Co-funded by the European Union

ACCOUNT 4Green Eco

Project presentation and introduction to the teaching activity

Teaching Activity 1

Trento, October 25, 2023

UNIVERSIDAD DE BURGOS

Centre for Sustainability Management

LEUPHANA UNIVERSITÄT LÜNEBURG

MBS since 1897 MONTPELLIER BUSINESS SCHOOL

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Our goal

GENERAL OBJECTIVE

To develop an open and interactive sustainability accounting online learning environment, **the Sustainability Accounting Learning Platform for a Green Economy**, to promote the integration of this topic into the business and accounting curricula in the European Higher Education Area and support the green transition of the EU economy

Operational objective 1

To produce **high-quality and structured learning materials & resources** on sustainability accounting

Operational objective 2

To implement the learning materials & resources in an **open and interactive online learning platform**

Operational objective 3

To foster the **use of the learning platform** in accounting graduate programs and professional training

The Partnership

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LEUPHANA
UNIVERSITÄT LÜNEBURG

Partners

DIRSE
ASOCIACIÓN ESPAÑOLA DE DIRECTIVOS DE RESPONSABILIDAD SOCIAL

Associated partner

Our plan

ACCOUNT4GREENECO ROADMAP

1

LEARNING MATERIALS & RESOURCES (WP2)

Module 1
Module 1
Module 3

2

PLATFORM DEVELOPMENT (WP3)

Architecture & functionalities
Implementation of materials and resources

3

TEACHING ACTIVITIES (WP2)

Test & validation of materials
Student mobility

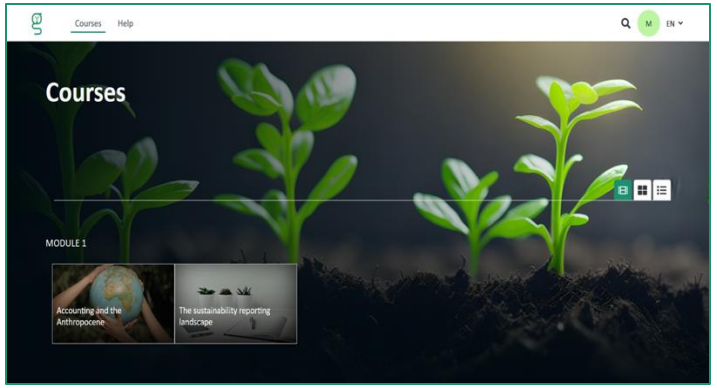
4

SHARING & PROMOTION (WP4)

During Project lifetime
S&P activities with lecturers and profesionals

GOAL

ACOUNT4GREENECO ONLINE PLATFORM



The course structure

Module 1 Sustainability accounting in the 21st century	Module 2 Sustainability accounting production	Module 3 Sustainability management accounting
Leading partner: **UBU** Supporting partner: **MBS** Feedback: **Leuphana** Delivered for implementation: **Jul 23**	Leading partner: **UniTrento** Supporting partner: **MBS** Feedback: **UBU** Delivered for implementation: **May 24**	Leading partner: **Leuphana** Supporting partner: Feedback: **UniTrento** Delivered for implementation: **Mar 25**
TA1: **Trento (UniTrento, Oct 23)**	TA2: **Lüneburg (Leuphana, Sep 24)**	TA3: **Burgos (UBU, Jul 25)**
U1.1. Accounting and the Anthropocene **U1.2. The sustainability reporting landscape**	**U2.1. Sustainability accounting regulation** **U2.2. Sustainability reporting assurance**	**U3.1. Fundalmentals of sustainability management accounting** **U3.2. Internal control for sustainability information**

Teaching activities

Goal of the teaching activities

For the project:

- To **validate** the resources and materials integrated into the online platform
- Gather students during the platform's development to test it and ensure its **usability and quality**

For the students:

- Develop knowledge on **sustainability accounting**
- Expose yourself to an alternative **form of (digital) learning**
- Interact in an **international environment**

The course structure

Year 1	Year 2	Year 3
Module 1 **Sustainability accounting in the 21st century**	**Module 2** **Sustainability accounting production**	**Module 3** **Sustainability management accounting**
Leading partner: UBU **Supporting partner:** MBS **Feedback:** Leuphana **Delivered for implementation:** Jul 23 **TA1:** Trento (UniTrento, Oct 23)	**Leading partner:** UniTrento **Supporting partner:** MBS **Feedback:** UBU **Delivered for implementation:** May 24 **TA1:** Lüneburg (Leuphana, Sep 24)	**Leading partner:** Leuphana **Supporting partner:** **Feedback:** UniTrento **Delivered for implementation:** Mar 25 **TA1:** Burgos (UBU, Jul 25)
U1.1. Accounting and the Anthropocene	**U2.1.** Sustainability accounting regulation	**U3.1.** Fundalmentals of sustainability management accounting
U1.2. The sustainability reporting landscape	**U2.2.** Sustainability reporting assurance	**U3.2.** Internal control for sustainability information.

Teaching activity 1

Teaching Activity 1: University of Trento

Teaching Activity 1: University of Trento

Oct 24, Tue	Oct 25, Wed	Oct 26, Thu	Oct 27, Fri
Morning/afternoon Travel to Trento **7pm – 8pm** Welcome reception	**9 am-10 am** Project presentation and introduction of TA1 **10 am-1 pm** Unit 1.1. Accounting and the Anthropocene **1 pm-2.15 pm** Lunch **2.30 pm-3.30 pm** Seminar C. Larrinaga: Accounting and the Anthropocene **4 pm-6 pm** Museo Diocesano **7.30 pm** Dinner	**9 am-10 am** Seminar S. Schaltegger: sustainability accounting and reporting from a multi-level perspective **10.15 am-1.15 pm** Unit 1.2. The sustainability reporting landscape **1.15 pm-2.30 pm** Lunch **2.45 pm-4 pm** Seminar L. Parker: Writing research **4 pm-4.30pm** Student's feedback **4.30pm-5 pm** Closing session **7.30pm** Farewell dinner	Travel back

Teaching Activity 1: University of Trento

- **24 selected students**
  - Six students from each university (Leuphana, MBS, UBU, UniTrento)
  - Prior knowledge of/interest in (sustainability) accounting
  - English skills

The floor is yours!

Some important information

- **Documentation**
  - Attendance list per session
  - Data protection document
- **Certificate of attendance**
  - Attend all sessions
  - Provide feedback by filling in the questionnaires in the specific session
- **Continue testing the platform after the session**
  - The platform will be available for use during the next 10 days!

Teaching Activity 1: University of Trento

Oct 24, Tue	Oct 25, Wed	Oct 26, Thu	Oct 27, Fri
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ACCOUNT 4Green Eco

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ACCOUNT 4 Green Eco

Unit 1.1. Accounting and the Anthropocene

Teaching Activity 1

Trento, October 25, 2023

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Teaching activity 1

Course materials – online platform

1. Sustainability reporting as a corporate practice

1.1. Defining sustainability reporting

The emergence of sustainability reporting

Traditionally, companies have produced financial statements to provide information on their financial performance to their shareholder and investors. This practice reflects what is considered the common and widespread conception of accounting as financial accounting. However, the growing **societal concern for the impacts of corporations on the environment and society** has increased the pressure on them to report also on how they are managing and mitigating those environmental and social impacts (Gray, 2006). This situation recognizes that firms, and organizations in general, should be held accountable not only to their providers of financial capital, but also to those stakeholders to which they relate (Gray et al., 1996).

As a consequence of this recognition, some organizations have published reports covering aspects about their social and environmental impacts for almost five decades. However, the **form and content of these reports have evolved significantly** during this period. In the 1970s, firms published social reports that provided information around how they managed certain social issues. The practice changed into environmental reports at the end of the 1980s and beginning of the 1990s driven by the dramatic environmental disasters that happened around this time (such as the 1984 Bhopal disaster in Indian, or the 1989 Exxon Valdez spill in Alaska), which increased society's spotlight on environmental impacts. Since the late 1990s and beginnings of the 2000s, corporate reports have broaden their coverage to inform about the social, environmental and economic impacts of business (the understanding of the economy in these reports goes beyond financial performance, as they consider how companies broadly affect the economies in which they operate, for instance by creating jobs, paying taxes, or supporting infrastructure development). This form of reporting is the most common nowadays and it is usually known as sustainability reporting.

> **Sustainability reporting** refers to the practice of producing reports that explain how organizations manage their social, environmental and economic dimensions of their businesses by informing about their priorities, policies and actions, as well as the impacts, both positive and negative, of their operations in those areas.

The main outcome of sustainability reporting is known as **sustainability report**. Yet, other labels may also be used to refer to these reports, such as corporate social responsibility report, CSR report, corporate citizenship report, non-financial report, among others. Usually, these are stand-alone reports that are published independently from the financial statements and accounts, although it is very common that both documents refer to the same reporting period (Tregidga & Laine, 2021). Regulation is driving such a greater alignment between sustainability and financial reporting. The different sustainability reporting regulatory pieces that are being enacted worldwide, especially in Europe are promoting the role of sustainability reporting to be considered as of similar importance to financial reporting. Furthermore, regulation is also recognizing the interconnectivity between both reporting pillars. The requirements of regulation, which will be detailly covered in Module 2, are in some cases even mandating that the sustainability report should be provided as an element of annual reports.

Video about definition of sustainability reporting, anticipating purpose (see file XXXX.docx)

The purpose of sustainability reporting

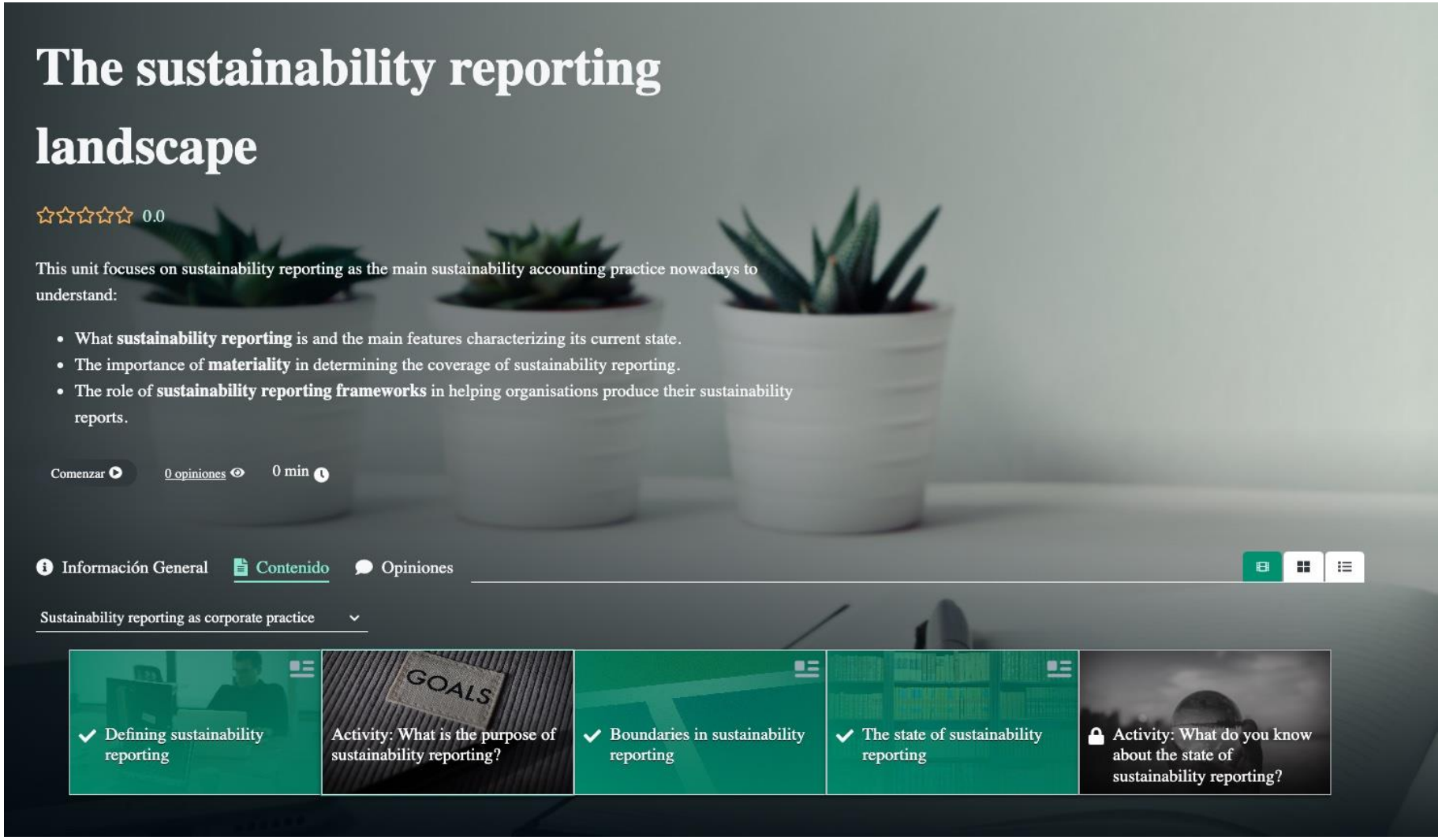
Usually, sustainability reporting has been understood as a tool through which organizations are made accountable to their stakeholders for their impacts (Tregidga & Laine, 2021). However, the increasing awareness of financial capital providers about the potential effect of sustainability on firms' financial performance has determined other objectives that sustainability reporting may support. Therefore, broadly speaking, sustainability reporting may serve **three main purposes:** accountability, valuation, and stewardship (Cooper & Michelon, 2022).

> **Purposes of sustainability reporting**
>
> - From an **accountability perspective**, sustainability reporting aims to provide an organization's stakeholders with information that allows them to assess how it manages the social and environmental impacts that its business generates (Gray et al., 1997).
> - From a **valuation perspective**, sustainability reporting aims to provide financial capital providers – namely, shareholders and investors – with information that allows them to evaluate their investments' future value .
> - From a **stewardship perspective**, sustainability reporting aims to provide financial capital providers with information that allows them to assess the use of the capital they provided to the organization.

The three different purposes ascribe different **levels of organizational responsibility.** The accountability perspective conceives organizational responsibility broadly. An organization is not only expected to be responsible to those stakeholder providing financial capital, but also all to all of them that suffers from the impacts that its activity creates. Therefore, this approach recognizes that organizations relate to a variety of stakeholders, with different views and needs, that must be acknowledge and consider in the production of sustainability reports.

Purpose activity (see file XXXX.docx)

Course materials – online platform

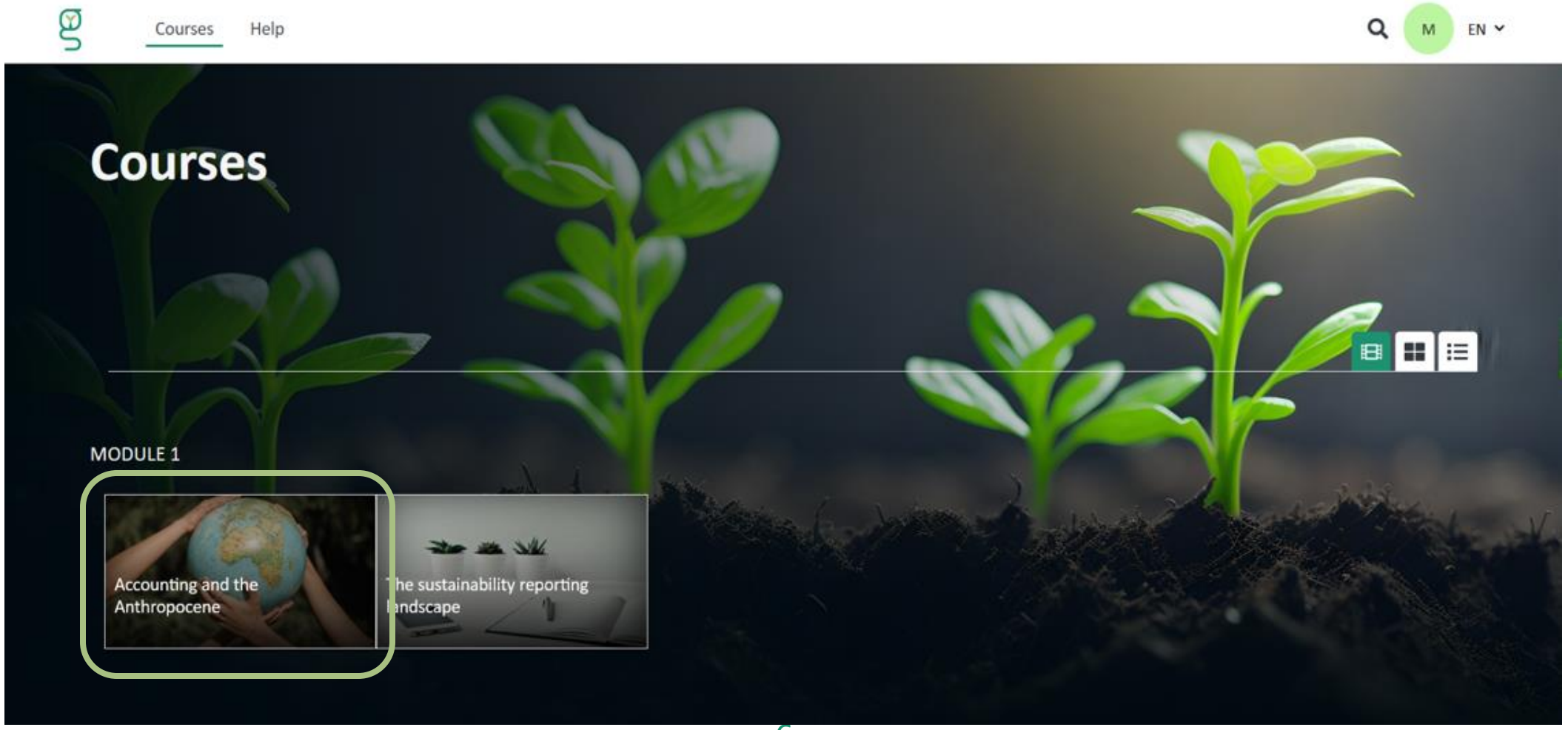


Online platform

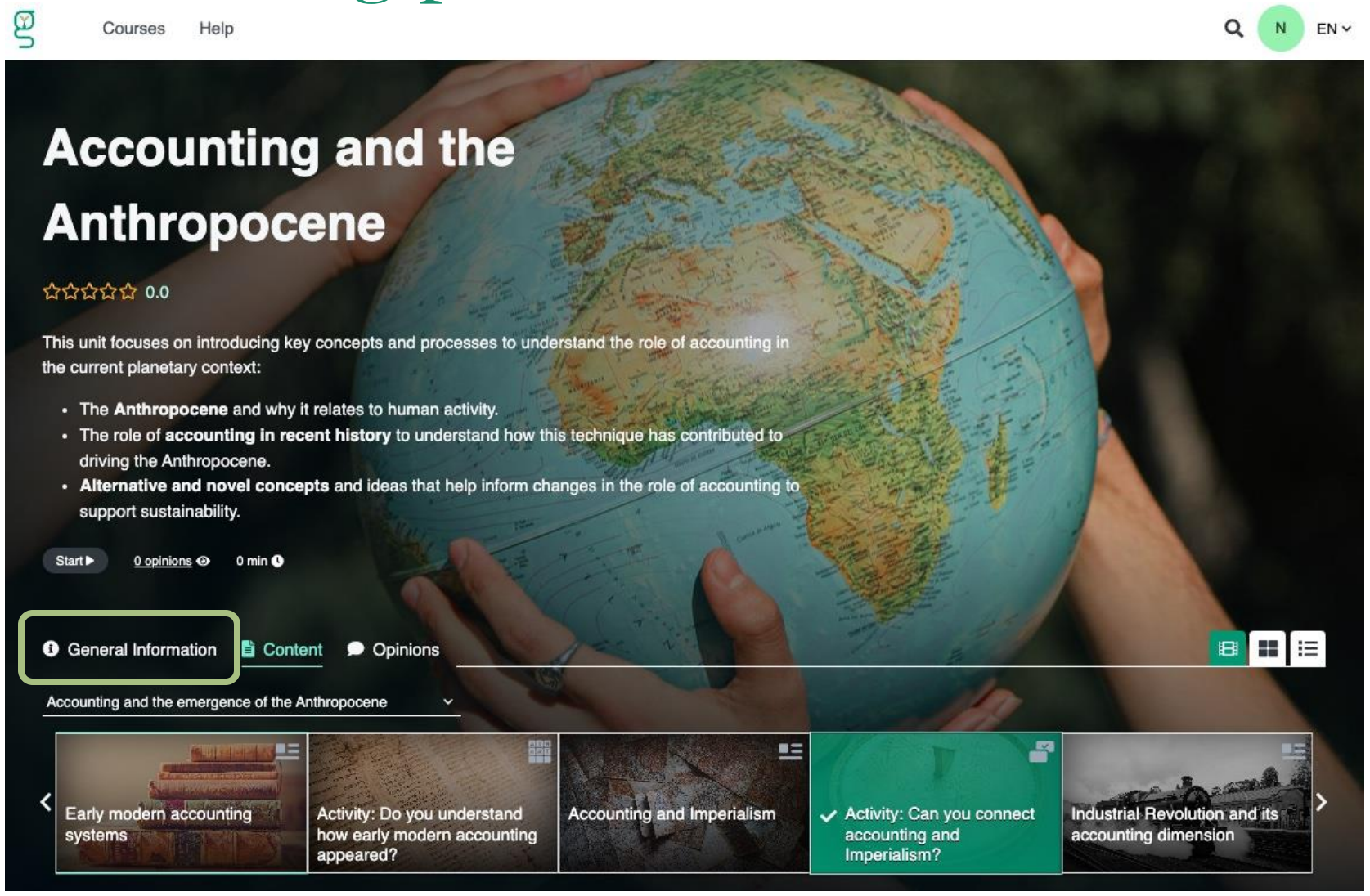
Registration:

- Open your browser and visit: https://pre-a4ge.gestionetdev.com
- Push the "Sign up" button.
- Fill in the form and push the "Send" button.
- You will receive and email called "Activate account" (check Spam folder if you don't see it). Open the "Activate account" link inside that email and push the "Activate account" button on the browser.

