

Rolf Feichtenbeiner | Heiko Weber | Robert Hantsch | Nadja Berger

Establishing sustainable learning venues

A Guideline for training companies on the road to becoming more sustainable

International version

VOCATIONAL EDUCATION AND TRAINING IN PRACTICE

Rolf Feichtenbeiner | Heiko Weber | Robert Hantsch | Nadja Berger

Establishing sustainable learning venues

A guideline for training companies on the road to becoming more sustainable

– International version –



Forschungsinstitut
Betriebliche Bildung



SPONSORED BY THE

Federal Ministry
of Education
and Research

bibb Federal Institute for
Vocational Education
and Training

This practical guideline was prepared by f-bb Forschungsinstitut Betriebliche Bildung (Research Institute for Vocational Training) in cooperation with the Federal Institute for Vocational Education and Training (BIBB). f-bb was commissioned by BIBB to provide scientific support for the Funding Line II, “Designing sustainable learning environments”. Funding for this guideline, as well as for twelve associated pilot projects with priority funding on “Vocational education and training for sustainable development 2015–2019”, was provided by the Federal Ministry of Education and Research (BMBF). The international shortened version of the guide was created in the framework of the ‘Bridging Innovation and Learning in TVET’ (BILT) project, which is implemented by UNESCO-UNEVOC and BIBB, and funded by BMBF.



Citation:

Feichtenbeiner, Rolf; Weber, Heiko; Hantsch, Robert; Berger, Nadja: Establishing sustainable learning venues. A guideline for training companies on the road to becoming more sustainable. International version. Bonn 2022

1st Edition 2022

Publisher:

Federal Institute for Vocational Education and Training
Robert-Schuman-Platz 3
53175 Bonn
Website: www.bibb.de/en

Publication management:

Strategic Office “Publications and Scientific Information Services”
Email: publikationsmanagement@bibb.de
Website: www.bibb.de/publications

Production and distribution:

Verlag Barbara Budrich
Stauffenbergstraße 7
51379 Leverkusen
Email: info@budrich.de
Website: www.budrich.eu

Licence:

The content of this work is subject to a Creative Commons Licence (licence type: Attribution-NonCommercial-NoDerivatives 4.0 International).



For more information on Creative Commons and Open Access, see Website: www.bibb.de/oa.

ISBN 978-3-8474-2899-2 (Print)

ISBN 978-3-96208-336-6 (Open Access)

urn:nbn:de: 0035-0998-9

Bibliographic information of the German National Library

The German National Library catalogues this publication in the German National Bibliography. Detailed information is available online at <https://www.dnb.de/EN/Home>.

Printed on PEFC-certified paper

Legend



Destination



Journey Information



Practical Examples

Table of contents

Introduction	5
This guideline in a nutshell	7
1. Corporate Environment and Community Embeddedness	9
Destination 1: Raise awareness of human and employee rights	10
Journey information	10
Innovative practical examples	11
Destination 2: Cooperate with other learning venues, create partnerships for innovation.	12
Journey information	12
Innovative practical examples	13
Destination 3: Promote educational practices that support sustainable development on both local and national levels	14
Journey information	14
Innovative practical examples	15
2. Corporate Learning Culture	16
Destination 1: Enshrine sustainable development as a guiding principle within your own company.	17
Journey information	17
Innovative practical examples	18
Destination 2: Define sustainable development education strategy and goals.	19
Journey information	19
Innovative practical examples	20
Destination 3: Plan concrete education measures for sustainable development	21
Journey information	21
Innovative practical examples	22
3. Learning and working environments	23
Destination 1: Exploit all potential learning and working opportunities to address sustainability issues.	24
Journey information	24
Innovative practical examples	25
Destination 2: Make learning and working environments conducive to learning	26
Journey information	26
Innovative practical examples	27
Destination 3: Promote sustainability competencies of training staff and managers.	28
Journey information	28
Innovative practical examples	29

Destination 4: Support exchange, collaboration and joint learning	30
Journey information	30
Innovative practical examples	31
Destination 5: Create space for design and action	32
Journey information	32
Innovative practical examples	33
4. Teaching and learning situations	34
Destination 1: Incorporate sustainability concepts into in-house learning content and in-company teaching/learning situations	35
Journey information	35
Innovative practical examples	36
Destination 2: Design a holistic learning approach that incorporates sustainable action and makes room for divergent perspectives and objectives	37
Journey information	37
Innovative practical examples	38
About the authors	39
Abstract	40

► Introduction

“Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

Gro Harlem Brundtland at the UN World Commission on Environment and Development

“Sustainability is the integration of environmental health, social equity, and economic vitality in order to create thriving, healthy, diverse and resilient communities for this generation and generations to come.”

UCLA Sustainability Committee

Today, sustainable development is not just an option but a necessity. In 2015 when the international community drew up the 2030 Agenda, they agreed on 17 global Sustainable Development Goals relating to various ecological, social and economic aspects. These goals lay the foundation for achieving global economic progress that is compatible with social justice and the Earth’s ecological limits. Implementing these goals is a task for all members of society and all sectors– political, business, scientific, cultural and civil society.

The transformation to a more sustainable lifestyle can therefore be seen as one of the greatest societal challenges of our time. Climate protection and fair working conditions are becoming increasingly important issues also for training companies. Moreover, they are being implemented on a practical level in workplaces around the world. Training companies therefore need to address this development and play an active role in shaping it. One important prerequisite for achieving this is that training companies further develop themselves into sustainable learning environments. There are many different ways of doing this. For example, employees can be empowered to actively contribute to designing change processes within their organisations. Training companies can introduce sustainably produced products, make their supply chains more sustainable and use learning processes to encourage employees to think and act more sustainably. Additionally, they can use different work environments, such as the point of sale or the company premises, to address sustainable development. Another option for training companies could be to derive qualifications based on their own sustainability models and strategies, as well as link to objectives set for training staff and managers. Employees can be trained on sustainability issues and the company can provide them with the appropriate freedom needed to implement internal sustainability-related projects. Moreover, training companies can examine their qualification programmes from a sustainability perspective and integrate appropriate learning content, where applicable (e.g. training seminars, team meetings, or during introductory training for new employees or trainees).

As the examples show, training companies can address a wide range of issues on their way to designing sustainable learning venues. Moreover, there are no one-size-fits all solutions for implementing a sustainable learning venue and promoting education for sustainable development. This practical guideline presents various possible options. It describes approaches and practical examples in four key areas: corporate environment & community embeddedness, learning framework, learning & working environments, and teaching & learning situations. Each of the four key areas is broken down into several areas of action. In each case, we begin by providing checklists, which give companies an initial idea of where to get started. Indicators also play a role here, as they can be used to document initial progress. In this regard, the guideline ties in with the tried-and-tested company practice of using indicators, or key performance indicators (KIPs) in order to both manage productivity and social responsibility. For instance, in the area of corporate responsibility and sustainable development, instruments and reporting systems such as the UN Global Compact, the Global Reporting Initiative (GRI) or the EMAS Eco-Management and Audit Scheme are already in use. The guideline ties in with this practice, thus contributing to the further development of these proven structures.

► This guideline in a nutshell

What is the purpose of this guideline?

Achieving a sustainable learning venue should not be seen solely as a destination but rather as a journey. A journey is something personal, unique, and individually tailored. While all training companies have the same goal, to achieve a sustainable learning venue, the paths, or journeys, that they chose to undertake this venture are unique. After all, by their very nature no two companies are the same. They all differ in terms of employee numbers, products, occupational profiles and/or work activities. They are also highly diverse with regard to their strategies and goals for sustainable development. It is therefore necessary for companies to set their own priorities when it comes to designing a sustainable learning venue. Sometimes along the path there will be hurdles to overcome, such as conflicting objectives between sustainable development and increasing sales. Other times complete roadblocks may derail the process, or send it down an entirely new path.

The aim of this guideline is not for training companies to view the outlined destinations as items on a checklist that need to be worked through as quickly as possible. Instead, this guideline presents various destinations, journey information, and practical examples. It also shows which themes and questions companies should address in order to successfully establish sustainable learning venues. On this journey it is important to not become overwhelmed and to recognize that even small steps are valuable and have impact on acting in a more sustainable way.

Who should use this guideline?

