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**The role of education for sustainable development in shifting
to a green economy**

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Greening the economy: mainstreaming the environment into economic development

The role of education for sustainable development in shifting to a green economy

Note by the secretariat

I. Introduction

1. The economic paradigm of greening the economy, against the background of multiple crises and accelerating resource scarcity, has gained paramount prominence in regional and international sustainable development processes. In 2009 the United Nations General Assembly, by its resolution A/64/236, decided to convene a United Nations Conference on Sustainable Development in 2012 and agreed that one of the main themes would be: “A green economy in the context of sustainable development and poverty eradication and the institutional framework for sustainable development”.

2. On the regional level, the UNECE Committee on Environmental Policy at its sixteenth session decided that “greening the economy: mainstreaming the environment into economic development” as well as “sustainable management of water and water-related ecosystems” would be a main theme at the Seventh “Environment for Europe” Ministerial Conference in Astana.

3. Phase III of the UNECE Strategy for ESD strives to closely link the regional ESD process to other major sustainable development processes in order to facilitate the creation of synergies. By doing so, it aims to effectively promote sustainable development. In order to discuss the potential role of ESD for greening the economy, the Bureau of the UNECE Steering Committee for ESD agreed to organize a panel discussion during the sixth meeting of the Committee, which took place from 7 – 8 April 2011.

4. This paper was originally prepared to facilitate the panel discussion. In its revised form, the paper also includes the core insights of the discussions held at the 6th Steering Committee meeting. It shows how ESD and green economy are really two sides of the same coin: prominent green economy concepts focus mainly on top-down policies while ESD can contribute significantly to greening the economy from the bottom up because it has the ability to equip people with the values, competences, knowledge and skills that are necessary for them to put the green economy concept into practice.

II. Green economy — background

5. The initial concept of a green economy was published in 1989.¹ It built upon the work of the Brundtland Commission, which had been established by the United Nations General Assembly to investigate the relationship between environment and development. In recent years, the green economy concept resurfaced and gained prominence in the context of the financial crisis and the interlinked energy as well as food crises.

6. While the importance of promoting a green economy is widely supported regionally and globally, there is no universal agreement on the definition of what a green economy

¹ Pearce et al., *Blueprint for a Green Economy* (London, Earthscan Publications, 1989).

entails.² The working definition of UNEP describes a “green economy as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities... [A] green economy can be thought of as one ... [whose] growth in income and employment should be driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services.”³ A similar, but broader definition is provided by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), which states that a “green economy can be defined as an economy where economic prosperity can go hand-in-hand with ecological sustainability”.⁴

7. Among countries and major organizations a variety of views persists concerning the policies and sectors that should be at the centre of greening the economy. However, there seems to be consensus that a fiscal policy that supports greening the economy and efforts to improve resource efficiency should be core elements of the transition process. In addition, there appears to be wide agreement that greening the economy needs to be adapted to regional and national needs.⁵

8. At the regional level, the relevant substantive document for the Seventh “Environment for Europe” Ministerial Conference states that, in order to achieve a green, inclusive and competitive economy in the UNECE region, a comprehensive policy mix will be needed. The policy mix should follow an integrated approach, including major economic sectors such as transport, housing, energy and agriculture and also the promotion of education as a cross-cutting issue.⁶

9. The current green economy process largely focuses on the analysis of core economic sectors and the design of supportive fiscal and legal policies for greening those sectors. However, in addition, a number of challenges for education are identified in mastering the transition to a green economy. Predominantly, the need for green skills and for raising awareness is pointed out. Moreover the promotion of public participation and of sustainable consumption is spotlighted.⁷ While those themes are also at the core of ESD, the discussion and work on green economy mostly refers to education in general and not to ESD in particular. The following chapter will discuss how ESD can be an effective instrument for mastering those challenges.

III. Education for sustainable development — a building block for the green economy

10. ESD is embedded in the main principles that inform the concept of sustainable development: it engages with the three interlinked pillars of economy, environment, society and environment and moreover with the relation between the local and the global. It

² See, e.g., the first intersessional meeting for the United Nations Conference on Sustainable Development (10–11 January), Synthesis report on best practices and lessons learned on the objective and themes of the Conference (A/CONF.216/PC/3) (advance version available from <http://www.uncsd2012.org/files/intersessional/Synthesis-Report-Final.pdf>).

³ UNEP, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication — A Synthesis for Policy Makers* (France, 2011), p. 1. Available from http://www.unep.org/greeneconomy/Portals/88/documents/ger/GER_synthesis_en.pdf.

