

Bridging Innovation and Learning in TVET

Thematic Workshop - Greening TVET

MCAST, Paola, Malta, 23-24 October 2019

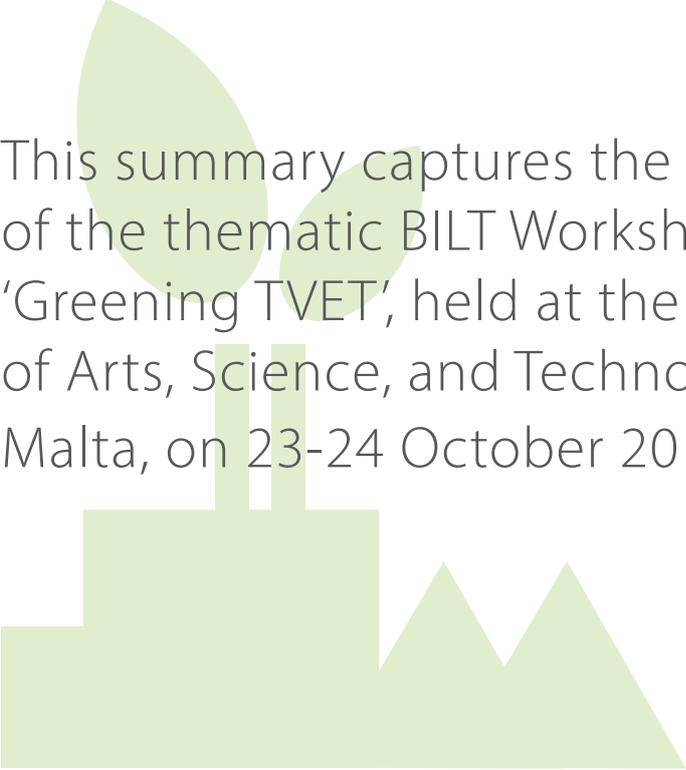
Workshop summary



Bridging Innovation and Learning in TVET

Thematic Workshop - Greening TVET





This summary captures the key outcomes of the thematic BILT Workshop on 'Greening TVET', held at the Malta College of Arts, Science, and Technology in Paola, Malta, on 23-24 October 2019.

Bridging Innovation and Learning in TVET (BILT)

The BILT project is a collaborative initiative focusing on consolidating the European Cluster of the UNEVOC Network. An additional bridging and knowledge exchange component with UNEVOC Centres and TVET stakeholders in the Asia-Pacific

and African regions is initiated in 2020. At its core, BILT addresses TVET challenges in five thematic areas, or 'work streams', that the participating UNEVOC Centres and other TVET stakeholders will focus on. Within BILT, these are:



In addressing these work streams, BILT intends to share information, generate new knowledge, and enhance national and regional TVET capacities in order to provide quality TVET now and going forward. Besides re-energizing the European cluster of the UNEVOC Network, the BILT project seeks to enlarge membership of the cluster through the addition of new active members.

BILT is a collaboration between UNEVOC Network members, coordinated by the UNESCO-UNEVOC International Centre for TVET in Bonn, in partnership with the German Federal Institute for Technical and

Vocational Training (BIBB), and implemented with the financial support of the German Ministry for Education and Research (BMBF).

The BILT project began with a Kick-Off Conference in July 2019, where European UNEVOC and other TVET stakeholders considered two to three key issues within each BILT work stream. These topics became the framework to be explored in detail between October and December 2019 during a series of thematic workshops, each led by a UNEVOC Centre Focal Point. They were:

Theme	Host	Dates
Digitalization	OsloMet, Norway	2-3 October 2019
Greening TVET	MCAST, Malta	23-24 October 2019
Entrepreneurship and TVET	TKNIKA, Spain	30-31 October 2019
New Qualifications and Competencies	SFIVET, Switzerland	12-13 November 2019
Migration and TVET	University of Nottingham, UK	10-11 December 2019

Interim results of each BILT Thematic Workshop were shared during the UNESCO-UNEVOC Advancing Learning and Innovation in TVET Global Forum, in Bonn, in December 2019. This event included the official launching of the BILT project, and included initial scoping and engagement with Asian and African UNEVOC Centres in addition to the presentation of European activities.