Online learning platform



Online learning platform



Accounting and the Anthropocene

-- minutos de duración

Introduction

This unit defines the key concepts and processes that have motivated the emergence of sustainability accounting turn in the 21st century. If you are one of those who think that accounting can change the way we live, this is your course.

Unit 1.1 starts by defining the **Anthropocene.** This word means much more than climate change. Summers are more prolonged and dryer. Also, mosquitoes and wasps are disappearing. Scientists are worried about this. We live in an ecosystem, and *the flutter of a butterfly's wings can trigger a tornado on the other side of the world*. The human actions embedded in the economic system and our forms of organising are one of the main, if not the most relevant, drivers of sustainability problems.

This interaction between human actions and ecological problems points to **the social dimension of anthropogenic problems**, as it is impossible to separate the environmental from the social. The economisation of nature could only be possible through society's economisation. Both realities were built together, and if we want to face one of them, Humanity must take them into consideration jointly as both sides of a coin. This unit will provide some historical notions to understand how, after the Industrial Revolution, and specifically after the "Great Acceleration", **social inequality became conjoint with natural exploitation.**

Accounting is not a neutral technique. It is (and has been) different from the natural form of understanding and managing business. It is a social construction that is constitutive of society itself and of the way we perceive (and act on) reality. It is part of our social and cultural heritage and has contributed, in some ways, to the current planetary crisis we are facing. However, for the same reason, it could be a helpful tool to change the dramatic social and ecological situation we currently live in.

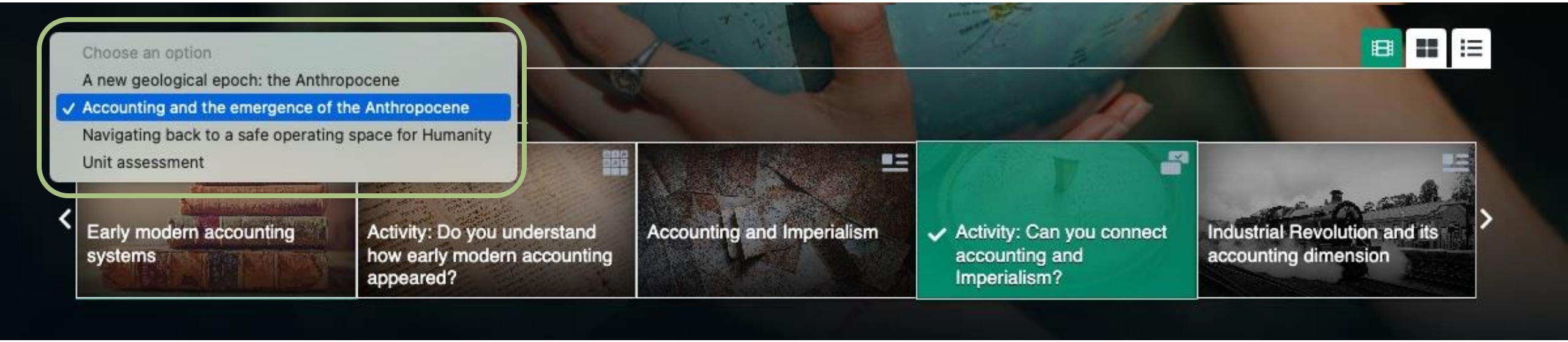
Intended learning outcomes and competences

At the end of this unit, you will be able to:

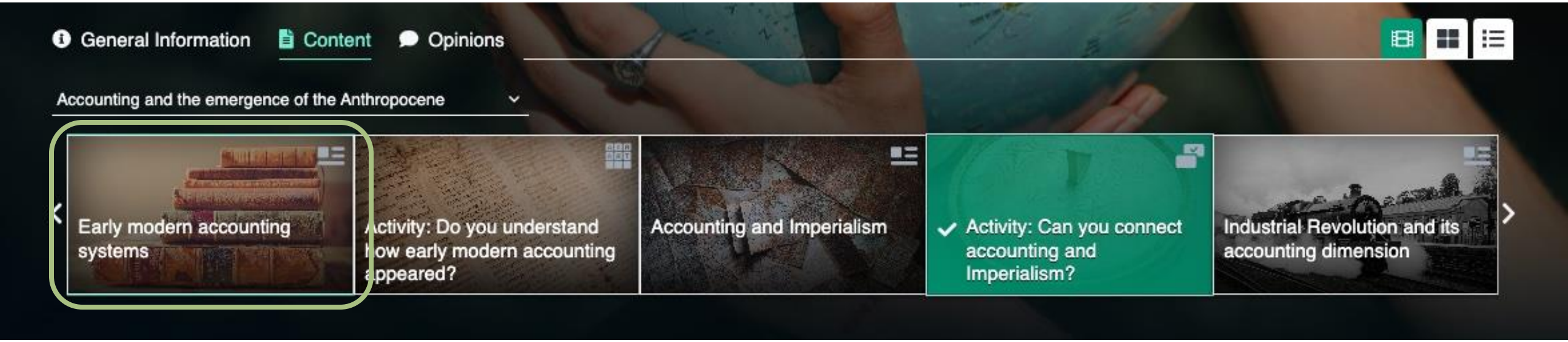
- Understand the implications of human economic activity in the environment on a planetary scale.
- Classify the different phases in the evolution of the relationship between human (economic) behaviour and the environment.
- Appreciate the historical roots of social and environmental problems in the Anthropocene.
- Identify the role of accounting in constructing past and present relationships between humanity and its environment.
- Reflect on other economic rationalities and the role of accounting in their enactment.
- Describe the current initiatives and concepts that can help change the role of accounting to a more sustainable path.

List of acronyms

Online learning platform



Online learning platform



EARLY MODERN ACCOUNTING SYSTEMS

- ✓ Early modern accounting systems
- Nature, History and Accounting

Early modern accounting systems

To understand how we got into this situation is key to consider that the Anthropocene is a consequence of the accumulation of minimal changes. The Industrial Revolution led to the upsurge of factories and other (economic) organisations, imposing a new way of understanding the connection between society and nature. Planet Earth became a machine, but it is not. Accounting had a relevant role in the rising process of factories and, more generally, in the instauration of a rationality based on efficiency, profit and the mechanical view of life. **Making the planet Earth exploitable** was one of the causes of the rise of the Anthropocene.

Some philosophers and economic thinkers proposed that the turning point of the social and economic evolution to modernity was when humanity, especially European societies, started their efforts to **dominate Nature**. Fear passes from future salvation (Theology) to now (Science). Not only society but also Nature must be safe, which implies control and domination.

Strangely enough, it was in a **warm period** when this story began. Despite modernity referring to a kind of self-improvement, it started when nature showed its kindest face. Once again, remembering the connection between Nature and Humanity is essential.

Some key aspects of European history should be analysed as a reaction to environmental factors: **Humanity and planet Earth** are linked in a **bidirectional** way.

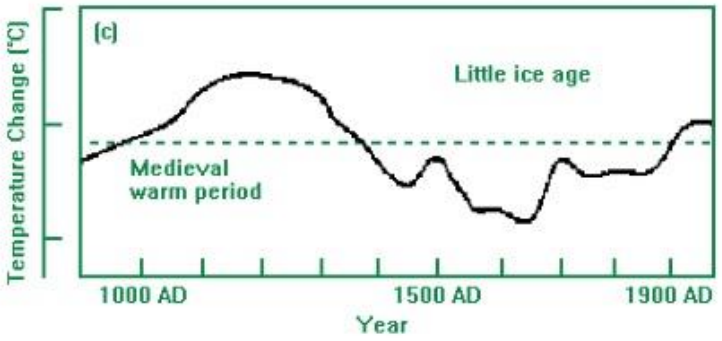
Next

Nature, History and Accounting

Europe experienced in the Middle Ages a warm period that allowed a **more profitable relationship with Nature.** As far as we know, that warm period was motivated by natural dynamics. No human influence (as observable today) affected the planet's (specifically, European) climate. Nevertheless, **it did affect society.**

High temperatures promoted agricultural activity, which in turn allowed an increase in the population and, therefore, commerce and wealth. In the final Middle Ages (11^{th}-15^{th} centuries), despite some terrible situations, such as the black death epidemy or long wars (i.e., the Hundred Years' War), it was a period of **intensive economic growth**, supported (initially) by European resources.

Figure 8. Evolution of temperature in the last millennia.



Source: Jones et al. (2007).

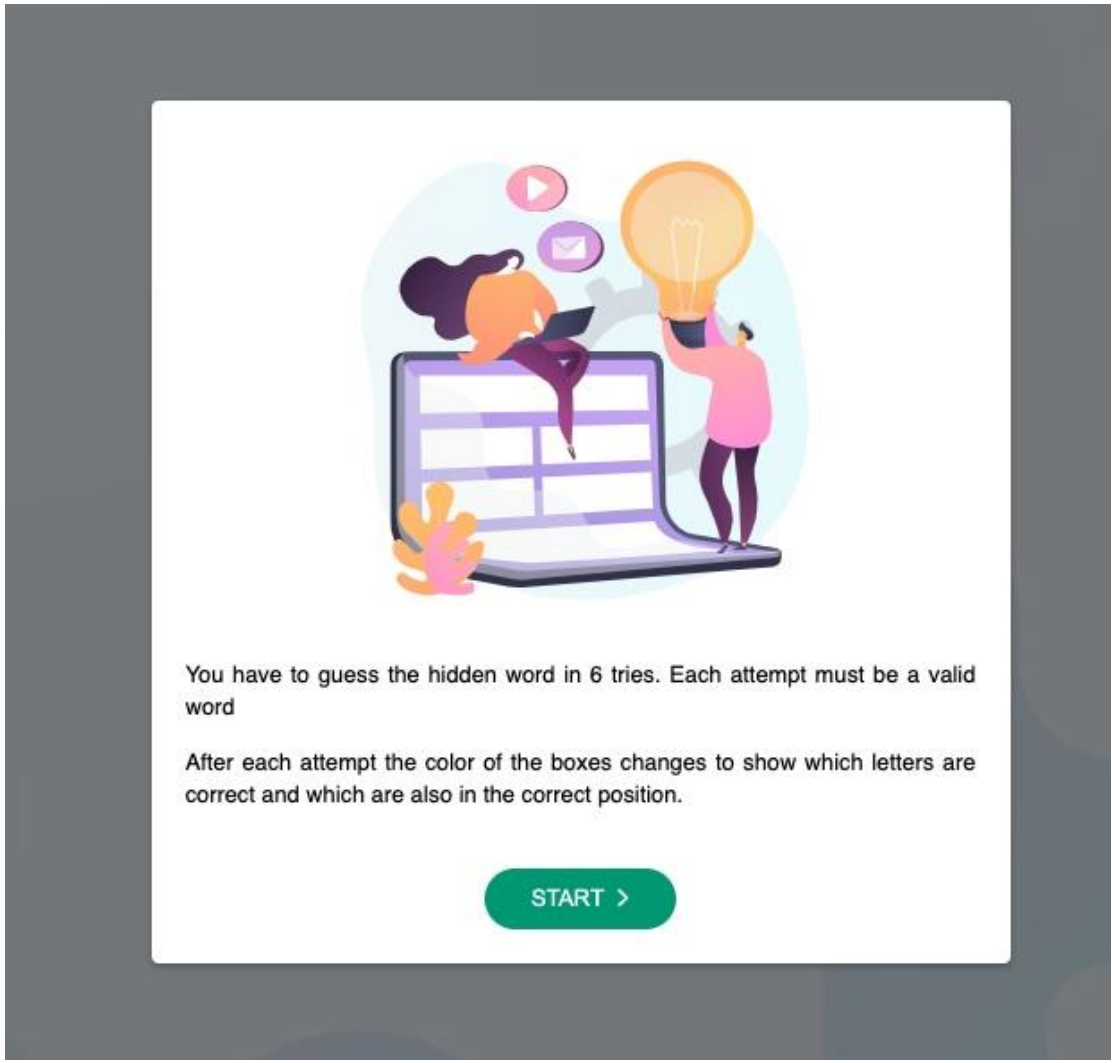
The first symptom of this evolution was the rupture of the regional circuits of commerce. Similarly, the states started their transition into what is known as *the Early Modern State*. Europe became the **very first global system**, reduced to itself and ego-centred, but a system nonetheless. The creation of markets on a large scale (fairs of Champagne, Lyon, North Italy, and at the end of the period, Spanish ones) demanded new instruments.

Bill of exchanges and credit solved some technical problems related to displacement, but they mainly addressed the **problem of (lack of) money**. We are not talking about the lack of precious metals, although they were equivalent terms. When American silver arrived in the 16^{th} century, those instruments did not disappear but were perfectionated because society continued to demand more agile transactions. Many accounting methods tried to manage these quick exchanges by reinforcing reliability and trust and, eventually, creating the sense of control over business.

