

M.Sc. Programme

# Sustainability Science, Policy and Society

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Programme Director

Master's Open Day

November 30, 2019



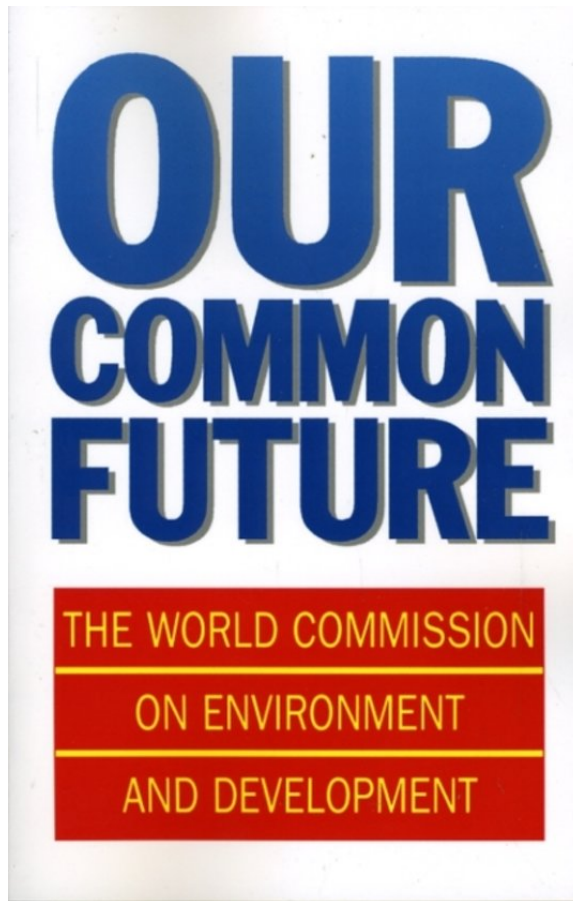


## Fast facts

- ✓ the youngest and most international university in the Netherlands
- ✓ 16.000 students, 4.000 staff, 40.000 alumni
- ✓ one of the best young universities in the world (THE, QS)
- ✓ the only Dutch university in the Worldwide Universities Network (WUN)







