PUBLISH

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Date and place: Hoa Binh, Viet Nam - 2018
Programme “Reform of TVET in Viet Nam”

Workshop Document

WORKSHOP ON DEVELOPMENT OF “ACTION PLAN FOR GREENING TVET IN VIET NAM”

Hoa Binh, 03-04.06.2018
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<td>Nationaler Aktionsplan Bildung für nachhaltige Entwicklung. Kapitel „Berufliche Bildung“ (Kurzfassung)</td>
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## WORKSHOP PROGRAMME

### Training Workshop on Development of a DVET “Action Plan on Greening TVET”

**Date:** July 3rd & 4th, 2018  
**Participants:** Representatives of DVET, TVET institutes and business sector  
**Venue:** Serena Resort, Hoa Binh province  
**Expected results:**

After completion of the workshop, the participants will have:

- An overview of the results of DVET’s previous Greening TVET workshops and are familiar with the recommendations for DVET and for TVET institutes developed during these workshops;
- Prioritized the recommendations for DVET and for TVET institutes, derive specific activities which are to be implemented by DVET during the next 5 years;
- Structured these activities in a 5 years action plan for greening TVET to be implemented by DVET.

### July 3rd, 2018

<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
<th>By</th>
</tr>
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<tbody>
<tr>
<td>8:00-8:30</td>
<td>Registration</td>
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<tr>
<td>8:30-8:35</td>
<td>Welcome and overview of the workshop's objectives and content</td>
<td>Mr. Tran Quoc Huy - Head of DVET Office</td>
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<tr>
<td>8:35-8:45</td>
<td>Statement of a leader of DVET</td>
<td>A leader of DVET</td>
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<tr>
<td>8:45-8:55</td>
<td>Statement of a leader of GIZ-TVET Programme</td>
<td>Ms. Britta van Erckelens-Deputy Director Programme Reform of TVET in Vietnam</td>
</tr>
<tr>
<td>8:55-9:15</td>
<td>Input presentation-Overview of DVET perspectives, policies and activities regarding greening TVET</td>
<td>Dr. Vu Xuan Hung - Director of Department of Formal Training-DVET</td>
</tr>
<tr>
<td>9:15-9:30</td>
<td>Business sector’s expectations regarding the Action Plan on Greening TVET in Viet Nam</td>
<td>To be confirmed</td>
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**Recap: Results of DVET’s previous Greening TVET workshops (October 2017)**
## WORKSHOP PROGRAMME

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
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</table>
| 9:30-10:30 | **Input presentation**<br>- Requirements of a green economy for TVET<br>- Activities to implement the Viet Nam Green Growth Strategy / Green Growth Action Plan<br>- Development of a "module on environmental protection, energy and resource efficiency"
- Options to integrate green requirements in occupational skills standards and training programs<br>- The role of the business sector in greening TVET<br>- Greening TVET institutes<br>- Recommendations for DVET and TVET institutes to promote greening TVET<br>Plenary discussion on the workshop’s results | Dr. Klaus-D. Mertineit-International Expert of GIZ |
| 10:30-10:45| **Tea Break**                                                            |                                                                          |
| 10:45-12:15| **Action Plan on Greening TVET – the global perspective**<br>- Input presentation<br>- Greening TVET in UNESCO’s Global Action Programme on Education for ESD<br>- Greening TVET in the German National Action Plan on ESD<br>Plenary discussion on relevant issues to be considered in the “Action Plan on Greening TVET in Viet Nam” | Dr. Klaus-D. Mertineit-International Expert of GIZ |
| 12:15-13:45| **Lunch Break**                                                          |                                                                          |
| 13:45-14:00| **Development of an “Action Plan on Greening TVET in Viet Nam”**<br>- Introduction of procedure and structure | Dr. Klaus-D. Mertineit-International Expert of GIZ |
| 14:00-15:15| **Group work and plenary discussion on definition of a general goal on Greening TVET in Viet Nam** | Dr. Klaus-D. Mertineit-International Expert of GIZ |
| 15:15-15:30| **Tea Break**                                                            |                                                                          |
| 15:15-16:15| **Group work and plenary discussion on definition and prioritization of relevant action areas<br>- Main challenges to be considered** | Dr. Klaus-D. Mertineit-International Expert of GIZ |
| 16:15-16:30| **Summary of results and outlook on the 2nd workshop day**               | Dr. Klaus-D. Mertineit-International Expert of GIZ |

**July 4th, 2018**
<table>
<thead>
<tr>
<th>Date</th>
<th>Content</th>
<th>By</th>
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<tbody>
<tr>
<td>8:30-10:00</td>
<td><strong>Development of an “Action Plan on Greening TVET in Viet Nam” (continuation)</strong></td>
<td>Dr. Klaus-D. Mertineit-International Expert of GIZ</td>
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<tr>
<td></td>
<td>Group work and plenary discussion on definition and prioritization of relevant action areas</td>
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<tr>
<td></td>
<td>• Regulations, stakeholder statements, practices, materials etc. to be considered</td>
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<tr>
<td></td>
<td>• Selection of most relevant action areas</td>
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<tr>
<td>10:00-10:15</td>
<td><strong>Tea Break</strong></td>
<td></td>
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<tr>
<td>10:15-11:45</td>
<td>Group work with divided responsibilities and plenary discussion on prioritised action areas</td>
<td>Dr. Klaus-D. Mertineit-International Expert of GIZ</td>
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<tr>
<td></td>
<td>• definition of sub goals and indicators</td>
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<td></td>
<td>• collection and prioritisation of relevant activities to achieve the sub goals</td>
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<tr>
<td>11:45-13:15</td>
<td><strong>Lunch Break</strong></td>
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<tr>
<td>13:15-14:45</td>
<td>Group work with divided responsibilities and plenary discussion on prioritised action areas (continuation)</td>
<td>Dr. Klaus-D. Mertineit-International Expert of GIZ</td>
</tr>
<tr>
<td></td>
<td>• definition of relevant stakeholders to be considered</td>
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<td></td>
<td>• definition of responsibilities, milestones, and resources</td>
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<td></td>
<td>• definition of outcomes / indicators</td>
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<tr>
<td>14:45-15:00</td>
<td><strong>Tea Break</strong></td>
<td>Dr. Klaus-D. Mertineit-International Expert of GIZ</td>
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<tr>
<td>15:00-15:30</td>
<td>Check of measures (plenary discussion)</td>
<td>Dr. Klaus-D. Mertineit-International Expert of GIZ</td>
</tr>
<tr>
<td>15:30-15:45</td>
<td>Commitment of the present stakeholders • Stakeholder (representative of industry/TVET institutes)</td>
<td>Dr. Klaus-D. Mertineit-International Expert of GIZ</td>
</tr>
<tr>
<td>15:45-16:00</td>
<td>Outlook on the procedure to coordinate, revise, pass and implement the action plan</td>
<td>A leader of DVET</td>
</tr>
<tr>
<td>16:00-16:30</td>
<td>Summary, feedback and farewell</td>
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GREEN GROWTH
AND VOCATIONAL TRAINING GREENING
POLICY FRAMEWORK AND IMPLEMENTATION IN VIETNAM

