental education (EE) and Nature conservation education (NCE). It allows every interested party to

perform activities for ESD development on a local, regional and national scale. Its main purpose is to support and encourage ESD in formal, informal, and non-formal education, as a means of creating life-long learning skills, too.

Apart from that a number of documents, analyses and projects have been developed aimed at particular aspects of ESD, for example:

- a. National Plan for the Integration of Children with Special Educational Needs and/or Chronic Diseases in the Educational System
  - b. Education Integration Strategy for children and Students from Ethnic Minorities
  - c. Continuing Vocational Training National Strategy 2005 – 2010
  - d. Improving Bulgarian Youth Sexual and Reproductive Health – a joint project among the Ministry of Healthcare, the Ministry of Education and Science and UN population Fund.
3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

(Please see above)

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*
5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*
6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

4.-6.

SD issues are part and parcel of Bulgarian State Educational Requirements (SER) for textbook contents and school syllabus. Environmental Education emphasizes the ecological laws that rule the ecological balance and guarantee man's healthy way of life, as well as human and social responsibilities for abiding by these laws. ESD emphasizes the importance of the relationship between nature and culture. Nature Protection Education focuses on conserving the natural environment. Though not introduced as a separate subject in Bulgarian curricula, SD issues are practically studied through integrated themes in different relevant subjects on all school levels, which is registered even in the very names of the compulsory subjects: grades 1st to 4th - through Bulgarian Studies, Man and Society, Man and Nature, World Studies; in secondary education ESD issues are differentiated in Biology and Health Education, Chemistry and Environment Protection, Geography and Economics, Physics and Astronomy, Philosophy and Democratic Citizenship. Thus within their compulsory studies students not only acquire knowledge and awareness as to key topics of SD through various approaches but also develop their skills and competences in this sphere through presentations and field-work projects which are part of the teaching methodology of these subjects. Depending on student's choice and school priorities students have a broad range of optional subjects, among which those treating environmental and social issues take a leading position.

Within vocational education and training there are SERs for acquiring professional qualification. In developing the corresponding curricula and study contents, bearing in mind the labour peculiarities of the corresponding professions and specialties, compulsory education in environment protection is involved, as well as means to reduce the harmful effect of technological stages and processes on air, water and soil, and man's life and health. The National Exam Curricula for professional qualification level acquisition state exams include among other issues, assessment criteria for professional competences acquisition in regard to

environment while practicing the corresponding professions. The educational system offers also vocational education and training in ecology through the specialty 'Ecology and Environmental Protection'.

A broad spectrum of opportunities has been ensured as extracurricular and out-of-school activities. Thus, for example, the traditional in Bulgaria Green Schools - an out-of-school week, usually in the country when students, along with their classes get involved in more practical environmental field projects. A flexible framework is provided for each separate school to adapt EDS issues to its own priorities, specific needs and circumstances.

Core curricula optional curricula for subjects per grade give teachers the opportunity to emphasize even more or even make ESD the main focus.

Within free optional subjects, out-of-class and out-of-school activities the opportunities for ESD education are practically infinite as far as ministerial policy is concerned. Free optional subjects, out-of-class and out-of-school activities are very suitable for ESD for they offer opportunities for publically realized needs for such education to be satisfied by the participation of students, parents, teachers, principals, as well as of municipalities. Examples of ESD related out-of-class and out-of-school activities: National Olympiad in Civic Education, National Competition in Natural Sciences Key Competences as well as all national campaigns on environmental issues, which are included in the National Calendar of out-of-class and out-of-school activities of the Ministry of Education and Science.

Some of the activities within the grade counselor classes are also devoted to ESD.

ESD is integrated in a number of subjects and study courses not a separate subject on its own. ESD relies on interactive approaches and modern computer and communication technologies.

*7. Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Though many projects primarily with NGOs are devoted to developing educational tools and study materials on particular ESD themes, in Bulgaria ESD materials are still by far not enough, particularly in Bulgarian. Neither are there standardized mechanisms for their quality assessment.

*8. Does your country address the issue of ensuring/assessing the quality of ESD?*

ESD quality is not subject to separate assessment but part of the educational system assessment, which derives from the integrated approach applied to ESD.

*9. Does your country promote research and development with regard to ESD?*

Yes, through seminars, conferences, workshops

Apart from all that ESD is a key issue of discussions at various conferences like the Natural Sciences and Ecology Teachers Conference; of various research for teachers.

Just one example: 'Natural Sciences and the Challenges of the 21<sup>st</sup> Century', Yambol, October 2006, with the participation of MES and Regional Inspectorates of Education experts, school and university teachers, observatory and planetarium centers.

*10. Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

(Please, see above)

## CANADA<sup>5</sup>

### 1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

In Canada, there is no federal minister or department of education and no integrated national system of education. Within the federal system of shared powers, Canada's Constitution Act of 1867 provides that "[I]n and for each province, the legislature may exclusively make Laws in relation to Education." In the 13 jurisdictions — 10 provinces and 3 territories, departments or ministries of education are responsible for the organization, delivery, and assessment of education at the elementary and secondary levels within their boundaries. In some jurisdictions, separate departments or ministries are responsible for elementary-secondary education and for postsecondary education and skills training. The institutions in the postsecondary system have varying degrees of autonomy from direct provincial government control.

Canada has continued to work in a consultative manner and coordinate and advance ESD activity. Since April 2008, the Council of Ministers of Education, Canada (CMEC) has established an Education for Sustainable Development Working Group to develop an ESD Framework for Collaboration and Action. This Working Group is comprised of representatives from provincial/territorial ministries of education in Canada.

Through a continued partnership between Environment Canada (a federal department), Manitoba Education, Citizenship and Youth and Manitoba Advanced Education and Training, and Learning for a Sustainable Future<sup>6</sup>, nine Provincial/Territorial Education for Sustainable Development Working Groups have been established in Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Saskatchewan, Nunavut, Ontario and Nova Scotia. Their purpose is to foster a culture of ESD in Canada by engaging leaders from provincial and territorial ministries, the federal government, the formal, non-formal, and informal education sectors, business, and community organizations in discussions and actions to advance ESD. To date, the ESD Working Groups have been active in sponsoring public forums, providing input to provincial curriculum reviews, developing learning resources, developing workshops and conferences, and creating web sites. As the Working Groups evolve, consideration will be given to their expansion to the other provinces and territories. The Working Groups focus on:

- Integration of sustainability education into formal, non-formal, and informal education.
- Coordination of sustainability education activities (i.e. curriculum, policies, research, teacher training and in-servicing, and facilities management).
- Establishment of strategic collaborations between governments, education sector leaders, businesses, and non-government organizations to increase their cohesion and leverage in creating a culture of ESD.
- Coordination of stakeholders from formal, non-formal, and informal education sectors for policy input, debate, exchange, and planning to improve delivery of ESD activities.

A number of Working groups are collaborating on joint activities that meet particular needs within their respective regions. For example, Manitoba, Saskatchewan and Quebec are beginning discussions that focus on working directly with the French educational and cultural communities in both each province to develop education for sustainable development action projects from early childhood to post-secondary level students. ESD Working Groups across Canada have made considerable progress to promote, develop and advance ESD regionally and nationally. For an overview of activities of all ESD Working Groups across Canada and joint Working Group activities, visit LSF's website: <http://www.lsf-lst.ca/en/pwg/index.php>.

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<sup>5</sup> Canada reserves the right to modify its references, if necessary, following further consultation with ESD partners and colleagues in Canada.

<sup>6</sup> Learning for a Sustainable Future (LSF) is a non-profit organization created to integrate education for sustainable development into the curriculum at all grade levels in Canada. LSF was founded by a group of youth, educators, business leaders, and government and community members.

The National Education for Sustainable Development Expert Council (NESDEC) has recently changed its name to ESD Canada (also created through a partnership between Environment Canada, Manitoba Education, Citizenship and Youth and Advanced Education and Training, and Learning for a Sustainable Future) continues to be an active coordination body. Members are comprised from Provincial/Territorial ESD Working Groups, as well as experts from the formal education, government, business, and community sectors. ESD Canada encourages the integration of ESD into formal, non-formal, and informal education and the development of activities such as sustainable literacy, research, communication, and sharing of effective practices. ESD Canada also provides advice to the Provincial/Territorial ESD Working Groups on program direction and constitutes a networking forum for stakeholders. Information about ESD Canada's vision, mission, goals, membership and structure sub-committee activity is available at the following website: <http://www.lsf-1st.ca/en/nec/index.php>

The Canadian Regional Centres of Expertise (RCE) Designation from the United Nations University Institute of Advanced Studies continue to be active in Canada. An RCE is a network of existing formal, non-formal, and informal education organizations aiming to deliver education for sustainable development to a region or local community. RCE's aspire to achieve the goals of the UN Decade of Education for Sustainable Development by translating its global objectives into the context of the local or regional communities. The Saskatchewan RCE (SK RCE) involves postsecondary institutions, other educational organizations, businesses, governments, non-profit and community organizations, and individuals. Six education for sustainable development issues have been identified by the region: climate change; health; farming and local food production, consumption, and waste management; reconnecting to natural prairie ecosystems; supporting and bridging cultures for sustainable living and community building; and sustainable infrastructure including water and energy. The SK RCE focuses on two crosscutting themes – sustaining rural communities and educational approaches for regional ESD.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Sustainable development and education for sustainable development are widely represented in policy documents, action plans, and frameworks established by governments and other bodies across Canada. These range from broad statements of government intent concerning sustainable development that encompass all departments and activities, to documents from the educational ministries and departments detailing beliefs and strategies that encompass the principles of ESD, to very specific plans for education for sustainable development.

The Council of Ministers of Education, Canada is currently working towards developing a National ESD Framework for Collaboration and Action. The objectives are to:

1. Coordinate action that will support and strengthen the implementation of ESD in all provinces and territories.
2. Develop a pan-Canadian ESD Framework for Collaboration and Action that builds on what jurisdictions are already doing and allows for information sharing and collaboration across Canada.
3. Establish a pan-Canadian ESD working group to support and monitor the implementation and evolution of an ESD Framework for Collaboration and Action
4. Act as a consultative body to provide advice to CMEC representatives attending international meetings on ESD and for drafting country reports.

The primary focus of ESD activity is on the K - 12 school systems, from entry to grade 12, and within those systems, the following areas will be focused upon:

- i. The integration of sustainable development concepts into curricula.
- ii. The identification/development/sharing of ESD-related teaching resources and material.

- iii. The provision of ESD-related pre-service and in-service teacher education and support.
- iv. The identification and sharing of information on exemplary sustainable development practices and initiatives at the school and school district/board/division level.

ESD Canada (formerly National ESD Expert Council) has ESD Strategies available at the following website: <http://www.lsf-1st.ca/en/nec/index.php>

In Canada, some provinces and territories are working to identify what ESD/SD policies exist in the many organizations, i.e. school boards, in their respective jurisdiction. For example, the Manitoba Department of Education is working with the International Institute for Sustainable Development to review the SD policy development at the school board level in Manitoba. The International Institute for Sustainable Development's website has a policy bank that contains the policies of Manitoba school divisions and policies within post-secondary institutions around the world. The policy bank can be found at the following site: <http://www.iisd.org/leaders/policybank/>

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Addressing “sustainable consumption and production” would be included in curriculum and policy documents on ESD in the provincial and territorial ministries of education. Some jurisdictions are putting an emphasis on SPC – for example, Manitoba is developing SPC units for inclusion in existing curriculum, particularly at grade seven and ten.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Provinces and territories in Canada have made progress regarding the issue of integrative conceptualization of ESD. For example, Manitoba is currently updating its 2005 Provincial Sustainability Report and is identifying the linkage between academic achievement and socio-economic factors. Provincial and territorial departments of education in Canada are working on integrating the dimensions of ESD (environment, economic and social) into the formal, non-formal and informal education sectors in a fully integrated manner.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

In Canada, provinces and territories have begun engaging the post-secondary teacher education programs regarding the incorporation of ESD into pre-service teacher education and are providing practicing teachers, administrators and divisional leaders with a wide range of professional learning opportunities as well as resources to support the effective integration of ESD into teaching and learning. For example, York University in Ontario has developed a Sustainability and Education Academy that provides senior education officials with the tools and strategies to incorporate sustainable development into their schools and school divisions. Another example is that the Manitoba Department of Education is providing teachers with the tools to address responsible and sustainable consumption through the development of integrated units targeting grades seven and ten.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

In Canada, implementing ESD has been done both through the approach of integration of ESD themes across subjects, programs and courses and through the provision of ESD courses, particularly at the high school (Grades 9-12) level. Although it is critical that ESD themes/concepts be integrated into all subjects at all grade levels, at the same time in-depth study for and about sustainable development concepts/themes is also

required. In Canada, many provinces and territories are using both approaches, however, more emphasis is being placed on the implementation of ESD through the integration of ESD themes across all relevant subjects, programmes and courses. For example, the Manitoba Department of Education is currently working with the Faculty of Education at the University of Manitoba to explore ways in which how to teach ESD can be incorporated into the existing teacher training programme.

*7. Does your country address the issue of developing adequate teaching tools and materials for ESD?*

In Canada, provinces and territories provide curriculum resources on sustainable development for their teachers, often through curriculum documents and web links to sites that are specialized in the topics being covered in a particular part of the curriculum. Many of the resources are developed and made accessible through the ministry or department of education (in some cases linking with business and industry), other government departments, universities, NGOs, museums, and other public organizations.

Canada has made progress to identify, share and develop teaching tools and materials (for teachers and students) for ESD. One ongoing example is The Resources for Rethinking online database, developed by Learning for a Sustainable Future (a non government organization) that contains relevant, peer-reviewed resources curriculum resources relating to education for sustainable development. It is a database of high quality resources (print, multi-media) developed for use in the formal education system (K-12) and must come with instructions and materials. The database is an online library where teachers can search for peer evaluated, curriculum-matched ESD resources. This database is being continuously updated. Teachers can search by:

- Subject, grade, and province/territory
- ESD issue or keyword
- Language (English/French)

The following website contains the database: [http://www.lsf-lst.ca/en/resource\\_database/index.php](http://www.lsf-lst.ca/en/resource_database/index.php)

The Canadian Teachers Federation (CTF) hosts Green Street, a national program offering ESD/EE opportunities for students and teachers. Since April 2008, Green Street has launched a new Global Citizenship workshop for K-12 teachers using the teacher's guide resource entitled, "Engaging in our Communities as Global Citizens: A citizenship education initiative centred on the values of the environment, democracy, peace and solidarity. Information regarding workshops and resources are available in English at: [www.green-street.ca](http://www.green-street.ca) or in French at [www.marueverte.ca](http://www.marueverte.ca).

Provinces and Territories have also made progress in identifying teaching materials that align with ESD. For example, Manitoba Department of Education recently published a list of learning resources for education for sustainable development (K-12) entitled Learning Resources for Education for Sustainable Development, Kindergarten to Grade 12: A Reference for Selecting Learning Resources (November 2008). The list of titles can be downloaded at the Provincial government website: <http://www.edu.gov.mb.ca/k12/esd/>

*8. Does your country address the issue of ensuring/assessing the quality of ESD?*

In Canada, each jurisdiction is responsible for assessing the quality of education including with respect to ESD. Some jurisdictions have made progress in this regard. For example, in Manitoba the Department of Education is working with the International Institute for Sustainable Development to assess sustainable development related knowledge, values and behaviours of citizens and of students in grades 6, 8, 9-12) in order to establish a benchmark from which to assess progress. The 2009 document that highlights this work is entitled, Measuring Knowledge, Attitudes and Behaviours towards Sustainable Development: Two Exploratory Studies and is available on the IISD website: <http://www.iisd.org/publications/>

Some provinces and territories have also developed programs that recognize schools who attain specific standards related to the incorporation of ESD into teaching and learning, the degree to which students are able to apply ESD values/attitudes, and the establishment of whole school ESD cultures. For example, Manitoba's ECO-Globe schools and Quebec's Brundtland schools.

9. *Does your country promote research and development with regard to ESD?*

Canada does promote research and development with regard to ESD, particularly through ESD Canada wherein a ESD Research subcommittee is working to identify and disseminate ESD around the world and ensure that the research that is undertaken is relevant and user-friendly to educators. Education Canada has a website that is currently being developed into a searchable database.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes, a number of provinces and territories in Canada have worked to build capacity and raise awareness of ESD. For example, a multi-sectoral Working Group (Manitoba ESD Working Group) recently hosted the Choose the Future ESD Conference that attracted almost 500 people mostly from across Canada to promote and advance ESD in Canada targeting the formal, non-formal and in-formal sectors. Other Working Groups in nine other jurisdictions in Canada are conducting similar activities including building websites focused on ESD, holding symposia, developing material and resources, bringing stakeholders that normally would not meet together to work on advancing ESD.

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

Forging partnerships with business and industry, NGOs and other organizations to advance ESD in Canada has resulted in excellent partnerships and collaborations. For example, B.C. Hydro and the British Columbia Department of Education have established a partnership to develop and share resources for educators. Similarly, Manitoba Hydro and the Manitoba Department of Education have worked together to develop and have expanded their ESD Grants program that support the efforts of educators to develop and implement interdisciplinary SD-focused units in their classrooms. Another good example is The National Education for Sustainable Development Expert Council, recently renamed ESD Canada, referenced to earlier.

## CROATIA

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

National Committee for the implementation of the UN Decade for ESD with inter-institutional composition was established within the Croatian Ministry of Science, Education and Sports. Members are representatives of the Teacher Training Agency, Croatian UNESCO Office, representative of the local government, scientific institutes, university, primary and secondary schools, representative of National Pupil's council.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

The draft *National Strategy for Sustainable Development (NSSD)* has been prepared and currently is in the adoption process. Education for sustainable development and promotion of sustainable consumption and production are listed among general principles for directing Croatia towards sustainable development. Sustainable consumption and production is recognized as one of the key challenges in achieving the sustainable development in Croatia. Some of envisaged measures/activities for achieving the sustainable consumption and production are informing and education of consumers and business sector on products and services quality, encouraging them to make choices in favour of sustainable products and services and developing the responsibility towards environment.

In the NSSD chapter “*Knowledge based society/Education for sustainable development*”, education and changes in the education system are recognized as prerequisites for achieving sustainable development. Accordingly, change and adaptation of education programmes is foreseen in order to include principles and values of sustainable development.

Environmental education and education for sustainable development are among main elements of environmental protection policy in *Environmental Protection Act* (adopted in 2007). Further, education for sustainable development is mentioned in other policy documents, i.e. *National Environmental Strategy* (2002) and *National Environmental Action Plan* (2002), *Waste Management Strategy* (2005) and *Waste Management Plan 2007 – 2013* (2005), *National Environment Protection Strategy*, *Croatian National Educational Standard*, *Law on Gender Equality* (2003) etc.

The draft *National Curriculum for Preschool Education, General Compulsory and Secondary School Education* has been prepared and it is undergoing public discussion and consultations. It contains the elements of education for sustainable development.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*
4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Secondary school mandatory subject called “Politics and economy” partly includes integration of socio-economic dimension in education.

One of the goals within National program for the protection and promotion of human rights 2008 – 2011 is incorporating the education for human rights at all levels and forms of education. Some of priority areas in this program are right to a healthy environment, gender equality, HIV, safety and human rights etc.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes, partly, in some school programmes, but not in the documents. In the draft proposal of National Curriculum 8 key competences (according to EU) and competences for each separate education area are defined. Some of them are in line with the ESD competences.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

In 2006, the existing environmental education in schools was extended and included in the Plan and programme for schools in the form of integrated educational theme “Education for environment and sustainable development”.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Additional educational materials that are used in schools must go through the approval procedure. After experts from Teacher training agency give their opinion on materials they are being approved by Ministry of Science, Education and Sports. System of monitoring the implementation does not exist yet.

As part of awareness raising campaigns, the Ministry of Environmental Protection, Physical Planning and Construction issued a number of brochures. Currently under preparation is UNEP Resource Kit on Sustainable Consumption and Production and it was proposed to be used as additional tool for teacher in schools.

Various NGOs offer textbooks and handbooks and informal education on ESD.

Institutions of higher education issue their own textbooks for ESD within various courses offered to students.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

Assessment of quality of ESD exists within the Eco-schools programme, but only schools involved in this programme are included.

Since 2008, Croatia has been involved in ENSI network (Environment and School Initiatives). ENSI brochure "Quality criteria for ESD schools" is currently under preparation and it is introduced to educators at the teachers' seminars.

9. *Does your country promote research and development with regard to ESD?*

Yes, through national research programmes funded by the Ministry of Science, Education and Sports, private companies, scientific institutes, and Croatian business council for sustainable development.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Awareness-raising activities are conducted through seminars and workshops, discussions and projects organized by various organizations. Teacher Training Agency organizes courses for teachers in primary and secondary schools (i.e. course "Education for environment and sustainable development"), various school projects (primary and secondary schools), Ekopark Pernat-Centre for Sustainable Development (NPO) - courses on SD themes, "Sunce" (NGO) - awareness raising courses etc.

Croatian schools are involved in European Schools Project Association (ESP) and will participate in 2009 ESP conference - Connecting Schools for Sustainable Society.

Croatian schools also participate in ENO-Environment Online - global virtual school and ESD network.

## CYPRUS

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Yes. In the field of education, the Republic of Cyprus has established a coordination body for implementing the National Action Plan for Education for Environment and Sustainable Development which has already received the approval of the Council of Ministers on October, 2007.

The aforementioned coordination body for ESD national plan is the Cyprus Pedagogical Institute. A Unit for Education for Environment and Sustainable Development has been created in order to implement and coordinate actions and activities for all levels of education (pre-primary, primary, secondary and technical-vocational education) across the border.

The decisions about various central actions for ESD are taken by an intersectional committee, chaired by the Director of the Cyprus Pedagogical Institutes, in which all the Directorates of Education participate with individual representatives. Moreover, representatives from other Ministers and Governmental Services usually participate during the discussion of issues that are of special interest or specific concern to them.

