



# Learning material (Youth workers)

## Green Jobs in Job Orientation

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# 1. Women4Green Trainers \_Green Job Basics

## 1.1 The basics of green jobs

What do you think of when you hear about green jobs? Gardeners and farmers? Did you know that eco-architects, nature reserve rangers, marine biologists, vegan nutritionists, geo.

In this introductory tutorial, you will learn what green jobs are and how they can not only provide you with a future-proof career, but also make a positive contribution to environmental protection, prosperity and social justice.



## 1.2 Introduction to green jobs

### Green Economy

The green economy is a new model for economic development that combines ecology and economy. The concept encompasses economic profitability, environmental sustainability and social inclusion.



Sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own needs. It focuses on the dimensions of economic efficiency, social equity and environmental sustainability.

The green economy will be achieved by transforming and modernising production and consumption patterns towards sustainable and environmentally friendly growth. The greening of the economy involves the conservation of resources, the reduction of emissions, the sustainable design of products and infrastructure, and the improvement of energy and raw material efficiency.

However, the process of change does not only involve the economy, but also society as a whole. Consumption patterns, product life cycles and living and working conditions are also part of the equation.



The aim of the green economy is to increase environmental and social sustainability through an economic approach that is in harmony with nature and the environment, while ensuring social welfare and a high quality of life.

## Green Jobs

When you hear the term 'green jobs', you may think of jobs that are carried out in green spaces, such as nature and landscape conservation officers and foresters. However, these jobs only qualify as green jobs if they are primarily concerned with protecting the environment and conserving resources.

Green jobs are relevant to the transition to a green economy, i.e. a sustainable and environmentally friendly economy. They include jobs that protect the environment, such as preventing waste or air pollution, and protecting plants or water. Jobs that focus on conserving natural resources, such as recycling plastics, producing renewable energy or saving water, are also green jobs.



Green jobs are jobs that have a direct or indirect positive impact on the environment. They include jobs that conserve the environment and natural resources in the production of products and services.

Green jobs are available in a range of sectors and include unskilled labour and apprenticeships as well as jobs requiring a high level of qualification such as bachelor's or master's degrees.

- The sectors in which green jobs are offered include, for example:
- Sustainable construction and renovation
- Air conditioning technology
- Water and wastewater management
- Renewable energies
- Waste treatment, avoidance and disposal
- Sustainable forestry and agriculture

- Landscape planning
- Biodiversity
- Recycling
- Sustainable tourism
- Environmental consultancy
- Sustainable mobility
- Nature and landscape conservation
- Environmental science and education
- Corporate sustainability



Examples of green jobs: environmental engineer, recycling and waste management specialist, solar technician, environmental scientist, air conditioning technician, energy consultant, internal energy management auditor, environmental educator, waste disposal and recycling specialist, biotechnician, climate change manager, energy and building services electronics technician and environmental IT specialist..

### The link between the green economy, the environment and society

The environment, society and the economy are inextricably linked. As the world's population continues to grow and developing and emerging economies catch up, there is a growing need to produce more goods and services with less energy and materials. Economic growth and the use of natural resources must therefore be decoupled. In many areas, the ecological limits of the planet's carrying capacity have already been exceeded and the foundations of human life are threatened.



Examples of the close links between the environment, society and the economy are the negative impacts of the exploitation of natural resources. These include deforestation for timber, overfishing of the seas, pollution of water resources and conversion of natural areas for agricultural production.

This type of economic activity has environmental and social impacts, for example by accelerating global warming and degrading the biosphere as a whole. Respecting ecological limits and social equity, while ensuring economic efficiency, gives people of this and future generations the chance to

meet their needs. The green economy therefore touches all aspects of life and requires a transformation of society as a whole.

## 1.3 The importance of green jobs

### Relevance of green jobs

The growing importance of environmental protection and sustainable development, while pursuing economic goals such as value creation and prosperity, is leading to an increase in the number of jobs in the green sector. Green jobs are therefore important for the economy, environmental protection and sustainable development. More specifically, green jobs are particularly important for these social, economic and environmental reasons:

Economic:

- Tackling growing pollution and improving environmental quality
- Reducing the impact of climate change and building resilience to environmental impacts
- Halting the loss of biodiversity
- Contributing to sustainability goals such as clean energy, responsible consumption and sustainable cities

Social:

- Combating poverty
- Empowerment, inclusion and equal opportunities in the labour market
- Creating fair living and development opportunities for the world's population
- Fair training and employment conditions in the green economy
- Improving the health and well-being of the population through healthier living conditions

Economic:

- Promoting the transformation to a more sustainable and diversified economy
- Creating new jobs and reducing unemployment
- Improving the corporate image and increasing the attractiveness of jobs
- Promoting innovation and technology
- Increasing competitiveness
- Increasing motivation, sense of purpose, satisfaction and retention in work



On the one hand, green jobs drive a sustainably strong economic system and support value creation and prosperity. On the other hand, they contribute to the protection and preservation of the environment and increase people's quality of life. Green jobs therefore offer a bridge between economic opportunities and ecological and social requirements.

### Impact of environmental protection measures

The economy and the environment are interdependent. On the one hand, the natural environment provides the basis for life and economic activity. It provides people with living space and resources such as water, land and timber. However, the atmosphere, ecosystems and biodiversity are not infinite and are increasingly threatened and limited. This poses an economic challenge that threatens productivity and prosperity. On the other hand, economic growth and prosperity provide the basis for increased action to protect the environment and natural resources.

What is certain, however, is that an economy without environmental awareness can have far-reaching economic consequences due to extensive climate and weather changes and the increase in extreme conditions:

- scarcity of resources and global competition for resources
- damage to energy infrastructure and higher energy costs
- crop failures and shrinking arable land
- environmentally-related material, infrastructure and building damage
- decline in or relocation of tourism



Climate change costs both human lives and money.

Europe is plagued by rising temperatures and extreme weather events such as floods, forest fires and heavy precipitation. As a result, there are disastrous economic consequences, such as crop failures, environmentally-related material damage and damage to ecosystems.



Agriculture is particularly affected by heat waves, droughts, pests, floods and the deterioration of soil health. This results, firstly, in a shrinking of suitable areas for agriculture and, secondly, in losses in agricultural production.



Unsustainable consumption and production systems, in which raw materials are transformed into goods and then used, consumed and disposed of, not only pollute the environment but also lead to global competition for dwindling natural resources.

Buildings and infrastructure are also threatened by heavy rain and flooding, extreme heat or cold, storms and rising sea levels. This results in high maintenance and restoration costs for the economy.

In addition, the increase in extreme weather events threatens the energy infrastructure, such as above-ground lines or substations. The energy demand for cooling will also increase significantly in southern Europe.

Tourism is also suffering from the consequences of climate change. While the dwindling snowfall is causing losses in winter sports regions, rising temperatures are also shifting the attractiveness of southern Europe as a holiday destination.



The goal of protecting the environment by means of a resource-efficient and sustainable economy requires an ecological restructuring of the economy, which is characterised by innovative transformations and technologies.



Environmental protection does not come free of charge. Nevertheless, the positive effects on the economy and employment are far-reaching and diverse.

Examples of the effects of environmental protection measures on the economy and labour market include:

- Creation of a sustainable, resource-efficient and future-oriented economy
- Increasing motivation and ability to innovate and develop new technologies
- Reducing environmental damage to materials or health and other environmental costs
- Investing in environmental protection technologies and efficiency measures often leads to operational cost savings
- Expansion of green jobs and creation of new jobs
- Increase in international competitiveness and improvement of corporate and employer image
- Energy and material efficiency can be increased
- Creation of new green economic sectors such as renewable energies, recycling and circular economy



One example of the advantage of a sustainable economy and measures to protect the environment is the generation of electricity through photovoltaics. Producing electricity from light energy (sun) is not only cheap, but also generates electricity without CO<sub>2</sub>.

## 1.4 Trends in the labour market for green jobs

### Trends and developments in the green economy



Developments in the green economy and green labour market lie in new or changing future markets, the promotion of women in green jobs, skills shortages, the need for a training culture and the need for lifelong learning.

The green markets of the future include new industries and sectors, as well as the transformation of traditional sectors such as automotive or agriculture.

Here are some examples of sectors that are part of the green trend:

- Sustainable water, land, forestry and agriculture through more efficient and environmentally friendly processes and management
- Green power generation through renewable energy such as wind and solar power
- Sustainable investment strategies and business models
- Energy, raw material and material efficiency through efficient processes, equipment and technologies
- Sustainable mobility through efficient transport infrastructure and renewable fuels
- Urban gardening, local food production
- Efficient waste management, zero waste initiatives, circular economy, reuse, reduce, recycle
- Sustainable production and consumption

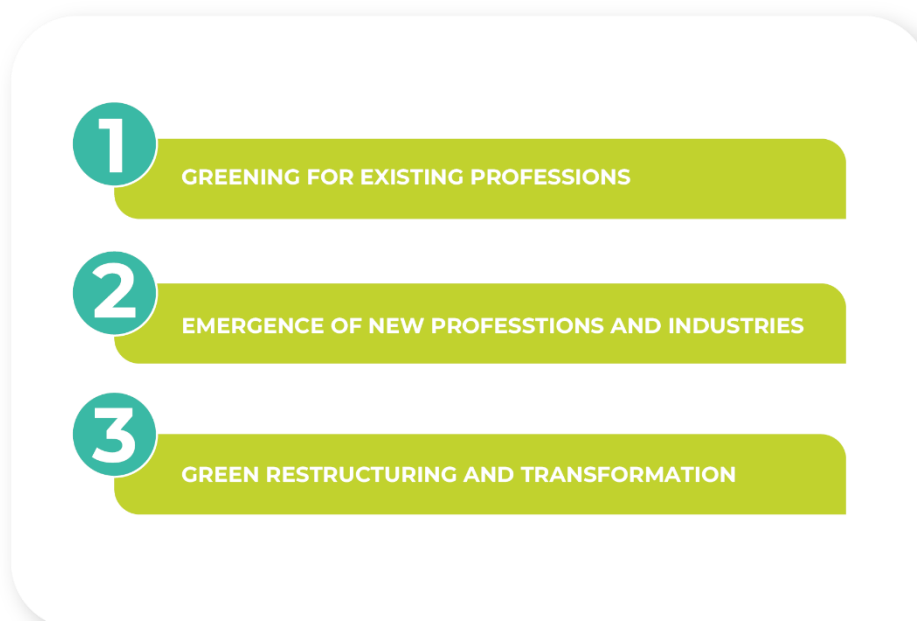
### Trends in the green labour market and driving factors of green jobs

In principle, the effects on the labour market of increased efforts to protect the environment are positive. The ambitious climate and environmental targets will create many additional jobs. Many jobs

will also be transformed by green technologies. While some jobs, skills and workflows will disappear, others will be completely new or will evolve and change.

Accordingly, the key transformations in the green jobs market are as follows:

- Emergence of new green occupations and sectors: new requirements and increased demand for green skills in new green industries and organisations.
- Greening of existing occupations: additional green skills requirements in existing specialised green jobs, as well as increased demand for green skills in other occupations and non-sustainable workplaces.
- Green restructuring and transformation: workers from other occupations moving into new green roles, transformation of workplaces and activities.



The transition to a green economy is also characterised by the much-discussed skills shortage. The jobs of the future will require a particularly high proportion of skilled workers and will be characterised by analytical and interactive non-routine tasks. This will lead to an increasing shortage of academic specialists and skilled workers in green occupations. Furthermore, a survey of European municipalities conducted by the European Investment Bank (EIB) shows that 60 per cent of municipalities consider their infrastructure investments in climate change mitigation and adaptation over the past three years to be insufficient.

Most worryingly, 69 per cent of municipalities report that they do not have enough experts to carry out environmental and climate audits, which is a major obstacle to implementing local investment programmes. In addition, around 80 per cent of municipalities cite a lack of funding, lengthy approval processes and regulatory uncertainty as key barriers to investing in a sustainable future.



Europe's green transition is expected to bring a significant increase in employment in key areas such as energy efficiency, renewable energy and climate-friendly mobility. By 2050, the demand for labour in these sectors is expected to increase significantly, with particular benefits for industries investing in infrastructure and building renovation.

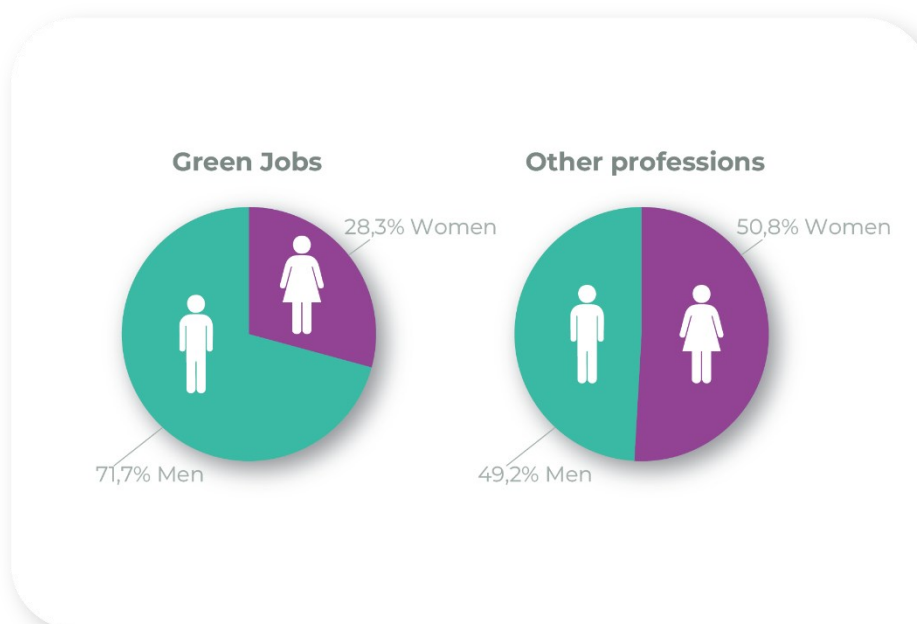
Current estimates suggest that green energy will have already created 4 million jobs in Europe by 2020. Up to 492,000 additional jobs could be created with a stronger global commitment to tackling climate change. The European Commission has proposed increasing the share of renewable energy to 40% by 2030, which has the potential to further accelerate job creation.



The largest declines in employment are expected in conventional energy extraction (mining, oil, natural gas, etc.) and in the processing of coal and petroleum products, as well as in mechanical and transport equipment occupations.

The high demand on the one hand and the shortage of green skills on the other is creating another trend in the green economy and the green labour market. Lifelong learning is becoming increasingly important and both workers and employers need to engage in strategic and continuous re-skilling and up-skilling. Formal education systems, as well as non-formal and informal forms of learning, are constantly adapting and expanding. Accordingly, a successful green labour market requires a systematic and focused culture of

While the ratio of men to women in the workforce is balanced, women are significantly under-represented in green jobs. This is the finding of an OECD study of EU countries, Australia, Canada, New Zealand, Norway, Switzerland and the UK. Many initiatives and organisations are therefore focusing on promoting women in the green labour market. By promoting appropriate framework conditions for this target group, female employment can be expanded and the performance and qualification potential of women can be better utilised. Greater inclusion and participation of women in the green economy promises to make a positive contribution to overcoming the skills shortage.



## Recommendations for green careers

Environmental protection has become an important factor in the labour market. The number of job vacancies requiring green skills is growing steadily. However, the skills and education of the global workforce are growing relatively slowly. This means that professionals are needed in the public, private and non-profit sectors, and that green careers are promising.



There is a wide gap between the number of vacancies in the green sector and the number of competent job seekers.

Careers in politics, such as in government agencies, federal offices or the Federal Ministry, offer opportunities to work for sustainability. However, high academic qualifications are often required. If you want to develop your career in the so-called third sector, there are NGOs, associations, foundations, non-profit organisations and federations.

For careers in the private sector, there are many ways to become professionally involved in environmental protection, sustainability, the green economy and social justice. You don't have to go for the typical green jobs such as forest manager, sustainability manager, fish farmer or solar technician.

