



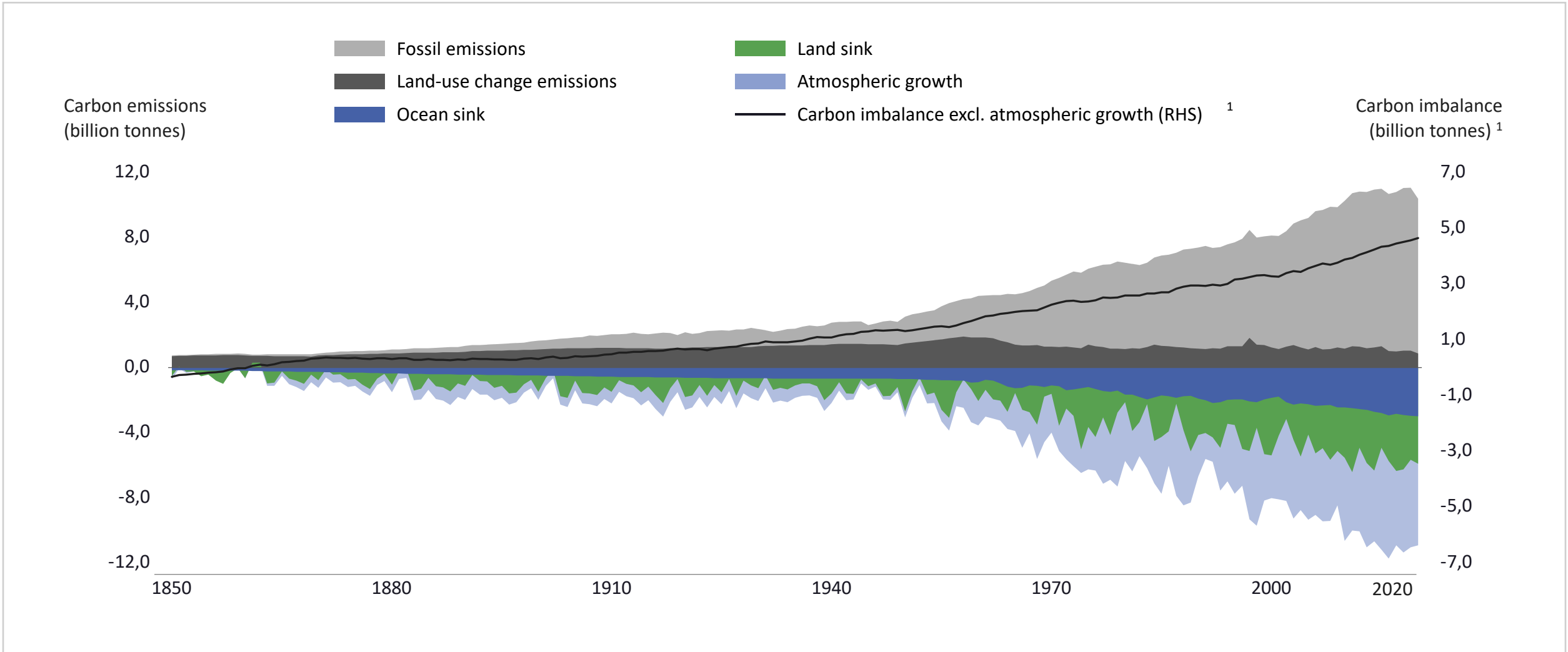
Sustainability x Banks x Investors

Anssi Kiviniemi
Head of Sustainability, Finland



The Anthropocene Era dilemma

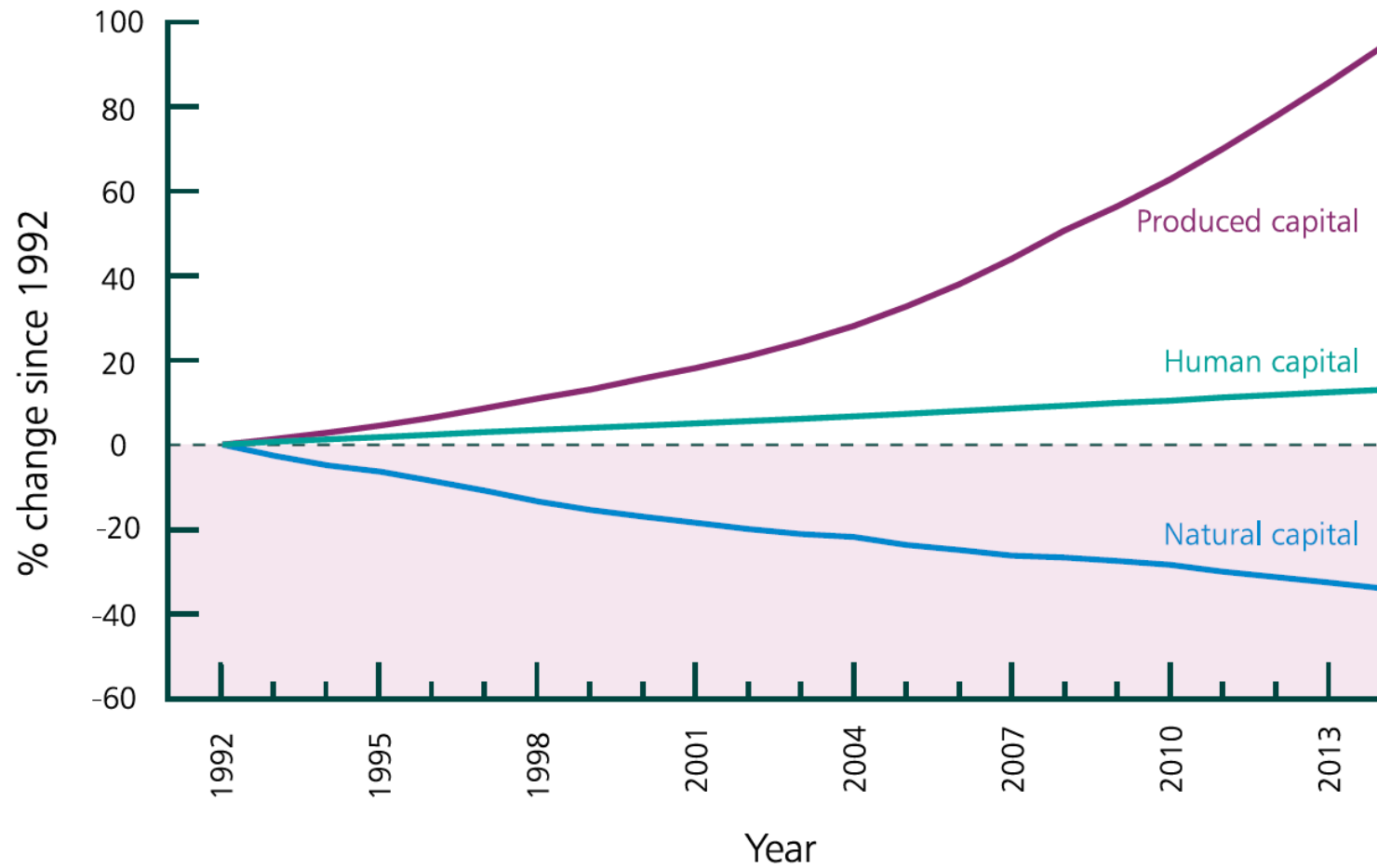
Land and ocean unable to absorb all carbon emissions



¹ Calculated as the difference between emissions from carbon sources and absorption from carbon sinks. Carbon sources including burning of fossil fuels, oil, gas and changes in land-use. Carbon sinks including land and ocean. 20-year rolling average applied. Sources: Global Carbon Project; Global Carbon Budget 2021.