Dr. Vu Xuan Hung - Director of
Formal Training Department
DVET

BACKGROUND

Dr. Vu Xuan Hung - Director of
Formal Training Department
DVET

BACKGROUND

Diagram: Economic growth and energy consumption 2005-2030

Source: MPI, UNDP. Development of key indicators to reduce emissions in the energy sector of Vietnam, project 2013-2030. For more detailed implementation, refer to the national action plan of the Government for GREEN GROWTH.
Role of vocational training

**Contribution of vocational training to “greening”**

- **Role of vocational training**

  **Skilled workers:**
  - Solve workplace issues related to energy & resources;
  - Produce and apply correctly environment-friendly technologies.
**Role of vocational training**

- Specific requirements of “green skills”
  - Awareness of the impacts of occupational environment
  - Ability to build up a clean working environment, to avoid risks and damages at the workplace;
  - Efficient and effective use of energy and resources; ability to reuse or recycle used materials;
  - Attitude and accountability towards job outcomes;
  - Professional completion of tasks.

---

**Benefit of “greening vocational training”**

- **For the society**
  - Sustainable development culture
  - Improved living standards
  - Creation of new jobs

- **For enterprises**
  - Enhanced competitiveness
  - Improved working environment
  - Reduced hazards and damages

- **For trainees (workers)**
  - Improved employment opportunities
  - Occupational accidents and risks mitigation
  - Appreciation by trainers and employers

- **For training institutions**
  - Enhanced perception of training centers
  - Enhanced quality and efficiency of training services

---

There is no difference between green skills and technical skill except application method.
Some policies on greening vocational training

**Green growth strategy (Decision No. 1393/QĐ-TTg)**

**Human resources training and development**
- Provide education and training
  - For public management and enterprise staff
  - About knowledge, management skills in a green economy and production process.
- Develop human resources for green growth
  - Identify and select the contents of green growth, green technologies, sustainable natural resource exploitation and mainstream these into the curriculum at all levels.
- Formulate guidance for enterprises
  - Access finance and technology options to shift towards green industry and green agriculture.

Some policies on greening vocational training

**National plan of action on green growth (Decision No. 403/QĐ-TTg dated 20 March 2014)**

- Support human resources development for green economy sectors
- Generation of green jobs
  - Issue policies to encourage the generation of green jobs.
- Capacity building
- Institutional improvement
Some policies on greening vocational training

- **Vocational training development strategy (Decision No. 630/QĐ-TTg)**
  - Vocational training will meet the demand of labour market in terms of quality, quantity, occupational structure and training level.
  - The quality of training in a number of occupations reaching that developed countries in the ASEAN region and the world.
  - To use 49 regional curricula and course books and 26 international curricula and course books.

- **Law on Vocational Education and Training**
  - **Objectives**
    - Enhanced creativity and adaptability to working environments in the context of international integration;
    - Enhanced productivity and quality of the labour workforce;
    - Prioritized comprehensive investment for human resources development in key occupations and sectors reaching ASEAN and world’s levels.
Results of “Vocational training greening” in Vietnam

❖ Results

- Some ideas of vocational training greening have been formed
- 7 officials sponsored by GIZ have been trained on “vocational training, climate change and green jobs” in Germany;
- Short-term business trip on “Vocational training greening” in 2013 in Germany;
- International leadership Training on “Vocational training, climate change and green jobs” in Vietnam for management officials;
- Surveys conducted on awareness of green vocational training and vocational training greening at some TVET institutes: LILAMA 2, Ninh Thuận…

Results of “Vocational training greening” in Vietnam

❖ Results

- The creation and development of the Green TVET Centre of Excellence at Vocational College of Machinery and Irrigation (VCMI);
- Piloting of “sewage disposal” vocational training at the Hochiminh Vocational College of Technology (in collaboration with the Water supply and Sewage Association) where greening standards were applied;
- Publication of the Catalogue of Learning outcomes for “Green TVET”
- Pilot implementation of TVET greening initiatives at some vocational training centers using international experiences.
**Recommendations**

To develop national strategy on green skills development; to improve awareness about green growth & vocational training greening for all relevant stakeholders;

To mainstream TVET greening into the training curricula

To make vocational training greening an assessment criteria to evaluate the quality of vocational training institutions and vocational training curricula and course books;

To organize training courses to build greening capacity for management officials and trainers
Thank You!

Xuan Hung - Director of Formal Training Department DVET
Objectives

After completing the workshop participants have

- an overview of the results of the previous Greening TVET workshops with DVET;
- are familiar with the recommendations for DVET and for TVET institutes developed during the Greening TVET workshops;
- prioritised the recommendations for DVET and for TVET institutes;
- derived specific activities which are to be implemented by DVET during the next 5 years to achieve the prioritised recommendations;
- structured these activities in a 5 years action plan for greening TVET to be implemented by DVET
Agenda

Tuesday, 3 July 2018

- Words of welcome, introduction, coordination of objectives and schedule
- Statements of stakeholders regarding greening TVET
- Looking back: Results of the previous Greening TVET workshops with DVET (October 2017)
- Greening TVET – the global perspective
- Drafting the action plan on greening TVET in Viet Nam for the next 5 years

Agenda

Wednesday, 4 July 2018

- Drafting the action plan on greening TVET in Viet Nam for the next 5 years (continuation)
- Closing: summary, outlook, feedback and farewell
Looking back: Results of the previous workshop on greening TVET

Key issues gained from input presentations

Input presentation 1: TVET for a green economy
- A greening economy requires a workforce having cross-occupational as well as occupation-specific green skills
- Generally, green skills should be integrated in already existing occupations; developing specific green occupations should remain an exception
- Industry has to be involved in an appropriate manner when defining green skills demands of different economic sectors.
Looking back: Results of the previous workshop on greening TVET

Key issues gained from input presentations

Input presentation 2: Some activities on implementation of the VGGS

- Green skills requirements should be integrated into learning outcomes of training programmes
- Modules on green skills should be developed to be used by TVET institutes
- Occupation-specific training curricula on environmental protection, renewable energies, etc. should be developed to meet labour demand of the green economy.

