

THE NETHERLANDS NATIONAL REPORT

Strategic partnership project "Micro- and project-based learning programme for Teaching ciRcular Economy and Ecological awareness in VET"

S.A.F.E.Projects, The Netherlands

2022 year

Project No. 2021-1-LT01-KA220-VET-000034724







Content

Introduction	2
What is Education for Sustainable Development (ESD): definition, applicability and use in	the
Netherlands	3
Sustainability: The Netherlands approach and priorities, policy and Circular economy	5
Semi-structured interviews results	.10
Insights	.16
Review of VET schools- current status, educational priorities	.17
Review of sectors included in the TREE Project within partner country	.19
a. Plastic sector	.19
b. Agrifood sector	.21
c. Wood sector	.22
National good practices	.26
Conclusion	







Introduction

The goal of the national report: to analyze how sustainable development goals are implemented in vocational education and training (VET) the Netherlands.

Objectives:

- Analysis of sustainability implementation in the Netherlands
- Description of VET sustainable schools
- Description of the Netherlands policy and Circular economy
- Review of three sectors

Methodology: scientific, statistic literature analyses, interviews with experts.



Conclusion: In the Netherlands in all educational sectors common and specific sustainability understanding, implementation actions are well-developed. National policy and instruments encouraging the implementation of SDG. Created different types of SDG implementation supportive organizations. Education for Sustainable Development is successfully integrated into the VET curriculum and constantly improving new sustainable strategy plans and implementation. VET teachers have enough knowledge of sustainable goals and lifestyles.







What is Education for Sustainable Development (ESD): definition, applicability and use in The Netherlands

In the Netherlands implementation¹ of the SDG resolution started on 1 January 2016. Implementation of the SDGs by the Netherlands focuses on its own territory and its footprint (the negative effects of consumption here on human beings and the environment elsewhere) on the one hand, and on international cooperation on the other (Ministry of Foreign Affairs, 2017). In The Netherlands² 'DuurzaamDoor' is the name of the national plan on Education for Sustainable Development (ESD) in which formal, nonformal and informal learning is supported. This plan is based on multi-stakeholder participation, cocreation, social innovation and transformative learning as underlying concepts. 'DuurzaamDoor' is an initiative of the Dutch government, e.g. the Ministry of Agriculture, Nature and Food Quality and is executed by the Netherlands Enterprise Agency. The focus in 'DuurzaamDoor' is on 5 thematic areas: Biodiversity, Foodsystem, Circular economy, Energy & Climate, and Water. And there are 3 crosscutting areas: Curriculum & Whole School Approach, Integral decisionmaking for SD ('Omgevingswet') Regional Cooperations for (E)SD ('Regionale and duurzaamheidsnetwerken'), thus supporting bottom-up energy in society. For the crosscutting area Curriculum & Whole School Approach the Cooperation Learning for Tomorrow ('Leren voor Morgen') is in the lead. This Cooperation was initiated by 'DuurzaamDoor'. It is a platform in which several networks for formal education are gathered to work on the implementation of ESD in Curricula, Quality education, Whole School/Institution Approach, Teacher competences, School Housing. The Cooperation communicates good practices, from Kindergarten to Universities. 'DuurzaamDoor' also acts as 'National Focal Point ESD (Education for Sustainable Development) for UNESCO (ESD for 2030) en UNECE (Strategy for ESD).

In the Netherlands ³only some headlines (kerndoelen) of the educational agenda and curriculum is subscribed by national government. For a large part of the educational topics, including sustainability, individual schools are able to prioritise and work out for their own school and students. In order to integrate Sustainability into schools in 2012 we focussed on groups of schools with a special label. We partnered up with several clusters of schools (e.g. Eco-schools; Biology+ schools; green flag schools; Unesco schools; the peaceful school; the healthy school) and we established a website where all sustainable schools can add their profile and interact (www.duurzaamonderwijs.nl – in Dutch). For TVET schools a very active network on sustainability exist that helps schools to integrate ESD in the curriculum, in there campus and in the training of teachers. (www.duurzaamMBO.nl) To promote the introduction of ESD into teacher education the network organises a yearly symposium for new and old teachers and informs all training institutes about Sustainable and Future Oriented Education. In 2012 the

¹ The Sustainable Development Goals: the situation for the Netherlands <u>https://www.cbs.nl>media> pdf>the-sustainable-...</u>

² <u>https://www.duurzaamdoor.nl/education-sustainable-development-netherlands#:~:text=ln%20The%20Netherlands%20'DuurzaamDoor'%20is,transformative%20learning%20as%20_0underlying%20concepts.</u>

³ <u>https://unece.org/fileadmin/DAM/env/esd/8thMeetSC/Netherlands.pdf</u>







focus was on Social Sustainability, in which "caring for yourself, the other and the planet" are important issues. This network also translated the competences for Educators, made by the UNECE expert group, added some Dutch good practises and made an attractive brochure for all Dutch primary school teachers out of it. (http://issuu.com/studio_lieke_weenink/docs/dp_competenties_losse_paginas?mode=window &backgroundColor=%23222222)

To reorient⁴ technical and vocational education and training in support of sustainable development and the transition to a green economy. In the Netherlands businesses have always played a big role in TVET. The curriculum and exams are traditionally made in cooperation between representatives of the educational and the business sector. Learning and working in an integrated program is an important and relevant part of TVET. And since the work-environment and required skills and competences changes very fast, especially in technical professions, working closely together with businesses and educational sector is relevant and inspiring for both sides. It is strongly encouraged that teachers in TVET also start there own business or work parttime in education and part-time in a company, to make sure they stay up-to-date.

⁴ <u>https://unece.org/fileadmin/DAM/env/esd/8thMeetSC/Netherlands.pdf</u>







Sustainability: The Netherlands approach and priorities, policies and Circular economy

According to Netherlands statistic agency (CBS) "sustainable development is a development that meets the necessities of life of the present generation, without compromising those of future generations. This concerns economic, social and environmental needs. Examples are a clean environment, biodiversity in nature, a highly educated and healthy population, well-functioning social networks and social trust. The Netherlands has a leading position in the field of circular economy and sustainable procurement by the government itself. Progress is also being made in other environmental themes, but there is also room for improvement. That is the conclusion of the European Union in its biennial Implementation of EU Environmental Policy 2019. The EU calls the Netherlands "an example for public-private cooperation" in the circular economy.