## The Brundtland Definition (1987)

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



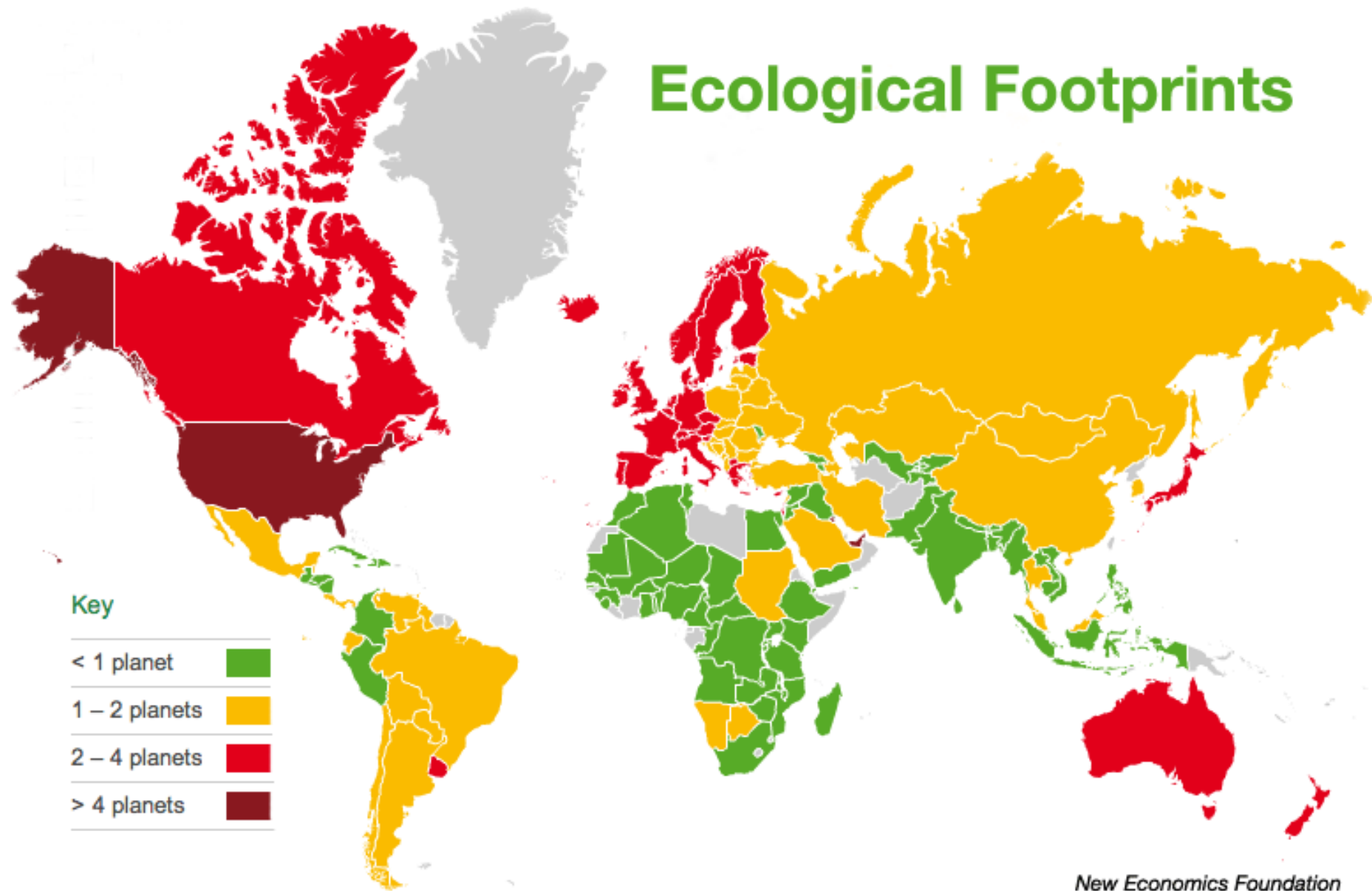








# Ecological Footprints



# Worldwide interdependencies

- ecological interdependencies  
(ecosystem services, life support systems, nature, etc.)
- economic interdependencies  
(global markets, international trade, supply and value chains, etc.)
- political interdependencies  
(nation states, EU, UN, WTO, NATO, etc.)