With respect to Sustainable Consumption and Production (SCP) no specific mechanism has been developed since it is an issue that is addressed in a holistic approach by several goals and objectives of the national curriculum.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. Cyprus has three national policy documents that are available online:

- The “National Action Plan for Environmental Education focused on Sustainable Development” which can be downloaded from the official website of the Cyprus Ministry of Education and Culture at the following address:  
([http://www.paideia.org.cy/upload/Arthrografia/29\\_1\\_2008\\_sinoptiko\\_keimeno\\_stratigikou\\_sxedias\\_mos\\_perivallontiki\\_ekpaidevsi.pdf](http://www.paideia.org.cy/upload/Arthrografia/29_1_2008_sinoptiko_keimeno_stratigikou_sxedias_mos_perivallontiki_ekpaidevsi.pdf)).
  - The “National Strategy for Sustainable Development” , based on the 2007 EU’s strategy review for sustainable development, and
  - The “National Development Strategy for Cyprus”, which coincides with the main objectives of the Mediterranean sustainable development strategy of UNEP. Both abovementioned official document can be downloaded by the official web-site of the Ministry of Agriculture, Environment and Natural Resources at the following address:(<http://www.cyprus.gov.cy/moa/Agriculture.nsf/All/04D327E3AEAEA22DC22573B100627691?OpenDocument>).
3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

The National Action Plan of ESD, includes issues of SCP, as priority concerns that should be investigated through the Cyprus educational system (please refer to the web-site of Cyprus Ministry Education and Culture for further information).

Additionally, the revised National Strategy of Sustainable Development incorporates aspects of SCP. According to these axes and taking into consideration the directives of the EU, with the participation of all the stakeholders and authorities involved, i.e. Ministries and Nongovernmental Organizations, the Cyprus Government, has modified and adapted the National Action Plan for “Green Public Convention”.

Information about the Green Products can be found in a publication of the Ministry of Ministry of Agriculture, Environment and Natural Resources, which has been distributed to students, teachers and their parents as an information as well as training guide. All related official documents can be downloaded from the following address:

(<http://www.cyprus.gov.cy/moa/agriculture.nsf/0/27730fd755a3893ac22573b100635e65?OpenDocument>).

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Through the curriculum, as well as the various projects implemented in school units at all levels of education the socio-economic dimensions of ESD, which constitute a crucial part to all the environmental and sustainable issues, are investigated. With regards to formal education, the following example developed by the Directorate of Vocational and Technical Education and Training illustrates how the socio-economic dimensions of ESD are applied to formal education system. In Secondary Technical and Vocational Education, the idea of entrepreneurship has been promoted through a number of subjects offered as electives to the students such as:

- Legal aspects concerning the operation of enterprises

- Studies and researches about the labour market
- The costing and pricing of products
- The establishment of enterprises
- The contraction of loans
- The Cyprus legislation concerning the operation of enterprises
- Organization and administration of personnel, etc.

The subject of Technology in the abovementioned Branch of Woodcraft and Furniture Making, aims at introducing pupils to issues related to entrepreneurship by preparing them to assume administrative duties at intermediate level. Through this subject, pupils receive information and acquire the skills to make the right decisions relating to the establishment of small enterprises in the field of furniture making and woodcraft. Pupils are also acquainted with the relevant legislation, which governs the establishment and operation of such enterprises. The most important objective of this subject is to help pupils develop a creative way of thinking as far as the design of products is concerned, and also as far as the most suitable methods of producing and promoting products are concerned. In addition, pupils are made aware of their role as entrepreneurs in the development and safety of human resources.

One of the most significant aspects of entrepreneurship is fostering the respect of moral values and promoting environmental awareness. Technical and Vocational Education and Training aims at developing entrepreneurs with moral values, and not individuals whose only objective is to make profit. Through the programs of industrial placement, the pupils of the Practical Direction are given the opportunity to familiarize themselves both with the workplace and also with the scope of activities and the objectives of an enterprise.

The idea of entrepreneurship is also promoted through extra-curricular activities such as participating in various competitions etc.

#### Non-formal Education

The Socio-Economic dimensions of ESD, through non-formal education, are promoted by the Environmental Education Programs that are applied by the net-work of the Environmental Education Centers, which implements the national curriculum and is closely connected to the school units.

At the centers, students with their fellow students and students with their teachers have the opportunity to examine various issues of sustainable development, by interacting with the natural place and the local population in order to investigate various issues in a holistic way by revealing the social and economical impact of a specific issue in community life. For instance, the Sustainable Production and Consumption Patterns are investigated through specific programs in which students have the opportunity to visit local trades, see the procedure of production and learn why it is important to support local products. They discuss with the local people and learn why local products and local cultivations are important for the social cohesion, as well as for the economic growth of the community.

Taking into consideration that non-formal education and formal education are closely connected, the programs implemented in the Communities through the Environmental Education Centers, are expanded in the school community so that students will be able to investigate issues of SCP in a wider context. Students make generalization from local to global level. They examine through the whole subjects of the curriculum the social and economical impacts of a product imported (fair trade, human rights, costs etc). Through outdoor activities and experiential learning students learn how to be responsible consumers.

#### Informal Education

Seminars and in-service training courses on the philosophy, the principals, the methodology and the pedagogy of ESD are organized for teachers at all levels of education, as well as for key stakeholders and parents by the Cyprus Pedagogical Institute. The seminars usually take place in the actual school units.

Through in-service training courses teachers are familiarized with various ESD and SCP issues. They are acquainted with pedagogical and methodological ESD approaches and participate in experiential workshops as well as outdoor activities, in order to learn how to use the outdoor environment and places for involving students more effectively in outdoor contexts. For that purpose interventional programs for sustainable development and environment issues, that include training and practical applications in the field, are applied.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes. Competences in ESD are promoted at all levels of education, within the Cyprus Educational System, through the curriculum as well as the various environmental and sustainable development projects implemented in the school units. Competences such as investigating environmental issues holistically, critical thinking, experimental and experiential investigation, mutual communication and interaction amongst all the participants in the learning procedure, in order to inquire alternative solutions for the specific issues, are investigated. Certain competences such as interdisciplinary thinking and teaching, as well as skills such as communication and project management, are included in various teaching as well as training courses.

An indicative example from Secondary Technical and Vocational Education and Training follows: The new curriculum offered by Secondary Technical and Vocational Education and Training, as has been amended during the recent revision, is an example of good practice as far as the student – focused, competence – based approach to learning is concerned. The main philosophy behind the new curriculum is the acquisition of key competences, through the combination of theoretical teaching with practical training, and the vocational orientation of students. Through practical training and industrial placement, students are given the opportunity to develop mathematical competences, as well as basic competences in science and technology, since each technical subject encourages them to implement fundamental mathematical principles and procedures in everyday working conditions.

Furthermore, through technological subjects, students are acquainted with technology and technological products and procedures, and are in a position to understand and evaluate the impact science and technology have on our world in general, and on the respective branch of study students follow in particular. In other words, the development of environmental awareness is promoted through the delivery of technological subjects, since pupils are systematically informed about the technological dimensions of modern civilization and their impact on the environment.

Through the pluralism that can be observed in the Secondary Technical and Vocational Education curricula (theoretical subjects, technological/laboratory subjects and elective subjects) students are given the opportunity to develop their native language, foreign languages and ICT skills. The application of theoretical knowledge and the development and enhancement of existing knowledge through technological subjects contribute to the effort of acquiring meta-cognitive competences. Moreover, through the school culture and the relatively good relationship between teachers and students, the social skills of students are developed, as well as their initiative, cultural knowledge and expression. Finally, through technological subjects and the selection of the respective branch of study, a sense of entrepreneurship is developed in each student.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

ESD issues are infused in all subjects of the curriculum at all levels of education within the Cyprus Educational System. Multidisciplinary as well as interdisciplinary instructional methods are used. Social sciences, environmental sciences, humanities and arts are used in combination, so that sustainable issues are investigated holistically. Sustainable development and environmental issues are also examined through

specific environmental and sustainable development programs that are applied in all educational levels. These programs are both developed and implemented at a pan-European level (“Eco-schools programme”, “Young Reporters of the Environment programme” “Learning about Forest” etc), or are a result of bilateral cooperation (“Programme Green-Leaf” a cooperation amongst Cyprus and Greece).

Important initiatives for designing and applying environmental and sustainable issues have been undertaken at a National Level, taking into consideration the needs and the specific concerns of Cyprus. Issues like consumerism, alternative means of transportation, sustainable cities, sustainable management of wastes etc are some of the issues that have been developed by schools with parental and community involvement. Holistic and co-operative approaches are used throughout all phases of both teaching and acting. Children action is considered as a basic component of the learning procedure. Outdoor learning, experiential learning, place-based education, team-working through intergenerational communication are also implemented.

*7. Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. Special emphasis is given in developing adequate educational tools and materials that will promote ESD according to the needs and priorities of the Cyprus Education System with special focus on the problems that the Republic confronts. An educational publication under the title “Issues of Sustainable Development: Activities of Interdisciplinary Investigation” has just been completed. The book is divided into five thematic areas of sustainable development issues: “Poverty”, “Sustainable Consumption and Production Patterns”, “Sustainable Tourism”, “Climate Changes-Desertification”, and “Alternative Means of Transportation”. For each thematic area educational activities based on cooperative learning, simulation games, problem-solving approach, moral dilemmas, issues of contradiction and role games are developed in order to help students investigate these issues through various aspects. All the issues contain various subjects of the curriculum. This educational material has been developed for the upper classes of elementary education and the lower classes of secondary education. Furthermore, the Department of Primary Education is in the process of uploading on the internet, examples of good teaching practices and additional instructional material developed by school units (teachers and pupils involved in ESD programs) which can be used as pilot models by educators.

*8. Does your country address the issue of ensuring/assessing the quality of ESD?*

A unified official assessment of ESD hasn't been established yet, however informal inside evaluation is implemented for all initiatives undertaken within the Cyprus Educational System. A set of officially approved qualitative indicators for ESD that will assess the whole education system according to ESD implementation will be developed in the near future.

*9. Does your country promote research and development with regard to ESD?*

Yes. Research with regards to ESD in Cyprus is in an evolutionary stage, but remarkable initiatives have been undertaken in this domain by the Environmental Education and Sustainable Development Unit of Cyprus Pedagogical Institute, in cooperation with the Universities in Cyprus. The first research conducted on a nationwide level examined the School Principals' conceptions and beliefs about Sustainable Development and Sustainable Schools. The aim of the research was to investigate the Principals' opinions about the term sustainable development, the pedagogy of ESD and how Sustainable Schools should be achieved. The research results will be used in order to organize schools according to the principles of ESD. Other researchers are under evolution in a national level and are related to the design of in-service training courses in ESD in order to improve the teachers' efficacy and competences in ESD. It is notable that through various research programmes, such as “Students in Research and Development”, schools are conducting individual action research in various sustainable issues related to their community and their school unit. Such research projects include investigating issues such as SCP, climate changes, bioclimatic, renewable resources of energy etc. The research conducted through European projects are also worth mentioning. The initiative undertaken by Cyprus in cooperation with EEA in order to develop and evaluate mini-projects for eco-schools is also of great importance. Amongst these projects, projects about SCP and how that issues could be

examined interdisciplinary, how school and community can contribute in order that citizens and students will adopt new lifestyles according to the sustainable and consumption models, are presented.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes. Awareness activities and capacity-building awareness are promoted through the Cyprus Educational System at all levels of education. Specific information has been provided under question number 4.

## DENMARK

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Yes. Denmark has established a cross-ministerial network and a Dialog Forum consisting of ministries, and at least 25 NGOs.

Yes. Denmark has in our soon coming Governments' national SD-strategy a specific chapter concerning Green Innovation in Production and Consumption.

The inter-institutional and stakeholder aspects of sustainable consumption and production are included in the Governments national SD-strategy, and this is also considered as a cross- curricula subject.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. In Denmark the policy documents are developed, but not translated into English. In these documents ESD is included in general curricula for the Folkeskole (primary and secondary education) as well as in youth education and training. Additionally ESD is mentioned in common goals for teaching and in guidelines from Ministry of Education to the municipalities of how and what to teach.

Yes; As mentioned above ESD is included in the overall Danish SD-strategy.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

In Denmark it is most probably point (b) that we include Sustainable Consumption and Production (SCP) in the general teaching process as an element in the multidisciplinary and democratic education process.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Please look at point 3. Supplementary Denmark can inform, that matters concerning takes its point of departure in educating children and young people as good, reasonable and qualified consumers who all the time are aware of sustainability. Consumption is therefore included in the curricula for several subjects in the Folkeskole as one of the main goals. The same situation is present in non-formal and in-formal education.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes. Since teachers are obliged to teach in production and consumer oriented matters to a level decided by the Ministry of Education, it is up to the teacher training institutions to secure the teachers competencies in this field.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

As (a).

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. In Denmark development of teaching materials are on free market basis. The decision on which materials and tools are to be used in the schools are up to the School Board under the precondition that the materials makes it possible for the teacher to fulfil the overall goals for the Folkeskole. The Ministry of Education encourage the Publishers to prepare actual and relevant materials.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

No. The assessment of the quality of teaching ESD is under the responsibility of the municipalities, who are obliged to fulfil the common goals laid down by the Ministry.

9. *Does your country promote research and development with regard to ESD?*

Yes. The Ministry of Education may at a yearly basis promote research and development projects i.e. for developing examples of educational materials.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes. Through the above mentioned Dialogue Forum the Ministry has close contact to informal and non formal education, where the ministry can encourage NGO and other institutions and organisations to work intensively with ESD. Some Folk High Schools have for instance decided to have ESD as a theme for the coming season.

## ESTONIA<sup>7</sup>

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Yes. A coordination group of the Estonian Ministry of Environment (ME) and the Estonian Ministry of Education and Research (MER) for environmental education and sustainable development exists since 2004.

Currently, the group is under re-organization.

There is no specific mechanism for SCP yet, but sustainable consumption and production are among the main challenges for environmental education, as described in the National Concept of Environmental Education.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. The National Concept of Environmental Education, which was accepted by government in 2006, is currently the general guideline for ESD.

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<sup>7</sup> Since Ms. Imbi Henno, the national representative of Estonia in the UNECE Steering Committee on ESD, recently departed from the civil service, the questionnaire is answered by Ülle Kikas, Advisor of the Estonian Ministry of Education and Research (ylle.kikas@hm.ee).

Development of the National Strategic plan for ESD 2008-2013 is currently under way. The plan has passed extensive public discussion, and will be signed in next few Months by the Ministers of ME and MER. The document is considered as the supplement to the National Sustainable Development Strategy 2030.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Both approaches are used. However, in policy documents on SCP the educational issues are only mentioned, but not specified.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

(a) Environment and sustainable development are included in the curricula of formal education:

1. national curriculum for pre-school education
2. national curriculum for elementary, basic and high school education as cross-curricula themes. This provides an opportunity to integrate SD themes not only with science subjects, but also with social subjects.
2. subject-field curricula for vocational education (as special moduls). Total 34 new curricula were developed in 2008, which integrate SD themes with professional education

(c) the projects and activities of schools and NGO-s dealing with SCP issues are funded by state sector and private foundations.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes. The in-service teachers can improve their competences in ESD in training courses. Mainly science teachers and elementary school teachers are engaged.

The new ESD strategy is stating that ESD competences should be taught to all teacher students in university education, but also to other students studying the key professions like engineering, public communication etc.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

(a) in pre-school, and school level

(b) is planned for university level

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Only few materials are developed. Mainly because of absence of good authors, but also because of partly unclear content of ESD.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

Yes. A research study is planned (2009) about implementation in schools of cross-curriculum themes, including "Environment and SD".

9. *Does your country promote research and development with regard to ESD?*

The ESD is considered as a part of research projects on SD. There is no special research on ESD.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes. A national program for capacity building in environmental education is planned for 2009-2014, funded by ESF. (Despite of the title, the program involves not only the environmental education, but the ESD in its wide meaning).

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

An award of the Ministry of Environment "Friend of Environment 2008" was given to the SILBET company for its sustainable production, and for rising public awareness on sustainable consumption. The company produces building materials from oil-shale ash, and published recently a CD for schools about sustainable use of oil shale, sand, water and other resources.

## FINLAND

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Yes. A contact group between the main actors of the ESD has been gathered by the Ministry of Education in 2008. The group comprises many active bodies (governmental and non-governmental, national and local) within the field of ESD. The group serves as an umbrella improving the mutual connection of these different bodies and networks.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. A working group on Education for Sustainable Development existed in the Ministry of Education from 2002 to the end of 2005, producing a strategy "Sustainable development in education; Implementation of Baltic 21E programme and Finnish strategy for decade of Education for Sustainable Development 2005-2014". [http://www.bup.fi/Finnish\\_Min\\_of\\_Educ\\_strategy\\_for\\_sust\\_dev.pdf](http://www.bup.fi/Finnish_Min_of_Educ_strategy_for_sust_dev.pdf)

In addition, a Sub-Committee for Education under the Finnish National Commission on Sustainable Development (NCSD) existed from 2004 to the end of 2007, producing a "Strategy for education and Training for Sustainable development and Implementation Plan 2006-2014". <http://www.edu.fi/julkaisut/engnetKekekajako.pdf>

The national SD strategy "Towards sustainable choices - a nationally and globally sustainable Finland" 2006 contains also elements concerning ESD. In the strategy ESD is considered as one of the three main instruments to achieve sustainable development and support sustainable choices. The issue is addressed in a specific chapter 'Education to promote sustainable development' and the strategy calls for, inter alia, implementation of the targets for development presented in the National Strategy of Education and Training for Sustainable Development. In addition to a separate chapter, ESD is mainstreamed in many of the themes. <http://www.ymparisto.fi/download.asp?contentid=57597&lan=en>

Furthermore, The Finnish Government included the promotion of sustainable development in its development plan for education and research already in 2003. This development plan is a key steering tool for the Ministry of Education. The promotion of sustainable development has also been incorporated into the national curricula in basic education and in general and vocational upper secondary education. It is also addressed in the annual performance agreements concluded by the polytechnics and universities with the Ministry of Education. Many universities have also included the ESD in their own internal strategies.

ESD related issues (e.g. Environment Education) are embedded in the present Government Programme.

The importance of the ESD is also confirmed in the national strategy for sustainable development in the European Union strategy for SD 2006.

- 3. What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Sustainable consumption and production (SCP) patterns are embedded in the general ESD at all levels. For example, universities have established their own action plan for sustainable development, including the dimensions of education, research and other possible activities of Universities. The dimension of the SCP is part of the plans.

There is also a special programme for the promotion of sustainable consumption and production in Finland since 2005. <http://www.ymparisto.fi/default.asp?contentid=62075&lan=en>

The programme was initiated in response to a decision made at the UN Sustainable Development Summit in 2002 to create ten-year framework programmes to promote sustainable forms of production and consumption.

A working group has been appointed by the Ministry of the Environment to evaluate the implementation of the programme's main measures. The working group will also compile a monitoring report and propose further measures. The programme will be revised in 2010 on the basis of the monitoring report. The first interim review of the implementation of the programme was published in autumn 2007. For example, a new government policy on public sector purchasing procedures is under preparation.

In addition, the current Government programme requires that all actors or bodies within the State administration will prepare their own strategy for SD, including ministries, while other actors in the society are encouraged to do the same.

One essential part of such individual strategies is, of course, the dimension of SCP.

- 4. Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Yes. The SD will be increasingly important in the working life of all, including teachers. Global responsibility, climate change, social equality, cultural diversity and the global economy are all aspects that need to be taken into account in today's and tomorrow's society. In this situation, an important task of the education is to offer the sufficient information (integrating the environmental, economical and socio-cultural aspects of education for sustainable development) so that the societies can be evolved in a balanced way.

This theme has been examined in the publication "Towards Sustainable Development in Higher Education – Reflections" (see question 5).

[http://www.minedu.fi/OPM/Julkaisut/2007/Sustainable\\_Development\\_in\\_Higher\\_Education.html?lang=en](http://www.minedu.fi/OPM/Julkaisut/2007/Sustainable_Development_in_Higher_Education.html?lang=en)

Here is another example of an article reflecting this issue:

<http://www.abocom.net/bup/joomla15/images/stories/book/dialogues-ffrc-ebook-2008-7.pdf>

- 5. Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

The competencies of teachers and researchers in higher education are promoted by the Ministry of Education through project financing for two university networks; the National Resource Centre for ESD in Higher Education and the UniPID (the Finnish Universities' Partnership for International Development) network.

Both networks are in a capacity building phase and aim at competence building through web-sites ([www.bup.fi](http://www.bup.fi), [www.jyu.fi/hallinto/unipid](http://www.jyu.fi/hallinto/unipid)), virtual courses, seminars and meetings.

The most recent internet-based and multimedia courses are:

- Concepts of Sustainability (5 cr) ([www.abocom.net/bup/courses](http://www.abocom.net/bup/courses))
- An Agenda for Global Responsibility ([www.abocom.net/bup/BUPfilm](http://www.abocom.net/bup/BUPfilm))

During 2008 three meetings on ESD have been organized for teachers and educators in higher education by the National Resource Centre for ESD in Higher Education.

Baltic Sea regional experiences on ESD in higher education have been published in the book *Learning for a Sustainable Future*, edited by Dr Liisa Rohweder and Dr Anne Virtanen (2008). This book can be downloaded at [www.balticuniv.uu.se/index.php/Other-publications/learning-for-a-sustainable-future.html](http://www.balticuniv.uu.se/index.php/Other-publications/learning-for-a-sustainable-future.html)

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

(a) Measures are taken to equip educators with the competencies to include ESD in their teaching.

The Ministry of Education is financing "A National Resource Centre for ESD Higher Education", including teacher education at all levels and subjects.

Within the non-formal education the ESD can be part of the initial training for educators. Usually the courses are tailor made, lasting from one week to 100-125 "study points". The topics are covering a wide range of subjects, from pedagogical studies to different implementations in teaching, e.g. ESD tools for evaluation and development in different types of working and learning surroundings.

(b) There are regional development projects at different levels of education. For example, in higher education there are supporting measures like future scenario projects and cooperative regional and international development projects involving general public and other key actors.

The non-formal and informal education can also apply for financial support from other actors in ESD for activities destined to raise awareness of the citizens through, for example, various campaigns, happenings, competitions and producing information material on SD.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. Many stakeholders produce learning materials (for example, Ministry of Education, National Board of Education, universities and actors of the non-formal education sector) in order to increase the ESD and SD competences in many fields and levels of the society.