The Netherlands national government (Rijksoverheid) supports sustainable economic growth with various subsidy schemes for entrepreneurs. The subsidies for sustainable business can be found on the website of the Netherlands Enterprise Agency (Rvo.nl). The economy must be sustainable, climate neutral, circular and inclusive in 2050. That is why no company can ignore sustainable business. And this is good news because sustainable business not only delivers environmental and social returns, but also financial benefits. Companies that innovate sustainable business make their company future-proof and are attractive to current and future staff. Sustainable entrepreneurship⁵ is about creating social, ecological and economic value - 3Ps: people, planet, profit (or prosperity).

The number of green public procurement contracts is already higher than the Commission's recommendation. Tendering with clear, sustainable requirements has taken root in the Netherlands. In addition, we also make good use of green taxes to tackle climate and environmental problems. As far as water and air quality and nature conservation are concerned, Europe sees "some progress" in the Netherlands but also "room for improvement". The government is working hard to take steps there too. For example, the Netherlands is working with water partners to improve quality in order to comply with the Water Framework Directive by 2027 at the latest (Rijksoverheid).

Netherlands⁶ Circular in 2050 The outcome of latest Dutch government climate change and wider environmental policy decisions could be increased market opportunity for wood. The country's aim is to create a truly 'circular economy' over the next 30 years, with the stress on using products and materials that can be re-used, recycled and ultimately disposed of in an environmentally sound way. To this end the government submitted the policy paper 'Netherlands Circular in 2050' to the House of Representatives in 2016. In the follow up of this policy ambition the National Agreement on the Circular Economy4 has been signed by more than 300 businesses and social partners like NGO's. At the beginning of 2019 the Dutch Cabinet presented the implementation program for the circular economy. This implementation program for decircular economy. This implementation program for the period 2019-2023 for the sectors: biomass and food, plastics, manufacturing industry, construction and consumer goods.

Based on Fifth Dutch National⁷ SDG Report | Sustainable Development in the Netherlands The government prepared document⁸ action to promote the long-term development of Dutch industry in the light of developments such as sustainability and digitalization. The vision points

⁵ <u>https://www.duurzaambedrijfsleven.nl/duurzaamheid</u>

⁶ https://unece.org/DAM/timber/country-info/statements/netherlands2019.pdf

⁷ https://www.sdgnederland.nl/wp-content/uploads/2021/08/Dutch-National-SDG-Report-2021.pdf

⁸https://open.overheid.nl/repository/ronl-c4171d5b-b717-4e79-93f8-47e5ae941561/1/pdf/20256588.pdf







to the contribution industry can make in terms of higher economic growth potential, a sustainable society, and a resilient, robust Europe.

The Netherlands Minister of Economic Affairs and Climate Policy, Eric Wiebes (2020) wrote a letter as a vision⁹ for more sustainable basic industries in 2050: the choice is ours. Dutch, European and global climate policies have fundamental implications for industry. By 2050 industrial production will have to be climate neutral. At the same time, it is clear that the world will continue to need basic industrial products.

The local and provincial authorities¹⁰ are working on the circular economy (SDG 12) through the Circular Economy Implementation Programme. Because a number of sustainability goals converge in the regions, this program focuses on action in particularly prominent and trendsetting regions. This is linked to Regional Deals, an instrument allowing a comprehensive approach to regional challenges. The parties involved will each be part of the Regional Circular Ecosystem, which is under development, in which the provincial authorities will play a coordinating role. In 2020 the provincial authorities published a circular economy chart (Krachtenkaart circulaire economie) with five main guidelines on circularity and how each region can use its strengths to work towards the circular transition.

The SDG Netherlands Foundation¹¹ facilitates the movement of everyone who contributes to the Sustainable Development Goals (SDGs) in the Netherlands. More than 1,250 social organisations, youth groups, municipalities, financial institutions, educational and knowledge institutions and residents' initiatives. Members of SDG Netherlands show in the community how they contribute to the goals. Citizens meet for local SDG actions. Seventeen alliance coordinators provide expertise on each of the SDGs. In the table below are analyse of policy documents.

⁹

 $[\]frac{https://english.rvo.nl/sites/default/files/2020/10/Vision\%202050\%20 sustainable\%20 Dutch\%20 basic\%20 industry}{\%20-\%20 English.pdf}$

¹⁰ <u>https://www.sdgnederland.nl/wp-content/uploads/2021/08/Dutch-National-SDG-Report-2021.pdf</u>

¹¹ <u>https://www.sdgnederland.nl/over-sdg-nederland/</u>







Policy document	Objective	Partners	Relevance to the SDGs
<u>National Strategy on</u> <u>Spatial Planning and the</u> <u>Environment</u>	A long-term strategy on the future and development of the living environment in the Netherlands	Central government in coordination with other government authorities and civil society parties	Links to agriculture (SDG 2), drinking water supply (SDG 6), energy (SDG 7), infrastructure (SDG 9), cities (SDG 11), circular economy (SDG 12), climate action (SDG 13) and biodiversity/life on land (SDG 15)
<u>Biodiversity Action Plan</u>	The Biodiversity Action Plan is an interministerial partnership to identify and take follow-up steps to bring about social and economic transformation aimed at restoring biodiversity, halving the Netherlands' ecological footprint by 2050 and achieving full compliance with the targets set out in the Birds and Habitats Directives	Various government ministries and the Delta Plan for Biodiversity Recovery	Focus on life below water and life on land (SDGs 14 and 15), and on partnerships to achieve goals (SDG 17). Links to health and wellbeing (SDG 3), sustainable energy, the economy and cities (SDGs 7, 8 and 11), climate action (SDG 13), and industry, infrastructure and innovation (SDG 9)
Forest strategy (Bossenstrategie)	In the National Climate Agreement, central government and the provincial authorities agreed to draw up a forest strategy setting out their joint ambitions (10% more woodland by 2030), goals for Dutch forests, and plans for achieving them	Central government and provincial authorities (policy intention). Further elaboration in collaboration with other authorities and social partners	Focus on SDG 13 (climate action) and SDG 15 (life on land)
<u>Clean Air Agreement.</u> (Schone Lucht Akkoord)	36 local authorities, 9 provincial authorities and central government set out their shared ambition to perma- nently improve air quality and achieve a minimum 50% health gain by 2030	Central government in coordination with other government authorities (provincial and local)	Focus on health and wellbeing (SDG 3), and contribution to sustainable cities (SDG 11) and climate action (SDG 13)
Supplementary parental leave after the birth of a child	Supplementary parental leave for partners was introduced on July 2020. Partners are now entitled to five weeks' supplementary parental leave, while still getting paid around 70% of their salary	Central government in coordination with social partners	SDG 5 (gender equality, in particular SDG 5.4: shared responsibility within the household)
Increased spending on poverty reduction and debt restructuring	Extra €146 million released to combat poverty and problem debt (supple- menting the current Broad Action Plan on Debt and agreements on accelerating its implementation)	Central government, local authorities, research institutions and parties involved in tackling poverty and debt	SDG 1 (poverty), SDG 10 (reduce inequalities)
Higher supplementary child benefit from third child	From 2021, an extra €150 million will be earmarked for the supplementary child benefit in order to reduce the risk of child poverty. Families will receive a	Central government	SDG 1 (poverty), SDG 10 (reduce inequalities
Balanced Labour Market Act Wet Arbeidsmarkt in balans)	Legislation to reduce the gap between conditions of employment and workers' rights in permanent contracts and flexible contracts. This has given on-call employees and payroll workers more security		SDG 8 (decent work) and SDG 10 (reduce inequalities)
<u>ifelong Development</u> <u>Programme - SLIM</u> Programma Leven Lang Dntwikkelen - SLIM regeling)	The grant scheme for development and training (SLIM scheme) enables SMEs and businesses in the agriculture, hospitality and leisure sectors to apply for grants for initiatives geared to staff development and training		SDG 8 (decent work), SDG 4 (education