## SD – ecological dimension



## SD – economic dimension



## SD – social dimension



## SD – institutional dimension





Sustainable Development = complex & normative

=> integrative approaches



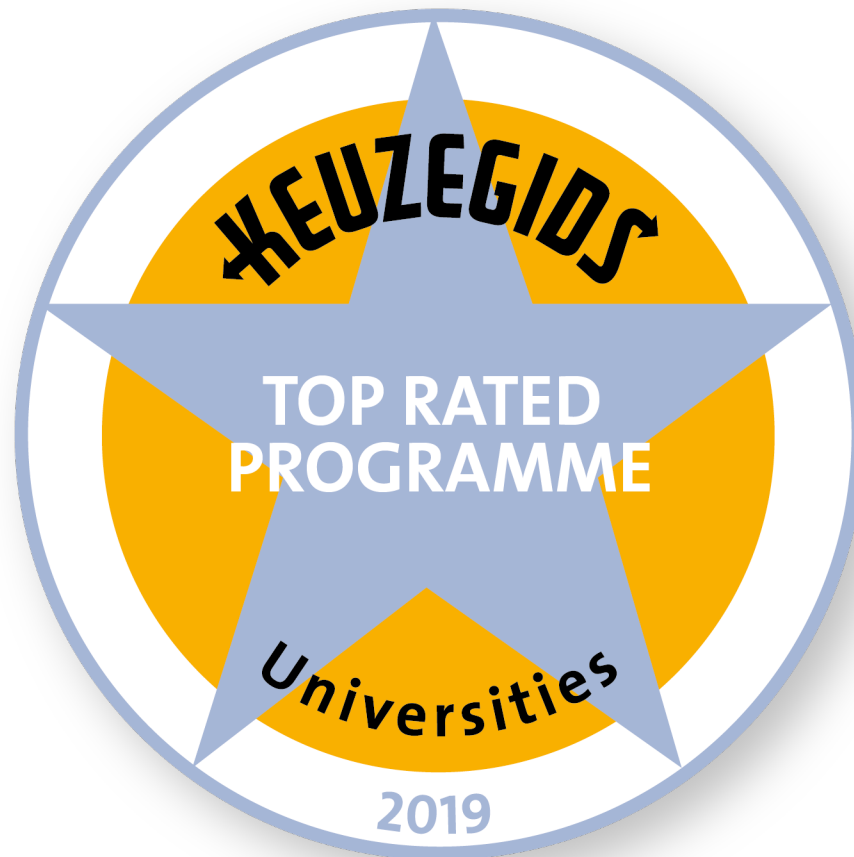
People. Planet. Prosperity.



ENVISIONING  
SUSTAINABLE FUTURES



## Master programme Sustainability Science, Policy and Society







- 1-year program fully taught in English
- Problem Based Learning (PBL)
- international, multidisciplinary student group
- small-scale teaching and learning
- thematic courses focusing on sustainable development
- serious game: Conquest for Paradise
- research for real clients (Integrated Sustainability Project)
- weekly 10–12 hrs classes, 28–30 hrs group work & individual





## Serious game



In the serious game Conquest for Paradise, students (and staff) experience the **complexity of the energy transition** in a **global context** from the perspective of **various stakeholders** and the impact of their decisions

