An Agenda 21 for Education in the Baltic Sea Region – Baltic 21E

CONTENTS

Abbreviations used in the document:

Some of the most commonly used abbreviations in the following are:
BSR = Baltic Sea Region
Educators = teachers, lecturers, trainers and voluntary education leaders
EE = environmental education
ESD = education for sustainable development
IGOs = intergovernmental organisations
IHEs = Institutions of Higher Education
Learners = pupils, students and participants
NGOs = non-governmental organisations
Schools = formal education/training (pre-school to upper secondary education, including initial vocational training, and formal adult education)
SD = sustainable development
SOG = Senior Officials Group

Some clarification notes

The following categories of learning or education are taken from the Memorandum on Lifelong learning 2000.
* *Formal learning* takes place in education and training institutions, leading to recognised diplomas and qualifications.(EU, Memorandum on Lifelong learning 2000)
* *Non-formal learning* takes place alongside mainstream systems of education and training and does not typically lead to formalised certificates. Non-formal learning may be provided at the workplace and through the activities of civil society organizations and groups (such as youth organizations, trade unions and political parties). It can also be provided through organisations or services that have been set up to complement formal systems (such as arts, music and sport classes or private tutoring to prepare for examinations). (EU, Memorandum on Lifelong learning 2000)
* *Informal learning* is a natural accompaniment to everyday life. Unlike formal and non-formal learning, informal learning is not necessarily intentional learning, and as such may not even be recognised by individuals themselves as contributing to their knowledge and skills. (EU, Memorandum on Lifelong learning 2000)

Lifelong learning is learning throughout life, either continuously or periodically. Lifelong learning stimulates and empowers individuals to acquire all the knowledge, values, skills and understanding they will require throughout their lifetime and to apply them with confidence, creativity and enjoyment in all roles, circumstances and environments.
Lifewide learning enriches the concept of lifelong learning by drawing attention to the spread of learning, which can take place across the full range of our lives at any one stage in our lives. The lifewide dimension brings the complementarity of formal, non-formal and informal learning into sharper focus. It reminds us that useful and enjoyable learning can and does take place in the family, in leisure, in community life and in daily work-life. Lifewide learning also makes us realise that teaching and learning are themselves roles and activities that can be changed and exchanged in different times and places
Continuing education/training covers activities aimed at updating, refreshing or extending knowledge and skills gained during basic education/training and at the same level as the latter covering knowledge and skills which are later included in basic education/training.

Other notes on clarification can be found in annex 6 to the Sector Report

Summary of Baltic 21E Goals, Action Programme and Indicators

Goals

5 In addition to the overall goal for Baltic 21 co-operation, a specific goal needs to be set up for the education sector. The education sector covers a broad field of actors with different regulatory management systems in different countries. These systems are also geared to people of different ages and in different positions in life. It was thus considered necessary to create an overall goal that was common to the whole education sector, as well as goals

10 for each field in the sector. This calls for divisions into sub-goals or criteria. Ultimately, they are to guide the selection of proposed actions and contribute to transforming and making BSR sustainable.

Overall goal for Education

15 All individuals should have competence to support a sustainable development that meets the needs of the present without compromising on the ability of future generations to meet their own needs.
Education for sustainable development should be based on an integrated approach to economic, societal and environmental development.

20 ### *Goal for schools*
The individual learner should have the knowledge, values and skills to be active, democratic and responsible citizens and to participate in decisions at individual, as well as at different levels within society, locally and globally, to contribute to creating a sustainable society. Learners in vocational education should also have skills and

25 competencies relevant to their future professions.

This will require the following:
- Legal provisions that clearly include ESD
- ESD is part of regular teaching and learning in school and the basis
30 of all school life
- Educators have relevant competence to include SD in their teaching
- Suitable learning methods and a learning environment positive to SD.

Goal for higher education
The individual learner should have such skills and competence relevant to their future
35 professions and future roles as decision-makers. Higher education should also play an active role locally, nationally, and internationally in enhancing knowledge and action competence regarding sustainable development through research and education in co-operation with surrounding society.

40 This will require the following:
- Legal or other normative provisions that clearly include ESD
- Educators also have relevant competence in SD aspects of their subject areas and in appropriate teaching methods/approaches
- That democratic and decision-making consistent with SD and work practices
45 permeate the daily life of IHEs
- Undergraduate education that includes aspects of SD in every field of studies, as well as specialized courses at undergraduate, graduate and postgraduate level in SD and continuing education, which provide knowledge and skills related to SD.

Goal for non-formal education
Learners are capable of influencing their life situation, taking part in societal development, and are aware of sustainable development and learning for sustainable development.

This will require the following:
- Reaching prospective learners in non-formal education with information on learning opportunities as regards ESD
- Ability to succeed in motivating prospective learners to attend learning activities
- Educators have relevant competence also with respect to ESD
- Resources are available to provide learning opportunities.

Action Programme

The education sector consists of a broad field of actors with different regulatory management systems also within different countries. These systems are also geared to people of different ages and in different positions in life. For this reason the Baltic 21 Action Programme for the Education sector is divided into a framework of action areas, which are common to the whole sector. Within these areas joint action headings have been created. Each part that is the schools, higher education and non-formal education fields has then to create specific actions (sub-actions) in accordance with their role in the education system. Examples of this can be seen in the Education sector report, Chapter 5.2.2.

The five action areas common to the whole sector are:
- *6.2.1 Policies and strategies*
- *6.2.2 Competence development within the education sector*
- *6.2.3 Continuing education*
- *6.2.4Teaching and learning resources*
- *6.2.5 Research on and development of education for sustainable development*

A brief presentation of these actions follows.

6.2.1   Policies and strategies

6.2.1.1 Each country in BSR should adopt a framework for ESD for schools and higher education
6.2.1.2 Each country in BSR should develop guidelines regarding ESD for the field of non-formal education
6.2.1.3 Stimulate the development of co-operation, especially international co-operation, for curricula, program and course development at all levels of education.

6.2.2   Competence development within the education sector

6.2.2.1 Stimulate competence development for personnel in the educational system, including actions to increase the awareness of SD issues among officials, headmasters/principals and staff
6.2.2.2 Support co-operation in BSR between educators, researchers and practitioners to promote knowledge in SD and skills in ESD
6.2.2.3 Introduce and develop management systems for SD in educational institutions, including schools, and IHEs, as well as non-formal education actors.

6.2.3 Continuing education

6.2.3.1 Promote continuing education for professionals, which should include sustainability related knowledge and skills

6.2.3.2 Introduce sustainability related knowledge and skills in the fields of planning and management in all parts of society

6.2.3.3 Promote international co-operation to improve and support the implementation of sustainability related professional knowledge and skills in the entire region.

6.2.4 Teaching and learning resources

6.2.4.1 Stimulate the production of printed materials, internet-based material and other ESD material for schools

6.2.4.2 Stimulate the production of printed materials, films, internet-based material for ESD for higher education and training, as well as methodological, pedagogic and didactic material to support ESD

6.2.4.3 Create an internet portal to give easy access to information and resources on sustainability, production of school books, films and other teaching materials for educators, learners and researchers

6.2.4.4 Support and extend existing BSR regional networks for ESD, especially in the use of common resources wherever possible.

6.2.4.5 Promote the possibilities for media in all countries to inform about and debate issues for SD to reach the general public.