Table prepared by Fifth Dutch National SDG Report | Sustainable Development in the Netherlands, page 14







The Netherlands¹² government has set out three goals aimed at making the Dutch economy circular as quickly as possible:

- 1. Ensure production processes use raw materials more efficiently, so that fewer are needed.
- 2. When new raw materials are needed, use sustainably produced renewable (inexhaustible) and widely available raw materials, like biomass raw material made of plants, trees and food waste. This will make the Netherlands less dependent on fossil fuel resources, and it is better for the environment.
- 3. Develop new production methods and design new products to be circular.

The local and provincial authorities¹³ are working on the circular economy (SDG 12) through the Circular Economy Implementation Programme. Because a number of sustainability goals converge in the regions, this programme focuses on action in particularly prominent and trendsetting regions. This is linked to Regional Deals, an instrument allowing a comprehensive approach to regional challenges. The parties involved will each be part of the Regional Circular Ecosystem, which is under development, in which the provincial authorities will play a coordinating role. In 2020 the provincial authorities published a circular economy chart (Krachtenkaart circulaire economie) with five main guidelines on circularity and how each region can use its strengths to work towards the circular transition.

Small businesses are becoming more and more circular in our country and the recycling rate of municipal waste is among the highest in the EU.Different private business initiatives suggest to do business and social impact on implementation sustainable life principles. (https://duurzaamheid.nl/)

More and more companies are linking their sustainability strategy to the Sustainable Development Goals (SDGs). Companies from different sectors are taking concrete steps. According to the annual report of the Central Government and the Association of Dutch Municipalities (VNG), the Netherlands is in eleventh place worldwide when it comes to the progress of the SDGs. According to the report, our challenges lie primarily in responsible production and consumption (SDG 12), combating climate change (SDG 13) and protecting the oceans (SDG 14). https://www.sdgsonstage.nl/artikel/sdgs-praktijk-voorbeelden

Milieu Centraal is the practical guide for sustainable tips and advice. How can I insulate in my floor and what do I save? What is a climate-friendly dish? How big is the impact of flying? Where do I leave an old video tape? With Milieu Centraal you discover what you can do yourself and how you approach it. Milieu Centraal was launched in 1998 on the initiative of the then Ministry of the Environment (VROM). Environment Central was the answer to the question: who ensures that households receive good information to help them with sustainable choices? In the mid-1990s, discussions such as coffee cups versus disposable cups, disposable diapers or cotton diapers and whether or not chlorine played a role in the household. (https://www.milieucentraal.nl/) Each can find information how to live sustainable life and how to reduce own impact to the Earth.

Almost each sector and organization shows or suggest how to live sustainable life. For example:

2050#:~:text=The%20Netherlands%20aims%20to%20have,and%20raw%20materials%20are%20reused.

¹² <u>https://www.government.nl/topics/circular-economy/circular-dutch-economy-by-</u>

¹³ <u>https://www.sdgnederland.nl/wp-content/uploads/2021/08/Dutch-National-SDG-Report-2021.pdf</u>







- Dutch Cosmetics Association provides answers to frequently asked questions about (micro) plastic in cosmetics
- Nederland Schoon provides information about trash
- Plastic Soup Foundation¹⁴ organizes campaigns against litter, such as World Cleanup Day.
- The North Sea Foundation organizes the Beach Cleanup Tour every year.
- Wageningen University conducts research into plastic in the sea and the influence on animals.
- The Ocean Cleanup is designing and developing cleanup systems to clean up what is already polluting our oceans and to intercept plastic on its way to the ocean via rivers.

There is several websites and organisations which provides news about sustainability implementation in daily life, for example, <u>https://www.duurzaamnieuws.nl/</u> Duurzaamnieuws website provides different articles on main eight topics (energy, economy, community, nature, health, food, sustainable tourism, circular economy).

¹⁴ <u>https://www.plasticsoupfoundation.org/</u>







Semi-structured interviews results

Implementation description

We have planned and implemented low-scale research on circular economy and green skills topics in VET during January – March, 2022. We have used prepared questionnaires and interview templates (see in annexes). We were informing (VET schools, teachers, business companies, NGO's staff) with requests to fill out questionnaires or participate in interview. However, we have noticed low interest to fill a questionnaire that's why we decided to make an individual interview with selected people. Our different approach to collect opinions and to make awareness about the project was successful because we have contacted people directly. We make with them zoom, MS teams meetings, talk face to face and via telephone to find out their opinion, to present project ideas, to discuss involvement into the project as associated partner.