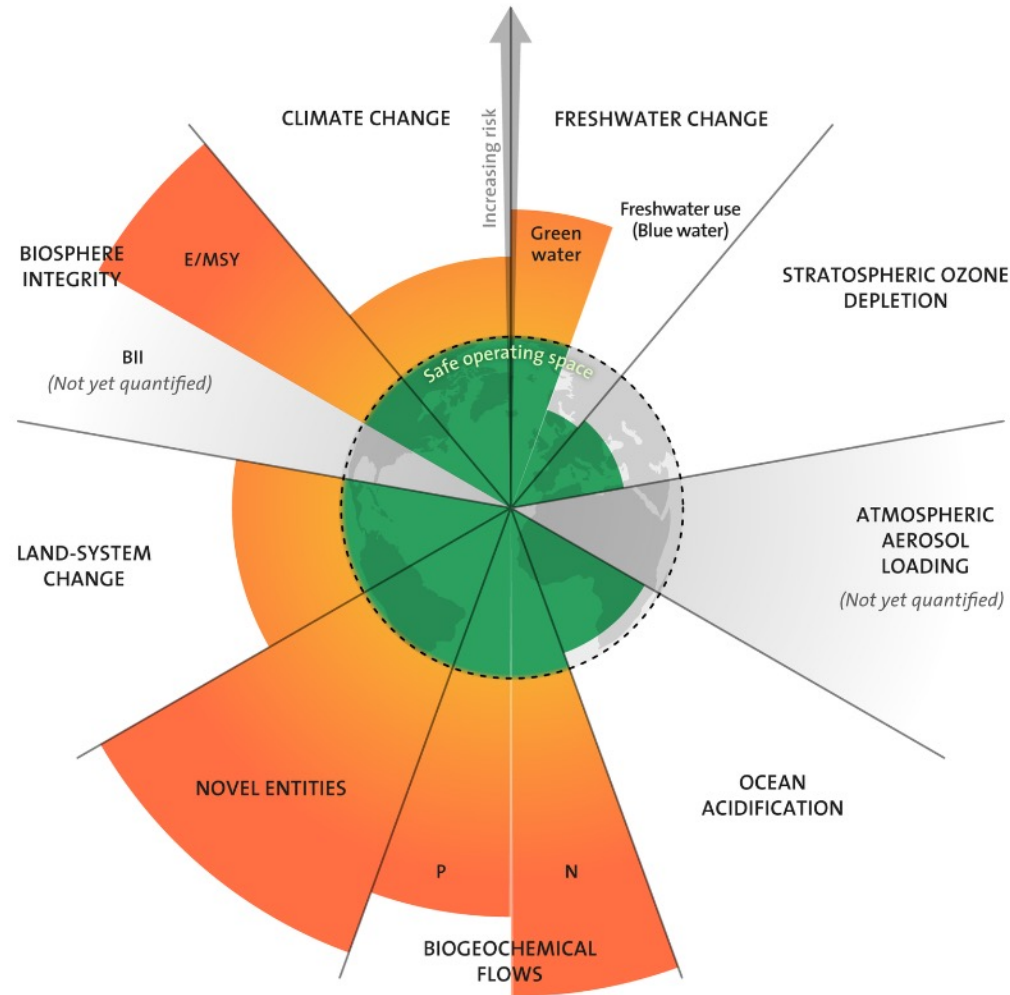
There is progress but at what cost

Natural capital has been diminishing steadily



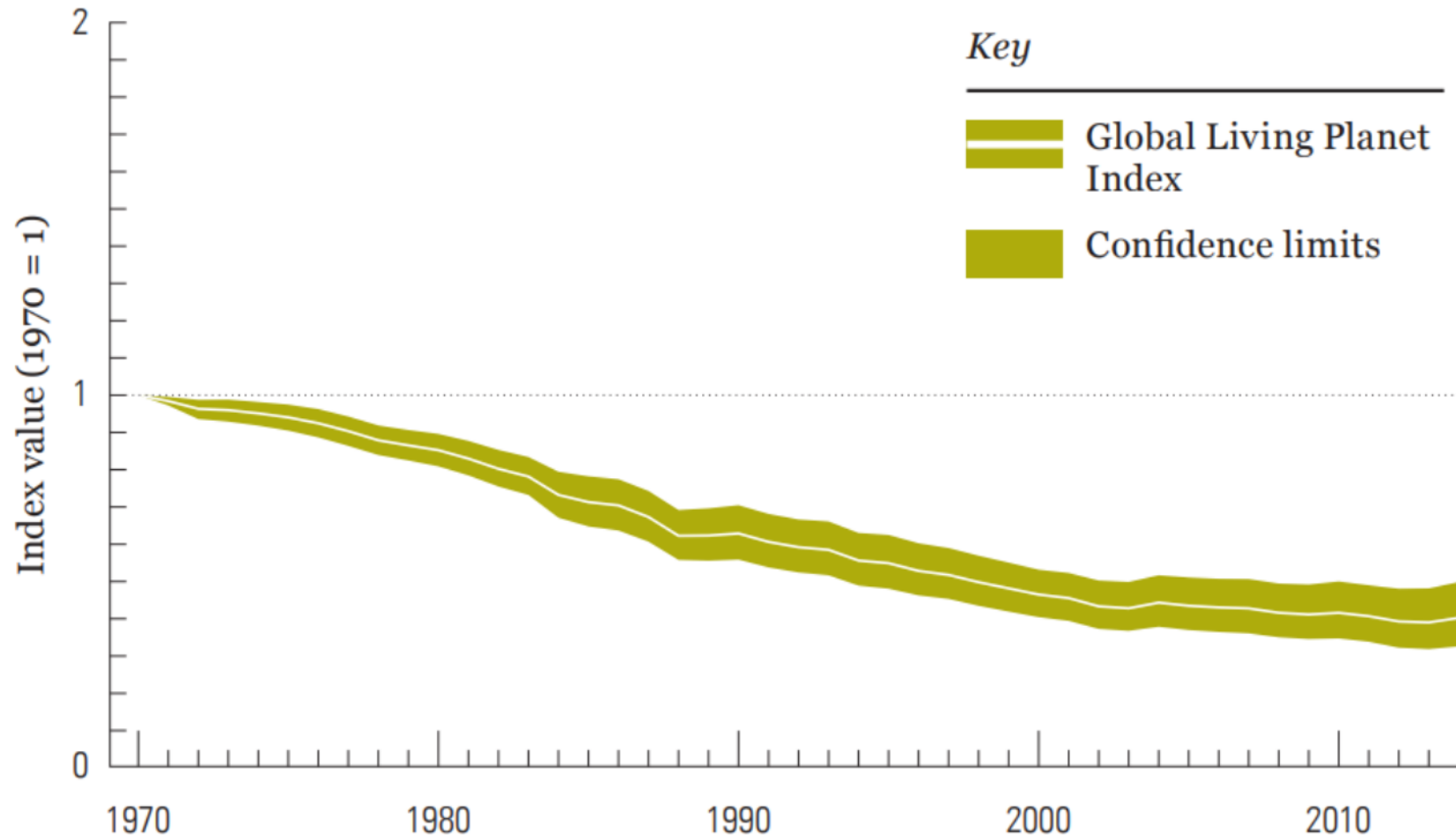
Planetary boundaries

Nine processes that regulate the stability and resilience of the Earth system



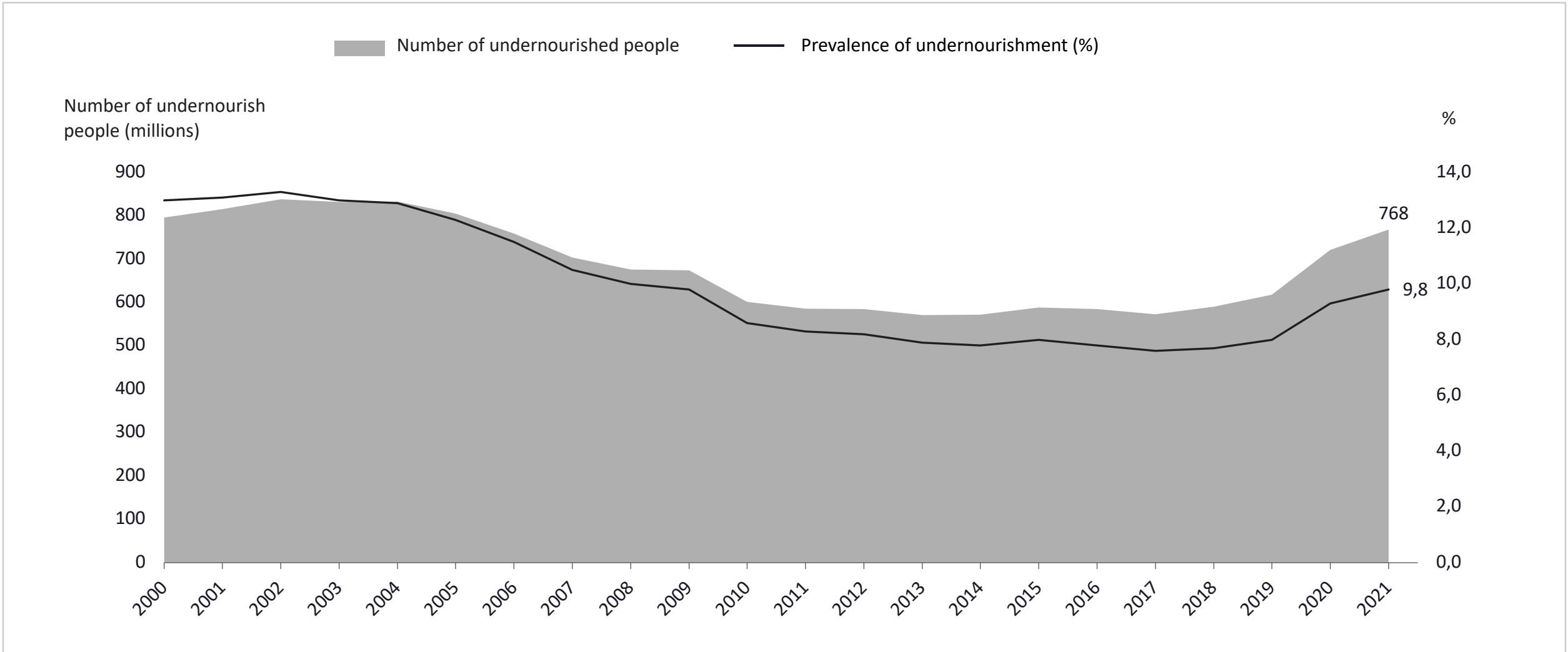
Global living planet index

Animal populations are, on average, less than half the size they were in 1970



Pressure also on humanity

Hunger trend have reversed



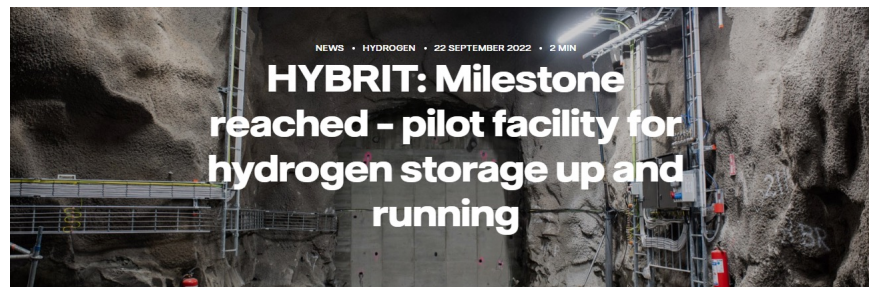
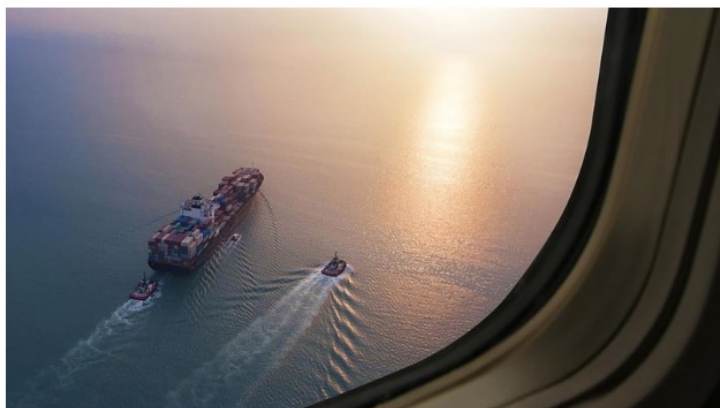
Source: FAO (Food and Agriculture Organisation of the United Nations)

The solutions emerge

17 May 2022

Neste introduces co-processed marine fuel in partnership with Nordic Marine Oil – a new solution for the maritime sector enabling up to 80% GHG emission reduction