Thematic Workshop – Greening TVET

MCAST, Paola, Malta, 23-24 October 2019

Environmental sustainability has evolved as a critical benchmark for all societies. Adverse climate change impacts and management of limited natural resources require changes across all levels of society and the global economy. TVET plays a crucial role in raising awareness and offering workplace competencies related to this issue, with ‘green skills’ becoming increasingly important for all sectors and occupations. These range from basic cross-cutting competencies to new occupational profiles.

The BILT project gathers international experiences on greening measures in TVET, starting with an initial workshop on ‘greening’ in 2019. Held at the UNEVOC Centre Malta College of Arts, Science, and Technology (MCAST) in Paola, Malta, the workshop brought together subject matter experts from eight countries (Austria, Denmark, Finland, Germany, Hungary, Malta, the Netherlands and Spain). Each expert contributed an example from their institution or business that addressed a key issue within Greening TVET, either **‘Institutional responses to green demands’**, or **‘Identifying and integrating green competencies in curricula, training and professional standards’**.

The workshop was an occasion to share innovative projects and to discuss key issues in response to dramatic effects of climate change and the urgent need to react at all levels of society, including education and TVET. This report illustrates how stakeholders engaged during the workshop to address these challenges and ensure that TVET remains not only relevant now, but positions itself for the future.

Opening and framing

Mr Louis Aquilina, Director of the Partnerships Office at MCAST and workshop host, opened the workshop with Dr Alex Rizzo, Deputy Principal of Research and Innovation at MCAST. Welcoming the participants, the speakers set the stage for the workshop and underlined how TVET can play a



Mr Louis Aquilina, MCAST

crucial role in combating climate change. Greening TVET means to embed sustainability in curricula and training regulations for all professions, to engage policy makers, institutions, teachers and trainers – and especially, to motivate learners to consider greening in their studies and everyday life. With ‘green’ mindsets, the latter are able to assume responsibility in their future workplace and in society to increase sustainability. To contextualize greening TVET within the BILT project, Mr Tristan Cole from UNESCO-UNEVOC gave an overview on the BILT goals and network activities. He noted the contribution of BILT towards the achievement of SDG 4 ‘Quality Education’ and SDG 17 ‘Partnership for the Goals’, while greening TVET itself is at the very heart of the SDGs and linked to nearly all of them. Mr Michael Schwarz from the German Federal Institute for Vocational Education and Training (BIBB) familiarized participants with an overview on planned BILT activities as well as the structure of the workshop. The objectives and expected outcomes were to:

- Share good practices and innovative solutions for TVET in the field of Greening TVET with colleagues from across Europe;
- Engage participants in peer-learning activities,

via the contribution of experiences and learning from the others; and

- Collect information on the examples presented for this theme, enabling their documentation and inclusion as 'BILT Innovation and Learning Practices' which will be shared with the TVET community.

Subsequently, Mr Wouter de Regt from UNESCO-UNEVOC framed greening TVET within UNESCO's Strategy for TVET and programmes. While the demand for green skills is increasing, education and training's response in many countries has been slow to respond. Mr de Regt pointed out that UNESCO supports Members States to enhance the relevance of their TVET systems with greening TVET as one of the priority areas. Finally, Mr Louis Aquilina clarified the concept and application of greening TVET from a European perspective: greening in Europe is progressing at different rates. One of the main challenges faced in all countries is to communicate its potential benefits with regards to green jobs,

Wouter de Regt, UNESCO-UNEVOC. Below: Rob de Vrind, Koning Willem I College



healthier lifestyles, and protecting the environment for future generations.

Workshop discussion format

For this work stream, UNEVOC Centres jointly identified two defining key issues which would structure the workshop:

- Key Issue 1: Institutional responses to green demands
- Key Issue 2: Identifying and integrating green competencies in curricula, training and professional standards

In preparation of the workshop, the BILT team collected examples from European UNEVOC Centres and other TVET stakeholders that addressed the Greening TVET. These 'BILT Innovation and Learning Practices' would form the core of presentation and discussions during the event.

For both key issues, a framing presentation included an overview of challenges while also providing information on recent developments and trends, allowing participants the opportunity to understand the context of the practices presented. Following this, participants presented examples in short 'pitches', designed to present a high-level overview. In order to fully engage participants, the workshop proceeded in a World Café format where each example was given one hour to discuss three main questions:

- What is the added value?
- What is the impact on curricula and training regulations?
- Which elements could be transferable to other contexts?