The goal of semi-structured interviews:

- to raise awareness among VET institutions' teachers and staff, education experts, businesses, local, regional, national, and European institutions involved in education policies on Education for Sustainable Development (ESD) practices to foster "green skills" for the job market, as well as knowledge and competencies related to the Circular Economy (CE).
- 2. to analyze the experience of respondents
- 3. to discuss knowledge on innovative methodologies to infuse environmental awareness, "green skills" and other competencies related to the CE in VET students; to discuss "green skills" which are most important for the job market and which are the most important for their organization; Which characteristics are essential for a training course for young people (15-19 years old) on CE and sustainability; Which sectors would benefit the most from training on CE and sustainability? (particularly among plastic, agri-food, and wood).







Participants from different organizations:

- VET schools, teachers (8) (Koning Willem I College, Alfa college, Aventus)
- NGO's (4) (Surplus, Liberterra, Alkmaar initiatives, CERES)
- Companies (4) (Fenan Consulting, Vitlena, Bouwhuis company, Loman)

Respondents:

- Total 16 respondents
- 8 respondents VET teachers or administrative workers (biology and Dutch language teachers, Sustainable consumption consultancy/ education, social worker, international officers, persons responsible for sustainability implementations)
- 4 respondents (high qualified practitioners working in NGO field)
- 4 respondents (one academic expert in sustainability, one practitioner in learning, one practitioner in a food production company, one agrofarmer)

Invitations to participate:

- We have sent 27 emails
- People reached through personal contacts

Collection of interviews:

- Four interviews were collected via telephone.
- Two questionnaires were filled using google forms (questionnaire).
- Seven interviews were done online
- Three respondents were interviewed in face-to-face meetings.

Respondents:

- 10 women
- 6 men







Findings from all respondents:

- familiar with SDG
- organizations implement sustainability principles and use circular economy principles
- they have to think and find a way how to think, work in a more sustainable way
- organizations have sustainability implementation strategy
- mentioned that they are not using the term "green skills" for the job market, but they are all familiar with green skills and competencies related to the CE.
- We asked them which green skills they are using: Was mentioned all importance of suggested skills (see below in annex 2), however, they emphasize also these not mentioned green skills:
 - ✓ Re-using skills
 - ✓ Visibility
 - ✓ Communication
 - ✓ Cooperation
 - ✓ Sharing
 - ✓ Openness for changes
 - ✓ Innovativeness
 - ✓ Cooperation skills
 - ✓ Volunteering skills

Respondents from VET opinion:

- they emphasized that they are following sustainability strategy and searching ways, methods how to integrate into teaching subjects sustainability topic. VET school supports teachers to integrate sustainability in the curriculum and implement actions for sustainability. All respondents from VET schools said that they are familiar with the VET school sustainability strategy.
- Few teachers mentioned that their VET schools organize monthly meetings on sustainable development topics
- in the beginning of SDG development at a subject level for VET teachers mostly difficult were to find connections with the subject which they teach and sustainability







- people responsible for sustainability development at VET said that they are searching closer relations to businesses because students have to do internships and in one way students suggest in a positive manner changes in a business organization or business companies bringing sustainable ideas, innovations to students, to school.
- VET teacher, responsible for sustainable development at VET school explanation on how should be encouraged VET community to be involved in sustainability implementation.

"We should start to think about involvement and benefits for people. Most important to make people happy and involved them in the process and show their input. Happiness – is an attitude is very important. To see how we could improve something about what we are not happy. Involvement teachers, students in the sustainability process should bring them personal value (recognition, positive changes). We could write an article about teachers initiatives, give an award and that's inspired them".

VET school teacher mentioned that they have "Green Office" but mostly green offices are at universities. A Green Office (GO) is a sustainability platform that is started and run by students and supported by university or college staff. The primary goal of a GO is to ensure that the institution becomes more sustainable in all its facets. In this way, GOs make sustainable initiatives within education institution more visible. This stimulates the involvement of students in sustainability. The Green Office Model, prepared by rootAbility, consists of 6 principles:

- consists of students and staff;
- has the official mandate to promote sustainability in the higher education institution;
- also receives funds to achieve this;
- is integrated into the organizational structure of the institution;
- cooperates with internal and external parties;
- learns how this change can be brought about through training.
- encouraged students and staff involved with sustainability.

The implementation is more about practical matters that influence the ecological footprint of the institution and therefore about energy, catering, buildings, waste, biodiversity and so on.







All VET schools, big business companies are involved in close cooperation because of internship implementation.

One business company mentioned that they are focused on corporate social responsibility <u>https://business.gov.nl/regulation/corporate-social-responsibility/</u>

Description of good practices adopted by their organization

- One of our respondents presented college achievements. The college has sustainable curricula in five education departments (catering, construction, ICT, fashion and technology), a policy for sustainable and healthy catering, service bicycles, an electric car, water taps, LED lighting everywhere, and a significant CO2 reduction over the past three years. The sustainable purchasing policy, 900 solar panels, the energy roof, and the compensation for air travel also yielded points in the questionnaire. The college has anchored sustainability in its core values for many years. We make sure that we waste as little (energy) as possible and create as little waste as possible. The college familiarizes students and staff with the UNESCO philosophy, which focuses, among other things, on peace and human rights. In this way, the school also contributes to a better world.
- NGO representer shared good practice about using area development to link social challenges such as a housing shortage and sustainability. Residents can realize their own ecological housing ambitions in the community, but at the same time commit themselves to regional challenges in the field of sustainability and quality of life. Over the next ten years, Foundation wants to realize fifty communities at home and abroad, creating a collective learning process around the question of how we can give substance to the Sustainable Development Goals. Our goal is to let them discover where their interests and qualities lie and on that basis formulate a future perspective. Together we take the first steps towards realizing this. Dutch foundation started in 2009 and used to work with youngsters with special needs from the Netherlands.







Challenges in adopting environment-friendly behaviors in their everyday life and in their workplace

Important to be able to change attitudes and habits.

Which "green skills" are the most important for the job market and which are the most important for their organization

According to respondents they said that there is not easy to say which "green skills" are most important because the entirety of competencies is important in the job market. Successful integration in the labor market depends not only on professional skills but also personal, intrapersonal competencies. Respondents mentioned that all skills which were suggested in the interview are important also they added several new important skills and emphasized that there are more "green skills".