There are also many industries and professions that are becoming increasingly green and sustainable. Green jobs in non-green sectors offer career opportunities with good prospects for the future. These include engineers who take sustainability into account when designing transport, and marketing and PR specialists who successfully market environmental protection, engage in green PR and promote high-profile projects such as waste collection campaigns. Packaging designers can also design products that are not only visually appealing but also environmentally friendly and resource efficient.

Bei Karrieren in der **Privatwirtschaft** gibt es viele Wege sich den Themen Umweltschutz, Nachhaltigkeit, grüner Wirtschaft und Sozialgerechtigkeit beruflich zu widmen. Dabei muss nicht

zwingend auf **typische grüne Berufe** wie Forstwirt:in, Nachhaltigkeitsmanager:in, Fischwirt:in oder Solartechniker:in zurückgegriffen werden.

There are also many industries and professions that are becoming increasingly green and incorporating sustainability. Green jobs in non-green sectors offer career opportunities with good prospects for the future. These include engineers who take sustainability into account when designing transport, and marketing and PR specialists who successfully market environmental protection, engage in green PR and promote high-profile projects such as waste collection campaigns. Packaging designers can also make products not only visually appealing but also environmentally and resource friendly.

Jobs in research, teaching and consultancy are also in demand and can be in typical green areas as well as interdisciplinary ones. A career in academia gives you the opportunity to research and teach environmental issues. You can work in both public and private colleges and universities as a teacher, lecturer or professor. Government agencies, businesses and not-for-profit organisations all use consultancy services. If you have specialist knowledge of relevant issues such as energy, the environment or social justice, you can pursue a career in consulting.



No matter what green career you are aiming for, continuous training in green skills is an essential part of career development for the green future. This can involve formal, non-formal and informal forms of education.

Key skills for future developments in the green jobs market come from STEM studies or training. Despite numerous initiatives and campaigns to promote women in STEM studies and careers, there are still significantly more men than women in these fields. With a growing shortage of skilled workers, women have particularly good job opportunities and career prospects if they choose STEM professions such as technicians, chemists, computer scientists, software developers or engineers.



STEM stands for science, technology, engineering and mathematics.

## 1.5 Opportunities and challenges of green jobs

### Problems and requirements

Green jobs offer many advantages and opportunities. However, there are also some problems, critiques, and requirements that must be addressed in order to both develop a comprehensive understanding of the green economy and to devise realistic solutions.

#### The challenges include:

- Economic feasibility
- Political barriers
- Social injustices
- Technological and infrastructural challenges

For the transition to a Green Economy, **substantial initial investments** in green technologies and infrastructure are required from both companies and governments. As a result, significant short-term costs may arise, which can pose an obstacle. The returns on these investments are also uncertain, as they depend on changing markets, demand, and emerging technologies.



Political barriers may arise from a **lack of political support**, measures, and frameworks. This includes, for example, legal regulations, subsidies, and tax incentives that promote green jobs.

**Access to green jobs** is not always equal, thus posing social justice issues. Inequalities can result from regional differences and varying levels of education. Many jobs in less environmentally friendly sectors will also disappear or be transformed, leading to changes in work methods and skill requirements. If no retraining measures are offered to affected workers, this will exacerbate **social injustice**.

In developing and emerging countries, there is a risk that the transition to a Green Economy will be hindered by a lack of professional skills. Therefore, one of the challenges is to ensure that all people can participate in economic growth and societal development.





Technological challenges include the fact that **green technologies are still in the development phase** and, as a result, may not yet offer optimal efficiency and reliability. The transformation to green technologies is also complex, unpredictable, and costly.

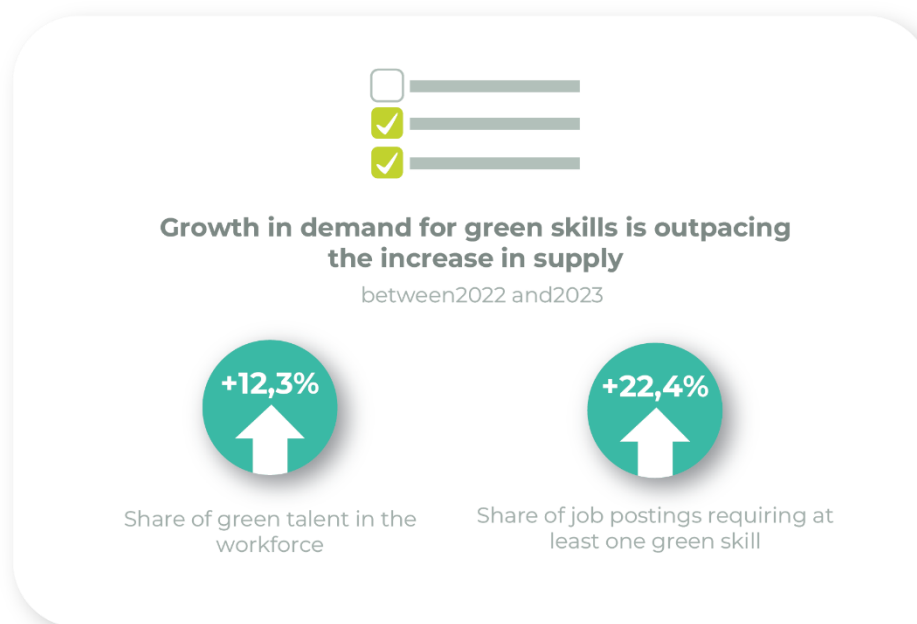
### Opportunities and benefits

The economic, ecological, and societal transformation offers many advantages and opportunities for green jobs. Through investments and restructuring in the field of green jobs, the ecological transition, new technological developments, and the optimization of energy and resource efficiency are stimulated, while improving competitiveness and corporate image. Green jobs effectively contribute to achieving political and company-specific **sustainability goals** and advancing social justice, environmental protection, and economic growth.



There is a rapidly growing global demand for personnel in green jobs, which is currently only partially being met.

According to the Global Green Skills Report 2023 by LinkedIn Economic Graph, the number of green jobs posted worldwide increased by 12% in 2023 compared to the previous year. Jobs requiring at least one green skill grew by 22% between 2022 and 2023. The increasing demand is coming from the numerous industries where companies are developing more sustainable and environmentally friendly ways of doing business.



In addition to the rising demand for green jobs and their economic and ecological benefits, green jobs offer **additional advantages**:

- Green jobs are future-proof
- Green jobs provide career diversity across many sectors and industries
- Green jobs are globally relevant and open up international career opportunities
- Green jobs offer meaningful work through a positive contribution to a better world for all



The benefits and opportunities, as well as the challenges and requirements of green jobs, must be considered in order to develop realistic, effective, and solution-oriented strategies for a sustainable future.

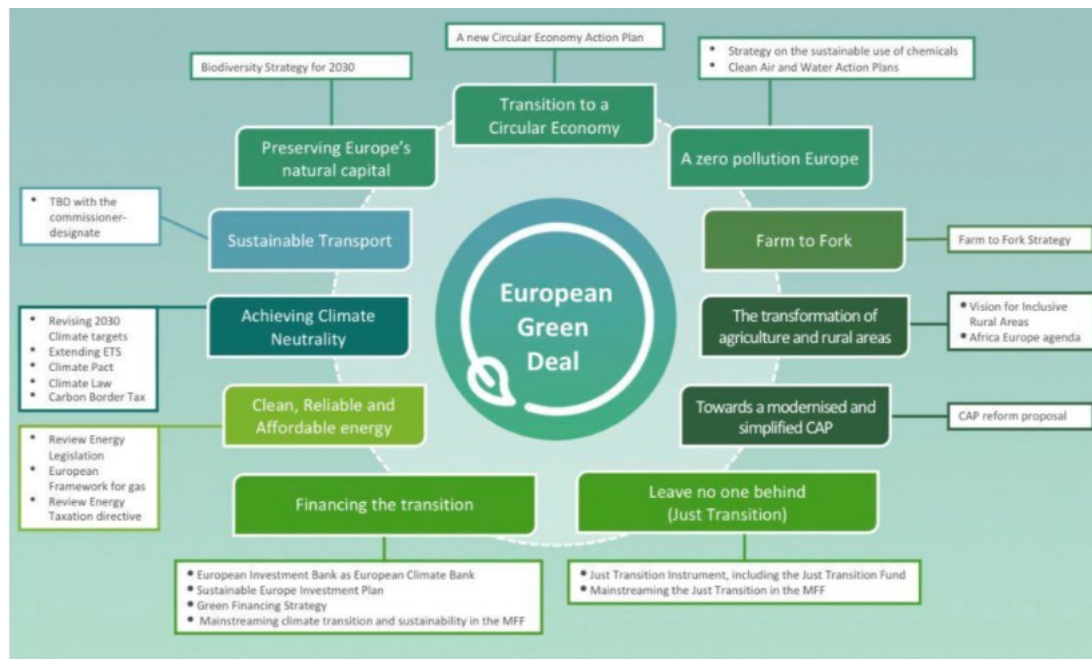
## 1.6 Political impact on green jobs

### Key regulations, policies, and legislation

The development and implementation of green jobs are significantly influenced by political support through legislation, public investments, and funding programs.

**The European Green Deal** was launched in 2019 to promote the creation of a fairer, healthier, and more prosperous society. The pillars of social justice, environmental protection, and economic growth support the Green Deal with the following goals:

- Achieve net-zero greenhouse gas emissions by 2050,
- Decouple economic growth from resource use, and
- Treat people fairly and inclusively.



These climate goals led to the European Climate Law in 2021, which legally commits EU Member States to meet the climate targets. As a result, the EU's climate goals became a legal obligation for all member states. By 2030, net greenhouse gas emissions must be reduced by at least 55% (compared to 1990 levels). By 2050, the EU must achieve climate neutrality.



Through the binding commitment of all EU member states under the EU Climate Law, Europe aims to become the first climate-neutral continent. This creates opportunities for innovation, investment, and the creation of green jobs and training programs.

A key part of the Green Deal is the Green Industrial Plan, which aims to make Europe's CO<sub>2</sub>-neutral industry more competitive.

#### The four pillars of the Green Industrial Plan are:

- Predictable and simplified regulations
- Faster access to financing
- Expansion of skills
- Open and fair trade



The Green Industrial Plan invests in green technologies, jobs, skills, financing, regulations, and action pathways. This means intensive support for green job and training opportunities.

**The European Climate Pact** is also an initiative within the Green Deal. It was launched to inspire a movement of people working together to achieve the goal of climate neutrality by 2050 as part of the Green Deal. People, communities, and organizations can join this initiative, connect, and develop and implement solutions.



The European Climate Pact drives the promotion and funding of upskilling and reskilling workers for green jobs.

**The Sustainable Development Goals (SDGs)**, adopted in 2015 at the UN Sustainable Development Summit as part of the UN Agenda 2030, also bind all 193 UN member states to sustainability. Specifically, there are **17 sustainable development goals** that must be implemented at the regional, national, and global levels by 2030.



The member states have agreed on social, economic, and ecological goals in a partnership for peace, prosperity, and environmental and climate protection.

**The five core messages (the 5 Ps) that form the basis for all guiding principles are:**

- People
- Planet
- Prosperity
- Peace
- Partnership



The implementation of the SDGs also drives labor market strategies such as the development of green jobs, social inclusion in the labor market, green education and entrepreneurship opportunities, the promotion of quality jobs, and the transformation and reduction of unsustainable occupations.

## Impact of regulations and legislation on green jobs

Legislation, regulations, pacts, and initiatives within the European Union influence both the **global and national development of green jobs**.

In the short term, this leads to impacts on the growth or demand for products and services. Environmental and climate policies, for instance, may have negative effects on traditional energy sectors but positive consequences for resource-efficient energy producers. As a result, the **number of jobs** in these sectors, as well as **job requirements and working methods**, change.

The medium-term effects on the labor market and job positions are based on transformations in business processes and the development of new or adapted markets and industries. This leads to further sectoral gains and losses, shaping the job market and the **emergence of green jobs**.

In the long term, an intersectoral structural change driven by wide-ranging innovations and technological changes will result in **lasting and difficult-to-predict employment impacts**.

A key consideration in employment development is not just the division between green and non-green jobs, but also the **quality of employment in a green economy**. The analysis of employment impacts is divided into two main aspects the transformation of employment profiles (qualification levels and profiles) and the quality of jobs.

This means that both the qualitative changes in labor demand and the relevant educational requirements in the transition to a green economy are crucial, as well as the impact of the green economy on working conditions and adherence to social standards.



In summary, the implementation of global, European, and national initiatives, regulations, and legislation promoting a Green Economy positively impacts the development of green industries, sectors, and professions. Opportunities for training and qualification, as well as re-skilling and up-skilling, are also supported. Emphasis is placed on the quality of green jobs and working conditions.

## 1.7 Summary

**The Green Economy** is a new paradigm in which economic profitability, ecological sustainability, and social inclusion are harmonized to make the economy and prosperity more environmentally and socially compatible.

**Green Jobs** refer to positions that have a direct or indirect positive impact on environmental protection and significantly contribute to the transition to a green economy. These include jobs in

forest and water conservation, as well as roles focused on recycling plastic, protecting biodiversity, or developing more sustainable vehicles.

Green jobs are relevant both **socially, ecologically, and economically**. They help fight poverty, promote inclusion and equal opportunities in the labor market, and improve living and working conditions. Environmental pollution, resource scarcity, and climate change lead to catastrophic economic consequences. The creation of a sustainable, resource-efficient, and future-proof economy not only results in reduced environmental damage, such as material or health costs, but also enhances energy and material efficiency, creates new green economic sectors, and generates jobs.

**Green future markets** include sustainable investment opportunities, eco-friendly agriculture, and efficient waste management. These not only create new green jobs but also "green" existing professions. The consequences of this transformation include a significant skills shortage, arising from the gap between the increasing demand for green jobs and the lack of green competencies.

**Lifelong learning**, re- and upskilling in formal, non-formal, and informal settings plays a central role in the **successful development of the green labor market**. The advantages of green jobs include future security, career diversity, global relevance, international career opportunities, and a sense of purpose contributing to a better world. However, challenges may arise in the form of political barriers, technological and infrastructural difficulties, and economic feasibility.

One of the most significant political regulations, initiatives, and legislations affecting Green Jobs is the **European Green Deal of 2019**, which became legally binding for all EU member states through the European Climate Law of 2021. This aims to achieve climate neutrality in the EU by 2050. As a result, new labor market strategies are emerging that promote the development of Green Jobs, social inclusion and fairness in the labor market, and the development of green skills.

## Bibliography

Federal Ministry for Climate Protection, Environment, Energy, Mobility, Innovation and Technology: Green Jobs in Austria.

[https://www.bmk.gv.at/themen/klima\\_umwelt/nachhaltigkeit/green\\_jobs/oe\\_green\\_jobs.html](https://www.bmk.gv.at/themen/klima_umwelt/nachhaltigkeit/green_jobs/oe_green_jobs.html)

Europäische Investitionsbank (2019). 7 reasons why the energy transition works for Europe.

<https://www.eib.org/en/stories/climate-energy-transition>

Europäische Investitionsbank (2023). Fachkräftemangel bremst die grüne Wende.

<https://www.eib.org/de/press/all/2023-255-eib-unveils-2022-municipality-survey-findings-skills-shortage-is-delaying-the-green-transition>

Europäische Kommission (2022). In focus: Employment in EU's renewable energy sector.

[https://commission.europa.eu/news/focus-employment-eus-renewable-energy-sector-2022-05-16\\_en](https://commission.europa.eu/news/focus-employment-eus-renewable-energy-sector-2022-05-16_en)

Europäischer Rat (2024). Climate Change Costs Lives and Money.

<https://www.consilium.europa.eu/de/infographics/climate-costs/#0>

Europäischer Rat (2024).. Ein europäischer Grüner Deal.