Some examples:

1. As a contribution to the Decade on ESD the Ministry of Education produced the publication: "Towards Sustainable Development in Higher Education – Reflections" by Taina Kaivola and Liisa Rohweder; Series of publications "Publications of the Ministry of Education", Finland 2007:6 Published 2007

The publication highlights various approaches to enhancing sustainable development in higher education and arousing interest in curriculum development and pedagogical reflection.

[http://www.minedu.fi/OPM/Julkaisut/2007/Sustainable\\_Development\\_in\\_Higher\\_Education.html?lang=en](http://www.minedu.fi/OPM/Julkaisut/2007/Sustainable_Development_in_Higher_Education.html?lang=en)

2. There is a three-year project called "Education for Global Responsibility" launched in spring 2007. The first publication within this project was "Education for Global Responsibility – Finnish Perspectives" by

Taina Kaivola and Monica Melén-Paaso ; Series of publications Publications of the Ministry of Education 2007:31 ; Published 2007

The publication consists of articles by researchers from different scientific fields probing the central themes of global education. In addition, it contains addresses that reflect and in part sum up the themes covered in the more formally written articles.

[http://www.minedu.fi/OPM/Julkaisut/2007/Education\\_for\\_Global\\_Responsibility.html?lang=en](http://www.minedu.fi/OPM/Julkaisut/2007/Education_for_Global_Responsibility.html?lang=en)

3. Within the project of "Global Responsibility" the most recent and essential publication is "Towards the Sustainable Way of Life - a Pedagogical Approach" by Liisa Rohweder and Anne Virtanen (2008).

The publication is so far only in Finnish: Kohti kestävää kehitystä. Pedagoginen lähestymistapa. Opetusministeriön julkaisuja 2008:3

[http://www.minedu.fi/OPM/Julkaisut/2008/Kohti\\_kestavaa\\_kehitysta\\_Pedagoginen\\_lahestymistapa?lang=fi](http://www.minedu.fi/OPM/Julkaisut/2008/Kohti_kestavaa_kehitysta_Pedagoginen_lahestymistapa?lang=fi)

4) The National Board of Education has informative web pages on SD.

<http://www.edu.fi/teemat/keke/index2.html>

5) The National Board of Education has produced a handbook for schools and educational institutions: "Learning the Sustainable Way of Life" by Marja-Leena Loukola.

The publication is only in Finnish: Käsikirja kouluille ja oppilaitoksille: Kestävän elämäntavan oppiminen - Kestävä kehitys opetukseen, arkikäytäntöihin ja toimintakulttuuriin

The handbook has been sent to all schools and pedagogical institutions in Finland. The book contains practical examples and shared experiences of how to promote the sustainable way of life.

[http://www.edu.fi/julkaisut/Kestava\\_elamantapa.pdf](http://www.edu.fi/julkaisut/Kestava_elamantapa.pdf)

6) New tools have been developed for the ESD also in the non-formal education by the umbrella organisations and different types of networks. The tools mostly consist of study materials, DVD:s, CD-ROM:s (including games), surveys and guidelines.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

One characteristic of the Finnish system is that the duty to evaluate permeates all educational legislation, that is, legislation obligates providers at all levels to evaluate their performance. Research is also evaluated. Thus it is possible to assess the quality of ESD initiatives. However, because of limited human and financial resources, evaluation is not as prevalent as it could be.

In the 1990s the National Board of Education undertook a wide-scale evaluation of SD in its sector. In 2000 and 2001 ESD was evaluated as part of the drafting of the Baltic 21E programme. An SD committee appointed by the Ministry of Education undertook some evaluation in looking into the development of SD from 2002 to 2006. The development of SD/ESD is currently being looked into, for instance within the SD forum of universities and polytechnics (led by the Resource Centre of the Åbo Akademi university) and by the National Board of Education.

In order to assess the effectiveness and outcomes of ESD initiatives, several research and evaluation initiatives take place, such as: policy, regulatory and operational measures to promote ESD, measures to promote ESD through formal education and measures taken to ensure that adequate tools and materials for ESD are accessible.

9. *Does your country promote research and development with regard to ESD?*

Yes. The position of sustainable development on the Finnish education and research policy agenda is further strengthened by a Government decision, which defines sustainable development as one of four sector

research areas. The so called "sector research" is in Finland undertaken by research agencies and universities for the benefit of different Finnish Ministries in their political decision making.

The funding is not earmarked. Since it is allocated on the basis of applications, which in turn are accepted on the basis of merit, it is not possible to estimate how large the annual funding shares are.

The situation:

In recent years, sustainable development has been gaining more and more weight on the education and research agenda in Finland. The Government has taken it as one of the four themes in sectoral research. The importance of promoting SD was stressed in the Government's Development Plan for Education and Research 2007–2012.

It is possible to promote ESD R&D:

- as part of sectoral research

- with project funding granted by the Ministry of Education to universities and polytechnics. In 2007 this funding was allocated to HAAGA-HELIA University of Applied Sciences for a project called "empirical research into the present situation in ESD in polytechnics and an ESD pedagogical model developed on this basis" ; in 2006-2008 funding was granted to a UNIPID university network coordinated by the University of Jyväskylä, "SD and development policy".

Each university has a profile of its own, i.e. its own strong areas, in which it specialises. Åbo Akademi University has an environmental profile and conducts a great deal of research on environmental education. A number of other universities also have activities relating to environment education (EE). The University of Jyväskylä in turn is the SD university of Finland, and was the first to adopt an SD strategy of its own.

The Academy of Finland has a Research Council for Biosciences and Environment, including natural resources. Research financed by the Council is often cross-disciplinary.

ESD at Master's level (e.g. in the Universities of Joensuu, Jyväskylä and Kuopio, plus in several polytechnics)

EE at Doctorate level. E.g. graduate schools in Applied Bioscience - Bioengineering, Food & Nutrition, Environment (ABS).

*10. Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes. There are both private sources (civic organizations and companies investing in SD and capacity building) and public sources of financing for innovation and capacity-building in ESD (publications, documentary films, corporate action etc.). The eligibility of the applicants who need financing depends on the granting organization. In the sector of the Ministry of Education eligible are all types of educational institutions within formal and non-formal education.

The project at the Ministry of Education on global education, "Education for Global Responsibility", which started in spring 2007 and which has widened the focus on education for sustainable development, includes the dimension of strengthening public awareness. More precisely, the project aims to enhance global education according to the following objective set by the General Assembly of the Council of Europe (2003): "to promote global education to strengthen public awareness of sustainable development, bearing in mind that global education is essential for all citizens to acquire the knowledge and skills to understand, participate in and interact critically with our global society, as empowered global citizens".

A concrete example of the Education for Global Responsibility project is the film *An Agenda for Global Responsibility* ([www.abocom.net/bup/BUPfilm](http://www.abocom.net/bup/BUPfilm)), which can be used by all levels of education, and the general public.

## GEORGIA

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

In May 2008 Ministry of Education and Science, Ministry of Environment Protection and Natural Resources and Ministry of Labour, Health and Social Affairs established a coordinating body on ESD, where officials from above mentioned ministries and two NFPs to the ESD are represented.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

National policy documents on ESD are in initial stage.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

SCP will be included in the policy paper as an essential part of ESD; in this case some documents (e.g. curricula) should be revised.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Yes. Socio-economic dimensions are widely presented, comparatively new is CoE Regional Project "Intercultural Dialogue through Education in South Caucasus and Ukraine", three workshops and one conference were conducted in Tbilisi. Also publication of activities is prepared together with other South Caucasus countries and Ukraine. These activities cover different directions, such are diversity management, overcoming prejudice, equality, inclusion, HR, conflict resolution, tolerance and mutual respect, multi-perspectivity in teaching.

Besides it similar themes were advanced by British Council Project "Leaving Together" - How to support for equity, equality and anti discrimination education at schools.

SCP is a part of formal education system, as the curricula of Social studies. It is studied in Economy. This is a separate elective subject in 11-12 grades, but in the earlier grades there are some elements of sustainable consumption included in the integrate curricula of History, Geography and Civic Education, which is studied in 7<sup>th</sup> and 8<sup>th</sup> grades. At tertiary level there are several modules.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

No.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

The National Curriculum and Assessment Center develop national curricula, ESD themes are integrated across the relevant programmes and subjects. On every level of school studying this areas of knowledge are

widely submitted and also are represented by different subjects (science, geography, biology, chemistry, physics, economy, civic education, also in some case by humanitarian subjects) for each grade.

New curricula designed to encourage active learning rather than mechanical transfer of knowledge. Interactive methodology focuses on a student and the studying process that gave an opportunity to every student to learn in more liberal atmosphere.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. National Curriculum and Assessment Center is working together with authors for create better text books (contains both students and teachers books) according to new curricula. Experts of this center give them recommendations. These books are piloting in 100 pilot schools throughout Georgia. Pilot schools are selected by different geographical conditions and settlement types. Also trainings are organized for authors, to receive more successful study books; this year training content was how to develop problem solving skills for students.

New curricula and textbooks are first piloted and then introduces in each subsequent class. Introduction of national curricula will be completed at lower and upper secondary levels in 2008-2009 and at primary level in 2011-2012.

“How to write successful projects” – Guidebook for students- develops problem solving skills and helps to succeed in Olympic Games in ESD.

National Curriculum and Assessment Center, together with “Save the Children” developed tolerance educational program and the textbook. The aim of the program is to learn tolerance, environmental and healthy lifestyle at the primary schools for teachers and students and this is facultative subject.

Within the frame of the “Big Wild Read” project, British Council Library is publishing an illustrated children’s book about Environment and Climate Change in Georgia in May 2008. The book is called “Greenies Read” and it is aimed at raising awareness among children about climate problems and environment protection. Project participants are children from 10 schools of Georgia. It's an illustrated Children’s fun reading about climate change and environment protection issues in Tbilisi and 5 regions of Georgia in English language.

National Curriculum and Assessment Center organizes trainings on problem solving skills for authors of the textbooks. The goal of trainings is to reflect successfully ESD principles in their books. The outcomes of this training were published in the book.

Within the CoE project was translated in Georgian language the textbook "Religion Diversity and Intercultural Education". This book was published and distributed to all Institutions that are working for teachers' professional development.

Regional Environmental Center for Caucasus Region conducted trainings for Journalists in direction of environmental protection and SD Textbook was printed for journalists who work on environmental protection. By the REC Caucasus also was translated Ken Webster's book "Rethink Refuse Reduce"... A book written for practicing classroom teachers with a responsibility for delivering education for sustainability. It offers alternative approaches to the current ways in which we teach education for sustainability.

CENN – Caucasus Regional Environmental Network published Text-book on energy conservation (both students book and teachers guideline). In most regions (7 from 12) of Georgia this text-book is in utilized.

From 2005 year 133 teachers in 100 schools from different regions of Georgia took place in "SPARE" school project to attract youth in energy efficiency activities and promote sustainable energy. The relevant textbook is created.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

No.

9. *Does your country promote research and development with regard to ESD?*

Rustaveli Foundation of the Ministry of Education and Science for Georgian studies, humanities and social sciences announces the state grants in different directions, among the scientific research categories there is a sub-direction of SD

<b>2_230</b>	<b>Sustainable development</b>	
2_231	Environmental Philosophy	Sustainable development
2_232	Environmental Economics	Sustainable development
2_233	Environmental Policy	Sustainable development
2_233	Resource Distribution and Consumption	Sustainable development
2_234	Environmental Justice	Sustainable development
2_235	Environmental Education	Sustainable development
	Other (Sustainable development, please, indicate field of specialization)	Sustainable development

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

From the side of the Ministry of Environment Protection and Natural Resources and the Ministry of Education and Science different awareness raising activities in environmental issues were promote, including citizen's rights and obligations under environmental legislation, are being conducted for governmental organizations, business sector, local population, students and school children, which include the following: seminars and eco-conferences; dialogue with NGOs and media sector; lessons for school children; awareness raising campaigns; TV and radio programs; documentary films, promotion videos and TV advertisements; video, animation and cartoon films; excursions; interpretation boots, road posters, map-collages for tourists; magazines, leaflets, flyers, booklets, advertising banners and posters; photo and drawing exhibitions; one tale for children; etc. A draft memorandum has been prepared between the Protected Areas Agency and two universities of Tbilisi; a plan for eco-educational activities for 2008 has been developed, where one of the main goals is a training of teachers of geography and biology in 180 secondary schools in different regions of Georgia;

Activity announced by the Ministry of Education and Science of Georgia in 2006 is the school Olympic Games with ESD direction. The partner of the competition is the Ministry of Environment Protection and Natural Resources of Georgia (MoE). This competition in group projects on ESD is annual.

The Aarhus Centre Georgia supports awareness-raising activities to promote ESD. The Centre also provides the conference room, equipment, library, internet and variety of services which is free and accessible for everyone to any activity connected to environmental and ESD issues. Special web-site of the Aarhus Centre Georgia (National Node) has been created the separate section for ESD, where all relevant documents are presented. The web-site is updated regularly to make it even more user-friendly for different target groups.

## HUNGARY

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

An ESD Committee was established in the Ministry of Environment and Water in 2006 to implement the UN Decade initiative. The ESD Committee consisting of representatives of concerned ministries, NGOs and individuals (mainly teachers), had 3 meetings and addressed SCP as an overarching topic and good tool for integration in the school curriculum. The committee works now as an informal contact group on ESD principally for information sharing and consultation through an electronic mailing list.

A project committee has been established in the Ministry of Education and Culture under the auspices of the State Secretary in 2007 in order to coordinate the work on the UN Decade but it has not done much so far.

There is a network on SCP, the Hungarian Network for Sustainable Consumption and Production which is a cross-sectoral partnership composed of stakeholder groups (governmental offices, business, civil organizations, academic sector and the media). The partnership emerged from the initiative of the UNEP in 2002 with support from the Regional Environmental Center for Central and Eastern Europe's (REC) Hungarian country office ([www.rec.hu/HFTF](http://www.rec.hu/HFTF)).

- 2. Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Some elements of ESD are integrated into strategic policy documents, like the National Sustainable Development Strategy (NSDS) and the National Environmental Programme (NEP). ESD is one of the horizontal priorities of the NSDS. The first thematic Action Programme of NEP-2 (2003-2008) and NEP-3 (2009-2014) deals with awareness raising, environmental education and ESD including awareness raising on sustainable consumption. The National Core Curriculum also contains some elements of ESD.

In Hungary the revised National Environmental Education Strategy – which had been developed by 200 civil organisations and after the revision its scope was broadened with themes of ESD - is used as a policy document for ESD.

- 3. What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Elements of both ESD and SCP are integrated into national policy documents as described in point 2 (NSDS and NEP).

Link to the English version of NSDS is: [http://www.ff3.hu/upload/NFFS\\_20070629\\_en1.doc](http://www.ff3.hu/upload/NFFS_20070629_en1.doc)

The English version of NEP-3 is not available yet. The link to the English version of NEP-2 (2003-2008) is: [http://www.ff3.hu/upload/NEP2\\_Hungary.pdf](http://www.ff3.hu/upload/NEP2_Hungary.pdf)

- 4. Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

There are 250 primary and secondary Eco-schools involved in the integration of SCP in the schools' curriculum all over the country. Furthermore, 600 primary and secondary schools are teaching the Green Pack (developed by the REC) including sustainable patterns of consumption.

In the vocational education SCP is a key topic for integration, introduction of new teaching methods and innovative tools.

- 5. Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes, it is addressed in the list of minimum professional competences for teachers in formal education.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

With respect to ESD, approach (a) is usual in public primary and secondary education but in higher education (b) is more frequent and accepted.

There are some topics related to ESD which are more in the focus as sustainable transport, sustainable energy use, healthy products and healthy nutrition.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. Several kinds of teaching and educational materials, education toolkits have been elaborated and are under development, by support from different sources (EU funds, Hungarian governmental funds, Norwegian Fund, business initiatives).

Many of them address sustainable consumption issues like a digital education toolkit on energy („Energy Experience”) which was elaborated by E-ON Hungaria, an electricity and gas provider company. Another education toolkit entitled „Global climate change” was elaborated by the Budapest Polytechnic for Economics. The “Kyoto in the home” project ([www.kyotoinhome.info](http://www.kyotoinhome.info)) focusing on energy use and climate change supported by Intelligent Energy Europe. The educational resources were developed in 12 languages, the Hungarian version was implemented by the Regional Environmental Center, Country Office Hungary.

NGOs are also very active in developing teaching manuals, toolkits.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

Yes. From kindergarten to secondary level there are some certification system (Eco-schools, Forest Schools and Forest Kindergartens, Green Kindergarten system) for ensuring quality of ESD, but they are voluntary based and not compulsory for institutions. It appears in teacher education also.

There are several university courses addressing SD (environmental science, environmental studies, environmental-economic studies, environment and society study, etc).

9. *Does your country promote research and development with regard to ESD?*

There are some international projects (FP-7, Comenius, etc) with Hungarian involvement (National Public Education and Innovation Institute, REC Country Office Hungary) focusing on transition processes in the society and on the role of education.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes. There are several awareness raising campaigns, financed from various sources (EU funds, Hungarian governmental funds, Norwegian Fund, business and NGO initiatives) on energy saving, waste minimizing & recycling, sustainable consumption, healthy lifestyle, etc.

## ISRAEL

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Israel has a mechanism for ESD activities. The coordination body is headed by a director of an administration that was nominated by the General Director. The coordination body includes 12 referents for the implementation of the Strategy. 2 referents represent the Minister and the General Director. 3 of them

serve as headquarter referents, and 7 serve as districts' referents. Each of the 7 districts in Israel has a referent that was nominated by the district's director. The coordination body operates accordance with a national Committee on ESD which establishes the necessary policies, structures, cooperation and involvement of governmental and non-governmental working groups. An effort on bridging the gap between policy and practice includes addressing policy documents, integrating SD principles and themes into the national curricula K-12, operating activities for leaders and teachers, and promoting processes for attaining values and behaviors.

Specific mechanism(s) with respect to SCP are in our consideration.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

2. & 3.

Israel responded to the challenge of Education for Sustainable Development (ESD), and is committed to incorporate SD strategy into our Education system. Israel established the necessary policies, cooperation and structures, as published in the Director General's circular. An effort on bridging the gap between policy and practice includes addressing policy documents, Setting standards supporting ESD, integrating SD principles and themes into the national curricula K-12, operating activities for decision makers, leaders and teacher training, and promoting processes for attaining values and behaviors. Israel has national policy documents on ESD based on the ENECE – Strategy. Cooperation between the Ministry of Education and the Ministry of Environmental Protection led to a National Action Plan “Understanding and protecting our Environment”, which was presented lately at the Ministry of Education board meeting.

Attached are a presentation and a link to the formal policy publication.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*
4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

4. & 6.

We are in a transition from an ecological and environmental component to an integrative conceptualization of ESD, with more emphasis on other SD issues, such as social and economic. Within the framework of the national plan, An integrative conceptualization of ESD is emerging by adopting the “cross-curriculum strategy”, as being implemented in terms of the “whole institution approach” with focus on an active participation of learners within the environment, in which meaningful learning occurs. The focus is not only on content, but more on teaching methods that stimulate a shift from top-down curriculum planning to an active participation of teachers and pupils that have some degree of freedom in negotiating the content of their learning within the environments. This approach demands; Team Teaching's school assimilation of SD cross curricula document which was published lately for 5 domains and subjects; Enhancing the integration of socio-economic dimensions for other domains and subjects; More often Out-door/class activities; Tools and materials accessible in Hebrew & Arabic; Non formal and informal activities via extracurricular classes & youth Cadets, and The development of assessment tools for achievements and enhancement related to skills, attitudes and behaviors.

More issues with respect to SCP are in our consideration.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

The development of ESD competence as an integrative multi-disciplinary concept that relies on Team-Teaching models is a major challenge, and is one of the main goals that we suggested as high priority. We'll be happy to share our achievements related to this issue.

ESD is not part of the initial educators training. In spite of our common pre-service and in-service training difficulties, About 24,000 (20%) teachers are taking part this year in 960 in-service regional courses, and 3 national courses that are leader oriented. According to several meetings with pre-service training decision makers, we expect changes within pre-service programs for Teacher training.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*
7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Israel is developing adequate teaching tools and materials for ESD. Most of the teaching materials are oriented toward subjects' contents, and are integrated with-in them. Some are being developed as ESD programs.

Tools and materials are accessible in Hebrew & Arabic, and we plan to organize more means and models through the internet. The Ministries of Education and Environmental protection have cross-linked sites, on which information and teaching aids are provided.

Quality control mechanisms of ESD teaching tools and materials are lacking. Assessment tools are needed to be developed, mainly for enhancement related to attitudes and behaviors. Knowledge, skills and achievements are being measured via the national exams.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

The issue of assessing the quality of ESD had not been operated at a national aspect. There are some data gathered via researches, but not in accordance with the Strategy's goals.

There is a need of ESD quality indicators, and an introduction of continuous monitoring and evaluation schemes for increasing the quality of ESD.

9. *Does your country promote research and development with regard to ESD?*

ESD Research and Development promotion is being operated by universities, and by the Ministry of Environmental protection. There is progress in this respect, but still a long way to go.

There is an immediate need for intermediate platforms that promote ESD research by articulating the main research questions from policy and practice as well with regards to ESD implementation. There is also a need for a platform that can share ESD research in a way that is accessible and useful for global usage.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

10. & 11.

Capacity-building, awareness-raising activities and other aspects to promote ESD through informal and non-formal education are being described in the presentation attached (see the annex to this paper).

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

## ITALY

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

The Italian National System on Environmental Information, Training and Education (INFEA) represents the main instrument through which consultative mechanisms between State and Regions are carried out with the aim of devising work on issues related to ESD.

Italy has developed activities at national level aimed at promoting ESD and at including its principles in sectoral policies, by following a path which reflects the multi-sectoral and crosscutting nature of ESD. As a matter of fact, the action at national level has been focused on the coordination of different actors and different initiatives around ESD to ensure effectiveness to the process. The Italian model of developing policies in the field of EE and ESD is characterised by a close cooperation among the Ministry of Environment and the Ministry of Education, the Regions and other local institutions which led to the creation and future constant support to the Italian National System on Environmental Information, Training and Education (INFEA). This system, through a strong and synergic cooperation between national and local authorities, allows to promote projects on environmental education and ESD and represents a relevant sector of intervention for policies in the field of EE/ESD and an added value to the interventions into the schools.

