

**e-Forum virtual conference**

## **Greening TVET for Sustainable Development**

***Organized by the  
UNESCO-UNEVOC International Centre for Technical and  
Vocational Education and Training***

***22 October to 2 November 2012***

***Moderator: Kai Gleißner M.A.***

### **Background Note**

#### **Programme Outline**

##### ***Aims and Objectives***

A green economy, green technologies, green TVET and green jobs – green ideas seem to have an important effect on different political, social and ecological processes. In recent years ‘sustainable development’ has been discussed as a concept for a future development in different ways and more and more people recognize that we need to ensure that future generations are left no worse off than current generations.

In the context of the changing nature of industry and work, the pressures of global financial crisis and the limitations and opportunities posed by climate change and other environmental imperatives major impacts are visible for business, industry and society as a whole. It is clear that there is a need to integrate the idea of sustainable development into working processes and education concepts. At the same time, many new industries and employment opportunities are emerging, including in ecotourism, environmental monitoring, sustainable community development, eco-design, recycling, alternative energy sources, land rehabilitation, pollution control, waste water treatment and reuse. All these emerging areas of work require skilled workers who have knowledge of sustainable development as well as technical knowledge and understanding of new working processes. There is a need for TVET programmes to recognize these developments.

In the field of vocational education it means that TVET for sustainable development has to contribute to developing, strengthening and disseminating ways of sustainable thinking and acting (cf. Diepenbrock, 2005, p. 96). Workers should be able to use their knowledge and their qualifications to identify social, economic and ecological challenges of modern society and to develop ideas and strategies for suitable solutions. Thus, it is important that TVET does not only impart technical and specialized knowledge but also develops conceptual and systemic thinking and acting (cf. de Haan, 2003 / Hahne, 2008, p. 62).

In addition TVET stakeholders need to assess which new working fields will emerge following the development of technologies. On this basis, TVET stakeholders need to develop new “Green Job concepts” which include the idea of sustainable development and also integrate new working fields and concepts into the TVET processes.

This significant and needed process of greening TVET shall be the topic of this e-Forum-virtual conference.

The programme will:

- Review current trends and international discourse for greening TVET and sustainable development;
- Comprehend country perspectives of good practices in reorienting towards greening TVET in support of Education for Sustainable Development (ESD);
- Discuss different ways of identifying working fields of green jobs;
- Review and discuss concepts for integration of greening issues into the TVET/education curriculum;
- Assimilate innovative and applied education concepts for TVET;
- Discuss the role of TVET teachers in advocating for working fields of greening TVET;
- Formulate directives and strategies for building capacity in reorienting towards Greening TVET in pursuit of ESD.

This discussion is expected to explore approaches and practices in greening TVET and to formulate facts and figures about the relevance of the development an idea and concept of Greening TVET. Relevant approaches and conceptual ideas of greening TVET shall be identified. It is intended to foster the discussion between experts in different parts of the world and to build a basis of possible South-South and North-South cooperation in the field of training programs and projects. Following the discussion UNESCO-UNEVOC will publish a report on the key issues, concerns and prospects concerning greening TVET.

### ***Central questions of the discussion***

- What is meant by sustainable development and greening TVET?
- What are the working fields of green jobs? How can we identify these working fields? What are green occupations?
- How can we “green” TVET? How can the greening TVET concept be integrated into the education curriculum and what are the working fields of greening TVET?
- What is the role of the teachers to integrate the greening TVET concept in their teaching and the curriculum?

### ***Expected Outcomes***

- Assimilated innovative approaches in TVET as to changing the nature of occupations;
- A set of leading practice distilled from the analysis of shared experiences;
- A set of key areas that may require greater emphasis in the development of greening TVET;
- Developed evidence-based information and recommendations for effective use at the country level;
- Increased awareness of the concept of greening TVET to support the enrichment of economy, social and environmental sustainability.

### ***Structure of the program / methodical approach***

In an introductory phase we will aim to build a common understanding of sustainable development and greening TVET. All participants are requested to give their inputs.

In the second phase we shall identify several sub-discussions and discuss the central questions. On this basis we will be able to develop some ideas of identify green jobs and green working fields and to discuss how existing occupations can be transformed to become greener, what kind of TVET concepts are needed and how they can be integrated into TVET. Here the members will be asked to share their practices/case studies/innovations they introduced/know about.

In a last phase it is planned to summarize the main ideas in a final discussion and to develop some main working tasks and basic information for TVET trainers and experts.

## References

- Skills for Green Jobs – A Global View Synthesis Bericht, basierend auf Analyse von 21 Länder-Analysen; 2011, [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_159585.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_159585.pdf)
- Greening the Global Economy – The Skills Challenge Policy Brief, 2011, [http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms\\_159585.pdf](http://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_159585.pdf)
- Comparative Analysis of Methods of Analysis of Skill Needs on the Labour Market in Transition to the Low Carbon Economy; 2011, [http://www.ilo.org/wcmsp5/groups/public/@ed\\_emp/@ifp\\_skills/documents/publication/wcms\\_166824.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/publication/wcms_166824.pdf)
- Skills and Occupational Needs in Green Building- Final Report (ILO – EU), [http://www.ilo.org/wcmsp5/groups/public/@ed\\_emp/@ifp\\_skills/documents/publication/wcms\\_166822.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/publication/wcms_166822.pdf)
- Anticipating skill needs for the low carbon economy? Difficult, but not impossible, Research brief (ILO – EU), 2011, [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---ifp\\_skills/documents/publication/wcms\\_168352.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_168352.pdf)
- Investment in renewable energy generates jobs. Supply of skilled workforce needs to catch up, Research brief (ILO – EU), 2011, [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---ifp\\_skills/documents/publication/wcms\\_168354.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_168354.pdf)
- Greening of the building sector is held back by skills shortages. Skills-led strategies can drive green building forward, Research brief (ILO – EU), 2011, [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---ifp\\_skills/documents/publication/wcms\\_168353.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_168353.pdf)
- Skills for Green Jobs: European Synthesis Report (ILO ( CEDEFOP); 2010, [http://www.ilo.org/wcmsp5/groups/public/---ed\\_emp/---ifp\\_skills/documents/publication/wcms\\_143855.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_143855.pdf)
- Green jobs and skills: the local labour market implications of addressing climate change, OECD Working Paper, 2010, <http://www.oecd.org/regional/leedprogrammlocaleconomicandemploymentdevelopment/44683169.pdf>
- OECD Green Growth Strategy: Green Jobs; 2010, [http://www.biac.org/statements/greengrowth/FIN\\_10-03\\_green\\_jobs.pdf](http://www.biac.org/statements/greengrowth/FIN_10-03_green_jobs.pdf)

- The jobs potential of a shift towards a low-carbon economy, Final Report of the OECD für die EU-Kommission 2012, <http://www.oecd.org/els/employmentpoliciesanddata/50503551.pdf>
- Enabling Local Green Growth; Addressing Climate Change Effects on Employment and Local Development, OECD Working Paper, 2012-09-24
- 'Green' Growth, 'Green' Jobs and Labor Markets , World Bank, Policy Research, Working Paper 2012, [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/03/07/000158349\\_20120307084323/Rendered/PDF/WPS5990.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/03/07/000158349_20120307084323/Rendered/PDF/WPS5990.pdf)