<https://www.youtube.com/watch?v=AaAex3YTfLY>







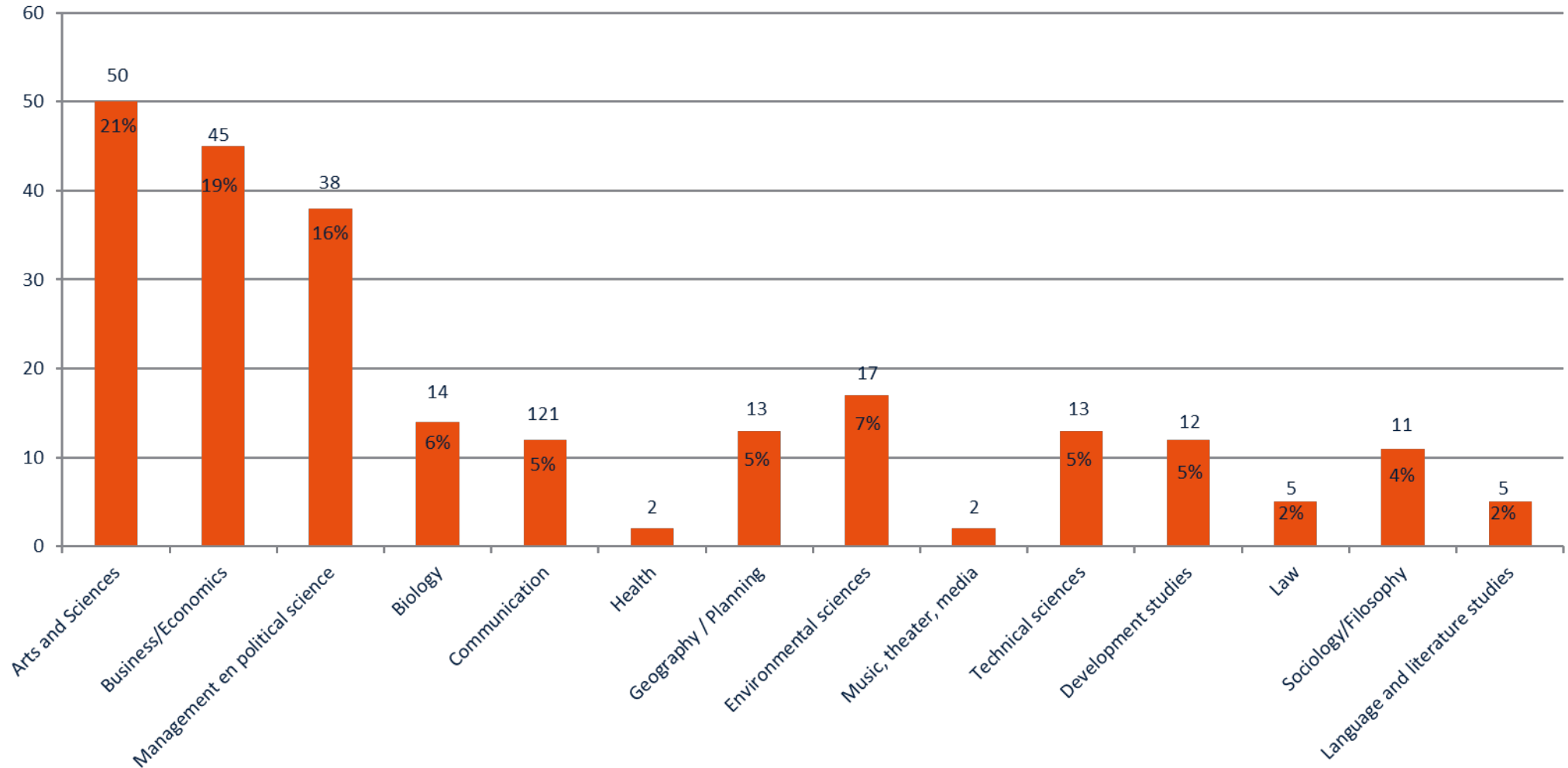


Year	Total students	NL	Other European	Non European
2011/12	<b>10</b>	3	6	1
2012/13	<b>22</b>	6	12	4
2013/14	<b>18</b>	1	11	6
2014/15	<b>13</b>	2	7	4
2015/16	<b>37</b>	9	23	5
2016/17	<b>44</b>	8	27	9
2017/18	<b>46</b>	13	26	7
2018/19	<b>49</b>	9	31	9
2019/20	<b>75</b>	12	50	13
<b>Total</b>	<b>314</b>	<b>63 (20%)</b>	<b>193 (61.5%)</b>	<b>58 (18.5%)</b>