This guideline is primarily aimed at stakeholders working in companies that provide vocational education and training – more specifically entrepreneurs, executives, personnel managers and trainers. It is advisable to embark on this journey with a diverse team of employees from different functional areas and hierarchy levels. This may include, for example, sustainability officers or training/education managers. Consultants, communications and marketing personnel, as well as knowledge management brokers may also use the guideline to support companies on their way to achieving sustainable corporate development. Although the guide is primarily aimed at companies, it can also be used by other education and training providers, e.g. vocational schools, inter-company vocational training centres¹, etc.

Navigating this guideline

To prevent you from losing your bearings along the way, the following structure will serve as a navigation system through the guideline. The guideline is divided into **four key areas**:

¹ Überbetriebliche Berufsbildungsstätten (ÜBS)



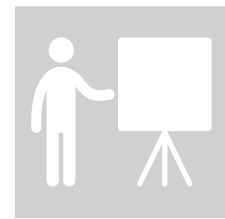
(1) Corporate Environment & Community Embeddedness



(2) Corporate Learning Culture



(3) Learning and working environments



(4) Teaching & learning situations

Each key area contains several calls to action, which are referred to as **destinations**:

Design areas and approaches

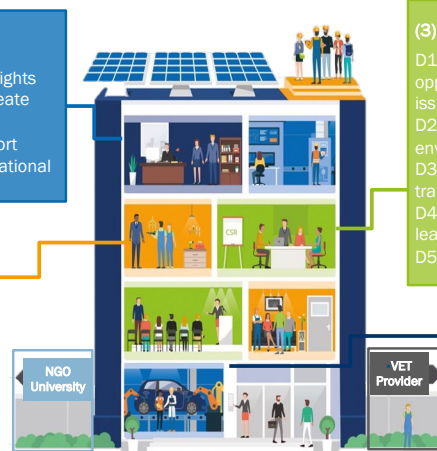


(1) Corporate Environment & Community Embeddedness

D1. Raise awareness of human & employee rights
D2. Cooperate with other learning venues, create partnerships for innovation
D3. Promote educational practices that support sustainable development on both local and national levels

(2) Corporate Learning Culture

D1. Enshrine sustainable development as a guiding principle within your own company
D2. Define sustainable development education strategy and goals
D3. Plan concrete education measures for sustainable development



(3) Learning & Working Environments

D1. Exploit all potential learning and working opportunities to address sustainability issues
D2. Make learning and working environments conducive to learning
D3. Promote sustainability competencies of training staff & managers
D4. Support exchange, collaboration, & joint learning
D5. Creative space for design & action

(4) Teaching & Learning Situations

D1. Incorporate sustainability concepts into in-house learning content and teaching/learning situations
D2. Design a holistic learning approach that incorporates sustainable action and makes room for divergent perspectives and objectives

Heiko Weber | 21.10.2021 | 1

Source: own representation

Navigation symbols



Destination

Every journey needs a destination. As there are many possible ways of achieving a sustainable learning venue, each training company can define its own precise destinations and choose individual routes. We have designed this guideline in the form of a travel guide, presenting several possible destinations (see graph above) that are assigned to four key areas (corporate environment & community embeddedness, learning framework, learning & working environments, and teaching & learning situations). Each destination involves a step that a training company can take towards designing a sustainable learning venue. Each destination comes with journey information and practical examples taken from various companies and projects.



Journey Information

Additional information is provided about every destination. This information contains a concise summary of why the *destination* is worth reaching, indicates any particular points to watch for and provides an overview of what aids may be useful in reaching the destination.



Innovative practical examples

Selected tools and materials provide you with an insight into the experiences of other companies and organisations that are already on their way to establishing sustainable learning venues. Hyperlinks provide an easy means of accessing additional information.

► 1. Corporate Environment and Community Embeddedness



1.

Key area 1 comprises educational activities that are either carried out within the environment of the company, or are initiated by other stakeholders in the environment of the company. What all activities have in common is that they can play an important role in education for sustainable development, in its social, economic and environmental dimension. This is because companies act as sustainable learning venues even beyond their own boundaries. Their mere geographical locations may tie them into specific regions, but the training they provide could play a role in the vocational education and training (VET) system; or they may work with partners in the context of global supply chains.

Selected indicators in key area 1:

	We're currently preparing for our journey	The first steps have been taken	We've reached the halfway point	It's not much further to go	We've reached our destination
Our company provides employees with information regarding the observance of human rights in general and within the company specifically.					
Our company incorporates external cooperation partners (e.g. educational institutions, NGOs, scientific institutions) into sustainability activities.					
Our company gets involved in career guidance for school students and trainees in the region.					
Our company advocates social and ecological education projects in the region.					

1.



Destination 1: Raise awareness of human and employee rights

Our company/educational institution raises awareness among employees, trade partners and/or customers regarding statutory regulations on human rights (e.g. equal treatment) and employee rights (e.g. occupational safety, health protection and initial/further training).



Journey information

One of the characteristics of a sustainable company is its consistent adherence to legal framework conditions that support sustainable development. A sustainable in-company learning venue also meets two further criteria. Firstly, employees are aware of their rights and duties and are put in a position to adhere to statutory regulations in their day-to-day work.

Secondly, trade partners and customers are also made more aware of sustainability. Around the world, there are already globally valid frameworks relating to human and employee rights that are intended to help advance sustainable development and can be taken into account when shaping in-company learning venues:

In the EU, for example, an Anti-Discrimination Directive has been drawn up with the aim of preventing and combating discrimination of any kind. The Directive is intended to ensure gender equality. Complying with statutory regulations, raising employee awareness, training employees and promoting a corporate culture geared towards equality can have a positive impact on the sustainable development of companies. Promoting equality can contribute to conflict-free cooperation while simultaneously increasing employee satisfaction and retention. The promotion and equal treatment of women is an important prerequisite for sustainable company development and success.

Another internationally recognised framework is the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work.

This declaration contains rules for assessing working conditions and lays the legal foundations for occupational safety and health protection, which is also listed as an essential sustainability goal in the 2030 Agenda. It is a prerequisite for companies to operate successfully and profitably. Employees and young people need to be sensitised and trained in this respect.

There are also several other binding guidelines that can be used here. One example is the **Corporate Social Responsibility-(CSR) directive on corporate sustainability reporting** at listed companies, which has plenty of options that allow for employees to engage with the topic of sustainability.



Between 2010 and 2018

the number of non-fatal accidents per 100,000 employees decreased by 7.8% in all sectors of the economy in the 27 EU countries (europa.eu 2020).



Innovative practical examples

1.

Asia, United Arab Emirates, company with global operations

Training programmes to raise awareness of human rights in Dubai

Aramex is a multinational logistics, courier and parcel delivery company based in Dubai that offers training seminars to raise awareness of human rights as a permanent training programme for its employees. Employees are compelled to take part in the behavioural training seminars. The aim is to raise their awareness of the importance of respecting human rights and enable them to actually put what they learn into practice in internal work processes. These training programmes, which are continually optimised, aim to ensure that employees proactively take human rights into consideration in their conduct, thus reflecting the social dimension of sustainability.

Source: <https://www.aramex.com/docs/default-source/resources/human-and-labor-rights-policy-2021.pdf> (access: 18 October 2021)

Europe, Germany, company with global operations

In-house training on human rights awareness at Evonik Industries

Evonik, a listed German company, is a market leader in speciality chemicals worldwide. Striving to increase knowledge of human rights awareness and compliance among both business partners and employees, Evonik offers various training units for employees and for business partners. These training units are divided into in-person sessions, digital courses, and e-learning modules that take place worldwide. The courses impart basic knowledge of human rights and tie in with the regulations in place at Evonik. This reflects the societal dimension of sustainability.

Source: https://corporate.evonik.com/Downloads/Corporate%20Responsibility/Evonik_Sustainability%20Report.pdf, page 27f (access: 18 October 2021)



Destination 2: Cooperate with other learning venues, create partnerships for innovation

Our company or our educational institution cooperates with other learning venues in VET (e.g. vocational schools and continuing education providers) and maintains partnerships with academic and/or civil society stakeholders (e.g. universities and associations) with the aim of mainstreaming sustainability in initial and further in-company training.



Journey information

Training companies can collaborate in initial and further training with vocational schools, continuing education providers and other vocational training institutions. For example, training companies in Germany already cooperate with a vocational school or a group of continuing education providers, because such cooperation is a legal requirement as part of the dual VET system. It may be worthwhile to intensify this cooperation when addressing sustainability. This type of collaboration is referred to as learning venue cooperation².

