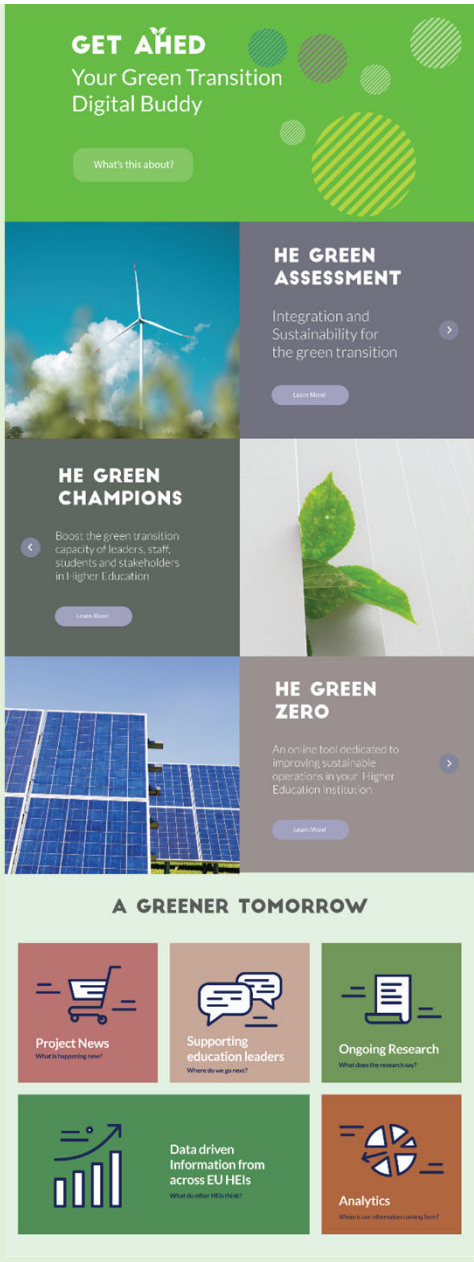
GET-AHED

“Embedding Sustainability in Higher Education Through Digital Approaches”

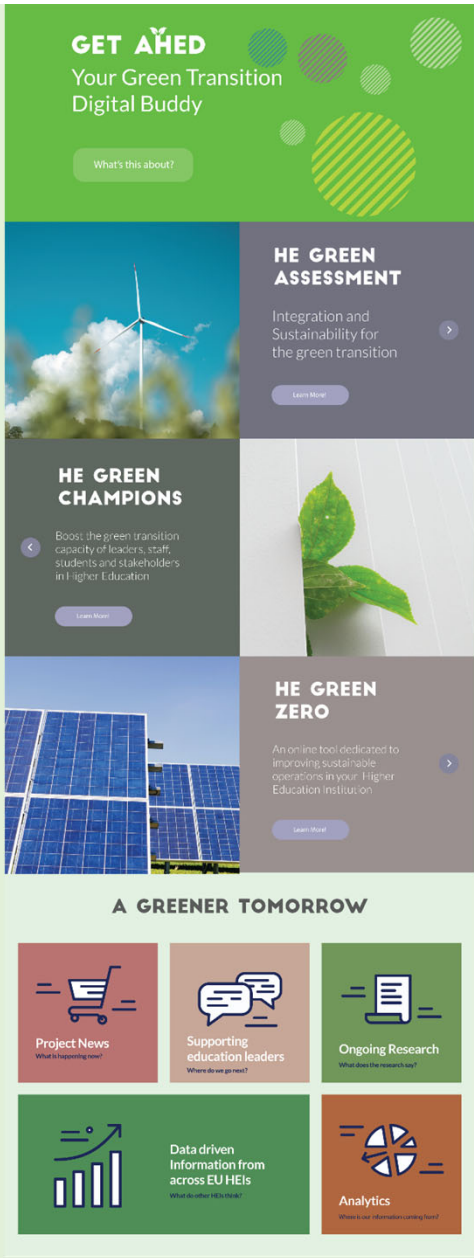
DisCo, Prague, June 19-20, 2023

Dr R. Neavyn (rneavyn@hea.ie)



GET-AHED

The Current Model which Underpins the Development of Humanity and Survival of our Planet is not Sustainable…

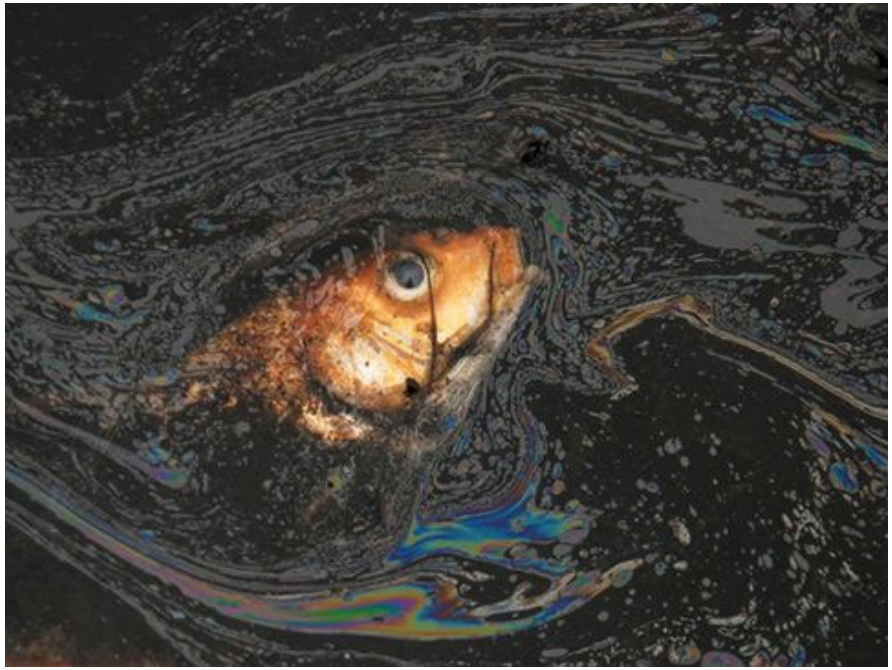


Addicted To Oil

- Energy
- Transport
- Manufacturing
- Health
- Construction
- Digital
- Recreation etc…

- Embedded in all aspects of human activity

OIL POLLUTION

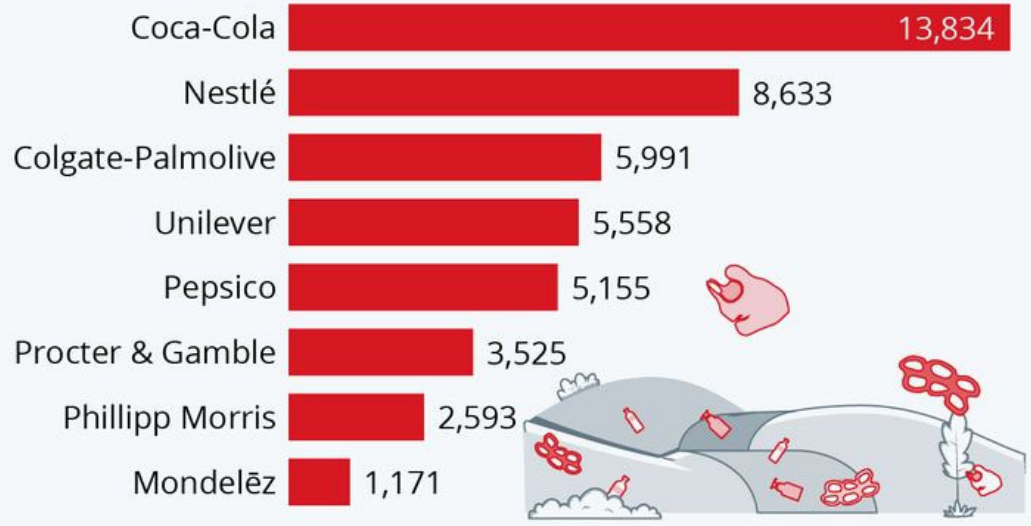


END
PLASTIC
POLLUTION

PLASTIC OCEAN
192 COUNTRIES BORDERING THE ATLANTIC, PACIFIC, INDIAN OCEANS AND MEDITERRANEAN AND BLACK SEAS PRODUCED 2.5 BILLION METRIC TONS OF SOLID WASTE IN 2010.
AN ESTIMATED 8 MILLION METRIC TONS OF PLASTIC ENTERED THE OCEAN THAT SAME YEAR.
Ocean Conservancy
2.5 BILLION
METRIC TONS OF SOLID WASTE IS PRODUCED ALL AROUND THE WORLD
AND WITHIN THAT
275M
METRIC TONS IS PLASTIC WASTE
2 BILLION PEOPLE WITHIN 30 MILES OF THE COAST CREATE
100M
METRIC TONS OF COASTAL PLASTIC WASTE
THANK YOU
AND EVERY YEAR,
8 MILLION
METRIC TONS OF PLASTIC GOES INTO THE OCEAN
WHAT WE CAN DO
REDUCE PLASTIC IN WASTE STREAM
IMPROVE SOLID WASTE MANAGEMENT
INCREASE CAPTURE & REUSE
HEALTHY OCEANS

The Companies With the Largest Plastic Footprint

Pieces of plastic waste from the following companies found in global cleanups in 2020*



* Based on an analysis of 346,494 pieces of plastic waste collected in 55 countries in 2020, 63% of which were marked with a consumer brand.

Source: Break Free From Plastic

statista

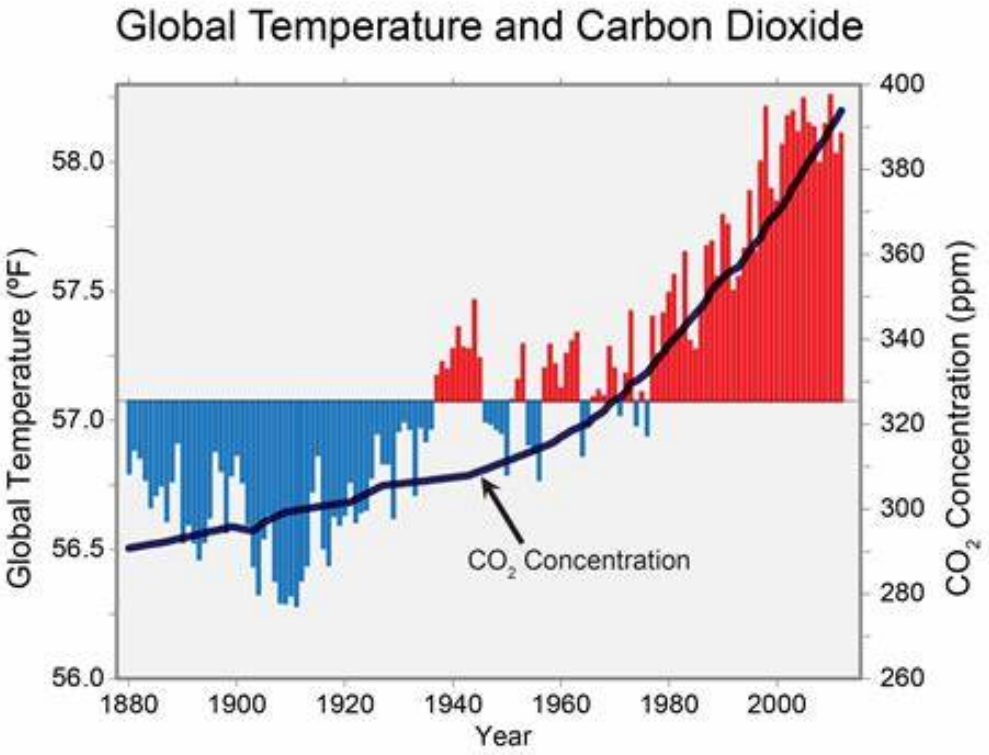
THE COUNTRIES POLLUTING THE OCEANS THE MOST