Online learning platform

Gamification

Online learning platform



ENIGMA

0 0 0 / 3

History ages with the last warm period before the Anthropocene

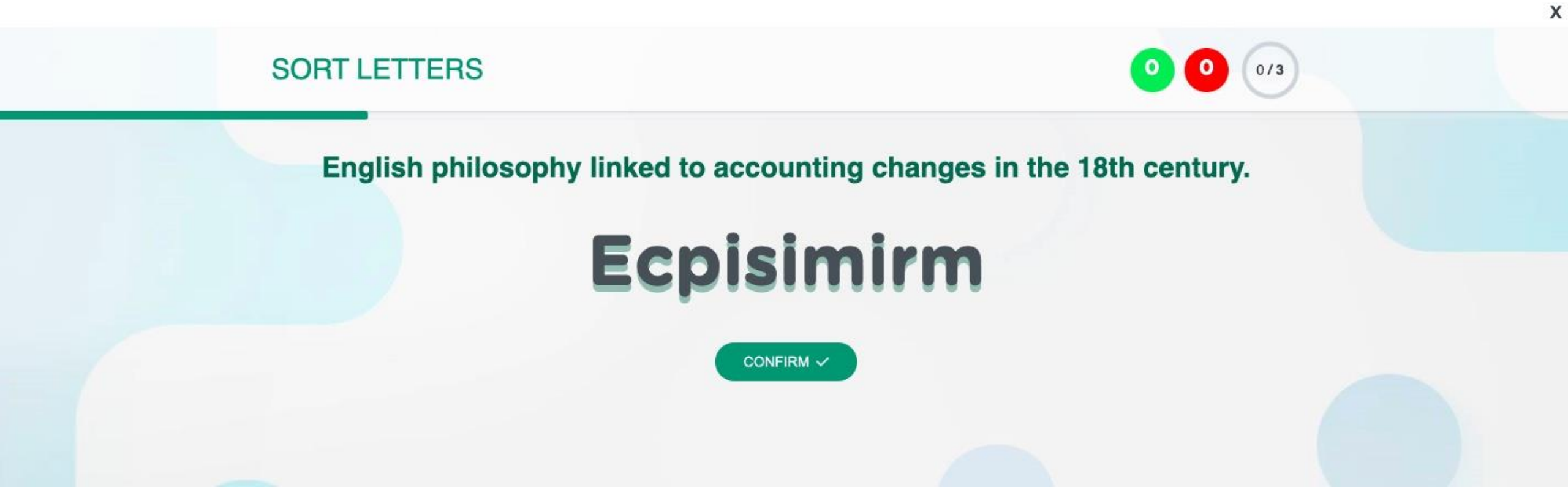
CONFIRM ✓

Q W E R T Y U I O P

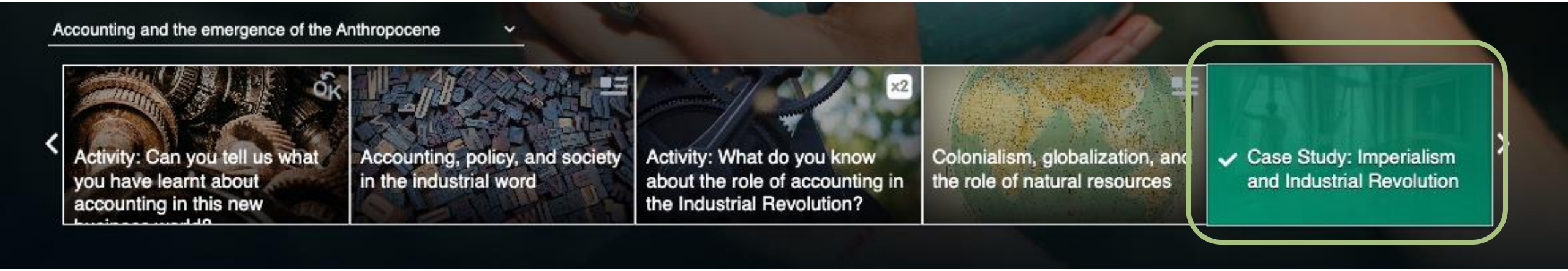
A S D F G H J K L Ñ

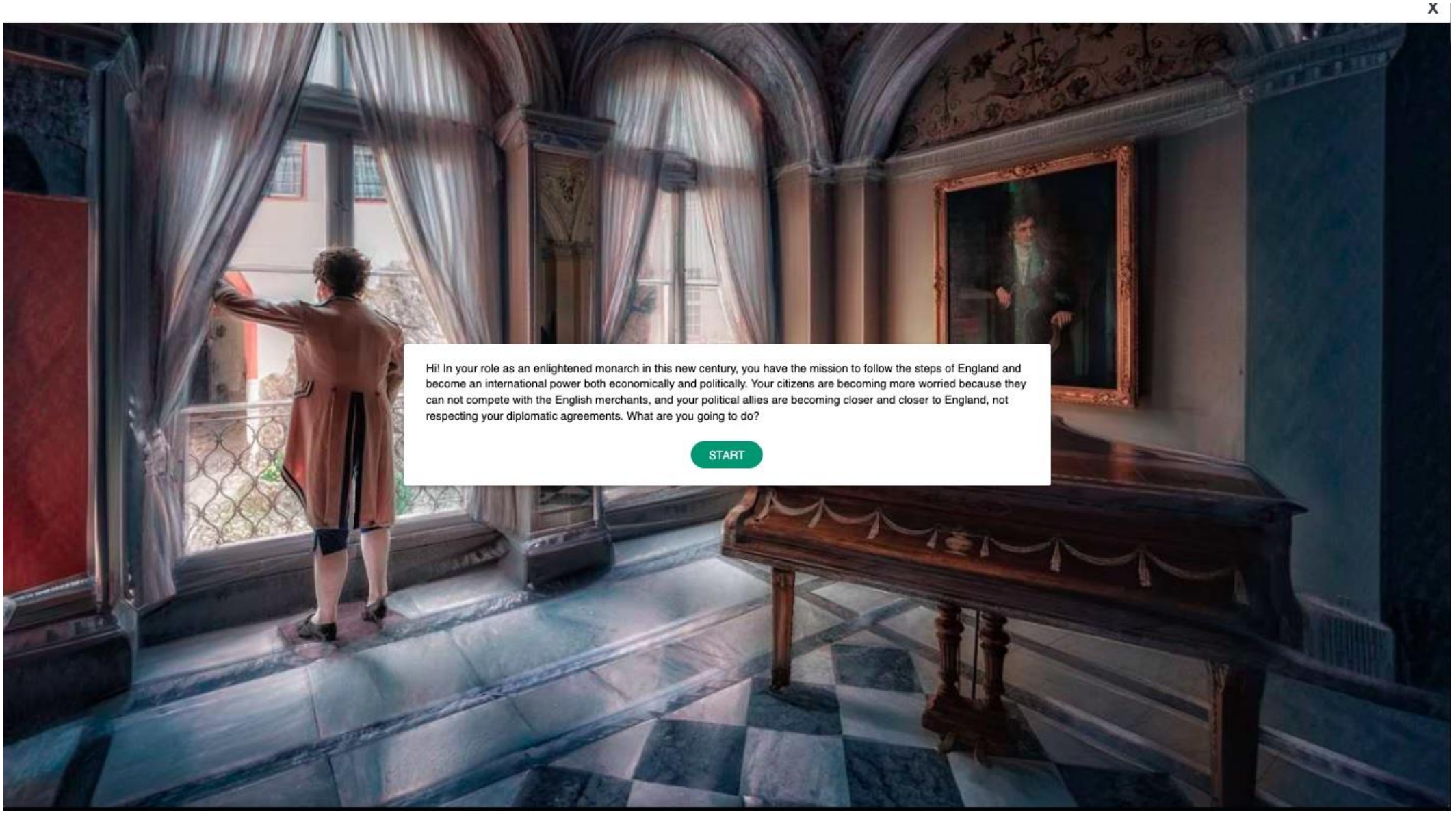
Z X C V B N M ⌫

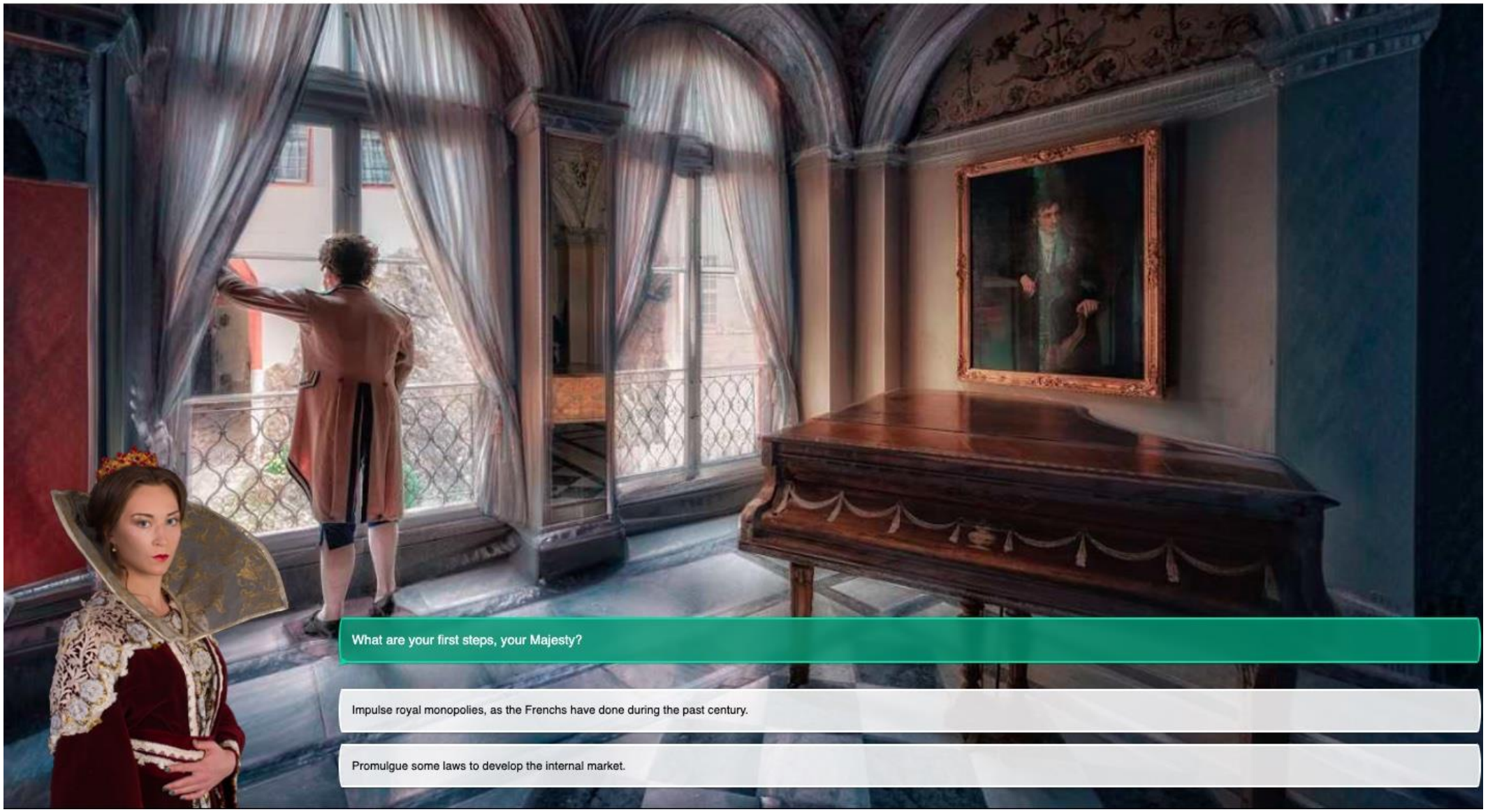
Online platform



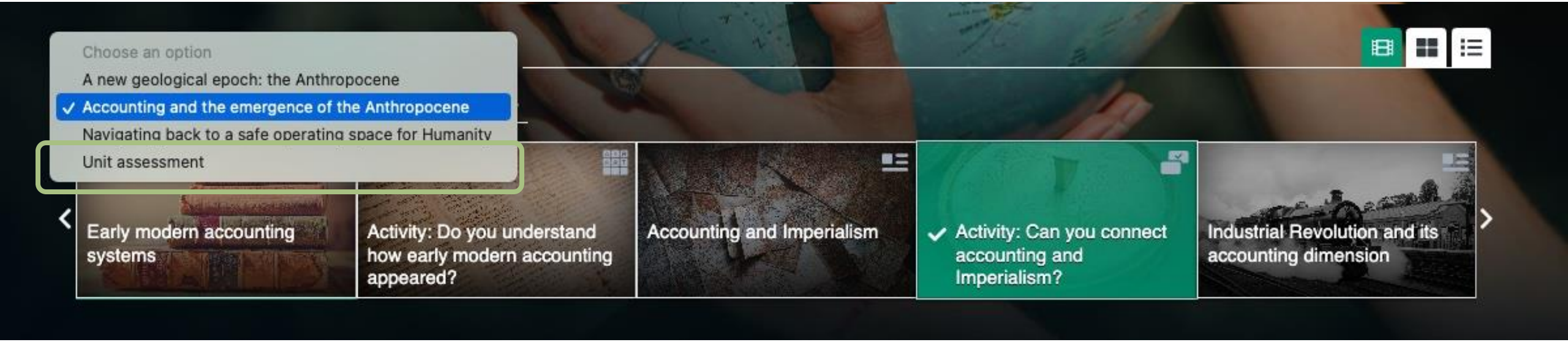
Online learning platform




x
Hi! In your role as an enlightened monarch in this new century, you have the mission to follow the steps of England and become an international power both economically and politically. Your citizens are becoming more worried because they can not compete with the English merchants, and your political allies are becoming closer and closer to England, not respecting your diplomatic agreements. What are you going to do?
START


X
What are your first steps, your Majesty?
Impulse royal monopolies, as the Frenchs have done during the past century.
Promulgue some laws to develop the internal market.

Online learning platform



QUIZ

6 2 8 / 10

The current global warming period:

A It has been common and similar in previous periods of the planet.

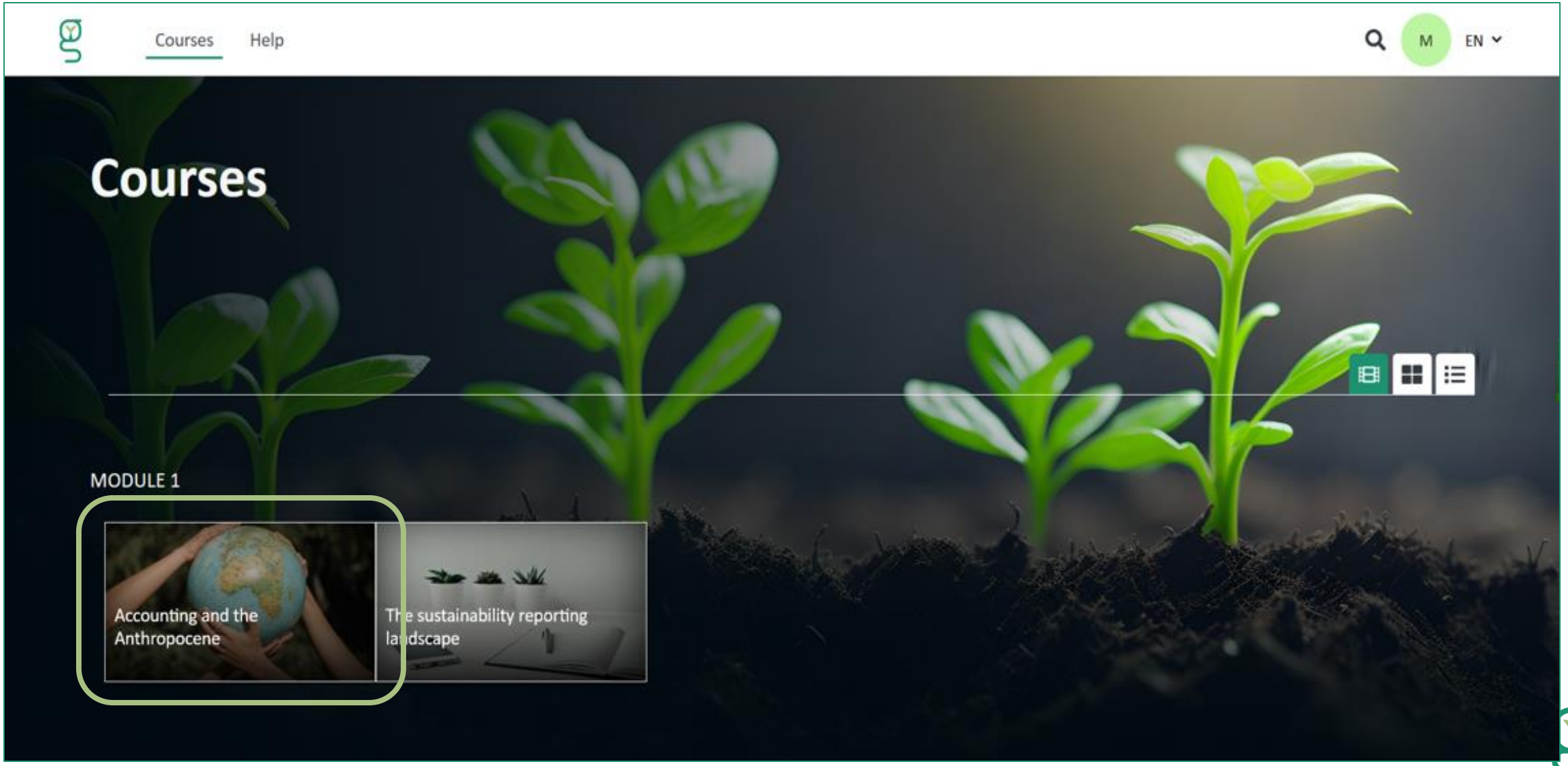
B It is one of the fastest recorded in the history of the planet.

C It is the first recorded in the history of the planet.

D It is one of the lowest recorded in the history of the planet.

Goals of this session:
Unit 1.1. Accounting and the Anthropocene

1. **Improve your knowledge of:**
    - What the Anthropocene is.
    - The role that accounting played in contributing to socio-ecological problems in the latest centuries.
    - Initiatives that can help imagine alternative forms of accounting to promote sustainability.


Courses
Help
M
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Courses
MODULE 1
Accounting and the Anthropocene
The sustainability reporting landscape

Goals of this session:
Unit 1.1. Accounting and the Anthropocene

1. A new geological epoch: the Anthropocene

- Defining the Anthropocene
- Scientific positions and evidence for the geological inflection

2. Accounting and the emergence of the Anthropocene

- Early modern accounting systems
- Industrial revolution and its accounting dimension
- Colonialism, globalization, and the role of natural resources

3. Navigating back to a safe operating space for humanity

- Accounting and economic growth
- Planetary boundaries
- Science-based targets
- Degrowth
- The Sustainable Development Goals

Activities and role plays

Goals of this session:
Unit 1.1. Accounting and the Anthropocene

1. **Improve your knowledge of:**
2. **Feedback on:**
    - The pedagogic approach embedded in the online learning platform
    - The easiness to learn
    - The dynamism of the content
    - The accessibility of the materials
    - Most importantly: if you can learn through it!

Dynamic of the session

1. Individually **work on unit 1.1** on the platform (until 12.15 pm).
   - Feel free to ask us any questions.
   - You can talk to your peers.
   - Prepare for the feedback: comments, suggestions, errors, etc.

Dynamic of the session

1. A new geological epoch: the Anthropocene

Defining the Anthropocene

Scientific positions and evidence for the geological inflection

2. Accounting and the emergence of the Anthropocene

Early modern accounting systems

Industrial revolution and its accounting dimension

Colonialism, globalization, and the role of natural resources

3. Navigating back to a safe operating space for humanity

Accounting and economic growth

Planetary boundaries

Science-based targets

Degrowth

The Sustainable Development Goals

Activities and role plays

Continue after the TA

Dynamic of the session

1. Individually **work on unit 1.1** on the platform (until 12.15 pm).
   - Feel free to ask us any questions.
   - You can talk to your peers.
   - Prepare for the feedback: comments, suggestions, errors, etc.
2. Small **group work**: **What is the Anthropocene and how to face it?** (until 12.30)
   - Do you perceive we are in the Anthropocene?
   - What evidence do we have about the Anthropocene?
   - What individiual and/or collective actions we can implement to mitigate Anthropocene's effects?
3. Presentation of **conclusions and debate** (3-4 minutes per group)

Dynamic of the session

Group 1		
Adam	King	Leuphana
Inna	Savchenko	Leuphana
Jade	Ligneres	MBS
Carlos	Alonso Delgado	UBU
Karen del Pilar	Chancafe Dominguez	UBU
Anna	Martinato	UniTrento

Group 2		
Asli	Gurbuz	Leuphana
Pauline	Alleaume	MBS
Veselin Veselinov	Valkanov	MBS
Carmen	Calzada Diez	UBU
Erika	Martini	UniTrento
Ilaria	Clementi	UniTrento

Group 3		
Elio	Llane	Leuphana
Polina	Kaliagina	Leuphana
Pinella	Nehme	MBS
Mario	Gómez Casanueva	UBU
Silvia	Prati	UniTrento
Valentina	Montrucchio	UniTrento

Group 4		
Divya	Tom	Leuphana
Sabah	Znassi	MBS
Jacob	Olivares Martín	UBU
Claudia	San Esteban Camarero	UBU
Valentina	Donini	UniTrento

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ACCOUNT 4 Green Eco

Accounting and the Anthropocene

Carlos Larrinaga

Sustainability Accounting Learning Platform for a Green Economy

2022-1-ES01-KA220-HED-000089844

University of Trento, October 24-26, 2023

Presentation outline

Motivation: how to make accounting transformative?

Anthropocene

Uncertainty and greenwashing

Resilience and diversity

Materialities

Corporate biosphere stewardship

Final comments

How to make accounting transformative?

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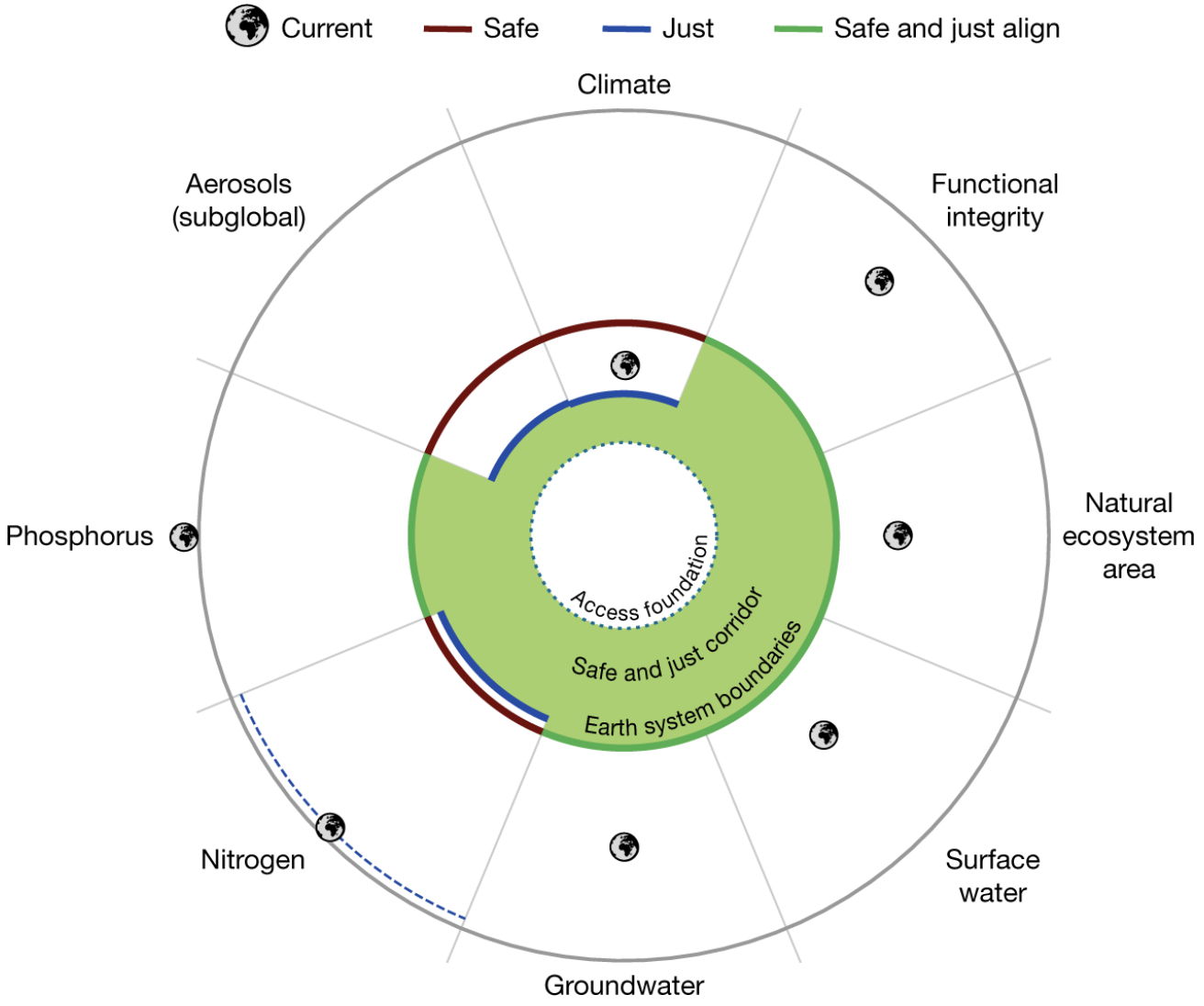
What do we know about the Anthropocene?



Rockström, J., Gupta, J., Qin, D. *et al.* Safe and just Earth system boundaries. *Nature* (2023). https://doi.org/10.1038/s41586-023-06083-8

What do we know about accounting?

Accounting represents …

Accounting performs … helps framing by ignoring overflows … makes visible some things by making others invisible, helps constitute social relations and construct markets, organizations, subjectivities, rationalities

Accounting (at least indirectly) *performs* the Anthropocene

Metaphor: geo-graphy

Key accounting question

Accounting is involved in the production of the Anthropocene

Accounting is part of the obstacles for a transformation

How to make accounting productive / transformative?

Anthropocene implications for transformative accounting: five areas to be explored: time, uncertainty, resilience, materiality and the role of corporations

1. Anthropocene

Where to situate the origin of the Anthropocene?

Great acceleration

Industrial revolution

Columbian exchange

2. Uncertainty and greenwashing

Uncertainty

Complex socio-ecological systems: e.g., nitrogen, eutrophication, ecosystems, food security, justice

Feedbacks: e.g., climate change - oceans

Nonlinearities and tipping points: e.g., (dangerous) climate change

Knowledge gaps about the functioning of the biosphere

Knowledge gaps on the geophysical and biological impacts of novel entities (e.g., antibiotics, 'forever' chemicals)

Transparency and greenwashing

Transparency and greenwashing research is arrogant: science knows and there are information asymmetries

Transparency and greenwashing research forgets that ”every way of seeing is a way of not seeing” (Quattrone, 2022)

Decentering transparency and greenwashing?

Technologies of humility: ”disciplined methods to accommodate the partiality of scientific knowledge and to act under irremediable uncertainty” (Jasanoff, 2007, p. 33)

Table 1
Impact estimates for different sectors, for doubling of CO_2, U.S. (positive number indicates gain; negative number loss) (Nordhaus, 1991, Table 6, p. 932)

Sectors	Billions (1981 $)
Severely impacted sectors	
Farms	
Impact of greenhouse warming and CO_2 fertilisation	−10.6 to +9.7
Forestry, fisheries, other	Small + or −
Moderately impacted sectors	
Construction	+
Water transportation	?
Energy and utilities	
Energy (electric, gas, oil)	
Energy demand	−1.65
Non-electric space heating	1.16
Water and sanitary	±?
Real estate	
Land-rent component	
Estimate of damage from sea-level rise	
Loss of land	−1.55
Protection of sheltered areas	−0.90
Protection of open coasts	−2.84
Hotels, lodging, recreation	?
Total	
Central estimate	
Billions, 1981 level of national income	−6.23
Percentage of national income	−0.26

3. Resilience and diversity

Resilient socio-ecological systems have the capacity to cope with future perturbations “without undergoing significant changes in function, structural identity, or feedbacks of that system” (Nelson et al., 2007, p. 397).

Perturbations are likely – we need systems that can cope with those perturbations

Accounting diversity

Is the existence of different approaches a problem?