⁴ ESCAP, *Conceptual Framework of Green Economy and Green Growth*, (2011), p.1. Available from http://www.greengrowth.org/capacity_building/National-Seminar/2011/Thailand/Documents/GENERAL/GG-CONCEPT.pdf.

⁵ See synthesis report on best practices, first intersessional meeting for the United Nations Conference on Sustainable Development.

⁶ See UNECE, *Mainstreaming the Environment into Economic Development* (forthcoming in 2011).

⁷ See UNEP, *Towards a Green Economy*.

ultimately aims to foster sustainable development.⁸ The concepts of green economy and ESD are therefore rooted in the same school of thought and serve the same goal; however, while they are conceptualized as different approaches for achieving sustainability, they are inherently interlinked.

11. ESD is not the silver bullet for greening the economy, but it is one key element for achieving this transition since it promotes the necessary educational foundations in society. Most importantly, it is able to change people's mind towards valuing sustainability. This is the key pillar for implementing the green economy concept, since key issues for the transition to a green economy — i.e., raised awareness, public participation and sustainable consumption, as well as reskilling the labour force — are essentially connected to a shift in peoples' attitudes towards sustainable development.

A. Sustainable thinking

12. The Green Economy Report,⁹ a comprehensive study written as part of the UNEP Green Economy Initiative, analyses the main economic sectors for greening the economy and defines necessary investments and policies. This report spotlights that a shift in economic thinking is of utmost importance. Greening economic thinking entails a socio-political consensus about the importance of a sustainable use of natural, human and economic capital. The mindset of actors shaping the economy will be one important factor when it comes to making investment, consumption and production decisions and moreover will be necessary to ensure societal support for the necessary economic restructuring, which temporarily is likely to bring hardship to vulnerable groups.¹⁰

13. A prerequisite for achieving a shift in economic thinking is learning about and understanding the concept of sustainable development, as well as the link between the multiple global crises and unsustainable economic activities. It might entail a reorientation of values and attitudes and has to encompass a broad variety of actors, ranging from the individual consumer, to policymakers and multinational corporations.

14. In order to prompt and facilitate the rethinking process, neither financial incentives, nor regulations, nor the pure transmission of knowledge about sustainable development will be sufficient. For this reason the concept of ESD is a unique and valuable approach to greening the economy, since it is designed in a way to facilitate the development of values and to initiate the reconsideration of existing values and attitudes.

15. However, while the ESD concept addresses explicitly all three pillars of sustainable development, the practical implementation of ESD in the UNECE region is still very much focused on the environmental pillar. In 2007, the national implementation reporting under the umbrella of the UNECE Strategy for ESD revealed that it is mostly the environmental component of ESD that is addressed in the region. Most sustainable development conceptualizations are of an ecological and environmental nature.¹¹ The second national implementation reporting, conducted in 2010, showed that the environmental component of sustainable development still largely prevails. As in phase I of the implementation of the Strategy, the least attention is given to the economic component of sustainable development; in particular, little attention is given to the issues of corporate social responsibility and rural/ urban development. If these themes are addressed at all they only find a place in the higher ISCED¹² levels.

⁸ See UNESCO, *Framework for the UN DESD International Implementation Scheme* (ED/DESD/2006/PI/1).

⁹ UNEP, *Towards a Green Economy*.

¹⁰ See *ibid.*

¹¹ Cf. UNECE, *Learning from each other*, (Geneva, 2007).

¹² ISCED stands for International Standard Classification of Education as designed by UNESCO.

16. While ESD is conceptually well equipped to shift people's mindsets towards a greener economic thinking, there is the challenge and opportunity to further explore this area of ESD in the UNECE region in practice. The green economy process could be a chance to advance a holistic implementation of ESD, and embracing the economic component of ESD might prove to be necessary to foster the transition to a green economy in the region.

17. An important step towards addressing the economic component of ESD has been by the collection of good practices on sustainable consumption and production, including sustainable transportation, through ESD in the context of climate change, pursuant to a decision of the Steering Committee.