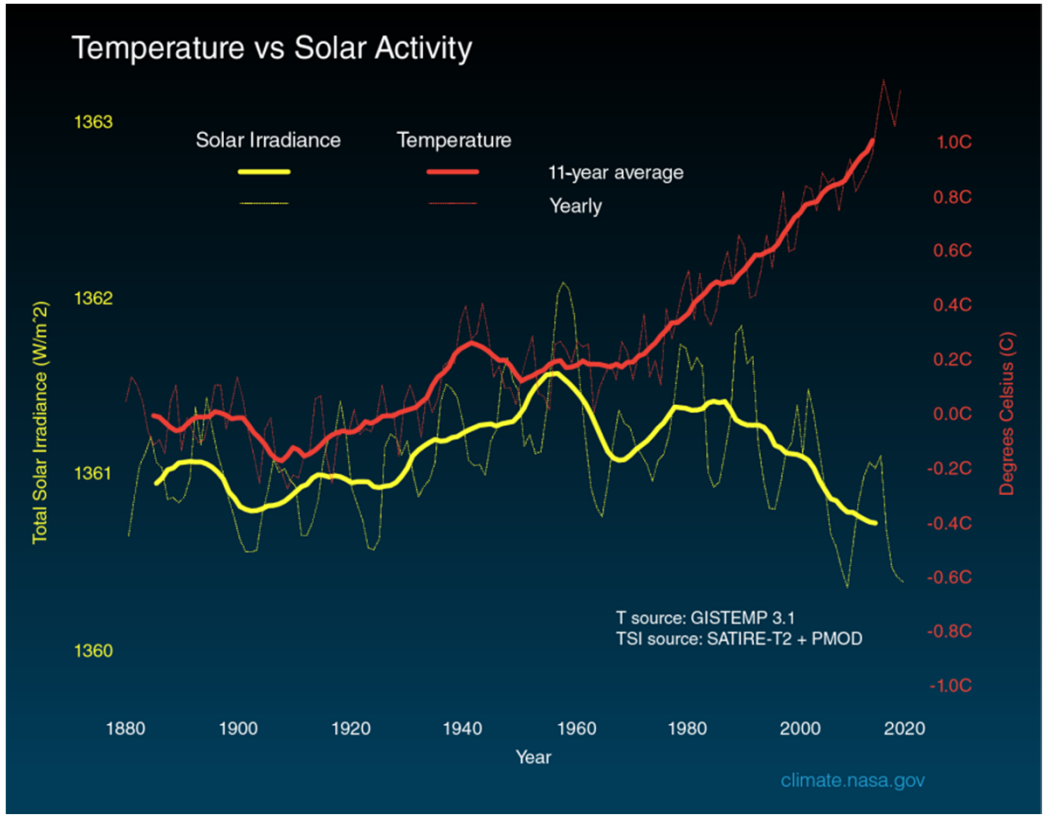
Annual metric tons of mismanaged plastic waste and total amount ending up in global waters*

(Source: The Wall Street Journal)