In this way, trainees in the company can gain practical, on-the-job experience of what sustainability means and how sustainable work activities differ from conventional activities. In addition, they can benefit from the knowledge of experienced colleagues and develop their own sustainable work routines through observation and trial and error. At vocational school, trainees focus on theory and learn how they can deal with conflicting objectives, for instance, between environmental protection and economic interests. They also learn to understand the consequences of their own actions and to take sustainability into account when making decisions. Vocational school enables trainees to look beyond company boundaries. This may result in trainees bringing fresh momentum into the company with respect to sustainable development.

Alongside the possibility of learning venue cooperation, companies may also benefit from external expertise and impetus through so-called 'innovation partnerships'. Innovation partnerships help to bring together various stakeholders from different sectors and with different perspectives with the goal of developing a new strategy, product, or service. In this regard, possible innovation partners could include universities, industry associations, trade unions, other associations and private sector organisations. It is particularly promising when companies participate in activities (e.g. competitions or award ceremonies) and events (e.g. sustainability congresses) within the framework of the UNESCO-Global Action Programme on Education for Sustainable Development.

The Global Action Programme constitutes the international implementation plan for promoting sustainability in all areas of education and training with specific measures and political strategies.



Innovative practical examples

1.

Asia, Europe, international network

German-Bangladesh Higher Education Network for Sustainable Textiles (HEST)

Universities in Germany and Bangladesh are working together to improve the quality of degree courses at selected Bangladeshi universities by incorporating social and ecological aspects into the curriculum and integrating practice-oriented teaching methods. When it comes to cooperating with other learning facilities for VET, the “HEST project” follows a holistic approach in close collaboration with the University Grants Commission (UGC) and the German Academic Exchange Service (DAAD). Thanks to the German-Bangladesh Higher Education Network, it has improved the capacities of public and private universities and reduced the skill gap for middle managers in line with the requirements of the industry and responsible corporate management. To supplement these main activities, the project supports exchange forums between the universities and the private sector with a view to providing recommendations for demand-oriented tertiary education in the textiles and clothing sector. This addresses not only the ecological and social dimension but also the economic dimension of sustainability.

Further information: <https://www.giz.de/en/worldwide/43187.html> (access: 20 October 2021)

West Africa, Benin

Partnerships with private companies in agricultural VET

Drawing on the guidelines and resources from an African Union project that concentrates on reviving the continent’s agricultural sector to create jobs for young people, Benin’s National Consultation Framework for the Promotion of Technical and Vocational Education and Training is taking steps to strengthen the relationships between stakeholders in agricultural VET and the private sector. This collaboration between VET and the private sector is primarily aimed at the economic and social dimension of sustainability.

Further information: https://unevoc.unesco.org/pub/nqc_bridging_benins_skills_gap.pdf (access: 20 October 2021)

Asia, Shenzhen, company with global operations

Huawei certification for ICT programmes

Employees who have qualifications and skills in the information-and communication technology (ICT) sector are very much in demand around the globe. This is particularly the case in Shenzhen, a global centre for ICT companies and innovations. Striving to keep pace with the demand for qualified workers in the ICT sector, the TVET provider Shenzhen Polytechnic (SZPT) has worked in close collaboration with the company Huawei to develop programmes, design courses and develop new qualifications and skills that meet the needs of the ICT sector. This cooperation between the two innovation partners primarily addresses the economic and social aspects of sustainability.

Further information: https://unevoc.unesco.org/pub/digitalization_shenzhen_huawei-certification.pdf (access: 21 October 2021)

1.



Destination 3: Promote educational practices that support sustainable development on both local and national levels

Our company contributes to promoting education at both regional and national levels. Education for sustainable growth and development plays a particular role here.

Fostering initial and further training plays an important role in the social dimension of sustainable development of companies. Lifelong learning is essential for employees to meet the demands of their jobs in the long term. Training companies can lay the necessary foundations for this. The first step is for personnel managers and/or training supervisors to familiarise themselves with the legal frameworks and funding opportunities for VET. In this way, companies and their employees can receive additional funding for training and career /educational guidance that supports their sustainable growth or other corporate change processes.



Journey information

Many companies get involved in career guidance for young people or the integration of refugees beyond their own core business. They support regional education initiatives, are members of various networks and assume corporate social responsibility (CSR) even when they are not compelled to do so by strategic considerations or political regulations.

Offering apprenticeships is one possible way of contributing to education and sustainable development in the region. Young people, who are potentially a company's future trainees and experts, are also concerned with the issue of sustainability before they even join the company. Moreover they bring along with them a wide range of different values, interests and prior knowledge.

Training companies can also participate in regional education initiatives that work on mainstreaming education for sustainable development in the region. Providing people with internships in order to make a social contribution to integration while at the same time recruiting potential new target groups for the company would be one possibility. Other possible areas for engagement might include providing vocational orientation for school students in order to draw the attention of potential apprentices who identify with sustainability.



79 percent

of school students in OECD countries stated that they were aware of the issues of climate change and global warming (OECD 2021).



Innovative practical examples

1.

Europe, Moldova, project materials

Supporting VET for the green economy

Aiming to strengthen the system of demand-oriented dual VET for promoting ecological, economic and social development in Moldova, the Ministry of Education, Culture and Research and several stakeholders from the private sector, social partners and training institutions are promoting the “Support to Vocational Education and Training (VET) in the field of Green Economy” project. This project is laying the foundations for promoting sustainable dual initial training to support ecological and sustainable companies. A joint skill development and advisory approach is instigating the process, geared towards introducing both governmental and private stakeholders to the range of topics described by the term “green economy”. The aim here is to implement an end-to-end strategy for improving the enrolment of target groups in dual VET programmes and facilitating their transition to the labour market after they complete their training. Regional companies can be involved here and motivated to participate in funding programmes. This addresses the ecological, economic and social dimension of sustainability.

Further information: <https://www.giz.de/en/worldwide/37587.html> (access: 21 October 2021)

Central America, Caribbean, project materials

Skill development to promote a green economy illustrated by the SAGE programme in the Caribbean islands

The “Skills to Access the Green Economy” (SAGE) programme funded by the Canadian government aims to help Caribbean nations such as Belize, Dominica, Grenada, Guyana, Jamaica and St. Lucia that are particularly threatened by climate change to become more resilient through demand-oriented technical and vocational education and training (TVET). This programme draws on the specific expertise of Canadian colleges and institutes in order to increase the capacities of local training institutions and organise gender-specific qualification programmes while meeting the economic and ecological needs in the region. In this way, it strives to promote education for sustainable development in the regional environment. The programme also promotes the participation of teenage girls and vulnerable population groups in demand-oriented areas of TVET. The aim here is to increase the involvement of small and medium-sized companies in personnel planning, development and training that ensures gender equality. This addresses not only ecological and economic aspects of sustainability but also social ones.

Further information: <https://www.collegesinstitutes.ca/what-we-do/international/education-for-employment/skills-to-access-the-green-economy-sage> (access: 21 October 2021)

► 2. Corporate Learning Culture



Key area 2 contains measures for the learning venue (the company) as a whole. This includes the strategies, processes, structures and culture of the learning venue concerned. Designing these elements gives rise to a framework with a substantial effect on the learning culture, in-company learning and the participation of employees in the process of sustainable development. The structural framework for sustainable development education is established in the company by defining guiding principles, strategic measures and short, medium and long-term objectives. The aim should be to link initial and further training to sustainable development.

Selected indicators in key area 2:

	We're currently preparing for our journey	The first steps have been taken	We've reached the halfway point	It's not much further to go	We've reached our destination
Our company has a mission statement with integrated sustainability aspects.					
Our company gets employees involved in developing our strategy and goals for the company's sustainable development.					
Our company has defined criteria for high-quality initial and further training.					
The need for further training resulting from sustainable development is systematically assessed.					
Our company has defined curricula for initial and further training measures relating to sustainable development					



Destination 1: Enshrine sustainable development as a guiding principle within your own company

We are familiar with the guiding principle of sustainable development and the resulting requirements that our company needs to meet. As a company, we pay particular attention to meeting the requirements of promoting inclusive education, lifelong learning and the development of sustainability-related skills among our trainees and employees. We have therefore created a mission statement for our company with integrated sustainability aspects.



