



Rijksdienst voor Ondernemend
Nederland



EnR Thinking Group Meeting *17th Oct 2022,* *Malta* Green Jobs, Skills & Education – the Dutch Approach

Rebecca van Leeuwen, Netherlands Enterprise Agency/
RVO



Top Sector Approach – driver for innovation

- Top Sector refers to 9 key economic sectors in the Netherlands:

Horticulture and propagation materials, Agri-food, Water, Health & Life sciences, Chemicals, High Tech, **Energy**, Logistics, Creative Industries

In 2011, partners joined forces to address societal challenges as part of the so called 'Top sector approach' –

- **Road Map Human Capital Agendas**





Human Capital Agenda

- **The Top Sector Energy** expects new competences on a large scale and therefore promotes better schooling.
- The energy transition offers many job opportunities for professionals on mbo-, hbo- and wo-levels. Labour market research shows that sustainable energy creates jobs.
- **Energy Innovation NL** focuses heavily on education since the jobs are changing and require alternative, additional and/or higher-level skills. Better quality, equality and accessibility of education is what Energy Innovation NL promotes and stimulates through the Human Capital Agenda. In this way more people will be able to follow the appropriate education.
- The Human Capital Agenda is a **network concept**. The Agenda has a **promoting, accelerating and facilitating role** together with all relevant stakeholders and other Top Sectors.
- Energy Innovation NL aims for increased and better schooling of young people and the employed as a leverage for the energy transition.

The Future is green



Natuur

Informatietechnologie,
big data en AI

Voedingsmiddelentechnologie

Vertical farming

Nieuwe
voedselconcepten

Klimaatadaptatie

Gezondheid,
voorlichting,
preventie

Voedselteelt op
de Noordzee

Energietransitie

Fijnstofopvang

Een mooie
leefomgeving

Waterberging

Recreatie en welzijn

Dierenwelzijn

Gepersonaliseerd
voedsel

Drinkwater

Duurzaam
waterbeheer

Hout, vezels

Voedselbos

Koolstofvastlegging

Biodiversiteit
en bestuiving

Strokonteelt

Plantgezondheid

Reinigend vermogen
bodem, water, lucht

Smart-farming

Duurzaam
transport

Kas als energiebron

Biomassa

Duurzame veehouderij

Diergezondheid

Bodemvruchtbaarheid

PROEFTEELT



Platform Talent for Technology

English - Platform Talent voor Technologie (ptvt.nl)



- PBT is an independent non-profit organisation (foundation) created by the Dutch Ministries of Economic Affairs and of Education and Social Affairs to support the implementation of national STEM strategies.
- PBT has been tasked by the government to coordinate the implementation of the Technology Pact in the Netherlands.
- The **Technology Pact** is a joint initiative of central government, the organised business community, trade unions, the education community and the regions.
- The objectives of the Technology Pact cover the entire education chain, from primary education up to the labour market.



The Technology Pact

Objectives:

1. To increase intake for engineering and technology programmes;
2. To increase the involvement of the business sector in engineering and technology education;
3. To promote life-long development in engineering and technology;
4. To reduce the shortage of teachers in engineering and technology; for example, via the use of hybrid teachers.

Example from the Netherlands: Groenpact

INTRODUCTION TO GROENPACT – GREEN PACT

TRIPLE-HELIX COOPERATION ON STRENGTHENING THE DUTCH KNOWLEDGE AND INNOVATION SYSTEM

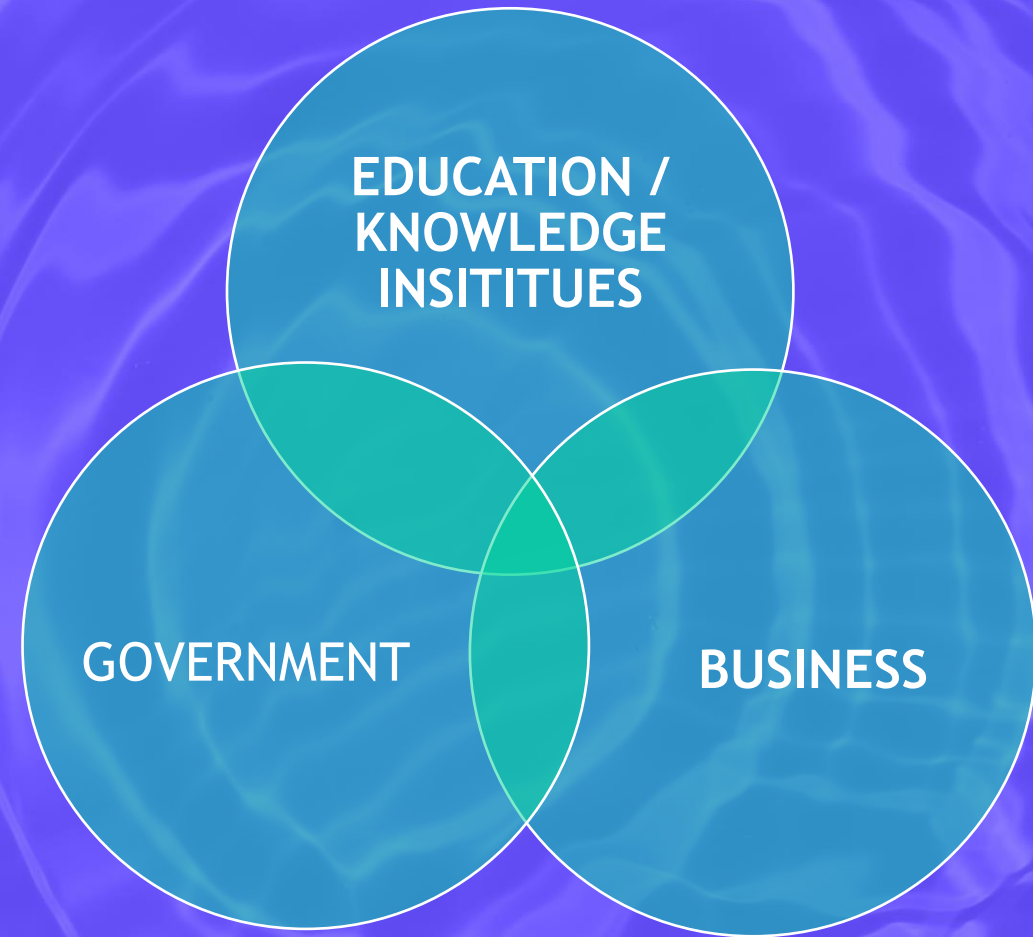
- **Green Pact**
- **Triple helix approach:** cooperation between government, education institutes and private sector parties aimed at renewal and innovation of the agricultural knowledge & education system
- **Ambitions:** renewal of education & innovation of the professional practice, in response to major social issues and the changing labour market
- **Organisation & implementation:** via clusters (e.g. practice oriented research in CiV Green and CoE Green), acceleration programmes, knowledge sharing, practical co-financing arrangements and subsidies
- Members: over 80 organisations
- **Governance:** triple helix incl. a 'Directing Team' – Ministry of Agriculture, Nature & Food Quality, the Dutch green education institutes, private sector parties, and the so-called 'Top Sectors' Agri & Food and Horticulture & Starting Materials.