Input presentation 3: Results of workshop at VCMI

- A draft of a cross-occupational basic module on “Environmental Protection and Energy & Resource Efficiency” has been developed
- The basic module shall supplement occupation-specific green skills development activities

**Structure of the basic module**
- **Target group:** 1. students (secondary and college level) 2. workers of companies
- **Duration:** 60 lesson hours
- **Format:** integrated in ongoing courses 2/3 at VCMI and 1/3 in companies
- **Didactic approach:** Learning oriented
- **Teachers:** Participants of training workshop
- **Curriculum/locus, plan:** To be developed by the teachers in a guided process
- **Training materials:** To be developed by the teachers in a guided process
- **Assessment:** Final test plus active participation (project / research / report)

**Elements of the basic module**
- Efficient use of resources and waste management
- Efficient use of energy
- Chemicals (hazardous substances, fumes, dust and smells)
- Laws and regulations (relevant)
- Environmental Management System (basic level)

- Focus is on hands-on skills; theory only as far it is necessary for understanding
- Consequences of behaviour made visible
- Company visits part of the concept
Looking back: Results of the previous workshop on greening TVET

Key issues gained from input presentations

Input presentation 4: Role of the economy in greening TVET
- It is advisable to more closely involve the industry on all TVET levels
- Besides large companies, organised industry (associations, etc.) could be involved in TVET
- In order to identify green skills demands cooperative TVET research can play an important role

Input presentation 5: Green learning outcomes
- Green learning outcomes have to be defined based on the respective occupational standard and considering the VGGS as well as skills demands of the corresponding green(ing) economic sector
- Demanding green learning outcomes have to express themselves in demanding examination setting

Case study 1: Introduction and development of a green occupation
- Based on a German standard, an occupational standard on “sewage engineering and wastewater treatment” was developed by HVCT, Viet Nam Water Supply and Sewage Association as well as five Vietnamese sewage enterprises
- Companies as well as the trade association are strongly involved in implementing the training course “Sewage Engineering Technician”
Looking back: Results of the previous workshop on greening TVET

Key issues gained from input presentations

Input presentation 6: Greening TVET institutes
- A reliable holistic approach for greening TVET institutes is available
- TVET institute can proceed step by step emphasising on low hanging fruits or issues most relevant for their profiles

Case study 2: Capacity building on green TVET at VCMi
- 5 S approach of workshop management is used for greening the TVET institute

Case study 3: Integration of green factors into workshop management at LILAMA 2
- 5 S approach of workshop management is used for greening the TVET institute
- Classification and separation of waste
- Design usable training products to avoid waste and environmental pollution (e.g. roasters, catch basin for storage of hazardous liquids)

Recommendations for DVET and for TVET institutes

Communication
- Take into consideration editing a newsletter on Greening TVET in Viet Nam to keep TVET stakeholders updated

Assistance of DVET / MoLISA
- Develop a coherent national green skills development strategy / action plan, incl. integration of green aspects into norms, standards, legal decisions
- Coordinate involvement of business sector on governmental and institutional level particularly for integrating green skills requirements into occupational standards
- Integrate green aspects into existing occupations
- Conduct cooperative TVET research
- Revise and implement a green TVET institutions strategy / action plan and run a campaign on greening TVET institutes
- Deliver training for teachers, in-company trainers and examiners
- Introduce the basic module on environmental protection and energy and resource efficiency
UNESCO’s Global Action Programme on ESD

Priority action areas

1. **Advancing policy**: Mainstream ESD into both education and sustainable development policies, to create an enabling environment for ESD and to bring about systemic change

2. **Transforming learning and training environments**: Integrate sustainability principles into education and training settings

3. **Building capacities of educators and trainers**: Increase the capacities of educators and trainers to more effectively deliver ESD

4. **Empowering and mobilizing youth**: Multiply ESD actions among youth

5. **Accelerating sustainable solutions at local level**: At community level, scale up ESD programmes and multi-stakeholder ESD networks
Action plan on greening TVET – the global perspective

German National Action Plan on ESD

Objective

Spreading ESD in all areas and at all levels of the German education system.

Content

Objectives and measures in regard to six fields of action:

- Early Childhood Education
- School
- Vocational Education and Training
- Higher Education
- Informal and Non-Formal Learning/Youth
- Local Authorities
Action plan on greening TVET – the global perspective

German National Action Plan on ESD: TVET

5 fields of action
- Carry out an inventory at all levels
- Tap the existing potentials in TVET
- Establish training companies and vocational colleges as green learning venues
- Identify skills green requirements
- Implement ESD in TVET at curriculum and didactic level

Structure
- TVET’s relevance for a sustainable development of the country
- Designation of the field of action
  - Current situation / requirements (approx. 3 sentences)
  - Objectives
  - Measures
Drafting an action plan on greening TVET in Viet Nam

Steps
1. Introductory remarks and definition of a main goal:
   - Which goals of the VGGS and the GGAP are relevant for greening TVET?
   - Which other policies / strategies / change processes / activities etc. have to be considered?
   - Which role does / should TVET play for implementing these relevant goals?
   - Which stakeholders and institutions are relevant (and why) and have to be involved?
   - Which main goal could realistically be achieved within the next five years?
Drafting an action plan on greening TVET in Viet Nam

Steps

2. Definition and prioritisation of relevant action areas:

Which are the main challenges to be met in order to achieve our main goal?