6.2.5 Research on and development of education for sustainable development

6.2.5.1 Initiate and promote research and development on contents and methods for ESD, as well as stimulate the dissemination of results of research on issues concerning SD with priority for research that brings together the different dimensions of SD, as well as focuses on issues of local development

6.2.5.2 Stimulate international co-operation regarding research and development of ESD, and support and initiate networks for experience sharing and joint activities at all levels

6.2.5.3 Stimulate and support different approaches in education covering an interdisciplinary approach, ways of including aspects of SD in different subjects, involving education in a local context, as well as collecting and disseminating examples of good practice

6.2.5.4 Stimulate the development of management systems for SD in educational institutions, including schools, and institutions of higher education, as well as non-formal education institutions.

Indicators

Indicators for sustainable development within Baltic 21 co-operation are already in use. Such indicators should, of course, also be used in Baltic 21E where relevant. However, in order to identify specific aspects of ESD, there is a need for additional indicators. The Education Sector has proposed indicators with a view to monitoring the agreed goals. Indicators can be formulated in the following areas:

1. Sustainability is included in all policy documents for education at different levels

(laws, ordinances, state/federal curricula or equivalent documents, core curricula and syllabi)
2. Learners and educators possess competence in SD
3. SD aspects are included in initial teacher training and in-service training for educators
4. Research and development activities on ESD are carried out
5. Schools/IHE/associations interact with society.

Steering, co-ordination and follow-up
The initiative to create Baltic 21E was taken by the Ministers of Education in the BSR. Education, Training and Research are important horizontal tools for attaining sustainable development and for the integration of environmental considerations in all sectors. Sustainable development is by its nature cross-sectoral. In order to fulfil the vision of a sustainable Baltic Sea Region, there is a strong need for the full involvement of ministers in the relevant sector.

Baltic 21 co-operation is steered by the Senior Officials Group (SOG). SOG should include work within the Education sector in their work as stated in the Report Baltic 21 Series No 1/98.

It is recommended that the general co-ordination of implementation be assigned to appointed Lead parties and that each country nominate one representative as a national co-ordinator to be the contact-persons for the lead parties. These persons should also be responsible for reporting to the lead party representative on proceedings in their country. Additionally, it is recommended that each country nominate one representative for each field in the three working groups to be the responsible co-ordinator in each field of education in the country, as well as for activities in collaboration with other countries in the BSR.

The follow-up of implementation (monitoring) of the Baltic 21E objectives and action programme will require regular reporting from the actors responsible. Criteria and common reporting elements have to be developed and agreed by the SOG preferably before December 1, 2002.

1.   Introduction

The World Commission on Environment and Development in the report "Our Common Future" (1987) defined sustainable development as 'development that meets the needs of the present without compromising on the ability of future generations to meet their own needs'. The integrated nature of sustainable development was strongly emphasised. Combating poverty and addressing health, economic growth and equity is as necessary as care of the environment in this respect. A number of areas such as the need for cooperation at all levels and women's participation were identified as being of special significance in this context. Building on these principles as well as the Rio Declaration the 1992 United Nations Conference on Environmental Development, UNCED, adopted a comprehensive action plan, Agenda 21, for the global transition to sustainable development. The global Agenda 21 is more normative than operational, and several efforts have subsequently been made to translate its intentions and perspectives into concrete policies and actions. Baltic 21 is one such initiative.

The mandate to develop Agenda 21 for the Baltic Sea Region, Baltic 21, with the objective of sustainable development, stems from the Heads of Government of the region at their meeting in Visby in May 1996, and the meeting of Ministers of Foreign Affairs of the Baltic Sea Region within the framework of the Council of the Baltic Sea States (CBSS) in the same year. As a result of this Baltic 21 comprises Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia and Sweden. For the Russian Federation only the north-western part is included. The European Commission is also a participant in Baltic 21.

Work within Baltic 21 started by focussing on seven sectors of crucial economic and environmental importance in the region: Agriculture, Energy, Fishery, Forest, Industry, Tourism and Transport. In addition to the seven sectors, a cross-sectoral focus was given to Spatial planning. The outcome of the work within the seven sectors and spatial planning can be found in the document "Agenda 21 for the Baltic Sea Region – Baltic 21" (Baltic 21 series No 1/98). Baltic 21 also called for building knowledge and awareness raising activities. Education, training and public awareness are recognised as underpinning all the cross-sectoral themes of Agenda 21 and represent an important means of implementing relevant strategies within Baltic 21.

At the meeting at Haga Palace in Stockholm in March 2000, the Ministers of Education of the region agreed to develop an Agenda 21 Education Programme, and to create a network of ministries, authorities and institutions. Working groups for formal education, higher education, and non-formal education (mainly at adult level) were given the task of conducting surveys on existing practice and provision.

At the BSR meeting of Prime Ministers in Kolding, Denmark in April 2000, *education* was identified as an additional sector of crucial importance for sustainable development in the region.

The foundation for work within Baltic 21 has also been considerably strengthened through the conclusion of the Göteborg European Council on 15-16 June 2001 with regard to the development of a strategy for sustainable development. In this conclusion, the European council invited Member States and candidate countries to draw up their own national sustainable development strategies and underscored the importance of consulting all

relevant stakeholders and also putting forward sustainable development as a goal in bilateral cooperation.

5 2.   Basic principles

2.1   The importance of Education for Sustainable Development

2.1.1 According to international agreements

10   Agenda 21, the strategy of sustainable development, was adopted at the UN Conference on Environment and Development, Rio de Janeiro in 1992. In Chapter 36 it is emphasised that "Education, including formal education, public awareness and training should be recognised as a process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the
15   capacity of the people to address environment and development issues." At all United Nations conferences thereafter, regardless of the subject under consideration (environment, population, social development, human rights and democracy, women and habitation), sustainable development has been a common concern and there has also been a consensus that education is the driving force for the change needed. It has been pointed out that
20   peace, development and democracy are mutually reinforcing prerequisites for sustainable development.

In 1990 at the World conference on Education for All (Jomtien, Thailand), the definition of basic learning needs was stated as "These needs comprise both essential learning tools
25   (such as literacy, oral expression, numeracy, and problem solving) and basic learning content (such as knowledge, skills, values, and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions, and to continue learning" (World Declaration on Education for all, Art. 1, para. 1). This is fully
30   underlined in the Dakar Framework for Action (from The World Education Forum in Dakar, Senegal, April 2000): "Education is a fundamental human right. It is the key to sustainable development and peace for effective participation in the societies and economies of the 21st century, which are affected by rapid globalisation."

35   In the report "Learning: the treasure within" addressed to UNESCO by the International Commission on Education for the Twenty-first Century (1996), the need for education for a democratic and sustained future is underpinned. It sets out four pillars as the foundation for education: learning to live together, learning to know, learning to do and learning to be.

40   The international UNESCO conference *Educating for a Sustainable Future* (Tessaloniki, in Greece 1997), stated that a curriculum reoriented towards sustainability would place the notion of citizenship among the primary objectives. The traditional primacy of nature study needs to be balanced by the study of social sciences and humanities. Learning about the interactions of ecological processes would then be associated with market forces, cultural
45   values, equitable decision-making, government action and the environmental impact of human activities in a holistic interdependent manner. Students need to learn how to reflect critically on their place in the world and to consider what sustainability means to them and their communities. They need to practice envisioning alternative ways of development and living, evaluating alternative visions, learning how to negotiate and justify choices between

visions, and making plans for achieving these, as well as participating in community life to bring such visions into effect. These are the skills and abilities, which underlie good citizenship, and make education for sustainability part of a process of building an informed, concerned and active population. The conference concluded that in this way education for sustainability contributes to education for democracy and peace.