Published in [Releases and news](#) under [Renewable solutions](#), [Marine](#)
◆ [Neste Marine](#), [Neste Marine 01 Co-processed](#)



SSAB, LKAB and Vattenfall's HYBRIT pilot facility for the storage of fossil-free hydrogen gas is now in operation in Luleå. The rock cavern storage facility is the first of its kind in the world for storing fossil-free hydrogen gas. The two-year test period will now start and continue until 2024, which means that HYBRIT has taken another important step in developing the overall value chain for fossil-free iron and steel production.

30.8.2022

Betolar and Consolis Parma announce a partnership for low-carbon concrete testing in hollow-core slabs

Betolar Plc

Press Release
30.8.2022

Betolar and Consolis Parma announce a partnership for low-carbon concrete testing in hollow-core slabs

MEDIA RELEASE // CORPORATE – 07/09/2021

Uponor Infra and Borealis collaborate to create a gravity plastic pipe with up to 70 % CO2 reduction

- Uponor Infra Oy and Borealis are leading the way for sustainable infrastructure development.
- Ultra Rib 2 Blue guarantees high performance and over 100 years of service while maintaining existing quality standards and certifications.
- Following the mass balance model, Ultra Rib 2 Blue is based on Borealis Bornewables™ consisting of over 50% renewable raw material, reducing the carbon footprint by up to 70%.
- Uponor Blue products enable forward-looking organisations to meet their sustainability goals.