Please consider

- the results of the previous workshops and the example from Germany
- cross-cutting issues, such as
  - involvement of industry and other relevant stakeholders
  - TVET research
  - quality assurance / management

and assign them to different levels:

- policy / capacity and human resources development in governmental institutions
- curriculum development / revision and examinations
- TVET institutes
- Training and support of executives, teachers, in-company instructors and examiners
- coordination and handling of the greening TVET in Viet Nam process
Steps

2. Definition and prioritisation of relevant action areas:
   - Are the 5 action areas (levels) most relevant to achieve the general goal or do we have to redefine the clusters or find other ones?
   - Please define sub goals for every prioritised action area

Steps

3. Elaboration of the prioritised action areas:
   - Please collect and prioritise relevant activities to achieve the sub goals.
   - Please define relevant stakeholders (incl. Ministries etc.) to be involved.
   - Please define a responsible body.
   - Please define resources to be provided.
   - Please define an appropriate timeframe.
   - Please define outcomes or indicators reliable to measure the achievement of the sub goals.
Drafting an action plan on greening TVET in Viet Nam

Steps

4. Check of measures:
   - Are the activities reliable to achieve the sub goals of the action areas?
   - Are all relevant stakeholders appropriately considered?
   - Are the responsible bodies appropriate?
   - Are the milestones consistent with the sub goals and measures?
   - Are the outcomes or indicators reliable to measure the achievement of the sub goals?

5. Last check and procedure:
   - Commitment of the present stakeholders
   - Finishing of the draft of the action plan
   - Outlook on the procedure to
     - coordinate
     - revise
     - pass and
     - implement the action plan
Closing: summary, outlook, feedback and farewell

What are the results of our workshop?
- What results have we achieved?
- What are the next steps?
- How do we assess the workshop?
Workshops on Green TVET (24 and 26 October 2017)
- results and recommendations -

Key issues gained from input presentations

Input presentation 1: TVET for a green economy
- A greening economy requires a workforce having cross-occupational as well as occupation-specific green skills.
- Cross-occupational skills: workforce should be able to
  - know and minimise the negative environmental impacts of their occupational activities,
  - know and apply the legal and corporate regulations relevant for their workplaces
  - use energy and resources efficiently,
  - handle waste properly.
- Generally, green skills should be integrated in already existing occupations; developing specific green occupations should remain an exception.
- Industry has to be involved in an appropriate manner when defining green skills demands of different economic sectors.

Input presentation 2: Some activities on implementation of the VGGS
- Green skills requirements should be integrated into learning outcomes of training programmes.
- Modules on green skills should be developed to be used by TVET institutes.
- Occupation-specific training curricula on environmental protection, renewable energies, etc. should be developed to meet labour demand of the green economy.

Input presentation 3: Results of workshop at VCMI: Development
- A draft of a cross-occupational basic module on „Environmental Protection and Energy & Resource Efficiency” has been developed.
- The basic module shall supplement occupation-specific green skills development activities.

Input presentation 4: Role of the economy in greening TVET
- It is advisable to closer involve industry on all TVET levels.
- Besides large companies, organised industry (associations, etc.) could be involved in TVET.
- In order to identify green skills demands cooperative TVET research can play an important role.

Input presentation 5: Green learning outcomes
- Green learning outcomes have to be defined based on the respective occupational standard and considering the VGGS and skills demands of the corresponding green(ing) economic sector.
- Demanding green learning outcomes have to express themselves in demanding examination setting.

Case study 1: Introduction and development of a green occupation
- Based on a German standard, an occupational standard “sewage engineering technician” was developed by HVCT, Viet Nam Water Supply and Sewage Association as well as five Vietnamese wastewater enterprises.
- Companies as well as the sector association are strongly involved in implementing the training programme “sewage engineering technician”.

Input presentation 6: Greening TVET institutes
- A reliable holistic approach for greening TVET institutes is available.
• TVET institute can proceed step by step emphasising on low hanging fruits or issues most relevant for their profiles.

Case study 2: Capacity building on green TVET at VCMI
• 5 S approach of workshop management is used for greening the TVET institute.

Case study 3: Integrate green factors into workshop management at LILAMA 2
• 5 S approach of workshop management is used for greening the TVET institute.
• Classification and separation of waste.
• Design usable training products to avoid waste and environmental pollution (e.g. roasters, catch basin for storage of hazardous liquids.

Summary of ideas and suggestions regarding DVET / MoLISA

Policy / capacity and human resources development in governmental institutions
• advise the government and consistently integrate green issues on system level, e.g. into norms, standards, legal decisions
• formulate a green skills development strategy / action plan
• establish a national green skills framework

Curriculum development / revision and examinations
• integrate green aspects into occupational standards
• integrate green aspects into existing occupations: consider step by step introduction: a) first 10 occupations b) 30 occupations (concentration); select one or two mechanical & electrical occupations which are most important basis for green occupations
• develop new green occupations (as far as required)
• develop guidelines / new media for considering green aspects in different occupations
• integrate green aspects into examinations
• introduce basic module / green modules

TVET institutes
• revise & implement green TVET institutions strategy / action plan
• run or support programmes on greening TVET institutes
• organise a video clips / photo competition for students

Be a role model and integrate green issues in a holistic approach, considering
• Green campus & workplaces
• Green curriculum
• Green research
• Green community
• Green culture
• Management integration

Training and support of executives, teachers, in-company instructors and examiners
• deliver basic and further training on green skills requirements and didactics for teachers of TVET institutes as well as in-company trainers
• deliver training for examiners
• deliver training on ways how to engage business sector
Coordination and handling of the greening TVET in Viet Nam process

Cross-cutting issues:

Involvement of industry and other relevant stakeholders
- coordinate involvement of business sector on governmental and institutional level

TVET research
- conduct cooperative TVET research

Quality assurance / management
- criteria for high quality TVET institutes: mandatory occupational standards, green issues considered in the institutions as well as in training programmes

Concrete steps forward

Communication
1. Take into consideration editing a newsletter on Greening TVET in Vietnam to keep TVET stakeholders updated.

Assistance of DVET / MoLISA
2. Develop a coherent national green skills development strategy / action plan, incl. integration of green aspects into norms, standards, legal decisions
3. Coordinate involvement of business sector on different levels (governmental and institutional level) particularly for integrating green skills requirements into occupational standards
4. Integrate green aspects into existing occupations (start with occupations most relevant for green(ing) economy), incl.
   - development of guidelines / media for considering green aspects in different occupations
   - integration of green aspects into examinations
5. Conduct cooperative TVET research
6. Revise and implement a green TVET institutions strategy / action plan, incl.
   - criteria for high quality TVET institutes: mandatory occupational standards, green issues considered in the institutions as well as in training programmes
   - run or support programmes on greening TVET institutes
   - run a campaign on greening TVET institutes (incl. organising video clips / photo competition for students)
7. Deliver training for
   - teachers of TVET institutes (on green skills requirements and didactics)
   - in-company trainers (on green skills requirements and didactics)
WORKSHOPS ON GREEN TVET - RESULTS AND RECOMMENDATIONS

- Examiners (on how to test green skills)

8. Introduce the basic module on environmental protection and energy and resource efficiency.

**Campaign on greening TVET institutes**

9. Use the greening holistic TVET institutes approach as reference.

10. Revise part two of the brochure on Greening TVET in Viet Nam, particularly collect and document more tips / ideas and examples of good practice.