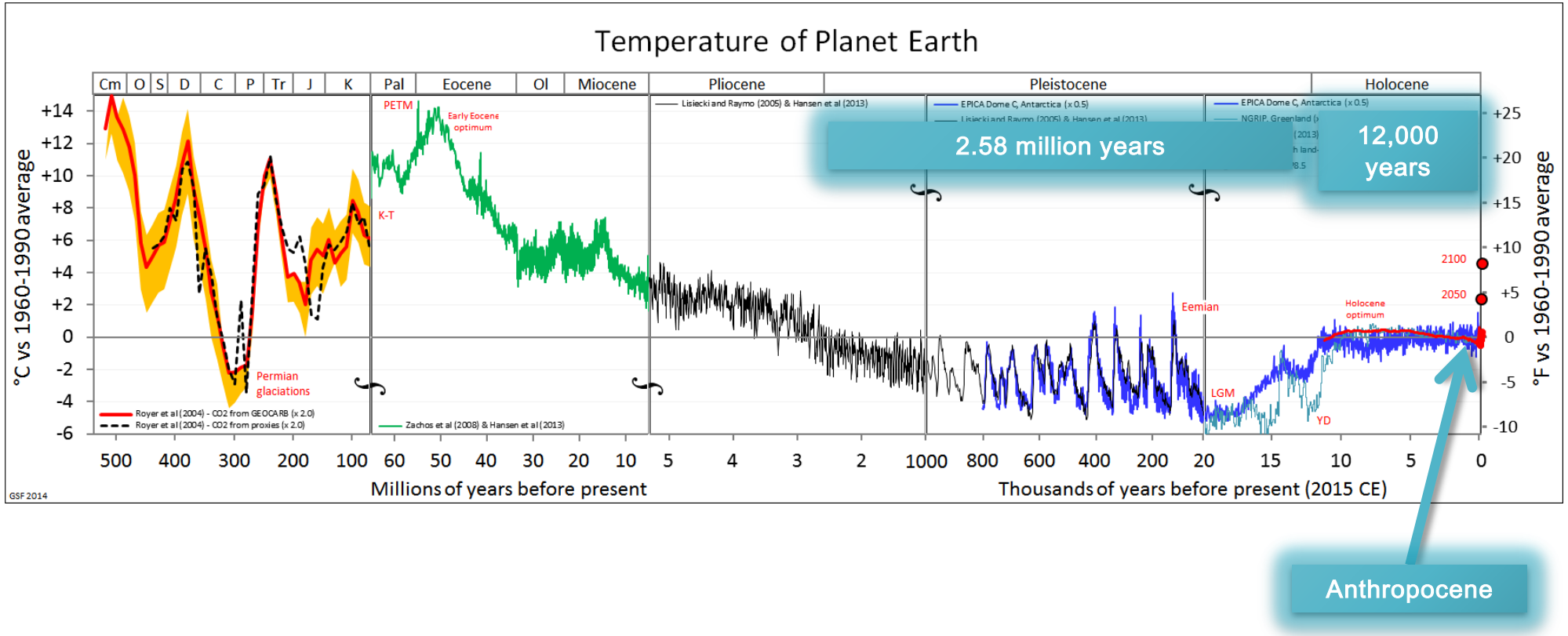
Resilience challenges common perceptions of inefficiencies (Folke et al., 2005): redundant systems could increase resilience of facilitate alternative attractors

Design flexible systems that cross boundaries and allow learning, because change will occur and better be prepared

Importance of cultural and social capital: local perspectives can increase resilience of facilitate attractors

Premature closure of sustainability reporting?

4. Materialities



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Humankind is a geological force

Humankind not just modifying the ‘natural environment”, but a geological force, new interval in geological history.

Future evidence in rock strata??

Likely: mass extinction, hybridization and redistribution of species, simplification of ecosystems, global warming, rise of sea levels, “unusual mix of carbon isotopes” in fossils from burning fossil fuels, ocean acidification, massive production of iron (Bebbington et al. 2020)

any social scientist analyzing society without considering Earth systems “is stuck in a world of modernity” (Hamilton, 2015).

Socio-ecological systems have a physical and biological base

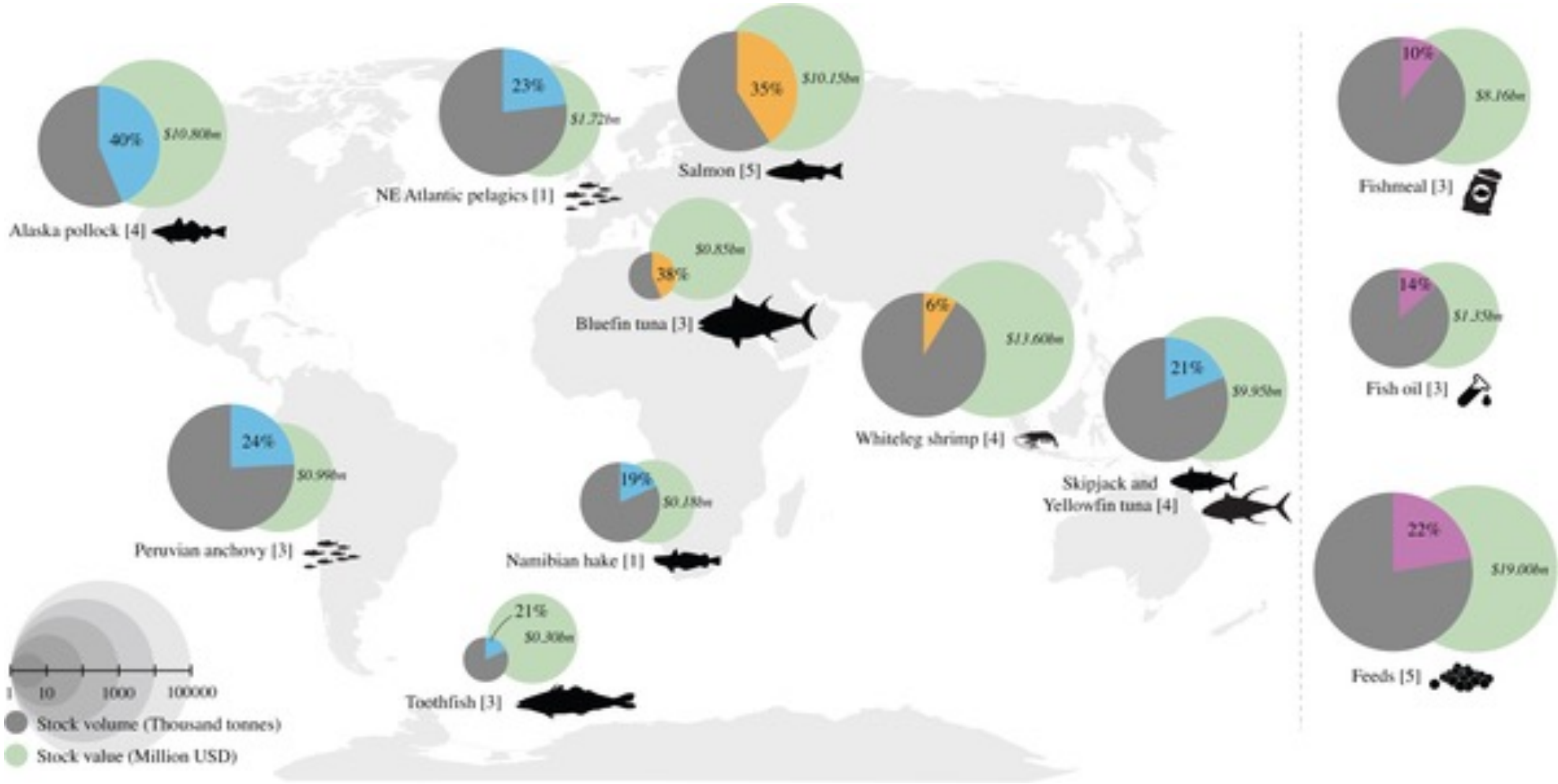
Rematerialization of accounting

The Anthropocene questions sustainability as reputation and intangibles

Sustainability reporting as discourse – neglect material dimension of environmental processes + adopt a contemplative and theoretically detached position (Redclift, 1999)

“Sociology of preparers” (Christenson, 1983)

5. Corporate biosphere stewardship



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Österblom H, Jouffray JB, Folke C, Crona B, Troell M, et al. (2015) Transnational Corporations as 'Keystone Actors' in Marine Ecosystems. PLoS ONE 10(5): e0127533. doi:10.1371/journal.pone.0127533.

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Keystone actors

Transnational corporations are a defining feature of the interconnected planet of people and nature (Folke et al., 2019)

Keystone metaphor

Keystone species have an impact over their ecosystems that is disproportionate relative to their abundance and biomass share in the ecosystem

Global fisheries and TNCs as keystone actors: 13 companies – 18% global value seafood production (2012)

Companies – geography – Anthropocene

Accounting for stewardship

Stewardship has a long history in accounting

Interplay between stewardship and accountability

Different understandings of stewardship

- Accounting
- Ecological economics

Mobilization of financial markets for sustainability

Some final comments

The observation of the Anthropocene calls for the attention to a new sort of challenges that question:

- The accounting construction of time
- Accounting programmes of efficiency and accountability
- Accounting narratives of transparency, uniformity and intangibles

Look across boundaries for new vistas that:

- Renew the interest in accounting technologies
- Foster the interdisciplinary and transdisciplinary engagement with the arenas where things are happening

Thank you for your attention

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ACCOUNT 4 Green Eco

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SUSTAINABILITY ACCOUNTING & REPORTING

- A MULTI-LEVEL PERSPECTIVE.

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Centre for Sustainability Management (CSM)
Leuphana University Lüneburg

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Co-funded by the European Union

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ORIGINAL ARTICLE

IJMR INTERNATIONAL JOURNAL OF MANAGEMENT REVIEWS BRITISH ACADEMY OF MANAGEMENT

Corporate sustainability management accounting and multi-level links for sustainability – A systematic review

Stefan Schaltegger[1] | Katherine L. Christ[2] | Julius Wenzig[1,3] | Roger L. Burritt[4]

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Abstract

The societal vision of sustainable development changes both the context of businesses and expectations that management should contribute to solving sustainability problems beyond organizational boundaries. Companies are influenced

Schaltegger, S., Christ, K. L., Wenzig, J., & Burritt, R. L. (2022). Corporate sustainability management accounting and multi-level links for sustainability – A systematic review. *International Journal of Management Reviews*, *24*(4), 480-500. https://onlinelibrary.wiley.com/doi/full/10.1111/ijmr.12288


Linking Environmental Management Accounting: A Reflection on (Missing) Links to Sustainability and Planetary Boundaries

Stefan Schaltegger

Pages 19-29 | Published online: 01 Nov 2017

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Schaltegger, S. (2018). Linking environmental management accounting: A reflection on (missing) links to sustainability and planetary boundaries. *Social and Environmental Accountability Journal*, *38*(1), 19-29. https://www.tandfonline.com/doi/full/10.1080/0969160X.2017.1395351


ELSEVIER

Journal of Cleaner Production

Volume 275, 1 December 2020, 124097

Integrating stakeholder theory and sustainability accounting: A conceptual synthesis

Jacob Hörisch [a], Stefan Schaltegger [a], R. Edward Freeman [b]

Hörisch, J., Schaltegger, S., & Freeman, R. E. (2020). Integrating stakeholder theory and sustainability accounting: A conceptual synthesis. *Journal of Cleaner Production*, *275*, 124097. https://doi.org/10.1016/j.jclepro.2020.124097


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Accounting for corporate environmental rebounds. A conceptual approach

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Egan, M. & Schaltegger, S. (2023). Accounting for corporate environmental rebounds. A conceptual approach. *Journal of Cleaner Production,* 419, 138175. https://www.sciencedirect.com/science/article/pii/S0959652623023338

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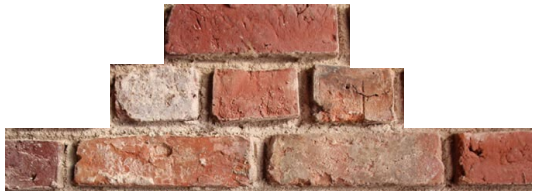

- **Structuring sustainability management accounting (SMA) and reporting** with the **CAT framework:** linking sustainability reporting and accounting with multiple levels beyond organisational boundaries
- **Adapting to context requirements and expectations**
  - Macro level context: situational influences on sustainability reporting (and accounting)
  - Meso level context: situational influences on sustainability reporting (and accounting) and accounting for stakeholders
- **Micro level corporate actions:** Sustainability and environmental management accounting, incl. examples of Material Flow Cost Accounting (MFCA) and accounting for rebounds
- **Sustainability accounting as a transformation supporting management approach**
  - Accounting (and reporting) for company effects on the meso level
  - Accounting (and reporting) for company (contributions to) effects on the macro level
- Summary

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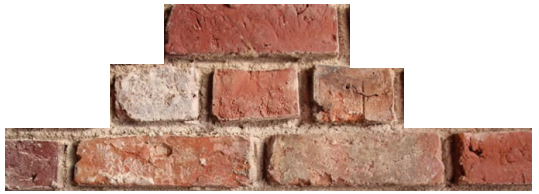

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SUSTAINABILITY ACCOUNTING AND REPORTING (SAR)
- HOW CAN IT BE ORGANISED?

Sustainability reporting and accounting needs to support management with regard to…

- **… how societal expectations are considered** (business context, incl. regulations, standards, guidelines, etc.)
- **… what actions the company undertakes with what immediate effects** (with regard to resources, materials, emissions, social effects, health aspects, etc.)
- **… what transformative impact the company creates beyond its organisational boundaries** (with regard to global sustainability goals by **linking company-related figures with macro-level goals**, e.g. planetary boundaries, UN SDGs).

CAT Framework to organise sustainability reporting and accounting:

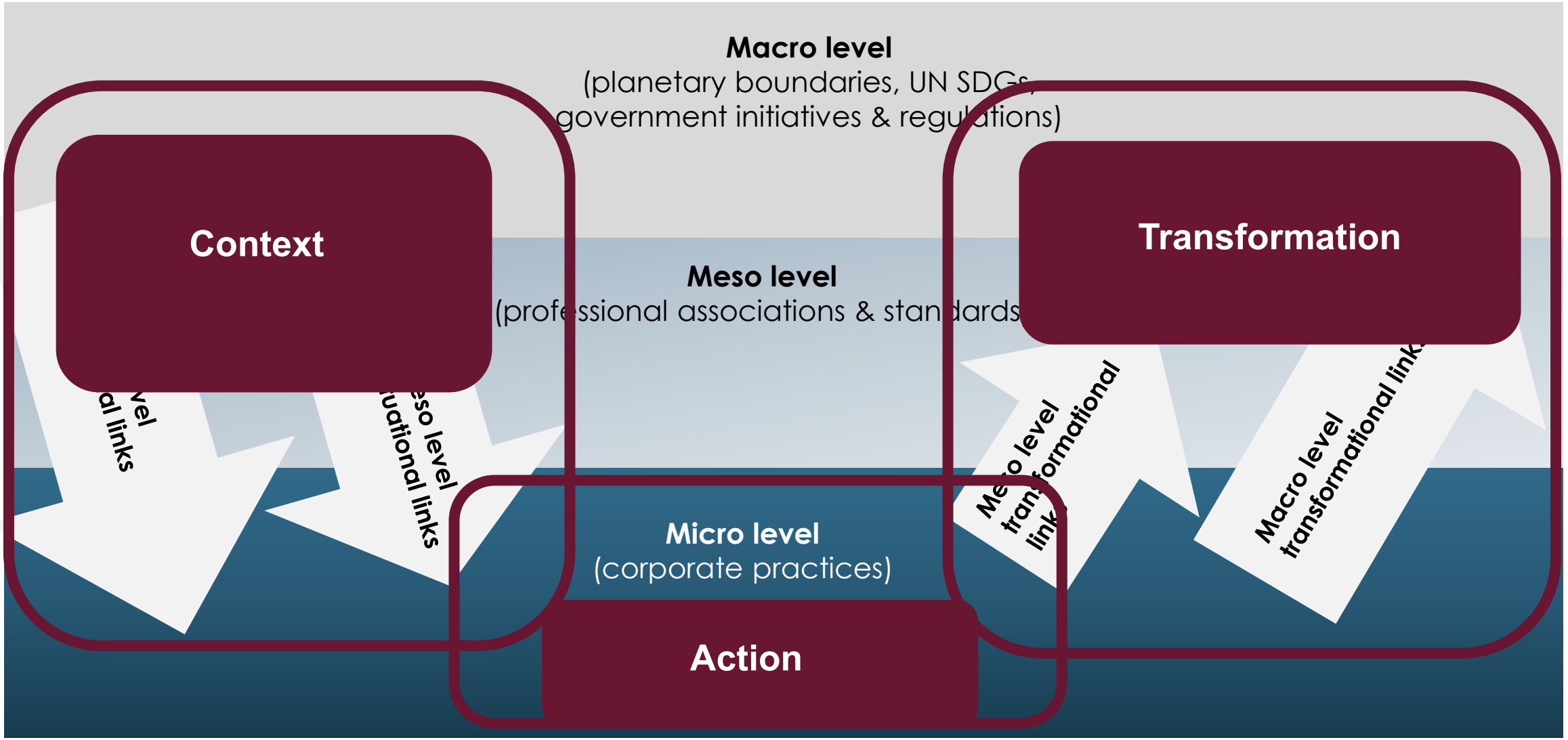
C = Context: How does sust. reporting (and acc.) help management to consider societal expectations?

A = Action: How does sust. reporting & accounting document what does the company does?

T = Transformation: How does sust. accounting (& reporting) help the company contribute to sustainability transformations?

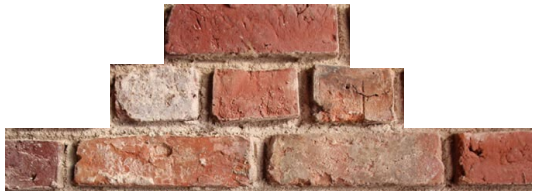
SUST. REP. & ACC. AS A MANAGEMENT SUPPORTING APPROACH

- ORGANISED ACCORDING TO CONTEXT, ACTION AND TRANSFORMATION.



(Source: Schaltegger et al. 2022)

STRUCTURE.



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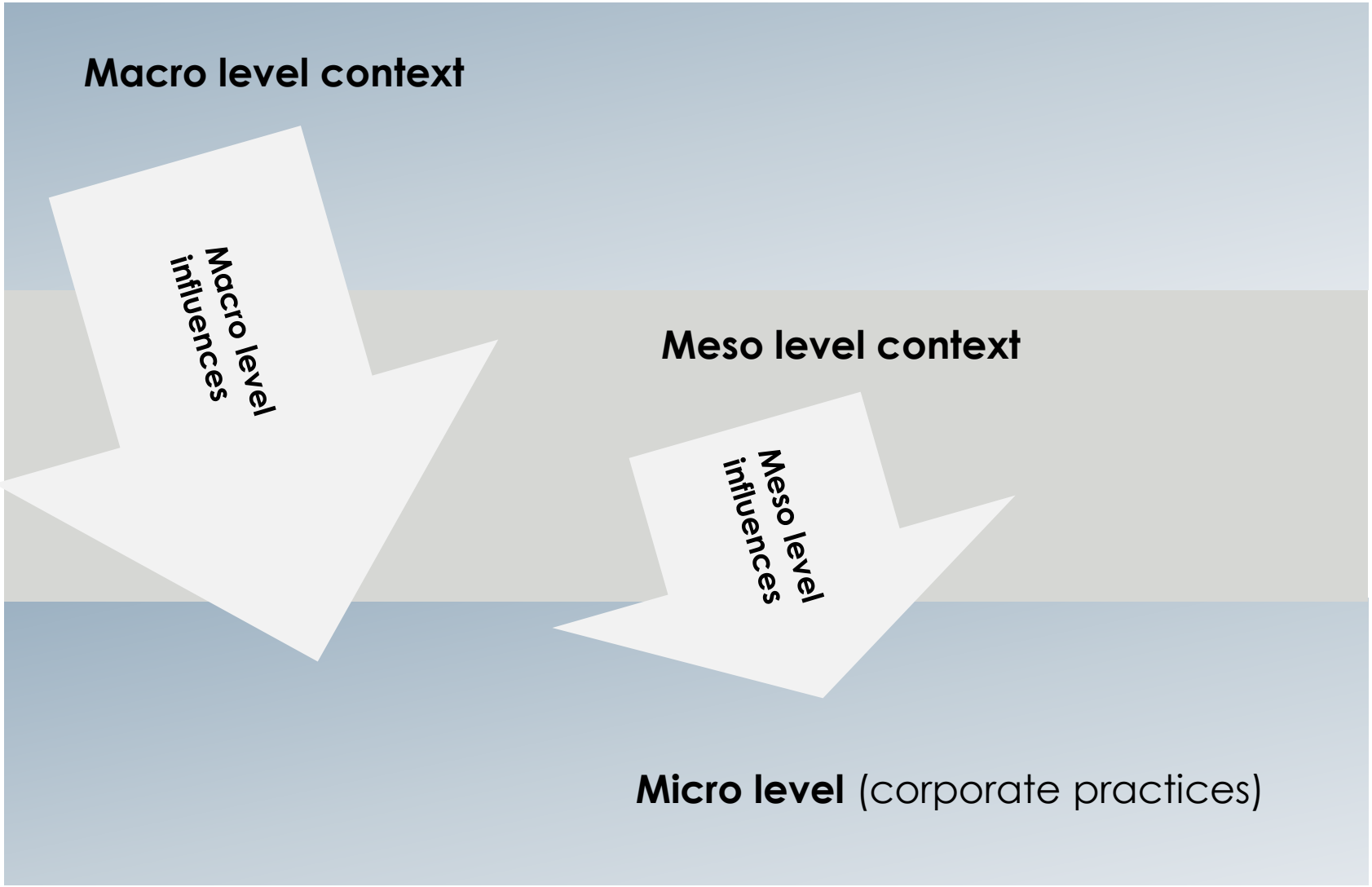
THE CONTEXT: SITUATIONAL INFLUENCES ON SUSTAINABILITY REPORTING AND ACCOUNTING

- MACRO AND MESO LEVEL INFLUENCES.



THE CONTEXT: SITUATIONAL INFLUENCES ON SUSTAINABILITY REPORTING AND ACCOUNTING

- MACRO LEVEL INFLUENCES.

Macro level context

Examples

Macro level influences

- **(Inter-)national regulations (e.g. EU Taxonomy, CSRD, stockmarket regulations)**
- *Scientific reports (e.g. on planetary boundaries, IPCC)*
- *International agreements (e.g. Kyoto Protocol)*
- …

Micro level
(corporate practices)

Establishing…

- CSR/sustainability reporting system (procedures & structures)
- Sustainability accounting system (measurement, indicators, etc.)
- …

EXERCISE.