Finnair and Gevo Enter into Sustainable Aviation Fuel Sales Agreement



WED, JUN 22, 2022 08:00 CET

[Report this content](#)

Finnair has signed a new fuel sales agreement with Colorado-based renewable fuels producer Gevo, Inc. The agreement outlines the details for the purchase of 7 million gallons per year of sustainable aviation fuel (SAF) for five years starting

The big challenge

37 670.6 TWh

additional non-fossil fuel
electrical power annual capacity



The same non-fossil fuel energy
mix of 2018 translates into 221
594 new power plants



46 423

Power plant
fleet in 2018
including all
types

221 594

New power
plants needed



4 weeks

buffer of power

573.4 TWh

storage buffer
capacity for the
global electrical
power system

5.7 million

100 MW stations

Electrical power generated from
solar and wind sources are highly
intermittent, both across 24-hour
cycle and in seasonal context.



A power storage buffer is
required if these power
generation systems are to be
used on a large scale.



**2.78 billion
tonnes**

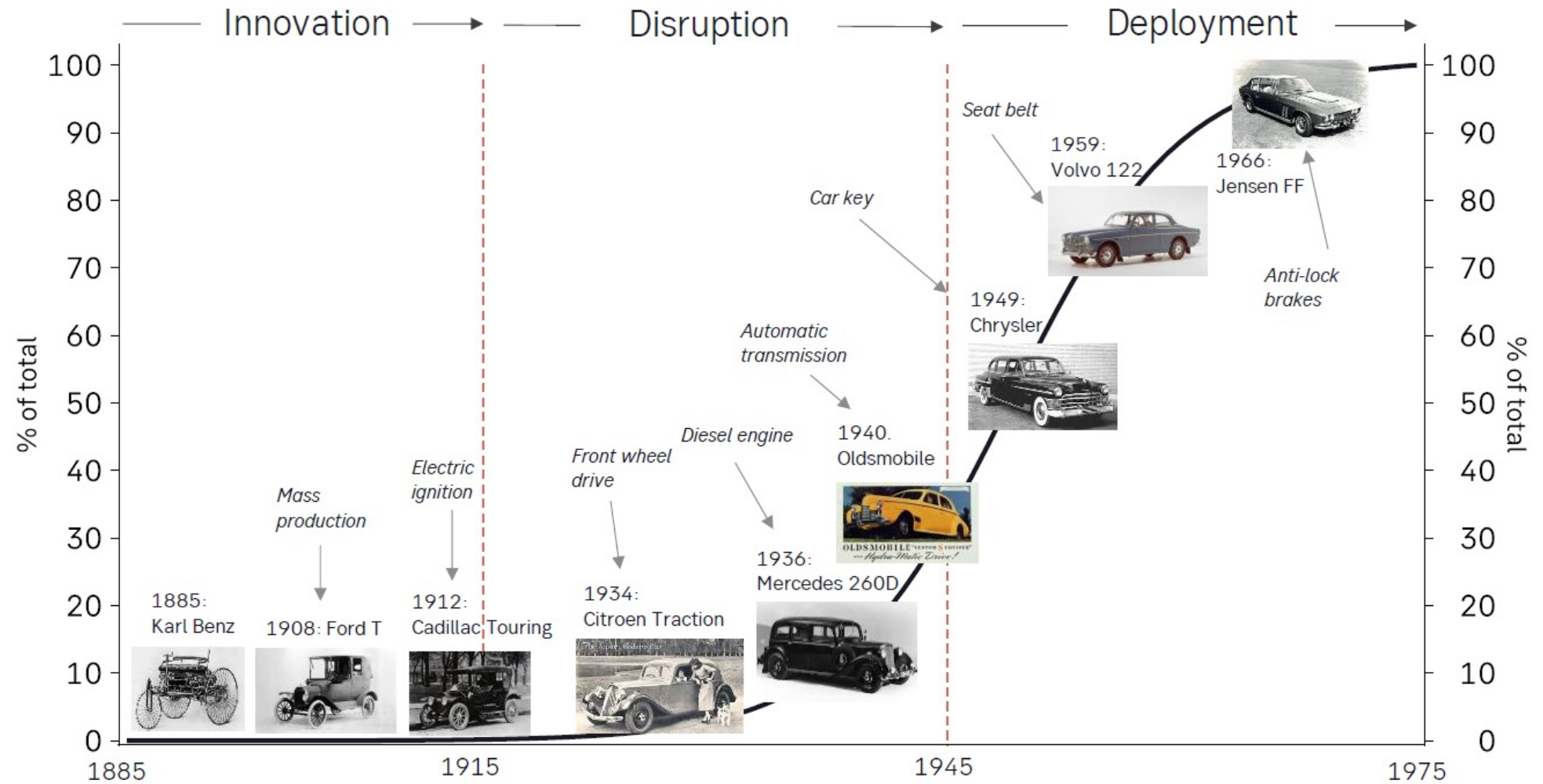
the total mass of lithium-
ion batteries required to
phase out fossil fuels