In this way, participants gained a deeper understanding of the presented projects and approaches towards greening TVET. Further group discussion following the World Café allowed participants to jointly identify common and exceptional elements from each example, and provided avenues for future exploration for the BILT project.

Key issues

BILT Innovation and Learning Practices

The first day of the workshop focused on the **key issue of 'Institutional responses to green demands'**. TVET plays a crucial role in providing the knowledge and skills to facilitate the transition to green economies and societies. In this context, training providers – as key members of the local skills ecosystem – have a particularly important role to play. Globally, institutions are applying different approaches (i.e., whole-institutional or incremental approaches) towards adopting a comprehensive strategy for becoming greener as a learning site and sustainable in their education and training approach, and day-to-day practices. This is to ensure that their institution has adequate foundation to become an active contributor in the context of the changing demands.

To illustrate the first key issue, a context session on 'Greening cities, communities and the workplace' established an understanding of greening TVET in relation to institutional settings. In response to shifting skill demands towards TVET students and new green requirements towards cities, communities and the workplace, institutions need to respond with a range of strategic decisions and find suitable processes. Ms Paivi Korhonen from the Finnish UNEVOC Centre, OMNIA, presented the case of the city of Espoo as an example for a city as a local driver for sustainability. Espoo is a UNESCO-awarded Learning city and forerunner for sustainability, involving all citizens in the development of greening strategies and setting a focus on green skills developments of citizens. To add the perspective of a TVET institution, Ms Susanne Krey-de Groote from the German College, BKAL, shared her experiences from the 'FOENAKO' project, which focuses on retail sector occupations. It shows how a TVET college can introduce new green skill demands into training while respecting the framework of existing curricula and training regulations, and how a TVET college can become a greener institution itself.

Following the introduction to this first key issue, two 'BILT Innovation and Learning Practices' were pitched and discussed by participants. In addition to the summaries of the examples in this report, more detailed information on the above and below described examples is accessible via the BILT knowledge platform.

The approach of the Municipality of Sorø

Presented by Ms Laila Carlsen, Denmark

Sorø, a city in Denmark, focuses on business development in close cooperation with the municipality and an advisory board consisting of 10 CEOs from local businesses. It has been distinguished as a successful method of dialogue between the municipality and companies, leading to recognition as one of the best performing business areas in the region. Sorø's engagement addresses 9 SDGs (3, 4, 7, 8, 9, 11, 12, 13, 17) – including SDG 13 'Climate Action' – where business leaders are agents for positive change and global citizens have the powerful ability to make a difference. Such interaction between leaders and employees ensures a meaningful dialogue; encourages relevant training and tools; and, assumes responsibility for delivering a societal impact. Sorø brings together all partners to make a significant and holistic change – municipality, local businesses, schools, parents, counsellors, advisory boards, universities, colleges and vocational schools. The aim is to create a working culture addressing linguistic and cultural diversities, the use of new technologies, and encourages collaboration with people from different areas of society.

The approach of the Koning Willem I College

Presented by Mr Rob de Vrind, Netherlands

At Koning Willem I College, sustainable development brings together technology, entrepreneurial skills, creative thinking skills and IT skills. Among the numerous greening initiatives of the college are basic and specific modules and projects addressing topics such as renewable energy, environmental ethics, circular economy, or the installation of a green canteen. The SDGs determine the whole school approach, which seeks to be attractive, challenging and relevant for learners. It also involves companies and the municipality. Learning by doing is encouraged and projects involve creativity, new techniques, entrepreneurship, and IT. What sets the college apart from other institutions is that the community feeling is one which supports serenity and happiness.

Another practical perspective was added by Ms Audrey Gatt, contributing the perspective of a Maltese UNEVOC Centre, MCAST. Ms Gatt presented ongoing greening initiatives run by the college: it invests, among other things, in resource management of new buildings that feature water saving taps, double glazed windows, new energy efficient air condition units, motion sensor to light fixtures or solar panel water systems.

The following day of the workshop focused on the **second key issue, 'Identifying and integrating green competencies in curricula, training and professional standards'**. The drive to sustainability and the resulting transformations, especially with regards to new job roles, call for learners to continually invest in upgrading their knowledge, skills and competences. TVET stakeholders therefore need to understand how skills required for current and future green jobs are identified and integrated into curricula and training regulations, as well as the impact this has on instruction/pedagogy, and the assessment of learning outcomes.