<https://www.consilium.europa.eu/de/policies/green-deal/>

Friedrich-Ebert-Stiftung (2019). Jobwende - Effects of the Energy Transition on Work and Employment.

<https://library.fes.de/pdf-files/fes/15696-20210201.pdf>

Jacob, K., Quitzow, R. & Bär, H. (2014). Green Jobs: Beschäftigungswirkungen einer Green Economy. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.  
<https://core.ac.uk/download/pdf/199425654.pdf>

Statistik Austria. (2024). Agenda 2030 SDG-Indikatorenbericht 2024.  
[https://www.statistik.at/fileadmin/user\\_upload/SDG-Bericht-2024\\_Web-barrierefrei.pdf](https://www.statistik.at/fileadmin/user_upload/SDG-Bericht-2024_Web-barrierefrei.pdf)

Umwelt Bundesamt: Economy and environment.  
<https://www.umweltbundesamt.de/themen/wirtschaft-konsum/wirtschaft-umwelt>

## 2. Women4Green Trainers\_ Green Job competences

### 2.1 Green job skills

STEM skills are key to a green and sustainable future. However, women are severely under-represented in these subjects (mathematics, computing, science, technology and engineering) at universities and colleges in EU countries. Only about a third of all STEM studies are taken up by women.

The green economy therefore calls on women to play an active role in shaping a sustainable future. In this unit, you can find out what specific skills are needed for green jobs and how to train and educate yourself for a future-proof green career.



Green competence requirements

### 2.2 What are green skills?

In the transformation to a green economy, there is a global race for green talent. As a result, workers with sustainable skills are also predicted to have a sustainable employment future. After all, what companies and organisations need are both managers and employees who can think, understand and apply sustainability.

But what exactly are green skills or green or sustainable competences?

Green skills are differentiated competences that enable people to manage and shape dynamic changes in the world of work with regard to sustainability. These include knowledge, competences, transfer skills, process understanding, values and attitudes. Green skills differ in their focus and competence requirements depending on the sector and field of activity.





Green skills consist of the triad of green knowledge, transfer competences and sustainability mentality.

The central basis for a competent workforce in the green economy is the triad of

**WHY: Sustainability Mindset:** Understanding and acceptance of the need for a green economy and the will to change.

**WHAT: Green Knowledge:** knowledge of green technologies, relevant issues and tasks

**HOW: Transferable skills:** Practical application of technical skills, identification and implementation of improvement potential, cooperation, communication and networking.



The United Nations Green General Skill Index identifies four key areas in which skills are central to green jobs: Technology and Engineering, Natural Sciences, Business Administration or Business Management, Legal and Technical Monitoring.

## Required qualifications and competences

In the green economy, there is no ‘one size fits all’ for knowledge, skills, abilities and educational requirements. When it comes to competences, a distinction is often made between subject-specific skills such as knowledge of standards or the use of green technology and soft skills such as sustainable values and mindsets.



Above all, the green transformation requires knowledge, values, attitudes, skills and abilities to live and work in green economies and societies.

In addition to the specific competences for green jobs depending on the sector and occupation, the following key competences can be identified:

Entrepreneurial competences for the creation of green solutions and technologies

Strategic competences for creating incentives and framework conditions in business and politics for a green economy

Leadership skills for the successful interaction of economic, ecological and social goals

Communication and negotiation skills to overcome complex challenges and conflicts of interest

Adaptation and transfer skills for learning, applying and adapting green technologies

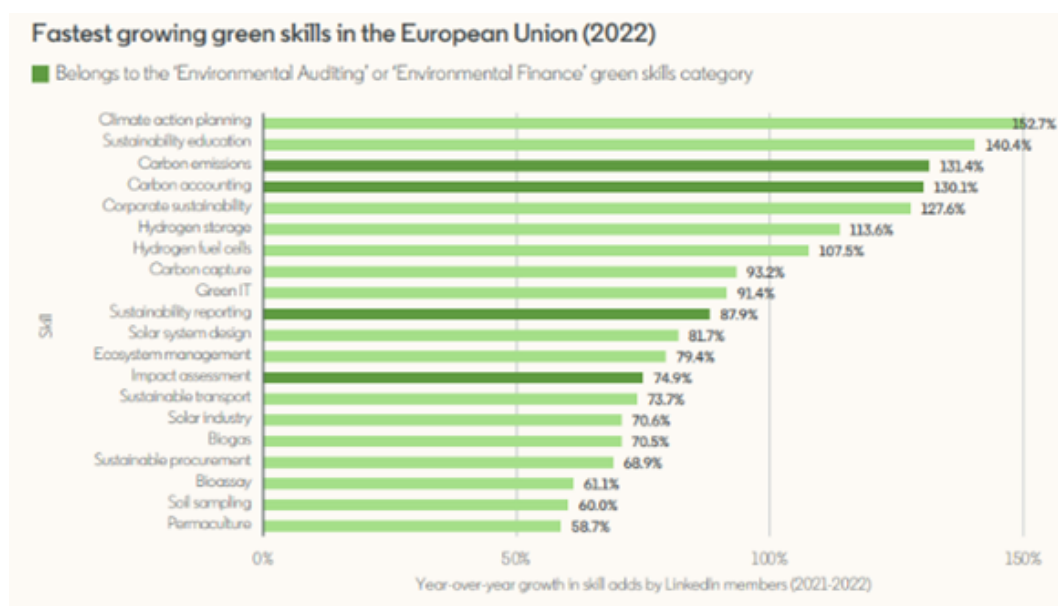
Innovation expertise to overcome green challenges, transformations and risks

Marketing and counselling skills to educate consumers about green products and services



The term ‘green soft skills’ is also often used. These include, for example, communication skills, leadership skills, empathy, problem-solving skills, design thinking, creativity and adaptability.

As shown in the chart, the fastest growing green skills in the European Union include competences in climate action planning, sustainability education, carbon emissions, corporate sustainability, solar industry, ecosystem management, impact assessments, carbon capture and storage, hydrogen storage, carbon accounting, green IT and biogas.



The so-called STEM subjects ( mathematics, information technology, natural sciences and technology) are considered a prerequisite for the development and application of green technologies and for working in the green economy. STEM skills include, for example

- understanding scientific principles
- mathematical modelling
- the ability to generate, understand and analyse empirical data
- Logical thinking and practical intelligence
- the ability to evaluate and solve complex problems



STEM competences are key 21st century skills that need to be combined with critical thinking, creativity, cooperation and communication in order to be highly effective.

Examples of areas of competence and training in the STEM subjects:

- Mathematics: geometry, probability theory, statistics, algebra, number theory
- Computer science: media informatics, data science, bioinformatics, computational linguistics, business informatics, computer theory, artificial intelligence
- Natural sciences: physics, chemistry, biology, astronomy, genetics, geosciences, physiology
- Engineering: agricultural engineering, civil engineering, mechanical engineering, automotive engineering, robotics, chemical engineering, electrical engineering

The career opportunities for graduates from educational programmes in the STEM subjects are particularly good, as the interest and number of graduates from engineering degree programmes and vocational training programmes in technical professions, for example, has decreased in the EU in recent years - while the demand for STEM talent has increased at the same time.



The term STEM subjects is also often used, which stands for Science, Technology, Engineering and Mathematics.

## Expertise requirements of the future

The number of people working in green jobs has risen steadily in recent years. It is assumed that the labour market for green jobs will continue to develop and expand. This will be accompanied by changes in job content and requirements as well as green qualification profiles and skills needs. This knowledge is important for the transformation and expansion of qualifications and further training in order to promote the green economy.



Future skills in the green economy range from general values and interdisciplinary skills to specific knowledge and concrete skills. The expected requirements therefore include resilience and entrepreneurship as well as programming and data science. It is assumed that a mix of interdisciplinary and job-specific green skills is required.

Many professions have direct or indirect links to environmental and sustainability issues such as energy and resource efficiency. In principle, sustainable behaviour is therefore becoming an essential component of professional competence for every profession in every sector. Expertise in energy and resource efficiency is one of the most important pillars of training for green jobs in a wide range of sectors and occupational profiles.



Sustainable action in terms of energy and resource efficiency plays a role, for example, for product designers in product design, for office staff in the procurement of materials or organisation of delivery, and for electronics technicians in the installation of systems.

The sustainability mentality, green knowledge and transfer skills are essential for existing and emerging green jobs, both now and in the future. This includes, for example:

- Environmental awareness
- Knowledge of chemical, physical and energy-related contexts
- Creativity, innovation and adaptation skills
- Business modelling, project, quality and operations management

- Financial skills such as cost and investment calculation
- Social skills such as communication skills, teamwork, relationship building and assertiveness
- Entrepreneurial competences
- Data science
- Critical and analytical thinking
- Problem-solving skills
- Knowledge of energy and resource consumption and recycling



In addition to general key skills for a green future, specialised green knowledge and skills in the respective sectors and activities will also be required. Accordingly, a worker in data analysis will require different green skills than a worker in organic farming or marine biology.

## 2.3 Education for green jobs

### Training and education opportunities

There are various training programmes in the green economy, which are offered both full-time and part-time. These include:

In the European Union, there are a large number of training and apprenticeship occupations that are learnt as part of training contracts and generally last two to four years. These professions are increasingly focussed on sustainability and environmental protection and therefore meet the requirements of the green economy.



Examples of sectors that offer sustainable apprenticeships and training programmes: Forestry, chemical industry, information technology, agriculture, wood processing, fisheries, viticulture, mechanical engineering, beekeeping, electrical engineering, energy technology, horticulture, home economics, agriculture and environmental technology.

- There are also a variety of specialised courses, certification programmes, workshops and online courses that focus on sustainability and environmental protection. These educational programmes cover areas such as environmental management, sustainable business, corporate social responsibility, diversity and inclusion.
- In addition, many universities offer specialised Bachelor's and Master's degree programmes that address the current challenges and needs of the green economy. These include degree programmes in environmental sciences, biodiversity, sustainable tourism, business ethics, energy and water management, environmental law, renewable energies, agricultural biology, environmental engineering, hydrology, bioeconomy, forestry, sustainability and climate management, humanitarian aid, environmental informatics, sustainable business management and environmental engineering.
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management, humanitarian aid, environmental informatics, sustainable business management and environmental engineering.

- In addition, interdisciplinary Bachelor's and Master's degree programmes are increasingly being offered that combine various disciplines such as social sciences, architecture, geography, data science, production engineering, political science, marketing, biology and economics with environmental studies. These programmes are designed to prepare students for the complex challenges of sustainable development and the green economy by combining different perspectives and expertise
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- In addition, numerous educational institutions offer specialisations and further training in green skills.
- Practical experience also plays an important role. For example, the EU promotes informal learning and practical experience through participation in projects, conferences, internships and volunteering. Networking opportunities, company visits, taster days and exchanges with other professionals offer learners valuable insights into practice and help to translate theoretical knowledge into real-life applications.



Training opportunities in the green economy vary widely across the countries of the European Union, both in terms of the programmes offered and the specific titles. To find out where and how to enter this field, it is important to utilise country-specific resources.

In many countries, there are national education ministries that provide information on green education programmes and initiatives. In addition, professional organisations and local chambers often provide guides and advice on training opportunities in the green economy. Websites such as the European Network for Education and Training or national professional associations are also valuable sources of information on specific courses, certifications and funding programmes.



By acquiring green skills, you will broaden your career prospects and make an important contribution to a sustainable future.

## Lifelong learning for green jobs

Lifelong learning is becoming increasingly important as the green economy and green jobs spread, as the green transformation goes hand in hand with changing technologies, professions and skills requirements. New professions and jobs are emerging, existing professions are being reorganised and some jobs are disappearing.



Lifelong learning and continuous adaptation of the labour force are essential in the expansion of green jobs.

Some green jobs require specialised training or a university degree. However, there are also numerous opportunities to gain lifelong qualifications in green jobs through further training. These include

further training in areas such as renewable energies, sustainable management and energy efficiency. This keeps both companies and employees competitive and innovative.



Transformation, adaptation and innovation are central pillars of green jobs and emphasise the need for lifelong learning.

#### **The opportunities for lifelong learning consist of:**

- Formal learning through, for example, a degree or apprenticeship at a recognised educational institution with an officially recognised qualification
- Non-formal learning through, for example, courses, workshops and seminars without generally recognised certification
- Informal learning in everyday life, in the family or ‘on the job’ through, for example, discussions with colleagues, reading specialised books, coaching at the workplace or visiting trade fairs



If you decide on a green job or profession, it is important to be prepared to continue your education in order to learn new knowledge and acquire or deepen your skills, whether formally, non-formally or informally.

## **2.4 Green career opportunities**

### **Career paths in the green job market**

Green careers not only require green knowledge, but also a suitable sustainability mindset and the ability to implement innovations and improvements. With this trio of skills, employees are free to work in different areas of activity or to opt for differentiated career paths.

It is possible to start a green job either directly after graduation or training, by transferring from another career or by taking on relevant tasks as part of your current position.

There are numerous fields of activity and career opportunities in the green job market:

- Organic farming and food production
- Sustainable production, trade and logistics
- Recycling and waste management
- Resource-conserving water management
- Renewable energies and energy efficiency
- Sustainable forestry and wood processing
- Technical environmental protection
- Sustainable mobility, tourism, rural and urban development
- Science, education and consumer protection
- Sustainable architecture and building technology
- Green financing and insurance
- Sustainability communication and campaigning
- Environmental policy, law and administration
- Animals and plants
- Green development cooperation



Accordingly, you can work in green jobs and at the same time live your passion for politics, marketing, food, animals, product design, finance, IT, medicine, tourism, engineering or education. Many green jobs are a combination of sustainability or environmental protection and interdisciplinary fields of work.



For example, as a politician, you could advocate environmental laws and policies, or as a designer, you could focus on sustainable product design and specialise in 'eco-design'. You could also focus on building ecology and sustainability as an infrastructure manager, developing road, rail or water transport routes in an ecologically beneficial way. If you are interested in education and consultancy, you could consider a career as a corporate environmental consultant, advising companies on the sustainable design of their operations.



If you enjoy working in research and laboratories, there are opportunities to protect animal and plant species through scientific work. If you are passionate about marketing or campaigning, you could use your communication skills in green organisations to make a significant contribution to public relations or fundraising.

Green careers are possible in a range of sectors:

Market or private sector: profit-oriented and market-financed companies

State: regional authorities such as federal, state and local governments, which are primarily financed by taxes and levies and fulfil sovereign tasks

Third sector or non-profit sector: non-governmental organisations (NGOs), non-profit organisations, associations, clubs and foundations



In the private sector, there has been an increased focus on corporate social responsibility (CSR) in recent years. From sustainable product design to image improvement in marketing, fair employee management and the development of future-oriented business models, green job opportunities are numerous.

In the public sector, for example in the federal government, city government or the Ministry of the Environment, the career opportunities for waste management professionals, data scientists, transport planners and climate protection managers range from landscape architects and organic farming consultants.

The non-profit sector includes organisations that work for the common good, for example protecting human rights, fighting for social justice and democracy or working to protect the environment. These organisations are often looking for people to work with them on a voluntary basis or to do internships. However, there are also paid permanent positions and green career opportunities. Examples of green jobs in the third sector include PR staff, environmental auditors, lawyers in the field of energy law, project managers, coordinators for municipal development policy, specialist advisors in organic farming and nature educators.