- **Which of the papers you were assigned to read for this workshop address the relevance of context for reporting and accounting?**
- **What are the key arguments in these papers why context should be considered by a company?**

Context	Reason(s) mentioned why context should be considered by a company/management	Theoretical argument or background
Paper XY		
Paper FB		

EXERCISE.

- Do you know further reasons for considering context?

Further reason(s)	Theoretical argument or background

- What problems could occur when “just” considering context?

KEY CONCEPTS IN THE SUSTAINABILITY DEBATE

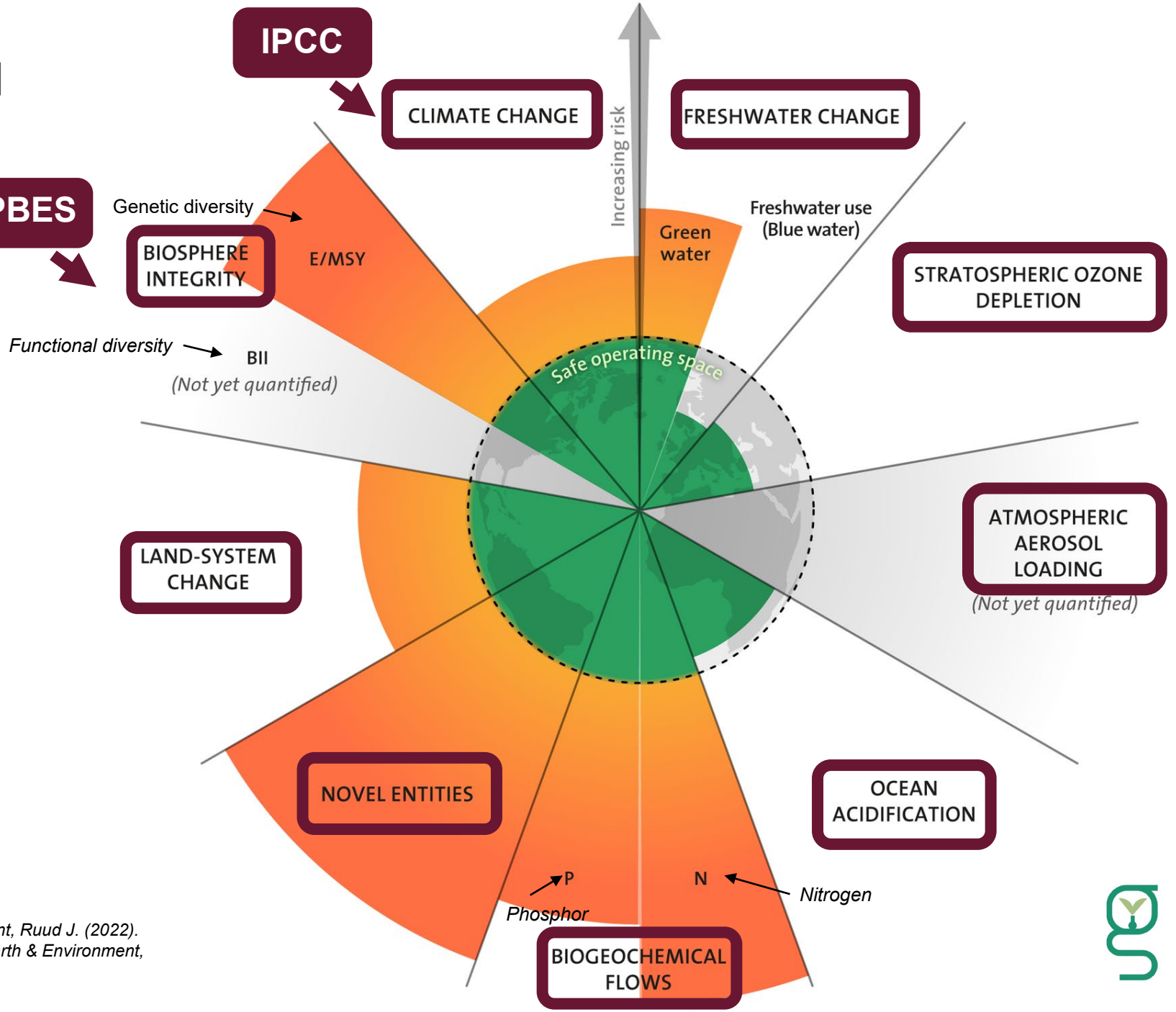
- MACRO-LEVEL POLITICAL PERSPECTIVE OF THE UN SDGs.

(United Nations 2015)

- UN Sustainable Development Goals (SDGs)
- Signed on 25 September 2015 by 193 nations at the UN General Assembly
- 2030 Development Agenda with the title ‘transforming our world’
- 17 goals with 169 targets and 304 indicators

KEY CONCEPTS IN SUSTAINABILITY RESEARCH

- THE MACRO-LEVEL SCIENCE PERSPECTIVE OF PLANETARY BOUNDARIES.

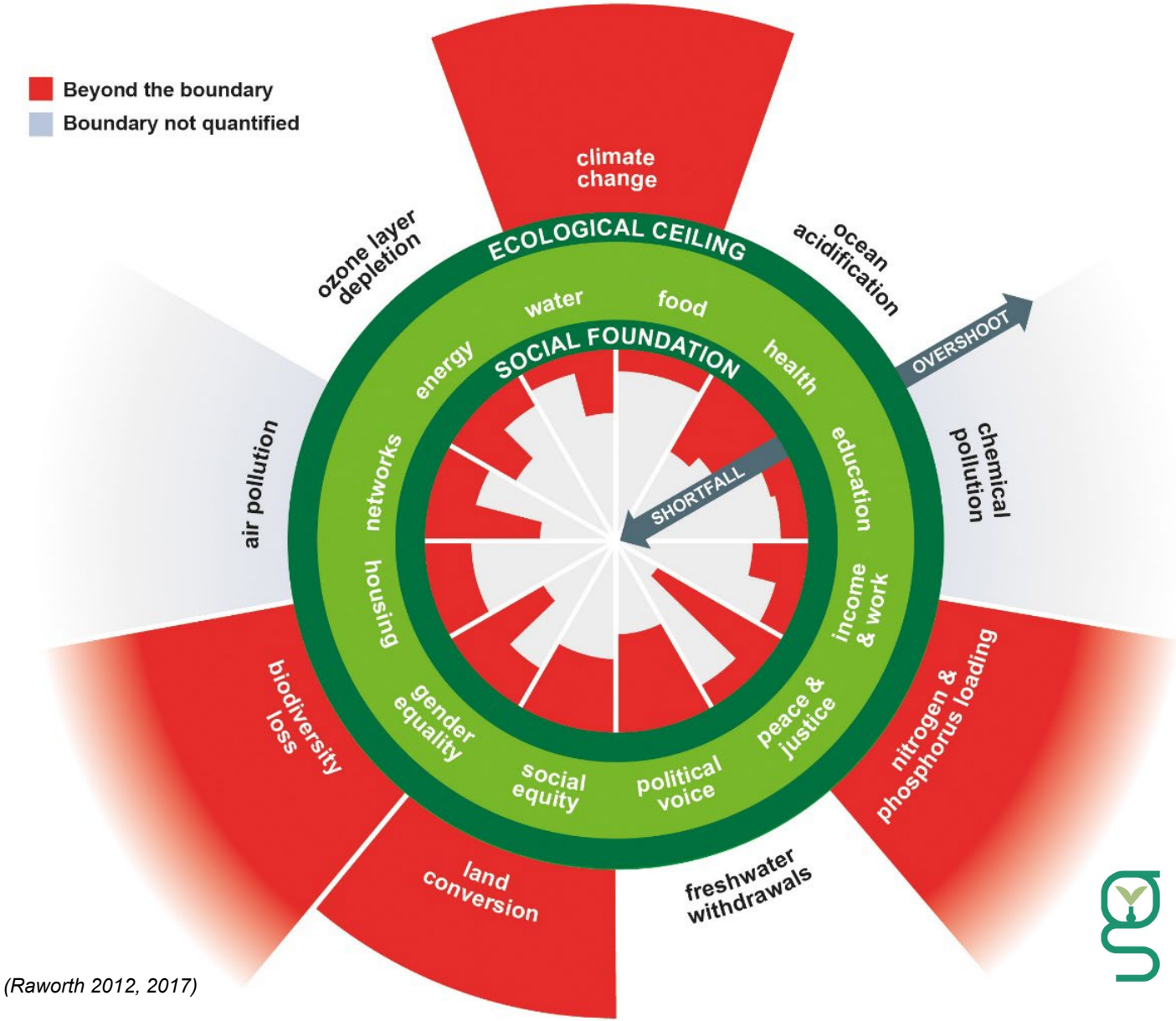


(Source: Wang-Erlandsson, Lan; Tobian, Arne; van der Ent, Ruud J. (2022). A planetary boundary for green water. Nature Reviews Earth & Environment, 3 (6), 380–392. doi:10.1038/s43017-022-00287-8. based on Rockström et al. 2009; Steffen et al. 2015)

THE COMBINED MACRO-LEVEL PERSPECTIVE AND BENCHMARKS

- ADAPTATION TO ECOLOGICAL AND SOCIAL BOUNDARIES: DOUGHNUT CONCEPT.

- Combination of planetary boundary concept with social perspectives, largely addressed in the UN SDGs
- **Ecological aspects** as **ceiling** for survival
- **Social aspects** as **foundation** of a human world
- **Doughnut = "Safe and just operating space"**
  A **corridor between ecological** planetary **boundaries** and **social foundations** exists. Inside the "doughnut" the economy and society is ecologically and socially sustainable.



(Raworth 2012, 2017)

THE CONTEXT: SITUATIONAL INFLUENCES ON SUSTAINABILITY REPORTING AND ACCOUNTING

- MESO LEVEL INFLUENCES.

Macro level context

Meso level context

Meso level influences

- **International initiatives, standards and guidelines**
- **Guidelines, support structures, etc. of business associations, professional networks, etc.**
- **Best practices in the same and other industries**
- *Stakeholder expectations*
- …

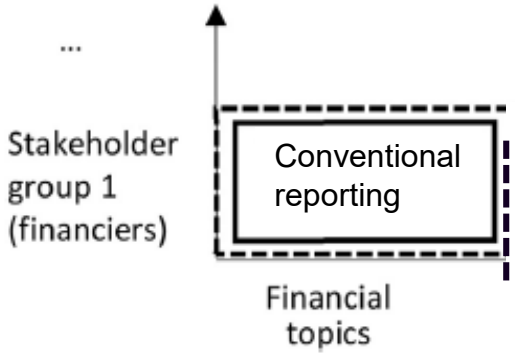
Micro level
corporate practices)

Establishing…
- CSR/sustainability reporting system (procedures & structures)
- Sustainability accounting system (measurement, indicators, etc.)
- …

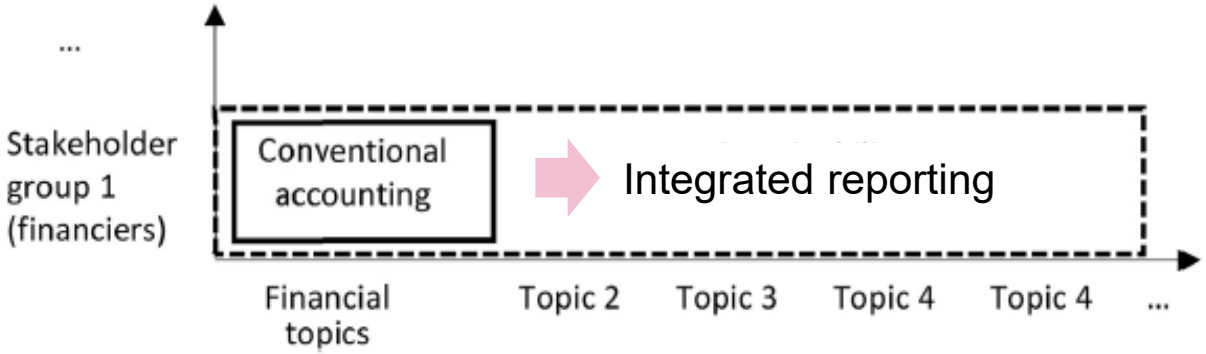
FROM CONVENTIONAL REPORTING AND ACCOUNTING

- …TO INTEGRATED REPORTING AND ACCOUNTING.

Conventional reporting has one key addressee



Extension of topics = main view of Integrated Reporting

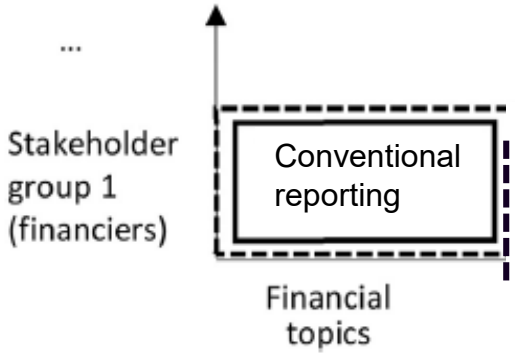


(adapted from Hörisch et al. 2022)

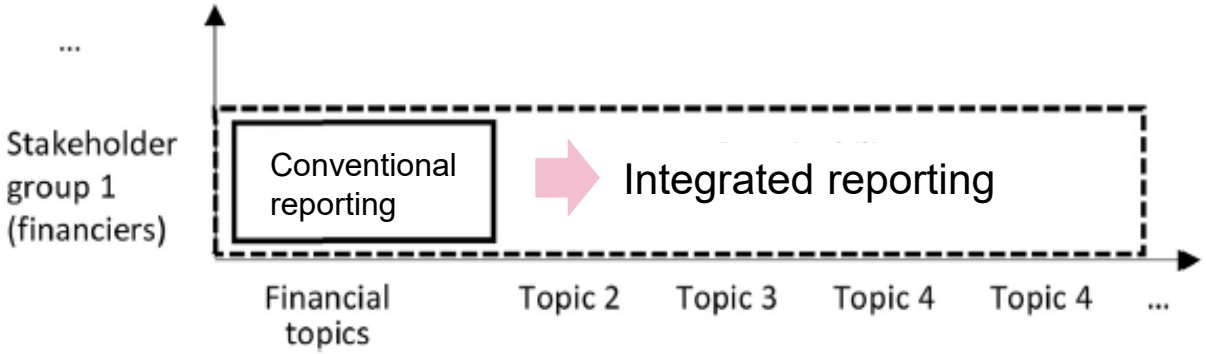
FROM INTEGRATED REPORTING AND ACCOUNTING

- … TO REPORTING FOR MULTIPLE STAKEHOLDERS.

Conventional reporting has one key addressee

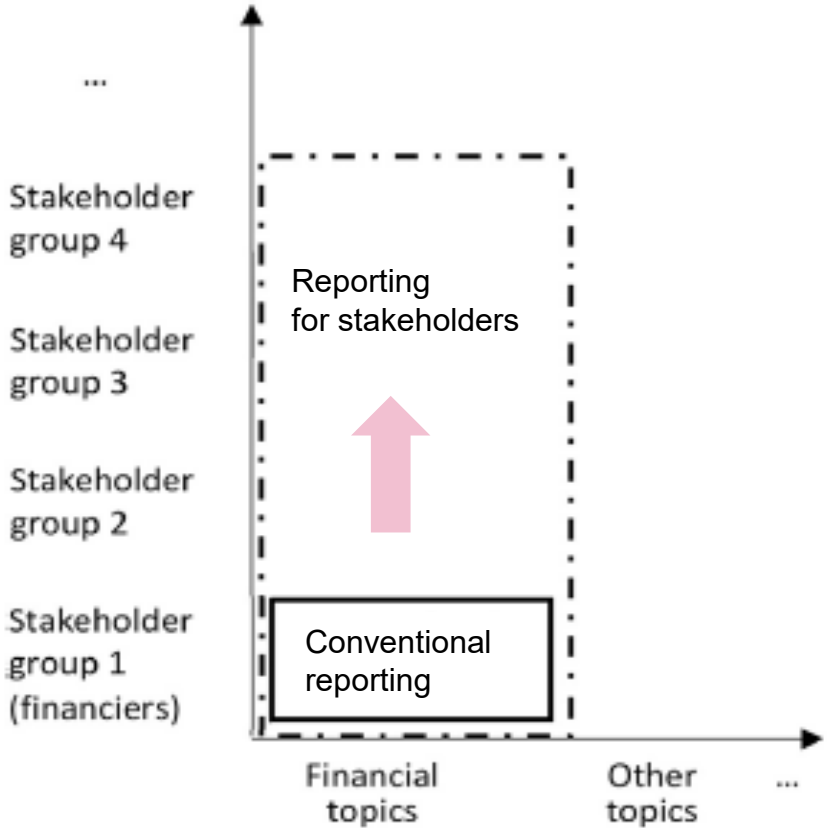


Extension of topics = main view of Integrated Reporting



(adapted from Hörisch et al. 2022)

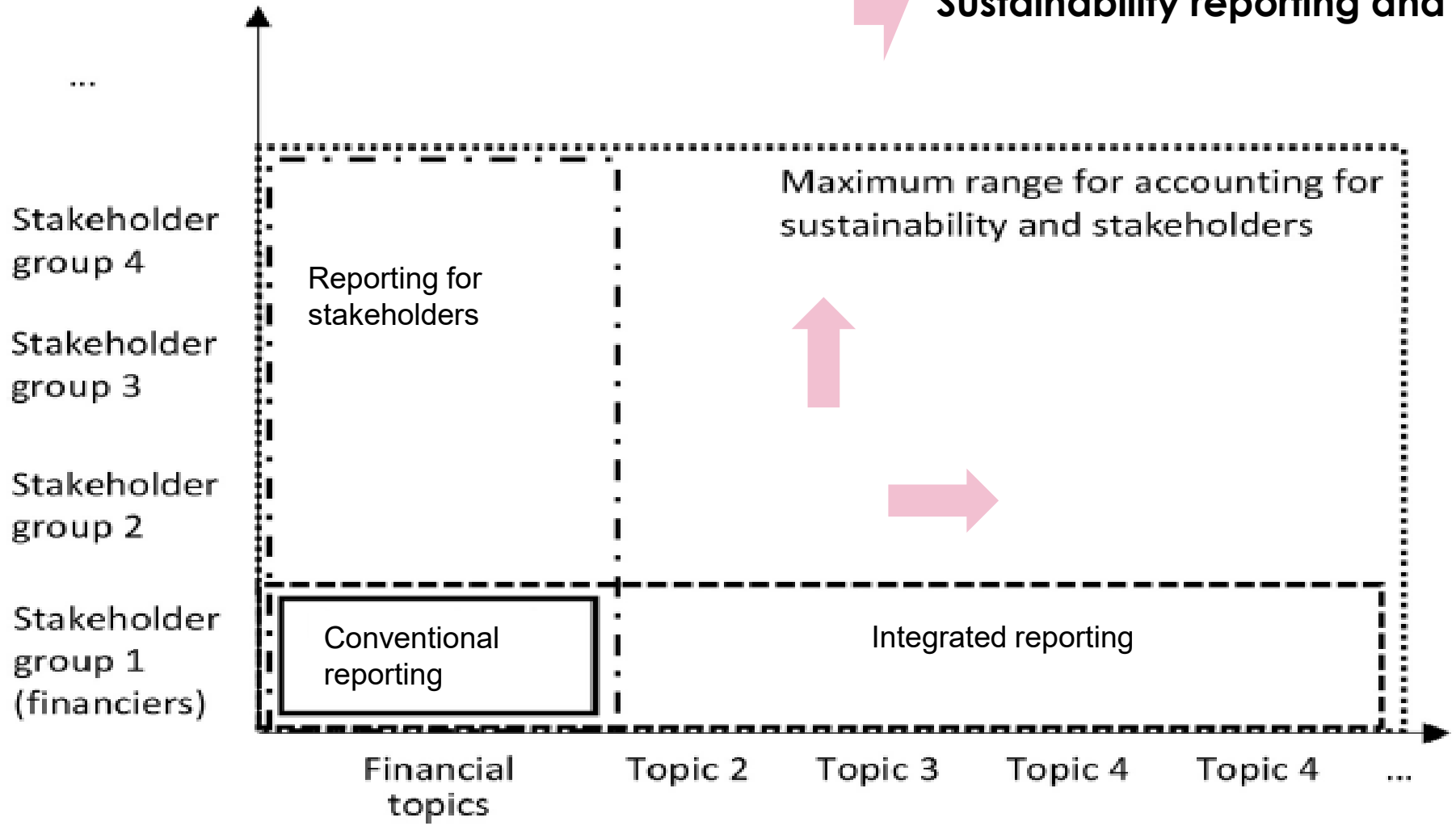
Extension of addressees = Reporting for (multiple different) stakeholders



FROM INTEGRATED AND STAKEHOLDER REPORTING AND ACCOUNTING

- … TO SUSTAINABILITY REPORTING AND ACCOUNTING.

