

# Initiatives for Greening Higher Education -An example from Denmark

A contribution to NUAS Webinar Series on:  
Session base- line on sustainability actions and the next step among the universities in the Nordic countries  
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3/17/2022 1



Global Compact  
Network Denmark

**CBS PRME**

PRINCIPLES FOR RESPONSIBLE  
MANAGEMENT EDUCATION

**CBS**

COPENHAGEN BUSINESS SCHOOL  
HANDELSHØJSKOLEN

# Agenda

- Introduction to Green Themes in Higher Education
- European Union
- Denmark
- A case study: CBS
- Closing

# European Union

A focus on the EU's green initiatives in the area of education and training stemming from, for example the EU Green Deal



# The European Education Area

- The European Education Area (EEA) is an initiative that aims for strengthened collaboration between European Union Member States to build more resilient and inclusive education and training systems. The initiative *has five focus topics where one of them is Green Education.*
- In 2021, the EU Council put forth a “Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021-2030)”. The Councils Resolution strengthens the attention towards green transition by agreeing that “the further development of education and training systems in the Member States are aimed at ensuring: (...) **sustainable economic prosperity, the green and digital transition and employability.**” (European Council 2021, p.3)

## The European Education Area

- Regarding the organization of the institutions the council resolution states that “education and training institutions need to include the green and digital dimensions in their organizational development.”
- Furthermore the member states are encouraged to “reorient education and training institutions to a whole-school approach (...) for achieving the needed changes for the green and digital transitions.” (European Council 2021, p.7).

# Proposal for a Council Recommendation on Learning for Environmental Sustainability

- This proposal was sent to the council on January 14, 2022, and is the most recent high level political communication on environmental sustainability.
- The core motivation for establishing this recommendation was to highlight that “learning for environmental sustainability is not yet a systemic feature of policy and practice in the EU.” (European Commission 2022)
- A focus on life-long learning

# GreenComp – The European Sustainability Competence Framework

The Commission encourages Member States to use the framework as a reference when rolling out educational initiatives on sustainability (Bianchi et al. 2022). It has a key focus on life-long learning.

**The framework consists of four competence areas that should be acquired by learners:**

- 1) Embodying sustainability values**
- 2) Embracing complexity in sustainability**
- 3) Acting for sustainability**
- 4) Envisioning sustainable futures**

- Each subject area (1-4) has three competence sub-parts. The GreenComp framework was published in relation to the proposal for council recommendation



## The Danish Context

- In September 2020, the Ministry of Higher Education and Science, Denmark, published '*Green solutions of the Future*', a strategy for investments in green research, technology, and innovation.

### Green solutions of the future

Strategy for investments in green research, technology, and innovation

September 2020





## The Danish Context

- In its publication, the Ministry of Higher Education and Science focuses on the important role of close collaborations between knowledge-institutions and the business community, in order to gear the public research investments with private funds in order that efforts become as powerful as possible. .
- **Green study Programmes**

## Green solutions of the future

Strategy for investments in green research, technology, and innovation

September 2020



## The Danish Context

- The Ministry of Higher Education and Science emphasise that higher education has “to create new knowledge and convert this knowledge into concrete green results that make a difference and pave the way for a greener and more climate-friendly society” (Ministry of Higher Education and Science, 2020).
- The Danish government will place its attention on supporting and strengthening the coherence between Danish higher education study programmes and the green transition.

## Green solutions of the future

Strategy for investments in green research, technology, and innovation

September 2020



# The Request for Data from HEIs in Denmark to the Ministry on Green Transition in Higher Education

- The Danish Ministry for Education and Science collected data in December 2021 on how higher educational institutions (HEIs) work to integrate green themes in educational programmes. Many institutions are working on integration of the 17 Sustainable Development Goals (SDGs) and broader sustainability perspective in educational programmes.
- This mapping focuses specifically on examining how educational programmes work with **green transition** and not a broader sustainability perspective such as social sustainability.