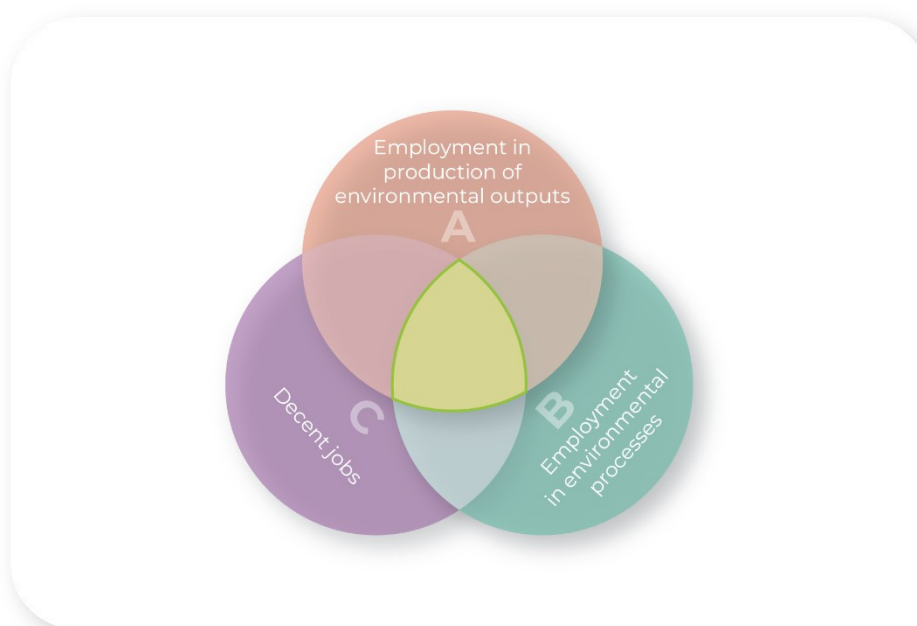


There are many different paths to a green and meaningful career, where you can help shape a sustainable and future-oriented world, whether you are a recent graduate, an experienced professional or a career changer, in the public, non-profit or for-profit sector.

However, it is always important to check whether a job is actually a green job. ‘Greenwashing’ has become a widespread marketing strategy in which companies or organisations try to present themselves as particularly environmentally conscious and friendly.

The term ‘greenwashing’ is used to describe this attempt to whitewash a company's sustainability practices. Similarly, challenges arise when green jobs are not actually green workplaces. The International Labour Organization (ILO) defines green jobs not only as jobs that help to protect and restore the environment, but also as so-called ‘decent jobs’.

These are jobs that offer good working conditions and practices. Therefore, dirty, dangerous, unhealthy, precarious and low-paying jobs, even if they serve to protect the environment, are not considered green jobs. Decent working conditions and fair pay are therefore a central component of a green job.



## Professional development of green careers

Authentic and strategic planning is particularly helpful for a green career choice. This allows long-term life and work goals to be clarified and short- to medium-term steps to be determined.



Professional goals and action planning for a green career must always be aligned with one's own skills, values and priorities, as well as opportunities in the green economy.

The following questions are important for self-reflection, goal planning and implementation and form the basis of central strategies for professional (further) development:

- What values and beliefs characterise me?
- What professional, methodological, social and personal skills distinguish me?
- What environment, role, sector and areas of activity interest me most?
- What do I want to achieve professionally? Where do I see myself in 5 or 10 years?
- What do I need to achieve my goals? What skills, contacts, experiences or qualifications are necessary?
- How can I fulfil the missing requirements? What or who can support me in this? What resources do I have available to me?



Even if you have already chosen a profession or a professional direction, are in the middle of your career or have finished your education, that does not mean that you can no longer choose a green career. Changing interests, open doors, revised decisions, professional detours, retraining and additional qualifications open up new professional opportunities in a green future.

First of all, think about what your vision, your goals and your mission are. Reflect on which field of action particularly interests you, how you can best use your talents, skills and experiences and what you want to achieve. This self-reflection is essential for the targeted planning and development of a green career.



If you are already in the middle of your working life and have specialised or interdisciplinary training or qualifications and professional experience, there is also the option of starting a green career as a lateral entrant through relevant further training. Consider how you can improve and supplement your skills, experience and previous activities with green expertise. The possibilities range from part-time further training to voluntary work and internships to (co-)founding start-ups and green engagement within companies and organisations.

If your company offers relevant training and development opportunities, you may be able to claim a subsidy from your employer. If this is not an option for you, you can find out about state funding and subsidies and what requirements need to be met.



Specialists in human resource management can further educate themselves in diversity management, farmers can specialise in organic food production, journalists can educate themselves specifically in sustainability topics, marketing and PR professionals have opportunities as fundraisers, and educators can further educate themselves in wilderness education. Bakers can specialise in organic baking, architects can focus on energy-efficient designs, business developers can focus on corporate sustainability, and engineers can specialise in disposal technology.

To advance your green career, it is helpful to search for jobs on specialised search portals. You can also be proactive and send an unsolicited application. If you can't find any suitable job ads or if you have your eye on a specific company, you can also apply directly for your dream job by sending an unsolicited application.

Another idea for advancing your green career is to opt for an internship or volunteer work. Through an internship, you not only gain valuable experience and knowledge, but also deepen your insight into a possible field of work and potential career path. Furthermore, this way you have access to a broad network of contacts in the industry that you can use at a later point in time. You can also do volunteer work if you are already established in your career and want to start looking around or reorienting yourself. By getting involved with non-profit employers, you not only spruce up your CV, but also gain vital experience and insights into the world of green jobs.



If you feel comfortable in the company or organisation you already work for, but would like to devote more attention to the topic of sustainability or environmental protection, then you can go beyond the previous limits of your work. Become a driving force behind green ideas, projects, working groups and innovations, and inform, advise and encourage your superiors or employers about opportunities for further development in the area of sustainability. Opportunities for this range from promoting carpooling to corporate volunteering and employee health



If you are not only a passionate doer and innovator, but also have a sense of business acumen and a willingness to take risks, there is also the opportunity to become a (co-)founder of a green start-up. This allows you to design your own company according to your personal values, goals and working methods and to shape the world in a socially and ecologically responsible way as an entrepreneur. There are various websites, trade fairs and events (e.g. founders' get-togethers, network meetings) where green start-ups look for co-founders.

## 2.5 Sustainability in the workplace

### principles of sustainability

Sustainability is based on three central dimensions or principles:

- **Economy:** economic efficiency, focus on economic progress, resource efficiency, circular economy, fair trade, local value creation and ethical business practices
- **Society:** social justice, promoting social participation, improving human well-being, avoiding the disadvantage of social groups, guaranteeing social rights, improving education and decent work, gender equality, sustainable consumption
- **Environment:** Ecological sustainability: conservation and protection of nature, biodiversity and ecosystems, responsible use of resources, reduction of environmental pollution and destruction



Thinking and acting sustainably is fundamentally relevant for every professional activity and every industry. Sustainability is therefore becoming an integral part of professional competence and is evident in both technical and methodological skills and in social and personal skills. Consequently, the integration of the three dimensions of sustainability also plays a vital role in professional development.

The principles of sustainability can be integrated into your professional development. This includes how you can work and learn more efficiently and effectively while protecting the environment and your health. The following options are available for an ecologically, economically and socially sustainable development of your career:

- Lifelong development of relevant talents and skills to increase your own effectiveness and efficiency
- Integration of different areas of life and balancing family or leisure and work
- Maintaining mental and physical health and well-being, recreation, sports and healthy nutrition for more professional resilience
- Supporting sustainable organisations and commitment to sustainable causes
- Increasing your own eco-efficiency and practising resource optimisation

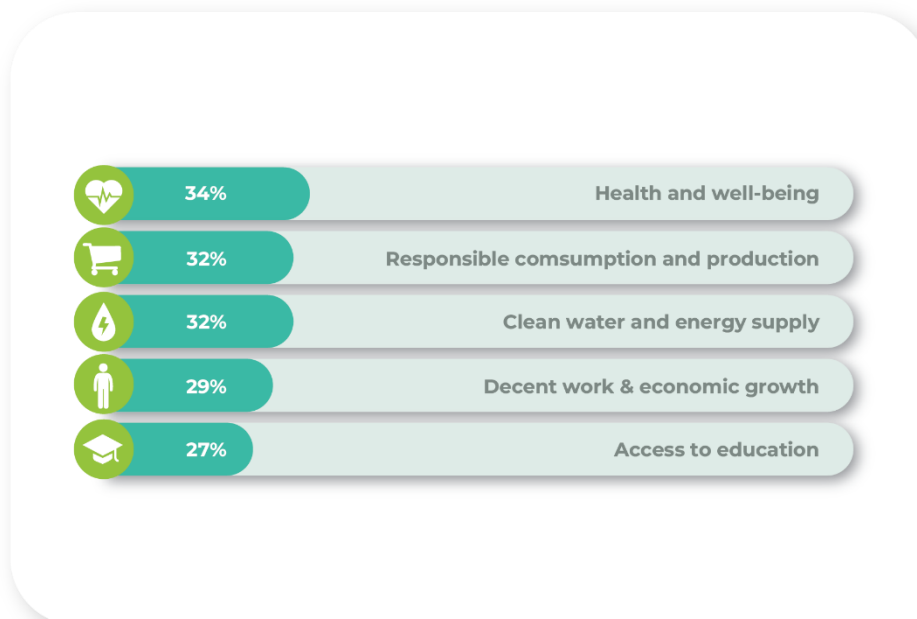
### Strategies for integrating sustainability into job roles

The Michael Page Sustainability Insights Study (2022) in Europe shows that 28 per cent of employees do not consider their company to be sustainable enough.



Sustainability at work means not only making all processes in the company, but also the entire culture future-proof, socially just and resource-efficient.

One in three workers in Europe says that health and well-being is the most important sustainability initiative for them in the company. The topics of responsible consumption and production and clean water and energy disposal come in second and third place. Decent work and access to education are also important to workers.



Effective strategies for integrating social, ecological and economic sustainability into various job roles include, for example:

- Promoting inclusion and diversity in the company or organisation
- Active career management to qualify for green jobs and to effectively develop green career paths for employees
- Introduction of environmentally friendly practices and management practices
- Further development and training of employees to promote employee retention, productivity, job satisfaction and engagement
- Creating a culture of sustainability by promoting employee engagement in the workplace
- Cross-job training on topics such as waste reduction, sustainable procurement or energy efficiency at work
- Organisation of volunteer programmes and volunteering
- Regular internal communication on sustainability strategies and goals, as well as success stories
- Introduction of incentives and reward systems for sustainable behaviour and ideas
- Provision of resources and conditions for all employees to integrate sustainability into their own workplaces



Promoting employee education to develop a mindset, knowledge and skills around sustainability is an important starting point for integrating sustainability into all

Involving staff in the cycle of success (education, inspiration and activation) to integrate sustainability into workplaces and companies creates a lasting culture of sustainability for individuals, teams and entire organisations.



Through education, inspiration and activation in the area of sustainability, conventional job roles can be designed to be socially, economically and ecologically sustainable. As a micro-finance officer, you can, for example, improve access to small loans for low-income entrepreneurs and, as an education officer, you can dedicate yourself to high-quality educational opportunities for underprivileged communities. As a food technologist, you feel inspired to develop new and innovative methods for growing food and, as a procurement officer, you ensure that goods are purchased in an environmentally and socially responsible manner.

## 2.6 Summary

Green skills include knowledge of green technologies, a sustainability mindset and transferrable skills for realising potential for improvement.

While there are specific green skills for each industry and occupation, entrepreneurship, communication skills, leadership, innovation and adaptability are also among the key competencies.

The MINT subjects (mathematics, computer science, natural sciences and technology) are also essential for working in the green economy. Sustainable action, environmental awareness, analytical thinking, data science and problem-solving skills are among the most important competencies for emerging green jobs.



The training pathways for green jobs include apprenticeships, specialised training courses, interdisciplinary and specialised degree programmes, green skills training and practical experience. Lifelong learning is particularly relevant for employment in the green economy because the green transformation is associated with changes in technologies, occupations and skills requirements.

Lifelong learning can take place in the form of formal, non-formal and informal learning. The career paths in the green job market are diverse and range from jobs in waste management, science and organic farming to green financing, sustainable mobility and technical environmental protection.

It is possible to find green jobs in the private sector as well as in the public and non-profit sectors. For a green career and career choice, it is valuable to have a career objective and action plan. Possible strategies include (unsolicited) applications, training and further education, voluntary work, internships, (co-)founding start-ups, and green engagement within one's own organisation.

The principles of sustainability include economic efficiency, social justice and ecological sustainability. Sustainable thinking and behaviour are fundamentally relevant in all fields of work and job roles and can be integrated through, for example, lifelong learning, the promotion of mental and physical health, the commitment to sustainable causes and the increase of one's own eco-efficiency. The promotion of education, inspiration and the activation of sustainability in workplaces creates a sustainable culture and thus affects individual job roles, work teams and the entire organisation.

## Literature

Federal Institute for Vocational Education and Training (2013). Vocational training for the green economy.

[https://www.bibb.de/dokumente/pdf/Berufsbildung\\_gruene\\_Wirtschaft\\_GlobalesPartnertreffen\\_Leipzig.pdf](https://www.bibb.de/dokumente/pdf/Berufsbildung_gruene_Wirtschaft_GlobalesPartnertreffen_Leipzig.pdf)

European Education and Training Network (2024).

<https://www.european-net.org/>

Plattform Industrie 4.0. (2023). Green Skills. There is a green collar in each and every one of us.

[https://www.plattform-i40.de/IP/Redaktion/DE/Downloads/Publikation/AG5\\_Impuls-GreenSkills.pdf?\\_\\_blob=publicationFile&v=8](https://www.plattform-i40.de/IP/Redaktion/DE/Downloads/Publikation/AG5_Impuls-GreenSkills.pdf?__blob=publicationFile&v=8)

Auktor, G.V. (2020). Green Industrial Skills for a sustainable future. United Nations Industrial Development Organization.

[https://www.unido.org/sites/default/files/files/2021-02/LKDForum-2020\\_Green-Skills-for-a-Sustainable-Future.pdf](https://www.unido.org/sites/default/files/files/2021-02/LKDForum-2020_Green-Skills-for-a-Sustainable-Future.pdf)

## 3. Women4Green Trainers \_ Women in Green Jobs

### 3.1 Women in green jobs

Not only building an exciting career, but also doing something active for the environment – that's exactly what green jobs offer! Particularly in the rapidly growing renewable energy sector, there are promising opportunities: According to an EIGE study, around 29 million new jobs could be created by 2050. Sounds promising, doesn't it?

But what does it currently look like for women in this growing industry? Are there barriers that prevent women from entering green professions and realising their potential? And above all, how can we overcome these barriers and pave the way for a fair and diverse future? Together, we want to find out how women are shaping the green economy and how we can all help create opportunities for everyone to move forward.



### 3.2 Women in green jobs – status quo

#### Why we need women in the green economy

Green jobs are a key factor for economic and gender equality. The increasing focus on sustainability and renewable energies is creating new occupations that are not tied to traditional gender roles. This development offers an opportunity to break down gender-specific barriers and integrate women into key areas such as renewable energies and sustainable production.



The shortage of skilled workers in technical and IT occupations, which are also part of the green economy, is worsening. Women are severely underrepresented in these occupations, which not only has social but also economic disadvantages. The gender pay gap and old-age poverty are examples of the consequences of this inequality. It is therefore crucial for companies to utilise not only male but also female professional potential in order to meet staffing needs and ensure long-term business success. Promoting the proportion of women in the green economy is therefore not only a matter of fairness but also a business necessity.



Traditional industries are often characterised by gender-specific barriers that make it difficult for women to access well-paid and stable jobs. However, the green economy offers a promising alternative for overcoming these inequalities. With the increasing demand for skilled workers in the fields of renewable energies, sustainable production and environmental technology, new career paths are emerging that are not based on outdated gender roles.

This potential for change brings major advantages: if women are more strongly represented in these areas, they will benefit from stable incomes, a wide range of career opportunities and long-term economic prospects. Such progress not only contributes to improving individual living conditions, but also helps to reduce the gender pay gap.

Despite these positive developments, however, the real world shows that women are still underrepresented in many areas of the green economy. While the sector as a whole is growing, the proportion of women in these occupations is low. In 2021, only 29% of jobs in green sectors were held by women, and by 2030 this share could fall to just 25%. This shortfall not only represents a step backwards for gender equality, but could also delay progress in this area by up to 15 years.

To counteract the decline in the proportion of women in green industries, it is crucial to attract more women to STEM education.