Extension of both addressees & topics = Sustainability reporting and accounting



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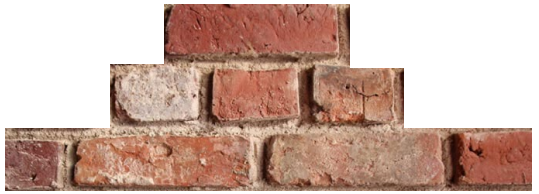

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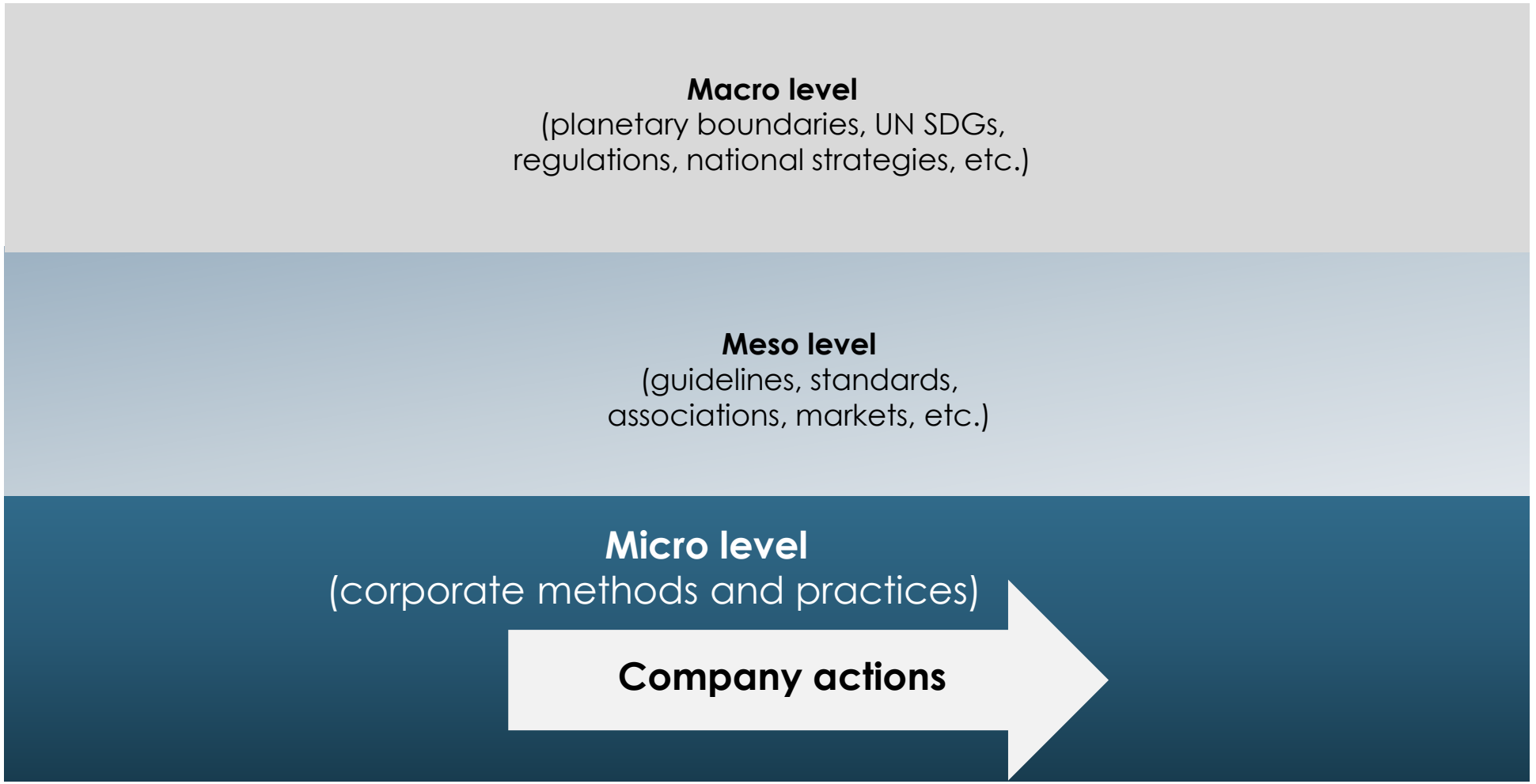
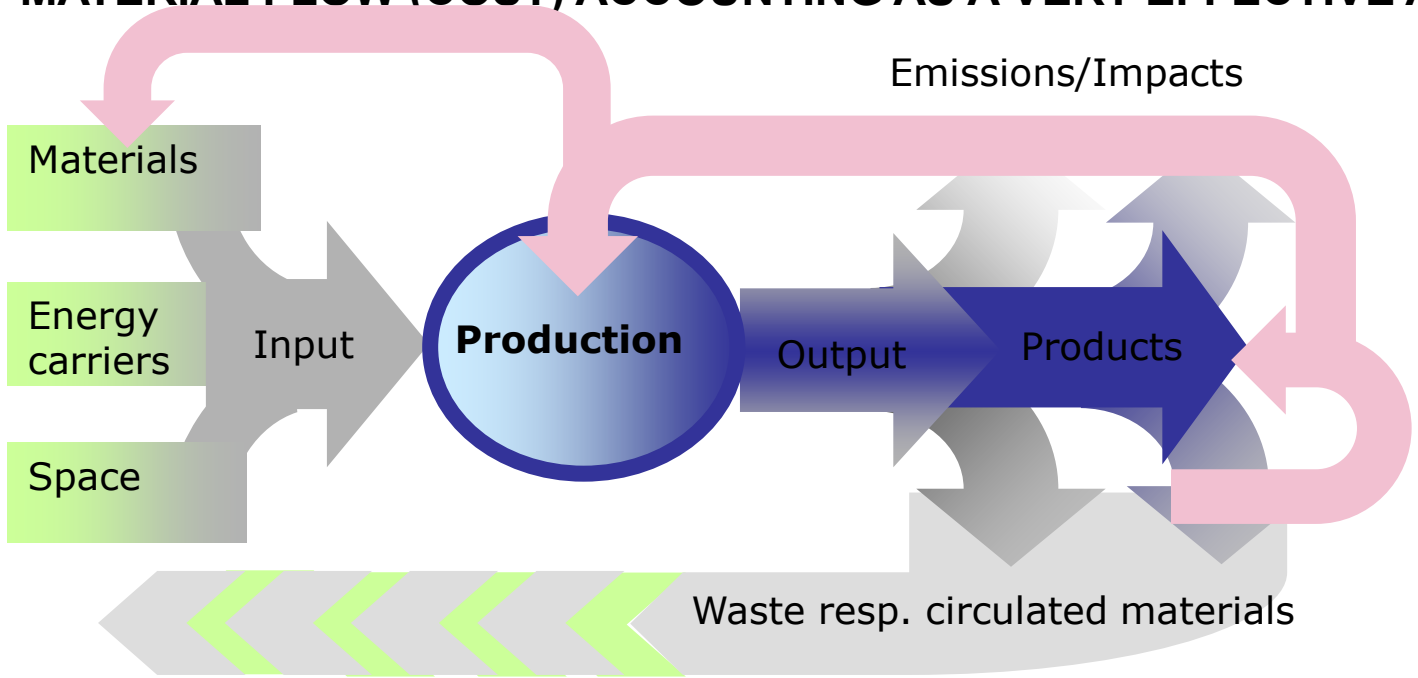
MICRO LEVEL: COMPANY ACTIONS

- WHAT MANAGEMENT ACCOUNTING METHODS AND PRACTICES EXIST?



ENVIRONMENTAL AND SUSTAINABILITY MANAGEMENT ACCOUNTING

- MATERIAL FLOW (COST) ACCOUNTING AS A VERY EFFECTIVE ACCOUNTING APPROACH.



Focus on increasing efficiency of material and energy use and flows (and related costs

Rationale:

Less material use in company
= less negative impact of company (incl. less costs)
= contribution to sustainable development (and economic success of the company)

- **Most effective environmental accounting approach to increase resource, material and energy efficiency!**
- **However, missing answers to key sustainability questions and benchmarks:**
  - Is this sufficient to achieve sustainable development (at the global level)?
  - How does the company contribute to societal transformation for sustainability?

ACCOUNTING FOR REBOUNDS

- WHAT IS A REBOUND EFFECT?

Rebound effects exist **when improvements achieved** through environmental efficiency initiatives **are**

a) **diminished or even overcompensated (backfire effect)**
b) **as a result of having encouraged other forms of wastefulness or inefficiency.**

Extant literature focuses either on

a) **mentioning** that rebounds (could) exist (without further investigation) or focus on
b) **correlations at industry and national levels** to find indication whether rebounds exist, commonly concluding that related effects are significant.

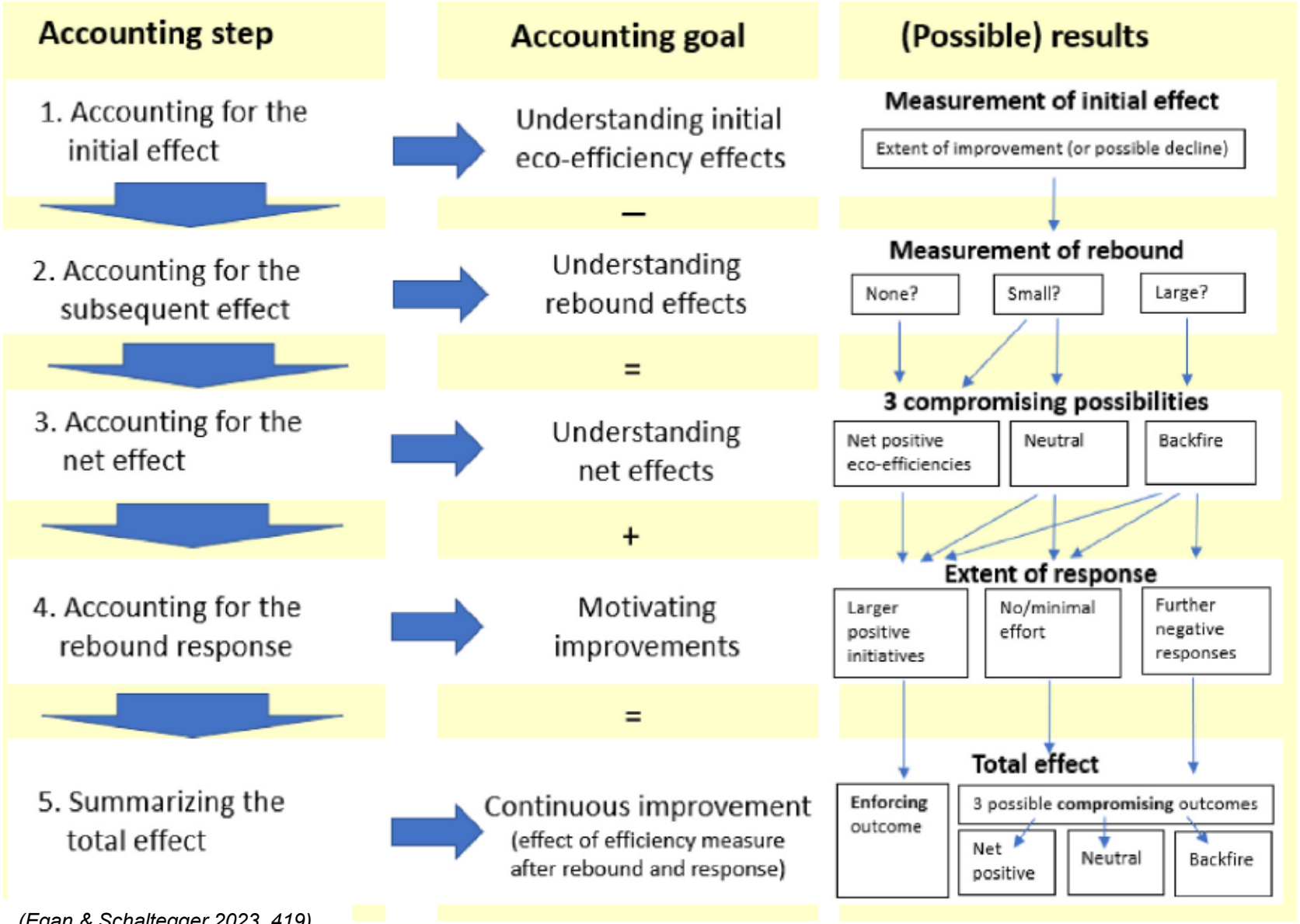
Whether they are relevant or not on a specific product, service, company or consumption level, however, is practically never measured and known.

Problematization

How do you know whether your product, service or company faces a rebound effect?

ACCOUNTING FOR REBOUNDS

- FROM ASSUMPTIONS (PREJUDICES) AND MACRO-LEVEL CORRELATIONS TO PRACTICAL MEASURES.



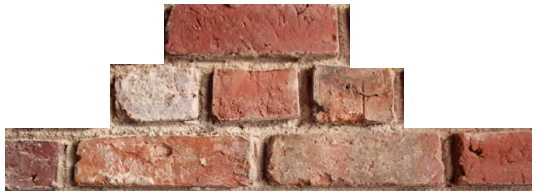
(Egan & Schaltegger 2023, 419)

EXERCISE.

- **What reasons and advantages do you see for a “pure” micro-level focus?**

- **What limitations could a “pure” micro-level focus of sustainability management accounting have?**

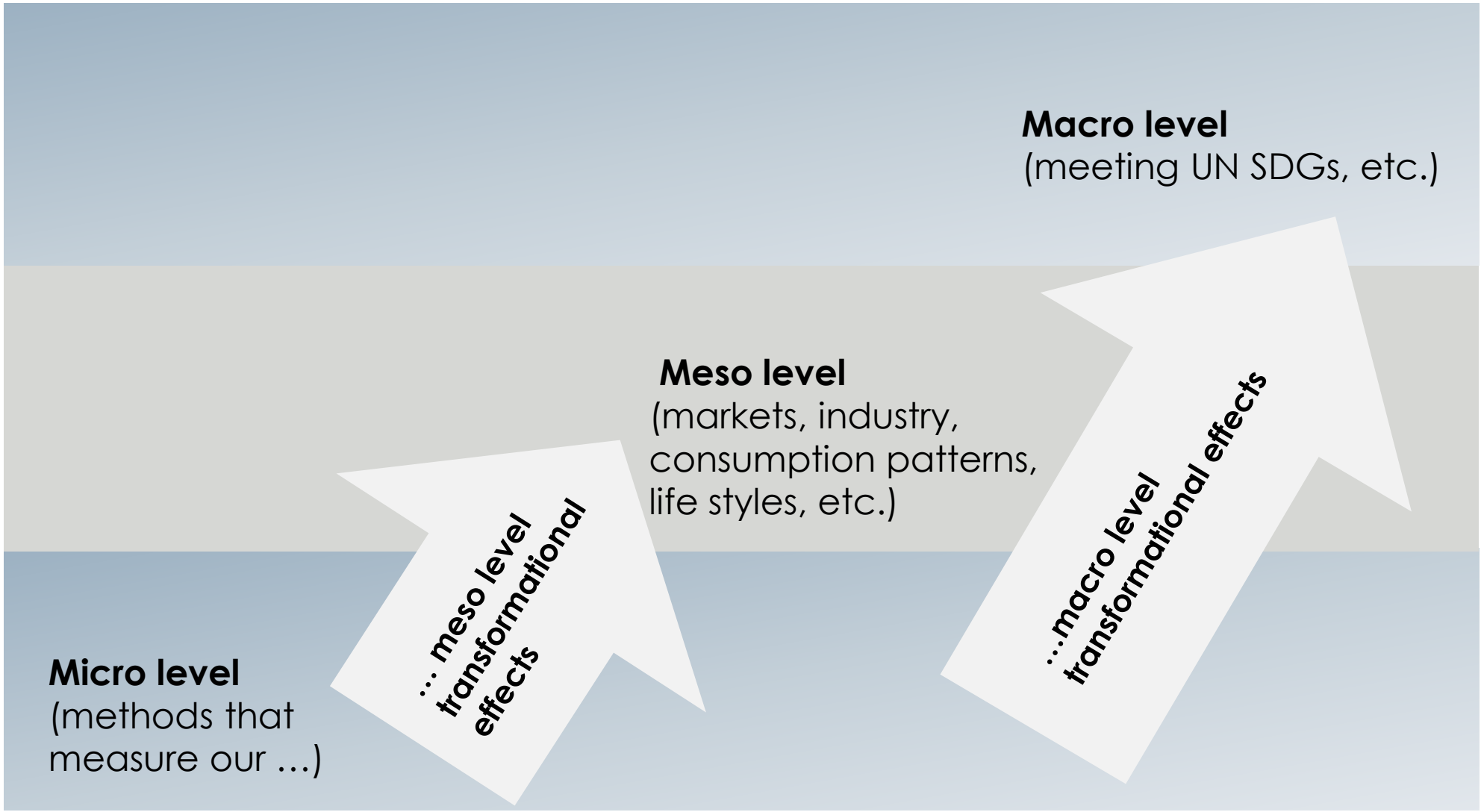
STRUCTURE.



- **Structuring sustainability management accounting and reporting** with the **CAT framework:** linking sustainability reporting and accounting with multiple levels beyond organisational boundaries
- **Adapting to context requirements and expectations**
  - Macro level context: situational influences on sustainability reporting (and accounting)
  - Meso level context: situational influences on sustainability reporting (and accounting) and accounting for stakeholders
- **Micro level corporate actions:** Sustainability and environmental management accounting, incl. examples of Material Flow Cost Accounting (MFCA) and accounting for rebounds
- **Sustainability accounting as a transformation supporting management approach**
  - Accounting (and reporting) for company effects on the meso level
  - Accounting (and reporting) for company (contributions to) effects on the macro level
- Summary

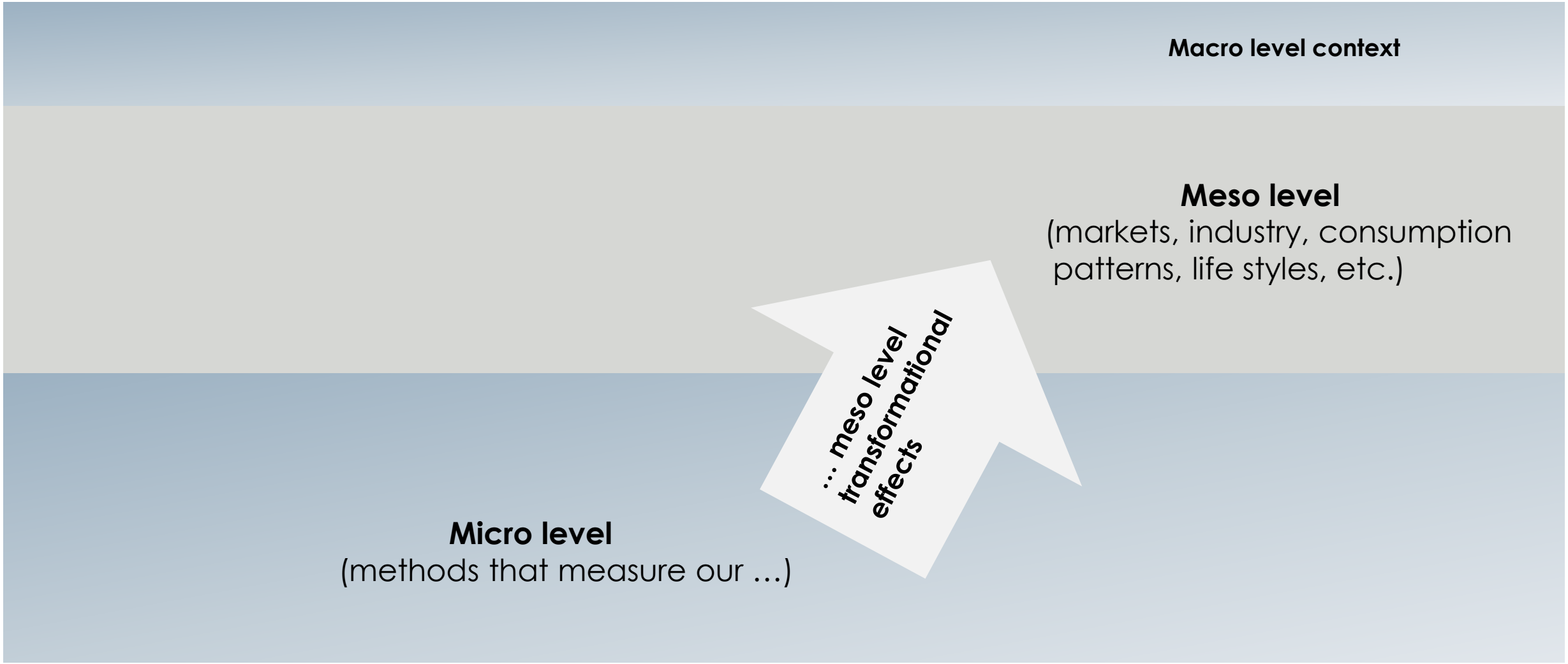
MEASURING AND REPORTING ON OUR TRANSFORMATIONAL EFFECTS

- HOW DO WE INFLUENCE THE MESO AND MACRO LEVELS?



LINKING MICRO WITH MESO LEVEL

- WHAT TRANSFORMATIONAL EFFECTS DO WE CAUSE IN MARKETS, THE INDUSTRY, ETC.?



KEY QUESTIONS OF ACCOUNTING FOR TRANSFORMATIONAL EFFECTS TO THE MESO LEVEL.

- How do we (contribute to the) change consumption patterns towards sustainability?
- How do we (contribute to the) change life-styles towards sustainability?
- How do we (contribute to the) change the market towards sustainability?
- How do we (contribute to the) change the industry and competitors towards sustainability?
- How do we (contribute to the) change (of) suppliers and supply chains towards sustainability?

