First BIBB Global Partners Meeting

The role of UNEVOC Network in Advancing Greening TVET Agenda

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Promoting learning for the world of work

Worldwide Network of TVET Institutions

Over 200 UNEVOC Centres in 168 UNESCO Member States
Time is Changing: TVET at Centre Stage

- Educational Imperative
- Social Imperative
- Technological Imperative
- Economic Imperative

TVET
TVET and ESD become High Priority within UNESCO

Core Area 3
- Acting as a clearinghouse and informing the global debate.

Core Area 2
- Conceptual clarification and monitoring of skills;

Core Area 1
- Provision of upstream policy advice & related capacity development;

3rd International TVET Congress
- Transform TVET first, then scale up.
Transforming TVET
Current Production and Consumption System is Unsustainable

We simply can not grow like this and clean up later

TVET for Sustainable Development, Employability & Citizenship

- Greening TVET is crucial for making transition from emission intensive to cleaner production and services

Factory operation in an industrial city
(Pollution source: mining, processing | Source: www.time.com (2007))
There is no S. D. without Education

“The crisis can not be solved by the same kind of EDUCATION that helped in creating the problem”.

We need a change in the way people think and act
However, the DESD campaign penetrated media faster than in education sector/schools (that are notoriously slow to incorporate scientific, social and environmental problems into mainstream curriculum and pedagogy).

Key Global Human Resource Challenges in Greening Transition

Changes in existing occupations outnumbered new ones

<table>
<thead>
<tr>
<th>Degree of Skills Change in Occupational Profile</th>
<th>High</th>
<th>Low</th>
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<tbody>
<tr>
<td>New and Emerging Jobs</td>
<td>Solar, Wind, Geothermal, Hydro-electric</td>
<td></td>
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<td>2006: 2 million</td>
<td>2030: 20 million</td>
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<tr>
<td>Existing Jobs</td>
<td>(electrician, plumber, auto technician, aircon technician, etc.)</td>
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Key Message: Shortage of skill manpower is severe in greening industry (UNEP) (Even in USA & Germany)
How UNEVOC is shaping the Greening TVET Agenda since 2004

1st Bonn Declaration (2004)
“If education is the KEY to any successful development strategy, TVET is the MASTER KEY that can alleviate poverty, improve the quality of life for all and help achieve sustainable development.”

ESD: Advocacy, Networking, and Knowledge Sharing

2nd Bonn Declaration (2009) [Mid-Term Review]
Call for Action at Policy Level
• Promote ESD to all of Education: Formal & Non Formal
• Reorient Education & Training to address SD through coherent policies

Call for Action at Practice level
• Integrate ESD in curriculum and teacher education
• Develop mechanism to transform institution towards greening

Follow up: International Experts Meeting: 2011
• Transforming TVET institutions (Whole Institutional Approach)
• Greening TVET framework and Interagency initiative
What extent of re-thinking and actions are needed at:

- Institutional Level?
- National Level?
- International Level?
- Industry Level
Three-Level Approach plus one

**Institutional Level**
- Transforming institution into greening TVET
- Education & Training for SD framework
- Capacity development

**National Level**
- Coherent and Coordinated Policies for green growth
- Integration of Greening TVET
- Enhancing the profile of TVET

**Global Level**
- Sharing evidence based policy & practices
- Facilitating multi-directional dialogue
- Forging new partnerships towards supporting capacity building and research

**+Industry**
- Integrating S.D components in all occupations
- Training for greening workplace practices and processes
- Sectorial greening skills development strategies
Transforming institutions for greening TVET
Transforming TVET: A Whole Institute Approach

**Institutional Level**

- **Green Campus**
  - Managing Campus
    - Resource Mngt
    - Technology deployment
    - Monitoring

- **Green Curriculum**
  - Promoting SD
    - Cleaner technology
    - Defining learning outcome
    - Integrating ESD
    - Teacher PD

- **Green Community**
  - Adapting Community
    - Capacity Building
    - Renewable Tech
    - Resource Support
    - Unique Practices

- **Green Research**
  - Fostering Research
    - Renewable Energy
    - Water Treatment
    - Green Innovations
    - Waste Recycling

- **Green Culture**
  - Promoting Culture
    - Green Values
    - Green Attitude
    - Green Ethics
    - Green Practices
Recent UNEVOC Network Initiatives

• Promising practices
• e-Forum discussion
• Greening TVET framework
• KM and capacity building
Greening Skills Development is a Global Challenge Requires Global Response

Main Objectives of IWG

- Awareness raising and advocacy
- Information and knowledge sharing
- Development of knowledge and learning resources
- Capacity building and skill development
Key concerns

C0: Incorporating greening skills strategies in national greening policy

C1: Cascading greening TVET policy into practice

C2: Capacity development at all levels

C3: Strengthening SD principles in occupations: Training & Retraining

C4: Multi Stake holder partnership at all levels

C5: Knowledge sharing and clearing house functions

C6: Curriculum and teacher development

C7: Integrating generic and higher order thinking skills
Thank you!!!

Without Education, there can be NO Sustainable Development
Innovations and skills requirement

Dematerializing products
Developing new products that require less materials and energy over their lifecycle

Increasing process efficiency
Developing new products that require less materials and energy over their lifecycle

Minimizing process emissions
Adopting clean technologies to minimize the generation of non-energy greenhouse gases

Switching to low-carbon inputs
Using renewable and low-carbon sources of energy and materials

Closing the carbon loop
Recovering organic wastes for reuse as feedstock for energy and materials