STEM is an abbreviation for science, technology, engineering and mathematics. These subjects are central to innovations and technical solutions needed in the green economy. They drive progress in areas such as renewable energy, sustainable production and environmentally friendly technologies.

A glance at the current study figures shows where action is still needed to sustainably increase the proportion of women in the green economy:



Between 2008 and 2020, the number of female first-year students in STEM subjects rose by 89 per cent, although there are subject-specific differences: While biology and chemistry have a high proportion of women, this is still lower in engineering and computer science, although it is slowly increasing here too. Dropout rates are high, particularly in computer science, often due to a lack of practical relevance and false expectations. Despite the increasing number of female graduates, the proportion of women remains low at 32.4%, particularly in future-oriented fields such as electrical engineering and computer science.

Increasing the proportion of women in the STEM subjects, especially in the fields of mechanical engineering, process engineering and electrical engineering, is of great importance for the green economy.

Targeted measures to further increase the attractiveness and practical relevance of STEM courses are important in order to increase the number of female graduates. Mentoring programmes and an early practical orientation could help to reduce dropout rates and to inspire women in the long term to work in these future-oriented industries.

## Where women are already making a difference in the green economy

Despite their persistent underrepresentation, women are increasingly being recognised in certain roles in the green economy:



Leadership positions such as Chief Sustainability Officer (CSO) are a good example: Here we see a significant increase in the proportion of women. In the US, the proportion of women in CSO roles rose from 28% in 2011 to 54% in 2021. These positions are particularly important because they have a direct influence on companies' sustainability strategies and thus play a key role in achieving climate targets.



As part of their career orientation, students can research in small groups which women already hold leadership positions in the green economy. They create a vivid presentation that highlights both the professional achievements and the contribution of these women to sustainable transformation. Through this exercise, students not only develop research skills, but also actively engage with inspiring female role models and recognise how diverse and influential women already are in green professions today.

Furthermore, women are also strongly represented in specific areas of renewable energies. Their participation in the photovoltaic industry is particularly noteworthy, where they occupy around 40% of jobs worldwide. This is a positive signal, as it shows that women are not only present in this growth industry, but also relevant.



To close the gender gap in the green economy and achieve net-zero emissions, companies need to take targeted action. This includes promoting education and training programmes for women, creating an inclusive work environment, and helping employees balance work and family life.

A greater gender diversity in leadership not only has a positive impact on gender equality, but also increases the effectiveness of climate action. By specifically promoting women in leadership roles, companies can achieve their environmental goals more successfully while creating a more transparent and equitable work environment. But how exactly do we benefit from women in leadership?

Here are some key benefits:

According to a 2023 report by the European Investment Fund, companies led by women perform better than average in the areas of environment, social issues and governance.

Women in leadership positions are more likely to invest in renewable energy and place a higher value on energy efficiency and recycling, which leads to lower greenhouse gas emissions.

A study by UN Women shows that companies run by women are more likely to disclose their greenhouse gas emissions and pursue a more transparent environmental balance.

### 3.3 Barriers for women in green jobs

But why, despite the mentioned advantages, are so few women active in the green economy? The desire for simple answers to this question is great—yet at the same time, it is impossible to provide one.



Many factors play a role in career choice, with different studies focusing either on the **psychological**/person-oriented perspective (the individual as a decision-maker) or on **social** structures and institutional frameworks (the environment and socialization as the determining factors).

The variety of approaches to explaining women's career choices and the influences on those decisions highlights the complexity of the issue, as the influencing factors cannot be viewed in isolation; rather, career choices are the result of multiple influences. We will now examine some of these **influences** and discuss initial approaches to overcoming **entry and advancement barriers** in the green economy.

## Overcoming barriers to green jobs



One of the most important factors is **stereotypes** and the resulting "**stereotype threat effect**." However, since gender stereotypes and their impacts are wide-ranging and can be addressed in career guidance and counseling, we will focus specifically on this issue in the next section, while taking a look at other aspects first.

The reality of the working world leads to the constant reproduction of the same patterns. Since few women work in green professions, these careers are **not perceived by girls and women as attractive fields with future potential**. Furthermore, in industries or occupations that are predominantly male, women sometimes feel that they are **not welcome**, regardless of whether this perception reflects reality or not.

There is also a **lack of female role models and mentors** who can share information about these careers or who can implicitly anchor the image of women in these fields.



In your practice, it is important to continuously highlight **female professionals as role models**. However, make sure that the representation is authentic and not unrealistically idealized, and that women in green jobs are **not portrayed as "special"** in the sense of being exceptional.



Images speak louder than words. Take a look at the two following images. What feelings or thoughts do they provoke in you?

While the first image seems completely staged, with the woman appearing as though she was placed there solely for the photo to convey "**diversity**," the second image depicts a **real-life moment of work**.



The problem of the **lack of female role models and mentors** who can inform about green careers or anchor a positive image of women in these fields also exists in the **private sphere**.

What makes it even more difficult is that mothers are often concerned or skeptical when their daughters want to pursue a male-dominated profession. Likewise, friends or educational mentors frequently advise against a career in a male-dominated field, arguing that women might struggle to fit in, constantly have to prove themselves, or face discrimination.



For career guidance to succeed, it is important to involve caregivers and peers in your efforts, as they have a significant influence.

Having discussed the challenges women face when entering green jobs and presented initial approaches, we will now illustrate these issues with a practical example. The following case shows how **uncertainties and barriers** can arise early in the **career guidance process** and what measures can help overcome them:



Elena, a student in her final year of school, is interested in technology and environmental protection. On the recommendation of an enthusiastic young teacher, she takes an internship at a large company that builds and maintains wind turbines. At first, she is full of excitement because she wants to contribute to the energy transition and learn something practical.

However, during the internship, Elena realizes that she is the only young woman in the technical department. Her colleagues are friendly, but she often feels unconsciously excluded. She repeatedly hears comments like, "This is heavy machinery, you should leave it to the guys," or "Technology isn't exactly a typical women's job." Elena is rarely involved in hands-on tasks and is often only allowed to watch. Her questions are answered, but sometimes she feels that her colleagues don't take her interests seriously.

She also notices that most leadership positions are held by men, and women are hardly represented in the technical areas of the company. This makes her feel insecure. Elena wonders whether she is really suited to a career in this industry and if she can succeed in the long term.

By the end of the internship, Elena is uncertain whether she wants to continue on this path. While her initial enthusiasm for wind energy and environmental protection is still there, the experiences during the internship have made her reflective.

So, how can **career counseling proceed** in a way that prepares women like Elena for these challenges and shows them that they can **succeed in the green economy**? How would you approach this? Below are some strategies that could be helpful in such situations.



- **Open exchange:**  
It is important to honestly discuss potential challenges so as not to dismiss or trivialize any emotions or impressions. In this process, it is crucial to be constructive—to set realistic expectations while also ensuring that women are not discouraged.
- **Motivational examples:**  
In the career guidance process, it is helpful to regularly present success stories of women in green industries. If resources allow, it can be especially inspiring to invite female key speakers who can address individual questions and concerns.
- **Encouraging mentoring and networking:**  
Career guidance should specifically highlight networks and mentoring programs for women. Connections to experienced women can create role models and provide valuable support.
- **Addressing company culture:**  
The choice of employer plays an important role. It should be emphasized that not all companies are the same, and the search for a company that promotes diversity and inclusion is a strategic decision.
- **Empowering self-efficacy:**  
In workshops, young women can be specifically empowered in areas that are important for dealing with stereotypes and pressures to conform. Communication training and assertiveness are key topics in this context.

## Arrived, yet facing barriers again?

Once a woman has entered the green economy, one might think that all obstacles have been overcome—but unfortunately, this is often not the case. In technical and manual professions, which are an integral part of the green economy, the dropout rate among women is often **higher** (regardless of their educational level), partly due to still-existing **sexist organizational cultures and/or stereotypical attributions of competence** and corresponding behaviors.







Studies (e.g., Haffner and Könekamp) show that women in technical and manual professions generally have **fewer opportunities** for advancement than their male colleagues. Factors include slower career entry after training, as women often have longer waiting times and fewer permanent positions after their apprenticeships, lower participation in further education, the predominance of male superiors who promote other male leaders, and a lower willingness to be permanently present or potential leave due to pregnancy or other care responsibilities.

Additionally, women in male-dominated environments often face daily barriers that require a significant amount of effort to overcome. They are **under constant pressure to adapt** and must repeatedly prove themselves—sometimes feeling, sometimes actually experiencing, being treated unfairly. This takes a toll on their energy and can **negatively affect their self-esteem**. These pressures lead to dissatisfaction, which in turn affects motivation, creating a vicious cycle where stereotypes are reinforced.



To counteract these effects, it is important to anchor diversity as an opportunity in the **corporate culture** from the start, for example, through training programs. Special attention should be given to gender sensitivity in **recruitment, preboarding, and onboarding processes** to make the green economy more inclusive and diverse from the outset.



To foster an inclusive green economy, career guidance professionals should forge **targeted partnerships with companies** in the green sector. These partnerships enable the development of workshops and training programs that focus on diversity and inclusion. Additionally, such collaborations offer the opportunity to optimize corporate processes like recruiting, preboarding, and onboarding, and to keep career guidance content relevant and attractive. They also create opportunities for mentoring programs and excursions, helping to foster a better understanding of careers in the green economy.

These targeted measures and partnerships are essential in providing women with the support they need to establish themselves successfully in the green economy. **Instead of being discouraged by the challenges**, it is important to show them that their **talents and skills** are in high demand in the green economy and that they can **play a vital role** in the sustainable transformation. Career guidance must go **beyond** simply informing young women about available careers—it must empower them to recognize and confidently use their potential.

Gender stereotypes and their impact



*The true value of a strength depends on when and how you use it.*  
Ingrid Gerstbach

While gender stereotypes often still hinder access to certain professions, the true value of skills lies in using them at the right time and in the right place. In the green economy, where **diverse talents** are in demand, it is important to recognize and utilize these **strengths regardless of traditional gender roles**.



However, skills and job profiles are still often categorized into "typically male" or "typically female" categories. Surely, you can think of examples from everyday life.

Frequently viewed as "typically female"	Frequently viewed as "typically male"
Empathy and social skills	Technical understanding
Communication skills	Assertiveness
Multitasking and organization	Analytical thinking
Collaborative work	Physical endurance



Even though technical aspects often come to mind first when thinking about jobs in the green economy—such as the development of solar **technologies** or working with wind turbines—**social skills** are equally important. Sustainability is not just about finding technical solutions, but also integrating them into social and ecological structures, which requires communication, teamwork, and an understanding of different perspectives..

It is important to emphasize that not every woman automatically possesses social skills and lacks technical talent—just as not every man brings only technical strengths and no social abilities. These **assignments** are not only oversimplified, but also **counterproductive**.

In the green economy, success depends on the interplay of these seemingly opposing skills—**social and technical**. A project for promoting renewable energy can only be sustainable and successful in the long term if it addresses both technical challenges and social impacts. For example, the technical aspects of building wind turbines are just one part of the process; involving communities, understanding their needs, and communicating the environmental benefits play an equally important role.

Therefore, it is important to **actively question these stereotypes**, promote women in technical fields, and simultaneously encourage men to leverage their social skills more effectively. This way, everyone, regardless of gender, can experience the green economy as a diverse field where all their talents are valued and utilized.

These early assignments and expectations shape **career choices and career paths**. Girls and women interested in careers in the green economy often face a **double challenge**: not only do they have to meet the demands of the profession, but they also have to fight against societal stereotypes and prejudices.



The concept of "**Doing Gender**" highlights that **these gender differences are not simply given**, but are **constructed and maintained through continuous social practices and expectations**. These practices manifest in the way we assess skills and professions and integrate them into daily life. When certain jobs are perceived as "male" or "female," they are continually reaffirmed and reproduced through social norms and expectations.

The concept of "Doing Gender" is reinforced by the "**Stereotype Threat Effect**," which presents an even greater obstacle. This phenomenon suggests that **negative stereotypes** about a group's supposed inferior performance can actually lead members of that group to perform more **poorly**. This effect often impacts women in technical professions or fields like mathematics and engineering. In the green economy, where technical understanding and innovation are in demand, such stereotypes can have a negative impact. The "Stereotype Threat Effect" and its consequences are illustrated in the following example:



Maria is training to become a **mechatronics technician for wind turbines**—a job that requires technical understanding and craftsmanship. She is the only woman in her class and often feels watched. Although she receives good grades in both vocational school and her internship, she feels she has to constantly prove herself with more complex technical tasks. Her colleagues and instructors often praise her strengths in communication and teamwork, but she receives little recognition for her technical abilities. Comments like "Women are more suited for organizational work" accompany her daily work routine.

This environment **increases** Maria's **uncertainty** about whether she can truly handle the technical challenges. During an exam, where she is supposed to solve a technical problem, she becomes so nervous that she makes mistakes and barely passes the test.

To help women succeed in green professions and prevent concepts like "Doing Gender" or the "Stereotype Threat Effect" from hindering their progress, targeted **gender-sensitive measures** should be implemented in career guidance and counseling.



It is crucial to actively question and dismantle **stereotypical assumptions** about women—such as the idea that they are physically weaker or less assertive. These prejudices are often not expressed openly but are subtly reproduced, making them harder to identify and change. However, consciously and sensitively addressing these unconscious biases can help empower women in the green economy and allow them to fully unleash their potential.

Career guidance plays a central role in this process: it should **not only inform about professions** in the green economy, but also actively prepare young women to confidently apply their **skills** and talents in areas traditionally considered "male."



The key is that career guidance and counseling should **not only be linguistically gender-neutral but also content-wise inclusive**. The **external presentation and description of professions** should be adapted to highlight the creative and social aspects, which are often marginalized but particularly attractive to many individuals. Studies show that a traditional "male image" in job descriptions can decrease women's interest, as it does not adequately reflect their specific strengths and interests.

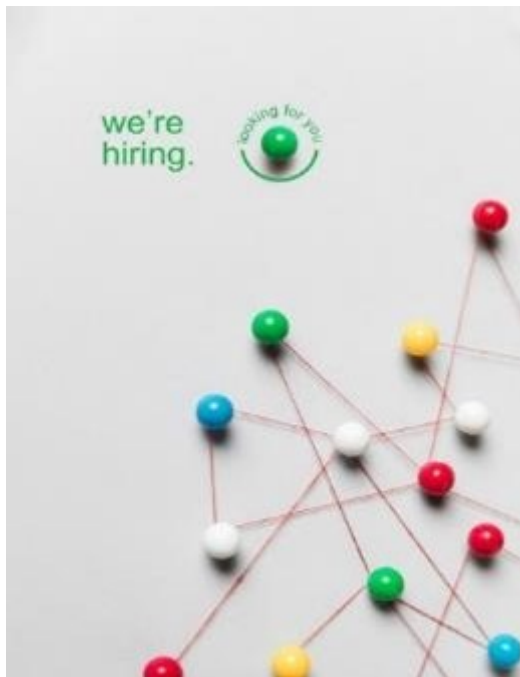
Take a look at the two **job descriptions for a solar technician position**. Which of the two job postings seems more inclusive and appealing to a wider audience?



As a solar technician, you will be responsible for installing and maintaining solar panels on rooftops and large areas. A good physical condition is required for working with heavy equipment and on construction sites. You will often need to work at great heights and on uneven terrain. Technical understanding and craftsmanship are essential for this job.

As a solar technician, you will contribute to sustainable energy supply by installing and maintaining solar panels. This role offers the opportunity to apply innovative technologies and actively reduce CO2 emissions. In addition to technical knowledge, skills like problem-solving and teamwork are required. Flexibility and a positive attitude toward outdoor work are helpful, with the main task being to contribute to the development of eco-friendly energy solutions. Creativity and commitment are just as important as technical expertise.

Although both job postings use **gender-neutral language**, it becomes clear that the **second posting is more inclusive**, as it emphasizes **a broader range of skills**. The first description focuses on traditional physical demands and technical expertise, while the second description also highlights the sustainable aspects of the job and skills such as problem-solving and teamwork.