Business Strategy and the Environment

Managing entrepreneurial and corporate contributions to sustainability transitions

Stefan Schaltegger, Derk Loorbach, Jacob Hörisch

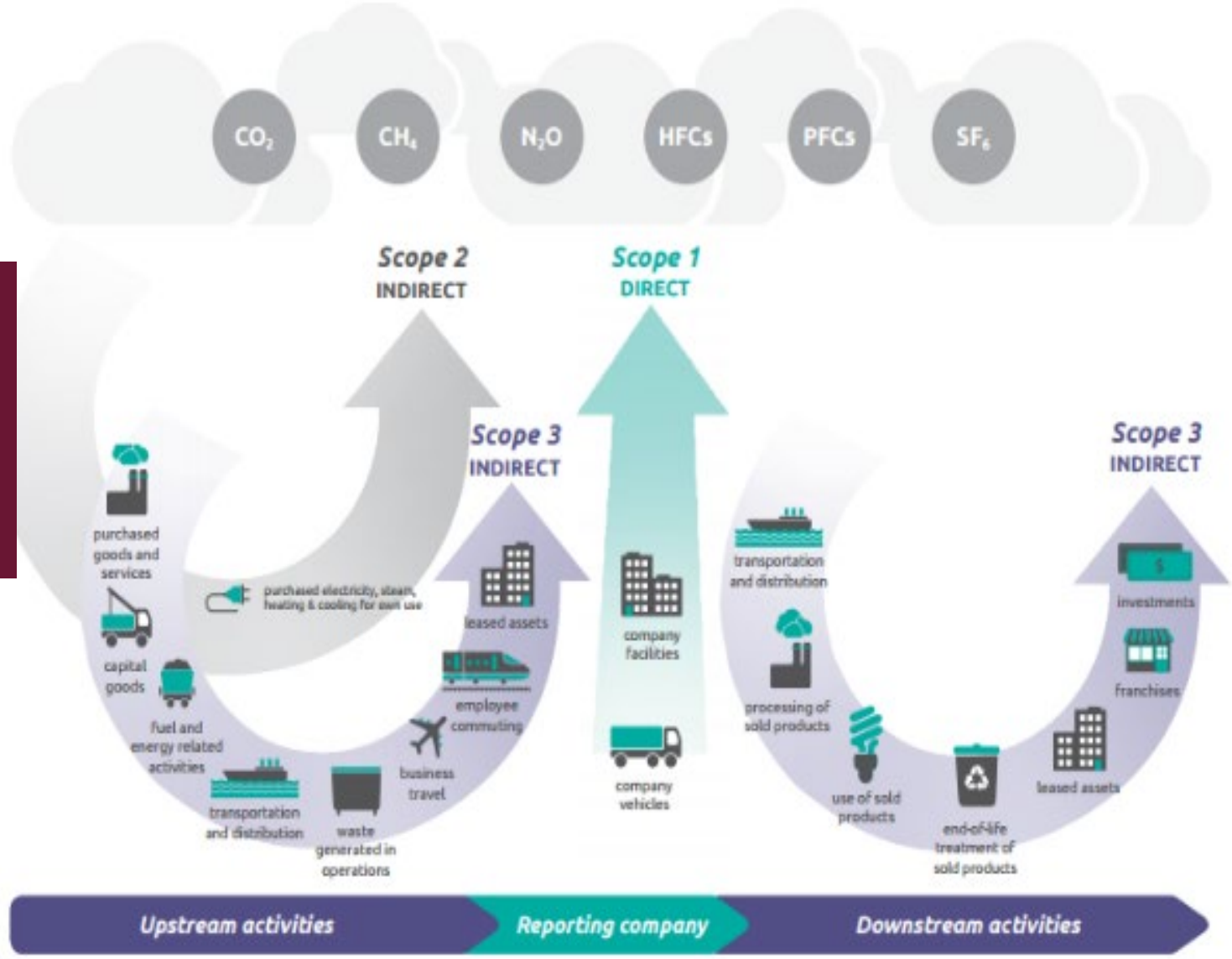
https://doi.org/10.1002/bse.3080

GREENHOUSE GAS ACCOUNTING

- THE GHG PROTOCOL TO ADDRESS TRANSFORMATIONAL EFFECTS.

- **Scope 2 = effects beyond organisational boundaries that change the electricity industry (supply chain)**
- **…but no (macro level) answer to: "Is the reduction sufficient".**

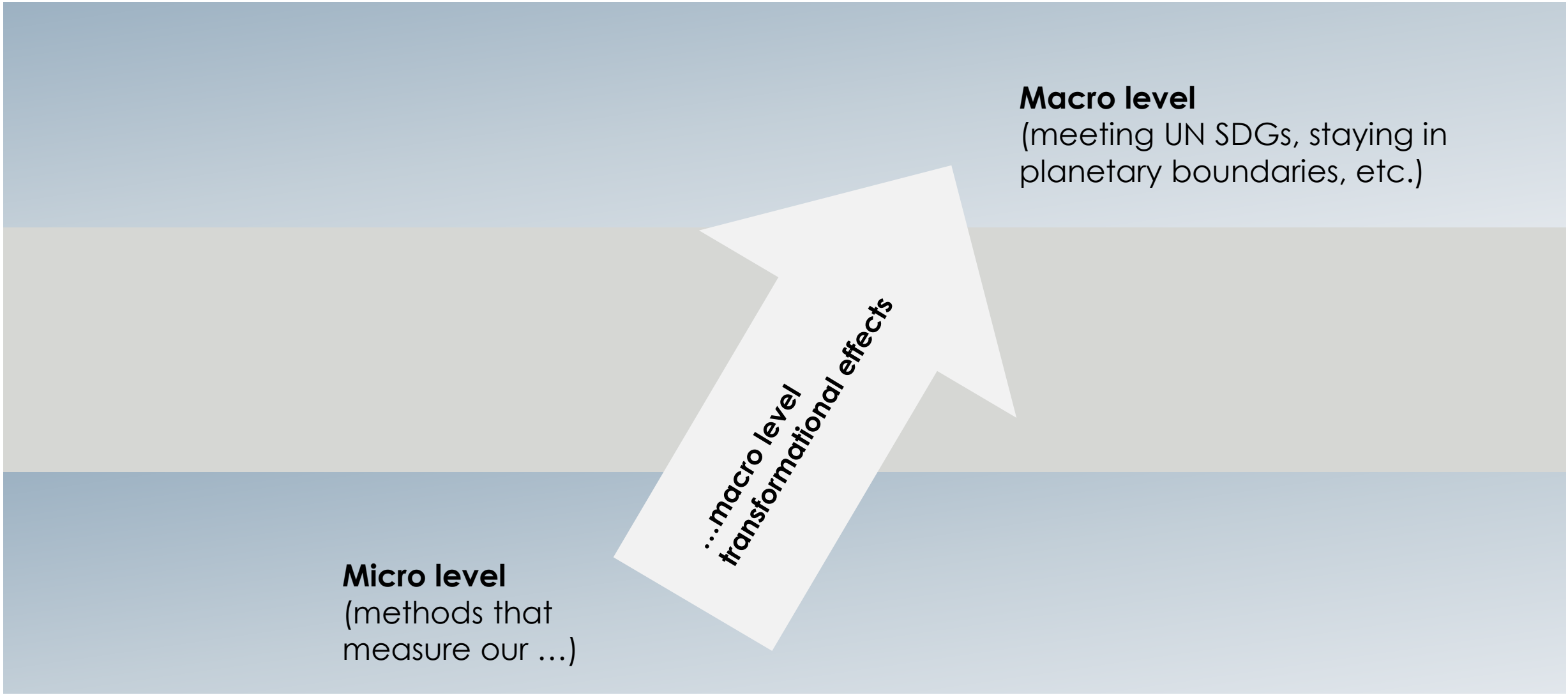
- Scope 1 = the emissions from owned or operated assets
- Scope 2 = the emissions from purchased energy
- Scope 3 = the emissions from everything else (suppliers, distributors, product use, etc.)



(Source: https://ghgprotocol.org/blog/you-too-can-master-value-chain-emissions
World Resources Institute (2 May 2023): Greenhouse Gas Protocol. Retrieved 22 July 2023)

MEASURING AND REPORTING ON OUR TRANSFORMATIONAL EFFECTS

- HOW DO WE CONTRIBUTE TO MACRO LEVEL GOALS?



SCIENCE BASED TARGETS (SBT)

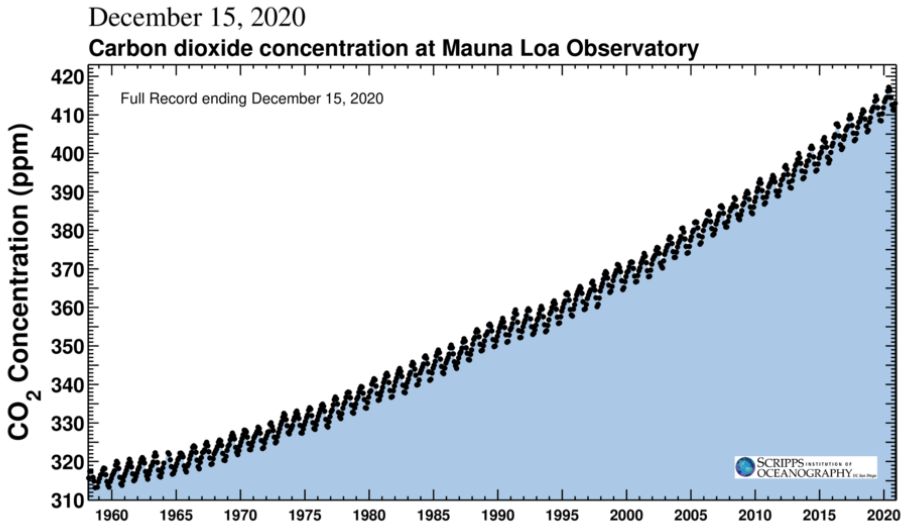
- THE APPROACH.

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

Assessment of the tolerable limits (planetary boundary)	Deduction of the GHG concentration in the atmosphere	Total budget of GHG that may still be emitted
1.5°C	430 ppm	< 300 Gt CO_2 < 400 Gt CO_2e

- **Regulation capacity**
  Tipping points when the climate system changes substantially
- **Regeneration capacity**
  (reversibility & survival)
- **Functional capacity** of ecosystems (ecosystem functioning)

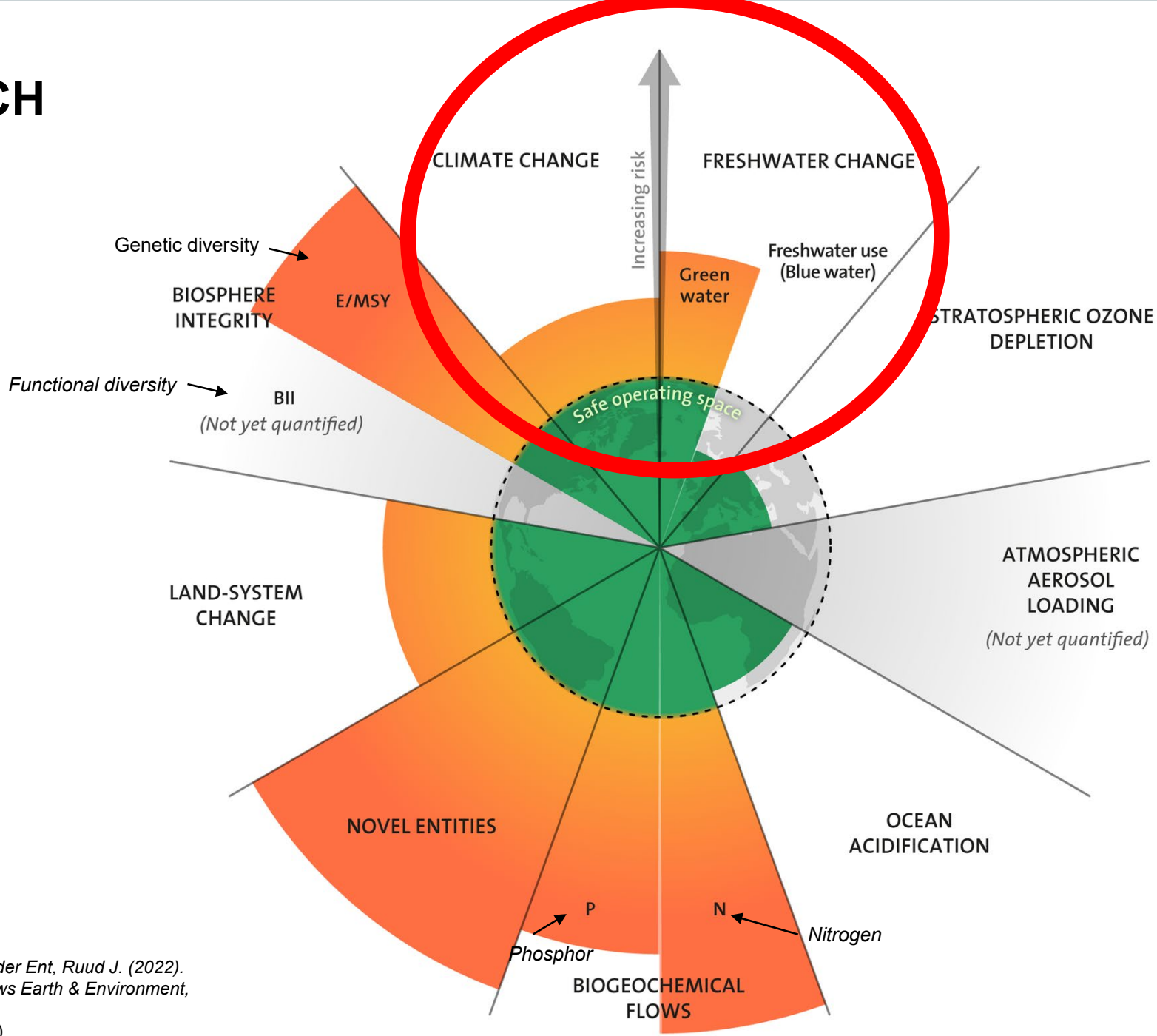


According to the current trend this budget will be used up in ca. ~ 7 years

(Source: https://www.mcc-berlin.net/forschung/co2-budget.html)

KEY CONCEPTS IN SUSTAINABILITY RESEARCH

- THE MACRO-LEVEL SCIENCE PERSPECTIVE OF PLANETARY BOUNDARIES.



(Source: *Wang-Erlandsson, Lan; Tobian, Arne; van der Ent, Ruud J. (2022). A planetary boundary for green water. Nature Reviews Earth & Environment, 3 (6), 380–392. doi:10.1038/s43017-022-00287-8. based on: Rockström et al. 2009;* Steffen et al. 2015)

DEDUCTING SUSTAINABILITY MANAGEMENT ACCOUNTING FROM PLANETARY BOUNDARIES.

Planetary boundary and related accounting focus	Environmental issues and recommended contribution (examples)	Specific accounting related references focusing on the respective planetary boundary (examples)
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Land use change • *Accounting for land use*	Less land use; restored biodiversity-rich land; mixed land use	*General accounting & management link to land use* Wilting and Vringer (2009) *No explicit EMA focus identified*
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(Schaltegger 2018, 24)

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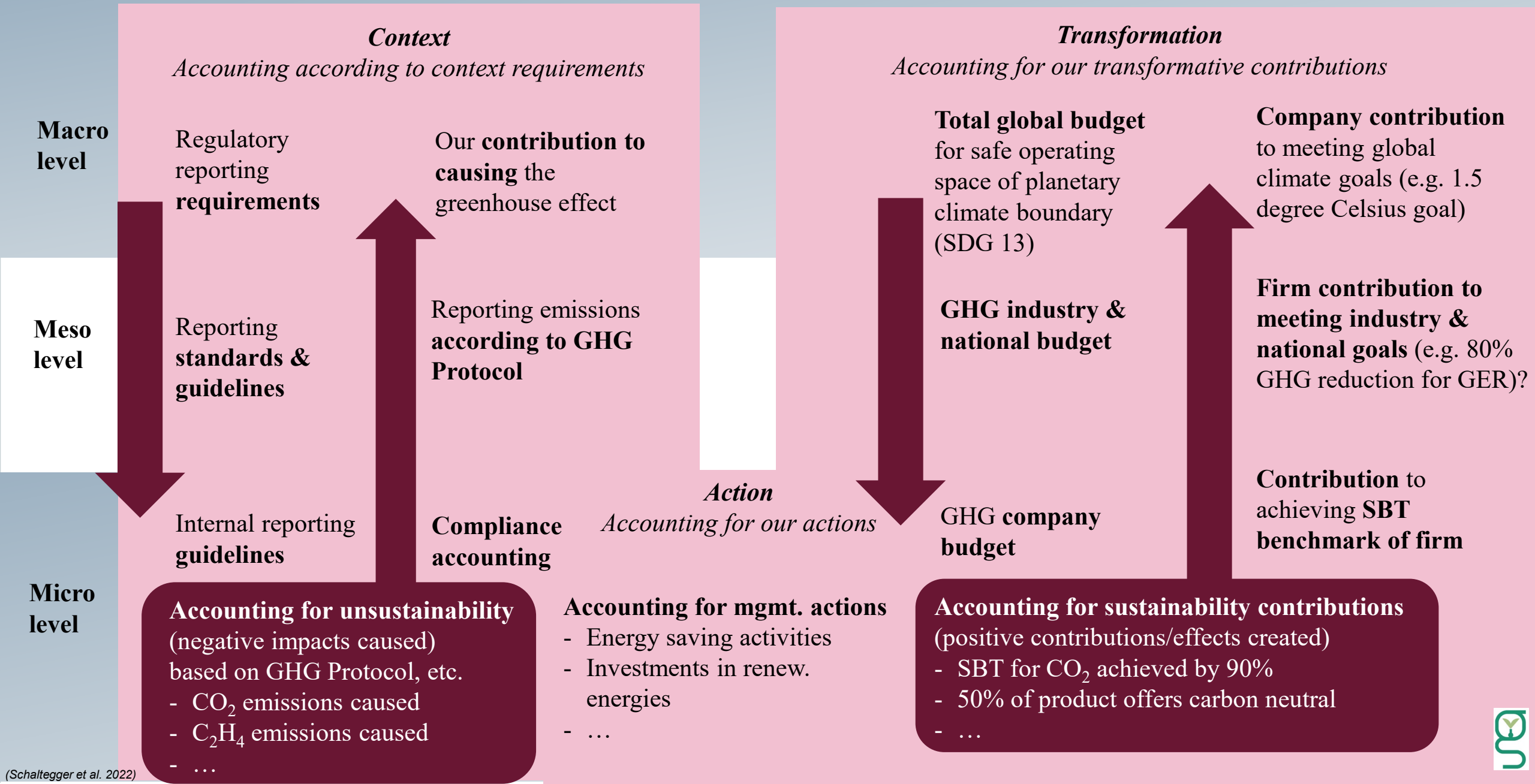
CAT FRAMEWORK TO ORGANISE SUSTAINABILITY REPORTING AND ACCOUNTING
- APPLICATION FOR GHG ACCOUNTING.



(Schaltegger et al. 2022)

THANK YOU.

ACCOUNT 4 Green Eco

Co-funded by the European Union

The project "Sustainability Accounting Learning Platform for a Green Economy" (Account4GreenEco) is co-funded by the Erasmus+ programme of the European Union (Ref. 2022-1-ES01-KA220-HED-000089844). The content of this presentation is the sole responsibility of the Account4GreenEco Partnership and neither the European Commission nor the Spanish Service for the Internationalisation of Education (SEPIE) are responsible for any use that may be made of the information contained therein.

Co-funded by the European Union

ACCOUNT 4Green Eco

Unit 1.2. The sustainability reporting landscape

Teaching Activity 1

Trento, October 26, 2023

UNIVERSIDAD DE BURGOS

Centre for Sustainability Management

LEUPHANA UNIVERSITÄT LÜNEBURG

MBS since 1897 MONTPELLIER BUSINESS SCHOOL

gestionet Play Think Learn

UNIVERSITÀ DI TRENTO

The course structure

Module 1 Sustainability accounting in the 21st century	Module 2 Sustainability accounting production	Module 3 Sustainability management accounting
Leading partner: **UBU** Supporting partner: **MBS** Feedback: **Leuphana** Delivered for implementation: **Jul 23** TA1: **Trento (UniTrento, Oct 23)**	Leading partner: **UniTrento** Supporting partner: **MBS** Feedback: **UBU** Delivered for implementation: **May 24** TA1: **Lüneburg (Leuphana, Sep 24)**	Leading partner: **Leuphana** Supporting partner: Feedback: **UniTrento** Delivered for implementation: **Mar 25** TA1: **Burgos (UBU, Jul 25)**
U1.1. Accounting and the Anthropocene **U1.2. The sustainability reporting landscape**	**U2.1. Sustainability accounting regulation** **U2.2. Sustainability reporting assurance**	**U3.1. Fundalmentals of sustainability management accounting** **U3.2. Internal control for sustainability information.**

Teaching activity 1

Course materials – online platform

1. Sustainability reporting as a corporate practice

1.1. Defining sustainability reporting

The emergence of sustainability reporting

Traditionally, companies have produced financial statements to provide information on their financial performance to their shareholder and investors. This practice reflects what is considered the common and widespread conception of accounting as financial accounting. However, the growing **societal concern for the impacts of corporations on the environment and society** has increased the pressure on them to report also on how they are managing and mitigating those environmental and social impacts (Gray, 2006). This situation recognizes that firms, and organizations in general, should be held accountable not only to their providers of financial capital, but also to those stakeholders to which they relate (Gray et al., 1996).