Journey information

Based on the 2030 Agenda and the global Sustainable Development Goals (SDGs), companies can develop their own ideas as to how they can contribute to education for sustainable development and what they wish to focus on here. In every case, it is a good idea to get employees involved in developing a sustainability-related mission statement that defines the organisation's long-term orientation. This process entails everyone working together to develop perceptions of sustainability at their own in-company learning facility.



Agenda 2030



Quality of in-company vocational education and training



Quality assurance of company-based training in the dual system in Germany

A jointly developed mission statement provides guidance for individual decisions and actions while documenting the essential pillars of the sustainable learning venue. This is important because sustainable development is something new for many companies and may give rise to numerous unanswered questions. The companies often do not yet have any fixed processes and routines for their employees. Moreover, the mission statement supports further steps on the road to becoming a sustainable learning venue, such as developing strategies and defining objectives.

The mission statement describes the importance of learning and participation. It explains why sustainable development and education for sustainable development need to be established in the company. It contains values and standards that are important for the company and defines the cornerstones of a learning culture geared towards sustainability. The mission statement shows how inclusive VET guided by quality criteria and lifelong learning can be made possible in the company.

2.

The following phases may be useful in developing a mission statement (see Compendium “Quality of In-Company Vocational Education and Training”):

1. Preparation and planning: The development of a mission statement is initiated in cooperation with the company management, training staff and sustainability officers. Responsibilities and resources are defined. Getting started: Trainees and employees are informed about the project and invited to participate. A mission statement development team is established.
2. Preparing the draft mission statement: The working group develops ideas and prepares a draft with the involvement of other trainees and employees.
3. Approval and publication: The draft mission statement is coordinated with all colleagues and presented both within the company and publicly.



Innovative practical examples

Europe, Germany, company with global operations

Training seminars for employees on the corporate code at the Applus+ Group

The Applus+ Group is an inspection, auditing and certification company with global operations. In its corporate code and code of ethics, it defines values, principles and rules of conduct that are intended to guide the company’s business activities. These values can be divided into integrity, transparency, impartiality, independence and responsibility. To ensure that all experts understand, heed and apply the values and ethical principles, the corporate code is presented each year in an online training course available to all employees. At the same time, it is also included in the initial training process for all new hires. This primarily addresses the social dimension of sustainability.

Further information: <https://www.applus.com/en/dam/jcr:46c8591d-39a8-4e3c-818b-2794ccf4db22/Integrated%20Report%202020.pdf> (page 115f) (access: 22 October 2021)

Europe, Germany, company with global operations

Communicating corporate sustainability objectives through joint guidelines at Siemens

Siemens personnel management supports the company’s managers in successfully implementing the Siemens Vision 2020+ strategy programme. It helps them not only in terms of achieving company goals but also in implementing the company’s organisational transformation and supporting cultural change processes. The guidelines and obligations provided in the Siemens Business Conduct Guidelines (BCGs) define the basic principles and rules for conduct both within and outside the company. The guiding principles govern all decisions and the overall conduct of employees. The BCGs also specify selected requirements such as human rights, core labour standards and sustainability goals. They thus serve as an example for transferring sustainable objectives into the company guidelines. The BCGs are compulsory for all employees, managers and Managing Board members worldwide. This example addresses not only the economic and ecological dimensions of sustainability but also the social dimension.

Further information: <https://assets.new.siemens.com/siemens/assets/api/uuid:13f56263-0d96-421c-a6a4-9c10bb9b9d28/sustainability2020-en.pdf> (page 83f) (access: 16 November 2021)

Asia, Viet Nam, political reform programme

Promoting the guiding principle of sustainable development by means of a TVET reform programme in Viet Nam

Although general environmental awareness and the share of the economy dedicated to sustainable industry is rather low in Viet Nam, a willingness to become a more sustainable society and create jobs with a corresponding demand for green skills can be seen. A TVET reform programme is transforming the country's vocational education system into a mediator for the green economy – such as by setting up regional hubs for sustainable vocational education in institutes like the College of Machinery and Irrigation, thus promoting the guiding principle of sustainable development and enabling companies to apply and implement it. Both the ecological and economic aspects of sustainability are addressed here.

Further information: <https://unevoc.unesco.org/pub/greening-vcmi-reform-vietnam.pdf> (access: 19 October 2021)

2.



Destination 2: Define sustainable development education strategy and goals

We have formulated a training strategy based on our company's general sustainability strategy and mission statement. We enable inclusive high-VET, and lifelong learning.



Journey information

Strategies and goals for sustainable development education put the general values and principles defined in the mission statement into concrete terms. They lay down the strategic organisational framework for shaping a sustainable learning venue. In essence, the strategy and goals define the extent and manner in which trainees and employees are involved in the transformation towards a sustainable company and are supported here through training. Strategies and goals are more binding than the mission statement and therefore provide guidance for the conduct of trainees, employees and decision-makers.

Before determining a training strategy and specific goals, it is a good idea to perform a thorough analysis. Essential steps and questions that companies can address in this context include the following:

1. Analysis of any existing sustainability **strategy**: What are our company's priorities with regard to sustainable development? In which areas can education for sustainable development support this process?
2. Analysis of sustainability **goals**: What goals are formulated in this context? What changes might arise in terms of operating structures, processes, responsibilities or activities?
3. Analysis of the **current situation** regarding a sustainable learning venue: What activities do we already perform pertaining to sustainable development education? What skills do our training supervisors, trainees and employees already have in the area of sustainability, and where will

further qualification be required in the future? What learning environments and learning situations do we already use to enable trainees and employees to experience sustainability?

The first step to be taken entails answering the above questions and drawing on the mission statement to name areas of action for education for sustainable development that will support sustainable corporate development. Following this, short, medium, and long-term goals can be formulated for each of the defined areas of action. It is advisable to formulate **S.M.A.R.T.** goals here:

- ▶ **Specific:** What exactly is to be achieved? (Clear and well defined)
- ▶ **Measurable:** How can the goal be quantified or measured? (Exact criteria to measure progress)
- ▶ **Achievable:** Is the goal feasible? (Attainable goal)
- ▶ **Relevant:** Is the goal important for the company and its staff? (Fitting to needs)
- ▶ **Time-bound:** When should the goal be achieved? (Planned timeline)

Indicators can then be used to verify whether the goal is achieved. Based on the strategic areas of action and the defined goals and indicators, companies can set the framework for the contribution that education/training will make to their own sustainable corporate development.

When developing the mission statement, strategy and goals, it makes sense to get employees involved. In small companies, it is quite feasible to involve all employees and answer the questions together as a team, for example, in the form of a workshop. In larger companies, managers can act as focal points for incorporating the views of their employees into the process.



Innovative practical examples

Europe, Germany, company

Employee surveys to gauge job satisfaction, improve working conditions and promote ergonomics and well-being

Dataflex, a German office furniture company, conducted employee satisfaction surveys in October 2020. These surveys are repeated four times a year. The findings help the company to further improve working conditions and thus maximise employee satisfaction. The company also provided ergonomic accessories and office chairs for the team in order to guarantee ergonomic working. In addition, it invited a pension consultant to help set up an employee benefits portal. In this way, the company aims to ensure not only the current well-being but also the future financial security of all members of the team. This corporate strategy addresses both economic and social sustainability aspects.

Further information: <https://www.dataflex-int.com/media/files/brochures/Sustainability-report-2020-EN.pdf> (page 32) (access: 8 November 2021)

Europe, Malta

Promoting sustainable practices through Greening TVET in Malta

The “Greening TVET” Initiative addresses sustainability in the context of in-company education. The College of Arts, Science and Technology in Malta (MCAST) supports small and medium enterprises through a multidisciplinary approach that promotes work-based learning through training programmes and diverse entrepreneurship. “Greening TVET” aims to promote the development of knowledge, skills, and attitudes that stimulate a culture of sustainable practices both in the community, the workplace, and the institutional environment. The goal of this sustainable development strategy is to raise awareness of the concept of a sustainable economy in TVET among students and teachers with vocational and/or academic backgrounds.

Further information: https://unevoc.unesco.org/pub/greening_mcast_greening_for_a_sustainable_environment.pdf (access: 25 October 2021)

2.



Destination 3: Plan concrete education measures for sustainable development

To take our company mission statement and strategy for education and training one step further, we plan concrete educational measures for the sustainable development of our company.