IANS GRAPHICS

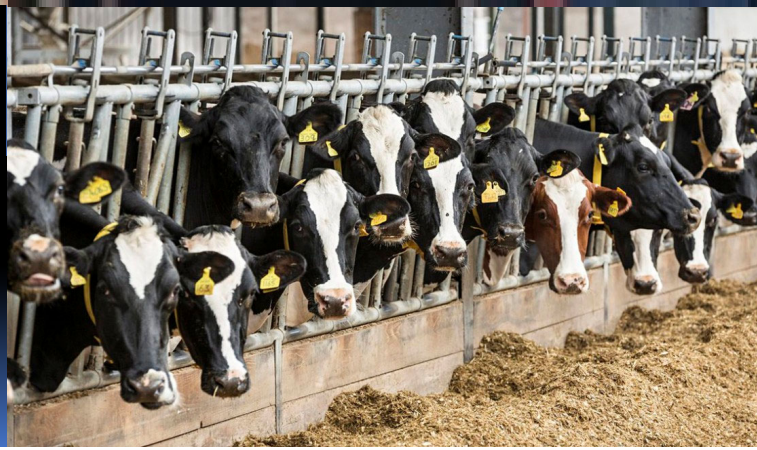
Climate Change – The Situation



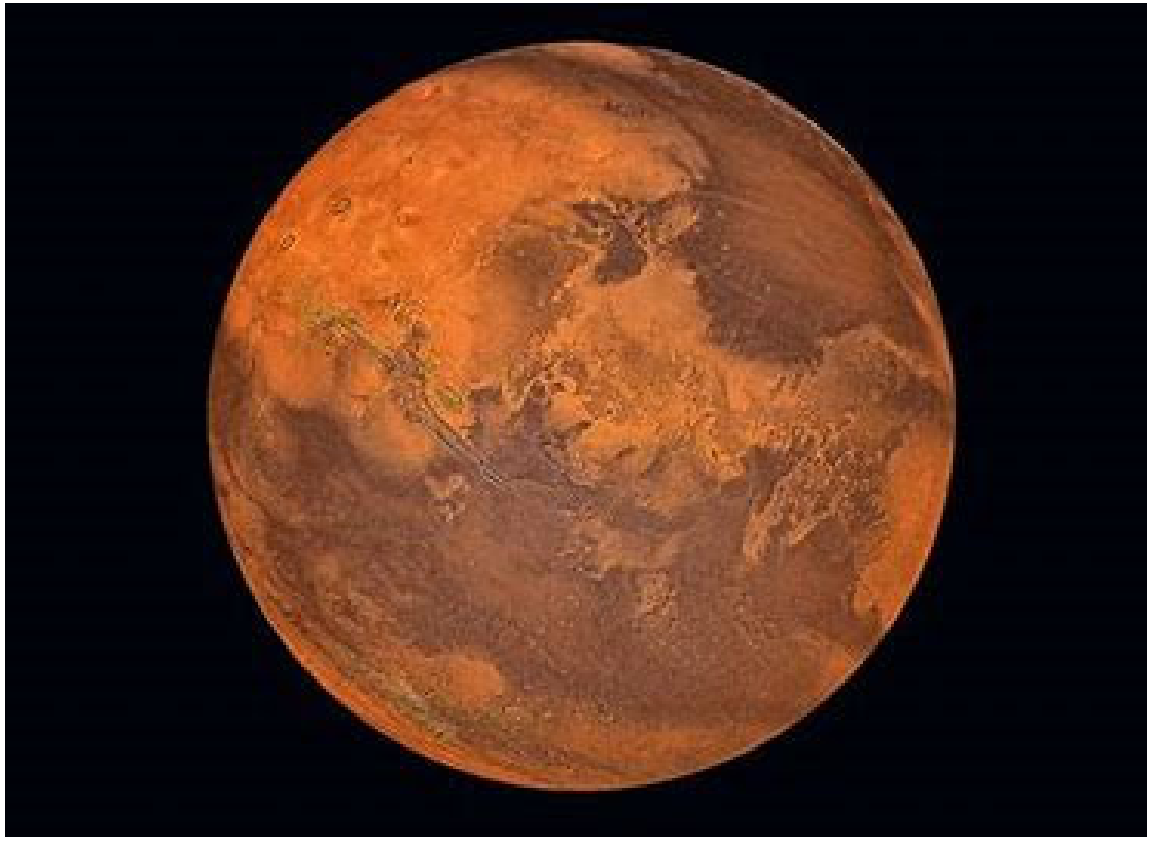


The Consequences

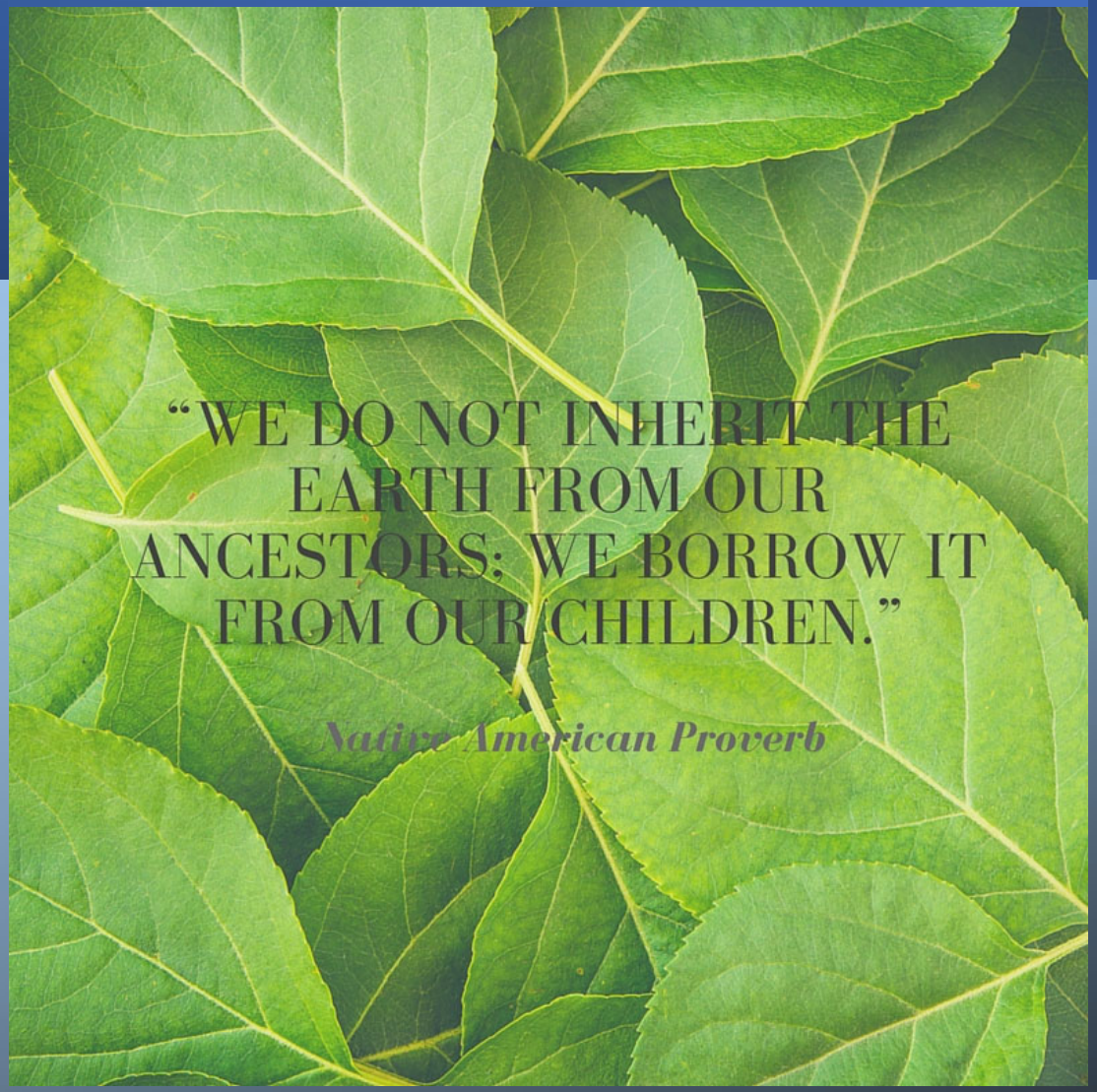
The Causes



Need to Change Approach or Else…



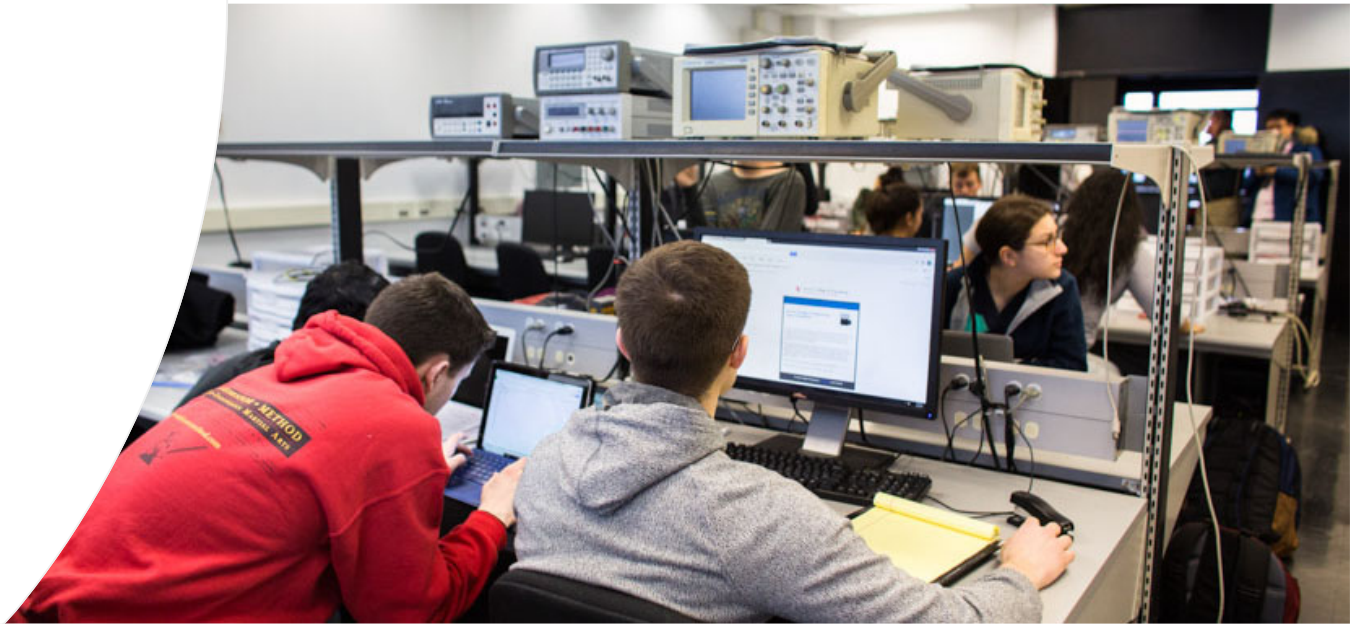
Can we Learn Lessons from Previous Generations?


“WE DO NOT INHERIT THE EARTH FROM OUR ANCESTORS; WE BORROW IT FROM OUR CHILDREN.”
Native American Proverb

What direction should we go in?

Do HEIs have a role?

- Absolutely
- HE community is very responsible for the current position
- Significant proportion of our population engage in HE
- Need to lead in embedding sustainability in human mindsets



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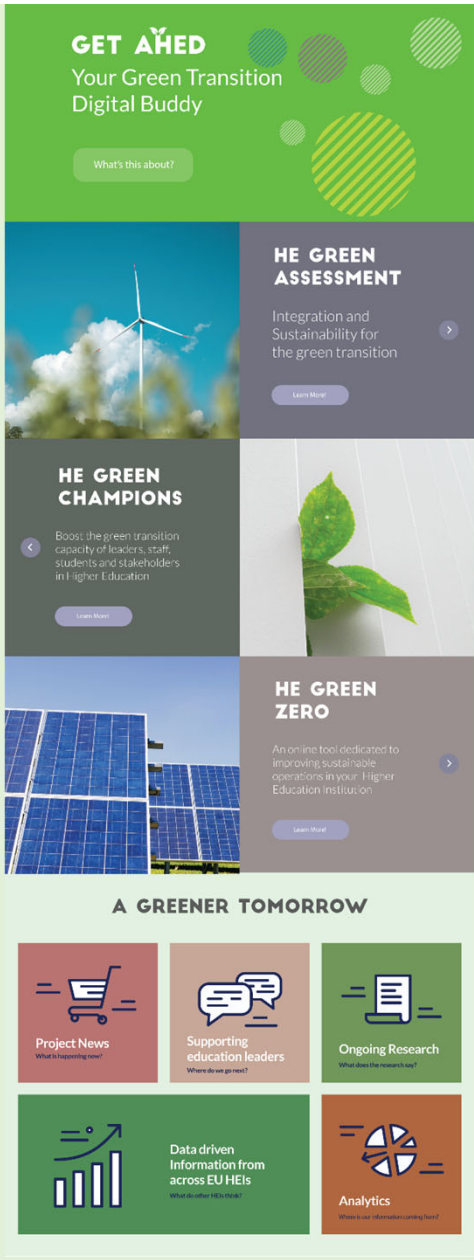
Sustainability and the Green Transition within the HE sector



How are Higher Education Institutions Doing?

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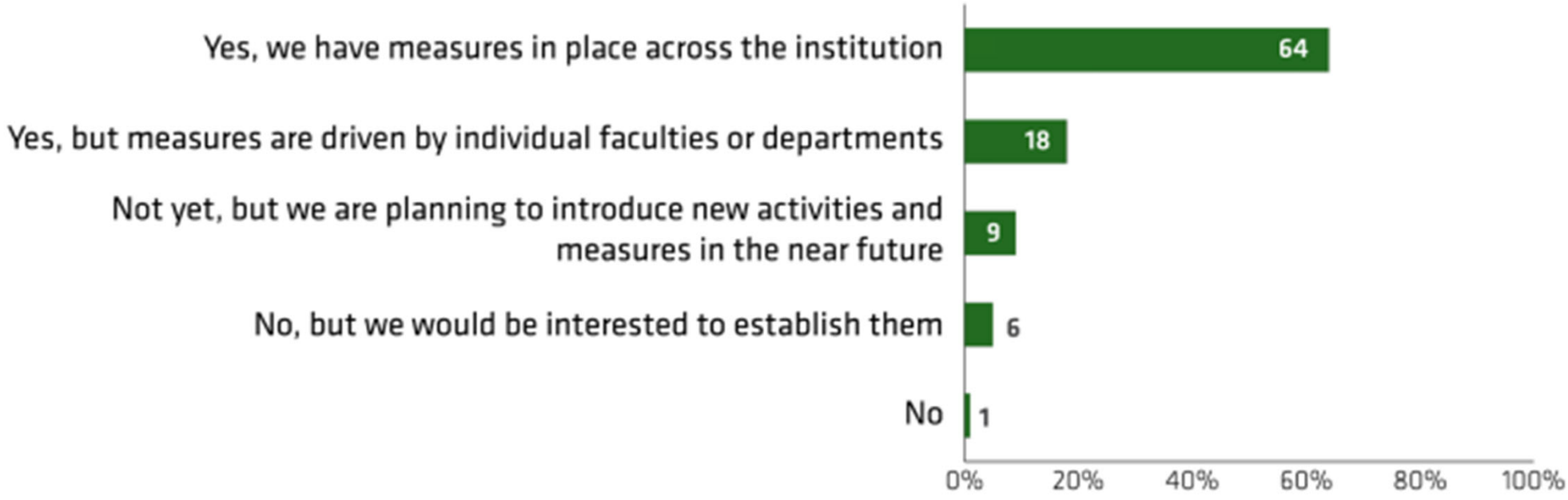
EUA greening survey, 2021 (1)



N=372. Q5: Does your institution have any greening measures in place? Please select one option.

EUA greening survey, 2021 (2)

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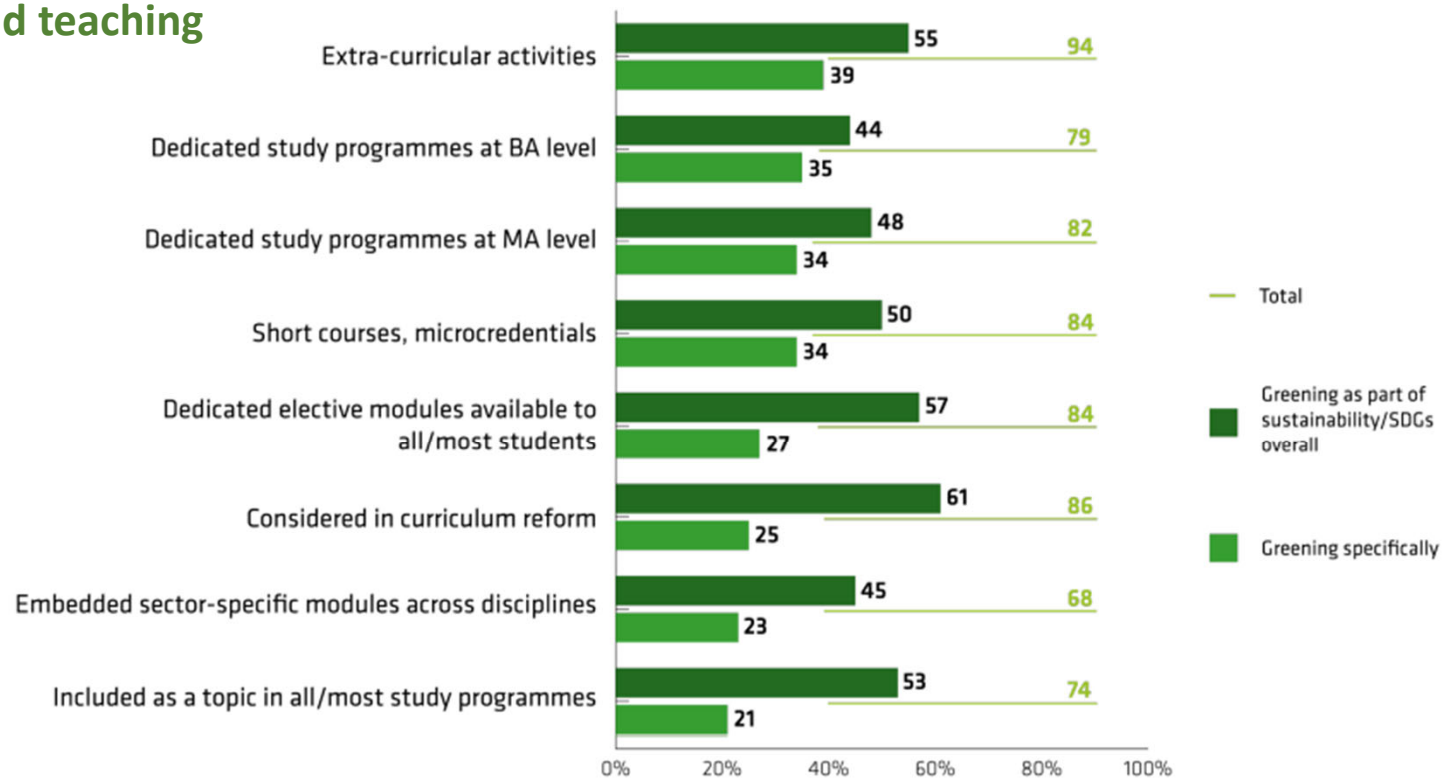
Learning and teaching



N=305. Q6: Which of the following activities and measures take place at your institution? Please select all that apply in the following categories.