To make your practice as unbiased as possible, the following reflection questions could be helpful in moving towards greater openness and diversity:



- Do I regularly reflect on how I present certain professions, or do I **unknowingly convey limiting gender stereotypes** in my counseling?
- Do I encourage both women and men **equally to develop both** technical and social skills, or do I unconsciously place more emphasis on one skill depending on gender?
- Have I developed strategies to address hidden or **implicit biases** without embarrassing participants, and how can I make such discussions constructive?
- Do I specifically promote the **self-confidence** of my participants by providing them with tools to confidently apply their talents and skills in non-traditional areas?
- What conscious steps am I taking to create an **inclusive counseling environment** where all participants, regardless of gender, are encouraged to pursue their career interests without prejudice?



It is clear that complete impartiality is unrealistic, as we all have unconscious biases. However, becoming aware of these biases is an important first step. It allows us to continually work on ourselves and question our own assumptions. Over time, through reflection and intentional action, we can continuously improve our practice and create a more inclusive environment.

### 3.4 Successful integration into green jobs

After exploring some exciting perspectives on the challenges and opportunities for women in the green economy, it is now time to dive deeper into practice. In this section, we will focus on how to strengthen **women's self-confidence** to pave the way for them into green careers or help them remain successful in their green work environment.

The following aspects have already been discussed as ways to attract women to the green economy. They are revisited here to emphasize their relevance and ensure a seamless transition to further strategies:

- Career advisors should be trained in **gender competence** to break down stereotypes and promote the diversity of opportunities.
- **Female role models** in the green economy should be authentically integrated into orientation programs to inspire and motivate women.
- **Parents and peer groups** should be involved in career orientation processes to reduce gender stereotypes and promote interest in green jobs.
- Career orientation should be **gender-sensitive** and complemented by **practical, low-threshold offerings** for women in the green economy.
- **Long-term collaborations** and **networks** between career counseling centers, educational institutions, and companies in the green economy are crucial for the effectiveness of support measures.

Now, back to the root cause to tackle the phenomenon at its core: As already described with the "Stereotype Threat Effect," stereotypes can have a significant impact on self-image and thus shape reality. Studies show that, particularly in **STEM fields**, which form a key part of the green economy, many women struggle with a negative **self-concept**. This detrimental self-image must be broken down to successfully and sustainably integrate women into the green economy.

Negative self-concepts, which often develop early in school, lead many girls to doubt their abilities. These doubts can persist into adulthood, affecting their **willingness to choose STEM programs**, deepen their **knowledge** in these areas, or pursue a **career** in these promising fields. As a result, this can significantly limit their opportunities in the job market and hinder their integration into key sectors like the green economy. It is therefore essential to actively strengthen the self-confidence of girls and women from the very beginning—so how can this be implemented in practice?



### Strengthening self-worth and strengths

- **Strength cards** allow individuals to record achievements and personal strengths that can be called upon in challenging situations to sharpen awareness of their own capabilities.

- Keeping a **journal** where even small personal successes are regularly noted helps to develop a positive perception of one's abilities.
- The introduction of positive **affirmations**, which should be repeated regularly and focus on one's abilities and goals, strengthens a positive self-image.

### Goal setting and success strategies

- **Setting SMART goals** (specific, measurable, achievable, relevant, and time-bound) strengthens the pursuit and achievement of these goals, boosting self-confidence through concrete successes..
- Creating **vision boards** where women visualize their professional and personal goals serves as a constant reminder of their objectives and enhances motivation.
- **Regular feedback** sessions can help women receive constructive feedback on their performance and learn to use it positively.

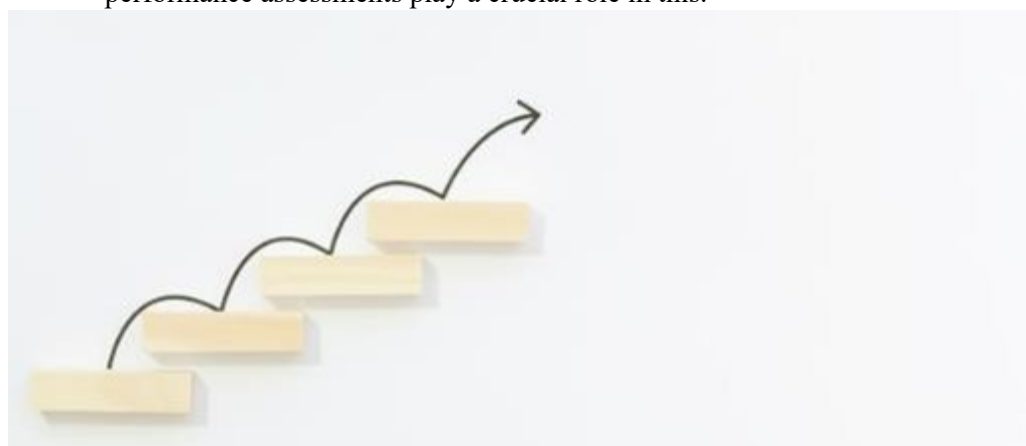


Once women have found their place in the green economy, not all challenges have been overcome. It is important that they continue to **actively work** on **strengthening their self-confidence**. Studies show that **women tend to underestimate** themselves compared to their male colleagues. This self-undervaluation can lead to women not fully recognizing their own abilities and successes. Particularly in the green economy, where they often encounter assertive male counterparts, it becomes even more crucial for women to continuously work on their self-confidence and actively advance their professional development.

However, the burden of integration should not rest solely on the shoulders of women—companies must also actively contribute by implementing targeted measures and strategies to ensure that women not only gain a foothold in green jobs but can also thrive and be successful in the long term.

### The following aspects play a key role in this:

- Companies should create a corporate culture through **targeted training and clear codes of conduct** that not only accept but actively value diversity and promote equality. This requires the systematic dismantling of stereotypes and the creation of an inclusive work environment where everyone feels respected, recognized, and specifically supported.
- It must be ensured that women have the **same opportunities** for career advancement as their male colleagues. Clear and fair promotion criteria, talent management, and transparent performance assessments play a crucial role in this.



- Companies should offer **flexible working models** and **opportunities for remote work** to support work-life balance. This is especially helpful during life phases when caregiving responsibilities play a larger role.
- Companies should foster an **open feedback culture** where everyone is encouraged to express their concerns and provide and receive constructive feedback



Fatima is a food scientist working in a company that develops sustainable packaging and environmentally friendly production methods. Although Fatima is very competent in her field, she struggles to assert her ideas in meetings, especially in front of her male colleagues, who often come across as more dominant. This uncertainty leads her to hesitate in presenting innovative concepts, such as introducing a new biodegradable packaging solution.

The company recognizes the issue and implements measures to promote women in technical and scientific positions. This includes targeted training that helps Fatima strengthen her communication skills and self-confidence. Additionally, the company fosters an open feedback culture and mentoring programs to advance women into leadership positions. With this support, Fatima gradually feels more encouraged to actively share her ideas and eventually takes on the lead of a major project to develop sustainable packaging solutions.

Of course, Fatima's example is a best-case scenario, in which targeted measures to support women in the green economy have been successfully implemented. In practice, however, there are often additional challenges, and change is not always achieved quickly, as we have already seen. It often takes time to **dismantle deeply rooted stereotypes** and **establish sustainable improvements**. Nevertheless, this example ultimately highlights how crucial the **green economy** is for our **shared future** and how much it benefits from the **diversity** and **perspectives of all involved**. Diversity brings about innovative solutions that are essential for the success of the green economy, and it is worthwhile to actively and collectively promote this.

### 3.5 Summary

**Green jobs** offer women significant opportunities to achieve **economic equality** and establish themselves in a growing, sustainable sector. The green economy creates new career paths that can break down traditional gender roles. However, women remain **strongly underrepresented** in these fields: only 29% of jobs in the green sector are held by women, and this share could drop to 25% by 2030. To close this gender gap, **companies** must take targeted actions. **Career guidance and counseling** also play a crucial role. Gender-sensitive elements, such as diverse positive role models and the reduction of gender-specific stereotypes in career choices, help to break down traditional gender roles.

A **key advantage of women in leadership** positions lies in their **effectiveness for climate protection**. Studies show that women-led companies in areas like environmental, social, and governance (ESG) perform above average. Women are more likely to invest in renewable energy, energy efficiency, and recycling, which leads to lower greenhouse gas emissions. They also place greater emphasis on transparent environmental reports.

Despite these advantages, women in green professions face numerous barriers, such as stereotypes and a lack of role models. Therefore, mentoring programs, gender-sensitive career guidance, and targeted networks should be promoted. These measures not only **contribute to gender equality** but also ensure **sustainable business success** and help achieve **climate goals** more effectively.



## Literatur

Balke Barbara & Östros Thomas (2023). Frauen an der Spitze sind gut fürs Geschäft.

<https://www.eib.org/de/stories/climate-women-profits>

Bergmann Nadja, Danzer Lisa & Willsberger Barbara (2017). Ausbildungssituation von jungen Frauen in Technisch-handwerklichen Berufen.

<https://www.lrsocialresearch.at/ausbildungssituation-von-jungen-frauen-in-handwerklich-technischen-berufen/>

Boll Christina & Hoffmann Malte (2015). It's Not All about Parents' Education, It Also Matters What They Do: Parents' Employment and Children's School Success in Germany.

[https://ideas.repec.org/p/diw/diwsop/diw\\_sp735.html](https://ideas.repec.org/p/diw/diwsop/diw_sp735.html)

Dornmayr Helmut & Rechberger Marlis (2020). ibw-Unternehmensbefragung zu Fachkräftebedarf/mangel (n = 4.431 Unternehmen).

<https://ibw.at/resource/download/2135/ibw-researchbrief-108-de.pdf>

Dreisiebner Gernot (2019). Berufsfindungsprozesse von Jugendlichen, Economics Education und Human Resource Management. Springer Verlag.

Ernst & Young (2022). Pressemitteilung, Fachkräftemangel in Österreich erreicht Höchststand – mehr als jedes vierte Unternehmen will 2022 zusätzliche Stellen schaffen.

[https://www.ey.com/de\\_at/news/2022/01/ey-at-mittelstandsbarometer-2022-fachkraeftemangel](https://www.ey.com/de_at/news/2022/01/ey-at-mittelstandsbarometer-2022-fachkraeftemangel)

European Institute for Gender Equality (2024). From STEM to Sustainability: Empowering Women and Girls in Science.

[https://eige.europa.eu/newsroom/news/stem-sustainability-empowering-women-and-girls-science?language\\_content\\_entity=en#:~:text=And%2C%20globally%2C%20women%20represent%20a,progression%20in%20male%2Ddominated%20industries](https://eige.europa.eu/newsroom/news/stem-sustainability-empowering-women-and-girls-science?language_content_entity=en#:~:text=And%2C%20globally%2C%20women%20represent%20a,progression%20in%20male%2Ddominated%20industries)

European Investment Fund (2023). EIF Working Paper 2023/87, Female access to finance: a survey of literature.

[https://www.eif.org/news\\_centre/publications/EIF\\_Working\\_Paper\\_2023\\_87.htm](https://www.eif.org/news_centre/publications/EIF_Working_Paper_2023_87.htm)

Haffner Yvonne (2007). Mythen um männliche Karrieren und weibliche Leistung. Budrich.

Ihsen Susanne, Mellies Sabine, Jeanrenaud Yves, Wentzel Wenka, Kubes Tanja, Reutter Martina & Diegmann Lydia (2017). Weiblichen Nachwuchs für MINT-Berufsfelder gewinnen. LiT Verlag.

Könekamp Bärbel (2007). Chancengleichheit in akademischen Berufen. VS Verlag für Sozialwissenschaften.

Nationales MINT Forum (Hrsg.) (2022). Frauen in MINT-Berufen: gewinnen und halten.

[https://www.nationalesmintforum.de/fileadmin/medienablage/content/themen/arbeitsgruppen/03\\_mint-frauen\\_4-0/Empfehlungen\\_MINT-Frauen\\_LF\\_05-12-2022\\_Web.pdf](https://www.nationalesmintforum.de/fileadmin/medienablage/content/themen/arbeitsgruppen/03_mint-frauen_4-0/Empfehlungen_MINT-Frauen_LF_05-12-2022_Web.pdf)

Schneeweiß, Sandra (2016). Wenn die Norm ein Geschlecht hat: Zur Arbeitssituation von Frauen in technischen Berufen in Österreich.

Thaler Selina (2018). Die Hürden für Frauen in der Technik.

<https://www.derstandard.at/story/2000089992723/die-huerden-fuer-frauen-in-der-technik>

UN Women (2022). Explainer: Why women need to be at the heart of climate action.

<https://www.unwomen.org/en/news-stories/explainer/2022/03/explainer-why-women-need-to-be-at-the-heart-of-climate-action>

## 4. Women4Green Trainers\_ Green Career Guidance

### 4.1 Green career counseling

Young people face important decisions and changes during transitions between different life phases, such as from school to higher education or vocational training. Counseling and coaching offer supportive and guiding services in these situations, focusing on educational paths, career choices, and career development.

Enhance your knowledge and skills in gender-sensitive **counseling approaches**, coaching tools, and methods that support young people in making sustainable educational and career choices in the green sector.



### 4.2 Counseling methods for women in green jobs

#### The importance of gender-sensitive counseling approaches



**Gender-sensitive career counseling for young people** is particularly important because, based on social constructs of gender, many individuals choose education and professions that align with traditional gender roles. As a result, women are underrepresented in scientific and technical fields at universities and in further education, and green jobs and technology-oriented professions are predominantly male-dominated.

Gender is an English term that translates to "social gender." While English distinguishes between "gender" (social gender) and "sex" (biological gender), the German language does not have distinct terms for these concepts. The borrowed term "gender" in German thus refers to social, lived, and felt gender.



Gender sensitivity refers to the conscious perception, reflection, and consideration of different life situations based on gender.

Gender competence or gender sensitivity in career counseling for children and adolescents is understood as the ability to:

- Reflect on individual values, ideas, and role models, as well as societal gender aspects and stereotypes.
- Be knowledgeable about laws regarding discrimination and act accordingly.
- Use gender-just and non-discriminatory language in counseling.
- Reflect on one's professional role and approach.
- Reflect on gender constructs and gender relations in the school field.
- Reflect on the social constructions of gender and diversity in counseling and incorporate them into professional practice (e.g., recognizing the abilities of boys or how girls "should" behave).
- Recognize, tolerate, and allow contradictions and differences.
- Promote self-determined career orientation and choices.



**Gender-sensitive** counseling involves a **thoughtful and reflective approach to gender-specific needs and situations**, as well as awareness of often unconscious gender stereotypes and role models that influence how young people are perceived and evaluated. Beyond raising awareness, the goal is to support overcoming gender-related barriers.

Gender-sensitive career counseling for children and adolescents **does not aim to direct the career aspirations** of young girls and boys into stereotypical "women's" or "men's" professions. Instead, it is important to help young people engage with their own interests, strengths, and abilities, ultimately enabling them to make **self-determined career choices**.



The career choices of young people are still heavily influenced by gender aspects. Sustainable career guidance must, therefore, focus on competencies and interests, break down stereotypical role models, and make female role models in green professions more visible.

In gender-sensitive career counseling, especially, make sure to:

- Identify discrepancies in the self-image of the individuals being counseled.
- Avoid excluding professions simply because the young people do not think they are suited to them based on their gender.
- Recognize and reflect diverse interests, even if the young people lack knowledge about potential career fields and occupations.
- Introduce new career paths and consider them.
- Encourage the counseling process to view personal interests, talents, and hobbies as the starting point for career decisions.



In career counseling, be mindful not to associate professions with "typical" genders, such as the mechanic, engineer, or secretary, or the natural cosmetics specialist.

## Counseling methods and approaches



Educational and career counseling supports young people in making career decisions and professional development, provides guidance on education and training opportunities, promotes inclusion in the labor market, and strengthens flexibility and career competencies.