B. Sustainable consumption and production

18. Sustainable consumption and production have continuously been important goals of the sustainable development process since the United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. Agenda 21 features a chapter on "changing consumption patterns" and calls for "new concepts of wealth and prosperity which allow higher standards of living through changed lifestyles that are less dependent on the Earth's finite resources".¹³ At the World Summit on Sustainable Development in Johannesburg in 2002 an agreement was reached to develop a 10-year framework in support of "regional and national initiatives to accelerate the shift towards sustainable consumption and production to promote social and economic development within the carrying capacity of ecosystems by addressing and, where appropriate, delinking economic growth and environmental degradation through improving efficiency and sustainability in the use of resources and production processes and reducing resource degradation, pollution and waste".¹⁴

19. Since 2003, the Marrakech Process supports the development and drafting of the African 10-Year Framework Programme on Sustainable Consumption and Production (10-YFP). On a global level, Governments agreed at the eighteenth session of the United Nations Commission on Sustainable Development (CSD) that sustainable consumption and production can be an important building block for mastering the transition to a green economy. At the core of this understanding is that demand in sustainable products can drive the growth of markets for sustainable products and subsequently has the potential to drive the greening of the economy. In 2011, at CSD-19, Governments considered the progress achieved by the Marrakech Process as well as the content of the 10-YFP.¹⁵ As UN Secretary-General Ban Ki-Moon pointed out at CSD-19 "without changing consumption production patterns - from squandering natural resources to the excessive life-styles of the rich - there can be no meaningful realization of the 'green economy' concept."¹⁶

20. So far, the work on greening the economy mostly singles out sustainable public procurement, as well as the establishment of financial incentives (i.e., taxes and charges), as means to promote sustainable consumption.¹⁷ For instance, the UNEP Green Economy Report highlights that in the transport sector investment in sustainable transport, as well as

¹³ UNCED (1992), *Agenda 21*. Available from <http://www.un.org/esa/dsd/agenda21/>.

¹⁴ Report of the World Summit on Sustainable Development, Johannesburg, South Africa, 26 August–4 September 2002 (United Nations publication, Sales No. E.03.II.A.1 and corrigendum), chap. I, resolution 2, annex, p.7. Available from http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/WSSD_PlanImpl.pdf.

¹⁵ See United Nations Department for Economic and Social Affairs and UNEP, "Proposed Input to CSD 18 and 19 on a 10 Year Framework of Programmes on Sustainable Consumption and Production", Third Public Draft (2 September 2009). Available from http://esa.un.org/marrakechprocess/pdf/Draft3_10yfpniputtoCSD2Sep09.pdf.

¹⁶ See IISD, summary of the nineteenth session of the Commission on Sustainable Development. Available from <http://www.iisd.ca/vol05/enb05304e.html>.

¹⁷ See UNEP, *Towards a Green Economy*.

charges and taxes, can strongly contribute to shifting people's behaviours towards more sustainable patterns. Influencing consumption patterns by setting economic incentives and regulations is in general one important aspect in green economy conceptualizations.

21. While those measures are important governance instruments for changing consumption and production patterns, decisions on how to consume and produce are of a multilayered nature. For example, the good practice collection of the UNECE Steering Committee for ESD and other stakeholders in the region has shown that the decision to use a private car and not public transportation may depend on a broad range of factors, including cost and accessibility of public transport means; lifestyle; health; and convenience issues.¹⁸ Due to the breadth of motivations behind consumer decisions, a multidimensional approach to drive sustainable consumption is needed.

22. ESD can make a crucial contribution to changing people's consumption patterns by providing knowledge, skills and the ability to make informed choices. ESD recognizes the potential of a reorientation of values and attitudes to unlock wide behavioural change in society and meets the need to promote sustainable thinking. It moreover can strengthen a sense of ownership of the sustainable development process for all those who have to contribute to it: citizens, decision makers at all levels and civil society. ESD in formal, non-formal and informal learning processes can therefore function as a key driver for change at national, regional and international levels.

23. The potential for supporting the transition to a green economy through awareness-raising and public participation has been recognized also within central policy papers on green economy.¹⁹ The synergies between ESD and green economy could be further strengthened by building on the work of the UNECE Strategy, i.e., the comprehensive analysis of a wide range of good sustainable consumption practices within the UNECE region. The ESD process could continue addressing sustainable consumption, for instance, against the background of the financial, energy and food crises. It could also convey an understanding of what greening the economy means, and what role consumers could play in it. Moreover, the visibility of the important role of ESD in changing consumption and production patterns could be promoted in the 10-YFP, as well as in the green economy processes.