2.1.2 In the Baltic process

The key importance of education is also recognised in the work of Baltic 21. All sectors in Baltic 21 co-operation have indicated the need for improved knowledge or awareness of sustainable development in their action programmes.

The development of an economically, socially and environmentally sustainable society is promoted through equipping citizens with relevant education and training. It is emphasized that relevant education will make it possible for each and everyone to take responsibility for making choices as critical and conscious consumers, professionals, decision-makers, employees, students, parents and voters, and also to maintain and thereby increase the quality of life for their own generation as well as for generations to come. Education is very important to all sectors. Firstly since new knowledge and skills need to be developed in order to meet the challenges of sustainable development (SD) in society, and secondly as a means of raising public awareness.

Education for sustainable development must also take account of local, regional and national characteristics and may therefore place varying degrees of emphasis on the three aspects of sustainability - economic, social and environmental – depending on country and field of education. Accordingly, education needs to be incorporated into the strategies of the policy areas currently involved, as a means of achieving the strategic objectives of the Baltic 21 process.

2.2 Principles of Education for Sustainable Development

Content and approaches

Based on the above considerations, in this document we will propose that sustainable development becomes one of the main goals of the whole education system, both formal and non-formal, from preschool to higher education and adult education. As such it should be included in all curricula or equivalent instruments corresponding to the level of education, and be seen as part of lifelong and lifewide learning. It should be integrated into existing disciplines and developed as a special competence. The interrelation between natural science and social science should be strengthened.

Vocational education/training, for these reasons, also needs to support improvement of knowledge and skills in sustainability strategies in their respective fields, each specific to the learners' future professions and to contribute to a sustainable society. Education/training must include evaluating different alternatives e.g. in the efficient use of material and energy, in recycling of material and in reducing emissions from polluting substances, taking into account at the same time social, economic and ecological factors. Learners should also in their training practise their skills in these areas.

Education for sustainable development needs to address several key areas.

In the field of environment, education should provide an insight into global, regional and local survival issues, and address patterns of production and consumption, covering the extraction of raw materials to final disposal of products. Recycling is an important concern. A good overall picture must be given of the real implications of the main environmental problems.

The growing tendency for people to move across national borders also makes great demands on their ability to live with and understand the values inherent in cultural diversity and is also a concern for sustainable development. Respecting diversity and regional cultural heritage, including preserving traditional European landscape, is part of ESD and democracy. This implies showing tolerance to and respecting different ethnic and minority groups as well as religious groups.

Addressing the ethical dimension is central to understanding sustainable development, as emphasised in several international documents. Thus questions of justice refer both to equity between generations – as underlined in the most common definitions of sustainable development – equity within the present generation, as well as relationships between man and nature especially taking into account respect for biological diversity. Responsibility is inherent in ethics and becomes a practical matter in questions concerning the responsibilities of consumers and citizens. This part may be further developed in philosophy.

Impact for educators and learners

Education is not a "pre-packaged" product ready for final distribution; it involves processes of learning. People need both factual information and confidence if they are to understand the consequences of various alternatives they face and be able to examine facts critically and take part in discussions. Attention must be given to the fact that a good learning environment relies on health, creativity and concentration.

The teaching profession has an important role in providing education for a sustainable society. Thus issues of democracy and ecological awareness may be taught and learnt through practice. Sustainable development is, as mentioned, a fundamental part of vital democracy and active citizenship. Real democracy is based on people respecting each other, talking to each other, exchanging information, talking about their experiences, listening to each other and comparing their respective views, before making their own choices and decisions.

The role of participatory democracy is underlined in the Agenda 21 document and from many years of practical experience. Democracy is part of the content of sustainable development, in particular as a means of managing conflicts in society and achieving justice.

Involving learners in the decision-making process in school/IHE provides important training for democracy. This could be on an individual basis in a specific educational situation or on a collective basis in student council work.

Education must also equip learners to act in order to achieve sustainable development, e.g. provide them with incentives for changing their patterns of consumption and help them to draw conclusions so that natural resources may be protected or used in a sustainable fashion. This may be practised in schools and IHEs by implementing the principles of sustainability in daily life.

Teaching must also be closely linked to the latest research findings. All this means that not only educators in the natural sciences should be involved, but also those in the social sciences, humanities and other subjects.

ESD need to address issues in all sectors

Thus national strategies for sustainable development in the Baltic Region should embrace the entire educational sector. Education for sustainable development must include all aspects. Many of these areas are included within different fields of Baltic 21 cooperation. However, education in sustainable development cannot be limited to these fields alone. Education must support all aspects of citizens´ work for sustainable development.

Clear and solid goals for sustainable development will bring about significant economic improvement. Technical innovations and investments that create growth and employment in the business and public sectors will contribute to the development of new environmental friendly technology. A precondition for this, however, is greater expertise and an education that is directed at appropriate target groups. Eliminating threats to the health of citizens through for example safe food, considerable reductions in the use of chemicals and measures to prevent infectious deceases can only be effected where there is high level of knowledge among citizens.

Generation equality is a prerequisite for sustainable development. This calls i.a. for pension systems, which are economically sustainable and able to fulfil the social goals of good health and medical services and care for the elderly. This presupposes measures in different parts of the educational system, which need to be adapted and developed in order to meet the demands of an aging population.

Economic, social and environmental measures must be integrated and mutually reinforcing. The interrelation effects of measures in these fields are often unclear and in most cases they need to be clarified. The following examples illustrate this.

Waste is especially interesting when it comes to sustainable development. Earlier but also today waste is taken to the dump, the landfill. But today waste has also become a resource to be recycled and used. Landfill is in fact a clear symbol of a non-sustainable society. It is the final destination of an unsustainable linear flow where resources that have been consumed are forever hidden. In reality this is not the only function of the landfill. When waste is emitted through chimneys and sewage systems, it is ultimately the soil, the lakes and the atmosphere that become the dumping ground. The consequences are climate change, acid rain, eutrophied lakes and seas, destruction of cultural monuments, and threats to our health.

It is clear that proper management of resources may improve efficiency dramatically. This so called eco-efficiency is part of the official strategies of several countries, as well as the European Union. Industry is starting to address these questions as part of the introduction

of environmental management systems. Both economic and quality arguments favour new ways of organising "cleaner" industrial production.

Economic factors come naturally into the picture. It is an obvious economic concern and good management. In this way waste also becomes a resource that is sold and bought. This was done earlier for scrap iron and other metals. Now we add paper, glass, biogas and many other resources. For example, producing biogas for buses from fermentation of organic waste has interesting consequences for cities investing in such systems. Instead of paying for fuel from a petrol company elsewhere, the economic activity generated remains within the local area. The fuel is produced, distributed and consumed locally. This is a fairly typical consequence of sustainable strategies. Money and resource flows become more local. Cities are intimately connected to sustainable regimes, not only for resource management, but also for city planning, economic development and social strategies. Living in a city, as most of us do, requires that the social situation and economy works. Today cities increasingly try to address these parts together with the environmental one in our region in comprehensive strategies for sustainable community development.