Journey information

An important prerequisite for the success of sustainable learning venues is the ability to translate strategy and goals into specific training measures to promote sustainability-related competencies among employees. Educational planning plays a significant role here. Educational measures are understood to include not only formal formats of initial and continuing in-company training (e.g. training seminars, briefing, etc.) but also informal forms of learning (e.g. training of trainees by experts, learning in a team, learning by doing, etc.), in addition to the organisation of working and learning environments. The aim here is to enable trainees and employees to deal with sustainability.

Educational planning includes the following tasks³ that companies should address:

Analyse in-company training needs

Modifying a company with sustainable development in-mind may result in activities changing and/or new routines being established for employees. Employees then require new knowledge, skills and capabilities. For example, if a company from the retail sector decides to provide a more sustainable range of products, its employees should be able to advise customers on the new products. This requires not only an extensive knowledge of sustainability labelling and/or production processes but also knowledge of different types of customers.

³ See: DEHNBOSTEL, Peter: Betriebliches Bildungsmanagement. 5. Auflage. Carl von Ossietzky Universität Oldenburg 2014, p. 16.

It is therefore advisable to analyse the training needs that may arise as a result of implementing new sustainable development practices in one's own company. A starting point for determining the future qualifications that will be needed is to look at how trainee and employee responsibilities change over time (target situation). It is equally important to find out what employees already know, what skill sets they have, and what their stances are with regard to sustainability (actual situation). Managers, training staff, or members of the works council may be the ideal contacts for obtaining an initial overview of the current situation among the workforce. Information on this can be obtained through employee performance reviews, seminars, or surveys. Areas of action in sustainable development education can be identified by comparing the company requirements (target situation) and the qualifications of employees (actual situation).



Innovative practical examples

Africa, Nigeria, Senegal, company

Talent development to promote social and cultural sustainability in Senegal

Dangote Cement is a multinational cement producer based in Nigeria. Through proactive policy, it aims to ensure that local employees in its home country have the knowledge of sustainability, experience and support that they need in order to assume key roles within the company. The company is committed to enabling employees to develop their careers and give them opportunities for promotion, in part based on a local corporate culture. This approach addresses the ecological and economic aspects as well as the social dimension of sustainability.

Source: [DangoteCementPlc_2018SustainabilityReport.pdf](#), page 81 (access: 26 October 2021)

Europe, Hungary, project materials

Sustainability in the automotive sector using the Green Wheels project as an example Example from Hungary

The Center for Modern Education (CFME) in Hungary is an international network for education projects that focus on improving the quality of teaching. CFME actively cooperates with vocational schools and national educational supervisory authorities to implement innovations in the education system. In this context, the Green Wheels project explicitly responds to the need for innovation in the automotive sector and constitutes a measure for sustainable development education in that it provides an open learning programme for the repair, maintenance and servicing of electric and hybrid vehicles. Priority areas in the programme include innovative learning methods and approaches, teacher training, mentoring and access to open learning materials as well as curricula and developing guidelines. This example addresses the economic and ecological dimension of sustainability.

Source: <https://www.gwproject.eu/home/> (access: 27 October 2021)

Further information: <https://lms.gwproject.eu/project/course/default.aspx?project=1&course=5> (access: 27 October 2021)

► 3. Learning and working environments



3.

Key area 3 revolves around the learning and working environments in the training company. The suggestions relate to the physical and nonphysical “spaces” in which vocational learning is made possible through pedagogical action. The selection and design of learning and working environments is an important lever for encouraging trainees and employees to address the company’s sustainable development. This is because staff also learn informally through conversations with one another, as well as by independently addressing sustainability. Learning and working environments can support or hinder these informal, self-directed forms of learning, and therefore should also be analysed with regard to their potential for sustainable corporate development and designed accordingly.

Selected indicators in key area 3:

	We're currently preparing for our journey	The first steps have been taken	We've reached the halfway point	It's not much further to go	We've reached our destination
Our company makes use of the learning and working environments both in the company and beyond (externally/virtually) to address ecological, economic and/or social aspects of sustainability.					
Our company regularly instructs training staff and managers regarding ecological, economic and social aspects of sustainability.					
Our company identifies conditions that hinder or promote learning.					
Our company implements measures to promote a culture of exchange, mutual learning and error management.					
Our company provides daily opportunities for learning to make sustainable behaviours both tangible and experienceable.					



Destination 1: Exploit all potential learning and working opportunities to address sustainability issues

Our company identifies and makes use of the opportunities offered by different internal and external learning and working environments for dealing with sustainability issues.



Journey information

There are a large number of potential learning and working environments at every company. This refers to spaces that can be used to address the issue of sustainability, such as training rooms, the workplace itself, training workshops, and increasingly digital learning environments. Learning can also be inspired by the company's premises, beyond an employee's personal workspace.

Learning environments have a substantial influence on whether or not trainees and employees are able to address the issue of sustainability. This depends on several aspects of the learning environment.

1. The architecture and design of the room itself can promote or inhibit learning. Learning conditions are affected by aspects such as lighting conditions, noise level, temperature, and cleanliness/order. Creative and problem-solving methods such as Design Thinking also assign great importance to the room.
2. The furnishings and available equipment also play a role. For example, objects such as solar panels, beneficial plants or water treatment facilities can be used both as learning units, as well as to illustrate sustainability-related content.
3. The processes and exchange formats used in the different departments offer further potential for addressing sustainability. Let's look at an example to illustrate this. The production section in industrial companies often contains what is called a "shop floor board". This is somewhat like a display board that can be used to document and verify operating performance indicators. For instance, a production plant's energy consumption can be documented and verified each day. In what are referred to as "shop floor board sessions", all employees in a department can come together to discuss the latest developments with regard to energy consumption and possible improvement measures. In this way, companies can continuously address and discuss specific performance indicators for sustainable development and initiate informal learning processes among trainees and employees.



Design Thinking

is an approach towards solving problems and developing new ideas. It is based on the three principles of team, space and process. The space should encourage creativity through movement (e.g. through moveable furniture) and the spatial setup (e.g. walls as work surfaces).

Learning venues outside the company can also provide important learning impetus for sustainable development. This is especially the case when the company's own learning venue does not offer such learning opportunities. For example, if a hotel and restaurant business wishes to change

over to a sustainable menu, it is useful if service staff are able to inform customers about the food process and preparation. Visiting suppliers could be an important learning impetus for staff to educate themselves about the cultivation, care, and harvesting of the food products offered.



Innovative practical examples

Europe, Netherlands, company with international operations

Sustainability expeditions and initiatives at ABN AMRO Bank

ABN AMRO Bank organises expeditions for various groups within the bank to help them address sustainability issues and create space for design and action in this regard. The groups are invited to offsite sessions spanning several days. Various initiatives for addressing sustainability already exist. One example is the “Purpose Walk”, which entails walking around wearing headphones and listening to inspiring stories about the bank’s goals and the role that bank employees play. A further example is the “Green Guide”, an interactive document describing the sustainability initiatives at ABN AMRO. This example primarily addresses the ecological aspects of sustainability.

Further information: [Circle Academy: teaching sustainability in theory and putting it into practice – ABN AMRO Bank](#) (access: 18 October 2021)

Africa, Cape Verde

GAIA collaboration platform for VET

The Cape Verde Competence Centre uses a digital platform with TVET content that is aligned with international standards and the latest demands in the industry. In this way, it brings the sectors of renewable energy and industrial maintenance to the forefront of innovative and environmentally friendly VET in the country, thus creating potential for learning and working conditions in which sustainability can be addressed. This example is aimed at the economic and ecological dimension of sustainability.

Further information: https://unevoc.unesco.org/pub/greening_cdc_3c_gaia_collaborative_platform.pdf (access: 16 November 2021)

Some of the further information in the linked PDF file is not publicly accessible.

Europe, Germany, company

Sustainability awareness through recycling in the office

To raise awareness of sustainability and allow employees to experience sustainable action, the Health, Wellness and Happiness (HWH) team at Dataflex invited all employees to take part in a plastic-free July challenge. For one month, the employees tried to reject plastic packaging and use more sustainable alternatives instead. To optimise waste collection in the office, new recycling stations were installed and employees were instructed on how to recycle their waste correctly. To make lunch breaks more enjoyable, the HWH team also added a shelf for fresh herbs and books to the canteen. This primarily addresses the ecological dimension of sustainability.

Further Information: [Sustainability-report-2020-EN.pdf \(dataflex-int.com\)](#) page 28 (access: 22 October 2021)



Destination 2: Make learning and working environments conducive to learning

In our company we continuously enhance working and learning environments to ensure that they enable employees to address the issue of sustainability. For this purpose, we also design the environments themselves in such a way that they are consistent with the concept of sustainability.