EUA greening survey, 2021 (3)

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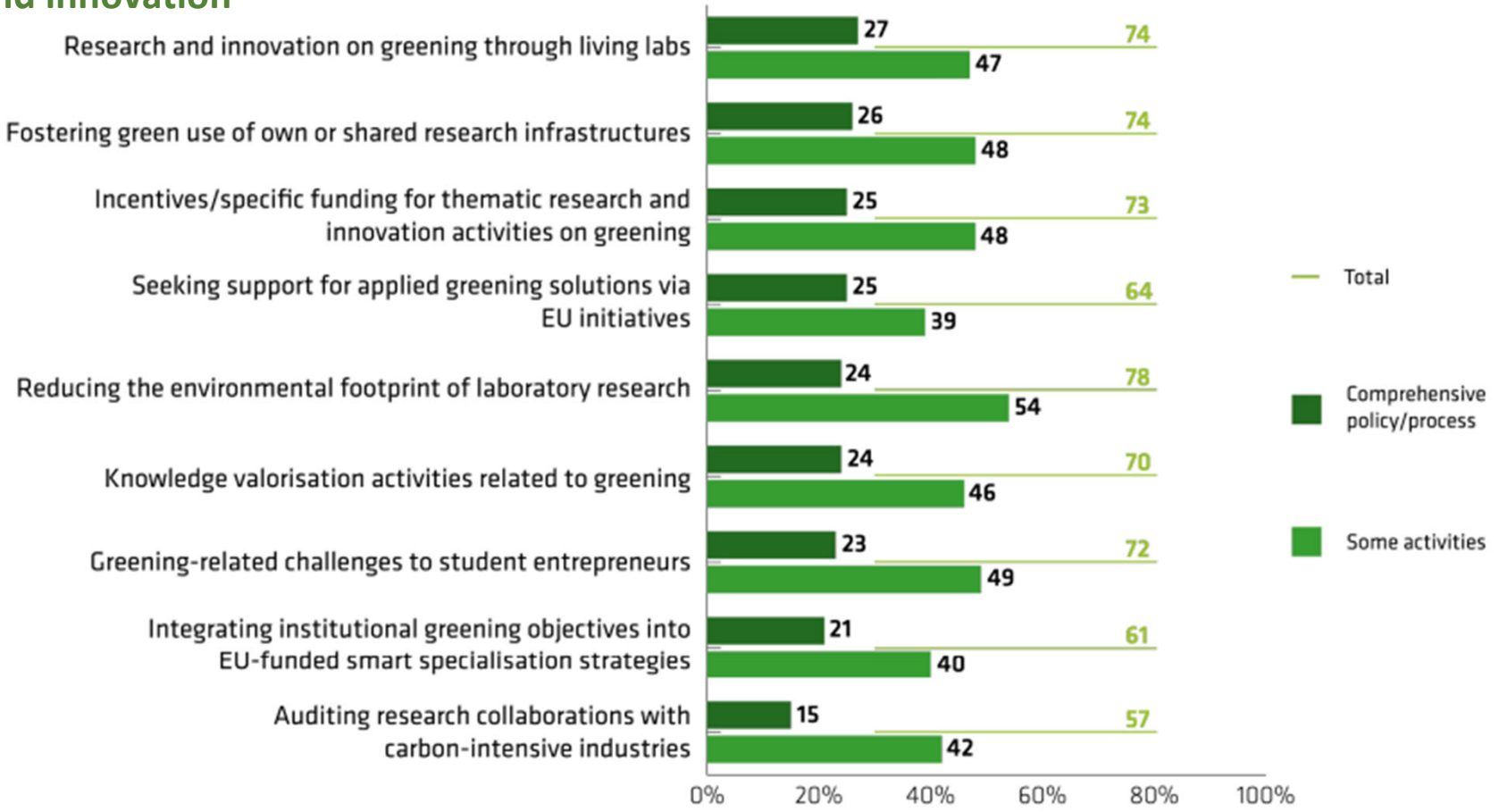
Research and innovation



EUA greening survey, 2021 (4)

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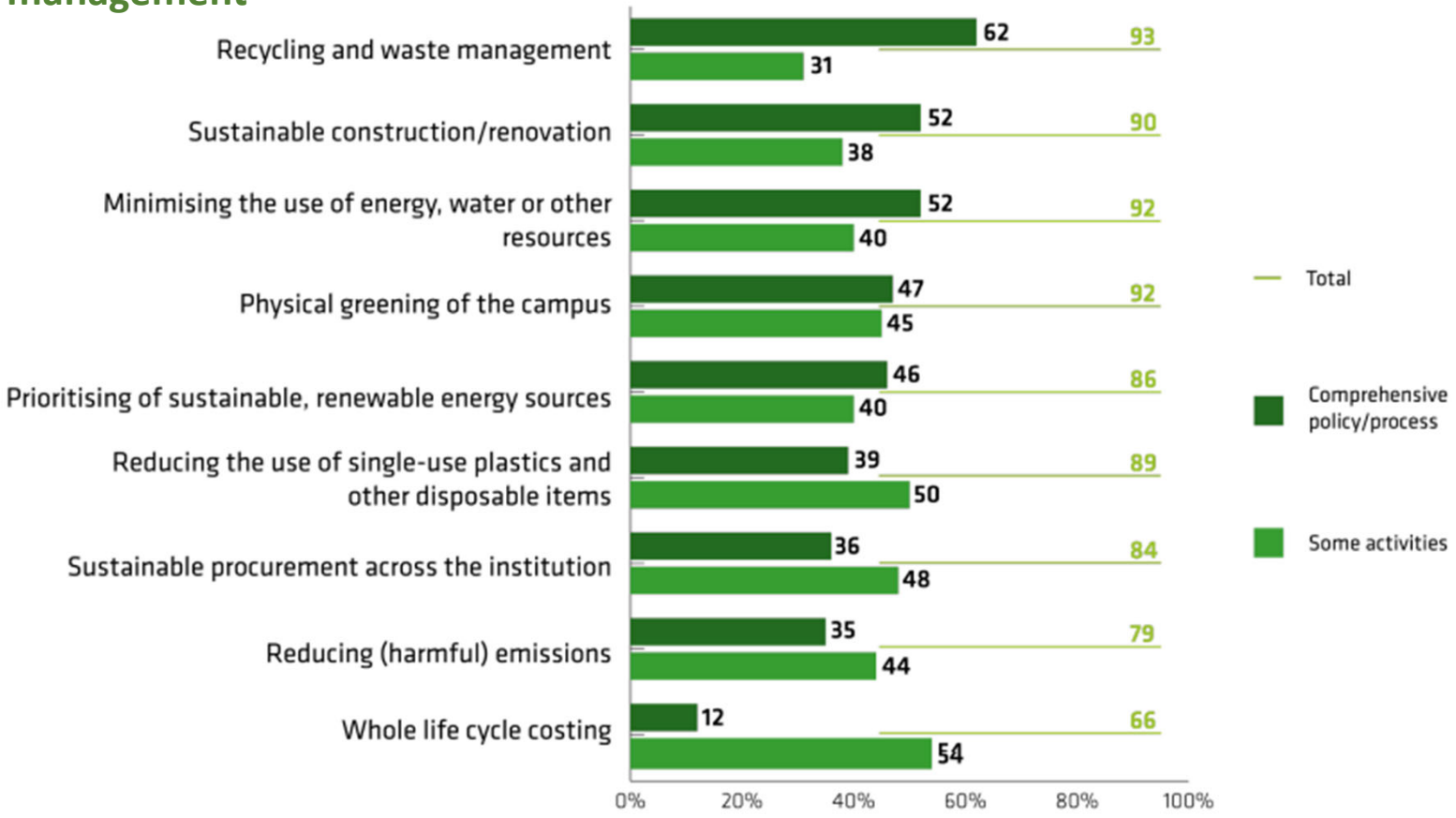
Campus management



EUA greening survey, 2021 (5)

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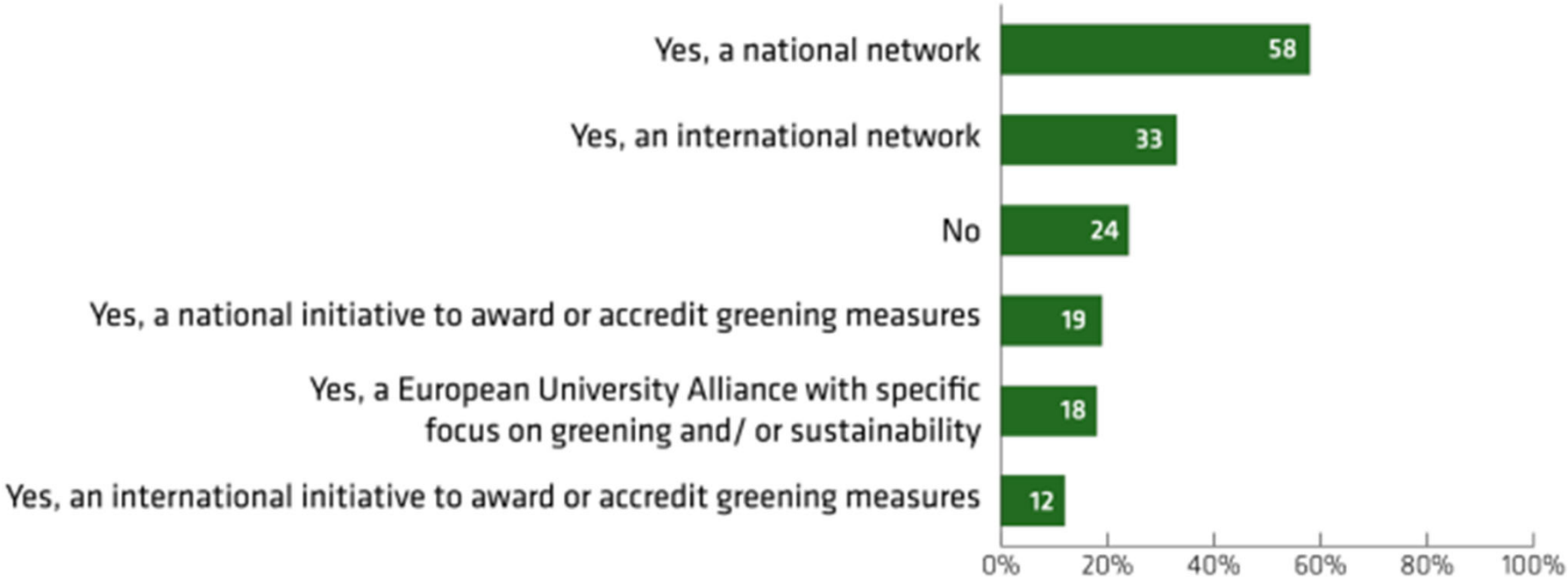
Networks



N=305. Q8: Are you part of any networks or working groups on greening? Please select all that apply.