### SCP

At national level, the Ministry for the Environment has established in 2007, through a Ministerial Decree DEC/GAB/185 a “Steering Committee on the National Action Plan for Green Public Procurement (GPP) and for the definition of a Strategy on Integrated Product Policy (IPP)”. This body represents a consultative mechanism aimed at creating linkages among policy makers, experts and researchers on SCP working for the various administrations (e.g. Ministry for the Environment, Ministry for the Economy and Finance, Ministry of Economic Development, and different agencies and representatives of Regions).

The Steering Committee, among his duties, has set up a number of meetings, conferences and information exchange programmes, aimed at creating a network of experts on SCP to provide inputs for the future definition of a National SCP Strategy involving representatives from private and public sectors and relevant stakeholders.

In the framework of the Steering Committee, seven thematic working groups have been established to allow an in-depth analysis of specific aspects related to SCP, among which a working group focused on sustainable consumption and education.

The Ministry for the Environment is supporting, through the work of the international Task Force on ESC<sup>8</sup>, the key role of education in promoting sustainable consumption and production patterns. The aim of the TF, is to share within the working group elements in support of the introduction of SCP principles into formal, non formal and informal learning processes. The TF has also prepared, together with UNEP and UNESCO, a working paper *Here and Now! Education for Sustainable Consumption*, which defines guidelines and recommendations, providing examples of curricula development on ESC. This document has been presented in Florence during the last meeting of the working group on sustainable consumption.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

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<sup>8</sup> In the framework of the Marrakech process on sustainable consumption and production patterns, coordinated by UNEP and UNDESA, Italy is chairing an international task force on education for sustainable consumption, launched in May 2006, with the aim of promoting, at an international and regional level, the introduction of SCP principles in formal curricula.

In March 2007, the State and Regions Permanent Conference<sup>9</sup> adopted a strategic document “Orientations and objectives for a new reference framework programme on environmental education and education for sustainable development”. The document defines objectives and scenarios oriented to reinforce cooperation between central and local institutions with the aim of sharing and defining roles and responsibilities of each and everyone in addressing formal, non formal and informal learning processes, in a long life learning perspective. The document, in particular, calls for actions in support of the implementation of the UNECE Strategy as a contribution to the Decade on Education for Sustainable Development.

The document separates the priority actions on three levels (national, interregional, regional) keeping into consideration the three learning processes (formal, non formal and informal) and defining specific actions for each one of them. Among the actions, Regions and autonomous Provinces have continuously recalled the need to develop actions to define legally the figure of the professional operator for environmental education and education for sustainable development.

In August 2007, the State and Regions Permanent Conference approved the “New State-Regions Framework Programme on Education for Sustainable Development” which represents the instrument for the implementation of the strategic document “Orientations and objectives for a new reference framework programme on environmental education and education for sustainable development”. The agreement also represents the formal element of continuity with the former national programme National Programme for Environmental Education, Information and Training (IN.F.E.A.) as it has renovated the allocation of funds for the National Programme for Environmental Education, Information and Training (IN.F.E.A.) for the period 2007-2009.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Italy addresses SCP through ESD at the national policy level by including ESD in policy documents on SCP, in the framework of the activities of the “Steering Committee on the National Action Plan for Green Public Procurement (GPP) and for the definition of a Strategy on Integrated Product Policy (IPP)”. In this context, the task force on ESC participates in the activities of the thematic working group focused on sustainable consumption. The aim of this cooperation is to provide support towards the integration of ESC into the National SCP Strategy, both as a mean of implementation and as an accompanying measure to sectoral policies. The efforts towards the integration of ESC keep strongly into consideration the work ongoing at international level under the broad framework of the UN Decade on ESD together with its regional and national initiatives, with a particular reference to the UNECE Strategy on ESD and its national implementation process.

The main focus, when defining approaches aimed at addressing SCP through ESD, is to introduce into the National Strategy on SCP a clear reference to the document recommendations and guidelines on ESC, prepared by the TF in the document *Here and Now!*, as a valuable tool to support policy makers, teacher trainers and teachers in the integration of ESC into formal learning processes.

On the other hand, the inclusion of SCP into policy documents on ESD at national level is reflected in the document “Orientations and objectives for a new reference framework programme on environmental education and education for sustainable development”. In the preamble, which defines the strategic approach in addressing ESD, particular attention is given to SCP objectives, and the key role of education in achieving them, by describing the international reference framework and the strong commitment and contributions of Italy to the Marrakech Process.

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<sup>9</sup> The State-Regions Permanent Conference is the formal instrument to cooperate with local authorities, sharing experiences between different contexts and developing an horizontal approach where central and local institutions are on the same level.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

The wide agreement on the “New State-Regions Framework Programme on Education for Sustainable Development” based on the strategic document “Orientations and objectives for a new reference framework programme on environmental education and education for sustainable development”, has involved also the Ministry of Public Education and University. The agreement is aimed at proposing a new model of integration of the principles of sustainability (e.g. equity, social inclusion and environmental protection) with cultural and pedagogic aspects and at supporting the effectiveness of sectoral policies for sustainability.

In order to reaffirm the centrality of learning, training and information processes as founding elements for a culture of sustainability, the agreement considers as a prerequisite the growth and strengthening of local networks, which have proven to be capable of providing appropriate answers to the complex realities where environmental, economic, social and cultural aspects are interlinked.

In the foreword of the strategic document, there is a clear reference to the work of the task force on education for sustainable consumption, with particular regards to the document *Here and Now! Education for Sustainable Consumption*. - guidelines and recommendations on the integration of ESC into formal curricula. This document will represent the basis for further action in promoting SCP through ESD processes. The translation of the document together with its presentation at national level during the week dedicated to ESC (first decade of November), organized by the Italian National Committee for UN DESD, will represent a concrete step towards mainstreaming education for SCP into formal, non-formal and informal learning processes.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

The issue of competences in ESD is been strongly supported by a bottom up approach. Such aspect is addressed in the strategic document “Orientations and objectives for a new reference framework programme on environmental education and education for sustainable development”, where a clear request to develop actions to define legally the figure of the professional operator for environmental education and education for sustainable development has been emphasized.

In the agreement, “New State-Regions Framework Programme on Education for Sustainable Development”, Regions are committed to develop in cooperation with the State and in the broad framework of I.N.F.E.A. projects focused on the creation of ESD competences considering the whole educational system (structure, operators, trainers, staff, evaluation and monitoring tools, etc).

Furthermore, the UNESCO Italian National Commission engaged in the implementation of the UN DECADE on ESD, has been organizing, since 2006, yearly at national level a thematic week focused on specific clusters. During this week, particular attention is dedicated to the creation and sharing of ESD competences, through training programmes, information and communication campaigns focused on specific issues such as climate change, CO2 emissions, energy and waste. The next thematic week (November 2009) will be dedicated to SCP and it will represent the occasion to start testing at national level the guidelines and recommendations on ESC prepared by the Task Force. The aim will be to create competences on ESC and to mainstream education for SCP into formal, non-formal and informal learning processes, in the overall framework of ESD and the implementation at national level of the UNECE Strategy.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

With regards to the definition of sustainable development policies, the Ministry for the Environment has followed the path of integrating ESD in national SD policies, both as a mean of implementation and as an accompanying measure to sectoral policies.

With regards to educational curricula, Italy has still not recognized ESD as a subject as it has done for Environmental Education.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

The Ministry for the Environment, in cooperation with UNESCO, UNEP and the Hedmark College in Norway and with the support of the University of Bergamo and the Istituto Scholé, is developing, within the work of preparation of the document *Here and Now! Education for Sustainable Development*, a section dedicated to resources on the issue of ESC, collecting materials and teaching tools on ESC, with the aim of making them available for policy makers, teachers and teacher trainers. The section on resources comprises subchapters analyzing institutional guidelines, toolkits, reports and researches (at local, national, and international level), describing academic researches and surveys, academic publications. The section also provides teachers, teacher trainers and policy makers with examples of resources dealing with education for sustainable consumption including relevant statistics, theory, and background information, resources which provide methodological guidance, curriculum suggestions and teaching materials about ESC, online pedagogical guidelines and teaching examples, cases and articles, web-links, games and journals. The section describes finally some civil society initiatives, guidelines, publications and toolkits.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

No.

9. *Does your country promote research and development with regard to ESD?*

Within the activities of the TF on ESC, the Ministry for the Environment, in cooperation with the University of Bergamo and the Istituto Scholé, has developed a technical annex on ESC which is the result of the reflections of the research group of the University of Bergamo – Doctorate school in Anthropology and Epistemology of complexity. The research focuses initially on the thematic issues of consumption and sustainability, highlighting viable ways leading to what we can define as sustainable consumption. The second part of the research is an in-depth analysis of education for sustainable consumption, which by addressing criticisms and describing excellences attempts to provide an initial possible framework for future action in the field of ESC.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

The Ministry for the Environment of Italy is strongly convinced that not only education institutions but also other contexts where non formal and informal learning processes take place (e.g. sport, information, communication, etc) need to contribute to awareness raising and capacity building, addressing individuals towards more sustainable behaviors and choices. In this context the Ministry for the Environment carried out communication campaigns addressing various thematic issues, as waste management, energy saving, climate change etc.

Informal education is also a key activity which is carried out by the Environmental Education Centres (established by the Regional Law n° 15/1996), public structures - supported by the new I.N.F.E.A. programme - that promote and organize on the field environmental information activities. The aim is to promote individual and social behaviours in line with the respect of nature and of the environment and to promote sustainable development.

## KAZAKHSTAN

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

We have the following coordinating bodies:

- a. National Committee for Sustainable Development - Council for Sustainable Development at Government of Republic of Kazakhstan
- b. National committee of UNESCO cases
- c. Presidential committee for Sustainable development
- d. Cluster bureau (office) of UNESCO (in Almaty) in Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan.
- e. Regional Environmental Center for Central Asia (CAREC in Almaty).

In 2006 was accepted Conception of transition Republic Kazakhstan for sustainable development for 2007-2024, on the basis of it start work National committee for Sustainable development of Republic Kazakhstan — Council for Sustainable development of Government RK. Main goal of Council activity — to assistance for formulation of state policy on sustainable development problems, execution of UN World Summit decisions and achievement of Millennium development aims on the basis of inter-sectorial cooperation, also integration of economic, social and ecologic sectors of development.

Also Kazakhstan was created National Committee of UNESCO cases (in Astana). This committee is departmental consultative-deliberative body of Republic Kazakhstan government. On Committee conference are looked through problems of development and reforms system of education, technical and professional education, which directed to sustainable development of country and on ESD.

At the same time work Cluster bureau (office) of UNESCO (in Almaty) in Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, which realize interaction on SD problems and ESD with the state and non-governmental bodies and organizations.

Actively works the Regional Environmental Center in Central Asia (CAREC Almaty), one of the main direction is implementation of ESD to formal and informal education.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. Legislative basic for achieving goals and execution tasks of education for sustainable development in RK is defined, first of all, in the frame of educational and ecologic legislative. In first case, they concerned system of formal education, when rules of ecologic legislative cover system of formal and informal education too and also enlightenment ( Law of RK “About education”, Law of RK “About languages”, Strategy of Kazakhstan 2030, Conception transition RK for steady development in 2007-2024, ecologic codex of RK (2007). State program of education development in RK for 2005-2010).

In addition, in conception transition for sustainable development in 2007-2024, which was accepted in Kazakhstan on 14 November 2006, included program statements related of realization education for sustainable development in the frame of educational organizations.

In 2006 in Kazakhstan was created project of National plan for ESD.

In 2007 February by Government of State was declared Plan of measures for realization conception of transition for sustainable development in 2007-2024, in which was included parts of ESD National plan.

Law of RK № 319- III LRK “About education” reflect main principles of ESD, as follows: continuity process of education, equality of rights for having qualificate education, respect human rights and freedom, priority of civil values, life, health of people, democratic character of educational administration. Also, education for sustainable development has additional principles as a governmental policy of Kazakhstan in sphere of education, as a priority of education system development, humanity and developing character of education, unity of education and upbringing.

Law of RK “About education” do not contain special statement about ESD, but establish common legislative frames to decide problems in sphere of education for sustainable development as follows:

1. integration of theme of sustainable development for governmental obligatory standards of education and educational study programs;
2. organization of process formal education in educational organizations in base of principles for sustainable development, through using instruments of accreditation and attestation;
3. preparing, attestation and advance or qualification teacher worker for decision of the problems in sphere of education for sustainable development;
4. promoting accessibility education measures and educational-methodical literature of education for sustainable development;
5. to assist in researching in sphere of education for steady development;
6. developing international cooperation of educational organization about cases of education for sustainable development.

State program of development of education in Republic Kazakhstan in 2005-2010 (President's act from 11 October of 2004 № 1459 “About state program of Republic Kazakhstan for development of education in 2005-2010”) define as one of main goals – to renew contain and structure of education on the basis of sustainable development principles. Decision of this problem is suppose, first of all, reflecting of problems of sustainable development in accordance with state general obligatory standards of education and structure of educational program and if necessary, to make structural changing in upbringing process and education.

In Kazakhstan realization of such state programs as: Strategy of industrial- innovation development, “Kazakhstan – 2030” Strategy, Transport strategy of Republic Kazakhstan, Territorial development of Kazakhstan, State program of familiarization of Kazakh sector on Caspian sea, State program of development education in Kazakhstan in 2005-2010, State program of development technical and professional education in Kazakhstan 2008-2012, State program reformation development of care about public health in 2005-2010, state program of development of housing, General national plans of main measures for realization of annual 2005-2008 epistle of head of the state to the people of Kazakhstan; Programs of RK governments in 2007-2009, acting and preparing of governmental and sectoral programs in 2008-2010 of middle important plans of social- economic development RK in 2008-2010, in which reflected problems of ESD.

In the frame of “Advancement of ESD to system of formal and informal education” project, executed in 2006 (ESD-2006), were created recommendations for Kazakhstan's legislative and documents - “Ecologic Codex RK” (2007) and “Conception transition of RK to sustainable development in 2007-2024”, in which was included statement for ESD.

Our country has National strategy of ESD, which work at accessible education for people and upbringing work for next directs: patriotism and citizenship, economic, moral, ecologic education.

National strategy of sustainable development - “Conception transition RK for sustainable development in 2007-2024”. ESD is the main element of Conception transition of RK for sustainable development (strategic level). Main principles conception of Sustainable development reflected on it: including of all society to process of achieving sustainable development; creating of policy basis for SD; guarantee of competitiveness for scientific and education; advanced of work about environmental protect as one of the main noosphere function in society; main priorities.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

***ESD is included in the following relevant legislative and regulating documents:***

Ecologic codex of Kazakhstan and Conception of Republic Kazakhstan for Steady Development in 2007-2024 – documents in which was included suggestion of ESD.

Programme of government Republic Kazakhstan for 2007-2009 ( part “5.2 Transition for sustainable development, rising of quality life of people and development of human capital”) reflecting main priority directs of country, which concluded problems of Steady Development and inculcation main principles of ESD to education.

Base of State Programme of education development in Republic Kazakhstan in 2005-2010 are provide of accessible of quality education for all stratum of society, upbringing of Kazakh patriotism, high level of culture, respect to human rights.

In the list of main proposes of State programme of education development in Republic Kazakhstan in 2005-2010 (Republic Kazakhstan President Act from 11 October 2004 №1459 “About Sate program for development of education in Republic Kazakhstan 2005-2010”) foresee renew of contain and structure of education on the basis of native traditions, world experience and principles of steady development. Steady development, integrated in system of education on all levels allow to decide problems of rising quality of education.

In plan of measures for realizing Conception of transition RK to sustainable development in 2007-2024 included also articles, related of ESD:

“1.3. Preparing of personals for steady development:

1.3.1. Bring in suggestion for preparing and rising of qualification of personals in sphere of steady development/Suggestion in government of RK/answer – MES, ME, MA/4 decade 2007” - training for teachers.

1.3.2. Accept measures for integration in education programmes and plans of problems of steady development/information in ME/answer MES/15 July 2009” - education programme, courses and plans for ESD”.

***In accordance with these documents the following approaches are used:***

In 2007-2008 worked out project “Advancement of ESD in system of high education in Kazakhstan” on the basis of pilot university – Palodar's State Pedagogical Institute ( PSPI) by supporting of OSCE Center in Astana and CAREC. Partners: Ministry of education and scientific RK, Ministry of environment RK, NPO “Baiterek”, NPO “Eco Center-Karaganda”. International consultant of project – expert in sphere of ESD, member of expert team UNECE by candidates of ESD Laima Galkute.

Main result of the project that the Ministry of education and Scientific of Kazakhstan supported process of implementation of amendment on the basis of State education, also implementation of new subject “Ecology and sustainable development” - Order of Ministry of education and scientific of RK №26 “About assertion of state standards of high and after universities education” form 20.01.2008 and letter MES RK № 03-3/528 from 20 June of 2008 to universities of RK about replacement in cycle of GOD (the general obligatory disciplines) subject “Ecology” (1 credit) for subject “Ecology and sustainable development”(2 credit).

In 2008-2009 education duration new course of “Ecology and sustainable development” included in system of formal high education of Kazakhstan and it's a great step in direction of assistance to sustainable development of people ( pupils of schools and newly specialists) through spreading of knowledges on the educational level for studying programme.

Example of successful advancement of ESD to system of education in Kazakhstan is statement and development of new education course “Ecology and sustainable development”. Project was carried out by supporting of OSCE in Kazakhstan and included follow organizations and partners: Regional Ecologic Center in Central Asia (CAREC), universities of Kazakhstan, Ministry of education of RK, Ministry protect

of environment RK, NPO, international consultant-expert in sphere of ESD, member of experts team UNECE by indicators of ESD Laima Galkute.

In the frame of project to Ministry of education and scientific RK was worked out and presented project of programme by new education course “Ecology and sustainable development”. Results of project get high points of MES RK and MPE RK. By the order of Ministry of education and scientific RK №26 “About assertion of state standards of high and after universities education” form 20.01.2008 and letter MES RK № 03-3/528 from 20 June of 2008 to universities of RK about replacement in cycle for GOD (the general obligatory disciplines) of subject “Ecology” for subject “Ecology and sustainable development” in 2008. New course was recommended for including in SOSF (the state obligatory standards of formation) majorities of Kazakh universities.

For wide and fast spreading of experience for teaching new subject by initiative of MES RK on October 2008 on the basis of Pavlodar's State Pedagogical Institute (PSPI) was hold Republic seminar. 50 teachers from 12 best regional universities of Kazakhstan get practice of ESD and teaching of the themes of ESD, get acquire methodical skills, educational materials for using to teach new subject “Ecology and sustainable development”.

On November 2008 during 7-th Central-Asia conference for ESD was performed results of this Project to all Central Asia countries. By showing high results in Kazakhstan, CAREC prepare favourable soil for execution such projects by supporting of European Committee in other Central-Asian countries in 2008-2009.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Yes. Thematic plan of new education course “Ecology and Sustainable development” include all key themes of SD, enumerated above, and from 2008-2009 educational year teaching of these problems are obligatory in the frame of lecture subjects and independent work of students in the time of constant help of teacher. It promoted by rising of number of hours of this educational course from 1 credit to 2-d credits.

=> By supporting of Programme PROON and Chevron-Munaigaz in KazNTU named Satpaev for small grants – pilot technical university – realizing project of 'Education in the interests of sustainability and energy-effectiveness" (2008-2009).

Expected results from realization:

- Course for technical universities of “ Sustainable development and energy-effectiveness”;
- Electronic book for course of “SD and energy-effectiveness”;
- Methodical handbook for course of “SD and energy-effectiveness”.

=> In 2007-2008 was carried out project “Advancement of ESD in the system of high education in Kazakhstan” on the basis of Pavlodar's State Pedagogical Institute (PSPI) by the supporting of OSCE center in Astana and CAREC. Partners: Ministry Education and science and Ministry of protect environment RK, NPO “Baiterek”, NPO “Eco-Center-Karaganda”. International consultant of project – expert in the sphere of ESD, member of expert groupe UNECE under indication of ESD Laima Galkute.

Main results of the project:

- Programme of new course “Ecology and sustainable development” and recommendations of implementation to the system of high education in Kazakhstan.
- Methodical handbook for implementation ESD in high education on the example of PSPI.

Situation in our country related to this theme:

- Are necessary projects for rising potential of state officials and educational sector employees of all levels on SD and ESD.
- Are necessary projects for supporting research on ESD on permanent base, in the frame of some international projects.
- Is necessary to strengthen coordination of ESD process between different participant of process, partners and donors, UNECE and UNESCO. As a result, Kazakhstan works in the frame of European and Asia-Pacific Ocean process on ESD and must execute obligations on both processes.
- Is necessary supporting of ESD projects by state budget, not only in the frame of separate international projects by supporting of international organizations and state-donors.
- To accept and establish by government "National plan for orientation of Kazakhstan education for ESD".

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes. Undertaking measures for rising of competence on ESD and teachers for implementation of ESD to process of education:

**In system of secondary (including preliminary) education** exist number of programmes, realizing in the capacity of variate part, directed for formulation of skills, knowledge and values, assisting for sustainable development. Details of project realized on district, city/village and school levels.

On the level of secondary education basis competence include skills of using knowledge for supporting ecologic equilibrium, taking care about protecting of environment, with the taking into consideration of all conditions mastering of high technology.