Which characteristics are essential for a training course for young people (15-19 years old) on CE and sustainability

Sustainable culture at home, at school, at working place to implement SDG and circular economy principles assure that youngsters will be able to adapt to new environments. Practical, not boring activities which are integrated in formal and non-formal curricula guarantee the involvement of youngsters. The development of broad competencies and skills can cover and create "green skills" and adapt to new situations.

Which sectors would benefit the most from training on CE and sustainability? (particularly among plastic, agri-food, and wood).

New ideas, new initiatives are always welcome. Exchanges of good practices are very important. All sectors can benefit from training it depends on lecture, material, topic but changes should be follow in each sector.







Insights:

- All respondents mentioned that they are familiar with sustainability, some of them are experts on SDG, circular economy, eco-living practice, ideas, daily advice and suggestions, knowledge of Education for Sustainable Development (ESD)
- All respondents mentioned that they are not using the term "green skills" for the job market, but they are all familiar with green skills and competencies related to the CE.
- One interview was taken from the most sustainable VET school in the Netherlands responsible person.
- Respondents practice what their preach
- All organizations support employees financially to use bicycles
- Water taps exist in organizations and students are supported with re-usable water bottles
- VET schools using solar panels, waste management
- Two schools were enthusiastic to invite TREE international partners to visit their schools







Review of VET schools- current status, educational priorities

Secondary vocational education¹⁵ (MBO) In May 2020, the Secondary Vocational Education Council signed SDG Nederland's SDG Charter on behalf of its member schools, underscoring the importance of the 17 SDGs and encouraging the schools to make an active contribution to them. A growing number of schools are individually endorsing SDG Nederland's vision and conditions. The SDGs increasingly form an important framework for MBO schools in their capacity as both educators and organisations. The Council is also incorporating the SDGs in its multiyear outlook for vocational education. MBO schools prepare students for the world of work, further training and good citizenship, and thus for a future role in society. Skilled workers are crucial to achieving the SDGs by 2030. The private sector works with the education sector to set the requirements for MBO qualifications. The circular economy, the energy transition and climate adaptation have been standard components of the occupational profiles of every MBO course since 2019. Aspects of sustainable development and the SDGs therefore play an increasingly important part in MBO courses. The building installation sector, for example, faces labour shortages and is hard at work setting up re-training and further training programmes to meet demand for fitters of solar panels and heat pumps. The SDGs are guiding principles not only for job-related subjects but also for citizenship, with young people learning to think about issues like sustainability and achieving the SDGs. Some schools explicitly discuss the SDGs in their communications, on their websites, or include the SDGs in their mission statements. At other schools, the link with the SDGs is less explicit, but they devote attention to them in various projects and courses. Examples include inviting guest speakers to talk about gender equality, carrying out studies into ways of saving water and small-scale use of solar panels, designing the school grounds to promote biodiversity, optimising waste separation and participating in human rights week. Schools seeking an extra boost, or wishing to give a teacher the recognition they deserve, may join SustainaBul MBO, which ranks MBO schools by teaching, practice, management and comprehensive approach to sustainability and helps them learn from each other. The SustainaBul award for sustainability may be seen as a yardstick and benchmark. Through a network of sustainability coordinators, the organisation facilitates sharing of knowledge, experience and ideas. The website Duurzaam MBO (Sustainable MBO) contains information on the SDGs and has a knowledge base with teaching materials. Sustainable MBO seeks to embed sustainable development in schools' strategies, curriculums, organisation and management. The vocational research platforms ('practoraten') also work with the SDGs. The vocational research platform on sustainable thinking and sustainable action ('Duurzaam Denken Duurzaam Doen') integrates the 17 SDGs into MBO courses. Other vocational research platforms focus on specific clusters of SDGs, such as the Circular Agribusiness platform.

¹⁵ https://www.sdgnederland.nl/wp-content/uploads/2021/08/Dutch-National-SDG-Report-2021.pdf







We have analyzed different VET programmes and in each exist topics based on sustainability.



1 picture. MBO – VET programe for adults) for example cook programme based on sustainability



There are a lot of books focusing on sustainability in the profession.







Review of sectors included in the TREE Project within partner country

Sustainable¹⁶ growth seems, in terms of economic activity and economic growth, the Netherlands is performing better than a number of other EU countries. The sustainable use of resources is important, because the supply of resources is not infinite and because their extraction and use can be damaging to humans and the environment. In order to use resources as sustainably as possible, it is important to handle them as efficiently and productively as possible. The Dutch economy has the highest resources productivity of the EU. This means that for every 1,000 euros of GDP, the Netherlands needs fewer resources for domestic consumption than other EU countries. A country's ranking for resources productivity appears to correlate with population density. A densely populated country such as the Netherlands needs little mass for infrastructure (e.g. roads and railways) per head of population.

a. Plastic sector

The Netherlands government emphasize that with regard¹⁷ to plastic products and packaging and other major material flows, efforts are focused on improved design, reuse and recycling. Various collaborations are emerging between waste processors, recycling companies and chemical companies with a view to investing in the chemical recycling of plastics. Large-scale demonstration projects for the conversion of plastic waste into new raw material for the chemicals industry will be carried out over the next few years, with support from the Ministry of Economic Affairs and Climate Policy. In 2020 the Ministry of Infrastructure and Water Management is supporting chemical recycling through the DEI+ scheme for circular economy and the 'Versnellingshuis', which advises companies wishing to become circular. Carbon capture and utilisation (CCU) is a commercial technology that is used in horticulture, the food industry and the chemicals industry. CCU applications in the building materials industry are currently being scaled up from pilot to demonstration level. Biobased feedstock is already being used on a commercial scale in the production of biofuels. Demonstration projects for new technologies like pyrolysis and gasification of biomass for fuels and chemicals will be set up over the next few years. The use of biogenic feedstock for plastics production is already possible on a commercial scale in the Netherlands. Lack of demand for recycled and sustainably produced plastics is often a stumbling block for chemical recycling or biobased processes. Measures such as source policy (including at European level) are needed to tackle this problem.