EUA greening survey, 2021 (6)

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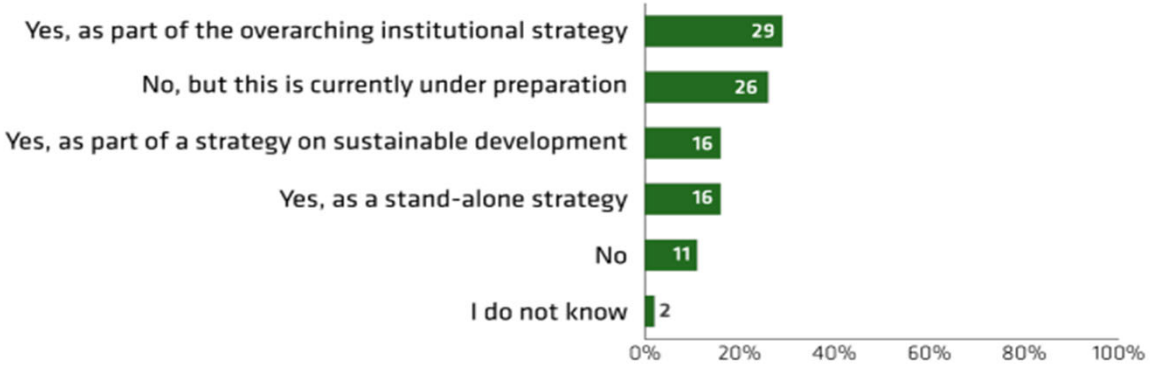
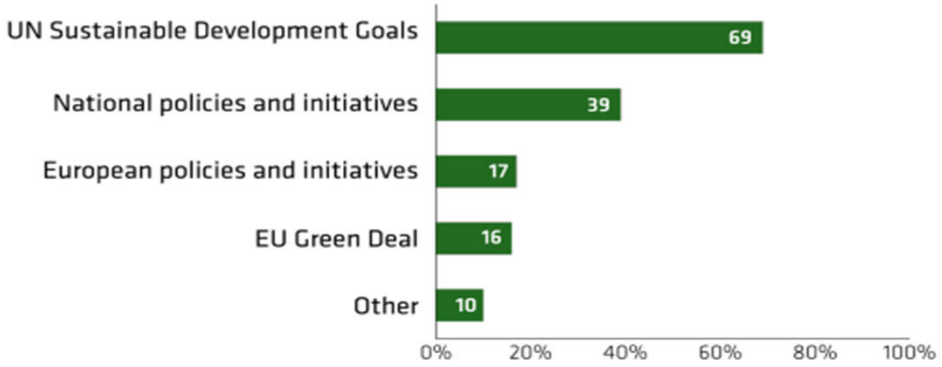
Strategy



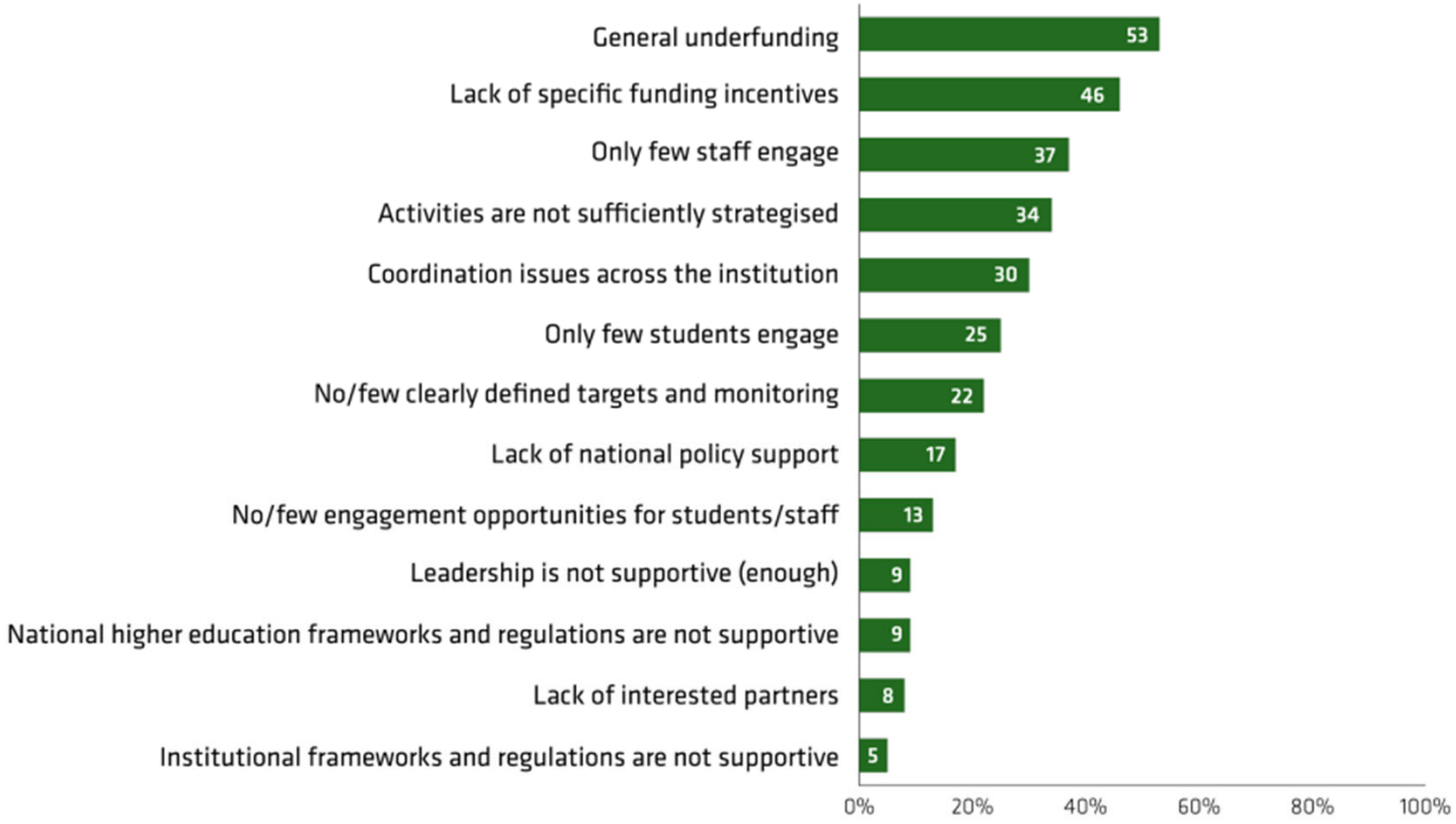
N=305. Q8: Are you part of any networks or working groups on greening? Please select all that apply.



N=185. Q9.1: If yes, does your strategy explicitly relate to any of the following? Please select all that apply.

EUA greening survey, 2021 (7)

Barriers



N=305. Q13: Which barriers does the implementation of greening measures face at your institution? Please select up to five barriers.

Examples of HEIs with a focus on greening (1)

Trinity College Dublin

Sustainability has been at the heart of Trinity College Dublin for many years. The university's green campus committee was founded back in 1993 and the university published its first sustainable development policy in 2008. Trinity's Strategic Plan for 2020-2025 includes research for impact and sustainability among its priorities and articulates nine cross-cutting goals relating to sustainability.

These include reducing the university's carbon footprint, improving energy use, waste reduction, sustainable transport and biodiversity, and ensuring all new buildings are based on sustainability principles. The Martin Naughton E3 Learning Foundry is Trinity's flagship project in sustainability, and all disciplines and schools will need to be aligned and involved to make a contribution to achieving the SDGs.

Examples of HEIs with focus on greening (2)

Prince Sultan University – PSU is the first *Carbon Neutral*-certified company in the MENA-region. The university is working with Climate Impact Partners to assess the greenhouse gas emissions and take steps to reduce emissions through internal emission reduction activities. Projects are being supported to support Renewable Energy installations.

Prince Sultan University is the First Saudi University to Pledge Net Zero Carbon University by 2060. Race to Zero for Universities and Colleges campaign is run in partnership with EAUC, Second Nature and UN Environment. PSU's Center for Sustainability and Climate (CSC) "transforms commitments into action" and builds a decarbonized, more sustainable world, driving technological and economic transformations to realize sustainable competitive advantage. It also coordinates, promotes, and accelerates interdisciplinary research and training on sustainability and climate, and the role of humans in the environment.

Has the Digital Transformation Agenda Assisted with Embedding Greening and Sustainability in HE?

GET-AHED

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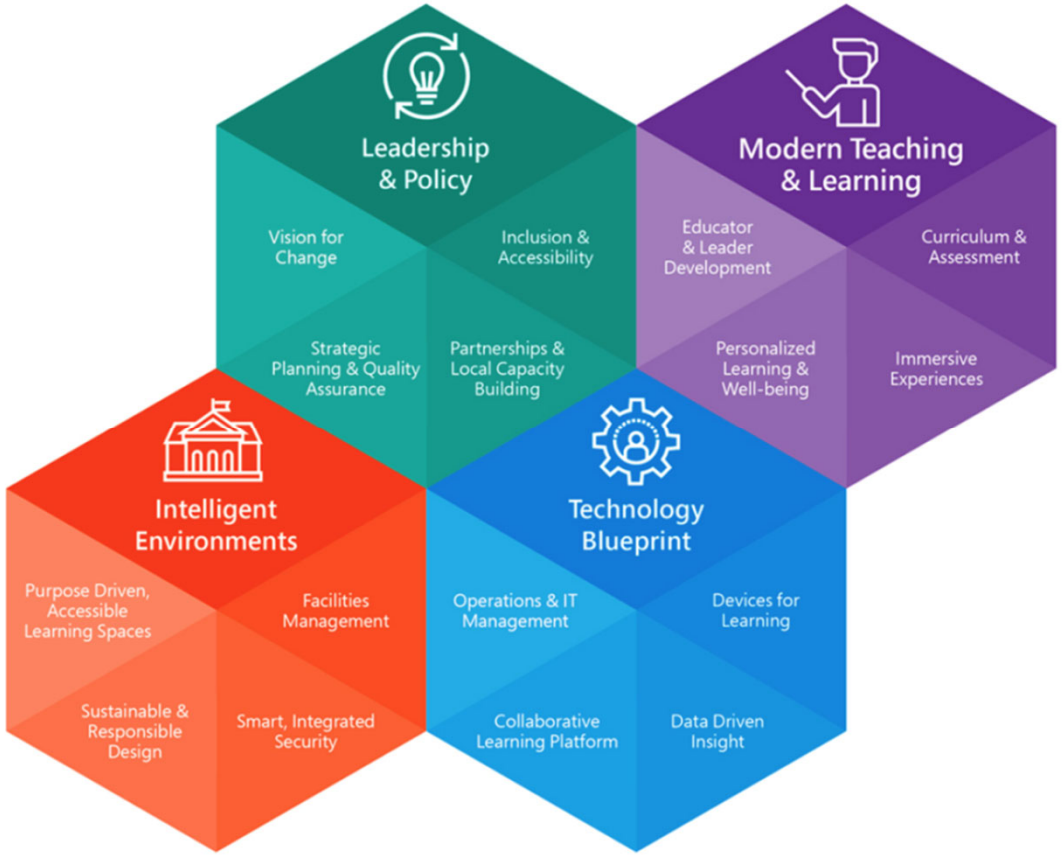
Wudqvirup dwlrq#Iudp hz run



Digital Sustainability Tools for HEIs

- Since the early 2000s, digital sustainability tools for HEIs have emerged and are nowadays numerous and widespread.