For further illustration, Mr Wouter de Regt from UNESCO-UNEVOC, spoke about the impact that sustainability has on job roles and curricula, presenting examples reflecting global developments in greening from selected sectors. He named four areas for consideration when greening occupations: the field of knowledge; raw materials/inputs; services/goods produced; and, the tools and machinery used.

Subsequently, six 'BILT Innovation and Learning Practices' were pitched and discussed by participants. In addition to the summaries of the examples in this report, more detailed information on the above and below described examples is accessible via the BILT knowledge platform.

Workshop participants listening to presented example



Erasmus+ project on aligning VET curricula to Greening and the SDGs

**Presented by Ing Louis Aquilina,
UNEVOC Centre MCAST, Malta**

This Erasmus+ project is carried out with European partners from Spain, North Macedonia, and Greece. Its main idea is that individuals become more conscious of greening issues and the environment. The target groups of this project are threefold: firstly, TVET learners – by providing them greening related exposure and accredited training that benefit their employability skills; secondly, TVET teachers – by involving and supplying them an accredited training module about greening and a toolbox to enable them to deliver the greening related training; thirdly, the communities – by improving their understanding of greening issues, but also from benefitting from the job opportunities created through greening initiatives.

The project has 6 main objectives:

- Greening in TVET module at EQF level 4
- Teachers' greening in TVET module
- Teachers' greening in TVET toolkit
- Greening in TVET website and logo
- Greening in TVET App
- Greening the campus initiative

At the conclusion of the 36-month project, it is envisioned that materials will be transferable to different contexts, reflecting different cultural and national requirements, and can therefore be freely disseminated.

Pro-DEENLA learning modules

**Presented by Mr Michael Schwarz,
UNEVOC Centre BIBB, Germany**

The aim of the 'Pro-DEENLA' project is to design, test and disseminate sustainably oriented learning tasks for in-company training in the transport and logistics sectors. The project focuses on personnel and teachers as well as trainees and students. The learning modules for both target groups were developed in cooperation between the following stakeholders:

Leuphana University, Steinbeis Innovation Center for Logistics and Sustainability, Federal Institute for Vocational Education and Training (BIBB), 15 companies from the transport and logistic sectors, 4 Federations from the transport and logistic sector, and the Chamber of Commerce and Industry Heilbronn-Franken. The first learning module is available in English via the BILT knowledge platform.

Green Wheels Project

**Presented by Ms Gabriella Mihályi,
Centre for Modern Education HU, Hungary**

This Erasmus+ project is carried out with partners from Croatia, Slovakia, and the United Kingdom. The focus of this programme is Hybrid Electrical Vehicle (EHV) operation, service and repair competencies for existing occupational job profiles (upskilling), and serves new employment opportunities (new qualifications) in the emerging field of EHV. The three needs which spurred the Green Wheels Project were: firstly, teaching methods used in TVET schools were frequently outdated; secondly, skilled workers need theoretical knowledge and information about new working processes; and thirdly, TVET schools might have information on EHV related to green issues which are however not reflected in daily practise of teaching. The Green Wheels Project addresses both the theoretical and practical aspects, and it includes: learning outcomes, description of the learning environment, description of how to support learning processes, and assessment modes. Practical aspects of the Green Wheels Project include: eLearning, questions, videos, worksheets, methodology guidelines, and a guide for teachers and trainers.

GoGreen Environmental Protection Programme

**Presented by Ms Helene Arz,
DPDHL Shared Value, Germany**

Deutsche Post DHL Group is a global company with the aim to generate zero emissions by the year 2050. To reach this goal, the company set four strategic goals for the year 2025:

- A global target, setting the carbon efficiency by 50% when compared to 2007 levels
- A local target, by delivering 70% of first and last mile services with clean pick-up and delivery solutions
- An economic target, more than 50% of sales will incorporate green solutions
- A people target, training 80% of employees to become certified GoGreen specialists and activists

A certified GoGreen specialist is actively involved to drive sustainability and efficiency. Development is inter-disciplinary and cross-divisional thanks to eLearning and offline workshops. Employees are offered elective modules which incorporate knowledge, training and participation in projects. 30 credits are needed to become a certified GoGreen specialist. DHL involves all employees in any job category (functional management, general manager, operational management, office staff at site, operational staff at site, and drivers). The key driver of the GoGreen Project is making solutions a core part of customer offerings.