PARTNERS

*over **80** organisations in 2022
(Knowledge institutes; Private sector;
Government; NGO's)*

Planning / duration: 2016 - 2025



Agricultural ('green') education



Number of Students (2020-2021)

87,800 (*excl. about 33,000 VMBO pupils*)

- 62,200 MBO students * (12.3%)
- 13,000 HBO students ** (2.9%)
- 12,600 university students *** (3.8%)



Young Platform set up to bring in ideas & knowledge from the younger generation on the future of the food & agricultural system and promotion of a “greener” society. This platform is very valuable to Groenpact and its partners since it is all about their future!

Nederlands Agrarisch Jongeren Kontakt (NAJK) ▶

Slow Food Youth Network (SFYN) ▶

Klimaat en Energiekoepel (KEK) ▶

Studenten voor Morgen (SvM) ▶

Voor de Oogst van Overmorgen (OvOM) ▶



YOUNG PROFESSIONALS VOOR
EEN DUURZAME TOEKOMST

Studenten voor
MORGEN



Four Acceleration Programmes



JOBS MARKET



Brings knowledge & partners together to address the following questions: How do we ensure we have enough “green” skilled labour? How do we ensure they are qualified with the knowledge of tomorrow?

The Acceleration Programme contributes to a better match between education and the jobs market. Without schooling there is not enough expertise and skills. Companies need these trained youngsters to meet the future challenges of the energy

MEER INFO



DIGITALISATION & TECHNOLOGY



Focuses on anchoring the use of technology in green education programmes.

The focus comprises 4 themes:

- Artificial Intelligence (AI)
- Data Science
- Robotics
- Sensor technology

It takes a bottom-up approach and is content focussed via knowledge sharing, research CIV Groen, CoE Groen, Groen Kennisnet and via Living Labs & Hotspots.

MEER INFO



This programme is in line with the digital vision of the Ministry of Agriculture (LNV).



INTERNATIONALISATION



Contributes to sustaining the global food production through scientific knowledge, green education and the Dutch agro-food companies.

They do this through facilitating knowledge exchange and cooperation between teachers and students and by organising activities which educational institutes support in their internationalisation agenda.

MEER INFO



KNOWLEDGE SHARING



Provides an important contribution to the production of sufficient, safe and healthy food supply and sustainable society through facilitating and knowledge sharing.

Researchers, teachers and students work together in fundamental and practical research:

- Education curricula continuously updated;
- Knowledge finds its way into practical jobs;
- Practical experience and Knowledge from business finds its way in making

MEER INFO



Impact Prize Green Education

- What impact does your project or start-up have? Worldwide green solutions are needed
- Impact prize of Groenpact for innovative projects, research & start-ups which have impact on food, climate and society
- Nominees win a film about their project plus there are 4 main prizes of € 2,500.

Genomineerden en winnaars 2021 ►

Genomineerden en winnaars 2022 ►





To address developments in the jobs market and education it is important that the information is accurate and complete. The Green Monitor offers information on the full breadth of the green sector and provides an overview of green jobs, green education courses and green companies.

[BEKIJK DE GROENE MONITOR](#) ►

[BRONNENTOOL GROENE MONITOR](#) ►



**GROENE
MONITOR 2022**

Onderwijs- en arbeidsmarktonderzoek



Business Partners



Knowledge Institutes Partners



Knowledge institutes

- 36 Schools for 'green' *pre-vocational education* (VMBO), united in one association
- 9 Institutes for Vocational Education (MBO) - (*pre-vocational education and*) *secondary vocational education*
- 4 Universities of Applied Sciences (HBO) - *higher professional education*
- Wageningen University and Research - WUR (*research oriented education, fundamental and applied research*)



Government Partners



Further information:

Contact RVO: Rebecca van Leeuwen
Rebecca.vanleeuwen@rvo.nl

Contact RVO: Fieke Roozen fieke.roozen@rvo.nl

Contact internationalisation 'green' education:
Karen Bakhuizen k.s.e.bakhuizen@minlnv.nl