These digital tools have had many functions including

- (i) supporting self-assessment of the integration of sustainability within institutional strategies and activities
- (ii) improving awareness of sustainability among staff and students
- (iii) improving sustainable operations in areas such as energy and transport.

Sustainability Assessment Tools (SATs)
72 currently available

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AISHE 2.0
Assessment Instrument for Sustainability in Higher Education

AMAS
Adaptable Model for Assessing, Sustainability in Higher Education

ASSC
Assessment System for Sustainable Campus

AUSP
Evaluación de las políticas universitarias de sostenibilidad como facilitadoras para el desarrollo de los campus de excelencia internacional

BIQ-AUA
Alternative University Appraisal

CITE-AMB
Red de Ciencia, Tecnologia, Innovacion y Educación Ambienal em Iberoamerica

DUK
German Commission for UNESCO AG HS

ESDGC
Education for Sustainable Development and Global Citizenship

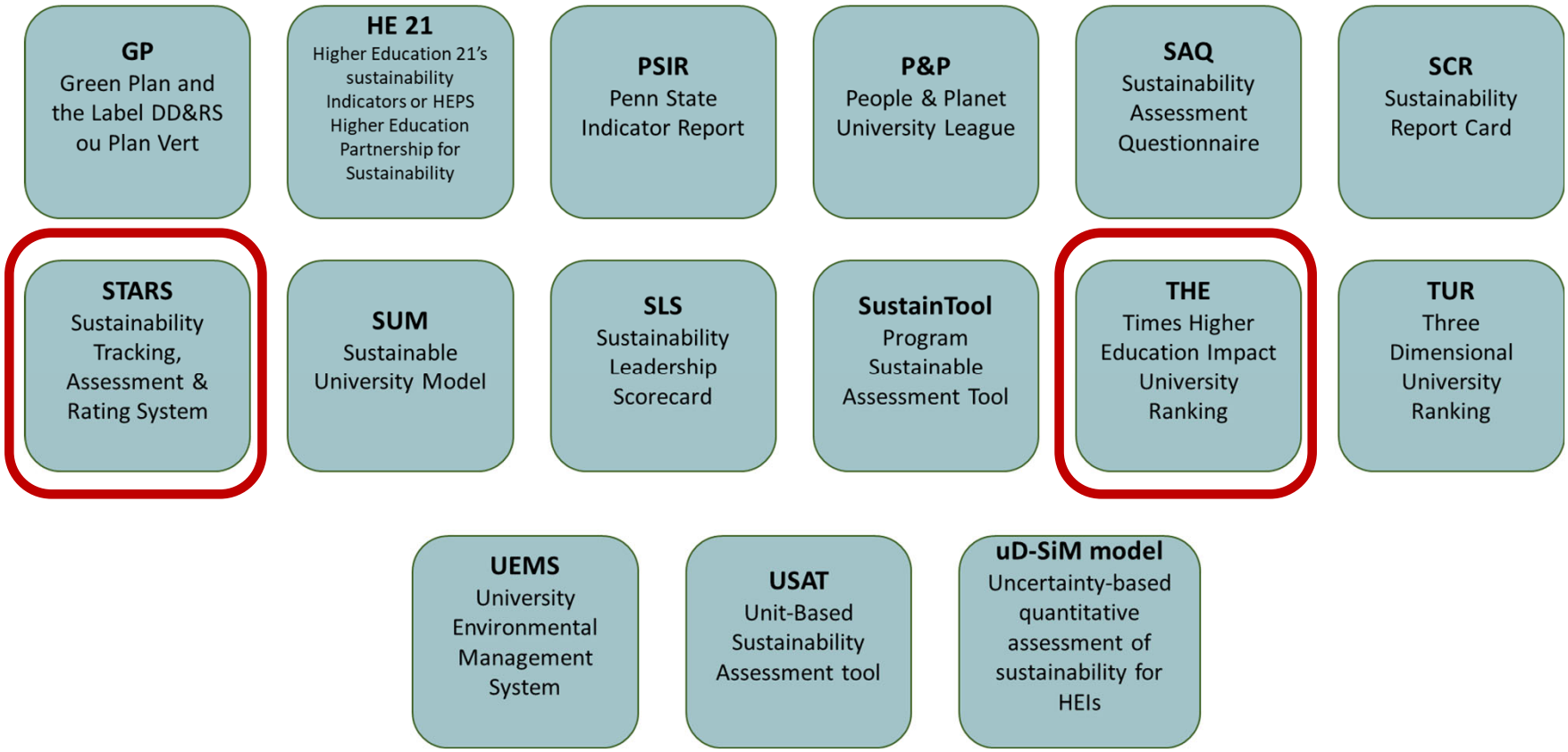
GASU
Graphical Assessment of Sustainability in Universities tool

GC
Good Company's Sustainable Pathways Toolkit

GM
Green Metrics University Ranking

GMID
Graz Model for Integrative Development

3 – Highlighted Sustainable Assessment Tools (SATs)



Examples - Sustainability Assessment Tools

- Sustainable Campus Assessment System (ASSC) – focus on campus sustainability, sustainability education and research, living laboratory, students involvement (Hokkaido University, 2013)
- Sustainability Tracking, Assessment and Rating system (STARS) – transparent, self reporting framework for HEIs to measure their sustainability performance (Association for the Advancement of Sustainability in Higher Education, AASHE)
- Assessment Instrument for Sustainability in Higher Education (AISHE) – originally developed by Dutch Foundation of Sustainable Higher Education 2001, more recently „AISHE 2“ by an international group (NL, SE, AT, ES)
- Graphical Assessment of Sustainability in Universities (GASU) – to facilitate the analysis, longitudinal comparison and benchmarking of HEIs‘ sustainability efforts
- Impact Rankings 2023 | Times Higher Education (THE) the only global performance tables that assess universities against the United Nations’ Sustainable Development Goals (SDGs)

Examples – Awareness and Training

- https://greenchampions.businessenergyscotland.org/
- https://www.gepenv.co.uk/training/our-courses/green-champions-environmental-engagement-gep-certified
- https://www.uhi.ac.uk/en/students/get-involved/environment-sustainability/uhi-green-champions-network/
- https://warwick.ac.uk/sustainability/environment/gettinginvolved/greenchampions/
- https://www.culturehive.co.uk/resources/guide-to-green-champions-building-competency-and-capacity/

Existing Examples - Energy

- https://greenzero-ax.com
- https://www.seai.ie/energyacademy/
- https://portsmouth.netzero-training.com/
- https://www.zerocarbonacademy.com/
- https://green-business.ec.europa.eu/eco-management-and-audit-scheme_en
- https://international-sustainable-campus-network.org

GET-AHED

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Green Education and Transition – A Higher Education online Digital Buddy

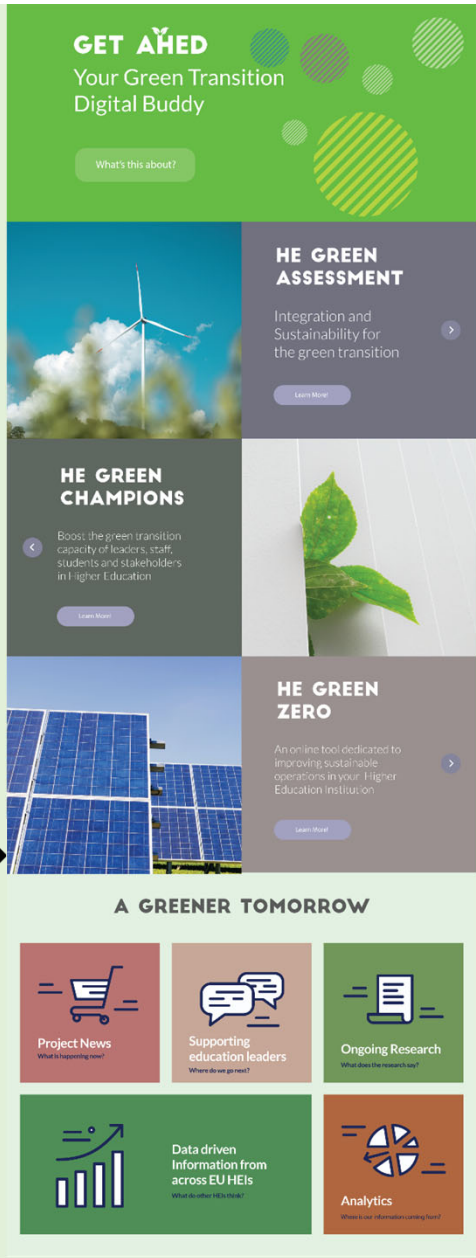
WPZ Research GmbH

universidade de aveiro
theoria poiesis praxis

MTU
Ollscoil Teicneolaíochta na Mumhan
Munster Technological University

University of Ruse
"Angel Kanchev"

FH Vorarlberg
University of Applied Sciences



February 1, 2023 – January 31, 2026

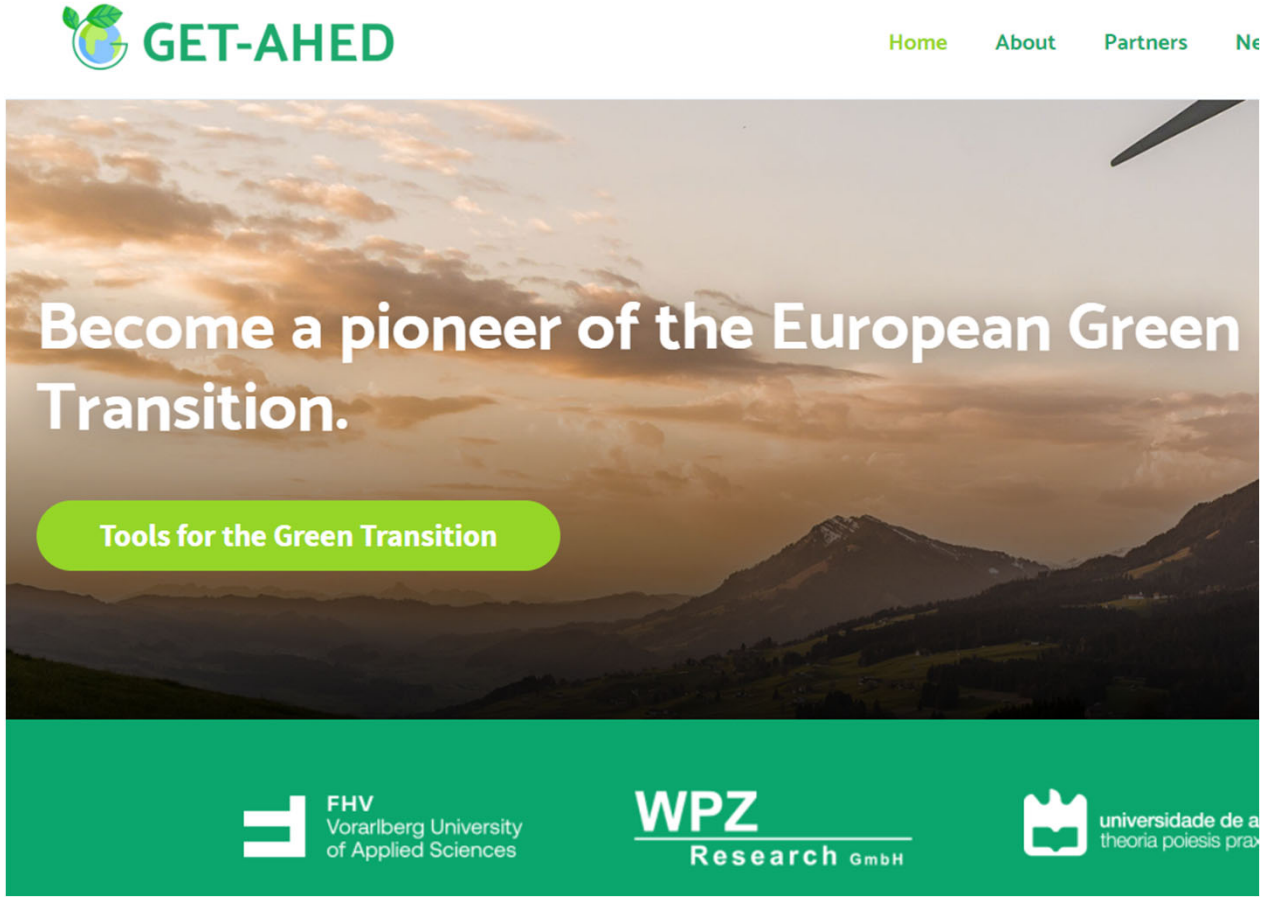
Project Characteristics

GET-AHED

- **Project starting date**: February 1, 2023
- **Project duration**: 36 months
- **Call**: ERASMUS-EDU-2022-PI-FORWARD
- **Topic**: ERASMUS-EDU-2022-PI-FORWARD-LOT1
- **Type of action**: ERASMUS Lump Sum Grants
- **Granting Authority**: European Education and Culture Executive Agency (EACEA)