In educational and career counseling, the concept of "Green Guidance" is becoming increasingly important. **Green Guidance** refers to career counseling that:

- Considers the environmental impact of individual educational and career choices.
- Raises awareness of the environmental consequences of these choices among the target group.
- Links individual personality, competencies, and interests with sustainability and matches them with green jobs.
- Highlights opportunities in green career fields, activities, and future prospects within the green economy.
- Critically discusses greenwashing with clients.
- Plays an active role in establishing educational pathways that positively impact the environment and social justice, contributing to a sustainable and just future.



High-quality educational and career counseling is a key pillar of an enabling, sustainable, and inclusive education and labor market policy, supporting young people in making a meaningful contribution to a green future.

Key steps in career counseling for young people include:

1. Assessing career status, biography work, situational analysis, identifying resources, experiences, qualifications, competencies, and potential.
2. Developing future plans and setting educational, career, and life goals.
3. Developing solutions, helping with the search for training, career opportunities, and job offers.
4. Implementing the developed goals by creating concrete activities and steps, providing process support, reflection, and evaluation of results, and adjusting the further approach as necessary.



Key elements of career orientation and core activities in educational and career counseling for young people:

- Thinking about the future
- Exploring the future
- Experiencing the future

**"Thinking about the future"** involves engaging with the future career through discussions and reflections. Allow the individuals being counseled to discover what truly interests them, what they are passionate about, and what motivates them. Finding meaning in a profession can be further developed with a sustainable career goal.

**"Exploring the future"** includes presenting training, career, and job opportunities through informative counseling, fairs, and company visits. Showing and introducing inspiring role models can also make a valuable contribution to green career decisions.

**"Experiencing the future"** means gaining practical experience in the world of training and work, for example through internships, volunteering, or university visits. In this approach to sustainable education and work, it is crucial to make not only academic careers but also opportunities in green vocational education accessible.



It is important to encourage young people to actively engage with opportunities in green educational and career pathways through "thinking, exploring, and experiencing." It is your role in career counseling to seek opportunities to make green jobs visible and tangible.

## 4.3 Instruments and tools

### Important tools in counseling

For career orientation and educational counseling that supports green careers, the following **methods, tools, and techniques** are particularly relevant:

- Building a trusting counseling relationship through **active listening**
- Creating a supportive and solution-oriented communication environment using **questioning techniques**
- Developing goals and future visions using the **SMART method**
- Goal-setting and action planning using the **GROW model**
- Assessing competencies and talents through, for example, **self-analysis**
- Analyzing passion, vocation, mission, and profession using the **IKIGAI method**
- Identifying opportunities for a green career path using the **tree of a green future**
- Reflecting on career aspirations by **writing a letter to oneself**



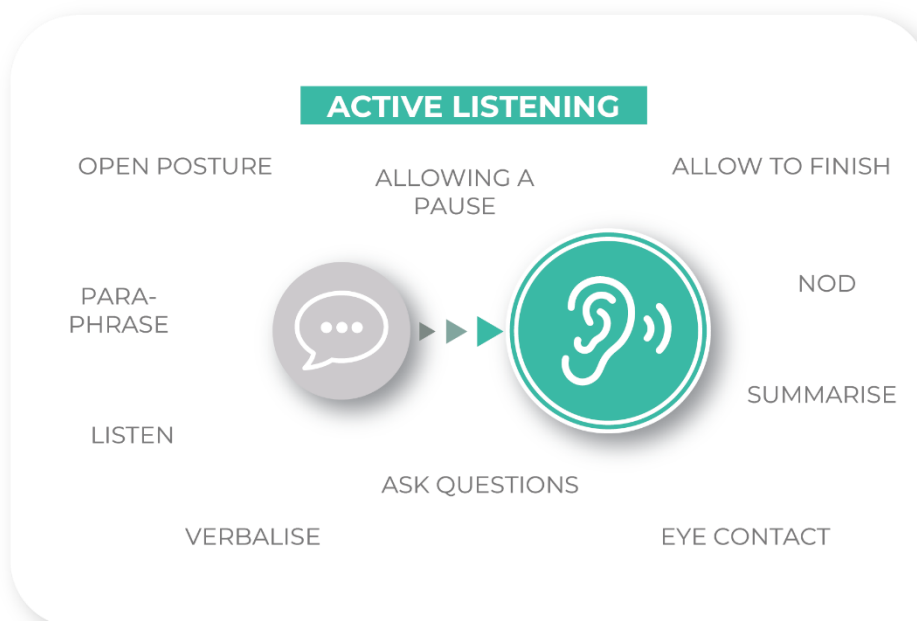
Methods are tools used by the counselor to guide the client through the educational and career decision-making process.

**Active listening** means engaging actively in the conversation, both verbally and non-verbally through body language, facial expressions, and gestures. Key elements of active listening include:

- Sufficient time and undivided attention for the counseling session



- An open and attentive body language (nodding, facing the client, maintaining eye contact, etc.)
- Building a trusting and respectful relationship with the client
- Verbal confirmation, such as "Aha" or "I understand"
- Paraphrasing the client's words, e.g., "Did I understand you correctly that you...?"
- Non-judgmental and unbiased listening
- Directly addressing emotional cues and feelings (verbally expressing them)
- Listening for subtext, hidden messages, and inconsistencies
- Asking for clarification when something is unclear



w4g\_E\_1



The benefit of active listening, aside from understanding and getting to know the concerns of the young person, lies in establishing a trusting relationship between counselor and client.

Strategic and goal-oriented **questioning** is one of the most important methods in counseling. Questions lead to reflection and insights, foster creativity, and open new perspectives and ways of thinking. It is crucial to avoid closed questions that can be answered with "yes" or "no." Instead, open-ended "W-questions" should be used to stimulate the conversation and thought process.

**W-questions include: Where? How? What? Who? Why? When?**

Other **central questioning techniques** that can be applied in career counseling include:

- Clarifying questions: to specify or complement information
- Hypothetical questions: to explore possible scenarios and solutions
- Assumption-checking questions: to clarify beliefs and convictions
- Circular questions: to introduce a new perspective or impact

- Resource-oriented questions: to identify resources such as competencies and contacts
- Goal- and solution-oriented questions: to open up future possibilities
- Ecological questions: to clarify the compatibility of decisions with environmental impact



**Clarifying question:** What exactly do you mean by that?

**Assumption-checking question:** What makes you so sure you're not suited for a career in the Green Economy?

**Hypothetical question:** What would you do if you could decide on your own?

**Goal- and solution-oriented question:** How can you achieve your career goal?

**Circular question:** How do you think your parents' expectations are in relation to this?

**Ecological question:** What are the advantages and disadvantages of your decision?

**Resource-oriented question:** Who can support you in your career choice?

In addition to general counseling methods like active listening and questioning techniques, there are specific tools and techniques from educational and career counseling

### Key tools in career counseling

- Many career counseling and coaching sessions use online competency tests. However, there is also a simple and quick way to conduct a **self-analysis of competencies** without digital tools.

**There are four main competencies to distinguish:**

- Subject-specific competencies
- Methodological competencies
- Social competencies
- Personal competencies

To enhance awareness and recognition of "green skills" and talents, these four categories can be analyzed with a particular focus on relevant green competencies. In each competency dimension, there are abilities that are important for green careers. This approach can help raise awareness among young people and link green professions to green competencies.



**Possible examples of individual competencies in relation to relevant Green Skills include:**

**Subject-specific competencies:** General knowledge, IT skills, mathematical abilities, knowledge of biology

**Methodological competencies:** Organizational skills, analytical thinking, project management

**Social competencies:** Empathy, intercultural communication skills, teamwork, conflict resolution

**Personal competencies:** Creativity, flexibility, self-motivation, resilience, risk-taking

To analyze both individual preferences, talents, and abilities, as well as the demand for specific skills, the **IKIGAI method** is frequently used. "Ikigai" is a Japanese term meaning "a reason for being" (iki = life, gai = value or meaning). This method is used for professional (re)orientation, identifying career goals, evaluating competencies and interests, and determining the needs in the labor market.



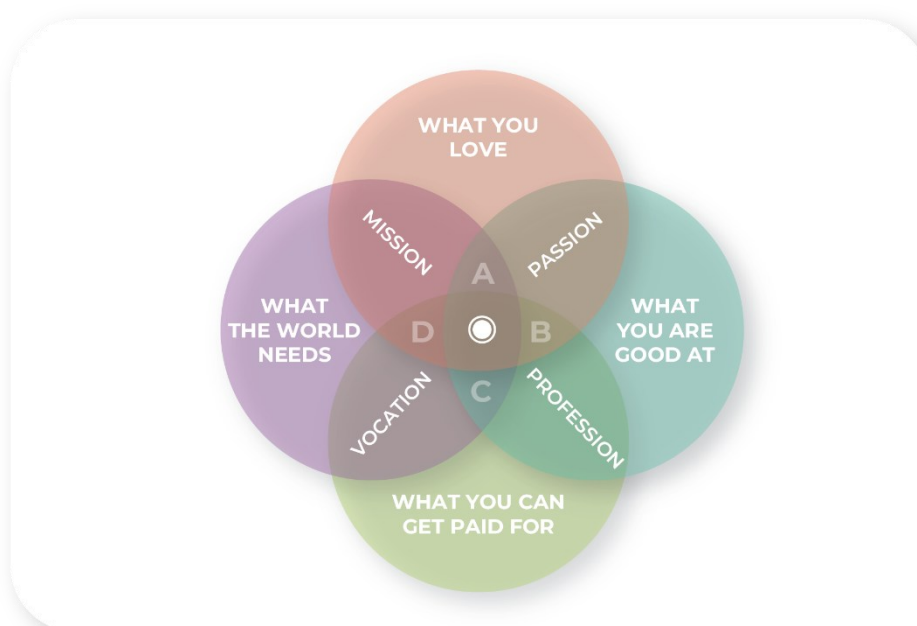
Using posters, images, or discussions, the four elements of the IKIGAI method can be explored and brought into alignment in career orientation.

In the IKIGAI method, four aspects are examined and brought into balance:

1. What you love (Passion)
2. What you are good at (Vocation)
3. What the world needs (Mission)
4. What you can be paid for (Profession)

**Questions that can be asked when applying the IKIGAI method include:**

1. **PASSION:** What do you love? What do you enjoy doing? What interests you the most? What would you do all day if you could?
2. **VOCATION:** What are you very good at? What comes easily to you? Where are your strengths and talents? What competencies and qualifications do you have?
3. **MISSION:** What does the world need? What challenges exist in the (environmental) world? What ideas and solutions are available for these challenges? How could you improve the (environment)?
4. **PROFESSION:** What activities can you earn money from? Which skills can you market? How can you turn them into an income?



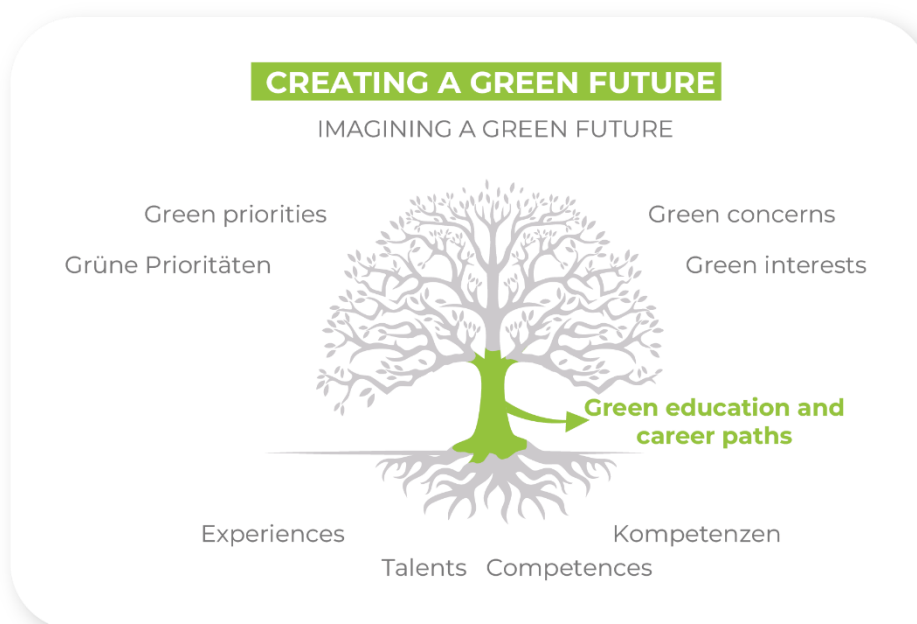
An example of the result of the IKIGAI method for a young person could look like this:

A girl loves reading, whether books, magazines, or online (Passion), and has a talent for writing (Vocation). At the same time, the world needs and pays for information and stories. Potential green careers could include becoming an environmental journalist, editor for environmental magazines, or a children's book author writing about animal and plant protection.

When analyzing various educational and career options, it is also helpful to reflect on the individual's green goals, priorities, interests, desires, and visions.

When these are combined with existing competencies, experiences, and talents, the visualization of career paths and job opportunities—through tools like the **tree of a green future**—can help highlight

possible career choices. The tree can be drawn on paper or displayed on a poster, and after brainstorming, it can be filled with ideas.



The professional support of young people in their educational and career choices involves showing them possible paths and goals. This requires not only methodical knowledge but also expertise regarding the education and job market, as well as relevant funding opportunities.

## 4.4 Additional coaching methods

### Techniques in career coaching



Coaching is defined by the German Federal Association for Coaching (Bundesverband Coaching e.V.) as professional advice, guidance, and support aimed at the development of learning and performance processes, primarily related to career concerns. Coaching also aims to improve performance, enhance self-management skills, and optimize individual resources.

In coaching, it is common to encounter blocking or limiting thought patterns in young people. Attitudes, beliefs, and mindsets that prevent young people from considering a green career can be shaped by prejudices or traditional gender roles from peers, parents, or the media. One method to help clients overcome these blockages is the **miracle question**.

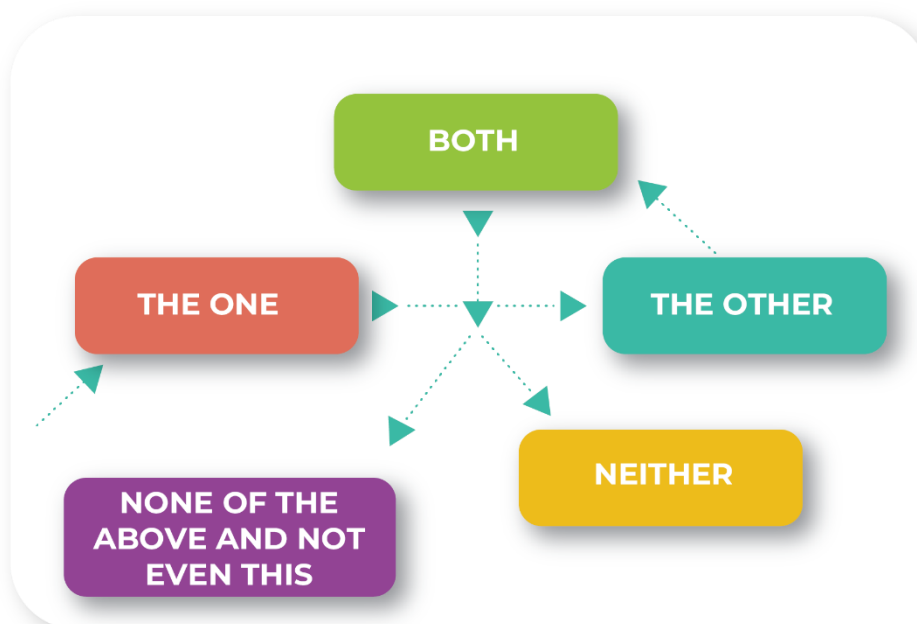


**As a coach, you might ask the following question:**

Imagine you go to bed tonight and a miracle happens. In the middle of the night, something extraordinary takes place. The problem or obstacle you've been talking about in this conversation is suddenly resolved. When you wake up tomorrow morning, how will you know that the miracle has happened? What is different? What has changed? What has occurred?