C. Green skills

24. The growing demand for green skills throughout most economic sectors is prevalent in debates on how to achieve the transition to a green economy. In 2010, the UNEP Report on Skills for Green Jobs concluded that every job is going to have to contribute to making the economy more sustainable. The most important challenge will be to improve existing skills and to introduce sustainable development concerns in existing fields of training and learning. While new green sectors will require new skills, it is existing skills that will have to be improved in most sectors. Moreover, concerns of sustainable development will have to be introduced at all levels.²⁰

25. A failure in providing green skills would crucially slow down the transition process to a greener economy. The challenge of meeting this demand will have to be met through education. The task of reskilling and improving skills of the entire work force will require a multitude of stakeholders to engage in educational efforts. While there will be a need for Governments to play a big role in facilitating the provision of green skills, a joint effort by

¹⁸ See UNECE, *Addressing Sustainable Consumption, production and transportation through education for sustainable development: analysis of good practices* (ECE/AC.25/2009/4). Available from <http://www.unece.org/env/esd/SC.Meet.htm>.

¹⁹ See UNEP, *Towards a Green Economy*.

²⁰ See UNEP, *Green Jobs: towards decent work in a sustainable, low carbon world*, (2008). Available from http://www.unep.org/labour_environment/PDFs/Greenjobs/UNEP-Green-Jobs-Towards-Sustainable-Summary.pdf

employers and vocational as well as tertiary education intuitions will be necessary to tackle this challenge.²¹

26. ESD is uniquely fit to contribute to the reskilling process because it lays out a carefully designed concept towards providing skills which will be necessary for mastering the transition to a green economy. At the global level, the Framework for the United Nations DESD International Implementation Scheme²² identified the provision of training as one of four major thrusts of ESD.

27. At the regional level, the UNECE Strategy on ESD states that “professional skills and knowledge of sustainable development should be improved continuously and, consequently, be part of the lifelong learning of individuals including those in sectors such as public administration, the private sector, industry, transport and agriculture. The development of new knowledge and the need to introduce new skills in order to give more specific substance to the concept of SD will remain a constant need, as many areas of expertise are constantly developing.”²³

28. A key activity for implementing this goal and for contributing to the transition to a green economy is the provision of specialized training. Only sector-specific green skills will enable the workforce to change to sustainable work patterns. (Re)training of the workforce, for example, in the sustainable use of energy and water, as well as improved waste management, is already resulting in huge financial, environmental and social benefits.²⁴

IV. Outcomes of the panel discussion on the role of ESD in greening the economy at the 6th Steering Committee meeting

29. At the Committee meeting, members and observers considered and discussed a wide range of possible linkages and relationships between ESD and greening the economy. The following core considerations were raised:

(a) In order to shift to a green society and transform people’s thinking towards these societies, “culture” — in the sense of how people relate to each other, the way they interact and perceive things — would be a key element;

(b) Besides promoting a rethinking process based on changed values, self-interest should also be strengthened as a motivation, by making people act sustainably through, for instance, regulation and financial incentives;

(c) There was a need to rethink the measurement of wealth, for a new measurement system/instrument that considered wealth together with economic growth, which would consider in its valuation the quality of life in terms of the quality of services available, the quality of the environment and the quality of the urban environment. There was also discussion regarding how far ESD should go in questioning the currently predominant economic models;

(d) There was a need to exchange experiences on realizing and extending university programmes in the field of renewable energy and energy efficiency, which were issues of particular importance in the UNECE region;

²¹ See UNEP, *Green Economy, Making it work*, (2010). http://www.unep.org/pdf/OP_Feb/EN/OP-2010-02-EN-FULLVERSION.pdf

²² See UNESCO, Framework for the UN DESD International Implementation Scheme.

²³ UNECE, *The United Nations Economic Commission for Europe Strategy for Education for Sustainable Development*, (2005). Available from <http://www.unece.org/env/esd/Strategy&Framework.htm>

²⁴ See UNESCO, Framework for the UN DESD International Implementation Scheme.

(e) There was a need for core skills to be taught to children, including also environmental awareness, which needed to be introduced at the beginning of the education system in order to facilitate the smooth transition to a green economy;

(f) The concern was raised that there is the danger of ESD becoming fragmented. If ESD was to have a transformative role, it had to teach systemic thinking. It was pointed out that at the moment a more fragmentary teaching approach was developing, e.g., natural disaster teaching, climate teaching, etc. As a result, the holistic approach was weakened. Focusing ESD solely on greening the economy might therefore also endanger its transformative potential. A green economy needed to be addressed through the overarching concept of sustainable development and thereby would also have to be seen through a social lens;

(g) Concerns about whether a green economy would also lead to a social economy were linked to the importance of connecting citizens with the economy. It was highlighted that the participation of citizens was very important during the process of deeply changing society. ESD could play a role in connecting citizens to the economy.