11. Develop teaching material / media and a training course on “Greening TVET institutes in Practice” for project managers and coordinators.

12. Establish a coordination unit and prepare the campaign (incl. conditions of participation; internet address / homepage, database on ideas and good examples, information material, competition criteria, fixed duration, support infrastructure, regional preparation workshops, etc.).

*Source:* Excerpt from KDM’s report on Workshops on Green TVET (24th and 26th of October 2017).
How is Germany implementing the Global Action Programme on ESD?

The German Federal Ministry of Education and Research (BMBF), in its role as lead ministry, has established a National Platform, expert forums and partner networks in order to drive forward Global Action Programme (GAP) on Education for Sustainable Development (ESD) implementation in Germany. Furthermore, two advisers consult the Platform on scientific issues and international developments:

**National Platform**

The National Platform - the supreme steering body - brings together 37 high-level representatives of politics, science, industry and society. Based on their expertise as well as input from expert forums and partner networks, the members of the National Platform defined strategic objectives and adopted a National Plan of Action to implement the GAP in Germany.

The National Platform strengthens awareness of ESD at both national and international level. High importance is given to scale up ESD from successful project based implementation to mainstream ESD into all aspects of education.

Chaired by BMBF State Secretary, the National Platform meets bi-annually. Besides the BMBF, the federal ministries for environmental affairs, family affairs as well as economic cooperation and development are taking part in the Platform, as are representatives of the 16 federal states, who are responsible for formal education and schooling. Platform members serve as advocates of and multipliers for ESD – also within their own organizations and institutions.

**Expert Forums**

Six Expert Forums consult the National Platform in developing a National Plan of Action:

- Early Childhood Education
- School
- Vocational Education and Training
- Higher Education
- Informal and Non-Formal Learning/Youth
- Local Authorities

Consisting of 15 to 20 members, Expert Forums deal with concerns, facts and proposals for topics from both the National Platform and the Partner Networks. Furthermore, Expert Forums provide corresponding expert reports and analyses, and formulate recommendations for action. They promote the discourse on the establishment of ESD in the respective areas. They also pool expertise on the relevant topics and act as the interface between the National Platform and the Partner Networks. Expert Forums meet three to four times a year.

**Partner Networks**

Ten Partner Networks bring together a diverse group of stakeholders:

- Early childhood education
- School Education,
- Initial and Continuing Vocational Training,
- Higher Education,
- Non-formal Education and informal learning,
- Local Authorities,
- Media,
HOW IS GERMANY IMPLEMENTING THE GLOBAL ACTION PROGRAMME ON ESD?

- Economy and Consumption,
- Biological Diversity,
- Cultural Education and Cultural Policy.

Partner Networks link stakeholders and experts. They cooperate closely with the Expert Forums, introduce important concerns and topics raised by diverse stakeholders and lobbies and encourage other stakeholders to take an interest in ESD. At the same time, Partner Networks set their own priorities and objectives, organize events and prepare recommendations and hand-outs, for example. Partner Networks thus act as drivers for implementation, initiate good-practice and act as multipliers for ESD in Germany.

**Advisers**

The National Platform is supported by a scientific adviser and an international advisor.

**Agenda Congress**

The Agenda Congress is Germany’s main nationwide conference on ESD. Every year the BMBF invites all the members of the National Platform, the Expert Forums and the Partner Networks as well as a wide range of ESD stakeholders to participate in the Agenda Congress. The aim is to exchange ideas, enhance networking and strengthen the establishment of ESD in Germany. Opening the meeting to a wider group of stakeholders in ESD boosts visibility and ensures a broader impact.

**ESD Awards**

The Agenda Congress also presents awards to outstanding networks, institutions and local authorities which have accomplished a structural implementation of ESD in high quality selected by a jury of members of the National Platform, the BMBF and the two advisers. The awards are handed over by high representatives of the BMBF and the German Commission for UNESCO. Highlighting examples of good practice, the awards seek to increase visibility of ESD and to provide an incentive for further development, thereby promoting the structural implementation of ESD in
German education systems. The awards also aim at fostering innovation, creativity and networking for ESD.

The awards are comprised of three categories (formal and non-formal places of learning, local communities and networks). Applicants of each category are expected to

- have ESD as their guiding principle, mainstreaming sustainability into all aspects of the learning environment
- address all three (economical, ecological and social) dimensions of sustainability
- apply a participative educational approach which generates competencies for ESD
- relate their work to the goals of the GAP and the 2030 Agenda
- prominently present their ESD work on their website.

The applications are assessed with regard to the following areas: governance, monitoring/evaluation, youth engagement, curriculum/teaching and learning, training and capacity building, facilities and operations, innovation and partnership as well as communication.

Source: BMBF
Drafting the action plan on greening TVET in Viet Nam

1. Introductory remarks and definition of a main goal

<table>
<thead>
<tr>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which goals of the VGGS and the GGAP are relevant for greening TVET?</td>
</tr>
<tr>
<td>Which other policies / strategies / change processes / activities etc. have to be considered?</td>
</tr>
<tr>
<td>Which role does / should TVET play for implementing these relevant goals?</td>
</tr>
<tr>
<td>Which stakeholders and institutions are relevant (and why) and have to be involved?</td>
</tr>
<tr>
<td>Which main goal could realistically be achieved within the next five years?</td>
</tr>
</tbody>
</table>
2. Definition and prioritisation of relevant action areas

2a) Which are the main challenges to be met in order to achieve our main goal?