With this question, you can already awaken dormant solution ideas and resources in the young person, which they can access through this strategic insight process.

The **Tetralemma** is a coaching method that can support young people in difficult decision-making processes. At least four options are explored through various visualization techniques. Often, a fifth option is also included.



The term Tetralemma comes from the Greek words "tetra" (four) and "lemma" (premise or assumption).

For example, chairs or cards placed on the floor can represent the four (or five) assumptions. The positions include:

- **The one:** a solution that is the closest to the client
- **The other:** an alternative or opposite solution
- **Both:** a combination of both options
- **Neither:** neither option is chosen
- **Something completely different:** everything is rethought and a new option is selected

Once the different assumptions are chosen and written on a poster, the client can "step into" each position. As the coach, you will ask questions at each position, such as, "How does it feel to make this decision?" "How do you feel if you choose the other option?" or "What is good about this decision?"



A young person is interested in a career in sustainability coaching but is unsure which educational path to take.

- **The One:** They decide to pursue a bachelor's degree in International Business with a focus on Sustainable Management.
- **The Other:** They decide on a bachelor's degree in Business Coaching with a specialization in sustainability within companies.
- **Both:** They decide to combine both options, starting with a bachelor's degree in International Business with a focus on Sustainable Management and then pursuing a master's in Business Coaching.
- **Neither:** They decide against both options and consider a one-year training program at a coaching academy to become an environmental and sustainability coach.
- **Something completely different:** They decide to do an internship in a company's sustainability department to gain more clarity before making a decision about their education.

## Techniques for building self-confidence and self-determination

Key methods and techniques in coaching and counseling to strengthen self-confidence and self-determination include:

- Setting and achieving realistic goals, as well as celebrating small successes (e.g., SMART goals)
- Becoming aware of personal strengths, abilities, and potential (e.g., competency analysis)
- Resource orientation (e.g., resource-oriented questioning techniques)
- Taking risks (e.g., Tetralemma, solution-oriented questioning techniques)
- Inspiration and guidance from role models and personal experiences
- Visualization and positive self-talk



A respectful and non-judgmental conversation with young people is a central technique in counseling to build their self-confidence.

In setting and pursuing career goals, it is normal for young people to experience negative thoughts or emotions such as fears, self-doubt, and uncertainty. Analyzing limiting **beliefs** and transforming them into positive and empowering affirmations is crucial. This can be achieved, for example, by focusing on resources, strengths, and successes using **resource-oriented questioning techniques**.

The application of The Work by Byron Katie is also a valuable tool for challenging limiting beliefs. In this approach, personal thought patterns, ways of thinking, and interpretations are analyzed and questioned using four sequential questions:

1. **Is it true?**
2. **Can you know with absolute certainty that it is true?**
3. **How do you react, or how do you feel when you believe that thought?**
4. **Who would you be without that thought?**

**Visualizations** also help to build self-confidence and provide a positive outlook on career goals and possibilities. Pursuing new paths and goals that seem difficult or impossible can feel overwhelming or intimidating. The mental technique of visualization can counteract this.

A **vision board** can be used to illustrate goals and visions with images, photos, quotes, and objectives. By placing the vision board in a central location at home or work, daily reminders and visual motivation can strengthen self-confidence.

Visualization offers a creative and emotional approach to reinforcing career goals, as opposed to rational goal-setting techniques like the SMART method.



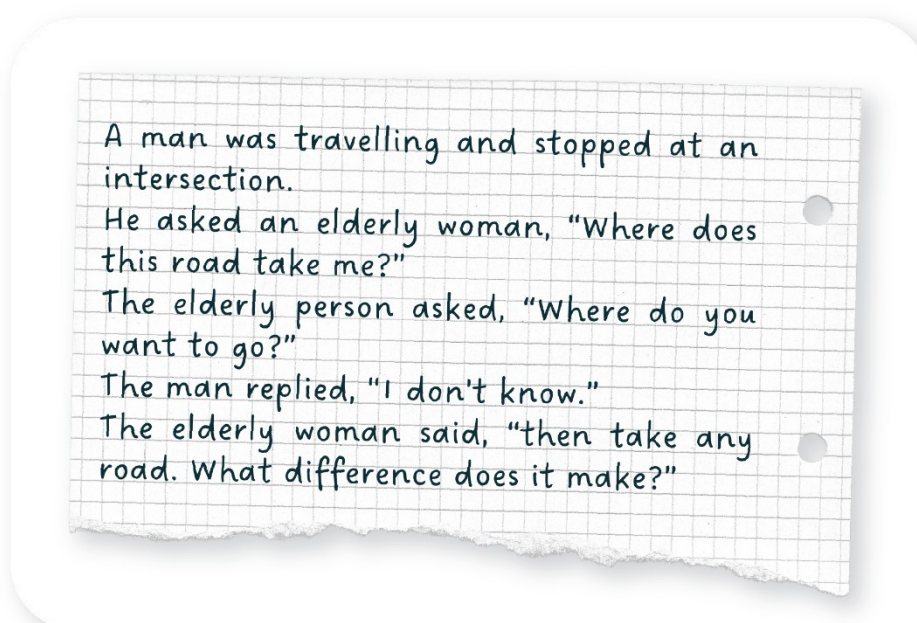
The opportunity for participation and independent reflection and decision-making about their career future gives young people autonomy, self-efficacy, and self-determination. This empowerment is essential, as it is sometimes lacking in the context of school or family, where many decisions are made for them.

## Effective career goal setting



„If you aim at nothing, you will hit it every time.“  
Zig Ziglar

Goals create clarity and focus, provide meaning and motivation, and increase determination, perseverance, and accountability. Setting goals gives structure to our actions.



Several techniques can be used for **effective goal setting**. Some of the most well-known tools include:

- **SMART** (Specific, Measurable, Attractive, Realistic, Time-bound)
- **SPEZI** (Positively formulated, Independently achievable, Context clarified, Intention of the previous goal maintained)
- **PSSÖM** (Positively formulated, Specified, Self-achievable, Ecologically sound, Motivating)

The **SMART method** is one of the most widely used methods in counseling and coaching. In this approach, goals are defined as specific, measurable, attractive, realistic, and time-bound.



Instead of the vague wish, "I want to work in IT and also do something good for the environment," a SMART goal in green career counseling might look like this:

**Specific:** I want to become an environmental IT specialist.

**Measurable:** I will complete a 3-year bachelor's degree in Environmental IT at the University of Applied Sciences Berlin.

**Attractive:** I am passionate about topics related to computers, the internet, and IT.

**Realistic:** I will prepare for the entrance exam by taking a summer course in IT.

**Time-bound:** The entrance exam, studies, and graduation are all set on specific dates

When setting goals, it is essential to frame them within a context.

**Specifically, this means that the goals should align with:**

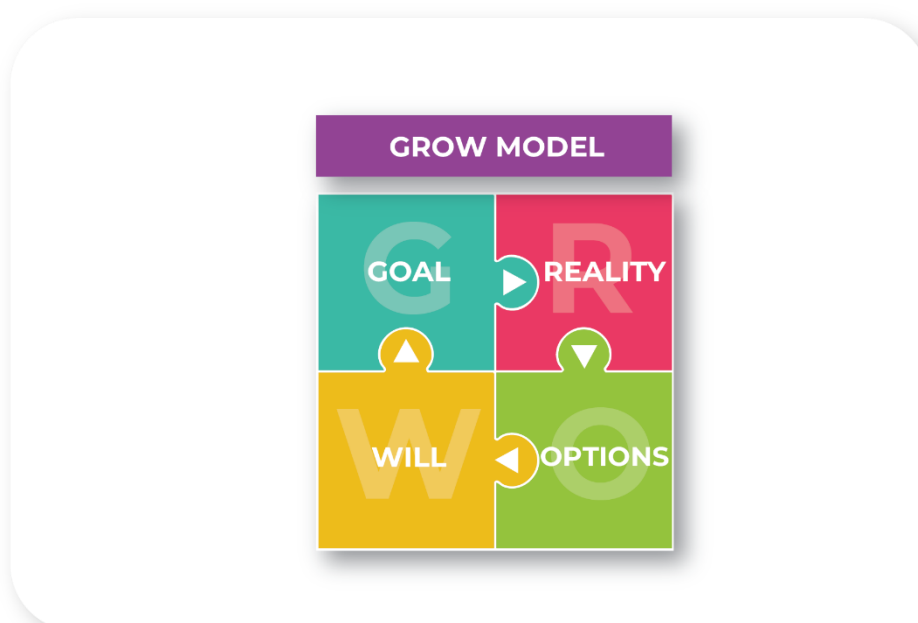
- Personal motivation and self-efficacy (belief in one's ability to achieve the goal)
- Frameworks and individual life circumstances
- Career interests and identity
- Skills, competencies, talents, and experiences
- Knowledge and information levels
- Activities





The **GROW model** supports goal setting and achievement in the counseling and coaching process. In four steps, goals are defined, the current situation is analyzed, challenges and solutions are developed, and concrete activities to reach the goals are planned. The four stages of the GROW model are:

- **G for Goal:** Define short- and long-term goals. This can be done using SMART goals.
- **R for Reality:** Assess the current situation. Objectively perceive where the client currently stands.
- **O for Options:** Identify different possibilities and strategies. Address barriers, obstacles, options, decisions, and solutions.
- **W for Will:** Develop action steps. Consider activities that arise from the identified options.



The **GROW model** concludes with a **final question**:

"On a scale of 1 to 10, how likely is it that you will take the necessary action steps?"

If the result of the final question is below 8, it is recommended to work further on the goal and adjust it so that there is enough willpower to pursue the goal.



Possible example questions for each phase of the GROW model:

**GOAL:** What do you want to achieve? What is your career goal? What do you truly want?

**REALITY:** What have you done so far to achieve this goal? How important is this goal to you? What is currently blocking your goal? Why is this goal important to you?

**OPTION:** What resources can you rely on? What has worked well in the past? Who can you ask for help or advice? What action options do you have?

**WILL:** What will you do, and when? What obstacles do you need to overcome? What else is important to achieve this goal?

## 4.5 Role of parents in career counseling

### Importance of including parents in the counseling process

For young people, career counseling approaches that use **systemic methods** are particularly relevant. This is crucial because various forces influence adolescents, including:

- Parents and their expectations, wishes, and personal biographies
- Peers and friends
- (Social) media and role models

These influences often result in high self-expectations, career attitudes, and preferences, such as the desire to conform, fit in, or be accepted by their environment. Systemic counseling addresses these influences, making them conscious and reflective. This leads to alternative perceptions, thought processes, and decisions. In this way, the integration of personal wishes and interests into both career and personal contexts can be encouraged.

However, it is also important to involve parents in the counseling process, as they play a significant role in the decision-making of young people. Adolescents are often confronted with parental pressure to conform to gender roles, and parents themselves serve as role models for young people to follow.



Parents often play a decisive role in the career decisions of young people. Whether girls and boys feel encouraged to pursue careers or education outside of traditional gender roles often depends on the support or resistance they receive from their parents.

## Strategies for collaboration with parents



It is not only crucial for a girl to consider a green career based on her interests and talents, but also to take into account how the desired profession aligns with both her own and her parents' perceptions of gender.

The foundation of working with parents is establishing a positive communication culture. Key principles that are helpful in the counseling process include:

- Partnership collaboration
- Respectful, tolerant, and appreciative interaction
- Open and transparent communication of expectations and goals
- Patience and empathy
- Providing positive and honest feedback
- Offering support

The most effective strategy for working with parents is personalized engagement. Writing individual messages, making phone calls, or having face-to-face conversations, as well as actively involving parents in career orientation activities, typically yield the most positive outcomes.

**Parents can be supported and integrated into career counseling in various ways:**

- **Emotional support**  
Recognizing and valuing the encouraging and motivating influence of parents.

- **Interpretative feedback**  
Providing reflective assessments and feedback on the adolescent's strengths, weaknesses, and potential.
- **Instrumental-material support**  
Offering information and recommendations related to career orientation and education financing options.
- **Informational-counseling support**  
Assisting with concrete information, providing career-oriented insights, and facilitating connections with companies.



In parent engagement within green career counseling, the focus on gender-sensitive and gender-conscious career orientation is central. The family home must be recognized as the most important socializing factor, particularly with regard to the construction of gender, and should therefore be addressed in the counseling process.

## Informationsmaterial und Eventorganisation für Eltern



Parents of adolescents are especially interested in events focused on career choice, personal counseling, and informational materials such as brochures on career orientation.

It is important for parents to have a good overview of the various educational paths and opportunities available for their children. Transparency and openness in counseling both parents and adolescents are therefore vital. The information needs primarily include:

- Career opportunities and job descriptions
- Educational pathways and content
- Admission requirements
- Application training
- Financing options and financial support



It is crucial to provide parents with tailored informational materials and events related to career orientation.

### Some differentiated ways of exchanging and collaborating with parents in career counseling include:

- Personalized parent letters
- Parent workshops and student-parent workshops focused on practical experiences and career topic development
- Inviting training companies with a focus on green careers (e.g., STEM subjects)
- Attending open house days at green employers and training companies
- Parent meetups, supplemented with guests and partners from green professions
- Career evenings for parents, with counseling sessions, information booths, and thematic tables
- Company visits to partners in the green economy

- Parent office hours or individual parent meetings
- Inviting former students as ambassadors for green careers
- Event series on specific topics, such as natural science studies or green vocational training
- Collaboration and exchange with universities, companies, career counseling centers, HR departments, chambers, vocational training centers, educational organizations, and foundations



Counseling and educating parents on competent career guidance for their children enhances their parenting skills and the adolescents' ability to make authentic career decisions.

## 4.6 Summary

**Gender-sensitive counseling for young people** is important because vocational and career decisions are often based on socially constructed ideas of gender.

As a result, girls tend to neglect technical, mathematical, and scientific subjects, leading to a dominance of men in green jobs. **Gender-sensitive career orientation** requires a **reflective approach to gender-specific stereotypes and role models**. In educational and career counseling, young people are supported in navigating the educational and labor markets and making authentic decisions.

Central to the counseling process are **career assessments, the development of future scenarios, finding solutions, and the implementation of goals**.

Relevant **methods and techniques** in counseling include active listening, various questioning techniques such as clarification questions and circular questions, competency analysis, the miracle question, the development of SMART goals, and goal implementation using the GROW model. Other essential tools for counselors in youth career guidance include the IKIGAI method, the Tree of a Green Future, the Letter to Yourself, the Tetralemma, visualization through a Vision Board, and The Work for addressing limiting beliefs.

An important aspect of working with young people is also involving their parents in the process. Through a systemic approach, the influences from the young person's close environment are integrated and reflected upon during counseling. Parent involvement is crucial for encouraging young people to pursue green careers, as parents often hold on to traditional gender roles and career models, influencing their children's educational and career choices accordingly. Event options for parent career orientation range from parent workshops and company visits to personal counseling sessions and open house days with green employers.

## Literatur

Bliem, W., Meister, M.H. & Pichler, R. (2023). Green Guidance: Nachhaltigkeit in der Bildungs- und Berufsberatung. Magazin erwachsenenbildung.at, Ausgabe 49.

<https://erwachsenenbildung.at/magazin/23-49/11-green-guidance-nachhaltigkeit-in-der-bildungs-und-berufsberatung-bliem-meister-pichler.pdf>

Deutscher Bundesverband Coaching e.V. (DBVC). (o.J.) Coaching.

<https://www.dbvc.de/der-dbvc/definition-coaching>

Schlüter, A. & Kress, K. (Hrsg.) (2017). Methoden und Techniken der Bildungsberatung. Verlag Barbara Budrich.

Wegener, R., Loebbert, M. & Fritze, A. (Hrsg.) (2016). Coaching – Praxisfelder. Forschung und Praxis im Dialog (2. Auflage). Springer.



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