“A third of the US’s corn harvest is turned into biofuels, the equivalent of 130 million tonnes in 2021.

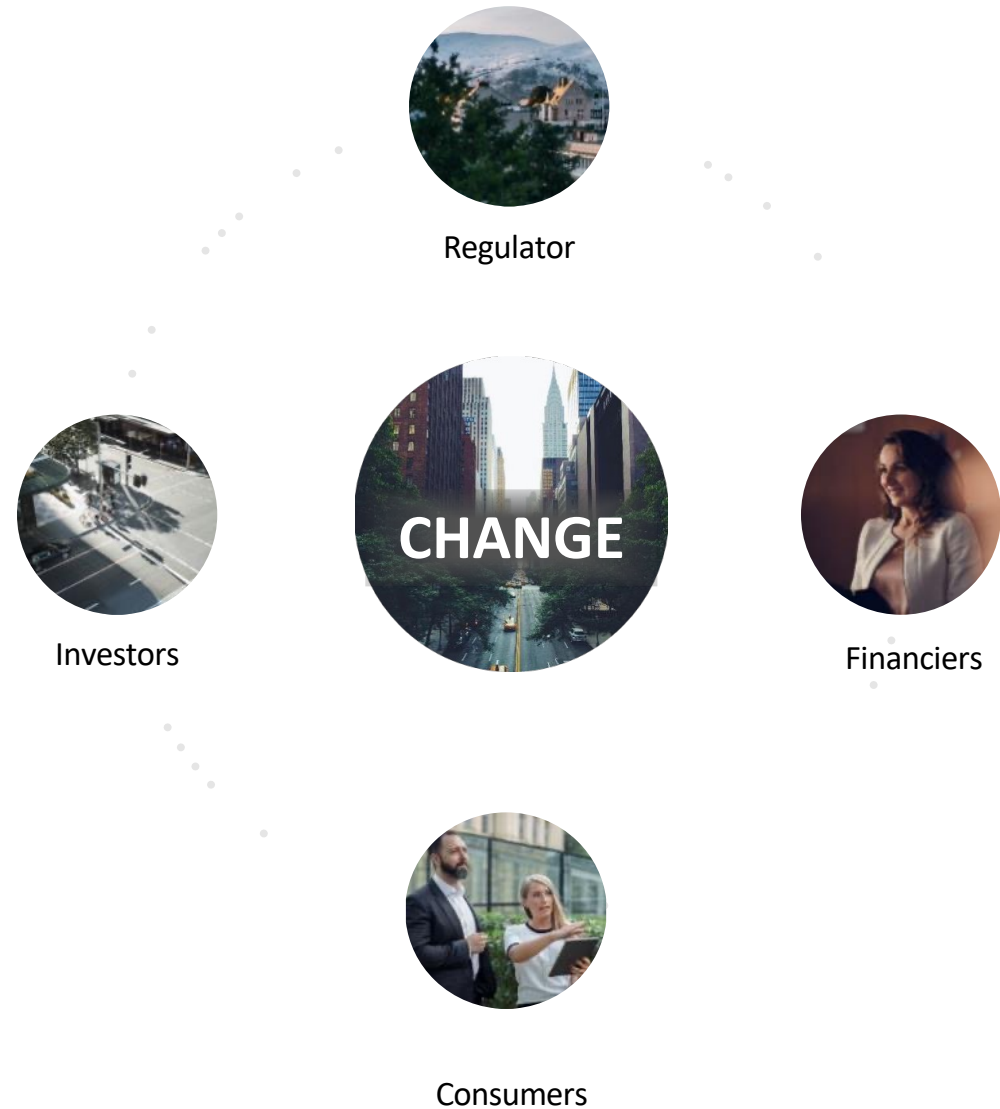
This is more than three times the total amount of grain exported from Ukraine,”