Journey information

The success of sustainable development education also depends on whether the learning environments are suitable for different target groups, such as people with disabilities, learning difficulties or a low level of basic education.

Trainees and employees should be given access to suitable learning materials with regard to sustainability. These materials may include everything from pure collections of information to prepared learning materials. The following six analysis criteria and key questions will help training staff in preparing learning materials⁴:

Analysis criterion	Guiding questions	Additional information and examples
Applicable situation	For what workplace situation(s) (e.g. processes, problems) are the learning materials to be developed?	On the one hand, the starting point is the company's sustainability strategy and, on the other hand, are the employees' responsibilities.
Target group	For which groups of people are the learning materials intended, and how should they be prepared in order to achieve the desired effects among the target group?	Whether the learning materials have the desired result depends on whether the needs of different target groups (e.g., trainees, mobile staff, semi-skilled and unskilled workers) have been taken into account when designing them.
Learning objective	What should trainees learn from the learning materials?	The learning objectives can be derived from the company's sustainability goals, work activities and employee learning requirements.
Learning content	Which processes, work activities or objects in the learning environment should be used to demonstrate the issue of sustainability?	Potential learning content may include processes, objects or work activities that can be used to investigate, discuss, or illustrate sustainable action. One option would be to prepare case examples with regard to energy generation in the company or the acquisition of production goods.

⁴ See: SCHLUTZ, Erhard: Bildungsdienstleistungen und Angebotsentwicklung. Münster 2006, p. 78

Analysis criterion	Guiding questions	Additional information and examples
Learning method	What learning tasks are connected to the learning materials?	In contrast to pure information, learning materials are usually connected to learning tasks to be performed. These tasks may range from knowledge tests to putting what has been learnt into practice.
Medium	Which means of communication is used to make learning content and tasks available?	In the learning environments, learning materials may take the form of short text elements or explanations based on sequences of images. However, they may also be instructions, manuals or checklists consisting of several pages. Moreover, the workplace computer or the employee's mobile device may also be used as a learning medium.

In the best-case scenario, the learning and working environments encourage people to learn and address sustainability. However, it is also important that their design is based on sustainable products and procedures – in other words, that sustainability criteria such as energy efficiency, occupational health and safety, and accessibility are observable. Any discrepancy between the company's claim to sustainable development and the reality in the learning and working environments can lead to a lack of credibility.



Innovative practical examples

Africa, Uganda

Using solar-powered computers to impart computer skills in rural Uganda

The Maendeleo Foundation recognises the importance of technology for economic development and is committed to supporting schools and communities in acquiring the technological skills they need to establish a productive computer service industry. Aiming to design working and learning environments in a way that will promote learning, the Mobile Solar Computer Classroom project provides all the equipment needed for schools and libraries to teach computer literacy and skills, as well as to develop digital literacy curriculums. Each year, the Mobile Solar Computer Classroom empowers 5,000 school students, 100 teachers, and 500 community members with competitive computer skills. In the process, it also teaches its trainees about the advantages of using solar energy. This example focuses on the ecological and economic dimension of sustainability.

Further information: <https://seed.uno/enterprise-profiles/the-mobile-solar-computer-classroom> (access: 26 October 2021)

Europe, Germany, project materials

VR to enhance learning in VET

The current discussion on using information and communications technologies (ICT) in VET is often characterised by a strong focus on technologies. This may in part be due to the novelty of technologies such as virtual reality and artificial intelligence, which can give rise to completely new approaches for teaching and learning. However, these technologies are relatively expensive, and substantial specialist knowledge is needed to develop applications for technology-enhanced learning (TEL). Moreover, TEL can only generate benefits if the learning applications and tools are incorporated into an appropriate educational strategy. Aiming to close this gap, the Federal Institute for Vocational Education and Training (BIBB) has teamed up with experts and partners from all over the world to draw up practical guidelines demonstrating the possible learning scenarios for VR-enhanced learning in VET and identifying international VR project examples. This makes it possible to design working and learning environments that promote learning. Both economic and social aspects of sustainability are addressed here.

Further information: <https://www.bibb.de/en/148130.php> (access: 10 November 2021)

Europe, Germany, company with global operations

“Safety 4 LIFE” programme to avoid work accidents at Henkel AG

Aiming to design working environments in which sustainability issues can be addressed and experienced, Henkel AG offers training seminars on fundamental safety regulations, exemplary behaviour, relaying information to responsible staff, intervening in hazardous situations and recognising safety risks through the 2020 “Safety 4 LIFE” campaign conducted by the Laundry & Home Care division. The company also conducts an emotional poster campaign to sensitise employees to accidents. In particular, it aims to protect employees from work accidents by raising awareness of safety issues. The focus here is primarily on economic and social aspects of sustainability.

Further information: <https://www.henkel.com/resource/blob/1155326/fd0ed3d9b948c34945175c60be864bb9/data/2020-sustainability-report.pdf> (p. 178) (access: 19 October 2021)



Destination 3: Promote sustainability competencies of training staff and managers

Our trainees and managers are able to impart sustainability-related learning content. They are role models for sustainable action. We promote their abilities accordingly.



Journey information

Sustainability needs role models. In the company, these role models are often the training staff and managers. Their abilities and their scope for action play a crucial role in the quality of voca-

tional training and the implementation of vocational education and training for sustainable development. Vocational training staff are designers and active supporters of sustainable development, and thus are an important factor in integrating sustainable development education into company practice. Management can also support the learning processes. They assume responsibility for educational planning, exemplify the company culture and are able to help transfer theoretical learning content into operational practice.

In order for those responsible to be able to perform their key functions, they must be capable of meeting the demands placed upon them. Therefore, the first step to be taken involves defining sustainability-related requirements (e.g. knowledge, competencies and values), which can be derived from the company's sustainability strategy and goals.



Innovative practical examples

Asia, Thailand

In-company trainer standard in Thailand

Standardisation and certification for in-company training skills leads to increased effectiveness and cooperation between learning venues and companies in VET.

Sixty experts from six countries have developed the ASEAN In-Company Trainer Standard, which Thailand's professional qualification institute has adapted to the national standard. This example focuses on the economic dimension of sustainability.

Further information: https://unevoc.unesco.org/pub/nqc_asean-in-company-trainer-standard_tpqi.pdf (access: 28 October 2021)

Europe, Netherlands, company with global operations

Training programme for inclusive leadership at Heineken

Heineken has concentrated on further training for managers and employees with a view to developing integrative leadership practices. Up to now, 1,000 managers have participated in the "Inclusive Leadership" training programme. In addition, the company aims to make all employees more aware of integrative conduct. To achieve this, it has developed and implemented a global online training course on inclusive practices, which can be accessed via a learning platform. This course promotes the entrepreneurial skills of management staff, thus reflecting the economic and social dimension of sustainability.

Further information: [heineken-nv-annual-report-2020.pdf](https://theheinekencompany.com/heineken-nv-annual-report-2020.pdf) (theheinekencompany.com) page 21 (access: 18 November 2021)



Destination 4: Support exchange, collaboration and joint learning

Our company encourages trainees, employees, teams and/or departments to communicate with one another, collaborate and learn about sustainable development together. To this end, the company creates a corporate culture that promotes learning in which conflicts are constructively resolved and employees support one another.



Journey information

For sustainable development to succeed at a company, all employees must be involved. It is therefore important to motivate employees to shape change processes and offer opportunities for participation. In this context, cross-hierarchical and cross-departmental opportunities for exchange, cooperation and learning are particularly helpful. There are many ways of promoting exchange, cooperation and learning in teams. Here are a few examples:

- ▶ Trainees and employees work and learn together on sustainable development issues (e.g. what measures can be taken to achieve certain environmental goals) and collectively implement change measures (e.g. installing photovoltaic systems) as part of learning or innovation projects.
- ▶ Training staff, sustainability officers and managers regularly come together (e.g. in the context of quality circles or larger-scale sustainability days) to discuss the company's sustainable development and connect sustainability to initial and further in-company training.
- ▶ Trainees and employees can use knowledge management systems (e.g. wikis or mind-mapping tools) to share new knowledge and new findings with colleagues (e.g. with regard to correct waste sorting and possibilities of saving resources or reducing energy consumption).
- ▶ Trainees and employees gain an insight into other business areas so that they can pinpoint their own contribution to sustainable development in the company's value chain, for instance, through work shadowing or job rotation.
- ▶ Projects for sustainable development can be initiated by forming sustainability teams that span different hierarchies and departments and have the necessary resources, authorisations and knowledge. Managers and employees from the company's various departments (e.g. human resources, production and purchasing) should be included here.