**Golas of system education in Republic Kazakhstan**, presented in the capacity of educational results, define basis the competence of school graduate, which must:

1. *Be able to correlate his skills with the real perspective of planning and organization of activity; have feeling of self dignity; be responsible for own acts and his life.* 2. *Be able to execute social roles in family, in cooperation with other peoples.* 3. *Have skills of association on Kazakh language as on national, on Russian language as on international association, on foreign language; be motivate for association on native language.* 4. *To be patriot of his Homeland, to show civil activeness and can to enter weigh opinion in the deal of moral, ethic, social justice.* 5. *To understand and value culture of native and cultural various of world; to adhere with the ideas of religious consent and tolerant.* 6. *To understand political system, to be able to give price for taking place social events and be orientated on democratic values.* 7. *To have skills for analytic and critic appreciate of situation and accept of responsible decisions.* 8. *To have skills of health mode of life and fruitful organization of leisure.* 9. *To understand scientific picture of world; to show care for saving environment; use knowledge and skills for supporting of ecologic equilibrium.* 10. *To have skills of aesthetic perception of world, environment.* 11. *Be able to find and use information, necessary for solving of problems.* 12. *To be able to use new information and communicative technologies; creative and effectively use them, also for self definition and professional rising.* 13. *To have skills search-explorer and creative activities.* 14. *To have social skills and set up for self-perfect as a base of get readying for further education and career rising.*

**In the system of high education:** organized and hold 1-st and 2-nd Republic seminar-trainings for teachers of PSPI universities for the problems ESD (in 2007 and 2008).

In the system of education, beginning with pre-school teachers pass trainings, different tests (physiology, professional). All these trainings hold through formal and informal education.

In the frame of UN Decade for ESD, Ministry of education and scientific, Department of secondary education hold Republic seminar about “Ecologic education and education for sustainable development: partnership of state structures and NPO” on 13-14 April 2005.

In the seminar participated officials of MES, regional structures of education (education streetings, institutions of rising qualification), directors and teachers.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

In 2007-2008 worked out project “Advancement of ESD in system of high education in Kazakhstan” on the basis of pilot university – Palodar’s State Pedagogical Institute (PSPI) by supporting of OSCE Center in Astana and CAREC. Partners: Ministry of education and scientific RK, Ministry of environment RK, NPO “Baiterek”, NPO “Eco Center-Karaganda”. International consultant of project – expert in sphere of ESD, member of expert team UNECE by candidates of ESD Laima Galkute.

Main measures of project:

- Working out in 2007-2008 of Programme new course “Ecology and Sustainable development” and recommendation about implementation to system of high education of Kazakhstan.
- Working out Methodical textbook about implementation ESD in high education by programme of Palodar’s State Pedagogical Institute ( PSPI).
- Hold series of seminar-trainings for SD and ESD in PSPI on the basis of inter subjective themes for SD and new course of “Ecology and sustainable development” with the purpose of spreading methodical and educational materials, best experience for rising potential of Kazakh universities teachers.
- Republic educational-methodical seminar “First experience and perspective of development of new subject “Ecology and sustainable development” on the basis of PSPI (October 2008) for 50 specialists of high school and educational administration of Kazakhstan. Professional level of teachers are rising and developed competence for problems of sustainable development; teachers were provided by knowledge and educational materials for sustainable development, also developed new methodical skills for teaching new subject “Ecology and sustainable development”.
- *Preparing suggestions for implementation of new subject “Ecology and Sustainable development” in new standard of high education RK.*

Main result of Project:

Ministry of education and Scientific of Kazakhstan supported process of implementation of amendment on the basis of State education, also implementation of new subject “Ecology and sustainable development” - Order of Ministry of education and scientific of RK №26 “About assertion of state standards of high and after universities education” form 20.01.2008 and letter MES RK № 03-3/528 from 20 June of 2008 to universities of RK about replacement in cycle of GOD (the general obligatory disciplines) subject “Ecology” (1 credit) for subject “Ecology and sustainable development”(2 credit).

In 2008-2009 education duration new course of “Ecology and sustainable development” included in system of formal high education of Kazakhstan and it's a great step in direction of assistance to sustainable development of people ( pupils of schools and newly specialists) through spreading of knowledge on the educational level for studying programme.

Example of successful advancement of ESD to system of education in Kazakhstan is statement and development of new education course “Ecology and sustainable development”. Project was carried out by

supporting of OSCE in Kazakhstan and included follow organizations and partners: Regional Ecologic Center in Central Asia (CAREC), universities of Kazakhstan, Ministry of education of RK, Ministry protect of environment RK, NPO, international consultant-expert in sphere of ESD, member of experts team UNECE by indicators of ESD Laima Galkute.

In the frame of project to Ministry of education and scientific RK was worked out and presented project of programme by new education course "Ecology and sustainable development". Results of project get high points of MES RK and MPE RK. By the order of Ministry of education and scientific RK №26 "About assertion of state standards of high and after universities education" form 20.01.2008 and letter MES RK № 03-3/528 from 20 June of 2008 to universities of RK about replacement in cycle for GOD (the general obligatory disciplines) of subject "Ecology" for subject "Ecology and sustainable development" in 2008. New course was recommended for including in SOSF (the state obligatory standards of formation) majorities of Kazakh universities.

For wide and fast spreading of experience for teaching new subject by initiative of MES RK on October 2008 on the basis of Pavlodar's State Pedagogical Institute ( PSPI) was hold Republic seminar. 50 teachers from 12 best regional universities of Kazakhstan get practice of ESD and teaching of the themes of ESD, get acquire methodical skills, educational materials for using to teach new subject "Ecology and sustainable development".

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. For drafting and spreading of instruments and materials on ESD are responsible:

- National/federal government
- State/district administration
- Municipal bodies

In the frame of projects above worked out and edited materials of teachers, also materials of young people, performing in the capacity trainers, which will be given for al l those who wish to holding of educational subjects on the way and in Ecologic museum.

By the results of "Implementation ESD to system of High education pf RK" project (2007-2008) was prepared and spread through universities of Kazakhstan methodical handbook "Experience of implementation ESD to PSPI", in which reflected main international and national documents, teaching materials for ESD, Strategy UNESCO for ESD on Kazakh and Russian.

On the seminar "First experience and perspectives of development new subject "Ecology and sustainable development" teachers get methodical and educational materials, list of web-sites for SD in supporting of practical implementation of new subject in Kazakhstan universities.

Worked out and tried Course of lectures for sustainable development for officials of RK high degree, executed on the basis of Venetian international university. 40 state officials of RK from 10 ministries and departments from period of April to September of 2008 passes 4 course modules for SD. Lectures of this course regarded to authors and organizers of course planning in the future to spread it in the supporting of teaching new subject "Ecology and sustainable development" in the country universities.

Drafted special educational course for SD for KazNTU with accent to technical aspects of ESD themes, included methods and methodical approach.

Prepared Methodical steering for Strategy of ESD and decreasing of the changing climate's results with the aim f future spreading of knowledge about Problems of changing climate, Sustainable Energy-using and methodical of ESD in technical universities of Kazakhstan.

Drafted and tried (among 100 masters and teachers, 200 students) in KazNTU (forms) for knowledge of SD themes.

***Instructions for using instruments of education and materials for ESD on each level and forms of education:***

1) In the frame of “Integration of young people with the limitation of ability to society through ecologic education” prepared:

- handbooks for teachers “How to hold educational seminar for ecologic way” and “How to hold educational seminar in educational museum” with the adaptation of exercises for pupils and students with the different types of limitation (on Kazakh and Russian);

- handbooks for young people with the limitation abilities “ How to organize and hold of educational seminars”;

- prepared Pocket-handbooks about rights and cooperation for young people;

- drafted document, provided participating of young people with the limitation requirements in the city life and democratic process of decisions;

- drafted and edited materials for teachers, also materials for young people, performing in the capacity of trainers, which will be given for all who wish of holding of educational lessons in the way and Ecologic museum.

2) In the frame of project “Implementation of ESD to system of Kazakhstan high education”:

- worked out and tried 20 themes of sustainable development as a inter-subject in the teaching of 14 subjects and 10 specialities of bachelors and masters of PSPI;

- worked out Methodical handbook “Experience of implementation of ESD in Pavlodar's State Pedagogical Institute” (Almaty 2007);

- in 2007-8002 worked out and presented to MES RK project of typical programme for new educational course “Ecology and sustainable development”.

3) In the frame of “Course for sustainable development for Kazakh state officials” project was worked out and tried course of lectures for sustainable development for officials of high degree.

4) By the project “Drafting and implementation of educational materials for changing climate in high schools” (Pilot project on the basis of Kazakh national technical university) prepared Methodical supervision for ESD strategy and lowering of the consequence of changing of climate with the aim of future spreading of knowledge for Changing Climate problems, Sustainable Energy-using and methodical of ESD in technical universities of Kazakhstan.

5) Other projects:

Projects for ESD in Central Asia in 2007:

1. “Placard for bio-variation of Caspian sea” (FSC/PECE/DEFRA/UK);

2. “Placards and Videos for changing climate in Aktau and Atyrau” (Adjip and SGP/GEF/UNDP);

3. “Implementation of ESD to system of high education RK” (Center OSCE in Almaty);

4. "Survey for ESD in CA" by the indicators in 2006 and 2007 – for Belgrade Conference;
5. 6-th Subregional meeting for ESD before Belgrade on September in 2007 (EC);
6. Realization of "Green Pack" project in Kazakhstan and Kyrgyzstan in 2007-2009. (CAREC, OSCE).

Projects for ESD in CA in 2008:

1. 7-th Central-Asia Conference for ESD (EC) and Survey of Best experience for ESD;
2. Development on institutional basis for ESD in CA – law surveys for ESD (EC);
3. Drafting and publishing of educational materials for SD (EC);
4. "Rising of potential of RK state officials on SD" (VIU, IMELS, BG Group);
5. "Implementation on ESD to system of RK high education" - subject "Ecology and SD" for Kazakh universities in the circle of GOD (PSPI, Pavlodar – Center of OSCE in Astana);
6. "ESD and effectiveness" - Project in Kazakh national technical university named K. Satpaev (Chevron PROON).

Exist national strategy for spreading of instruments and materials on ESD.

Project of National Plan of Kazakhstan for orientation of education to sustainable development was drafted in 2006 in the frame of "Implementation of ESD to system of formal education RK" project, executed by CAREC in the cooperation with the Ministry of Education and science RK, Ministry of protect environment RK, by supporting of Center OSCE in Almaty. In present time it pass discussing and agreement in profile departments of MES RK. From other side, it under close correlation with international process of ESD, from another side – absolutely corresponding with the national process of sustainable development and priorities of education, and strength corresponding of national aims of education in wide scale.

Except this, by the Experts group of this project, with the taking into consideration of national priorities and peculiarity and international process in the sphere of ESD, also formulated next general purposes of ESD in Kazakhstan:

1. Providing with the legislative base for education for sustainable development.
2. Advancement of principles for sustainable development to system of high education as condition of rising quality of education.
3. Integration of national religious-moral values and traditions to ESD.
4. Development of competence for ESD teachers and other specialists, engaged with the education and enlightenment.
5. Providing of organization, engaged with the education and enlightenment, informational and educational-methodical materials of ESD.
6. Creating conditions for holding scientific explorers for ESD and pilot projects for development of ESD.
7. Development of cooperation in sphere pf ESD on:
  - international, regional, national, district and local levels;
  - inter-departmental;
  - inter-sectoral.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

Yes. High educational institutions of Kazakhstan can initiative implementation Conception of ESD (Strategy of UNECE for ESD) to educational process on institutional level.

This process already started on the example of pilot university – Pavlodar's state pedagogical institute (PSPI) by supporting of MES RK, CAREC and center of OSCE in Astana.

Achieving of quality ESD on the regions can and should be realized on more wide scale with the full supporting of state in the face of MES RK and MPE RK. Necessary joint Strategy in implementation of this policy.

Whole, we consider that we have such abilities:

- drafting of educational-methodical electronic handbooks of new courses, often “ecology and SD” and “SD and Energy-effectiveness”;
- organization and holding of practical lessons, seminars on the new level;
- realization of student social-meaningful projects;
- using various active methods of education for development of student competence, which allow to accept decisions based on principles of sustainability in ecologic, economic and social spheres.
- participating on conferences, round tables – exchange of knowledge, experience, ideas.

9. *Does your country promote research and development with regard to ESD?*

By the results of project in PSPI were drafted Recommendation of university teachers about teaching of scientific explorers in the sphere of ESD and development of ESD:

1. To use worked out Questionnaires(forms) for students and masters with the aim of appraisal availability and development of competence for SD on the different stages of education in universities(on the beginning and in the end). These questionnaires spread on Republic educational-methodical seminar “First experience and perspectives developing of new subject “Ecology and sustainable development” on the basis of PSPI (October 2008) for 50 specialists of high school and educational institutions of Kazakhstan.

2. In the frame of new subject “Ecology and SD” recommended to use method of scientific project in independent work of students (bachelors) with the aim of developing competence of explorer and compete able person.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes. Public funds put recourses in informal education to ESD through the next presented bodies:

- State or district body of power
- Municipal body of power
- NPO
- News media
- ducational institutes

In the capacity of supporting measure of informal education in ESD are served give of grant helps for Kazakh NPO and all their partners for doing of joint projects.

In the sphere of moving principles of Strategy UNECE for ESD in Kazakhstan more active are PA (public associations) and NPO: Regional ecologic center of Central Asia (CAREC), Regional Ecologic center of Central and East Europe (REC), Public fund “Baiterek”, NPO “EcoCenter-Karaganda”, PA Center of coordinating and information for ecologic education “EcoObraz” (Karaganda, Kazakhstan)/The Field Studies Council (Great Britain), PA Karaganda Ecologic Museum (Karaganda Kazakhstan), Luchik Nadezhda’s PA (Karaganda, Kazakhstan).

In the frame of cooperation of secondary department MES with the Karaganda center of coordination and information about ecologic education “EcoObraz” continued realization of joint English-Kazakh project “EcoSchools-Kazakhstan” and project about using recourses and energy “SPARE-Kazakhstan”.

Eco-Schools – it's a Kazakh analogy for European project of creating net of ecologic schools “Shanirak”.  
Eco-Schools – one of the effective instruments for involving school communities for processes of ESD.

**In system of secondary (including preliminary) education** exist number of programmes, realizing in the capacity of variate part, directed for formulation of skills, knowledge and values, assisting for sustainable development. Details of project realized on district, city/village and school levels.

On the level of secondary education basis competence include skills of using knowledge for supporting ecologic equilibrium, taking care about protecting of environment, with the taking into consideration of all conditions mastering of high technology.

**Golas of system education in Republic Kazakhstan**, presented in the capacity of educational results, define basis the competence of school graduate, which must:

*1. Be able to correlate his skills with the real perspective of planning and organization of activity; have feeling of self dignity; be responsible for own acts and his life. 2. Be able to execute social roubles in family , in cooperation with other peoples. 3. Have skills of association on Kazakh language as on national, on Russian language as on international association, on foreign language; be motivate for association on native language. 4. To be patriot of his Homeland, to show civil activeness and can to enter weigh opinion in the deal of moral, ethic, social justice. 5. To understand and value culture of native and cultural various of world; to adhere with the ideas of religious consent and tolerant. 6. To understand political system, to be able to give price for taking place social events and be orientated on democratic values. 7. To have skills for analytic and critic appreciate of situation and accept of responsible decisions. 8. To have skills of health mode of life and fruitful organization of leisure. 9. To understand scientific picture of world; to show care for saving environment; use knowledge and skills for supporting of ecologic equilibrium. 10. To have skills of aesthetic perception of world, environment. 11. Be able to find and use information, necessary for solving of problems. 12. To be able to use new information and communicative technologies; creative and effectively use them, also for self definition and professional rising. 13. To have skills search-explorer and creative activities. 14. To have social skills and set up for self-perfect as a base of get readying for further education and career rising.*

**In the system of high education:** organized and hold 1-st and 2-nd Republic seminar-trainings for teachers of PSPI universities for the problems ESD (in 2007 and 2008).

In the system of education, beginning with pre-school teachers pass trainings, different tests (physiology, professional). All these trainings hold through formal and informal education.

In system of high education, beginning from 2008-2009 of educational year, in all high administrations in the size of 2 credits at first was realized course of “Ecology and SD” (according SOSF (the state obligatory standards of formation) RK “Main provisions of bachelor”). Implementation to the number of general educational subjects (GES) by the programmes of preparing bachelors for all specialities “Ecology and sustainable development” is the first scale and full reflection of educational strategy, supporting ESD on national level.

Strategies for implementation of ESD clearly defined on the level of high education. On all other levels of Strategy are exist separate beginnings in the form of projects, regional programmes etc.

Examples:

- Elaboration of Methodical handbook for implementation of ESD in high professional education on the example of PSPI (2007).
- Holding series of seminar-trainings for SD and ESD in PSPI on the basis of inter-subject themes of SD and new course "Ecology and sustainable development" with the aim of spreading methodical and educational materials, best experience for rising of Kazakh universities teacher's potential (2007-2008).
- Republican educational-methodical seminar "First experience and perspectives of new subject's development "Ecology and sustainable development" was hold on the basis of PSPI (October 2008).
- Republican scientific-practical seminar "Advancement education for sustainable development through system of formal and informal education" was hold in Karaganda (13-14 November 2008) by the Department of secondary education MES RK joint with the Cluster bureau UNESCO in Almaty.

In the system of high education:

In 2007-2008 educational year after holding of 1-st Republican seminar-training (August 2007) in the frame of Project "Advancement of ESD to the system of formal and informal education", 14 teachers of PSPI insert SD 21 key themes for Working plans of 10 subjects. It covered 10 specialities of PSPI.

On the 2-nd Republic seminar-trainings (PSPI, October 2008) participate 50 teachers and 12 universities of Kazakhstan. They studied best practice of ESD and teaching the themes of SD, had methodical skills, get educational materials for using in teaching of new subject "Ecology and SD" in 2008-2009.

Courses of rising qualification in IRQ: in programme of professional development of teachers include courses of rising qualification for IRQ. Besides, teachers take pass attestation for rising of qualification, courses, get additional education through mass media, books, internet, television and other types of mass media.

*11. Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

In the country in the capacity of supporting measure of informal education in ESD serve given of grant helps for Kazakh NPO and all their partners for doing of joint projects.

In the sphere of moving principles of Strategy UNECE for ESD in Kazakhstan more active are PA and NPO: Regional ecologic center of Central Asia (CAREC), Regional Ecologic center of Central and East Europe (REC), Public fund "Baiterek", NPO "EcoCenter-Karaganda", PA Center of coordinating and information for ecologic education "EcoObraz" (Karaganda, Kazakhstan)/The Field Studies Council (Great Britain), PA Karaganda Ecologic Museum (Karaganda Kazakhstan), Luchik Nadezhda's PA (Karaganda, Kazakhstan).

Governmental bodies collaborate with the nets for supporting ESD enumerated below:

- a. International association
- b. regional and sub-regional Alliance UNECE Steering Committee on ESD, responsible for realizing of Strategy UNECE on ESD, Regional Bureau of UNESCO for Asian-Pacific region, Cluster Bureau of UNESCO for Central Asia).
- c. Working groups (Central-Asian Working Group on ESD at CAREC, experts group on indicators UNECE on ESD).

Also should mark participating of Kazakhstan in international process on ESD. Republic Kazakhstan takes part in regional processes on ESD in the frame of UN decade: in working out of and realization UNECE Committee Strategy on ESD and in process of ESD in the Asian-Pacific Ocean Region.

Besides, Kazakhstan actively participating in Bologna process, which aimed to create Space of European high education and implementation of European system of high education around the world.

Also, Kazakhstan support London Communique accepted on 18 May of 2007 by the European ministries of education "Sphere of European high education: reaction to the problems of globalization world". Also, in London Communique mentioned that the main purposes are: preparing of students to life in the capacity of active citizens in democratic society; preparing for future carrier and encouragement of personal development; creating and supporting wide and advanced basis of education, also stipulating of explorers and innovation; submitting of role of high education in the capacity of main element for creating sustainable society on national and international levels.

## KYRGYZSTAN

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

**Coordination Council on Education for Sustainable Development of the Kyrgyz Republic.** In Kyrgyz Republic a Coordination Council on Education for Sustainable Development was established by the Governmental Resolution №74 in February 11, 2005. Coordination Council is an advisory and consultative body, purpose of which is integration of principles of sustainable development in to education system of the Kyrgyz Republic within the framework of implementation of the Conception of transition of Kyrgyzstan towards sustainable development up to 2010, and establishment of ESD national platform within the framework of UN initiatives in ESD. At present, due to events of March 2005, composition of the Council is being clarified and reviewed, but unequivocally, it will include heads and experts of the Ministry of education and science, State Agency for Environment Protection and Forestry under the Government of the Kyrgyz Republic, representative of academic circles, and NGOs. Chairman of the Coordination Council is the Minister of education and science of the Kyrgyz Republic. Composition of the Coordination Council will be approved by the Government of the KR. Coordination Council will be implementing management of activities of ministries, state agencies and committees, and administrative bodies, local state administrations and municipalities in cooperation with international and public organizations within the framework of UN initiatives in ESD. In its activities Coordination Council will be governed by the law of the Kyrgyz Republic, its Charter, and carrying out its activities on a voluntary basis.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Since the ESD – is the result of Ecological education transformation, at present time the policy on ESD in Kyrgyzstan is not developed but there is a policy in the field of ecological education. Also there is an ongoing process is taking place at present time on the matter related to the development of the National Strategy on ESD and National Plan of Actions on ESD which is going to be the basic political documents on ESD implementation in the KR

In Kyrgyzstan is elaborated and approved by the Decree of the President of the Kyrgyz Republic as of November 23, 2007 No 506 "The Concept on Ecological Safety in the Kyrgyz Republic" and the separate component of Education for Sustainable Development such as ecological education included in it as a separate chapter.

In January 2009 year Parliament of the Kyrgyz Republic approved the Ecological Code project which included the ESD chapter. This project was directed to President of Republic for the consideration.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Kyrgyzstan has just started the discussion about necessity of inclusion of SCP issues into policy documents, and at present there is no such document in the republic. In short order, as history measures these things, they must replace the extractive economy with one that functions on current sunlight, eliminates the concept of waste, uses energy and materials with great efficiency, and distributes wealth fairly within and between generations.

The main documents, where SCP issues will be included, are the Strategy of Kyrgyzstan on ESD and National Action Plan on implementation of this strategy in Kyrgyzstan.

Slow steps in this field also caused by complicated economic situation in the republic, in conditions, when both major industry and small business are nearly collapsed and the level of consumption (both products and resources, like, for example, energy) is low, then social minimum.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Kyrgyzstan is addressing this issue through current discussing about concept of ESD among Kyrgyz educators.