Experience tells us that introduction of sustainable regimes will require wide participation of citizens in a society. This is clear when it comes to practicalities, such as managing resource flows, but it also has implications for the foundations of democracy through people's participation in the development of society. This may concern housing areas, a neighbourhood or a city. Democracy in practice concerns how we take common responsibility for our home, our city our society and our world. It is an important task for education to promote the learning of the skills needed and a basic understanding of how all these aspects of society are functioning.

3.   Definitions and Goals

3.1   Definitions/scope

According to the Haga Declaration, ESD should be based on an integrated approach to economic, societal and environmental development and encompass a broad range of related issues such as democracy, gender equity and human rights. This broad approach should be recognised in both the natural and social sciences, and should complement and build on existing initiatives in environmental education.

The Haga Declaration also emphasises that the creation of knowledge about and awareness of sustainable development must be seen as a lifelong process for the individual person. Furthermore, it states that ESD demands an educational culture directed towards a more integrative, process-oriented and dynamic mode emphasising the importance of critical thinking, social learning and the democratic process. The definition of ESD must take its starting point from the cultural and social situation in each country. However, much must be left to the educator to make decisions concerning the content and method to be used in the classroom or other education situations. This poses a great challenge for educators, but at the same time provides great scope for their professionalism.

3.2 Overall Goal for Sustainable Development in the Baltic Sea region

5 This overall goal has been elaborated within the Baltic 21 process and approved by the Senior Officials Group (SOG) that steer the work within Baltic 21 co-operation and has been adopted by the Ministers for Foreign Affairs of the BSR (further information can be found in the report Baltic 21 Series 1/98).

"The essential objective of Baltic Sea Region co-operation is the constant improvement of the living and working conditions of their peoples within the framework of sustainable development, sustainable management of natural resources and protection of the environment." Sustainable development includes three mutually interdependent dimensions - economic, social and environmental. This means for the region:

- A safe and healthy life for current and future generations.
- A co-operative and prosperous economy and a society for all.
- That local and regional co-operation is based on democracy, openness and participation.
- That biological and ecosystem diversity and productivity are restored or maintained.
- That pollution of the atmosphere, land and water does not exceed the carrying capacity of nature.
- That renewable resources are efficiently used and managed, within their regeneration capacity.
- That materials flow of non-renewable resources are made efficient and cyclic, and that renewable substitutes are created and promoted.
- That awareness of the elements and processes leading to sustainability is high among different actors and levels of society.

The Baltic Sea Region recognizes its interdependence with other parts of the world and makes its contribution to the fulfilment of sustainable development goals at the global and European level.

10

3.3 Overall Goal for Education for Sustainable Development

15 The education sector covers a broad field of actors with different regulatory management systems also within different countries. These systems are geared to different ages of people and in different position in life. It was thus considered necessary to create an overall goal that was common to the whole education sector, as well as goals for each field in the sector. Their use calls for divisions into sub-goals or criteria. Ultimately, these are to guide the selection of proposed actions and contribute to transforming and making the BSR sustainable.

20

3.3.1 Overall goal for Education
All individuals should have competence to support a sustainable development that meets the needs of the present without compromising on the ability of future generations to meet their own needs.

Education for sustainable development should be based on an integrated approach to economic, societal and environmental development.

3.3.2 Goal for schools

The individual learner should have the knowledge, values and skills to be active, democratic and responsible citizens and to participate in decisions at individual, as well as at different levels within society, locally and globally, to contribute to creating a sustainable society. Learners in vocational education should also have skills and competencies relevant to their future professions.

This will require the following:
- Legal provisions that clearly include ESD
- ESD is part of regular teaching and learning in school and the basis of all school life
- Educators have relevant competence to include SD in their teaching
- Suitable learning methods and a learning environment positive to SD.

3.3.3 Goal for higher education

The individual learner should have such skills and competence relevant to their future professions and future roles as decision-makers. Higher education should also play an active role locally, nationally, and internationally in enhancing knowledge and action competence regarding sustainable development through research and education in co-operation with surrounding society.

This will require the following:
- Legal or other normative provisions that clearly include ESD
- Educators have relevant competence also in SD aspects of their subject areas and in appropriate teaching methods/approaches
- That democratic and decision-making consistent with SD and work practices permeate the daily life of IHEs
- Undergraduate education that includes aspects of SD in every field of studies, as well as specialized courses at undergraduate, graduate and postgraduate level in SD and continuing education, which provide knowledge and skills related to SD.

3.3.4 Goal for non-formal education

Learners are capable of influencing their life situation, taking part in societal development, and are aware of sustainable development and learning for sustainable development.

This will require the following:
- Reaching prospective learners in non-formal education with information on learning opportunities as regards ESD
- Ability to succeed in motivating prospective learners to attend learning activities
- Educators have relevant competence also with respect to SD
- Resources are available to provide learning opportunities.

4. Current Activities

4.1 Legal framework and organization

SD is an overriding national political issue in all the BSR countries. In the general
documents for national education, concern for the environment is expressed. According to
national documents governing formal education, environmental education/education for
sustainable development (EE/ESD) should be integrated as a compulsory aspect of many
subjects, but the most common way is to integrate it in the natural science subjects. There
seem to be a lack of understanding among all educators of the concept of SD and particular
a lack of knowledge how to integrate economics and social aspects as well as the cultural
perspective. The curriculum design creates in many countries obstacles to cover the needs
of EE/ESD in regular education.

However, there is considerable interest among educators, as well as among learners in
EE/ESD, which is very promising. In reality complete implementation of legal regulations
with regard to EE/ESD is still under way. Achievement of broad implementation of the
ideas underlying sustainable development in education requires politicians at all levels and
civil servants to be actively engaged in the development of state and local supportive
structures for teaching in schools. There is also a need to further develop teaching
materials on sustainable development

4.2 Working methods and competence of staff

In schools a single-subject approach still seems to be most common. Scientific knowledge
and scientific studies appear to be the most important part of EE and transmitting these
facts still seems to be a common method in schools. There are, however, many indications
of development towards ESD. Many methods are being used that could change educational
culture into a more integrative and dynamic mode in line with the Haga Declaration. Being
in touch with the real world and building action competence are important components of
ESD. Efforts in many schools to relate theory to practice in making the school
environmentally friendly and in working with the local environment are promising
examples of such work.

Introductory courses in SD are offered in most IHEs either as optional or compulsory. A
range of teaching methods are used in education. However, interdisciplinary methods
covering economic and social issues are still under way.

Involving students in the decision making process in school/IHE is important training for
democracy and is becoming more and more common in the BSR. In many of the BSR
countries, learners participate in councils, boards and committees, which are important for
their education.

In non-formal education approaches tend to focus on specific parts or aspects of SD or
certain environmental problems.

The extent to which EE/ESD is included in initial teacher training varies, but it is to some
extent incorporated in a majority of educational programmes in the region. Educators who

received their initial teacher training long ago need to be able to receive in-service training in ESD. In continuing education educators update and acquire new information and knowledge concerning SD and ESD.