<table>
<thead>
<tr>
<th>Policy / capacity and human resources development in governmental institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>• advise the government and consistently integrate green issues on system level, e.g. into norms, standards, legal decisions</td>
</tr>
<tr>
<td>• formulate a green skills development strategy / action plan</td>
</tr>
<tr>
<td>• establish a national green skills framework</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Curriculum development / revision and examinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>• integrate green aspects into occupational standards</td>
</tr>
<tr>
<td>• integrate green aspects into existing occupations: consider step by step introduction: a) first 10 occupations b) 30 occupations (concentration); select one or two mechanical &amp; electrical occupations which are most important basis for green occupations</td>
</tr>
<tr>
<td>• develop new green occupations (as far as required)</td>
</tr>
<tr>
<td>• develop guidelines / new media for considering green aspects in different occupations</td>
</tr>
<tr>
<td>• integrate green aspects into examinations</td>
</tr>
<tr>
<td>• introduce basic module / green modules</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TVET institutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>• revise &amp; implement green TVET institutions strategy / action plan</td>
</tr>
<tr>
<td>• run or support programmes on greening TVET institutes</td>
</tr>
<tr>
<td>• organise a video clips / photo competition for students</td>
</tr>
<tr>
<td>Be a role model and integrate green issues in a holistic approach, considering</td>
</tr>
<tr>
<td>• Green campus &amp; workplaces</td>
</tr>
<tr>
<td>• Green curriculum</td>
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<tr>
<td>• Green research</td>
</tr>
<tr>
<td>• Green community</td>
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<tr>
<td>• Green culture</td>
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<tr>
<td>• Management integration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Training and support of executives, teachers, in-company instructors and examiners</th>
</tr>
</thead>
<tbody>
<tr>
<td>• deliver basic and further training on green skills requirements and didactics for teachers of TVET institutes as well as in-company trainers</td>
</tr>
<tr>
<td>• deliver training for examiners</td>
</tr>
<tr>
<td>• deliver training on ways how to engage business sector</td>
</tr>
</tbody>
</table>

| Coordination and handling of the greening TVET in Viet Nam process |
Cross-cutting issues:

<table>
<thead>
<tr>
<th>Involvement of industry and other relevant stakeholders</th>
</tr>
</thead>
<tbody>
<tr>
<td>• coordinate involvement of business sector on governmental and institutional level</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TVET research</th>
</tr>
</thead>
<tbody>
<tr>
<td>• conduct cooperative TVET research</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality assurance / management</th>
</tr>
</thead>
<tbody>
<tr>
<td>• criteria for high quality TVET institutes: mandatory occupational standards, green issues considered in the institutions as well as in training programmes</td>
</tr>
</tbody>
</table>
2b) Which regulations, stakeholder statements, practices, materials and other connecting factors are already there and should be considered on the different levels?

<table>
<thead>
<tr>
<th>Policy / capacity and human resources development in governmental institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum development / revision and examinations</td>
</tr>
<tr>
<td>TVET institutes</td>
</tr>
<tr>
<td>Training and support of executives, teachers, in-company instructors and examiners</td>
</tr>
<tr>
<td>Coordination and handling of the greening TVET in Viet Nam process</td>
</tr>
</tbody>
</table>
**Cross-cutting issues:**

<table>
<thead>
<tr>
<th>Involvement of industry and other relevant stakeholders</th>
</tr>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>TVET research</th>
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<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Quality assurance / management</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
3. Elaboration of the prioritised action areas

1. Please collect and prioritise relevant activities to achieve the sub-goals.
2. Please define relevant stakeholders (incl. Ministries etc.) to be involved.
3. Please define a responsible body.
4. Please define resources to be provided.
5. Please define an appropriate timeframe.
6. Please define outcomes or indicators reliable to measure the achievement of the sub-goals.

<table>
<thead>
<tr>
<th>Subgoal(s)</th>
<th>Activities / measures</th>
<th>Stakeholder</th>
<th>Responsible body</th>
<th>Resources required</th>
<th>Time (start – end)</th>
<th>Outcomes or indicators reliable to measure the achievement of the sub-goals</th>
</tr>
</thead>
<tbody>
<tr>
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<td>1</td>
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<td>10</td>
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</tr>
</tbody>
</table>
Final evaluation: training / further training

Dear participant,

You have taken part in a GIZ training event. To help us further enhance the alignment of such training with your needs, we would ask you to participate in this survey and share your experience and any suggestions you might have for improvements. Naturally, we evaluate all questionnaires anonymously and will not be passing on your data to any third party. The data is statistically grouped and evaluated to allow us to provide information on the quality of our training. For this reason, we would ask you to answer all the questions in the survey.

Thank you for your help and support!

Your GIZ team

Please read the following statements and indicate your level of agreement by marking the appropriate box. You have six possible answers ranging from “totally disagree” to “totally agree”. If you cannot answer or do not wish to, please tick the “no answer” box.

1. General information

<table>
<thead>
<tr>
<th>Workshop title:</th>
<th>Development of the “Action Plan on Greening TVET”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venue:</td>
<td>Hanoi</td>
</tr>
<tr>
<td>Duration:</td>
<td>3 - 4 July 2018</td>
</tr>
</tbody>
</table>

2. Content relevance and transfer possibilities

<table>
<thead>
<tr>
<th>The topics and content of the workshop are important for my work.</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3</td>
</tr>
<tr>
<td>□</td>
</tr>
</tbody>
</table>

Please list topics that the workshop did not deal with, but would have been important for your work.
### 3. Contents

#### My assessment on the following course units:

<table>
<thead>
<tr>
<th>Course Unit</th>
<th>Very low</th>
<th>Very high</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total -3 -2 -1 +1 +2 +3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Welcome and introduction to the topic and statements of stakeholders
- Presentation of the results of the previous Greening TVET workshop with DVET (October 2017)
- Presentation of greening TVET activities in Germany (process and German National Action Plan)
- Drafting the action plan: Definition of the main goal
- Drafting the action plan: Definition and prioritisation of relevant action areas
- Drafting the action plan: Elaboration of the prioritised action areas
- Drafting the action plan: Check of measures
- Workshop in general
4. **Working and learning methods**

<table>
<thead>
<tr>
<th>Description</th>
<th>Totally disagree</th>
<th>Totally agree</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The contents and outcomes of the workshop were clear throughout.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>The participants were able to bring their own experience and examples into the workshop.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>The working and learning methods were appropriate to the tasks and suitably varied.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>I could relate the programme units to the context of my own work and life.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
</tbody>
</table>

The workshop was ... too long □ ... too short □ ... just right □

5. **Facilitator**

<table>
<thead>
<tr>
<th>Description</th>
<th>Totally disagree</th>
<th>Totally agree</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The main facilitator obviously had considerable expertise in his own field and was well prepared.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>The facilitator could listen to the participants and answered their questions.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
</tbody>
</table>