The Dutch Sustainable Growth Coalition¹⁸ (DSGC) aims to accelerate the transition towards a circular economy for plastics. An integrated approach aimed at pioneering innovation and

¹⁶ The Sustainable Development Goals: the situation for the Netherlands https://www.cbs.nl > media > pdf > the-sustainable-...

https://english.rvo.nl/sites/default/files/2020/10/Vision%202050%20sustainable%20Dutch%20basic%20indust ry%20-%20English.pdf

¹⁸ https://www.dsgc.nl/en/news/2021/TransitionTime-ACircularEconomyforPlastics

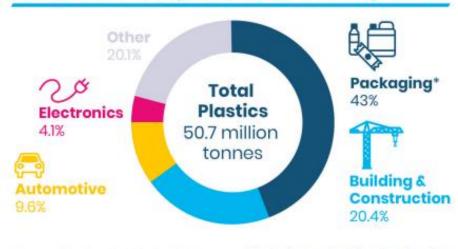






cooperation is required and more urgent than ever. Primarily from an environmental perspective, at the same time the transition provides ample economic opportunities across the entire value chain.

In the publication¹⁹ 'Transition time! A circular economy for plastics', the coalition sheds light on the challenges of plastic, shares innovative cases and makes specific recommendations on how to incentivise action. This publication was presented to the Dutch cabinet and Frans Timmermans, European Commission Executive Vice-President for the European Green Deal, on 13 January by Jan Peter Balkenende, Chair of DSGC.



Four sectors responsible for 75% of plastic

20 *including agricultural packaging

'A transition of this magnitude requires shared values and a willingness of various partners to create a responsible society that views plastic as a resource, and not as waste, which is far too often the case right now,' said Jan Peter Balkenende.

As he accepted the publication, Frans Timmermans agreed that tackling the issue of plastic must be a concerted effort. *'This publication is urgently needed: we want to significantly reduce the amount of plastics needed and reduce the amount of plastics that are incinerated in the EU. We must also bridge the difference between virgin plastics and recycled plastics. We will adress these matters by revising varioud guidelines.'*

The potential benefits of a transition are huge. A circular economy will dramatically reduce the amount of plastic in the environment. Energy and water consumption will also decrease significantly, as will CO_2 emissions. We already have various technologies available that could be used to create innovative applications to retain the value of plastics as a secondary raw material.

Cooperation between governments, knowledge institutions, societal organisations and the business sector becoming a must condition to reach SDG. To grow initiatives into impactful sustainable solutions, both harmonised policies & effective legal frameworks are of great importance, for which the DSGC shares specific recommendations. 'The technology is here, now it comes down to joint action', said Jan Peter Balkenende.

¹⁹ <u>https://www.dsgc.nl/publications/Transition-time-A-circular-economy-for-plastics/DSGC-Transition-Time-A-Circular-Economy-for-Plastics-Publication.pdf</u>







b. Agrifood sector

The value ²⁰ of agricultural exports in 2021 is estimated at 104.7 billion euros, a record. Wageningen University & Research (WUR) and Statistics Netherlands (CBS) report this on the basis of joint research commissioned by the Ministry of Agriculture, Nature and Food Quality (LNV).

Agricultural exports in 2021 will be 9 billion euros (9.4 percent) higher than in 2020. The growth of agricultural exports is due to both an increase in prices and a growth in export volume. The price increase is slightly greater than the volume growth.

In 2019, the Netherlands²¹ exported €94.5 billion worth of agricultural goods. That is a 4.6% increase on the €90.4 billion export figure for 2018. Around two-thirds of this growth is due to an increase in export prices, while a third is due to higher export volume. Last year saw not only an increase in the export of agricultural goods, but also of agricultural machinery, greenhouse materials and machinery used in the foodstuffs sector. The export of agriculture-related goods grew by 8% to a value of €9.9 billion. These figures are the result of a study carried out by Wageningen Economic Research and Statistics Netherlands (CBS) on behalf of the Ministry of Agriculture, Nature and Food Quality.

Video presentation²² on how Dutch learn to feed the world.

Based on CBS report²³, agricultural productivity, the Netherlands, together with Denmark, has been in a leading position in Europe for a considerable time. Since the turn of the century, production volume per unit of labour has risen by more than 41 percent in the Netherlands.

20

https://www.agrofoodportal.com/ThemaResultaat.aspx?subpubID=2232&themaID=2276&indicatorID=3425&s ectorID=3436

²¹ <u>https://www.government.nl/latest/news/2020/01/17/dutch-agricultural-exports-worth-%E2%82%AC94.5-billion-in-2019</u>

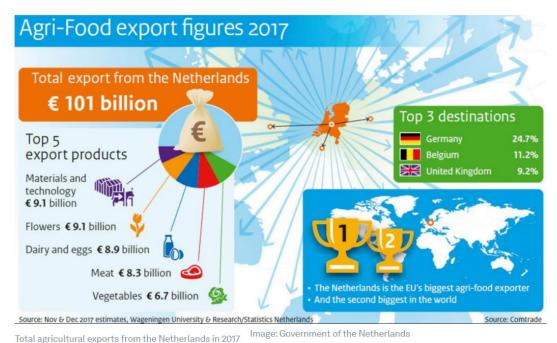
²² https://www.youtube.com/watch?v=5EkglVH6GM0&t=15s

²³ The Sustainable Development Goals: the situation for the Netherlands https://www.cbs.nl > media > pdf > the-sustainable-...









Food waste²⁴ In 2015, just under 130 kg of food was wasted per person, this being food meant for human consumption that was not used for that purpose (Soethoudt et al., 2017). This has changed little in relation to 2009. The absolute reduction goal of 20 percent between 2009–2015 was therefore not achieved (Ministry of Agriculture, Nature and Food Quality, 2009)

c. Wood sector

The Netherlands²⁵ is a densely populated country and has relatively little natural countryside compared with other countries. Sixteen percent of the land surface of the Netherlands consists of woods, wet and dry natural terrain, and wetlands. This puts the Netherlands in last place of the 26 EU countries for which data are available. However, the valuable natural areas that exist in the Netherlands are often designated as protected nature reserves. More than 90 percent of the terrestrial and freshwater hotspots in the Netherlands – designated nature reserves with high biodiversity – are protected.