5 ### *4.3   Co-operation in the region*

Co-operation takes place especially through networks. Such co-operation seems to have an important impact on the development of education and training as a whole. As for non-formal education, many activities are attached to the general activities of a given group,
10 and often the methods are very much oriented to learning-by-doing. There are a number of networks operating in BSR and some of these are mentioned below. The employability and adaptability of citizens is a vital part of the economic aspect of SD. The knowledge-based society, along with wider economic and societal trends such as globalisation, changes in family structures, demographic change, and the impact of information technologies,
15 presents many potential benefits as well as challenges. Today there is a greater need than ever for citizens to acquire the knowledge and competences necessary to be able to benefit from and meet the challenges of the knowledge-based society.

20 <u>Projects and Networks</u>

Schools
There are many ongoing activities within the field of schools encompassing specific state projects, bilateral projects and networks.
25

Examples of *specific state projects* from different countries are: "Keep Estonia clean", The Finnish Oak", "River tells me a story" in Latvia, "The Norwegian environmental network", "Clean Vistula River" in Poland and "Clean city" in Russia. Some countries also take part in the Air pollution project, Energy saving projects SPARE and Nature watch Baltic.
30

Eco-schools is another example. In Germany the biggest network of schools (600 schools) working on SD are "*Eco-schools*" of the Foundation for Environmental Education in Europe, FEEE (in Germany called "Umweltschule in Europe"). In Lithuania the national project *School Agenda 21* was started with the aim of encouraging students to identify,
35 investigate and to take action toward the prevention and resolution of environmental issues in their own community, as well as to make connections between the school curriculum and principles of sustainable development. In Sweden *the Green School Award* was initiated to stimulate education for sustainability. Criteria have been developed in several areas covering teaching, competence and training of staff, health and physical welfare, as
40 well as the physical environment. Schools who fulfil a certain number of these criteria receive the award, which lasts for three years, but this can be extended for a further three years providing the school fulfils a certain number of criteria. Examples from Denmark are *green education and environmental qualifications* and there are also some ongoing activities in vocational education in food processing industries that should be mentioned.
45

Networking is a rather common activity. The most common are the following:
- The *Baltic Sea Project* (BSP) was initiated in 1989 and the acute environmental problems of the Baltic Sea was the starting point. Schools in all countries around the

Baltic Sea take part. The educational approach is to achieve a balance between a holistic view and specific subjects, to change the role of learners into active constructors and the role of educators into a guide in learning processes as well as using networks and international co-operation. To implement the pedagogical ideas developed in BSP, methodological books such as Learners´ Guides are published. Four have been published so far.

- *The GLOBE-project* was established on an initiative taken by the former American Vice-President, Mr. Al Gore. Most countries in the BSR participate in GLOBE. The aim is to develop: environmental consciousness of participating learners, natural science, knowledge about the climate, life and structure etc. of the earth and develop learners' insights into relevant mathematical and natural sciences methods.

Higher education
Internationalisation of research and education in IHEs has been intensive in recent decades. The *Baltic University Programme* is so far the only activity in the area of SD in higher education that covers all 14 countries of the drainage basin of the Baltic Sea, and links together more than 170 IHEs in research and education for a regional SD. The programme is coordinated by Uppsala University, and there are programme centres in all participating countries. The courses are produced with the involvement of expertise from IHEs in the whole region. The Programme connects participating IHEs through common study material, and via different distance education technologies, as well as common seminars and conferences. In the year 2000 more than 6600 students participated in five courses.

For the IHEs, the BSR is often a natural region for cooperation, alongside other European and global activities. There have been several attempts to list co-operation projects in the BSR (in terms of sectors and IHEs etc), but it seems to be almost impossible to obtain an accurate overall picture of the number of IHE projects in the BSR. However, some of them should be mentioned. IHE co-operations in the BSR are of different kinds. They may be at the institutional level, bilateral and trilateral projects, sectoral projects and network/programmes. Examples of cooperation at *management level* are the Conference of Baltic University Rectors (CBUR), in existence since 1991.

There are a large number of bilateral projects around the Baltic Sea addressing special issues, which may not all be directly related to sustainability, but sometimes they are of indirect relevance as areas of the environment are often treated. It is important that a network of personal and institutional contacts develops. In addition, there are some *sectoral projects*, such as Baltec (technical universities in Denmark, Estonia, Germany, Latvia, Lithuania and Sweden), Novabova (virtual agricultural research in the BSR) and the Tampere University of Technology, which in 1994-99 together with Tallinn Technical University and Riga Technical University, arranged five one-year training courses in Water and Environmental Management open to professionals from Russia, the Baltic States and Finland.

Non-formal education
The various actors in the non-formal education field maintain good relations with surrounding society and have many different collaboration partners. For NGOs working with environmental issues or with questions of sustainable development, it is fair to say that increased establishment of networks and partnerships with other NGOs in the field and

with research centres, municipalities, ministries and certain individual persons seems to be crucial.

Also educational institutions (folk high schools, study organizations, adult educations centres and the like) establish contacts with authorities and NGOs as well as other actors. Some relations are constant and involve the exchange of information and experience, whilst others grow out of mutual involvement in specific projects.

The Network for Learning and Sustainability is an example of BSR wide cooperation. Another example is the Baltic Adult Education NGO Network which although it is not primarily focused on EE/ESD, comprises all the major organizations and associations within non-formal adult education - i.e. representatives from study organizations/associations, folk high schools and the like.

A final example is the project involving cooperation between three Nordic folk high schools to offer young adults a new and innovative politically oriented main subject. The students come from all the Scandinavian countries.

5.   Policy Implications

The key to creating a more sustainable and peaceful world is learning. The change towards sustainability depends on a change in understanding.

The *Haga Declaration* endorses the movement towards and paves the way for education in the BSR for a sustainable future. In the light of the Haga Declaration, the experience gained from the surveys carried out by the three working groups form the foundation for future steps.

The *results of the survey* carried out in the education sector network indicates that there is considerable interest among educators, as well as among learners in EE/ESD. This is highly promising and should be encouraged. However, there is to some extent a need to clarify and strengthen national documents, e.g. laws, ordinances, national curricula or equivalent documents and time frames concerning ESD. There is also among educators a generally felt need to clarify and refine the concept of SD and approaches to integrating economic, social and environmental aspects, as well as the cultural dimension in ESD.

There is also a need for new knowledge, understanding and skills in many professions of key importance for the development of our societies. There is much knowledge, both general and technically detailed, on SD that until now has not been a part of the education/training for these professions. Both competence development and continuing education for professionals need to be part of Agenda 21 in the education sector. Many of the other sectors of Baltic 21 co-operation have in their reports or action programmes expressed the necessity for updating, refreshing or extending knowledge and skills regarding SD.

Effective education for sustainable development depends upon a combination of factors, i.e. legitimacy through the curriculum, new ways of learning, competence of staff, institutional development, partnerships and finances. Awareness of ESD within the educational community should be emphasised as an initial step.