At present non-formal and informal education address to integrative conceptualization of ESD much more, then formal education, as that can be confirmed by content of the training courses, provided by NGOs in Kyrgyzstan for teachers and population, a number of publications in this sphere, priorities, declared in their networking programs, etc. SPC is included as important element in both non-formal and informal education, though the general framework for thinking about this issue are still not clear enough and need to be more sensible.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Kyrgyzstan has just started to address the issue of competences in ESD – for example RCE KG and State Agency on Environmental protection and Forestry developed of first SD and ESD courses for High Institutions teachers. Though a major part of work should still to be done, and then included into National Action Plan on realization of ESD Strategy of Kyrgyzstan. There were no specific work done on competences required to promoting SCP.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

At present time the work on integration of key regulations on ESD in teaching plans and programs on different levels of formal education is on the initial stage. There are certain higher education institutions and schools in Kyrgyzstan which deals with initiatives in this sphere through the development of author teaching programs and educational modules on ESD as well as their integration into existing teaching programs. Due to the work carried out by different international projects there created perspectives for the integration into the teaching programs such topics like Sustainable development, “Biological and Landscape Diversity”, “Citizenship, democracy and/or management”, “Human Rights” (gender, labor migration matters); “HIV/AIDS, drugs abuse”, “Healthy life-style”, “Cultural diversity”, “Climate Change”, “Preservation of Ozon Layer”, “Persistent Organic Pollutants”.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes, but number of these teaching tools and materials for ESD does not exceed 70, and Kyrgyzstan has very limited resources for publishing and distribution of these materials among educators.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

Unfortunately our country doesn't address yet.

9. *Does your country promote research and development with regard to ESD?*

Yes, but the number these research does not exceed 10 and financial support of these researches is very low.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes, especially through informal and non-formal education. For example, such NGO network, as Green Country and SPARE work with schools, higher educational institutions and centers throughout the Kyrgyzstan in the field of ESD - ESD integration into the school programs, interactive technologies, modernization of education, education on a open air, biodiversity preservation and protection of natural ecosystems.

RCE KG is implementing the Capacity building project for decision makers and teachers on SD and ESD, prepared and published the Training Module and teaching materials with USA Embassy s in KG support.

Republican Children and Youth Center on Ecology, study of local lore and tourism carrying out its activity on the territory of the country. It comprises more then 2000 schools which are actively involved in the following directions such as – education for sustainable development, ecological education, study of local lore and tourism. Annually in the framework of the republican ecological action “Earth Forever”, “March of Parks” workshops are conducted for teachers of secondary schools on ESD matters, as well as for awareness rising among the teachers on ESD as well as integration of ESD into the programs and courses with specific topics.

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

Kyrgyzstan take part in the ESD process since 2003, more active involvement in the field of ESD have been started since 2005 after the participation in the Vilnius Ministerial Conference. In September 2003 “The Concept of the constant ecological education of the Kyrgyz Republic” have been elaborated and approved by the two key ministries- by the Ministry on Education and Science of the KR and Ministry on Ecology and Emergencies of the KR. The Plan on implementation of this concept has been elaborated. This document was issued and distributed among teachers of schools, HEI's and representatives of academia circles of the Kyrgyz Republic. At present time all of the activities on ecological education is carried out on the basis of the concept on ecological education of the Kyrgyz Republic. In February 2005 by the Government Decree of the KR (dated 11 February 2005 No74) Coordination Council on ESD of the KR (CCESD). It comprises representatives of the state authorities, HEI's. institutions dealing with secondary school education, representatives of the civil society. The goal of the CCESD is the integration of ideas and principles into the system of formal and informal education in the KR. The Government of the KR has approved the Regulations on CCESD. In March 2005 delegation of the Kyrgyz Republic took part in the meeting with high ranking officials from the ministries dealing with environmental protection and education (Vilnius, March, 2005). Kyrgyz Republic was represented by the deputy of the minister on ecology and emergencies and deputy of the minister on education, science and youth policy. In framework of his meeting Kyrgyz Republic presented two messages – “Prerequisites for the implementation of UNECE Strategy on ESD in the Kyrgyz Republic” as well as position of the CA countries in the implementation of the `UNECE Strategy on ESD. Initiatives of the CA countries was included into the final document of the Chairman in the UNECE Meeting on ESD. In July 2005 upon concordance with the two ministries –ecology and education, National

Coordinator of Kyrgyzstan on ESD has been appointed – representative of the State Agency on Environmental Protection and Forestry under the Government of the Kyrgyz Republic. In 2006 under the support from the Government of the Kyrgyz Republic, CAREC, cluster UNESCO office, OSCE and other organizations in Bishkek the 5<sup>th</sup> Jubilee Sub-Regional Conference on Education for Sustainable Development have been conducted. In the work of this conference representatives of UNESCO, UN University in Tokyo (UNU IAS), OSCE, presidential administration of the KR, governmental administration of the KR, deputies of Jogorku Kenesh (Parliament) of the KR, ministers on education and environmental protection from CA countries, teachers of schools, HEI's, representatives of academia circles, civil society, international organizations and others. In January 2007 under the CAREC support Kyrgyzstan was able to submit first voluntary pilot report on ESD indicators which was placed on the following website: <http://www.unece.org/env/esd/Implement.Gov.htm> . In August 2007 UNECE Strategy on ESD was translated into the state language at expenses of the State Agency on Environmental Protection and Forestry, issued and distributed among the stakeholders. <http://www.unece.org/env/esd/strategytext/strategyKyrgyz.pdf>

In October 2007 the deputy minister on education and science Mr. A. Boronov have turned with the report on the Unified Pan-European Conference of ministers on environmental protection in Belgrade “Environment for Europe” and presented the Central Asian Initiative (CAI). In 2007 the Concept on Ecological Safety in the Kyrgyz Republic was approved the Decree of the President, where the aspects of ESD was highlighted. Since 2007 Kyrgyz Republic holds the position of the Chairman within the Intergovernmental Commission on Sustainable Development in Central Asian Region.

Since November 2007 Kyrgyz Republic actively involved in the monitoring process on ESD in South-Pacific region. At present time the country report “Progress report in the field of ESD” have been elaborated by Kyrgyzstan, sent to UNESCO-Bangkok and was included into the UNESCO ATR «Sharing Progress towards National DESD Monitoring Systems in the Asia-Pacific: Country Update. Progress report 3».

In May 2007 under the assistance rendered by UN Institute on Advanced Studies in Japan (Yokohama) in Kyrgyzstan Regional Center on Expertise on ESD (RCE-Kyrgyzstan) was established. It was established to serve as the platform for the implementation of ESD in Kyrgyzstan and aimed at unification of multi stakeholders in the field of ESD. In August 2007 RCE-Kyrgyzstan took part in the work of the 2<sup>nd</sup> International Conference of Regional Centers on ESD matters, which was held in Penang (Malaysia). At present time there is an ongoing discussion taking place on the participation in the 3<sup>rd</sup> International Conference of Regional Centers of Expertise on ESD, which is planned to be held in Barcelona. More over, RCE-Kyrgyzstan conducting the work on integration of ESD ideas and principles among interested stakeholders, awareness rising for teachers (Republican Session of Teachers – 2007, International Conference “Bishkek+5: Matters and perspectives of sustainable development of mountainous states). Since 2004 till present time Ozone Center of Kyrgyzstan supporting the project implementation on formation of public opinion and awareness rising on the matters related to the preservation of ozone layer in Kyrgyzstan through education for sustainable development” which was included into the collection of examples as the best practices on ESD. <http://www.unece.org/env/esd/GoodPractices/list.html#K>). Kyrgyzstan prepared and sent to the UNECE Secretariat examples of positive practices which are at present time available on website <http://www.unece.org/env/esd/GoodPractices/list.html>. Under the consultative and financial assistance of the State Agency on EP and Forestry, number of teaching and methodical materials has been published. Published and distributed among the schools and HEI's of Kyrgyzstan “Collection of sayings and by-words”, prepared in the framework of local lore competition “Manas Descendants”, “Cradles”, “The Source of Memories”, “Invaluable gift of ancestors” and others. It includes competition works made by the pupils of Kyrgyzstan. At present time Republican Fund for Nature Protection and Forestry Development of the State Agency on EP and Forestry of the KR supported the project on the elaboration of the bibliographic indicators of literature on ecological education and ESD. Since 2005 in the country functioning the network “Schools of Kyrgyzstan for the biodiversity preservation and sustainable development” initiated by the Ecological Movement “BIOM. Number of plot projects are implemented in the country on the ESD principles integration into the national educational programs for HEI's and primary schools. The State Agency on Environmental Protection and Forestry under the Government of the Kyrgyz Republic elaborated website and placed information on ESD [http://www.nature.kg/menu.php?el=4\\_5](http://www.nature.kg/menu.php?el=4_5). One of the important achievements

is that fact that in February 2008 Ministry on Education and Science of the KR and the UNESCO National Commission in the KR appointed focal points on ESD matters. However, along with positive results in the republic there are a number of difficulties on the ESD promotion. There is no any National Action Plan on the UNECE Strategy Implementation on ESD elaborated for the time being despite of certain perspectives to do so. ESD considered as the element of ecology or social policy, it is necessary to increase the status of ESD in Kyrgyzstan as an important priority of the state policy. Despite of the ESD Decade commencement ESD is not included into the grant and other programs of international organizations and agencies (for example, UNDP, TESIS, TEMPUS and other) as a priority, including financial institutions such as ADB, WB, EBRD and others.

## NORWAY

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

No.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. ([http://udir.no/upload/Satsningsomraader/barekraftig\\_utvikl\\_rapp.pdf](http://udir.no/upload/Satsningsomraader/barekraftig_utvikl_rapp.pdf)); the English version (<http://sustain.no/about/>)

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

We do support the EU-project Consumer Citizenship Network (<http://www.hihm.no/Prosjektsider/CCN/Consumer-Citizenship-Network>)

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Yes. This is part of the National Curriculum for Primary and Secondary Education (i.e. Formal education).

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

The issue of competences in ESD is addressed as an integrated part of the Curriculum. Regarding SCP, see q 3.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

ESD is implemented through the integration of ESD themes across all relevant subjects, programmes and courses, this also applies to SCP.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. This is part of the implementation of the national policy document on ESD (see above).

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

The Norwegian Centre for Science Education has developed a set of quality criteria. (See URL: <http://miljolare.no/tema/demokrati/artikler/esd-skoler/>). In addition, the EU-project SUPPORT

([www.support-edu.org](http://www.support-edu.org)), chaired by Norway, is aimed at enhancing the quality of education for sustainable development. It is also shored up by action research. One of its main activities is CO<sub>2</sub>nnect ([www.co2nnect.org](http://www.co2nnect.org)).

9. *Does your country promote research and development with regard to ESD?*

The answer is partly no (See Q 8).

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

The answer is mostly no. However, see next question.

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

The Ministry of Education and Research together with the Ministry of Environment has launched a programme called *Den naturlige skolesekken*. The programme is supporting formal and informal science education and education for sustainable development by utilizing learning environments outside the schools. These environments span from museums and science centres to natural environments (e.g. woods). Local NGOs (e.g. WWF) is to be invited to participate by virtue of their competence and local knowledge.

## THE NETHERLANDS

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

From the start of the National Program Learning for Sustainable Development there was a steering committee with 7 departments and provincial and local authorities and Water boards. As in NL there is a national program on ESD and there is a new program on Environmental Education there is a new steering Group in charge of both programmes, consisting high level representatives from national governments, provinces, local government and water boards. NGOs, research and businesses are represented as agenda-member and in reference group.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes, there is an national action plan for ESD (Learning for Sustainable Development) see [www.senternovem.nl/lvdo](http://www.senternovem.nl/lvdo) → English

Yes, ESD is part of the National action plan for SD: Kabinets Aanpak Duurzame Ontwikkeling (KADO see link [http://www.vrom.nl/Docs/milieu/2008050615Kamerbrief\\_duurzameontwikkeling.pdf](http://www.vrom.nl/Docs/milieu/2008050615Kamerbrief_duurzameontwikkeling.pdf))

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Sustainable consumption and production is just a subtheme that is addressed in ESD. HOW it is addressed is in both ways, but also in e.g. biodiversity strategy, but how it is developed as a topic for education is under the umbrella of ESD.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

ALL: is one of the central criteria for ESD projects under the national program LfSD.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes, there are specific descriptions of competences on SD in Higher Education ([www.dho.nl](http://www.dho.nl)) and there are specific competences for teachers and educators ([www.duurzamepabo.nl](http://www.duurzamepabo.nl)). There are no specific competences in SCP.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

Both are in place, but as the Dutch Curriculum system leave lot of responsibility to individual schools, the approach is mostly in creating inspiring practices and knowledge management, rather than guidelines or legislation.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes, and they are promoted by internet and in trainings. E.g. [www.duurzaamheid.kennisnet.nl](http://www.duurzaamheid.kennisnet.nl).

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

There are quality criteria for ESD in higher education, as the AISHE method (see [www.dho.nl](http://www.dho.nl))

In the national program LfSD there are criteria for projects, which underpin the specific characteristics of ESD.

9. *Does your country promote research and development with regard to ESD?*

Yes, the conceptual development of ESD is supported by e.g. a series of essays addressing specific topics and methods in ESD. In research there is paid attention to monitoring and development of the national ESD program, Story writing in projects, and research of long term output and outcome of learning.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes, specific as the LfSD program is addressing also decision makers on all levels, and stakeholders as NGO, Media, businesses at regional and local level, most activities are informal and non formal. Consumer organisations pay attention to sustainability issues.

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

The issue of Youth participation is on the agenda in ESD politics.

## SLOVAKIA

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Yes. In December 2005 “national ESD platform”, the National commission for ESD was set up. At the moment the National commission for ESD is not institutionally operational, only represents the group of interested experts who meet from time to time at different occasions devoted to ESD in Slovakia. Some members of the commission are permanently in contact sharing experiences and information in the field. I am not aware of any special mechanism regarding SCP.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

Yes. In December 2005 “national ESD platform”, the national commission for ESD was set up. The first phase of commission’s work was finished in December 2006 when the National Action Plan for ESD was finalized. This national implementation plan addresses objectives, activities, measures, tentative timetable and means of implementation. Despite this existing policy implementation framework the work on implementation the objectives of the NAP for ESD has been stagnating from the year 2007 due to the weak political and financial support from the governmental level. Most efforts has been spent and most work has been done in higher education (the fulfillment of the task of NAP for ESD in the higher institution segment is evaluated annually).

ESD has been integrated into the National Action Plan for SD which was approved in July 2005 including in its objectives also educational part following UNECE Strategy objectives.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

There probably are not any special approaches related to SCP and generally to the issue is given little attention.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Yes/No. Generally speaking not very much, but some initiatives are present at higher education institutions. Universities have started to integrate abovementioned task into their curricula. In December 2008 all universities were informed about the recommended objectives and tasks, which should be realised within education, research and management. Universities on the basis of the questionnaire that was distributed to all of them in January 2009 have prepared proposal how to improve the current situation. This proposal will be submitted to Ministry of Education for further discussion. From the questionnaires emerged the fact that within the sustainable issues the environmental and ecological themes prevail so there is a lot to do in the future.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes/No. Generally speaking not very much. In the framework of Green Schools some work has been done in the field. At some universities environmental management systems are starting to be implemented and some economy drive measures introduced. But systematic measures are still missing. A big shortage is a lack of finances at Universities to be incurred on these measures. The overall awareness of the management about the SD/SCP is missing as well.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

At governmental level the support is very low if not any. At nongovernmental level there are few approaches within the Green School program, provision of participatory environmental management procedures, educational activities and trainings for basic and secondary teachers about the different aspects of ESD. Universities have progressed significantly in the integration of SD topics into relevant subjects when more than half of them have today separated subjects devoted to SD.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes/No. At governmental level the support is very low if not any. Some NGOs are providing some materials, but these are more or less only local and individual endeavours.

Universities as the abovementioned questionnaire has showed make use of some innovative approaches in their education through which the students are motivated to work more actively. Teaching tools and materials are available; some dozens of books already exist about the issue. But the important result of the questionnaire is missing basic handbook/publication describing and dealing with key themes of SD (ecological/environmental, sociologic, economic and cultural) in its complexity. Such a bible if accessed electronically would create a basic study material for publishing specialized books and teaching materials for different studying programmes.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

No. Not yet.

9. *Does your country promote research and development with regard to ESD?*

Yes/No. A lot of particular research projects supporting SD have been realized so far. But database about their results and the availability to them is very low. Interdisciplinary oriented projects should be more supported as for the moment specialized projects within single scientific disciplines are privileged.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

No. Not at governmental level, only some NGO are locally dealing with this task. Also medias are still very inactive in the issue.

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

Topic of SCP is absent in the official school documents for basic and secondary schools which are at the moment discussed and commented also by NGOs trying to incorporate the SCP themes into the school curricula. Universities as it has been described above are key actors. For example very positives steps can be visible also at technically oriented universities where the SCP issue is discussed also at different seminars often organised by students in the cooperation with NGO sector. For more than 10 years there has been a contest organised by Universities aimed at choice of best student work devoted to SD.

## SLOVENIA

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

A working group for Education for Sustainable Development was established by Ministry of Education and Sport. This working group targets especially on formal education till tertiary education, since Slovenian Ministry of Education and Sport covers early childhood education (kindergartens), primary education, secondary education and higher professional education.

A governmental Council of SD is composed of state secretaries and the work will be divided between different groups that are already established. Since Slovenia hasn't got a coordinating group that would deal with ESD on all levels of education and target different groups, Ministry of Education and Sport gave a suggestion to the governmental Council of SD to establish a new group. Council established a new working group for ESD in 2008 that includes all stakeholders and different ministries (not only for education and environment). Since the establishment of the new government in December 2008 the plan of ministerial working group is still in progress.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

**National policy:**

- ***Guidelines for Education for Sustainable Development from Preschool to Pre-university Education (Appendix numb. 1 or.***  
[http://www.mss.gov.si/fileadmin/mss.gov.si/pageuploads/podrocje/razvoj\\_solstva/trajnostni\\_razvoj/trajnostni\\_smernice\\_VITR.doc](http://www.mss.gov.si/fileadmin/mss.gov.si/pageuploads/podrocje/razvoj_solstva/trajnostni_razvoj/trajnostni_smernice_VITR.doc); in ENG:  
[http://portal.mss.edus.si/pls/portal/docs/PAGE/PORTAL\\_SOLSTVO\\_MSS/MSS\\_STRANI/MSS\\_DOKUMENTI\\_ZA\\_SPLET/VITR%20ANG%20SCREEN.PDF](http://portal.mss.edus.si/pls/portal/docs/PAGE/PORTAL_SOLSTVO_MSS/MSS_STRANI/MSS_DOKUMENTI_ZA_SPLET/VITR%20ANG%20SCREEN.PDF))

**ESD in sections of some documents:**

In most important documents, dealing with education:

- ***Act on Changes and Supplementations of Elementary School Act (2007; available on:***  
<http://www.uradni-list.si/1/objava.jsp?urlid=2007102&stevilka=5073> ) sets forth new objectives of elementary education in Slovenia:
- “ Education for sustainable development and active social integration in the democratic process which involves in-depth knowledge of and responsible attitude towards oneself and others, own and other cultures, natural and social environment, and towards future generations”.
- New changes of ***The Organization and Financing of Education Act*** (adopted in March 2008; available on: <http://www.uradni-list.si/1/objava.jsp?urlid=200836&stevilka=1460>) set some new aims:
- - “ Development of consciousness of national affiliation and identity, and knowledge of the history of Slovenia and its culture. Education institutes shall strive to develop consciousness of national affiliation and identity to wit institutes shall commemorate national holidays--the rendition of the national hymn of the Republic of Slovenia shall be an integral part--and engage in other activities. Education institutes shall fly the flag of the Republic of Slovenia at all times; in areas where Italian and Hungarian national communities reside a flag of the national community shall be flown as well;
  - Education for sustainable development and active social integration in the democratic process, in-depth knowledge and liable attitude towards oneself, own health, others, own and other cultures, natural and social environment, and towards future generations”.

Slovenian parliament has adopted Strategy of development of Slovenia (available on: [http://www.slovenijajutri.gov.si/fileadmin/urednik/dokumenti/strategija\\_razvoja\\_slovenije.pdf](http://www.slovenijajutri.gov.si/fileadmin/urednik/dokumenti/strategija_razvoja_slovenije.pdf)) and a governmental Council for sustainable development is in charge of its fulfillment. Although the ESD does not explicitly form part of the Strategy, the Council is dealing also with ESD; a new working group was established.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Slovenia has included the SCP contents in National Curriculum for ESD on primary and secondary level. This document is available on the following web site:

<http://www.zrss.si/default.asp?link=predmet&tip=6&pID=22&rID=267>

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

Yes. National Curriculum for ESD includes all the three components: environmental, social and economic. SCP contents are distributed through each of them.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

Yes. Linked with PISA and OECD project DeSeCo we classified the conceptual framework of ESD competencies for students into three broad categories:

1. using tools interactively
2. interacting in heterogeneous groups
3. acting autonomously

On this basis, ESD competences have been classified as:

1. subject competences,
2. methodological competencies,
3. social competencies and
4. personal competencies.

Each of these competencies is linked with SCP.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

Education for Sustainability and Global Learning addresses environmental, social and economic issues that are of importance to young people in Slovenia, EU and wider. ESD is implemented into the curricula in Slovenia through cross curricular themes.

Slovenian schools find that ESD is useful in designing and planning their wider curriculum. Cross curricular themes should not be considered in isolation; for example, there are links between global issues and sustainable development.

Slovenian schools have found many different ways to build ESD into their curriculum. They include:

1. teaching ESD through existing school subjects with cross curricula topics
2. thematic days (for example Day of Earth, Day of the Water), activity weeks and events that focus on a particular content or objective of ESD (for example Campaigning on global development issues, Promoting recycling)
3. whole-school development plans, policies and ethos with elements of ESD
4. activities that integrated into the routines of the schools
5. educational visits and out of hours learning opportunities and bringing ESD experts into the schools
6. project programmes (Innovative projects, Hidden treasure , ECO Schools, UNESCO ASP net, Health Schools)
7. any combinations of these.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. Slovenia adopted Guidelines for Education for Sustainable Development from Preschool to Pre-university Education that includes some general guidelines for ESD-related teaching tools and materials. ESD tools and materials have to satisfy general guidelines for preparing teaching tools and materials.