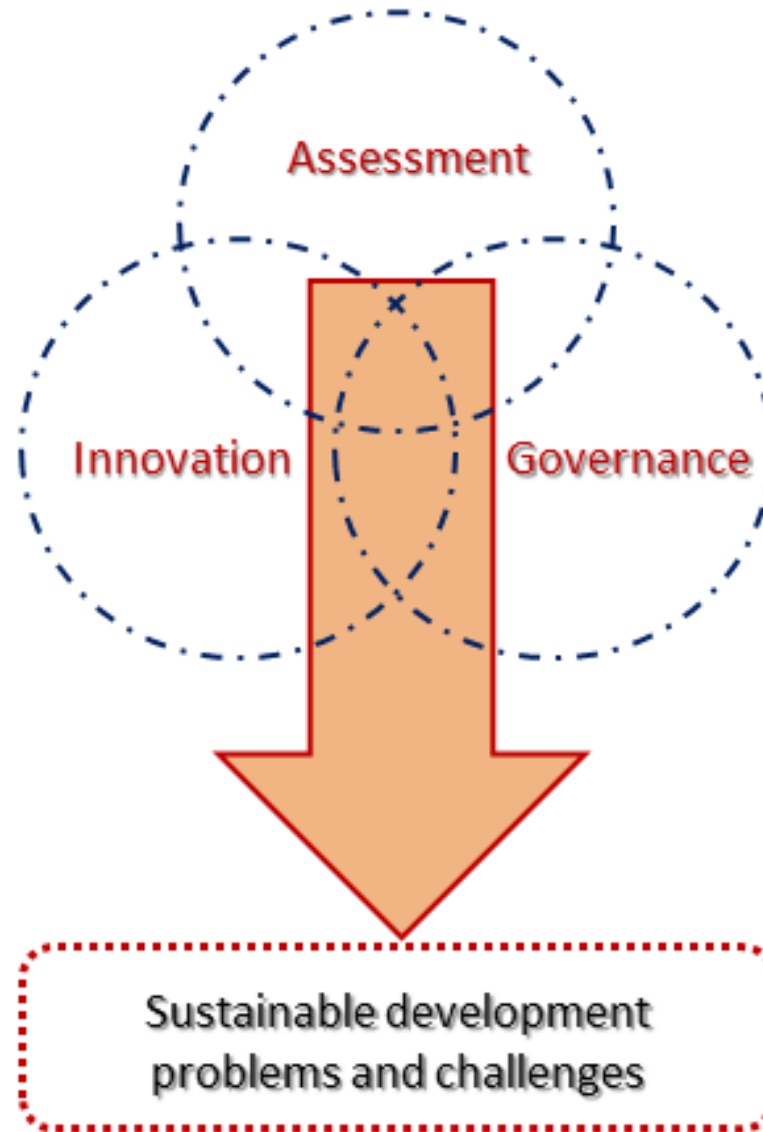


## Education background master SSP

alumni 2011-2018 (N=239)







# Courses & curriculum (60 ECTS)



- Problem Based Learning & Academic skills (1)

- Sustainable Development (5)
- Sustainability Science (5)

- Governance for Sustainable Development (5)
- Innovation for Sustainable Development (5)
- Sustainability, Law and the Environment (5)

- Methodology for Sustainability Assessment (5)
- Sustainability Assessment Skills (4)
- Integrated Sustainability Project (5)

- Research Approaches and Methods (2)
- Thesis Research Proposal (3)
- Master Thesis (15)



# Understanding sustainability

## ❖ Sustainable Development

- provides an introduction into the field of study
- history and main ideas underlying sustainable development
- important theories, concepts and milestone publications regarding the complex interactions between environment and society

## ❖ Sustainability Science

- science at the interface of science and policy
- role(s) of scientists
- concept of boundary work
- structuring of sustainability problems

# Policy for sustainability

## ❖ Governance for Sustainable Development

- shift from governing by government to governing as governance
- global governance, local governance, multi-level governance
- all in the context of sustainable development

## ❖ Innovation for Sustainable Development

- different forms of innovation (product, process, social)
- transitions, socio-technological transformation
- social economy initiatives, experiments and social learning

## ❖ Sustainability, Law and the Environment

- builds on governance theory, examines role of law for environmental protection from the perspective of the government, business and victim (e.g. NGOs)
- international climate policy and law (e.g. Paris Agreement, European ETS)



# Assessing sustainability

## ❖ Methodology of Sustainability Assessment

- steps in sustainability assessment
- how to apply and combine different methods
- project plan for a sustainability assessment of a real-world sustainable development problem commissioned by an external client

## ❖ Sustainability Assessment Skills

- students practise and improve their skills in basic modelling, participatory methods, scenarios, and multi-criteria analysis

## ❖ Integrated Sustainability Project

- students work in small teams and conduct the assessment, which include an integrated analysis of the problem, identification and assessment of solution options, and formulation of recommendations for the client

## Integrated Sustainability Project (ISP)



In ISP, students work in small teams on **real-world sustainability problems** commissioned by **external stakeholders** and conduct an **assessment**, which include an integrated analysis of the problem, identification and assessment of solution options, and formulation of recommendations for the client