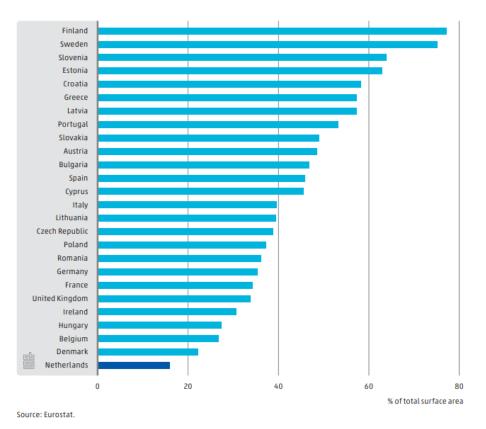
²⁴ The Sustainable Development Goals: the situation for the Netherlands <u>https://www.cbs.nl > media > _pdf > the-sustainable-...</u>

²⁵ The Sustainable Development Goals: the situation for the Netherlands <u>https://www.cbs.nl > media > _pdf > the-sustainable-...</u>









4.29 Natural and forest areas, 2015

Approximately²⁶ half the forest area in The Netherlands has been certified for sustainable forest management. In recent years, the amount of timber in our woodlands has increased steadily, due to reduced harvesting activities. Consequently, we could harvest much more wood than we actually do. If Dutch harvesting rates were to be increased, we would not have to rely so heavily upon timber procurements from woodlands in countries abroad, where often sustainable forests management is much more difficult to achieve. Wood is an important renewable resource, which is neutral in terms of carbon dioxide emissions. The use of wood requires a relatively small amount of energy compared with other construction materials and hardly impacts our environment in a negative way if the resource is managed sustainably. Therefore timber products are very much appreciated in our society and they are being used in many applications. In the policy paper "Nature for people, people for nature" in which the Dutch nature conservation policy is described in detail, and in which the forestry policy is included, wood production and timber harvesting are not mentioned explicitly. Over the past few years, the

²⁶ <u>https://www.probos.nl/images/pdf/boeken/VisionOnTimberHarvesting.pdf</u>







Dutch Timber Platform has observed a reduced attention for the production and harvesting of timber, and a significant reduction in the total volume of wood harvested in Dutch woodlands.

The <u>report</u>²⁷, commissioned by the Netherlands Timber Trade Association (NTTA) undertaken by forest and timber sustainability advisors and analysts Probos, shows that in 2020 93.7% of the 2.047 million m3 of timber and panel products imported by NTTA members (who account for the vast bulk of Dutch imports) was chain of custody certified. This compared with 91.9% of the 1.76 million m3 imported in 2019.

The proportion of the Netherlands' 319,000 m3 of hardwood imports certified was 67.2%, up from 62.4% in 2019. Within that figure, the percentage of the 269,550 m3 of tropical imports certified was 65.1%, compared to 61.6% in 2019, while that of the 49,482 m3 of temperate hardwood imports was 78.6% as against 67.2%.

By applying²⁸ a systemic whole supply chain transition approach, it hopes to achieve a 30% increase in the use of wood in housing and office buildings in the Netherlands within ten years. In an attempt to make this a reality, the project mobilizes up to 100 different partners from governments, companies, advisories, and NGOs to achieve an annual carbon saving of a minimum of 5% of the Netherlands' yearly carbon footprint. The forests that feed timber production can, if managed well, be entirely sustainable responsible, and support the establishment of an effective forest economy. In the Netherlands alone, we foresee a potential of more than 400 million trees planted for this purpose.

Making sustainable wood ²⁹a common commodity in the Netherlands gives an impulse to sustainable forest management worldwide!

No fewer than 23 parties are joining forces with the Covenant on 'Promoting sustainable forest management' to make wood from sustainably managed forests commonplace in the Netherlands. In addition to the Ministries of Foreign Affairs, 13 branches in the timber, construction, furniture and retail chain, FNV, CNV and 7 civil society organizations have signed the Covenant.

By stimulating the demand for sustainable wood in the Netherlands, an impulse is given to sustainable forest management worldwide. This is of great importance for combating climate change and makes an important contribution to the Sustainable Development Goals. The main positive contributions of sustainable forest management. The impact of 3 years green deal presented in video³⁰.

In the view³¹ of the Dutch government, public procurement of sustainably produced timber is very important to give timber producing countries a clear signal regarding consumers'

²⁷ https://www.europeansttc.com/netherlands-reports-further-rise-in-certified-imports-market-share/

²⁸ <u>https://except.eco/projects/boosting-ewp/</u>

²⁹ <u>https://bewustmethout.nl/convenant-duurzaam-hout/</u>

³⁰ <u>https://www.youtube.com/watch?v=9M7EZTewwVk&t=213s</u>

³¹ https://unece.org/DAM/timber/country-info/statements/netherlands2019.pdf







willingness to purchase sustainably produced products at reasonable prices and thus increase such purchases. It also sets an example for semi-governmental organisations and the private sector to introduce sustainably produced timber in their procurement criteria and by doing so, contribute to sustainable forest management. Forest and Wood Action Plan Forest and timber organisations, in collaboration with NGO's and other sectors, have drawn up an Action Plan on Forests and Timber, on the contribution to the green economy. The plan proposes to intensify the roundwood harvesting in a sustainable way, to plant new forests, and to use more timber in construction. This plan was presented at the National Climate Summit in October 2016 and received support from the Dutch Prime Minister and state secretary of the ministry of the Environment and Infrastructure. Currently the first activities have started as part of the Action Plan, e.g. in the field of Climate Smart Forestry. The so called Coalition Forest and Timber is responsible for the further development and promotion of the interventions or actions formulated in the Action Plan in the coming years







National good practices

Title	KW1C DUURZAAMSTE MBO VAN NEDERLAND				
	Koning Willem I College is the most sustainable VET in the Netherlands				
Country	The Netherlands				
How is/was it promoted?	 within the framework of a European project within the framework of a national project X as a part of a VET school curriculum as a part of a research programme 				
Goals of the activity	The most sustainable VET school in the Netherlands				
Implementat ion choices	The college has sustainable curricula in five education departments (catering, construction, ICT, fashion and technology), a policy for sustainable and healthy catering, service bicycles, an electric car, water taps, LED lighting everywhere and a significant CO2 reduction over the past three years. The sustainable purchasing policy, 900 solar panels, the energy roof and the compensation for air travel also yielded points in the questionnaire. UNESCO school The Koning Willem I College has anchored sustainability in its core values for many years. As a UNESCO school, the college is committed to a better world and strengthening sustainability. We make sure that we waste as little (energy) as possible and create as little waste as possible. The college familiarizes students and staff with the UNESCO philosophy, which focuses, among other things, on peace and human rights. In this way, the school also contributes to a better world.				
Benefits and results	 In order to emphasize the importance of sustainability, the Board has also set up a Global Goals expertise group since last year. This includes enthusiastic employees and students who are committed to embedding sustainability across the board even more in our education and business operations. SDG Charter The Executive Board of King Willem I also signed the SDG (Sustainable Development Goals) Charter in 2020. In doing so, the Board underlines the importance of working together towards a better world. The SDG Charter is a statement of intent with which the college commits itself to achieving the Sustainable Development Goals (SDGs). These are seventeen sustainable development goals to improve the world before 2030. They are a global compass for challenges such as poverty, education and the climate crisis. The SDGs have been agreed by the United Nations (UN), of which the Netherlands also belongs. b. Community/social/economic impact 				