Innovative practical examples

3.

Europe, Finland

Individual learning paths in Finland

In Finland, individual learning paths are offered to increase success among school pupils, make VET more attractive and thus support exchange and collaboration in VET. School pupils follow an individual learning path, which can take place at various learning venues. Teachers and tutors play an important part in this process, assuming the roles of mentors and coaches. This example focuses on economic and social aspects of sustainability.

Further information: [nqc_omnia_individual_learning_pathways.pdf \(unesco.org\)](#) (access: 8 November 2021)

Some of the further information in the linked PDF file is not publicly accessible.

Asia, India

Innovation and learning practice in India

An initiative launched by the Pandit Sunderlal Sharma Central Institute of Vocational Education aims to sustainably promote VET for young people in preparation for the future labour market. This strategy for sustainable development education focuses on identifying green skills as crucial employment qualifications that need to be implemented in VET programmes throughout the entire education system. Cooperation throughout the entire education system provides opportunities for exchange and joint learning. The ecological and economic aspects of sustainability are primarily addressed here.

Further information: <https://unevoc.unesco.org/pub/greening-psscive-advancing-vet.pdf> (access: 1 December 2021)



Destination 5: Create space for design and action

Our company provides employees with space for design and action and motivates them to learn and take on responsibility in conjunction with the company's sustainable development. Our company promotes the participation of employees and involves them in sustainable development.



Journey information

There is a gap between the available knowledge of sustainability and actual sustainable action. This means that imparting knowledge of sustainability does not automatically lead to sustainable action. To change this, trainees and employees should be given space for design and action so that they can try things out, reflect and learn independently. As a result, they will be able to input their own ideas and practice action routines. Here are a few examples:

- ▶ Trainees and employees can independently implement learning projects. For example, they could measure electricity consumption and optimise it by purchasing and installing alternative lighting. In this way, they can contribute to the company's sustainable development, acquire new knowledge and skills, and experience self-efficacy through action. To do this, the learning teams need the support of power promoters, i.e. people who are authorised to allow structural changes (e.g. management personnel).
- ▶ Managers can take up sustainability issues at regular team meetings and assign tasks with learning potential to trainees and employees.
- ▶ Trainees and employees are empowered to suggest improvements with regard to sustainable development and implement corresponding measures with support from managers and training staff.
- ▶ Particularly committed trainees and employees can be appointed as promoters of sustainability by providing them with additional training, endowing them with certain authority, and making them visible within the company.
- ▶ Trainees and employees can be supported in their overall commitment to education for sustainable development outside the company as well. For example, allowing them to participate in sustainability-related conferences.

In order for employees to have space for action, they need to be given sufficient time and the authorisation to actually effect changes in terms of operating processes, materials and products when they gain new knowledge in the learning process.



Innovative practical examples

3.

Europe, Germany, company with global operations

Training staff to become sustainability ambassadors

To develop the skills of its staff, Henkel aims for employees to not only impart information on the issue of sustainability but also motivate other employees to commit themselves to sustainability. With their knowledge and capabilities, employees can act as ambassadors and make an important contribution to sustainability at various sites as well as in communication with customers and partners in the business environment. This example addresses both the economic and the ecological dimension of sustainability.

Further information: <https://www.henkel.com/sustainability/initiatives-and-partnerships/sustainability-ambassador-program> (access: 5 November 2021)

Europe, Norway

FabLabs: Vocational educational workshops in Norway

In today's world, vocational education students need to be equipped with modern skills in innovation, technology, entrepreneurship and digitalisation. However, accessing modern technology to provide hands-on learning experiences can also be a challenge. To address this, the global FabLab network offers small workshops with the latest technological equipment available to individuals and industry to create opportunities for action and creation. FabLabs enable testing of devices or creation of products without the cost of investing in technology. In Norway, Verket FabLab is an example of how a FabLab can be successfully implemented thanks to close collaboration between the private sector, Østfold Province and vocational training providers.

Further information: https://unevoc.unesco.org/pub/digitalization_verket_fab_lab.pdf (access: 4 November 2021)

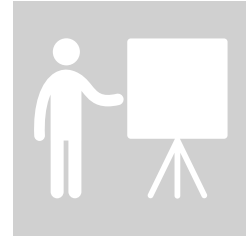
Kisoro, Uganda

Sustainable agricultural techniques for producing nutritious foods for hospitals in hospital gardens

The hospital gardens of Sustain for Life in the Bwindi Community and St. Francis Mutolere hospitals in Uganda provide food for patients and employees, while simultaneously providing a platform for training communities on sustainable agriculture, nutrition and sanitation. This helps them become autonomous and deploy affordable solutions to combat hunger, thus also creating new space for design and action. Sustain for Life generates income by selling excess food that is produced in its gardens. It also helps participants replicate the skills that they have acquired in their own communities, thereby increasing the company's impact. This example focuses on the social and ecological dimension of sustainability.

Further information: Growing a Sustainable Future: [Sustain for Life Hospital Gardens – SEED – Promoting Entrepreneurship for Sustainable Development](#) (access: 11 November 2021)

► 4. Teaching and learning situations



Key area 4 entails designing teaching/learning situations that reflect how trainees and training staff communicate and behave during their everyday business lives. There is no need for an entirely new didactic approach here. The aim is to initiate a holistic learning process. One that not only focuses on knowledge transfer but also on ways of motivating action, raising awareness, and achieving a values-based perspective. It is essential here to allow hands-on learning by incorporating both learned and life experiences. Examples include sustainability-related learning tasks and simulation games with Design Thinking methods, the use of learning apps, serious games and learning diaries, and the integration of sustainability into everyday work and training, for instance, by means of “5-minute conversations⁵”.

Selected indicators in key area 4:

	We're currently preparing for our journey	The first steps have been taken	We've reached the halfway point	It's not much further to go	We've reached our destination
Our company teaches trainees about the local, regional and global effects of their own actions and the associated role that they can play in shaping a sustainable future.					
Our company includes aspects of ecological sustainability as learning content in initial and further training measures.					
Our company supports trainees in naming environmental factors, megatrends and changing customer needs, as well as in formulating proposals on how a business model can be changed to implement sustainable business practices.					

5 *5-Minuten-Gespräche*. The “five-minute conversation” is a learning technique used by educators to keep coming back to sustainability issues throughout a training period. Using current developments in sustainability taken from any sector (business, politics, society, economy, environment, etc.) the trainer encourages trainees to have an open and intensive exchange about the topic. Central to this technique is keeping the topic constrained to a 5 minute timeframe, by doing so, one can regularly embed these conversations into everyday training practices.



	We're currently preparing for our journey	The first steps have been taken	We've reached the halfway point	It's not much further to go	We've reached our destination
Our company contributes to ensuring that trainees are able to identify contradictions and conflicts of interest in their professional actions and learn methods for dealing with contradictions in their professional work.					



Destination 1: Incorporate sustainability concepts into in-house learning content and in-company teaching/learning situations

Our company ensures that it includes learning content with reference to sustainable development when designing teaching/learning situations. Trainees and employees are informed about the effects of their professional actions in their own area of influence and beyond, including long-term global consequences.



Journey information

Company training staff need to address the company’s mission statement, strategy and goals for education for sustainable development and translate them into learning content that will be used during teaching/learning situations. The content is intended for use by trainees and employees and must be relevant and promote learning among the target groups. Teaching/learning situations are understood here as micro-didactically planned learning units that can range from training courses spanning several days to short learning and exchange formats on the topic of sustainability. The aim of the teaching/learning situations is to convey to employees the relevance of sustainable development for their own professional and private actions.

Using authentic working situations, activities and actions as a starting point in the development of teaching/learning situations can help to achieve this goal. This means that the training staff or managers can recognise opportunities for learning about sustainability in everyday work and make use of them accordingly as learning content. The reference to current work situations makes it clear what role sustainability plays in the company’s own environment and what opportunities employees have to promote sustainable development in their own sphere of influence.