Co-funded by the European Union

Project website: **www.get-ahed.eu/home**



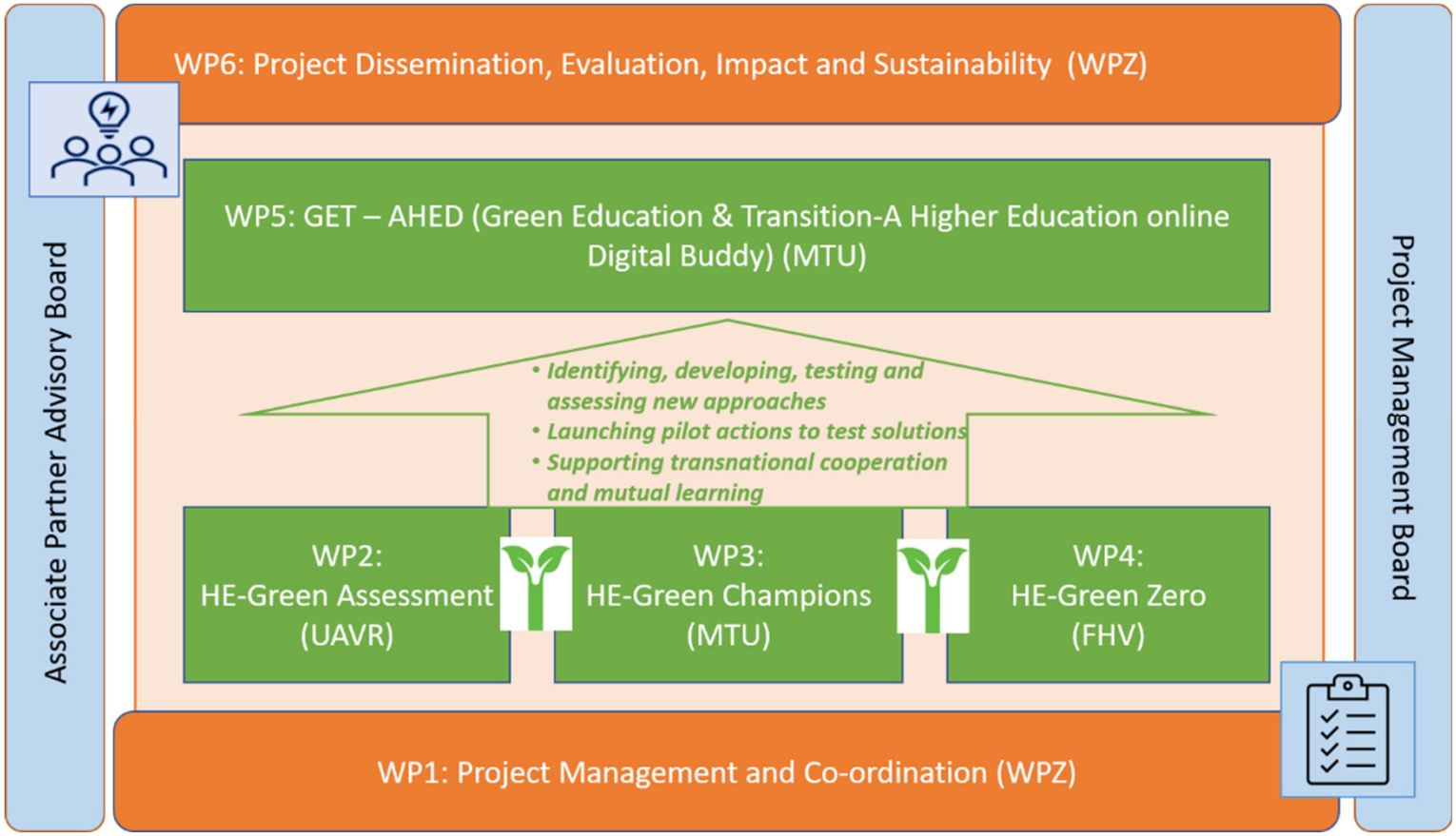
GET-AHED

- A **digital platform developed** in consultation with:
  - a number of associate partner EU ministries,
  - HEI representative bodies and
  - an existing European University alliance
- Which will provide HEIs across the EU with a **range of online tools to enable them to implement the EU's Green Transition** and Green Education and Training priorities.
- GET-AHED will act as a **green transition digital buddy** for the HE community across the EU.

GET-AHED

- The platform will provide a range of tools to allow a multiple of HE stakeholder groups to **promote and develop whole institutional approaches to sustainability** which will focus on:
  - Designing, implementing, and monitoring institution sustainability plans
  - Supporting Higher Education leaders, in embedding sustainability into all aspects of the institution's operations
  - Supporting staff and students in promoting greater involvement in sustainability initiatives both internally and externally.
  - Designing, implementing, and monitoring approaches related to sustainability operations of a HEI and in particular energy and energy related systems

Get-AHED work packages



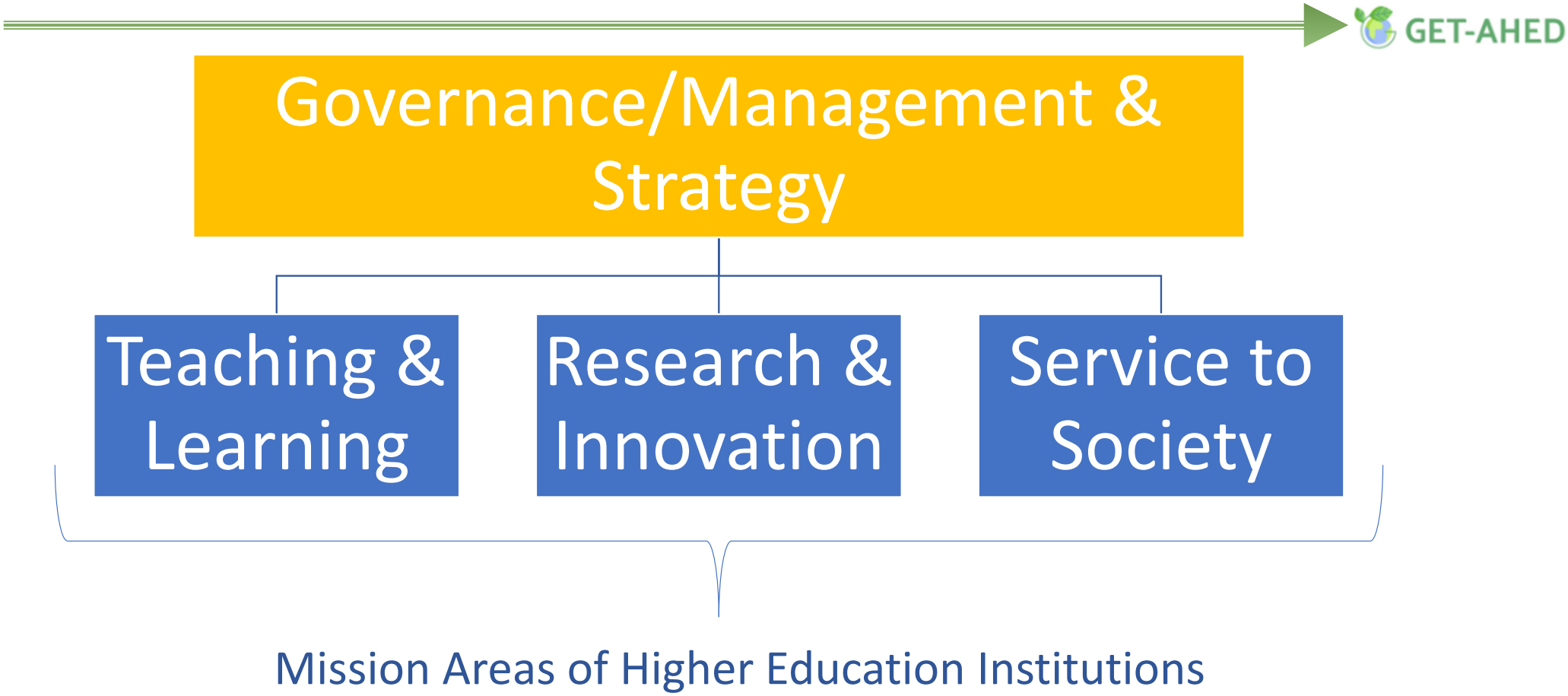
The Tools

- An online self-assessment tool (**HE Green Assessment**) whose design will be based on the model and principals of the EUs HEInnovate online self-assessment tool; which will allow HEIs to assess themselves in terms of the level of integration of sustainability and green transition across a range of indicators and dimensions
- An online training system (**HE Green Champions**) which will boost the green transition capacity of internal stakeholders in HEIs by providing learning initiatives for (i) HEI leaders to help them embed sustainability into the operations of a HEI, and (ii) staff and students which will support their involvement in sustainability initiatives and developing links with local community groups and other partners beyond the education institution.
- An online tool **(HE Green Zero)** dedicated to improving sustainable operations in the HEI relevant to energy and energy related systems focussed on the ultimate goal of achieving net zero energy on school/campus sites. The tool will be based on a range of available best practice examples and will be relevant to the dimensions and indicators of the HE Green Assessment tool

HE Green Assessment & HEInnovate

[Home | HEInnovate]