Last year many tools and materials for ESD, done by experts and practitioners, were financed by Ministry of Education and Sport and distributed to teachers in kindergartens, elementary and secondary schools and to other different stakeholders (NGO-s, municipals, universities etc). Every tool has a review before publishing.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

Yes. Slovenian schools are active partners in the following projects:

1. ENSI (Environment and School Initiatives)
2. SEED (School Development through Environmental Education) - an important product of this project is a booklet QC of ESD school which was translated into the Slovenian language.
3. SUPPORT (Partnership and Participation for a Sustainable Tomorrow)

Ministry of Education and Sport through European Social Fund finances quality projects of school networks, especially on ESD.

SCP contents are included in all of these projects.

9. *Does your country promote research and development with regard to ESD?*

Yes. Some researches, financed by Ministry of Education and Sport and Public Research Agency are concluded (inclusion of the elements of sustainable consumption and sustainable development in school curriculum; analysis and encouraging the integration of education for sustainable development into primary schools). They are available on:

[http://www.mss.gov.si/si/delovna\\_podrocja/razvoj\\_solstva/razvojno\\_raziskovalne\\_studije\\_crp/izbrani\\_projekti\\_2006\\_2013/#c17085](http://www.mss.gov.si/si/delovna_podrocja/razvoj_solstva/razvojno_raziskovalne_studije_crp/izbrani_projekti_2006_2013/#c17085)

Some researches have just started.

Other researches are financed through European Social Fund (public tenders) or done by research institutes through annual working plan, agreed by Ministry of Education and Sport.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes, we promote ESD as a complex and continuously evolving concept, with permanent interaction between social, economic and environmental areas and a variety of key themes: inter alia, poverty alleviation, citizenship, peace ethics, responsibility for local and global context, democracy and governance, justice, security, human rights, health, gender equity, cultural diversity, rural and urban development, economy, production and consumption patterns, corporate responsibility, environmental protection, natural resource management, and biological and landscape diversity.

Promotion of ESD in the informal and non-formal education sector entails a holistic and systemic approach and a specific knowledge, skills and values.

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

Research project [Inclusion of the elements of sustainable consumption and sustainable development in school curriculum](#) was financed by Ministry of Education and Sport and Public Research Agency between 2006 and 2008.

The main aim of the project was to prepare the expertise which would facilitate the inclusion of the elements of sustainable consumption and sustainable development in the Slovene school curriculum. In order to achieve this aim the following goals were attained:

- Review and analysis of the relevant current literature and trends in the area of sustainable development and education for sustainable development.

- Review and analysis of the relevant foreign school curricula and of the Slovene school curriculum (for the elementary and grammar school) regarding the inclusion of the sustainable development and sustainable consumption themes and contents.
- Empirical research amongst Slovene secondary school students and their teachers in order to establish the “presence” of the sustainable development and sustainable consumption themes in teaching and learning processes and the teachers’ perceptions of the inclusion of these themes in the syllabi.
- Preparation of the list of the sustainability themes (focusing primarily on sustainable consumption), which could be included in the subjects’ syllabi, in the teaching and learning processes of different subjects, and in other school activities. The list of the good practice examples of education for sustainable development was gathered.

Methodology: The analysis of relevant scientific and expert literature of different concepts related to education for sustainable development was combined with an empirical research amongst Slovene secondary school students and their teachers. The research was designed as a survey and the data were collected by means of a self-administered four-page questionnaire. It was completed by 454 final year secondary school students (app. 18 years old) by 111 teachers.

Results: Analysis of the curricula: as it was the case also in some other foreign curricula that we’ve reviewed, we can say that sustainability themes in Slovene syllabi are mostly related to environmental dimensions of sustainable development (ecologic, conservation themes). It can be claimed that sustainable development themes are approached in a more holistic way at the beginning of the elementary school; as pupils and student are progressing from school year to school year, they meet these themes more often within the natural science and technical subjects.

Research amongst students and teachers: the above mentioned findings were in line with the results of the empirical research. Amongst others it was also found out that students are not aware of the complexity of consumer choices and its’ consequences on the economic and social development. Again, the environmental dimension was the most obvious. The research amongst teachers in general showed that they have positive attitude towards inclusion of sustainable development and sustainable consumption themes in their subjects. However, it was established also that sustainable development as well as sustainable consumption are still relatively vague concepts, and this has an influences on the inclusion of these theme in the lessons. It was also found out that many teachers are aware of the complexity of the sustainable development concept as well as of the importance of the in-service teacher education. They expressed their willingness to take part in the education for sustainable development themselves.

## SWEDEN<sup>10</sup>

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

There is no national coordinating body for the implementation of the Strategy, however, the Swedish National Commission for UNESCO (*Svenska Unescorådet*) has ESD as an overarching theme for its work and is a facilitator of national activities on the theme. In order to achieve the strategy the National Commission has invited concerned NGOs, government agencies and ministries to join interactive groups on various themes, where sharing information about planned activities and developing joint activities and projects are key elements. One of the groups has an ESD focus, another has culture. In addition, the Ministry of Education and Research has designated focal points for ESD at each department. These are co-ordinated by the Ministry’s Secretariat of International Affaires.

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<sup>10</sup> The Swedish reply was compiled from contributions made at very short notice by concerned units and organisations. Please note that this is not a comprehensive description of the current situation. Contact information: Anna Lundh, Ministry of Education and Research, [anna.lundh@education.ministry.se](mailto:anna.lundh@education.ministry.se), ph +46 8 405 14 57.

In 2007 the Swedish National Council of Adult Education (*Folkbildningsrådet*) carried out a government assignment to stimulate and develop the themes 'international solidarity' and 'society's reorientation towards sustainable development' in liberal adult education. The report from the assignment points out that ESD is very much in line with the ideology and pedagogy of Swedish liberal adult education.

In addition, once a year the Swedish National Council of Adult Education carries out a follow-up of activities concerning ESD in folk high schools and study associations. The result is reported to the government. Included in the annual report are activities concerning e.g. sustainable development, global justice, public health, equity, life-long learning and culture.

Annually as well, all government agencies report on their environmental management systems to the Ministry of the Environment. This means all public universities report on direct and indirect (e.g. education and research) environmental aspects - several institutions have extended 'environmental aspects' to include sustainable development - of their work.

In addition two networks at university level organize a joint bi-annual conference on ESD where taking stock of the current situation, is one of the main points.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

There is no national policy document (strategy/action plan) on ESD which includes all educational levels in Sweden.

However, in the Education Act — which is a steering document for pre-school, compulsory comprehensive and upper secondary school and certain equivalent forms of school, i.e. special schools principally for pupils with impaired hearing/vision and speech disabilities, schools for the mentally disabled and Sami schools, as well as adult education, adult education for the mentally disabled and Swedish for immigrants — it is stated that "school activities shall be structured in accordance with fundamental democratic values. Each and every person active in the school system shall promote respect for the intrinsic value of every human being and for our common environment. Persons active in the school system shall in particular promote equality between the genders and actively counteract all types of insulting treatment such as bullying or racist behaviour." Find the Education Act in English at: <http://www.sweden.gov.se/sb/d/574/a/21538>

The curriculum for the non-compulsory school system (*Lpf 94*) points out that an environmental perspective in education provides students with insights so that they can not only contribute to preventing harmful environmental effects, but also develop a personal position to major global environmental issues. It also emphasizes that education should illuminate how the functions of society and our ways of living and working can best be adapted to create conditions for sustainable development. Furthermore, it states that it is important to have an international perspective to be able to see one's own reality in a global context in order to create international solidarity and prepare pupils for a society that will have closer cross-cultural and cross-border contacts.

<http://www.skolverket.se/sb/d/493/a/1306> (in English)

For higher education, ESD is included in the Higher Education Act (*Högskolelagen*), Chapter 1, section 5:

- "In their activities, higher education institutions shall promote sustainable development that ensures present and future generations a healthy and good environment, economic and social welfare and justice."

- "Equality between women and men shall always be observed and promoted in the activities of the higher education institutions."

- "The higher education institutions should furthermore in their activities promote understanding of other countries and of international conditions."

-“The higher education institutions shall also actively promote and broaden recruitment to higher education.”

In addition, ESD competencies, knowledge and themes are included in the objectives of several of the university qualifications described in the Higher Education Ordinance (*Högskoleförordningen*) (Appendix 2). The Ordinance also contains e.g. instructions on student influence and representation in governing bodies of the universities.

Translations into English of all statutes concerning education and culture are found at:  
<http://www.sweden.gov.se/sb/d/3288/a/19574>

Similarly, there are policy documents concerning ESD for liberal adult education. These have been collected in a book (2006) available in English on the web site of the Swedish National Council of Adult Education, [http://www.folkbildning.se/download/533/FBR\\_Sustainable.pdf](http://www.folkbildning.se/download/533/FBR_Sustainable.pdf)

In 2008 the Nordic countries revised their shared strategy for sustainable development – *Hållbar utveckling – En ny kurs för Norden* – which includes ESD and SCP and sets up objectives and priorities for 2009-2012. For more information see the web site of the Nordic Council of Ministers:  
<http://www.norden.org/start/start.asp?lang=6>

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

Both approaches are used. On the one hand ESD is included in the activities around the Marrakech process, see more information in the reply to question 11. On the other hand SCP is included in ESD themes in general, as well as specific, policy documents concerning education.

In addition, the curricula for the compulsory and non-compulsory school systems, together with the syllabuses, are permeated by the thoughts of ESD. The documents may be found in English at the following web link: <http://www.skolverket.se/sb/d/493>. SCP specifically is included in the goals for certain subjects in the compulsory school.

*Example: Home and consumer studies*

Home and consumer studies, which is a compulsory subject in the compulsory school, contains studies about resource management which refers to the management of human, economic and other material resources, as well as natural resources, both locally and globally. These studies have as objective to give pupils an understanding of the interaction between the household, society and nature and provide the basis for pupils to actively take part in creating a conscious lifestyle and a sustainable society.

Among the goals for grade 5 is: to be able to use different goods, methods and tools in the household and through this show consideration for health, household economics and the environment. The goal is similar but more advanced and comprehensive for grade 9. Another example, from grade 9, is the goal; to know one's rights as a consumer and to be able to value different kinds of information while carrying out tasks in the household.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

The social-economic dimension is an important part of the Swedish Education Act. According to the Education Act, all children and youths shall have equal access to education. All children shall enjoy this right, regardless of sex, place of residence, or socio-economic background. The Education Act states that the education shall “provide the pupils with knowledge and, in co-operation with the homes, promote their harmonious development into responsible human beings and members of the community.” Consideration shall also be given to pupils with special needs.

In addition, the Education Act contains requirements concerning active measures to combat bullying and similar kinds of degrading treatment. The educational facilities must conduct active targeted efforts to prevent and combat all forms of degrading treatment. Every facility will be required to have an equal treatment plan describing planned measures.

The curricula for the compulsory and non-compulsory school system state that the fundamental value system shall permeate all activities in schools and preschools. This involves working with the fundamental value system, i.e., democratic values such as solidarity, equality between people and equal opportunity. Working with fundamental values is a continually ongoing process that covers all situations in the school: teaching, breaks, the hallways between classes, the staff-room, and the interaction between staff and pupils.

Reference: <http://www.skolverket.se/sb/d/493>)

The Swedish Parliament (*Riksdagen*) has established overall objectives for the state support to liberal adult education. The activities shall:

- strengthen and develop democracy,
- make it possible for people to influence their life situation and create participative involvement in societal development,
- bridge educational gaps and raise the level of education and cultural awareness in society,
- broaden the interest for and increase participation in cultural life.

Based on these objectives, the study associations and folk high schools are free to shape the goals of the activities on their own.

*Example: Home and consumer studies*

Home and consumer studies, which is a compulsory subject (see more information in question 3), is supposed to give pupils an understanding of the interaction between the household, society and nature and provide the basis for pupils to actively take part in creating a conscious lifestyle and a sustainable society. Among the goals for grade 9 are: to be able to cooperate with others regardless of differences in e.g. gender and ethnic background, and to have an understanding of issues concerning cultural diversity and equity in connection with household tasks.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

The Swedish school system is a goal-based system with a high degree of local responsibility. The main responsibility for educational activities, including in-service training, lies with the municipalities and the authorities responsible for independent schools. There is currently no available overview of the in-service training taking place, hence the question is difficult to answer.

There is a national programme on ESD called The Global School (*Den Globala Skolan*) which offers in-service training for teachers and other staff, school leaders, politicians at local level, staff involved in teacher education at university level as well as students in teacher education. Among the themes visited are: a sustainable lifestyle, climate change, hiv/aids and human rights. The programme also offers teaching and learning seminars about ‘active learning’. For more information, see <http://www.denglobalaskolan.com>. (in Swedish)

Indirectly, the work a school puts in to receive the award “Sustainable school” (*Utmärkelsen Skola för hållbar utveckling*) involves in-service training on ESD. The National Agency for Education (*Skolverket*)

houses the award programme and there is extensive information about requirements and a guide on how to reach the goal on <http://www.skolverket.se/sb/d/2274> (in Swedish)

In Sweden examples of good practice are used quite extensively to support development and training, also in the area of ESD and SCP. As an example, the National Agency for Education and the National Agency for Higher Education (*Högskoleverket*) have materials available for free on their web sites. In addition, the WWF Sweden (*Världsnaturfonden*) has published a collection of examples on ESD in higher education, which is a free publication available in print and on the internet. Mostly the materials have teaching staff and course planners as target groups, but they may also be used for inspiration by decision-makers, leadership and others who are interested.

In liberal adult education, the different organisations regularly organize events and conferences – at local, regional and national level – to develop staff's competencies in ESD. In addition a collection of examples of good practice (including on learning methods) – with the title *Folkbildningens eldsjälar* – was published by the Swedish National Council of Adult Education in 2007.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

The most common approach to implementing ESD in the compulsory and the non-compulsory education system, and in higher education, is through the integration of ESD themes in subjects and courses. Specific ESD programmes and courses are available as well. In addition there exists e.g. independent upper secondary schools and folk high-schools which have sustainable development and ESD as overarching idea.

*Example: Civics*

Civics is a core subject in upper secondary education. One of the objectives of Civics is that the students shall develop knowledge in order to form their own points of view and to be able to act in local, regional and global issues that are of importance for a sustainable society. Students shall after the first course (Civics A) be familiar with how political, economic, geographical and social conditions form not only our own, but also international society.

*Example: Higher education*

It is possible to receive a Ph.D. in ESD. Furthermore, ESD is included in teacher education at several higher education institutions, either/both as an integrates theme or/and as a specific course or project. Sometimes, but not always, the issue of how to teach and to use appropriate teaching methods are discussed and tested in a live teaching situation. Each institution decides over design and syllabus of courses and programmes offered, however, they need to follow the Higher Education Act and Ordinance.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

There is no centralized, centrally financed or centrally controlled materials/tools production for education. Instead it is a market-driven situation where the decisions concerning the purchasing of teaching/learning materials are made at a local level, by municipalities and the authorities responsible for independent schools. This is in line with the high degree of local responsibility described in question 5. The inspection of teaching material ended in 1991 since it was not considered compatible with the goal-based system. Textbooks and other school materials are produced on the open market.

Swedish radio and Swedish television (specifically *Utbildningsradion*) produce quality programs which are broadcasted on national TV and radio and may be used in an educational setting at different educational levels depending on the production. ESD-themes have been investigated or presented in several programs.

A review of ESD and SD in teacher education made by the National Agency for Higher Education in 2008 showed that there is quite a few teaching materials, or material that may be used in a learning situation, for different education levels available through the internet and the public libraries.

Also see the reply to question 5 on examples of good practice.

*8. Does your country address the issue of ensuring/assessing the quality of ESD?*

Regularly the National Agency for Education carries out national reviews of how subjects are taught and of pupils'/students' understanding of subject matter. One national review of social science, where several ESD themes are taught, was made in 2003 and involved pupils and teachers in year 9.

Similarly, the National Agency for Higher Education carries out reviews of the quality of subjects and programmes offered at universities and university colleges. Recently teacher education was reviewed, a process which included ESD.

The newly established Swedish Schools Inspectorate (*Skolinspektionen*), has an instruction to examine the quality of education and to be the supervisory authority over public child-care institution, pre-school and schools. It houses the Child and School Student Representative (*Barn- och elevombudet*), a sort of ombudsman.

*9. Does your country promote research and development with regard to ESD?*

There are national research grants available for ESD, however the interdisciplinary nature of the field makes it somewhat of a challenge to be successful in the application processes. In addition there is research on ESD carried out by Ph.D. students in e.g. pedagogy and the didactics of a range of subject areas.

*10. Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

The media, as well as liberal adult education, are important actors in awareness raising and capacity-building of the general public.

Also see replies to questions 5 and 7.

*11. Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

The Swedish International Centre of Education for Sustainable Development (SWEDESD) was officially started in January 2008. Its purpose is to facilitate and support education and learning in the field of sustainable development. The Centre is a department of Gotland University and financed by SIDA, the Swedish International Development Cooperation Agency. SWEDESD supports education for sustainable development (ESD) as a part of Sweden's development cooperation. The Centre has a broad scope including formal and informal educational organizations and the promotion of capacity development in ESD. SWEDESD intends to work with policy makers, officials, leaders and planners in pre-primary, secondary, higher and non-formal education, with governmental and civil society organizations (CSOs). SWEDESD's activities include initiating, promoting and supporting policy development, designing and implementing education and training programmes at Gotland University and elsewhere, capacity development projects with partner institutions in the developing world, and compiling, evaluating and disseminating research and practical experience within the ESD field.

In addition, Sweden is actively involved in the Marrakech process, e.g. the follow up of the World Summit on Sustainable Development in Johannesburg regarding sustainable consumption and production. Since 2005 Sweden is leading the (international) Task Force on Sustainable Lifestyles within this process. The task force is running a number of different projects, the larger part on information and education on sustainable

development/sustainable lifestyles and consumption. It has close co-operation with other Marrakech task forces, especially the Italian one on education for sustainable consumption. The Italian task force has developed an excellent guide: *Here and now: Education for Sustainable Consumption*.

The purpose of the task forces is to concretise work and give input to the 10-year Framework of Programmes on Sustainable Consumption and Production which will be presented at CSD (*Commission on Sustainable Development*) in 2010 and adopted the year after, 2011.

Within UNECE Sweden has supported a report on SCP in EECCA and SEE countries (carried out by UNEP and EEA). Additional support has been given to UNEP 2009 for further work and a Pan European Initiative on SCP in accordance to the EfE (*Environment for Europe*) Declaration.

### **THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA**

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Yes. In the Ministry of Education and Science of the FYR of Macedonia there is a person-focal point for ESD. At the national level there is no ESD coordinative Body.

2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

No. We are in a process of analytical approach at the mainstream strategy, planning documents. The next step will be introducing ESD into these documents.

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

ESD is rarely present in the educational policies. However, a systematic approach lacks in the educational policy documents.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

No.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

No.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

In the FYR of Macedonia we are facing with parallel process of slowly introduction the ESD in the educational documents. At the primary school level, secondary general and vocational educational level, as well at the university level some special EE, and very rarely ESD programs are introduced. As an example the special Institute for ESD is opened at the University level.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

No. Textbooks are the unique obligatory teaching tool in the FYR of Macedonia Educational system. Unfortunately, the ESD aspects are introduced very slowly in this tool.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

No.

9. *Does your country promote research and development with regard to ESD?*

Yes. In the new adopted Law for Science in April 2008, two of the defined aims of the Law are:

- A) mutual connection of the science and education and
- B) sustainable development and protection of the living environment

These makes solid basis for promoting education and research at the education for sustainable development.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Yes. The FYR of Macedonia has introduced the optional subject named “Environmental Education” at the primary school level. Environmental education is a subject at the secondary school level, and at the Higher educational, university level. Initial attention is given to the Environmental education as a optional subject at some teachers trainings colleges at the university level.

11. *Please provide any other information on the implementation of ESD, including with respect to SCP, in your country that you consider important for sharing.*

- Ministry of Education and Science of the FYR of Macedonia is partner organization in the realisation of the EU Comenius Life Long Learning project “SUPPORT: Partnership and participation for a sustainable tomorrow”.

- Currently Republic of Macedonia is making preparations for including the country in the ENSI network.

#### UZBEKISTAN<sup>11</sup>

1. *Does your country have any consultative mechanisms for ESD activities, i.e. a coordination body for the implementation of the Strategy?*

Согласно совместного Постановления Министерства высшего и средне-специального образования, Министерства народного образования и Госкомприроды Республики Узбекистан «О Программе и Концепции «По развитию экологического образования, подготовки и переподготовки экологических кадров, а также перспективах совершенствования системы повышения квалификации в Республики Узбекистан»» за № 242/33/79 от 7 ноября 2005 года, была создана рабочая группа по реализации данной Программы, на базе этой рабочей группы и в целях координации и исполнения Стратегии ЕЭК ООН для образования в интересах устойчивого развития (пункт 47) был создан координационный совет по развитию непрерывного экологического образования и ОУР в Республики Узбекистан. Основной целью создания и деятельности Координационного Совета является координация усилий представителей образовательных и природоохранных структур, ННО страны для эффективного осуществления и развитие системы непрерывного экологического образования и образования в интересах устойчивого развития, определение стратегических направлений и приоритетов организационной, научно-исследовательской и опытно-экспериментальной работы в этой области.

Результат:

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<sup>11</sup> Ponomarev Yuriy – Senior specialist scientific-technical progress and propaganda department of the State Committee for Nature Protection of the Republic of Uzbekistan.