Innovative practical examples

Europe, Germany, project materials

Sustainability-based learning tasks for freight forwarding and logistics services based on the example of the “Pro-DEENLA” pilot project

In the “Pro-DEENLA” (proactive qualification of vocational training staff through dynamic development, testing and dissemination of sustainable learning tasks in VET) pilot project, 27 learning tasks related to sustainability for use in vocational training for freight forwarding and logistics services clerks have been designed and tested in companies. They include learning modules on topics such as (customer) requirements related to sustainability or carbon and water footprints. In this context, trainees develop professional skills with methods such as Design Thinking. The economic and ecological dimension of sustainability is mapped here.

Further information: [Federal Institute for Vocational Education and Training \(BIBB\) – Germany](#) (access: 2 December 2021)

Africa, South Africa

Aligning VET with 4IR developments

The Department of Higher Education and Training in South Africa develops vocational training curricula centrally at the national level. As the results and standards are already established, the curriculum planning adds new technological developments to the existing curricula without the need for any extensive changes. Thanks to collaboration with an established ICT company in a public-private partnership, changes to content and assessment standards are straightforward, up-to-date and relevant for trainees. In this way, they also integrate sustainability as learning content in-company learning situations through the collaboration with ICT companies. This example addresses economic and social aspects of sustainability.

Further information: https://unevoc.unesco.org/pub/digitalization_dhet_dhet_partnership_with_cisco.pdf (access: 7 December 2021)

Europe, Germany

Increased sustainability in the bakery trade in Germany

The bakery trade in Germany faces fundamental challenges such as a severe shortage of qualified staff and the question of how it can reflect sustainability in training and put it into practice at the workplace. In response, ADB Nord gGmbH, which is responsible for initial and further training in the bakery trade, has developed the NiB-Scout project to ensure that new training content in the bakery sector accommodates sustainability. Making training more attractive for trainees and renewing the focus on high quality standards in inter-company training centres results in sustainability also being incorporated into company learning situations. Primarily the economic and social dimensions of sustainability are addressed here.

Further information: https://unevoc.unesco.org/pub/greening_adb_nord_ggmbh_nib-scout.pdf (access: 29 November 2021)



Destination 2: Design a holistic learning approach that incorporates sustainable action and makes room for divergent perspectives and objectives

When designing teaching/learning situations, our company makes sure to use methods and media that allow trainees to experience sustainable action/behaviours and any contradictions that may arise in this context.



Journey information

Designing sustainability-oriented teaching/learning processes is not a case of reinventing the wheel. There are existing didactic principles of vocational training and adult education that can be drawn on. This entails mapping complete routines, taking account of various dimensions of competence (professional expertise, social skills and self-competence), allowing social interaction in the learning process and aiming to allow trainees to largely steer the learning process themselves. Moreover, the guiding principles in designing learning situations for education for sustainable development stipulate getting trainees actively involved, promoting their ability to assess themselves and enabling them to (help) shape their professional and private lives.

When it comes to getting trainees and employees to address the issue of sustainability, the following two approaches are particularly promising:

1. Allowing a wide range of perspectives on sustainability and reflecting on contradictions

Knowledge lays the foundations for informed decisions. However, contradictions may arise when addressing the issue of sustainability in professional situations. This may be the case, for example, if ecological or social aspects of sustainability meet with economic constraints, thus leading to uncertainties and conflicting objectives. In order for the lessons learned to be transferred, it is important that these problems are also actively addressed in VET, incorporating different perspectives. By addressing contradictions, trainees learn to recognise the various dimensions of the problems, to weigh their advantages and disadvantages from different viewpoints, to take their own positions and to assume responsibility.

2. Trying out sustainable actions and taking individual responsibility

Developing sustainable professional competence is the central goal of education for sustainable development. To achieve this, it is essential that sustainable action is not only demanded in operational practice but is also already made possible during teaching/learning situations. For example, through scenario-based learning games trainees can play games based on a fictitious simulation. Through the learning exercise participants can address issues relating to sustainable corporate management and try out their own ideas for resolving problems in the process. They can also “test-out” how sustainable the company’s learning projects are, thereby gaining skills through practical action. One core element here is the assumption of responsibility by the trainees. This entails confronting different value concepts, making decisions, and testing them out, as well as being able to reflect on these decisions in a protected learning environment.



Innovative practical examples

BMBF and BIBB videos on vocational education and training for sustainable development illustrate sustainability in training

These videos, aimed at the target groups of entrepreneurs, training staff and trainees, demonstrate practical examples of how vocational education and training for sustainable development can succeed. They show role models for sustainable action and can be used as a starting point for a company's own sustainability activities.



[To the videos](#) (access: 15 July 2022)

Europe, Germany, project materials

“Combined traffic: Transport and logistics of the future” simulation game from the Pro-DEENLA pilot project

This simulation game provides a fun way of learning about the complex and sometimes contradictory viewpoints with regard to designing a future-oriented road, rail and waterway network and thus achieving environmentally friendly transport and logistics networks. The game was designed by planpolitik GbR on behalf of the Heinrich Böll Foundation, then further developed project-specifically by the Pro-DEENLA team. It is intended to allow participants to experience sustainable action while learning. The economic and ecological dimensions of sustainability are mapped here.

Further information: [Federal Institute for Vocational Education and Training \(BIBB\) – Germany](#) (access: 19 October 2021)

Europe, Germany, project materials

Learning module on dealing with contradictions from the Pro-DEENLA pilot project

In the “Dealing with contradictions” learning module, trainees describe and interpret a picture illustrating the mesh of relationships in the transport and logistics sector. They address the conflicting objectives between efficiency and sustainability and identify such contradictions in their own working environment. The trainees then jointly decide on one of the contradictions, which they deal with themselves in the subsequent extension learning task using the method of “systemic visualisation”. This primarily addresses the economic and ecological aspects of sustainability.

Further information: [Federal Institute for Vocational Education and Training \(BIBB\) – Germany](#) (access: 19 October 2021)

► About the authors

The scientific support for this guideline, Funding Line II, “Designing sustainable learning venues”, was prepared by f-bb Forschungsinstitut Betriebliche Bildung (Research Institute for Vocational Training). Contributing authors are Rolf Feichtenbeiner, MA in educational science, Heiko Weber, MA in sociology and pedagogy, and Robert Hantsch, MA in business education. The text was shortened and adapted for an English version by Nadja Berger, MA in sociology and Heiko Weber from fbb. Original translation was done by Heather Bogusch from “exact! GmbH”. Final editing was assured by Vera Hark, Barbara Hiller, Jessica Rosenfeld and Cara Schmidt from BIBB. This paper is part of the BIBB funding priority on “Vocational education and training for sustainable development”. Funding for the English version of the guide was provided by BMBF in the framework of the “Bridging Innovation and Learning in TVET” (BILT) project that is implemented by UNESCO-UNEVOC and BIBB.

Contact: Heiko Weber, e-mail: heiko.weber@f-bb.de

► Abstract

Sustainability is one of the greatest social challenges in this day and age. Climate protection, fair working conditions and responsible neighbourhoods are becoming increasingly important issues for companies. A sustainable in-company learning environment helps employees to develop sustainability-related skills. These skills play a crucial role when it comes to acting in line with the guiding principle of sustainability.

Companies are already doing a great deal to increase sustainability. However, there is still substantial potential to do more. This guideline describes four key areas for designing sustainable learning venues with a total of 13 areas of action. It provides practice-oriented suggestions for implementation in companies.

The guideline thus not only brings fresh momentum for reporting but also contributes to anchoring sustainable development more firmly into the structure of initial and continuing vocational education and training at companies.



Sustainability is one of the greatest social challenges in this day and age. Climate protection, fair working conditions and responsible neighbourhoods are becoming increasingly important issues for companies. A sustainable in-company learning environment helps employees to develop sustainability-related skills. These skills play a crucial role when it comes to acting in line with the guiding principle of sustainability. Companies are already doing a great deal to increase sustainability. However, there is still substantial potential to do more. This guideline describes four key areas for designing sustainable learning venues with a total of 13 areas of action. It provides practice-oriented suggestions for implementation in companies. The guideline thus not only brings fresh momentum for reporting, but also contributes to anchoring sustainable development more firmly into the structure of initial and continuing vocational education and training at companies.

Federal Institute for Vocational Education and Training
Robert-Schuman-Platz 3
D-53175 Bonn

Phone +49 228 107-0

Internet: www.bibb.de
Email: zentrale@bibb.de



ISBN 978-3-8474-2899-2