Strengthening current policies

Political demand for and support at national and local level are decisive for success in the pursuit of sustainable development. The democratic process that underpins sustainable development needs to be further strengthened. Politicians at all levels should be encouraged to give strong and clear expressions of the importance of education for sustainable development with reference to the following:

a. All levels of education need an enhanced legal framework where sustainability aspects are clearly incorporated e.g. education laws, ordinances, curricula/standards, syllabuses.

b. Strengthening the connection between the natural, economic and social sciences is important both in interdisciplinary and in specialised studies. In these studies interdisciplinary approaches and specialization must be properly balanced.

c. Further initiatives must be taken in school/IHE development regarding content and methods. Learners should be given greater opportunity to influence and take responsibility for their own learning. It is important that the role of learners should be changed into active participation and that the role of the educator be transformed into more of a facilitator and active co-learner. Other important approaches are critical reflection and discussion.

d. Learners should be given the opportunity to influence and take part in the preparation of all school/IHE work. Practical cooperation in different forms and in democratic decision-making should be part of the curriculum and implemented in practice. Such participation should also be seen as an opportunity for learners to influence work in the school/IHE including study contents and methods.

e. Continuing education and training should be offered to all professionals with the aim of building knowledge, understanding and improving skills on sustainable development.

f. Aspects of sustainability should be incorporated in teacher training programmes while considering the evolving nature of ESD. Increasing efforts should be made over in-service training with regard to the aspect of sustainability. Such in-service training programmes/courses are important and should be promoted to educators at all levels of education including teacher trainers at IHEs. Provision of in-service training and consultancy – including training programmes should be offered for non-formal educators with regard to SD.

g. IHEs should be encouraged and supported to offer opportunities for academic staff to enhance their knowledge in sustainable development concepts and appropriate teaching methods and to incorporate SD in as many courses and programmes as possible.

h. Encouragement should be given to research regarding content and methods in education for sustainable development, as well as for the integration of sustainability aspects in different academic disciplines.

i. Support should be given to the media in their important role in providing new knowledge on sustainability to all sectors of society.

j. Increased efforts should be made to raise public awareness of SD leading to necessary changes in lifestyle e.g. more sustainable consumption patterns by i.a. supporting non-formal modes of learning.

k. Strengthening co-operation with different actors (e.g. municipalities) and disseminating examples of good practice.

l. Strengthening and extending BSR co-operation with regard to ESD.

Issues also to be addressed

The Haga Declaration emphasizes the need for an integrated approach to economic, societal and environmental issues. The following aspects must be taken into consideration when planning for and implementing ESD in the BSR:

a. The need for multicultural coexistence is today more evident than ever. The common problems of our earth - threat against the environment, human beings, violence, inequality - must be solved taking into account cultural diversity. However, the obstacles are numerous and can only be overcome by the encouragement of learning to live together for the common good. The difficult task for education is to put knowledge into a context that affects and is related to our own time and contemporary moral and ethical perspectives.

b. ESD in the Baltic region should be seen as part of the programme on Education for all as agreed on in the World Education Forum in Dakar, Senegal (April 2000). There is thus a need to ensure that education reaches everyone and embraces a deep concern for the fundamental goals and purposes of education, for the relevance of learning contents and process, and for modes of learning that reinforce human values.

c. Higher levels of education and continuous learning, when accessible to all, make an important contribution to reducing inequalities and preventing marginalisation. All actors should be invited to work in partnership to promote the action programme for ESD in the BSR. The efforts made by the Association of European Universities (CRE) as set out in the Magna Charter of European Universities and subsequent university declarations should be endorsed. In the Magna Charter universities are increasingly called upon to play a leading role in developing a multidisciplinary and ethically-oriented form of education in order to devise solutions for the problems linked to sustainable development.

d. The employability and adaptability of citizens is a vital part of the economic aspect of SD. The knowledge-based society, along with wider economic and societal trends such as globalisation, changes in family structures, demographic change, and the impact of information technologies, presents many potential benefits as well as challenges. Today there is a greater need than ever for citizens

to acquire the knowledge and competences necessary to be able to benefit from and meet the challenges of the knowledge-based society.

e. The result of the work within the EU as presented in the document 'Making a European Area of Lifelong Learning a Reality' should be recognized. It also promotes the goals and ambitions of SD in the BSR for people to become more inclusive, tolerant and democratic. Thus lifelong learning is not the same as recurrent education within the formal education system. It has implications not only for education systems, but also for many different sectors of society. This emphasises the importance of adequate levels of open and flexible education and training provision at the local level for bringing organizers of learning and (potential) learners together, as well as the role of local guidance services in mediating this.

f. Considering the evolving nature of SD, lifelong learning and lifewide learning is of great importance. The development of a sustainable society must be seen as a process where the right answers and solutions are constantly changing as our experience increases.

6. Action programme

6.1 Overall nature of the Action Programme

The emphasis of the Baltic 21 Education sector programme is on strengthening the capacity of knowledge building in the region as a solid foundation for the common long-term transition to sustainable development in the BSR. The proposed key action plan aims at filling the gaps that have been identified in the surveys. The focus is on giving strong political signals on the need for ESD as well as support to educational institutions at all levels of policymaking bodies. The aim is to achieve genuine integrative learning with regard to natural sciences, social sciences, economics and culture, based on a democratic approach and using integrative, process-oriented and participatory learning methods. The education sector consists of a broad field of actors with different regulatory management systems in different countries. They are also geared to people of different ages and in different positions in life.

The Baltic 21 Action Programme for the Education sector is divided into a framework of action areas, which are common to the whole sector. Within these areas joint action headings have been created. Each part that is the schools, higher education and non-formal education fields has then to create specific actions (sub-actions) in accordance with their role in the education system.

Effective implementation of the Action Programme will require that its priorities be integrated into the planning processes used by the co-operating countries, regional governments (in Germany Ländern) as well as by local governments, schools, institutions of higher education and associations. They should also be made a key element of the investment and management strategies of the actors involved in education and awareness activities. The diversity contained in the Action programme implies that project financing will need to be addressed on a case-by-case basis. The sector report contains a more

detailed description of how several of the action points may be implemented with proposed time frames and responsible actors.

As indicated in the Haga Declaration in general, financing of the implementation of Baltic 21E should be borne by each respective country using different resources. Financing for some of the actions of other projects developed might be sought through supplementary resources e.g. from programmes of the European Union.

6.2   Joint action areas

6.2.1 Policies and strategies

The creation of knowledge about and awareness of sustainable development should be seen as a lifelong process for individuals and thus cover all levels of education from pre-school to higher education and adult education, awareness-raising measures through actions by non-governmental organizations as well as through continuing education. It is necessary that politicians at all levels in the country give strong and clear political signals in order to achieve broad implementation of the ideas underlying sustainable development in education. All managerial documents whether they are laws, ordinances, national curricula or equivalent documents, core curricula or syllabuses must cover basic elements of ESD being prerequisites for the realization of ESD. There is also a need to invite politicians and civil servants to become actively involved in the development of local supportive structures for teaching in schools. Efforts to incorporate ESD into regular school activities should be encouraged.

The support of school management, educators' knowledge of their subject and the ability to use an interdisciplinary approach and motivate learners' participation in the process are considered to be essential to the quality of education for sustainable development. IHEs should be encouraged to include sustainable development issues in programmes for undergraduates and postgraduates, as well as for professional education and learners in continuing education. Non-governmental organisations should be encouraged to broaden their activities to embrace environmental, economic, social and cultural aspects in an integrated approach.

ACTIONS

6.2.1.1 Each country in the BSR should adopt a framework for ESD in schools and higher education

6.2.1.2 Each country in the BSR should develop guidelines regarding ESD in the field of non-formal education

6.2.1.3 Stimulate the development of co-operation, especially international co-operation, for curricula, program and course development at all levels of education.