Overview ISP's 2012-2018

<https://www.maastrichtuniversity.nl/education/master/master-science-sustainability-science-policy/why-this-programme>





## Integrated Sustainability Project (in 2018–19)

Circular Economy: A Case Study of Venlo	<a href="#">Gemeente Venlo</a>
Transformation of the ENCI mining area	<a href="#">Ontwikkelingsmaatschappij ENCI-gebied</a>
What role can small scale cooperatives play in the Dutch Energy Transition and how can Beekse Energy Cooperation fulfil this role?	<a href="#">Beekse Energie Coöperatie</a>
Indicator-Based Urban Sustainability Policy for Heerlen	<a href="#">Gemeente Heerlen</a>
Maastricht University: mitigating CO2 emissions from academic flying	<a href="#">Maastricht University</a>
Participatory Approach for “natural gas-free districts” in Brunssum-Noord	<a href="#">Mijnwater BV</a>
Transitioning towards circularity in the building industry: the case of Royal Mosa	<a href="#">Royal Mosa NV</a>
Towards a Sustainable Supply and Delivery System in Maastricht	<a href="#">Maastricht Bereikbaar</a>
Towards a more sustainable socio-spatial approach in Limburg- Exploring the role of the Provincial Spatial Planning Department in narrowing spatial disparities	<a href="#">Province of Limburg</a>

# Master's thesis on sustainability

## ❖ Research Approaches and Methods

- research traditions, ways of knowing
- research methods (e.g. literature review, qualitative & quantitative methods)

## ❖ Thesis Research Proposal

- Thesis market (December) for students and staff
- topic and supervisor
- research proposal (April)

## ❖ Master Thesis

- research and writing (May onwards)
- presenting (begin July or late August)



## Current students tell their story



- Problem Based Learning & Academic skills (1)

- Sustainable Development (5)
- Sustainability Science (5)