# Questions to Danish HEIs

- The Ministry has asked educational institutions, including CBS, to submit a mapping of the following seven subject themes in your programme:
  - 
  - Energy production
  - Energy effectiveness
  - Agriculture and food production
  - Transport
  - Environment and circular economy
  - Nature and biodiversity
  - Sustainable behavior and societal consequences

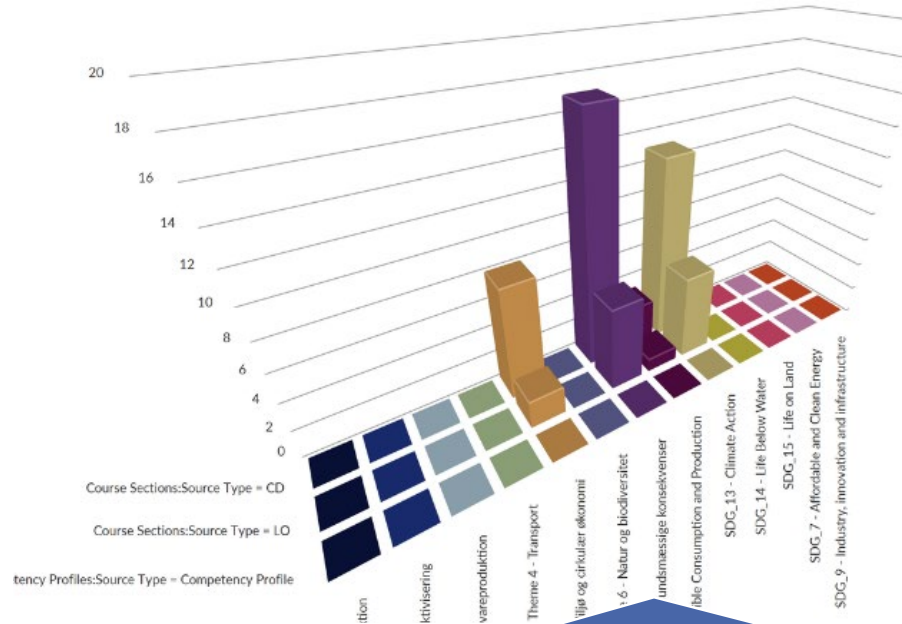
# Questions

- Do the students gain learning outcomes that affect green conversion **within one or more of the seven green themes?** a. If so, what themes?
- Are one or more green themes included in the description of the programme's core subject matter (the curriculum's initial description of the knowledge skills and / or competences acquired?)
  - Compulsory?
  - Non-compulsory