Agriculture and environment in TVET

**Presented by Mr Helmut Kalss,
HBLFA Raumberg-Gruppenstein, Austria**

HBLFA is an Austrian TVET school focused on agriculture with a special interest in the environment. Students follow a general education where content and language are integrated within the agricultural context. What sets this school apart, is that it gives importance to the sense of community prevailing among

teachers, students and administration. Voluntary experiences and student projects are given equal importance to academic subjects. Studies are then enriched by job experiences until they reach an EQF level 5. Furthermore, students must experience practical training abroad to encourage independence, better teamwork and improve expertise. HBLFA promotes cutting-edge education supporting green pedagogy, including social aspects, ecology and economy. The four pillars of the school are that every individual is responsible for a sustainable future; a positive school spirit over generations; lifelong friendships; and a school for life.

COOP – Proctefa Project

**Presented by Ms Garbiñe Maiza,
UNEVOC Centre TKNKA, Basque Country,
Spain**

The PROCTEFA Project contributes to the economic and social sustainability of the Basque country. Its core objective is to develop a joint strategy in favour of sustainable development in order to improve the competences needed of the wood sector. The projects pillars are training improvements and the development of new products and technologies. Training improvements include the development of collaborative learning based on challenges with a technical guide for implementation on TVET as well as the development of training courses for the wood sector. Concerning the development of new products and technologies, the project seeks to develop, for instance, a tool for calculating light frame structures or a structural calculation tool for wooden stairs. The website can be referenced by everyone (TVET students, teachers and companies), thereby creating a common point of information and collaboration for a sustainable wood sector along with a training and employment observatory.

Findings

Greening trends and opportunities

Greening TVET is an emerging concept that has gathered momentum in the international community in the past years. This momentum is a reaction to – and is strengthened by – the **evident need for change**. The **negative impacts of climate change** are becoming more apparent, sustained by environmentally unsustainable practices. Jobs in the energy production, transportation, industry, commerce, agriculture, chemicals production, waste management, and mining and quarrying sectors have recorded high carbon emissions. Moreover, movements such as ‘Fridays for Future’ clearly demonstrate the awareness of the global youth for an urgently needed sustainable transformation.

The BILT knowledge platform, gathering ‘BILT Innovation and Learning Practises’ on this issue and illustrating the cooperation between UNEVOC Centres, contributes to this necessary transformation. The following section captures elements of the discussion around greening TVET during the BILT workshop at MCAST.

KEY ISSUE 1

Institutional responses to green demands

Concerning the first key issue, participants agreed on the importance of **involving and engaging a wide range of stakeholders in processes that make TVET greener**. Co-developing strategies together with students, teachers, parents, and management are important to ensure the longevity of activities at the school-level. Certain stakeholders also need to be convinced about the need for greening processes, and their involvement throughout the process can facilitate this. At the same time, the involvement of the private sector and municipalities are important to ensure the relevance and impact of the education and training provided, and ensure that what takes place at the institutional level, can also have an impact on the national/systemic level. Furthermore, **TVET**

students and employees should be actively involved in greening their learning venue and workplace. Their feeling of being able to make a difference is a key to success for greening an institution or company. These observations were resonated by all successful projects shared during the workshop: a good example is the multi-stakeholder project ‘Pro-DEENLA’ from the transport and logistic sector in Germany. The project’s result are concrete learning modules – both for in-company trainers and teachers as well as for trainees and students – which promote skills for sustainable vocational action.

Another idea that emerged from the ‘BILT Innovation and Learning Practices’ analysed during the workshop is that greening practices tend to be more successful and effective when a **strong champion, running a good pilot initiative**, advocates for the cause within the institution, community, or industry. TVET teachers, students, in-company trainers and other actors should therefore try to create pilot projects with champion teams with whom they can lead the change in their institution. Finally, addressing the local level with a global eye leads to success – as well as **local action that is needed for global change**. Participants argued that this needs to be put forward as a rationale to convince key stakeholders of an institution or company to kick-off a greening process.