6.2.2 Competence development within the education sector

The potential of education in the development of a sustainable Baltic Sea Region is high. Already a number of good initiatives have been taken. However, to exert a significant
5   impact more competence-building efforts are necessary at all levels in the education system, in the formal as well as the non-formal. To begin with, leaders and decision-makers at all levels of education need to increase their knowledge about education for sustainable development in order to provide appropriate guidance and support in development work ahead. Introducing management system for SD at educational
10   institutions has great potential for improving such knowledge. Similarly, providing opportunities for educators to enhance their awareness and knowledge of sustainable development, of sustainability aspects in their subject areas and appropriate teaching methods is a necessary prerequisite for change. With this increased competence, educators can better work with and support learners to take responsibility for their own learning and
15   their acquisition of knowledge, values and skills regarding sustainable development. When learners leave education situations, the aim should be that they have acquired knowledge and tools to act for sustainable development in their personal as well as their professional life. In this context lifelong learning plays an important role.

20   ACTIONS

6.2.2.1 Stimulate competence development for personnel in the educational system, including actions to increase the awareness of SD issues among officials, headmasters/principals and staff
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6.2.2.2 Support co-operation in the BSR between educators, researchers, and practitioners to promote knowledge in SD and skills in ESD

6.2.2.3 Introduce and develop management systems for SD in educational institutions,
30   including schools, and IHEs, as well as non-formal education actors.

6.2.3 Continuing education

35   The development of new knowledge and the need for introducing new skills in order to give more specific substance to the concept of SD will remain a constant need for years to come, as many areas of expertise are constantly developing. Continuing education has a very important role to play in this development. It has two main activity areas: upgrading knowledge and skills, and the provision of new competencies needed in different
40   professions. It is thus essential that continuing education also involves knowledge-building with the aim of i.a. better understanding of relevant sustainability issues, improved skills on sustainable strategies and a sharing of new research and techniques and that this is introduced in all professions, especially those with a role in planning and management. Sectors such as industry, transport, public administrations, and agriculture are all relevant.
45   Enhancement of professionally related skills and knowledge of sustainable development should preferably take place on a continuing basis and consequently should be part of the lifelong learning of individuals. Continuing education is one of the areas, which would benefit from cooperation between the education sector, stakeholders (including learners, employers, professional organizations) and the community. The actions below include

furthering initial vocational training, continuing education/training at all levels where appropriate.

ACTIONS

6.2.3.1 Promote inclusion of sustainability related knowledge and skills in continuing education for professionals

6.2.3.2 Introduce sustainability related knowledge and skills in the fields of planning and management in all parts of society

6.2.3.3 Promote international co-operation to improve and support the implementation of sustainability related professional knowledge and skills in the entire region.

6.2.4 Teaching and learning resources

Learning and teaching sustainable development at all levels will require access to resources. These include basic texts as well as cases studies, good examples of all kinds, media, web-resources etc. The quality of an educational program for sustainability will be critically dependent on the quality of the material. Such material is, however, not available in many fields and considerable efforts should be devoted to developing them. Material can in general be used in the region as a whole and regional cooperation should be promoted.
The actions include joint actions such as the development of a website providing access to information and resources on sustainability, production of school books, films and other teaching materials (a portal for EDU 21). Material for IHEs both for general courses and specialist education in professions of key importance as well as teaching material and material for self studies in non-formal education are needed.

ACTIONS

6.2.4.1 Stimulate the production of printed materials, internet-based material and other ESD materials for schools

6.2.4.2 Stimulate the production of printed materials, films, internet-based material for ESD for higher education and training, as well as methodological, pedagogic and didactic material to support ESD

6.2.4.3 Create an internet portal to give easy access to information and resources on sustainability, production of school books, films and other teaching materials for educators, learners and researchers

6.2.4.4 Support and extend existing BSR regional networks for ESD, especially in the use of common resources wherever possible

6.2.4.5 Promote the possibilities for media in all countries to inform about and debate issues for SD to reach the general public.

6.2.5 Research on and development of education for sustainable development

The Haga Declaration recognizes in particular the need for research on education for sustainable development, which involves education in the formal education system and in higher education, in the training of professionals, in consciousness-raising and knowledge-building of individuals and of the general public. Realization of the goal of a sustainable Baltic Sea Region requires more research and development activities in such areas as e.g. effective learning and teaching approaches for ESD with regard to different levels of education, suitable self-evaluation instruments, formation of attitudes and values, school/institutional development and implementation of ICT to support ESD and the development of a sustainable society. The Haga Declaration also states that all education should rest on broadly based scientific knowledge.

For education to become a part of an agenda of change towards a more sustainable society, education itself must be subject to change. ESD approaches should, like all good learning processes, construct meaning through involvement in participative learning processes and encourage curiosity, creativity and a wish to take responsibility for one's own learning throughout life. ESD approaches must be focused, in an integrated way, on social development, human and natural ecology, equity and practical skills for sustainable living. This includes development of approaches to teaching sustainability aspects as an integral part of academic disciplines and also efforts to increase inter-disciplinarity in higher education. Support for school/institutional development is needed to improve learning and teaching approaches in ESD.

Similarly there is a need for increased co-operation and partnerships between stakeholders in the processes involving these research and development activities, ranging from identifying issues to working with and making new knowledge known and used in the sector. Naturally, the results of research and development efforts should be shared with actors locally, regionally and globally, and incorporated into different parts of the education system.

Of equal importance is experience-based development and development initiated out of a desire for change or improvement in education e.g. introducing systems of working such as ECO schools and the Green School Award. This should naturally be done in co-operation with stakeholders and the results should be dissemination to those concerned.

In addition, more examples of best practise in ESD, as well as education efforts involving the general public need to be identified and analysed to support development.

ACTIONS

6.2.5.1 Initiate and promote research and development on contents and methods for ESD, as well as the dissemination of results of research on issues concerning SD with a priority for research that brings together the different dimensions of SD, as well as focuses on issues of development

6.2.5.2 Encourage international co-operation regarding research and development of ESD and support and initiate networks for experience sharing and joint activities at all levels

5 6.2.5.3 Stimulate and support different approaches in education covering an interdisciplinary approach, ways of including aspects of SD in different subjects, involving education in a local context, as well as collecting and disseminating examples of good practice

10 6.2.5.4.Stimulate the development of management systems for SD in educational institutions, including schools, and institutions of higher education, as well as non-formal education institutions.

6.3 Indicators

15

Efforts on developing indicators for education are under way in many different national bodies and international organizations such as OECD, EU and UNESCO. Indicators for sustainable development within Baltic 21 co-operation are already in use. Such indicators should, of course, be used also in Baltic 21E where relevant. However, in order to identify
20 specific aspects of ESD, there is a need for additional indicators. The Education Sector has proposed indicators with a view to monitoring the agreed goals. Indicators can be formulated in the following areas:

1. Sustainability is included in all policy documents for education at different levels (laws,
25 ordinances, state/federal curricula or equivalent documents, core curricula and syllabi)
2. Learners and teaching personnel possess competence in SD
3. SD aspects are included in initial teacher training and in-service training for educators
4. Research and development activities on ESD are carried out
5. Schools/IHEs/associations interact with society.

30

7. Financing

According to the Haga Declaration, the financing of the implementation of Baltic 21E
35 should, in general, be borne by each respective country. Many of the proposed actions can be incorporated into ongoing development work in the education sector. Some actions would be more easily carried out as region-wide joint projects e.g. production of teaching/learning material or setting up a common Internet portal.