6. **Participants**

<table>
<thead>
<tr>
<th>Description</th>
<th>Totally disagree</th>
<th>Totally agree</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>The atmosphere among the participants was always cooperative.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>I was able to benefit from the experience of other participants.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>I will continue to exchange views on this subject with some of the other participants.</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
</tbody>
</table>

7. **Achievement of objectives**

<table>
<thead>
<tr>
<th>Description</th>
<th>Totally disagree</th>
<th>Totally agree</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participants have ...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• got an overview of the results of the previous Greening TVET workshops with DVET and are familiar with the recommendations for DVET and for TVET institutes developed during the Greening TVET workshops</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
<tr>
<td>• prioritised the recommendations for DVET and for TVET institutes, derived specific activities which are to be implemented by DVET during the next 5 years to achieve the prioritised recommendations and structured these activities in a 5 years action plan for greening TVET to be implemented by DVET</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
<td>□ □ □ □</td>
</tr>
</tbody>
</table>
What competences or expertise have you acquired in addition to the workshop’s explicit outcomes?

8. Organisation

<table>
<thead>
<tr>
<th>How satisfied are you with...</th>
<th>Not satisfied at all</th>
<th></th>
<th>Very pleased</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>the overall organisation of the workshop?</td>
<td>□ □ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the coordination of the workshop (by Dr Mertineit)?</td>
<td>□ □ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the workshop venue?</td>
<td>□ □ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the language understanding?</td>
<td>□ □ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>the information you received in the run-up to the workshop?</td>
<td>□ □ □ □ □ □ □ □</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

What other information / documents would you have needed as well?

Since there are lots of aspects a survey like this cannot cover, we would ask you to add any comments or recommendations below that you might have for future study visits and training courses.

Thank you!

Your GIZ team
Nationaler Aktionsplan Bildung für nachhaltige Entwicklung.
Kapitel „Berufliche Bildung“ (Kurzfassung)


Handlungsfeld I: Bestandsaufnahme auf allen Ebenen

In den letzten Jahren wurden zahlreiche Weiterbildungsmaßnahmen, curriculare Module für die Ausbildung, Projekte im Rahmen der Ausbildung sowie Lehr-/Lernmaterialien für BBNE erarbeitet, die jedoch nur wenig Verbreitung fanden. Darüber hinaus wurden relevante Maßnahmen im Kontext der Förderung einer nachhaltigen Entwicklung realisiert, ohne aber entsprechend als BBNE gekennzeichnet zu sein.

Ziel:
Für eine strukturelle Verankerung von BBNE werden die vorhandenen Wissensbestände und Praxiserfahrungen gesammelt und ausgewertet.

Maßnahmen:
- Unter Einbeziehung aller relevanten Akteure wird eine Definition für BBNE erarbeitet.
- Bestehende Beispiele guter Praxis werden gesammelt und systematisiert.
- Ordnungsmittel werden daraufhin gesichtet, inwieweit Nachhaltigkeitsaspekte bereits berücksichtigt sind.
- Es sind mögliche Ansatzpunkte in Ordnungsmitteln zu identifizieren, z.B. durch die Erweiterung von Lernzielen.
- Unterstützenden Materialien für das Ausbildungspersonal (Lehr-/Lernmaterialien und Lehr-/Lernarrangements) werden im Hinblick auf BBNE gesichtet und gesammelt.
- Ergebnisse wissenschaftlicher Untersuchungen zu BBNE werden gesammelt und gesichtet.

Handlungsfeld II: Potenziale der beruflichen BNE

Es gilt, weitere Potenziale für BNE in der beruflichen Bildung zu erschließen. Innovationen aus der betrieblichen Praxis sollen schneller in die Ausbildung fließen. Zudem sind die Nachhaltigkeitsziele über Qualitätssicherungsinstrumente zu sichern, um eine Verstetigung der BBNE zu erreichen.

Ziel:
Bis Dezember 2019 werden bestehende BBNE-Potenziale identifiziert und nutzbar gemacht.

Maßnahmen:
- Verbreitung vorhandener Konzepte und Materialien:
  - Die vorhandenen Materialien, Konzepte und Beispiele guter Praxis werden über eine zentrale Plattform (z.B. BNE-Portal) zugänglich gemacht und mit vorhandenen Plattformen der beruflichen Bildung verlinkt (z.B. Ausbilderportal).
  - Fort- und Weiterbildungsangebote sowie unterstützende Angebote für das Bildungspersonal zur Förderung einer nachhaltigen Entwicklung werden über dezentrale Multiplikatoren (z.B. Kammerorganisationen) erfasst und verbreitet.
- Unterstützende Akteure für BBNE aus dem non-formalen Bereich werden regional und branchenbezogen erfasst und bekannt gemacht.

- Vernetzung der Akteure (berufsbildende Schulen, Betriebe und anderen relevante Akteure):
  - Betriebliche, schulische und außerschulische Akteure im Kontext von BBNE vernetzen sich auf nationaler Ebene und treffen sich mindestens einmal pro Jahr.
  - Die regionale Vernetzung der Akteure für BBNE wird über Berufsbildungsausschüsse sowie lokale Initiativen, wie z.B. Klimabündnisse, gefördert.
  - Es wird eine bundesweite Aktionswoche „Berufsbildung für nachhaltige Entwicklung“ von berufsbildenden Schulen, Betrieben und außerschulischen Bildungseinrichtungen durchgeführt.
  - Die berufsbildenden Schulen führen jährlich einen Tag der offenen Tür zu BBNE durch.

- Erschließung und Förderung potenzieller Handlungsoptionen:
  - Möglichkeiten, BBNE in Berufsbildpositionen zu verankern, werden auf Grundlage der Definition von BBNE (siehe oben) geprüft und umgesetzt (z.B. durch Modernisierung der Berufsbildposition Umweltschutz).
  - BBNE wird als Qualitätskriterium in den bestehenden Qualitätsmanagementsystemen der berufsbildenden Schulen verankert.
  - Nachhaltigkeitsrelevante Aspekte beruflichen Handelns werden in Maßnahmen der Berufsorientierung integriert.
  - Der BIBB-Hauptausschuss gibt Empfehlungen zur Förderung von BBNE in Kooperation der Lernorte Betrieb und Schule.