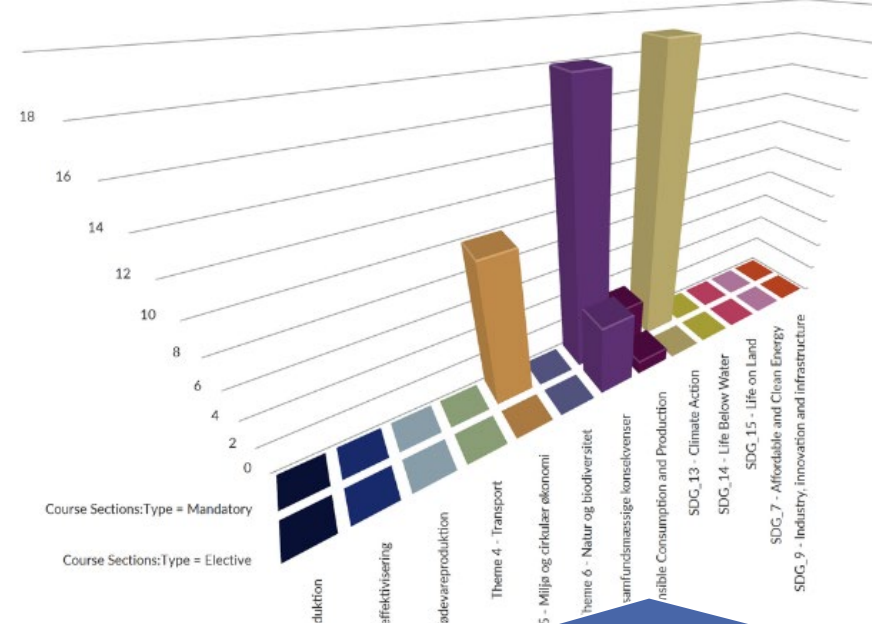
# The CBS Context

Theme 1. Energy production	Theme 2. Energy effectiveness	Theme 3. Agriculture and food production	Theme 4. Transport	Theme 5. Environment and circular economy	Theme 6. Nature and biodiversity	Theme 7. Sustainable behavior and societal consequences
<p>energy OR renewable OR "energy prod*" OR "green energy"</p> <p>*power-to-X</p> <p>*atmos*</p> <p>*brint</p> <p>wind OR solar* OR geothermal* OR hydro*</p>	<p>"energy efficien*" OR energy OR "green energy efficiency"</p>	<p>agricultur* OR food* (production) OR pesticide*</p>	<p>transport OR ["green] transport"</p> <p>shipping* (*cautious) airline* (cautious)</p> <p>infrastructure</p>	<p>environ*; circular* drinking water*</p> <p>ocean OR marine OR pollute OR Pollution OR conserv* OR fish</p> <p>consum* OR production OR waste OR "natural resources" OR recycl* OR "industrial ecology" OR "sustainable design"</p>	<p>nature*; biodivers*</p> <p>*Soil [Health] *Antarctic* *ecosystem</p> <p>forest OR ecology OR</p> <p>conserv* OR "land use</p> <p>environment OR "global warming" OR weather OR environmental OR green OR climate OR "greenhouse gas" OR Co2 *GHG</p>	<p>sustainable OR sustainability OR "sustainable development" OR "*consequences"</p> <p>*Food waste</p> <p>*inclusive cit *smart cit *sustainable community</p> <p>["Sustainable, Smart and Inclusive Cities and Communities".]</p>

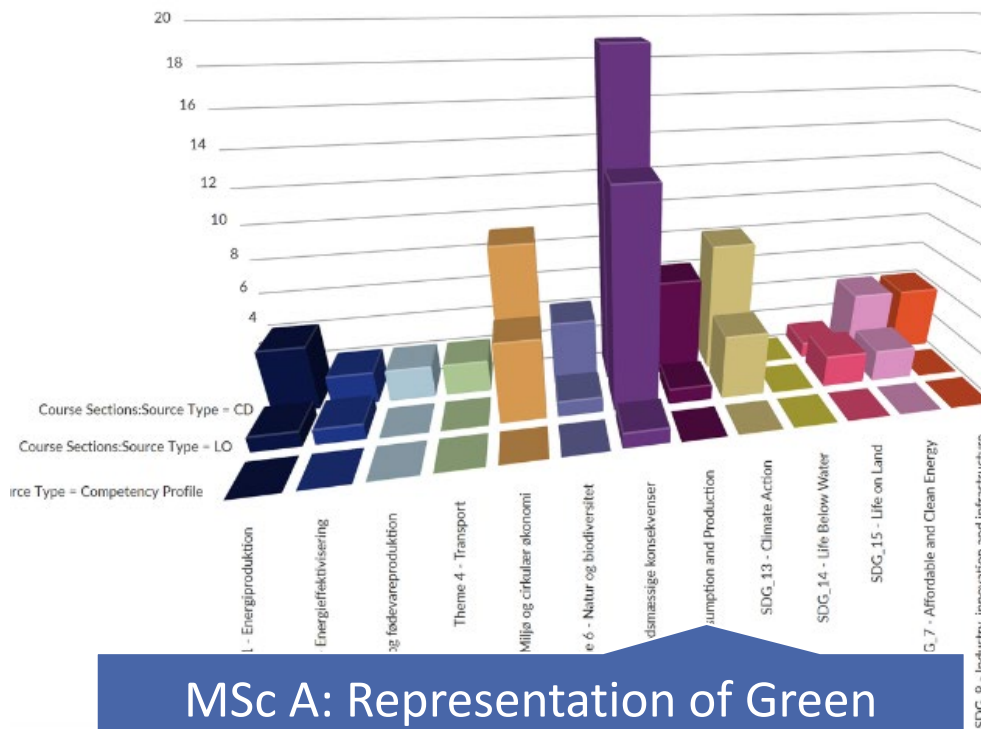
# What can we learn from coding content?