- была заложена начальная база для дальнейшей деятельности подобного межведомственного органа;
  - производится инвентаризация имеющейся литературы по ЭО и ОУР в Республике Узбекистан на национальном и русском языках;
  - определена рабочая группа при Координационном Совете из числа опытных экспертов и специалистов разных ведомств-партнеров;
  - были обсуждены и выдвинуты стратегические предложения по дальнейшему развитию непрерывного ЭО и ОУР, в Программу действий по охране окружающей среды 2008-2012 гг.;
  - постепенно нарабатывается опыт межведомственного сотрудничества в области реализации общих планов и целей, координация совместных усилий в области развития ЭО и ОУР.
2. *Does your country have any national policy documents on ESD i.e. a national strategy for ESD and/or a national action plan for ESD?*

(Yes) Да. **Национальная программа по подготовке кадров 1997-2010**, принятая Олий Мажлисом. Утверждена Законом Республики Узбекистан от 29.08.97 г.). Национальная программа по подготовке кадров соответствует положениям Закона Республики Узбекистан "Об образовании", разработана на основе анализа национального опыта, исходя из мировых достижений в системе образования и ориентирована на формирование нового поколения кадров с высокой общей и профессиональной культурой, творческой и социальной активностью, умением самостоятельно ориентироваться в общественно-политической жизни, способных ставить и решать задачи на перспективу.

Для Узбекистана характерны весьма высокие показатели образованности. Ключевыми приоритетами реформирования являются предоставление равных возможностей в получении образования на всех уровнях, а также создание условий для обеспечения качества образования в соответствии с современными требованиями. Программа предусматривает реализацию национальной модели подготовки кадров, создание социально-экономических, правовых, психолого-педагогических и иных условий для формирования всесторонне развитой личности, адаптации к жизни в современном изменяющемся обществе, осознанного выбора и последующего освоения образовательных и профессиональных программ, воспитание граждан, сознающих свою ответственность перед обществом, государством и семьей, будущими поколениями.

**«Программа действий по охране окружающей среды Республики Узбекистана 2008-2012 годы».** Настоящая Программа разработана в целях осуществления комплекса мер по охране окружающей среды, обеспечению экологической безопасности, восстановлению природных систем, и их биологического запаса, т.е. способности к саморегуляции, обеспечению рационального использования природных ресурсов, совершенствованию и внедрению эффективных экономических методов управления природопользованием, снижению уровня загрязнения окружающей среды, в соответствии с правовым механизмом обеспечения сохранения природной среды, содействия и активизации экологической науки, широкой пропаганды экологических знаний, а также повышению экологической культуры и информирования населения. В целом программа охватывает практически все слои населения. Часть программы, которая посвящается вопросам развития ЭО и ОУР ориентирована на преподавателей и учителей, детей и молодежь, общественность. Настоящей Программой намечена реализация мер по следующим основным четырем направлениям: охрана окружающей среды и обеспечение экологической безопасности; рациональное использование природных ресурсов и внедрение экологических методов хозяйствования; совершенствование нормативно-правовой базы и развитие экологической науки, экологического образования и образования в целях устойчивого развития, воспитания населения; международное сотрудничество и региональная экологическая безопасность.

Часть Программы, соответствующая непосредственно содействию ЭО и ОУР, включает в себя мероприятия по реализации Декады ООН по ЭО и ОУР в регионе. Например, обозначены мероприятия по развитию системы непрерывного ЭО и ОУР:

- разработка новой концепции Республики Узбекистан по непрерывному ЭО и ОУР;
- разработка информационно-аналитического обзора «Развитие системы экологического образования и просвещения в РУз»;
- подготовка и издание учебно-методической литературы, наглядных и дидактических материалов по ЭО и ОУР;
- активизация экологовоспитательной и просветительской деятельности, проведение экологических акций и мероприятий среди детей и молодёжи;
- проведение цикла круглых столов, пресс-конференций для СМИ, научно-практической конференции по ЭО и ОУР и семинаров-тренингов на базе повышения и переподготовки педагогических работников;
- развитие базы данных Информационного центра Госкомприроды в области Охраны окружающей среды, ЭО и ОУР;
- разработка цикла программ на Центральном телевидении и радио по теме ООС, ЭО и ОУР.

Включение пункта 3.2. «Реализация Декады ООН по образованию для устойчивого развития» ЕЭК ООН 2005-2014 в регионе» в Программу действий по охране окружающей среды Республики Узбекистан 2008-2012 годы позволила привлечь к этой области дополнительное финансирование, расширив возможности по реализации Стратегии. Позволяющая повысить приоритетность и значимость ЭО и ОУР. Является надёжной базой для поэтапного и поступательного развития ЭО и ОУР.

**Национальный план действий в рамках Программы «Образование для всех» (2003 – 2015 гг.) – реализуемая при содействии ЮНЕСКО.** Работа по реализации Национального плана действия осуществляется специально образованным Координационным Советом Республики Узбекистан по развитию экологического образования и образования для устойчивого развития, включающей представителей МинВУЗа, Минобразования, Госкомприроды, профессиональных специалистов образовательного сектора, представителей ННО, общественности и международных организаций. При этом координатором действий по реализации Плана действий должны выступать Государственный комитет Республики Узбекистан по охране природы, Министерство Народного образования и Министерства высшего и средне-специального образования. Механизм реализации Плана действия основывается на многоуровневой структуре, которая будет включать действия органов государственного управления, ответственных за выработку государственной политики в области ОУР; ННО; международных программ и проектов; региональных целевых программ; местных программ и планов. Деятельность будет заключаться в рассмотрении текущей политики, осуществлении правовых и организационных основ, разработке механизмов финансирования мероприятий в области образования, а также выявление, анализ и проработка любых препятствий или недоработок. Следует предусмотреть меры по исправлению положения с целью устранения недостатков. Документ был представлен на совместной Коллегии Госкомприроды Республики Узбекистан, МинВУЗа и Минобразования от «31» мая 2007 . В настоящий момент идёт процесс доработки, обсуждения и согласования НАЦИОНАЛЬНОГО ПЛАНА ДЕЙСТВИЙ РЕСПУБЛИКИ УЗБЕКИСТАН ПО РЕАЛИЗАЦИИ СТРАТЕГИИ ЕЭК ООН ДЛЯ ОБРАЗОВАНИЯ В ИНТЕРЕСАХ УСТОЙЧИВОГО РАЗВИТИЯ И ПРОВЕДЕНИЯ ДЕКАДЫ ООН (2005 – 2014 г.г.).

3. *What approach(es) does your country use in addressing SCP through ESD at the national policy level, i.e. (a) through inclusion of ESD in policy documents on SCP; and/or (b) through inclusion of SCP in policy documents on ESD?*

**Программа действий по охране окружающей среды Республики Узбекистана 2008-2012** годы была принята 19 сентября 2008 года Кабинетом Министров Республики Узбекистан. Организация работ и контроль над выполнением Программы действий по охране окружающей среды Республики Узбекистан на 2008-2012 годы возложена на Государственный комитет Республики Узбекистан по охране природы. В результате разработки новой концепции по данной программе по развитию ЭО и ОУР будет заложен фундамент для поступательного продвижения ЭО и ОУР в образовательную систему, появиться нормативная основа для подготовки учебно-просветительской литературы, наглядных, информационных и дидактических материалов по ЭО и ОУР. Будет произведен анализ существующей ситуации по ЭО и ОУР в РУз, систематизация полученной информации, выявление недостатков и их причин, проблем в области развития ЭО и ОУР, определение дальнейших приоритетных планов, стратегии развития ЭО и ОУР. Согласно данной программе в период с 2002 по 2007 годы выполняя Постановление совместной Коллегии Госкомприроды с Министерством народного образования и Министерством высшего и среднего специального образования Республики Узбекистан проведены ряд семинаров по экологическому образованию, подготовлено десять рекомендаций по организации экологического образования для учеников различных классов, разработаны специальные программы для кружков по экологии. Министерством народного образования разработаны учебники, практические пособия и рекомендации в помощь учителям. Также разработаны рекомендации, по интегрированию ЭО и ОУР в систему школьные общеобразовательные предметы. Министерством высшего и среднего специального образования разработаны учебные программы, практические пособия с учетом современного природоохранного законодательства и доведены до всех учебных заведений. На сегодня во всех высших и средних специальных, профессиональных учебных заведениях преподается предмет «экология» и охрана окружающей среды. В среднем по республике ежегодно ВУЗами выпускается 310 специалистов-экологов. Ежегодно представители высших и средних специальных учебных заведений страны обращаются в Госкомприроды с просьбой об организации и проведении учебной и производственной практики, подготовки выпускных работ студентов – будущих работников в области ООС, экологии и устойчивого развития.

P.S. Электронная версия данного документа прилагается.

4. *Does your country address the issue of integrative conceptualization of ESD, i.e. by enhancing the integration of socio-economic dimensions in education?*

No.

5. *Does your country address the issue of competences in ESD, in particular in the education sector? Is there specific work done on competences required to promoting SCP?*

No.

6. *What approach(es) are you using in implementing ESD, i.e. (a) through the integration of ESD themes across all relevant subjects, programmes and courses; and/or (b) through the provision of specific ESD programmes and courses?*

Образование в интересах устойчивого развития связано со всеми направлениями школьного учебного плана. Оно не может быть добавлено в учебный план как новый предмет. Предпочтительнее, чтобы это стало вкладом в каждый аспект школьной жизни.

Цели и задачи обучения являются общими для большинства предметов учебного плана, особенно там, где они, связаны с отношениями между людьми или приобретений умений и навыков. Напомним, ОУР направлено на развитие критического и созидательного мышления, способности

решать проблемы, анализировать, принимать решения, изучать что-либо совместно, быть лидером, развивать коммуникабельность.

Один из примеров устойчивого развития в учебной программе:

### Урок «Устойчиво-неустойчиво»

#### Цель:

- **Содействовать** развитию представлений об окружающей среде, как совокупности различных компонентов (природы, экономики, общества);
- **Способствовать** пониманию понятия устойчивого развития;
- **Обучить** навыкам коллективного анализа и принятию решений.

#### Методы обучения:

- Объяснение;
- Работа в группах ПОПС.

#### Необходимые материалы:

Листы бумаги. Иллюстрации, изображающие какие-нибудь примеры устойчивой или неустойчивой деятельности.

#### Основные понятия:

Устойчивое развитие, окружающая среда.

#### Ход урока:

Учитель кратко дает представление об окружающей среде, рассматривая ее как среду обитания людей. Говорит (и схематично зарисовывает и записывает на доске), что она формируется под влиянием разных факторов, которые можно разделить на три группы: природные (климат, растения, животные, водные объекты, почвы); социальные (численность населения, отношения между людьми в обществе, законы в обществе, традиции, система образования и здравоохранения); и экономические (уровень жизни, благосостояние, промышленные предприятия, транспорт, дороги).

Что вы можете сказать об этих факторах, влияющих на среду обитания и на нашу жизнь, подумайте, они постоянны или меняются?

- Правильно, эти факторы меняются со временем. Мы можем сказать, что происходит РАЗВИТИЕ – многое вокруг нас меняется и вместе с этим меняется наша жизнь...

Затем, учитель записывает на доске три слова ПРИРОДА, ОБЩЕСТВО и ЭКОНОМИКА, обводит их линиями. Говорит, что это – три неразделимые составляющие развития, в зависимости от того, как эти части связаны между собой, развитие может быть устойчивым или не устойчивым.

Важно показать, что устойчивое развитие приводит УК улучшению качества жизни, миру и благополучию, а неустойчивое развитие – к конфликтам, бедности и деградации природной среды.

Учитель записывает на доске:

**Устойчивое развитие** – мир, благополучие, процветание;

**Неустойчивое развитие** – войны, бедность, разрушение природной среды...

Вопрос устойчивости весьма сложный вопрос. Вроде бы все хотят мира, благополучия и стабильности в жизни для себя, своих детей и внуков, но как к этому придти? Что для этого надо делать?

Напомним, что основная цель сегодняшнего урока – попытаться немного разобраться в этом вопросе. А чтобы было легче это сделать, еще раз вспомним о важнейших составляющих развития это – природа, общество и экономика. От того, как они взаимодействуют между собой, и зависит по какому пути развития идет страна, устойчиво, или неустойчиво. Помните об этом всегда!

Теперь, предлагается поработать самостоятельно.

Класс делится на группы по 6 человек. Даются листы бумаги. Каждой группе нужно за 10-15 минут выполнить задания, которые записываются на доске:

1. Нарисуйте схему **УСТОЙЧИВОГО** и **НЕУСТОЙЧИВОГО** развития, покажите, как природа, общество и экономика взаимодействуют, влияют друг на друга в каждом случае.
2. Что такое **УСТОЙЧИВОЕ** развитие? Дайте краткое определение.

Причем, каждому члену группы сначала предстоит подумать и выполнить задания самостоятельно, затем обсудить, сравнить и прийти к общему результату группы.

Кроме того, каждой группе даются подготовленные заранее учителем иллюстрации, фотографии или схемы (по 2 на группу), предлагая определить, где примеры устойчивой деятельности, а где – неустойчивой и почему.

<b>УСТОЙЧИВО:</b>	<b>НЕУСТОЙЧИВО:</b>
<ul style="list-style-type: none"><li>• Озеленять территорию</li><li>• Использовать энергию солнца</li><li>• Разрабатывать безотходные технологии</li><li>• Потреблять меньше...</li></ul>	<ul style="list-style-type: none"><li>• Создавать огромные свалки мусора</li><li>• Вырубать леса, деревья</li><li>• Вести войну</li><li>• Покупать горы вещей</li><li>• Загрязнять воздух...</li></ul>

По окончании работ в группах проводятся презентации по 5-7 минут. Листы с ответами размещаются на стенах класса. Можно по ходу презентаций заполнять на доске таблицу, что означает действовать «устойчиво» и «неустойчиво» (на основе работ над картинками).

Учитель подводит итоги работы в группах.

Акцентирует внимание на том, что государство только тогда устойчиво развивается, когда **экономика** развивается в рамках, соответствующих уровню развития **общества** и не выходит за ограничения, диктуемые законами **природы**.

7. *Does your country address the issue of developing adequate teaching tools and materials for ESD?*

Yes. В период 2002 по 2007 годы выполняя Постановление совместной Коллегии Госкомприроды, Министерства народного образования и Министерства высшего и среднего специального образования Республики Узбекистан проведены ряд семинаров по экологическому образованию, подготовлено десять рекомендаций по организации экологического образования для учеников различных классов, разработаны специальные программы для кружков по экологии. Министерством народного образования разработаны учебники, практические пособия и рекомендации в помощь учителям. Также разработаны рекомендации, по интегрированию ЭО и ОУР в систему школьные общеобразовательные предметы. Министерством высшего и среднего специального образования разработаны учебные программы, практические пособия с учетом современного природоохранного законодательства и доведены до всех учебных заведений. На сегодня во всех высших и средних специальных, профессиональных учебных заведениях преподается предмет «экология» и охрана окружающей среды. В среднем по республике ежегодно ВУЗаами выпускается 310 специалистов-экологов. Ежегодно представители высших и средних специальных учебных заведений страны

обращаются в Госкомприроды с просьбой об организации и проведении учебной и производственной практики, подготовки выпускных работ студентов – будущих работников в области ООС, экологии и устойчивого развития.

8. *Does your country address the issue of ensuring/assessing the quality of ESD?*

No.

9. *Does your country promote research and development with regard to ESD?*

No.

10. *Does your country undertake capacity-building and awareness-raising activities to promote ESD, including through informal and non-formal education?*

Внедрение идеи УР в образовательный компонент всех ступеней **непрерывного формального образования**.

**Задачи:** подготовка учебно-методической и дидактической базы, квалифицированных специалистов для внедрения и распространения УР в систему формального образования на всех уровнях.

**Результат:** 1. Издание учебного пособия на русском и узбекском языке: Азизов А.А., Акиншина Н.Г., Нишонов Б.Э., Тупица А.В. «Экология, Охрана окружающей среды и Устойчивое развитие». ЮНЕСКО. Ташкент. 2001. 372 стр.

*Предназначено для учащихся старших классов школ и студентов высших учебных заведений, преподавателей и специалистов в области экологии и охраны окружающей среды.*

2. CD-диск. Патент Республики Узбекистан N BGU 00052, от 17.05.2002. UNESCO& Азизов А., Акиншина Н., Нишонов Б., Тупица А. (2002): Электронная база данных «Интерактивная учебно-образовательная программа по Экологии, Охране окружающей среды и Устойчивому развитию».

3. Подготовка мультимедийной регионально-ориентированной версии обучающей программы “Teaching and Learning for a Sustainable Future”, созданной для ЮНЕСКО специалистами Гриффитского Университета (Австралия).

4. CD-диск на узбекском языке «Преподавание в интересах Устойчивого Развития».

*Предназначен для преподавателей, содержит информацию, задания, вопросы и упражнения, помогающие понять концепцию ОУР и способы введения идей УР в учебные планы.*

5. Создание учебно-методического пособия «Образование в интересах устойчивого развития» в 2-х частях (пособие для учителей школ, лицеев и колледжей и упражнения для учащихся) Азизов А.А., Акиншина Н.Г., Нишонов Б.Э. «Барқарор тараккиёт таълими» (ўқув услубий кўлланма ва топшириқлар), Тошкент, ЮНЕСКО, 2007. 141 стр. и 54 стр. Книга была издана на узбекском языке при поддержке Национальной Комиссии по делам ЮНЕСКО в Республике Узбекистан и Japanese Funds-in-Trust (500 экз.).

6. Проведён 3-х дневный тренинг-семинар «Устойчивое развитие в учебном плане». 25-27 марта 2008 г. Участники: 15 человек (учителя средних школ, преподаватели и методисты из ВУЗов).

7. Издание учебно-методического пособия «Образование в интересах устойчивого развития» в 2-х частях (пособие для учителей школ, лицеев и колледжей и упражнения для учащихся) на русском языке).

Азизов А.А., Акинъшина Н.Г. Образование в интересах устойчивого развития. Учебно-методическое пособие в 2-х частях. Ташкент. 2008. 142 стр. и 56 стр.

8. Уже проведено 3 семинара – в Республиканском Институте повышения квалификации и переподготовки специалистов народного образования им. А.Авлоний (2 однодневных тренинга для директоров и завучей школ, лицеев и колледжей Республики Узбекистан – 24/04/2008 и 02/07/2008); 1 презентация для руководителей школ, лицеев и колледжей ЮНЕСКО – 13/06/2008. Запланировано ещё 4 однодневных тренинга в ноябре (целевая группа – преподаватели ВУЗов, слушатели Академии Госстроительства, представители средств массовой информации).

9. При поддержке РЭЦА издан курс лекций «Экология и Устойчивое развитие». Проведено 3 семинара и презентация данного пособия. Внедрён и преподаётся в ряде ВУЗов РУз. Авторы: Нигматов А.Н., Шивалдова Н.С.

10. Опубликовано учебное пособие «Экологическое воспитание и образование в начальных классах общеобразовательной школы» и рабочая тетрадь для ученика начальных классов. Авторы Н.В. Вахитова и В.М. Несговорова. Пособие является результатом проекта, реализованного Программой экологического образования Регионального экологического центра Центральной Азии при поддержке Европейского союза. Проведен ряд семинаров в Республиканском Институте повышения квалификации и переподготовки специалистов народного образования им. А. Авлоний для директоров, завучей и учителей школ.

**Рекомендации:** 1. В РУз имеется острая необходимость в компетентной и содержательной учебно-методической литературе и наглядных пособий по ОУР.

2. Среди работников системы образования, как руководящего состава, так и преподавательского нет чёткого понимания концепции УР, целей и задач ОУР.

3. Ведётся определённая работа, но в масштабах страны этот вклад не значителен. Требуется широкомасштабная обучающая программа на постоянной основе во всех сферах формального образования.

4. Необходимо дополнительное финансирование на разработку и внедрение тем ОУР в формальное и неформальное образование.

Разработка и внедрение тем УР в систему **неформального образования**.

**Исполнители / партнеры:** ННО «Атроф - мухит ва соглом хаёт», Центр «Образование во имя жизни», МНО, Фонд «Махалля», зарубежные посольства и представительства международных организаций.

**Связь с национальными приоритетами/ актуальность в национальном контексте:**

1. Программа (2006 -2010гг.) и Концепция «По развитию экологического образования, подготовки и переподготовки экологических кадров, а также перспективах совершенствования системы повышения квалификации в Республики Узбекистан»; утвержденных совместным Постановлением Министерства высшего и средне-специального образования, Министерства народного образования и Госкомприроды Республики Узбекистан за № 242/33/79 от 7 ноября 2005 года включены вопросы ЭО и ОУР.

2. Программы действий по охране окружающей среды Республики Узбекистан на 2008-2012 гг.

**Цель и задачи Инициативы:** Рассмотрение ключевых тем УР непосредственно в плане/программе обучения на различных уровнях неформального образования.

**Целевая группа:** Учащиеся школ, учителя естественных наук, молодежь махаллей, администрация школ, прилежащих к махаллям.

**Результат:** 1. Подготовлено и выпущено методическое пособие «Обучение во имя жизни» ( рус. язык и узб.), проведены семинары для учителей.

2. Разработан сценарий фильма «Дело о пропаже воды» и методической рекомендации. Показ фильма, проведение семинаров для учителей и проведение семинаров, акций для молодежи и детей

3. Переведена на узбекский язык и адаптирована книга «От экологического образования к образованию для устойчивого развития» - «Экологик таълимдан баркарор таълим сари» (узб). Проведены семинары.

4. Проведен отбор, и обучение молодых активистов махали, построены 2 детские площадки в двух махалах города, проведена недельная акция « не сжигайте люди листья» (сбор и компостирование листьев с привлечением жителей махали, создание пунктов для сбора макулатуры).

5. Он-дебаты, новости, библиотека, информация для педагогов, самообразование , изучение англ. языка и прочее.

6. Подготовлена и издана книга «Изменение климата». Анализ и адаптация в учебных заведениях, проведение семинаров.

**Рекомендации:** 1. Национальный координационный центр (НКЦ), легитимный на территории РУз, значительно бы улучшил и упростил процесс внедрения ОУР в образовательную систему.

2. Необходим механизм для координации осуществления Стратегии на государственном уровне, а также для обмена информацией и стимулирования партнерских союзов с участием различных субъектов. Одним из возможных решений является создание "национальной платформы ОУР", возможно под эгидой советов по устойчивому развитию или других соответствующих органов, объединяющих специалистов различных секторов.

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