As a consequence of this recognition, some organizations have published reports covering aspects about their social and environmental impacts for almost five decades. However, the **form and content of these reports have evolved significantly** during this period. In the 1970s, firms published social reports that provided information around how they managed certain social issues. The practice changed into environmental reports at the end of the 1980s and beginning of the 1990s driven by the dramatic environmental disasters that happened around this time (such as the 1984 Bhopal disaster in Indian, or the 1989 Exxon Valdez spill in Alaska), which increased society's spotlight on environmental impacts. Since the late 1990s and beginnings of the 2000s, corporate reports have broaden their coverage to inform about the social, environmental and economic impacts of business (the understanding of the economy in these reports goes beyond financial performance, as they consider how companies broadly affect the economies in which they operate, for instance by creating jobs, paying taxes, or supporting infrastructure development). This form of reporting is the most common nowadays and it is usually known as sustainability reporting.

> **Sustainability reporting** refers to the practice of producing reports that explain how organizations manage their social, environmental and economic dimensions of their businesses by informing about their priorities, policies and actions, as well as the impacts, both positive and negative, of their operations in those areas.

The main outcome of sustainability reporting is known as **sustainability report**. Yet, other labels may also be used to refer to these reports, such as corporate social responsibility report, CSR report, corporate citizenship report, non-financial report, among others. Usually, these are stand-alone reports that are published independently from the financial statements and accounts, although it is very common that both documents refer to the same reporting period (Tregidga & Laine, 2021). Regulation is driving such a greater alignment between sustainability and financial reporting. The different sustainability reporting regulatory pieces that are being enacted worldwide, especially in Europe are promoting the role of sustainability reporting to be considered as of similar importance to financial reporting. Furthermore, regulation is also recognizing the interconnectivity between both reporting pillars. The requirements of regulation, which will be detailly covered in Module 2, are in some cases even mandating that the sustainability report should be provided as an element of annual reports.

Video about definition of sustainability reporting, anticipating purpose (see file XXXX.docx)

The purpose of sustainability reporting

Usually, sustainability reporting has been understood as a tool through which organizations are made accountable to their stakeholders for their impacts (Tregidga & Laine, 2021). However, the increasing awareness of financial capital providers about the potential effect of sustainability on firms' financial performance has determined other objectives that sustainability reporting may support. Therefore, broadly speaking, sustainability reporting may serve **three main purposes:** accountability, valuation, and stewardship (Cooper & Michelon, 2022).

> **Purposes of sustainability reporting**
>
> - From an **accountability perspective**, sustainability reporting aims to provide an organization's stakeholders with information that allows them to assess how it manages the social and environmental impacts that its business generates (Gray et al., 1997).
> - From a **valuation perspective**, sustainability reporting aims to provide financial capital providers – namely, shareholders and investors – with information that allows them to evaluate their investments' future value .
> - From a **stewardship perspective**, sustainability reporting aims to provide financial capital providers with information that allows them to assess the use of the capital they provided to the organization.

The three different purposes ascribe different **levels of organizational responsibility.** The accountability perspective conceives organizational responsibility broadly. An organization is not only expected to be responsible to those stakeholder providing financial capital, but also all to all of them that suffers from the impacts that its activity creates. Therefore, this approach recognizes that organizations relate to a variety of stakeholders, with different views and needs, that must be acknowledge and consider in the production of sustainability reports.

Purpose activity (see file XXXX.docx)

Course materials – online platform

DEFINING SUSTAINABILITY REPORTING

- ✓ The emergence of sustainability reporting
- ✓ The purpose of sustainability reporting

The emergence of sustainability reporting

Traditionally, companies have produced financial statements to provide information on their financial performance to their shareholders and investors. This practice reflects what is considered the most widespread conception of accounting as financial accounting. However, the growing **societal concern for the impacts of corporations on the environment and society** has increased the pressure on them to report also on how they are managing and mitigating those environmental and social impacts (Gray, 2006). This situation recognizes that firms, and organisations in general, should be held accountable not only to their providers of financial capital but also to those stakeholders to which they relate (Gray et al., 1996).

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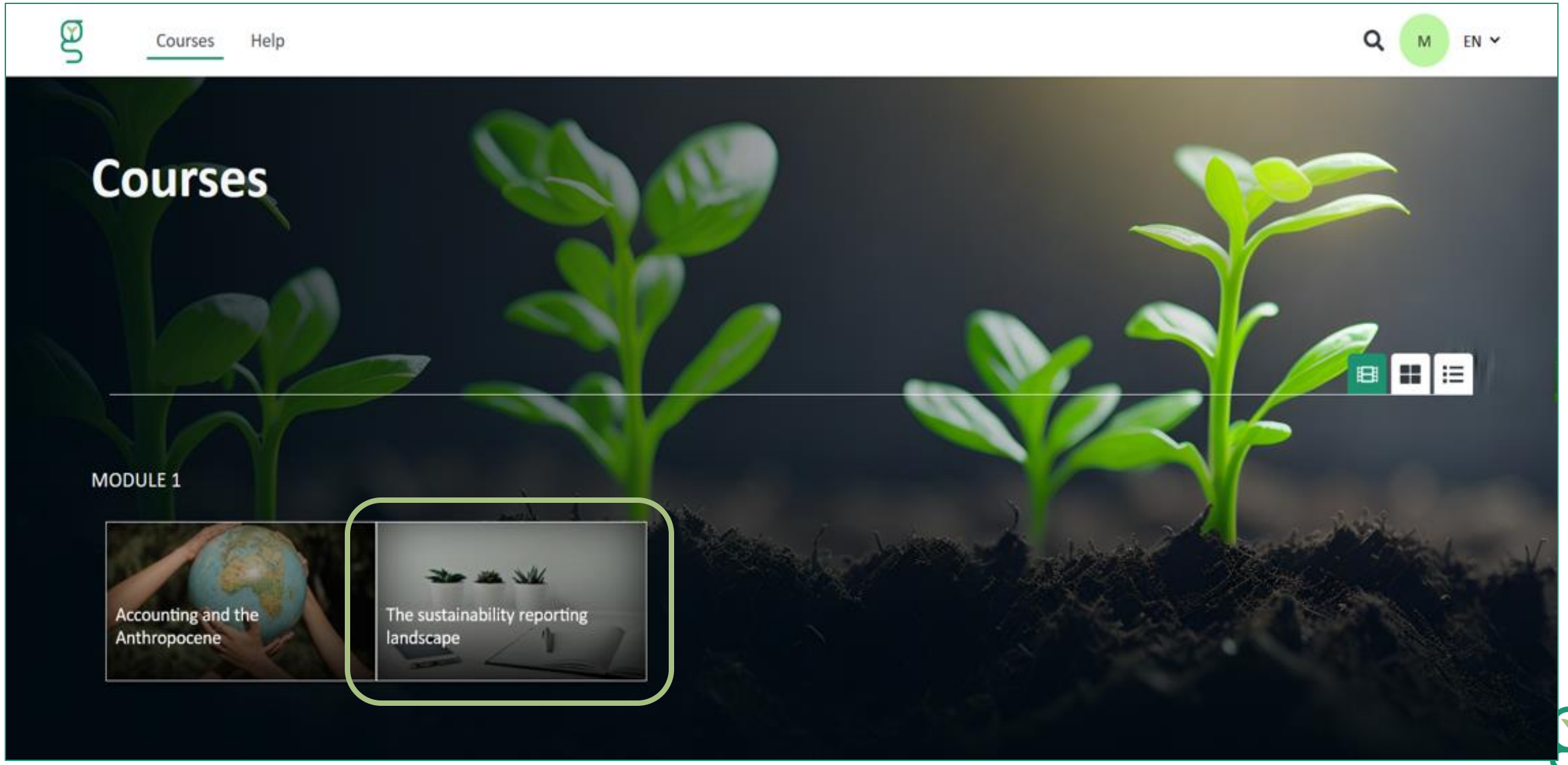
Sustainability reporting refers to the practice of producing reports that explain how organisations manage the social, environmental, and economic dimensions of their businesses by informing about their priorities, policies, and actions, as well as the impacts, both positive and negative, of their operations in those areas.

The main outcome of sustainability reporting is known as **sustainability report**. However, other labels may also be used to refer to these reports, such as corporate social responsibility report, CSR report, corporate citizenship report, non-financial report, among others. Usually, these are stand-alone reports that are published independently from the financial statements and accounts, although it is usual that both documents refer to the same reporting period (Tregidga & Laine, 2021). Although sustainability reporting emerged as a voluntary practice, the recent regulatory focus on this phenomenon is promoting a greater alignment between sustainability and financial reporting. The different regulations enacted worldwide, especially in Europe, are promoting the role of sustainability reporting to be considered as of equal importance to financial reporting. Furthermore, regulation is also recognizing the interconnectivity between both reporting pillars. The regulatory requirements, which will be detailly covered in Module 2, are in some cases even mandating that the sustainability report should be provided as an element of annual reports.

Goals of this session:
Unit 1.2. The sustainability reporting landscape

1. **Improve your knowledge of:**
    - What sustainability reporting is.
    - The concept of materiality as a fundamental element in sustainability reporting.
    - Main sustainability reporting frameworks and standards that exists.


Courses
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MODULE 1
Accounting and the Anthropocene
The sustainability reporting landscape

Goals of this session:
Unit 1.2. The sustainability reporting landscape

1. Sustainability reporting as corporate practice

Defining sustainability reporting

The state of sustainability reporting

2. Materiality in sustainability reporting

The concept of materiality

The materiality assessment process

Activities and role plays

3. Frameworks for producing sustainability reports

The Landscape of sustainability reporting framework

The Global Reporting Initiative

The International Sustainability Standards Board

The Sustainability Accounting Standards Board

The Integrated Reporting Framework

The Task Force On Climate-related Financial Disclosures

The Sustainable Development Goals Disclosure Recommendations

Goals of this session:
Unit 1.2. The sustainability reporting landscape

1. **Improve your knowledge of:**
2. **Feedback on:**
    - The pedagogic approach embedded in the online learning platform
    - The easiness to learn
    - The dynamism of the content
    - The accessibility of the materials
    - Most importantly: if you can learn through it!

Dynamic of the session:

1. Individually **work on unit 1.2** on the platform (until 12.30 pm).
   - Feel free to ask us any questions.
   - You can talk to your peers.
   - Prepare for the feedback: comments, suggestions, errors, etc.

Dynamic of the session:

1. Sustainability reporting as corporate practice

Defining sustainability reporting

The state of sustainability reporting

2. Materiality in sustainability reporting

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Activities and role plays

Continue after the TA

3. Frameworks for producing sustainability reports

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The Integrated Reporting Framework

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Dynamic of the session

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   - Feel free to ask us any questions.
   - You can talk to your peers.
   - Prepare for the feedback: comments, suggestions, errors, etc.

2. Small **group work**: **What materiality perspective makes more sense to you?** (until 12.45)
   - Each group will be assigned a specific materiality perspective
   - Each group should build a case of why that perspective is more reasonable for a firm to apply, vs the alternative perspective.
3. Debate to argue and counterargue (4-3 minutes per group)

Dynamic of the session

- To which audience is each materiality perspetive aiming to inform?
- That are the implications of that perspective?
- What is the representation of the “reality” that each perspective creates?
- In which way do you think that the information produced under each perspective is characterized?
- Is there a particular ideology behind each perspective?

Dynamic of the session

Group 1 – Impact materiality		
Jade	Ligneres	MBS
Jacob	Olivares Martín	UBU
Carmen	Calzada Diez	UBU
Valentina	Montrucchio	UniTrento
Anna	Martinato	UniTrento
Elio	Llane	Leuphana

Group 2 – Financial materiality		
Inna	Savchenko	Leuphana
Sabah	Znassi	MBS
Divya	Tom	Leuphana
Carlos	Alonso Delgado	UBU
Erika	Martini	UniTrento
Silvia	Prati	UniTrento

Group 3 – Impact materiality		
Polina	Kaliagina	Leuphana
Karen del Pilar	Chancafe Dominguez	UBU
Veselin Veselinov	Valkanov	MBS
Pinella	Nehme	MBS
Ilaria	Clementi	UniTrento
Mario	Gómez Casanueva	UBU

Group 4 – Financial materiality		
Claudia	San Esteban Camarero	UBU
Pauline	Alleaume	MBS
Adam	King	Leuphana
Valentina	Donini	UniTrento
Asli	Gurbuz	Leuphana

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Students' feedback

Teaching Activity 1

Trento, October 26, 2023

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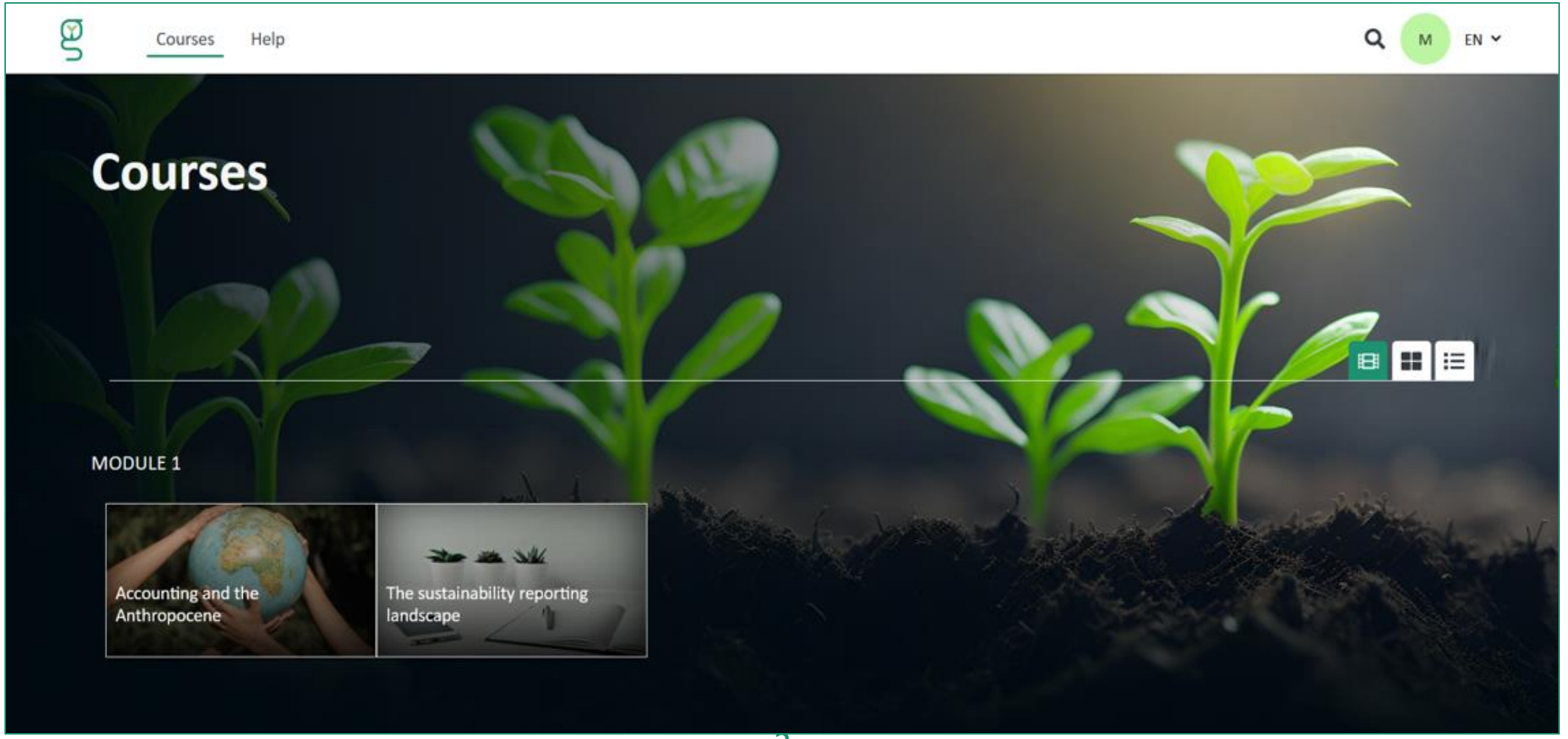
Use of the online learning platform



Goal of the teaching activities

For the project:

- To **validate** the resources and materials integrated into the online platform
- Gather students during the platform's development to test it and ensure its **usability and quality**.

For the students:

- Develop knowledge on **sustainability accounting**
- Expose yourself (perhaps) to an alternative **form of (digital) learning**
- Share experience in an **international environment**

We want your feedback

Send your notes: account4greeneco@ubu.es


merci
graciñas
eskerrik asko
gracias
danke
grazie

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ACCOUNT 4Green Eco

Closing session

Teaching Activity 1

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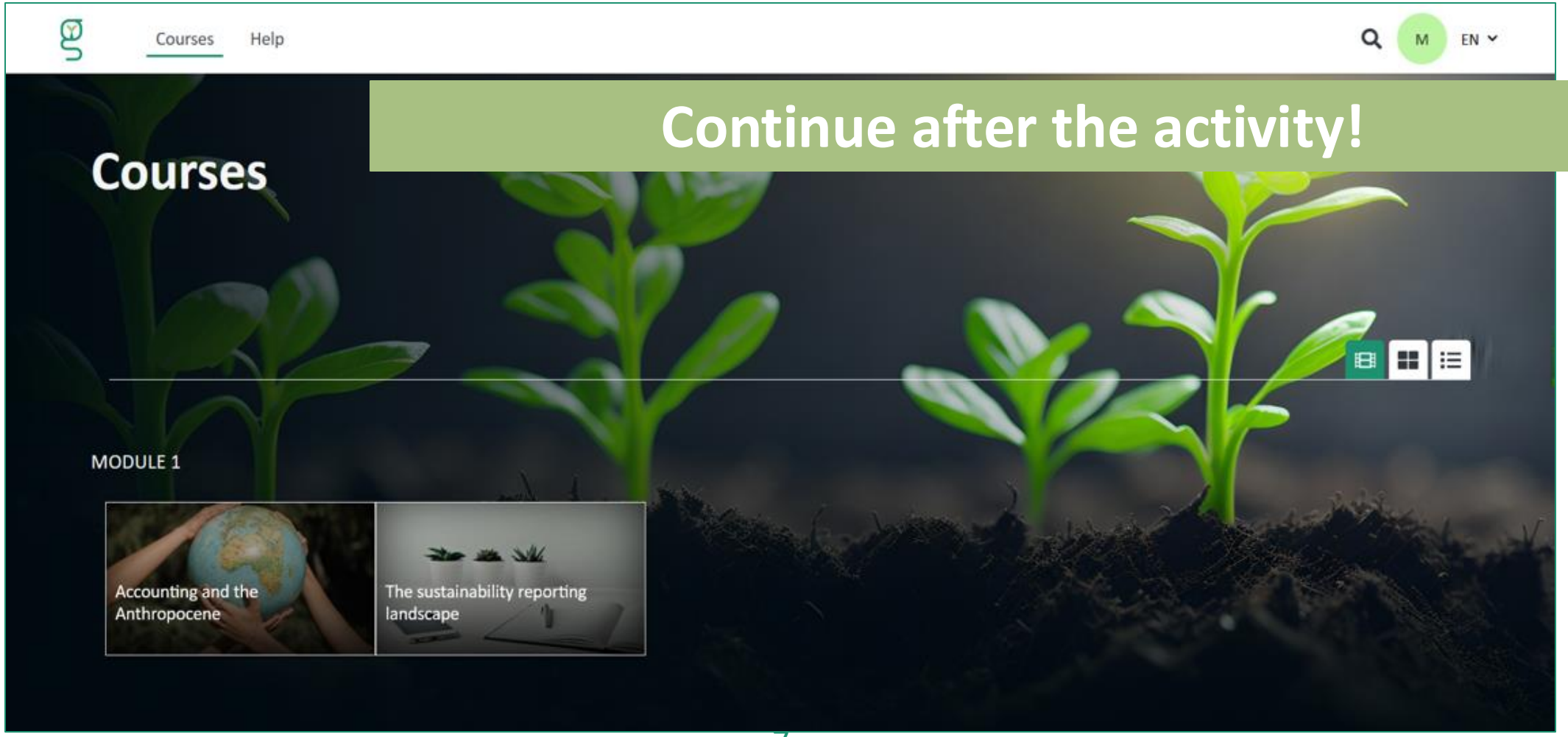

Certificates of attendance

Requirements

- Attend all sessions
- Provide feedback by filling in the questionnaires in the specific session

Reception

- Email with which you register for the activity.
- Next Monday morning.

Many thanks

UniTrento team:

- Michele, Ericka and Caterina
- Supporting staff

Rest of the partners:

- Academic partners: Selection of students and development of content
- Gestionet: design and implementation of the online platform

To all of you!

- Montpellier Business School
- University of Burgos
- University of Leuphana
- University of Trento

Moving to the next phase

"Living" course under development		
Module 1 **Sustainability accounting in the 21st century**	**Module 2** **Sustainability accounting production**	**Module 3** **Sustainability management accounting**
Leading partner: **UBU** Supporting partner: **MBS** Feedback: **Leuphana** Delivered for implementation: **Jul 23** TA1: **Trento (UniTrento, Oct 23)**	Leading partner: **UniTrento** Supporting partner: **MBS** Feedback: **UBU** Delivered for implementation: **May 24** TA2: **Lüneburg (Leuphana, Sep 24)**	Leading partner: **Leuphana** Supporting partner: Feedback: **UniTrento** Delivered for implementation: **Mar 25** TA3: **Burgos (UBU, Jul 25)**
U1.2. The sustainability reporting landscape	**U2.1.** Sustainability accounting regulaiton **U2.2.** Sustainability reporting assurance	**U3.1.** Fundalmentals of sustainability management accounting **U3.2.** Internal control for sustainability information.

Integrate your feedback!

Further updates

Dissemination

CSEAR Education Community of Practice

- April 25, 2024, 4 p.m. (zoom)
- View of students
- account4greeneco@ubu.es, before November 30, 2023.

Keep updated on the project development

@a4ge_EU

@Account4GreenEco project

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