Conceptual model of HE Green Assessment



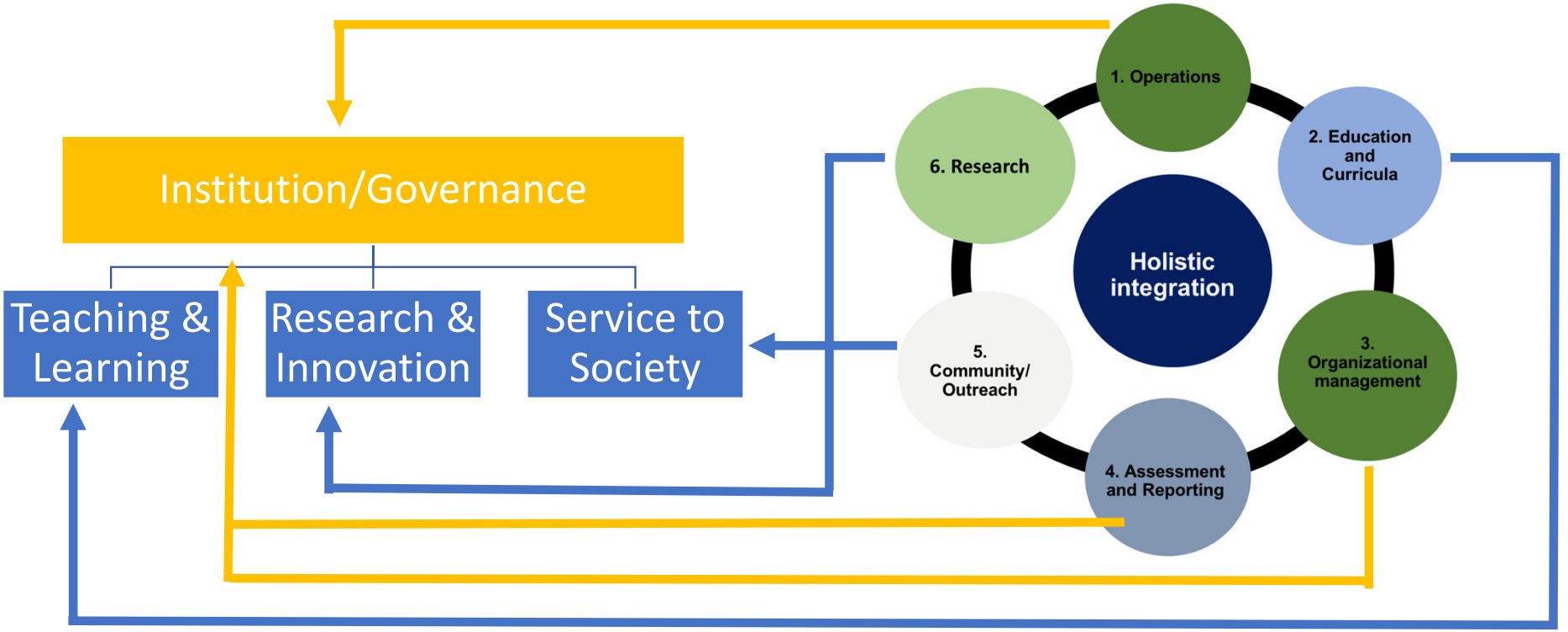
SAT Core Elements (Dimensions)

General core elements (Dimensions) identified in SATs:

- Operations
- Education
- Research
- Governance/Organizational management
- Community/Outreach
- Assessment and reporting

Adapted from Lozano et al. (2015a) and UNESCO (2012)

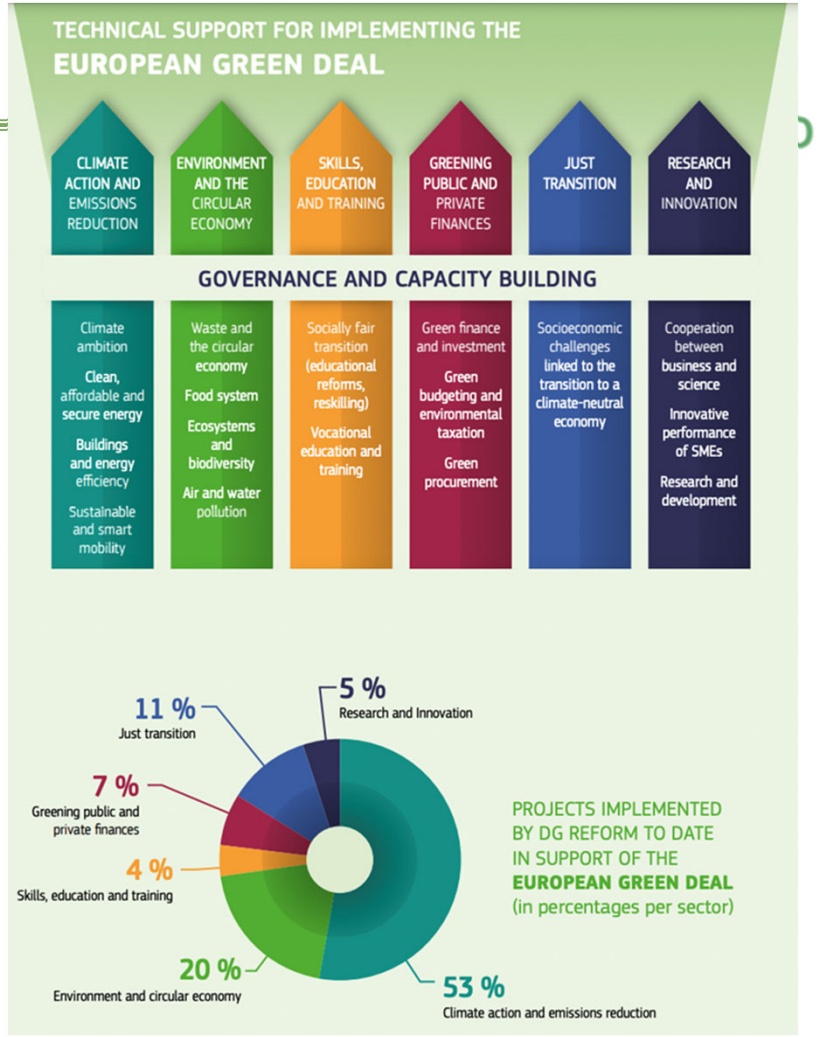
Element Mapping to HEI Functions and Missions



Adapted from Lozano et al. (2015a) and UNESCO (2012)

Sustainability Dimensions will need to link with European Green Deal Priorities

1. Climate Action and Emissions Building
2. Environment and the Circular Economy
3. Skills, Education and Training
4. Greening Public and Private Finances
5. Just Transition
6. Research and Innovation



The HE Green Champions training system

- Boost the green transition capacity of internal stakeholders
- Staff and Students
  - To support their involvement in sustainability initiatives both internally and externally through training and awareness tools
  - Components such as fact sheets, videos, quizzes, and training elements designed to increase awareness and drive change
- Leaders
  - Embed sustainability into the operations of a HEI
  - Training relevant to the sustainability dimensions and indicators of the self-assessment tool

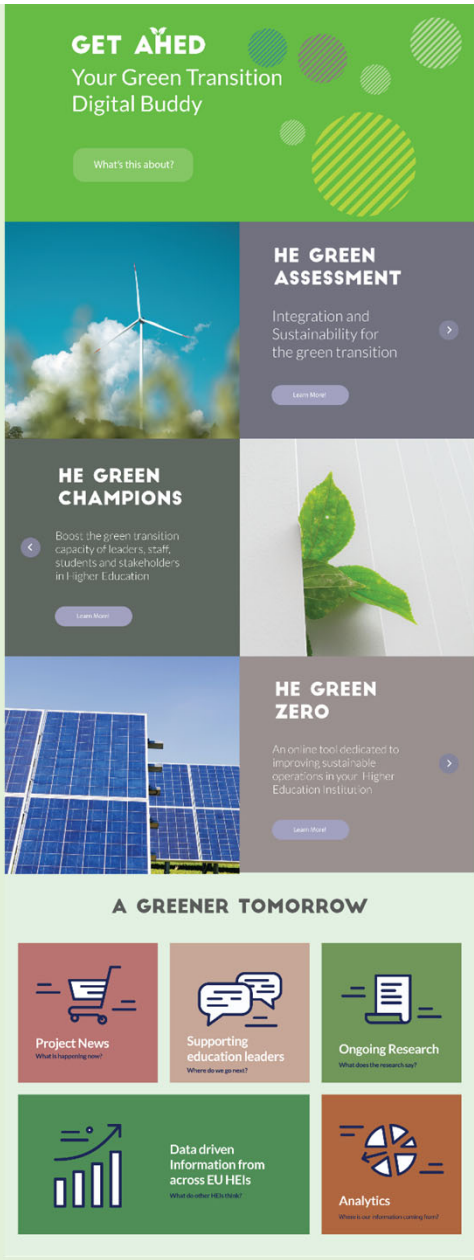
GET-AHED

Information, training and best practice examples in sustainability for HEI ***Leaders/Management*** to drive the green agenda

Information, training and best practice examples in sustainability for HEI ***staff*** to drive the green agenda

Information, training and best practice examples in sustainability for HEI ***students*** to drive the green agenda

Green Champion



The HE Green Champions training system

Training will need to take on lessons learnt from the following

- The United Nations Climate Change learning platform
- Business Energy Scotland
- Strategic learning for sustainability
- Sustainability for leadership
- Net zero training
- Zero carbon academy
- Establishing a ‘green champions’ network
- Learning for Sustainability Champions Training
- iiE Green Champion online course
- Green Champions Environmental Engagement (GEP Certified)
- The Green Teams Programme
- 50 shades greener education

2. The HE Green Champions training system

Resources

- Guidance on policy-writing, waste and energy use
- Case studies from Scottish Cultural organisations
- Maynooth University Energy Management Programme – TZC Case Study
- Templates, tips and resources
- Toolkit: Fostering green champions at work
- University College London green champion resources
- Evaluating green champions, their role, definitions and place in a HEI's carbon reduction strategy: Final Report

HE Green Zero

- Online tool with the ultimate goal of achieving net zero energy on school/campus sites. It will be based on available best practice examples, and it will be relevant to the dimensions and indicators of HE Green Assessment tool.
- Three step approach:

1) Review available good practices among the partner institutions and associated partners

2) Search and discover good practices outside our own networks

3) Peer reviews including relevant stakeholders from industry, policy, society and also students from relevant courses

Associate partners

Associate partners are drawn from, participating country ministries, HEI representative bodies and an existing European University

- Alliance of Sustainable Universities in Austria
- Austrian Ministry of Education, Science and Research
- Bulgarian Ministry of Education and Science
- EAIR – The European Higher Education Society
- Irish Higher Education Authority
- Portuguese Erasmus+ Education and Training National Agency
- Regional University Network – European University RUN-EU (*represented by FHV*)

Involvement of Associate Partners

- Up to date information in terms of current and future EU, national, sectoral and institutional level priorities, and initiatives relevant to delivering on the EU green transition which will inform the content of the GET-AHED platform
- Feedback on the progress and development of the platform directly from a range of potential end users
- Guidance and support on the dissemination, and sustainability of the platform across the EU HE community going forward
- Make sure that issues of inclusion, promotion of women and young academics are considered in developing HEIs towards green transition
- Support the sustainability of the platform in promoting its use across their HE systems and by making it readily available through their own mainstream HE sustainability initiatives.

The Result

- The GET-AHED platform will offer an intuitive and accessible user experience, while also ensuring access to an extensive range of material, presented in a practical and pedagogically effective format which also facilitates effective “real-world” transfer and impact for all users and stakeholders.

- A user oriented digital platform – **GET-AHED platform**
  - promoted with the assistance of associate partner ministries and HE bodies
  - being the basis of or be integrated into current and future EU led online green transition initiatives
  - having a reach and impact that will be far greater than traditional face to face conferences, seminars or training events

Sustainability is here to stay or we may not be.
Niall FitzGerald
quotefancy

GET-AHED