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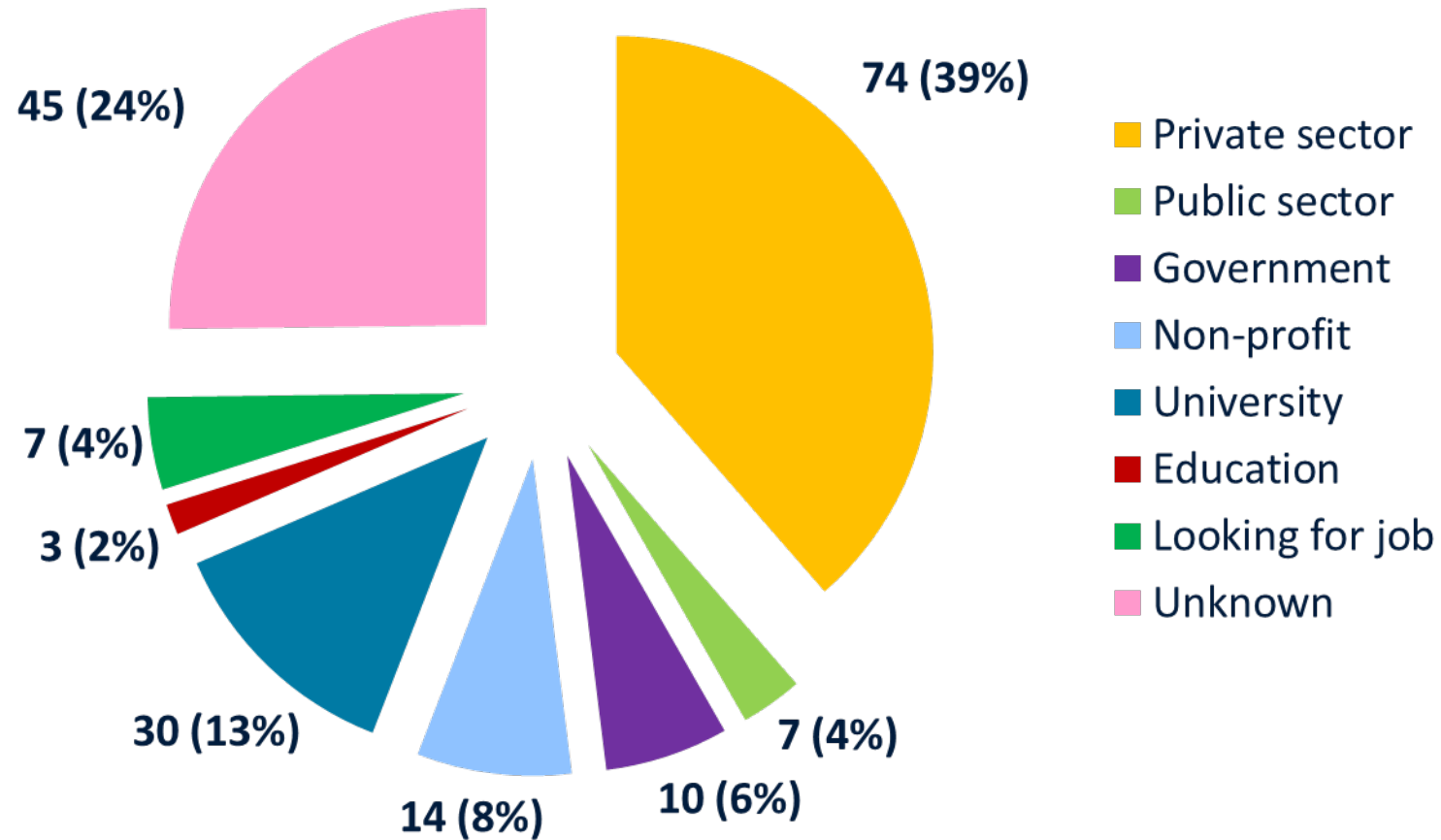
Total	Graduated	Re-registered	Stopped
239	217 (91%)	10 (4%)	13 (5%)

Graduates (1 December 2019)



## Sector of employment Master SSP alumni

2011-2018 (N=190)



Graduates report suitable **careers as sustainability professional**, e.g.

- advisor
- analyst
- consultant
- lecturer
- manager
- policymaker
- researcher
- trainer
- PhD candidate
- etc.

## Examples **employers**

- Amnesty International
- Columbus Earth Center
- Cradle to Cradle Products Innovation Institute Europe
- CSR Europe
- Deutsche Gesellschaft für Internationale Zusammenarbeit
- Ernst & Young
- European Environment Agency
- General Electric
- Green Trust
- KPMG
- Siemens
- Tata Consultancy Services
- Universities (Aalborg, Charleston, Maastricht, etc.)
- WWF European policy office









## UM Master SSPS website

<http://www.maastrichtuniversity.nl/masterssp>

### Need more information?





#### General questions about the programme

-  [Request a brochure](#)
-  [admissions-ssp@maastrichtuniversity.nl](mailto:admissions-ssp@maastrichtuniversity.nl)
-  [+31 43 388 2662](tel:+31433882662)
-  [www.maastrichtuniversity.nl/icis](http://www.maastrichtuniversity.nl/icis)

skype: master-ssp available every Thursday  
from 15:30-16:30 CET or by appointment

### Meet us

There are several information activities for those interested in learning more about our programmes:


-  [Open days](#)
-  [Calendar \(all activities\)](#)
-  [INKOM](#) 

### Address

#### School of Business and Economics Sustainability Science and Policy

 Kapoenstraat 2  
6211 KW Maastricht

 [Get directions](#) 

 PO Box 616  
6200 MD Maastricht

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UM Master SSPS website

<http://www.maastrichtuniversity.nl/masterssp>

Thank you for your attention!

**QUESTIONS?**

