Luonnonvarat, kestävyys ja rahoitus

Haasteet ja tietotarpeet

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Sustainable finance: why?

EU objectives and commitments

- UN Agenda 2030 and Sustainable Development Goals
- Paris Agreement and EU climate targets
- Kunming–Montreal Global Biodiversity Framework
- Water, circular economy and zero-pollution objectives

- A modern, resource-efficient and competitive economy

Sustainable finance: how?

How can environmental objectives be connected to economic decisions?

Capital markets

More and cheaper capital to activities that support positive trend towards EU environmental and social objectives.

Less and more expensive capital to activities associated with significant environmental or social harm – or unmanaged environmental or social risks.

How can capital flows be redirected in a market economy?

Economics and sustainable-finance regulation offer two complementary approaches:

1 Price externalities

- Economic instruments can internalise selected externalities through prices. The EU Emissions Trading System is a prime example.
- However, at a larger and global scale, comprehensive pricing of climate, nature and social effects remains extremely difficult.

2 Use a regulatory and information approach

- Science-based criteria, corporate reporting and financial disclosures can reduce market information gaps when impacts, dependencies and risks cannot be fully reflected in prices.

Both approaches aim to correct market failures, improve market efficiency and increase overall welfare.

Key elements of the EU sustainable-finance framework

EU TAXONOMY

Criteria and thresholds for environmentally sustainable economic activities

CSRD / ESRS

Corporate information on material environmental and social impacts, dependencies, risks and opportunities

SFDR / RTS

Product- and entity-level sustainability information for financial-market participants

Supporting information architecture

- EU Green Bond Standard
- Corporate Sustainability Due Diligence Directive (CSDDD)
- Climate Benchmarks
- ESG rating activities
- Ecodesign and deforestation rules
- Consumer information and green-claims rules

The frameworks create demand for sustainability-linked evidence that is relevant, credible, comparable and decision-useful.

Taxonomy Delegated Acts and environmental objectives

Climate Delegated Act | in force since 1 January 2022

Environmental Delegated Act | in force since 1 January 2024

1. **Climate change mitigation**
2. **Climate change adaptation**
3. **Sustainable use of water resources**
4. **Transition to a circular economy**
5. **Pollution prevention and control**
6. **Biodiversity protection and restoration**

- The six objectives provide the **analytical structure** that is aligned with EU environmental objectives.
- Taxonomy **technical screening criteria** (TSC) specify the evidence required for covered economic activities to qualify as ”sustainable”.

EU Taxonomy in a nutshell

Substantial contribution

Evidence must show that the activity **substantially contributes** to at least one environmental objective.

Do no significant harm

Evidence must also show that the activity **does not significantly harm** the other objectives.

Minimum safeguards

The assessment includes compliance with minimum **social safeguards**.

Types of economic activities

Own-performance activities

For example, electricity generation from wind power

Enabling activities

For example, manufacture of energy-efficiency equipment

Transitional activities

For example, manufacture of steel

EU Taxonomy assesses **individual economic activities** rather than sectors.

Examples of activities covered by the Climate Delegated Act

Manufacturing

Aluminium, steel, cement, plastics, chemicals

Energy

Solar, wind, geothermal, hydropower and transmission, bioenergy

Buildings

New buildings, existing buildings and renovation

Transport

Low-emission and zero-tailpipe-emission solutions

ICT

Selected data and digital solutions

Forestry & Wetlands

Maintaining or increasing carbon stocks, improving climate adaptation, safeguarding biodiversity and water environments

With the exception of the most harmful fossil fuel activities (especially coal and oil), no activity or sector is automatically excluded.

Challenges and information needs

Risk management

Natural-resource risks require causal understanding: how impacts and dependencies can transmit to costs, revenues, assets, resilience and strategic options.

Double materiality

Double materiality links two evidence questions: i) effects of the company on nature and people, and ii) financial effects of sustainability-related dependencies, risks and opportunities to the company.

Interpretation

Methods, definitions and data quality vary. Transparent assumptions, spatial and temporal context, and uncertainty are therefore essential.

- The core challenge is to translate heterogeneous environmental (and social) evidence into information that is credible and usable in financial decisions.
- The ultimate goal is to incentivise adoption of more sustainable business practices and models.

Information needs and Luke’s areas of expertise

1. Climate mitigation	Carbon balances, sinks and land-use emissions
2. Climate adaptation	Risks, resilience and management options
3. Water	Hydrology, nutrient loading and aquatic ecosystems
4. Circular economy	Bioeconomy value chains, side streams and resource efficiency
5. Pollution	Nutrients, chemicals and environmental pressures
6. Biodiversity	Ecosystem condition, restoration and biodiversity impacts

Research-based contribution: Identify suitable evidence, make methods and assumptions transparent, assess and quantify uncertainty, and interpret results in their ecological and economic context.

Key discussion elements

How can research evidence support sustainability-related business and financial decisions?

1 MATERIAL IMPACTS, DEPENDENCIES, RISKS & OPPORTUNITIES

- Identify material impacts and dependencies in own operations and across value chains (*double materiality!*)
- Assess sustainability-related risks and opportunities
- Support alignment with CSRD/ESRS, SFDR/RTS, EU Taxonomy, IFRS Sustainability, GRI, SBTi, SBTN, TNFD, ISO etc.

2 CREDIBLE EVIDENCE FOR DECISION-MAKING

- Select credible data, indicators and models
- Make methods, assumptions, baselines and uncertainty transparent
- Produce evidence suitable for reporting, risk assessment, target-setting and capital allocation

3 LUKE AS A PARTNER

- Natural-resource data, monitoring systems, modeling and statistics
- Climate, biodiversity, water and bioeconomy expertise
- Co-development of methods and sector-specific applications for companies and financial institutions

Kiitos!