**Handlungsfeld III: Betriebe und berufliche Schulen als nachhaltige Lernorte etablieren**


**Ziel:**

Bis zum Ende des WAP werden in ausgewählten Betrieben/beruflichen Schulen in Handlungsfeld 2 lokalisierte Potenziale weiterentwickelt.

**Maßnahmen:**

- Indikatoren für nachhaltige Lernorte werden entwickelt und eine Roadmap zur Umsetzung erstellt. Bund und Länder werden gemeinsam mit den relevanten Akteuren
- die (Weiter-)Entwicklung von Indikatoren für nachhaltige Lernorte der beruflichen Bildung unter Berücksichtung vorhandener Qualitätsmanagementansätze unterstützen;
- unterstützende Leitfäden zur Umsetzung einer nachhaltigen, gesamtorganisationalen Entwicklung („Whole Institutional Approach“) entwickeln bzw. weiterentwickeln;
- verschiedene Indikatorenmodelle zusammenführen (wo vergleichbar und sinnvoll).
- Die Netzwerkbildung wird verbessert. Die Bundes- und Landesressorts streben an,
- eine Sammlung guter Praxisbeispiele für nachhaltige Lernorte erstellen und diese auf einer geeigneten etablierten und administrierten Internetplattform der Öffentlichkeit zur Verfügung zu stellen;
- dort die in Maßnahme 1 entwickelten Leitfäden zu veröffentlichen;
- Workshop-Reihen zur Unterstützung der Vernetzung der Akteure und nachhaltiger Lernorte durchzuführen;
- Netzwerkbildung und -management auch strukturell zu unterstützen.

• Das schulische und betriebliche Ausbildungspersonal wird qualifiziert. Bund und Länder setzen sich gemeinsam mit weiteren relevanten Akteuren innerhalb ihrer jeweiligen Zuständigkeit ein für die
- Entwicklung, Erprobung und Verbreitung von Qualifizierungskonzepten für Fach- und Führungs- kräfte in den identifizierten Lernorten.

• Die Motivation für Fort- und Weiterbildung wird erhöht, indem
- die Länder und Schulträger in ihrer Personalressourcenplanung Deputatsstunden für berufliche Schulen bewilligen. Sie unterstützen die BBNE-Koordinatoren darin, BBNE-Projekte und die nachhaltige Schulentwicklung zu stärken;
- Bund und Länder die Entwicklung von Fort- und Weiterbildungsformaten gemäß der Definition von BBNE unterstützen.

• Bund und Länder streben gemeinsam mit den relevanten Akteuren in jeweiliger Zuständigkeit an,
- regionale Coaching Center sowohl für die schulischen Lernorte der beruflichen Bildung als auch für die Betriebe zu etablieren;
- erforderliche Schulungskonzepte für das Coaching-Personal zu entwickeln,
- die für die jeweiligen Lernorte der beruflichen Bildung zuständigen Coaching Center zu vernetzen.

**Handlungsfeld IV: Kompetenzanforderungen zur Nachhaltigkeit**

Es gilt, Kompetenzen zu definieren, um Nachhaltigkeit im Ausbildungs- und Arbeitsprozess umsetzen zu können.

**Ziel:**
Lernende werden in berufsbezogenen Lern- und Arbeitsprozessen zur Umsetzung von Nachhaltigkeit befähigt.

**Maßnahmen:**

- Es werden Kriterien zur Bewertung berufsspezifischer und -übergreifender BBNE-Kompetenzen erarbeitet.
- Es wird ein Verfahren zur systematischen Analyse von berufsspezifischen Arbeits- und Geschäftsprozessen in Bezug auf nachhaltigkeitsrelevante Aspekte entwickelt. Dieses Verfahren unterstützt die Ordnungsarbeit bei der Identifizierung BBNE-spezifischer Kompetenzen.
- Es werden berufsspezifische, nachhaltigkeitsrelevante Kompetenzen für alle Ausbildungsberufe auf Basis der entwickelten Dokumente (Maßnahmen 1–2) bestimmt.
- Einschlägige Kompetenzmodelle der beruflichen Bildung werden hinsichtlich der Dimensionen einer nachhaltigkeitsbezogenen Gestaltungskompetenz überprüft und gegebenenfalls weiterentwickelt.
- Es werden wissenschaftlich begleitete Modellversuche zur Klärung der Frage durchgeführt, wie im Hinblick auf die Kompetenzentwicklung mit Dilemmata, Konflikten und Widersprüchen zwischen ökonomischen, sozialen, ökologischen und globalen Aspekten beruflichen Handelns konstruktiv umgegangen werden kann.
Handlungsfeld V: Curriculare und didaktische Umsetzung von beruflicher BNE

Eine breite Umsetzung von BBNE wird maßgeblich befördert durch die strukturelle Verankerung von nachhaltigkeitsorientierten Kompetenzentwicklungszielen in der Berufsbildung.

Ziel:
Bis zum Ende des WAP werden Konzepte zur curricularen und didaktisch-methodischen Umsetzung von BBNE durch die Sozialpartner, Ministerien und das BIBB entwickelt.

Maßnahmen zur curricularen Umsetzung:
- Das Thema BBNE wird in den Ordnungsverfahren im Hinblick auf die spezifischen Ausprägungen und Anforderungen in den Berufen diskutiert und ggf. berücksichtigt.
- Die Standardberufsbildposition „Umweltschutz“ wird überarbeitet.
- Es wird geprüft, inwieweit die Ausbilder-Eignungsverordnung bzw. die Vorbereitungskurse zu überarbeiten sind.

Maßnahmen zur didaktischen Umsetzung – Erarbeitung von didaktischen Materialien:
- Vorhandene Materialien zur Unterstützung der Aus- und Fortbildungspraxis sowie für die Ausbildung der Ausbilder werden gemäß den Ergebnissen der Bestandsaufnahme (Handlungsfeld I) auf Grundlage der Definition von BBNE ggf. überarbeitet und ergänzt.
- Für Berufsschullehrkräfte wird ein Kriterienkatalog für die Gestaltung von Lehr- und Lernsituationen in Bezug auf BBNE erstellt.

Maßnahmen zur didaktischen Umsetzung – Verbreitung:
- Für die Verbreitung der vorhandenen und neu erstellten Materialien werden etablierte und von der Praxis nachgefragte Kommunikationskanäle genutzt, um einen hohen Verbreitungsgrad zu gewährleisten.