	The Sustainable MBO is organized by Learning for Tomorrow and is based on
	the Sustainable in higher education. It is a positive competition where
	educational institutions look to each other and provide each other with feedback
	to get better at integrating sustainability into their schools. Participating schools
	fill in a questionnaire about the degree of sustainability within the school in the
	field of education, practice, operational management and the integrated
	approach to this.
Website	https://www.youtube.com/watch?v=daKnFgdyKQM
E-mail	https://www.kw1c.nl/jaarbeeld/2021/582/kw1c-duurzaamste-mbo-van-nederland
Other	https://www.youtube.com/watch?v=3HvuSnFvILE
contact info	https://www.facebook.com/DuurzaamheidKWIC/
References	







Title	Alfa College
Country	The Netherlands
How is/was	- within the framework of a European project
it promoted?	- within the framework of a national project
	X as a part of a VET school curriculum
	- as a part of a research programme
Goals of the	Sustainability implementation in VET school
activity	
Description	Alfa-college established consultancy bureau for the Mechanical Engineering,
-	Electrical Engineering (Engineering), Architecture and ICT degree programs
	of the Alfa College Hoogeveen, is actively working on sustainability
	They have started in 2015 with vision about sustainable school and not only
	build sustainable school infrastructure but also created culture of
	sustainability. They implemented 189 creative actions, 26 strategics actions, 6
	workshops. Were involved all school community. They created 4 sustainable
	principles and strategical conception are based on ABCD model which consist
	of 4 steps:
	A) creating a shared definition of sustainability based on
	sustainability principles and formulating a vision;
	B) analysis of current reality in relation to that vision;
	C) developing creative, smart, flexible solutions to
	current reality closer to the vision and
	D) set priorities and make a strategic action plan.
	Alfa College created sustainable vision for school focused on planet proof in
	practice conception. They defining 6 main strategical sustainable aspects
	(waste management, integration into education, visibility&communication,
	fit&vital, physical environment, strong locally).
	, F,,,, //
	Core values: Connecting: We learn in connection with our sustainable partners
	• Trust: We trust that everyone can contribute to this
	• Entrepreneurship: We do business by acting sustainably
Benefits and	a. The benefits of this best practice for the target groups
results	
	Target group – school. School buildings were build in sustainable way.
	Teachers and students searching sustainable approach to each subject. Plans to
	integrate "Planet proof in practice" principles in each subject until 2027 year.
	Prepared strategic memorandum contains many ideas, concepts and principles.
	But when we smash it, the Alpha way of working remains
	about. We summarize them as:
	1. Actions speak louder than words: Decisiveness is paramount.
	 Sustainability is fun: Sustainability inspires. Celebrate successes: Milestones are there to hang garlands from.
	4. Showcasing what we've done: Simplicity in communication
	. Showeasing what we ve done. Simplicity in communication







	5. Everyone participates: It belongs to all of us.
	b. Community/social/economic impact Energy efficient, waste management soorten 100 %
Website	Any references listed, should be cited by using the APA referencing style
E-mail	(https://libguides.murdoch.edu.au/APA#:~:text=The%20APA%20referencing%20style %20is,and%20the%20year%20of%20publication.)
Other contact info	
References	<u>https://www.alfa-college.nl/hoogeveen/voltastraat-33/duurzaamheid-en-</u> <u>circulariteit</u>
	https://www.alfa-college.nl/bedrijven/ac-duurzaam
	Separate folder placed in google drive.







Conclusion:

In the Netherlands in all educational sectors common and specific sustainability understanding, implementation actions are well-developed. National policy and instruments encouraging the implementation of SDG. Created different types of SDG implementation supportive organizations. Education for Sustainable Development is successfully integrated into the VET curriculum and constantly improving new sustainable strategy plans and implementation. VET teachers have enough knowledge of sustainable goals and lifestyles.







More information and advice:

- 1. https://www.duurzaammbo.nl/
- 2. https://www.lerenvoormorgen.org/mbovoormorgen
- 3. https://www.lerenvoormorgen.org/best-practices
- 4. https://www.lerenvoormorgen.org/leren-voor-morgen/mbo
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- 6. https://www.sustainabilityinstitute.net/
- 7. https://sustainability.games/whitepaper/introduction
- 8. <u>https://duurzameinterieurstylist.nl/</u>
- 9. https://www.theupcyclecollection.nl/
- 10. https://hetgroenekompas.nl/
- 11. <u>https://uplink.weforum.org/uplink/s/uplink-issue/a002o0000133Un1AAE/global-plastic-innovation-network</u>
- 12. https://www.plasticsoupfoundation.org/en/contact-us/
- 13. <u>Milieucentraal https://www.milieucentraal.nl/</u>
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- 16. Plastic Soup Foundation https://www.plasticsoupfoundation.org/
- 17. Stichting Noordzee https://www.noordzee.nl/
- 18. <u>Universiteit Wageningen https://www.wur.nl/nl/Onderzoek-</u> <u>Resultaten/Onderzoeksinstituten/marine-research/show-marine/Plastic-afval-in-zee.htm</u>
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- 22. Sustainable Netherlands Monitor -http://www.monitorduurzaamnederland.nl/
- 23. Nederland Central government
- 24. <u>https://www.rijksoverheid.nl/actueel/nieuws/2019/04/05/nederlands-milieubeleid-gooit-hoge-ogen-in-europees-verband</u>
- 25. The Netherlands national government (Rijksoverheid) <u>https://www.rijksoverheid.nl/onderwerpen/duurzame-economie/groene-groei</u> <u>https://www.rijksoverheid.nl/actueel/nieuws/2019/04/05/nederlands-milieubeleid-gooit-hoge-ogen-in-europees-verband</u>