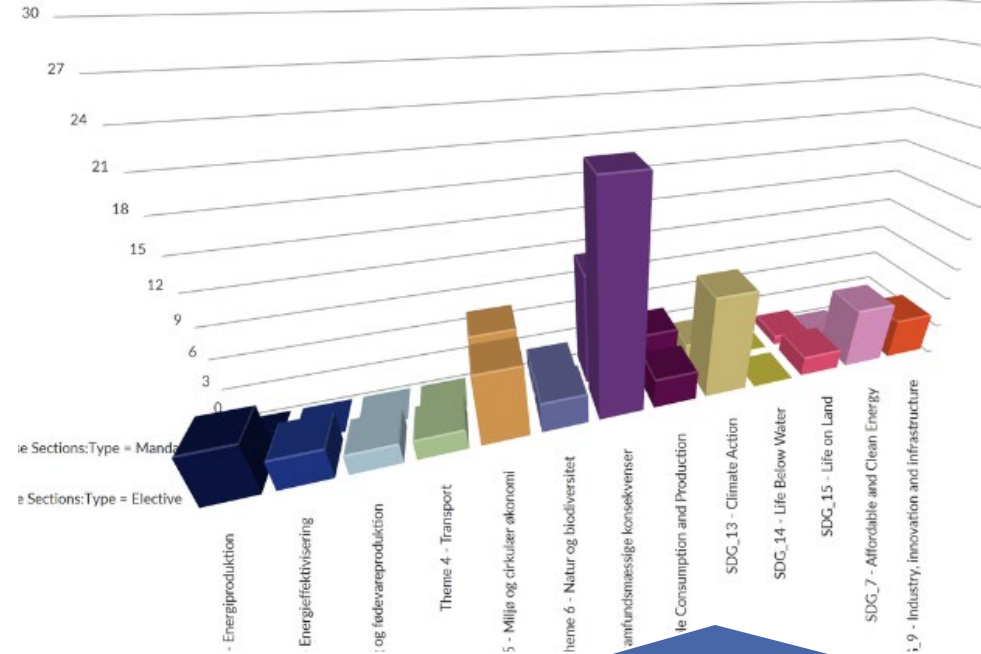
BSc A: Representation of Green Themes in Course Descriptions, Learning Objectives and Competency Profiles



BSc A: Representation of Green Themes in Mandatory and Elective courses



MSc A: Representation of Green Themes in Course Descriptions, Learning Objectives and Competency Profiles



MSc A: Representation of Green Themes in Mandatory and Elective courses



## Understanding the 'As-Is' picture

....Allows us to ask informed questions about how to move to the 'To-Be' picture

Data Source/Type	Theme1	Theme 2	Theme 3	Theme 4	Theme 5	Theme 6	Theme 7
B : Course Sections:Source Type = CD	0	0	0	0	11	13	17
C : Course Sections:Source Type = LO	0	0	0	0	3	6	6
D : Programme Competency Profiles:Source Type = Competency Profile	0	0	0	0	0	0	0
A : Course Sections:Type = Mandatory	0	0	0	0	13	19	18
B : Course Sections:Type = Elective	0	0	0	0	1	0	5

# What's next?

- The analysis and reporting will function as a basis on which discussions about environmental sustainability in the institution's educational activities can be taken. It can serve as a supporting tool to understand the 'as-is' picture.
- The generated material strengthens the transparency and clarity in the internal and external communication regarding green coverage by giving a sense of magnitude of green elements and themes covered in courses and programmes. In addition, a structured approach, **allows for comparison of coded study programmes, over time.**
- Getting the overview of the green themes in higher education through a coding exercise, provides, the high-level overview **for further work to advance both content coverage and scope, as well as pedagogical approaches that strengthen the advancement of environmental sustainability competences.**

# Thank You