KEY ISSUE 2

Identifying and integrating green competences in curriculum, training and professional standards

The transition to greener economies creates an urgent need to embed sustainability in TVET curricula, training and standards, as discussed under the second key issue. Participants identified different approaches to doing so, from the integration of transversal skills linked to awareness about climate change, to the identification of

specific knowledge and skills applicable to specific sectors and occupations. Furthermore, it became clear that **'green skills' combine different types of competencies**, including entrepreneurial skills, creative thinking, communication skills and IT skills. All of these need to be considered within the backdrop of greening and across TVET training. What is more, participants agreed that these competencies needed new pedagogical approaches to teaching that are student-centred. However, such approaches can only be put into action if teachers and trainers are motivated and capable to do so, putting in focus the importance of mechanisms that support TVET teaching personnel. Therefore, the **training and preparation of the TVET teaching personnel** is a very critical point of this exercise.

A point that was reflected by many of the 'BILT Innovation and Learning Practises' was the challenge of **changing the mind-set of learners, industry and TVET institutions**. Therefore, greening and sustainability needs to be introduced in all types of education from a very young age onwards. The importance of promoting thinking on sustainability in non-formal and informal settings should also not be underestimated. This is also the experience displayed by countries like Finland, where greening is high on the political agenda and implemented on various levels. Besides, a green mind-set should equally be introduced as a policy mind-set in the public sector, which can be advocated for by TVET institutions.

Finally, participants recognized the **link between digitalization and greening processes**. On the one hand, developments in technology are driving the growth of certain sectors, including in renewable technologies. On the other hand, the development of Apps, MOOCs, Open Educational Resources and other technological tools can make education for sustainable development more accessible, in and outside of education and training settings, whether it be in schools, companies or at home.

BILT Peer Learning

Participants underlined how beneficial it was to **learn about other approaches to greening TVET and to promote and publicise good practices**. As with other BILT workshops, they suggested to explore how the theme could be connected to other BILT themes, for instance with 'Entrepreneurship in TVET'. Exploring this idea, TVET students could be motivated to create start-ups where their main goal is to assume responsibility for sustainability. Finally, sharing material, such as greening modules, was considered as extremely enriching, since much content has been created already and it saves other institution from 'starting from scratch'.

List of Participants

Name	Institution	Country
Louis Aquilina	MCAST	Malta
Helene Arz	Deutsche Post DHL Group	Germany
Helga Berg	BMBF	Germany
Laila Carlsen	Municipality of Sorø	Denmark
Charlot Cassar	The Environment and Resources Authority (ERA)	Malta
Tristan Cole	UNESCO-UNEVOC	Germany
Audrey Gatt	MCAST	Malta
Helmut Kalss	HBLFA	Austria
Paivi Korhonen	OMNIA	Finland
Susanne Krey-de Groote	BKAL, Koeln	Germany
Detlev Lindau-Bank	University of Vechta	Germany
Garbiñe Maiza	TKNIKA	Spain
Gabriella Mihályi	Centre for Modern Education HU	Hungary
Wouter de Regt	UNESCO-UNEVOC	Germany
Alex Rizzo	MCAST	Malta
Michael Schwarz	BIBB	Germany
Rob De Vrind	Koning Willem I College	Netherlands
Karin Wechsler	HBLFA	Austria

Participants from the BILT Workshop on Greening TVET at Malta College of Arts, Science, and Technology in Paola, Malta



Workshop Agenda

23 October	Wednesday
08:30–09:00	Registration and welcome coffee
09:00–09:45	Welcome and opening Welcome and opening <ul style="list-style-type: none"> • Deputy Principal, MCAST • Tristan Cole, UNESCO-UNVOC <i>Group Picture</i>
09:30–10:30	Framing the workshop Overview of the BILT project, objectives and expected outcomes of the workshop and workshop structure <i>Introduction of participants</i> <ul style="list-style-type: none"> • Greening TVET in the BILT project Tristan Cole, Project Officer, UNESCO-UNVOC Michael Schwarz, Deputy Head of Division, BIBB • Clarifying the concept of greening TVET <ul style="list-style-type: none"> • Greening TVET within UNESCO’s Strategy for TVET and Programmes Wouter de Regt, UNESCO-UNEVOC • Clarifying Greening TVET (concept, application) Louis Aquilina, MCAST, Malta
10:30–11:00	Coffee break
11:00–12:00	Context: Greening cities, communities and the workplace The session will establish an understanding of greening TVET from the lenses of shifting skills demand, the range of strategic decisions and process suited for adoption in institutional setting and the implications of these skill demands and movement for cities, communities and the workplace <ul style="list-style-type: none"> • Cities as local drivers for sustainability – the case of the City of Espoo Paivi Korhonen, OMNIA, Finland • Understanding changing skills demands and workplace processes <ul style="list-style-type: none"> • Retail sector – Susanne Krey-de Groote, BKAL, Germany (Eco-labelling) • Energy/water sector - The Energy, Water Agency (EWA), Malta