40 However in order to promote and be able to disseminate such work, bilateral and multilateral donors could be addressed to assist countries, especially those with economies in transition (CITs) in the region and in particular request the following EU programmes, PHARE, Instrument for Structural Policies for pre-Accession (ISPA), Special Accession Program for Agriculture and Rural Development (SAPARD), TACIS, SOCRATES and
45 LEONARDO da Vinci, as well as the Nordic Council of Ministers, the Nordic financing institution, e.g. the Nordic Environmental Financing Corporation and the Nordic Environmental Fund, to support actions in the education sector.

To properly judge the significance of costs and revenues for carrying out the proposed action programmes, it is necessary to understand the value of education in introducing sustainable strategies in society. Education should be seen as an investment that will subsequently be paid back in terms of better performance.

In some cases this is very concrete and can easily be evaluated. In industrial production, knowledge and competence in environmental management, a component of sustainable strategies in this sector, produces concrete returns in the form of a reduction in the use of resources and decreased pollution. Typically some 10-30 % of energy and water can be saved, and pollution substantially decreased. The value of this is obviously considerable and far exceeds the investment in education. Also in the building sector, a similar decrease in resource consumption is evident as new strategies are applied.

A similar situation can be seen in agriculture mainly due to the fact that education of farmers is too often inadequate, especially as a result of the restructuring of collective farms and privatisation in several countries in transition. It is obvious that the value of raising the competence of farmers and a consequent increase in the quantity and quality of production would be far greater than the costs of investments in education.

8. Organization of the Implementation of Baltic 21E and its Action Programme

8.1 Actors and responsibilities

8.1.1 Parliament and Governments
The responsibilities on the part of governments for the implementation of Baltic 21E should be in accordance with the provisions of this document. In addition, governments should play a proactive role in their respective countries as regards promoting and facilitating the work of implementing Baltic 21E.

8.1.2 Local educational authorities and boards of IHEs
In the implementation of Baltic 21E, local educational authorities and central IHE levels are encouraged to take on the responsibility for facilitating the Action programme and its monitoring.

8.1.3 Schools and IHEs
Headmasters and department heads of IHEs are assigned the responsibility of actively supporting staff in their work on implementing the action programme.

8.1.4 Non-formal education
Governments should define the areas of the non-formal education field which deserve to be supported and invite the relevant actors and stakeholders to take on the responsibility for implementation and follow-up of the action programme.

8.1.5 Partnership
Sustainable development is a responsibility for all of society, including all responsible actors and stakeholders. They have to be involved and take responsibility for their roles. It is thus recommended that educational

institutions/NGOs seek to co-operate in partnership with their counterparts in the region, as well as other parts of society.

8.2 Steering, co-ordination and follow up

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8.2.1 The political and ministerial level
The Baltic 21 process has its origins in the political commitment made by the countries of the Baltic Sea Region at the meeting of Prime Ministers in Visby in 1996 and the meeting of Ministers of Foreign Affaires in Nyborg in 1998. The Prime Ministers should receive a progress report, covering a review of progress in fulfilling the goals set-up, approximately every 5th year for their consideration and for decisions on any additional action needed. The review should be based on the agreed indicators and follow-up system.

10

15   The initiative to create Baltic 21E was taken by the Ministers of Education in the BSR. Education, Training and Research are important horizontal tools for attaining sustainable development and for the integration of environmental considerations in all sectors. Sustainable development is by its nature cross-sectoral. In order to fulfil the vision of a sustainable Baltic Sea Region, there is a strong need for the full involvement of ministers in relevant sectors.

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The Senior Officials Group (SOG), that steer the work within Baltic 21 cooperation, should include work within the Education sector in their work as stated in the Report Baltic 21 Series No 1/98.

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8.2.2 Co-ordination
It is recommended that the general co-ordination of implementation be assigned to appointed Lead parties.

30   It is recommended that each country nominate one representative as a national co-ordinator to be the contact-persons for the lead parties. These persons should also be responsible for reporting to the lead party representative on proceedings in their country.

35   Additionally, it is recommended that each country nominate one representative in each field of the three working groups to be the responsible co-ordinator in each field of education in the country, as well as for activities in collaboration with other countries in the BSR.

40   8.2.3 Follow-up of implementation
The follow-up of implementation (monitoring) of the Baltic 21E objectives and action programme will require regular reporting from the actors responsible. Criteria and common reporting elements have to be developed and agreed by the SOG preferably before December 1, 2002.

Communiqué of the second Meeting of Ministers of Education in Countries of the Baltic Sea Region, January 24-25, 2002, Haga Palace, Stockholm Sweden

The Ministers for Education from the countries of the Baltic Sea Region, that is Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland, Russia and Sweden, met at Haga Palace in Stockholm on January 24-25, 2002 for their second meeting.

The mission of the meeting was to examine the results of the work done by the Baltic 21 Education Sector network and its three working groups in accordance with the task given at the first ministerial meeting at Haga Palace in March 2000 and to adopt an Agenda 21 for Education for sustainable development in the BSR, Baltic 21E.

1. We have taken note of the Education Sector Report (including its annexes), which we have found most informative and valuable for future steps in developing a sustainable Baltic Sea Region.

2. We have adopted the Agenda 21 for Education in the Baltic Sea Region (Baltic 21E)

3. We endorse the major commitments, goals and the action programme in Baltic 21E and resolve to ensure an efficient implementation of Baltic 21E thereby expressing our determination to:
   - Pursue the overall goal for education for sustainable development (ESD) and the specific goals for ESD in formal education, higher education and non-formal education
   - Ensure that the implementation concentrates on gaps and areas not sufficiently dealt with elsewhere
   - Give responsibilities to the various stakeholders to implement the Action Programme and to monitor that appropriate resources are available with a view to facilitating the implementation and to encourage to seek financing for some of the actions from supplementary sources
   - Ensure necessary translation into respective languages the Baltic 21E
   - Follow up of the progress in moving towards the goals of ESD.

4. We request that the Senior Officials Group (SOG) continue its work of co-ordinating and monitoring the implementation process. We also endorse Lithuania and Sweden the commitment to act as lead parties for the sector. We undertake to report to the lead parties by 31 March 2002 of nominated national co-ordinators.

5. We request that SOG pay proper regard to Baltic 21E in its regular reporting to appropriate bodies of Baltic Sea co-operation, including Ministerial Sessions of the Council of the Baltic Sea States (CBSS) and Baltic Sea States Summits.

In particular we find it important that the implementation of the Baltic 21E should be examined by regional meetings of Ministers of Education and of Ministers of Environment.

Haga Palace, 24 January 2002

Ministers:

Henrik Nepper-Christensen, Permanent Secretary,	Denmark
Imbi Henno, Chief Expert,	Estonia
Maija Rask, Minister of Education,	Finland
Ralf Stegner, Secretary of State of the Ministry of Education, Science, Research and Culture in Schleswig-Holstein,	Germany
Svavar Gestsson, Ambassador,	Iceland
Valdis Egle, Deputy State Secretary,	Latvia
Rimantas Vaitkus, Vice-minister of Education and Science,	Lithuania
Kristin Clemet, Minister of Education,	Norway
Tadeusz Slawecki, Undersecretary of State,	Poland
Nikita Bantsekin, Deputy Minister of Education,	Russian Federation
Thomas Östros, Minister of Education and Science,	Sweden
Ingegerd Wärnersson, Minister for Schools and Adult Education,	Sweden