23 October		Wednesday	
12:00–13:00		Lunch	
13:00–14:30		<p>Topic 1: Institutional responses to green demands Peer learning via practical examples</p> <p>TVET plays an important role in providing the knowledge and skills to facilitate the transition to green economies and societies. Training providers, as key members of the local skills ecosystem, have a particularly important role to play. Globally, institutions are applying different approaches (i.e., whole-institutional or incremental approaches) towards adopting a comprehensive strategy for becoming greener as a learning site and sustainable in their education and training approach, and day-to-day practices. This is to ensure that their institution has adequate foundation to become an active contributor in the context of the changing demands. Session I presents some practical examples of institutions and their initiatives</p> <p>Presentation of practical examples:</p> <ol style="list-style-type: none"> 1. Laila Carlsen, Municipality of Sorø, Denmark 2. Rob de Vrind, Koning Willem I College, Netherlands, Netherlands <p>Discussing practical examples in a World Café format: <i>Presenters 1 and 2 as table hosts</i></p>	
14:30–15:00		Coffee break	
15:00–15:30		<p>Transferability of practice in response to green demands</p> <p>Louis Aquilina, MCAST, Malta Wouter de Regt, UNESCO-UNVOC</p>	
15:30–16:45		<p>Greening in practise – MCAST perspectives</p> <p>Louis Aquilina, MCAST, Malta</p>	
16:45–17:00		<p>Wrap up Day 1</p> <p>Louis Aquilina, MCAST, Malta</p>	
18:30		Group Dinner	

24 October

Thursday

09:00–09:15

Context: Sustainability and the impact on job roles and curriculum

The drive to sustainability and the resulting transformations, especially with regards to new job roles, call for learners to constantly upgrade their knowledge, skills and competences. Participants therefore need to understand how skills required for current and future 'green jobs' are identified and integrated into the curriculum and standards, and the impact this has on instruction/pedagogy, and assessment of learning outcomes.

- **Understanding the global developments and its impact on Europe – presentation of examples from select sectors**

Wouter de Regt, UNESCO-UNEVOC

09:15–11:00

**Topic 2: Identifying and integrating green competences in curriculum, training and professional standards
Peer learning via practical examples – Session 1**

Presentation of practical examples:

1. Erasmus+ project on aligning VET curricula to greening and the SDGs
Louis Aquilina, MCAST, Malta
2. ProDEENLA
Michael Schwarz, BIBB, Germany
3. Green Wheels Project
Gabriella Mihályi, Centre for Modern Education HU, Hungary

Discussing practical examples in a World Café format:
Presenters 1, 2, and 3 as table hosts

11:00–11:30

Coffee break

11:30–13:15

**Topic 2: Identifying and integrating green competences in curriculum, training and professional standards
Peer learning via practical examples – Session 2**

Presentation of practical examples:

4. GoGreen Environmental Protection Programme
Helene Arz, DPDHL Shared Value
5. New qualifications and competencies
HBLFA Raumberg-Gumpenstein, Austria
6. Coop – Poctefa Project
Garbiñe Maiza, TKNIKA, Spain

Discussing practical examples in a World Café format:
Presenters 4, 5, and 6 as table hosts

13:15–14:15

Lunch break

24 October**Thursday****14:15–14:45****Transferability of practices in response to identifying and integrating green competences in curriculum, training and professional standards**

Louis Aquilina, MCAST, Malta
Wouter de Regt, UNESCO-UNEVOC

14:45–15:15**Workshop summary session & Networking Coffee****15:15–15:30****Wrap up and closing**

Louis Aquilina, MCAST, Malta, and UNESCO-UNEVOC
Tristan Cole, Project Officer, UNESCO-UNEVOC
Including feedback by participants

15:30**End of workshop**

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Authors

UNESCO-UNEVOC:
Tristan Cole
Alexandra Filippova
Jens Liebe

BIBB:
Vera Hark
Michael Schwarz

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Design
Christiane Marwecki

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