- Silvia Pavoni, Editor, FT Sustainable Views

The transition



Sustainability as a changing force in society



SEB's sustainability milestones



Climate ambitions and goals to ensure our progress

The Brown Carbon Exposure Index

What: Volume-based metric capturing our fossil fuel credit exposure

How: Measuring the fossil fuel credit exposure in our energy portfolio

Goal: To reduce exposure by 45-60% by 2030, compared to a 2019 baseline

The Green Sustainability Activity Index

What: Volume-based metric capturing our sustainability activity

How: Measuring our activities supporting the sustainable development

Ambition: To increase average activity 6x-8x by 2030, compared to a 2021 baseline

The Future Transition Ratio

What: Volume-based ratio based on our internal Climate Classification Model ¹

How: Measuring our corporate and real estate credit portfolio's anatomy from a climate perspective

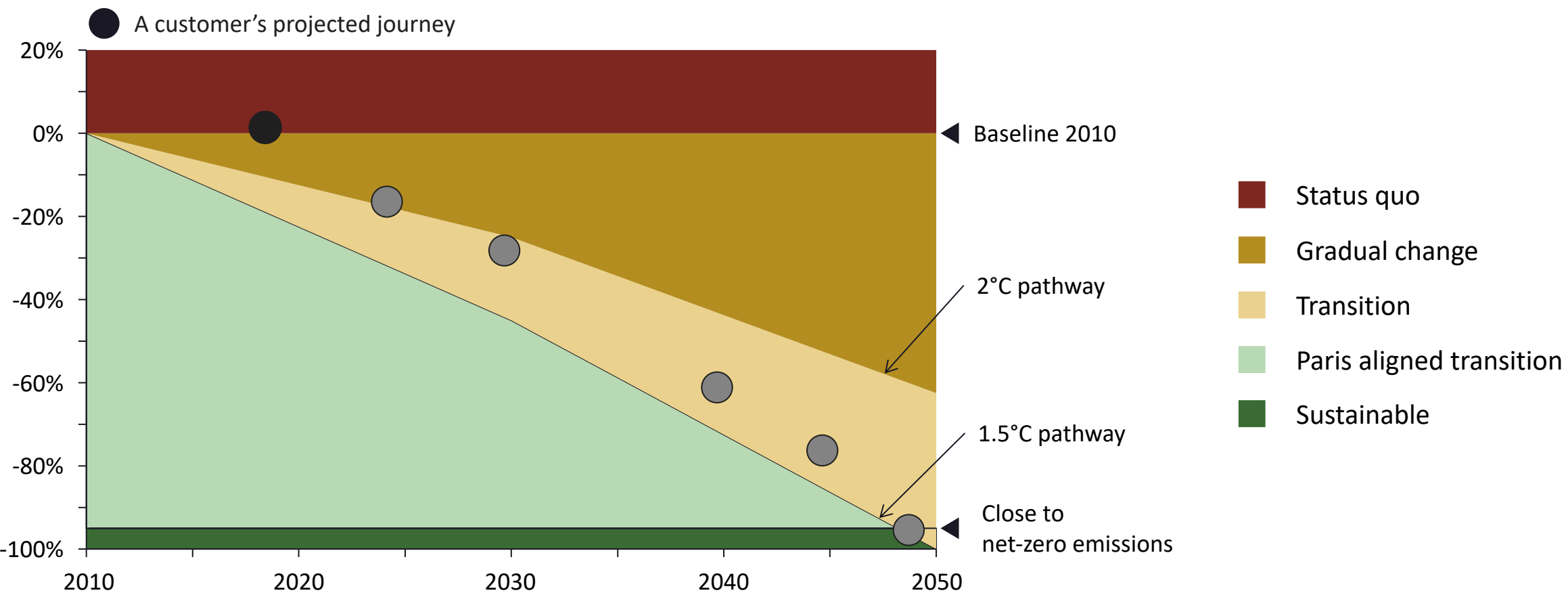
Ambition: To provide a reflection of how our customers, over time, transition in line with the Paris Agreement ²

¹ Model assessing our customers' and our own climate impact and alignment with the goals set out in the Paris Agreement.

² Work ongoing to classify credit portfolio. Transition ratio to be communicated in 2022.

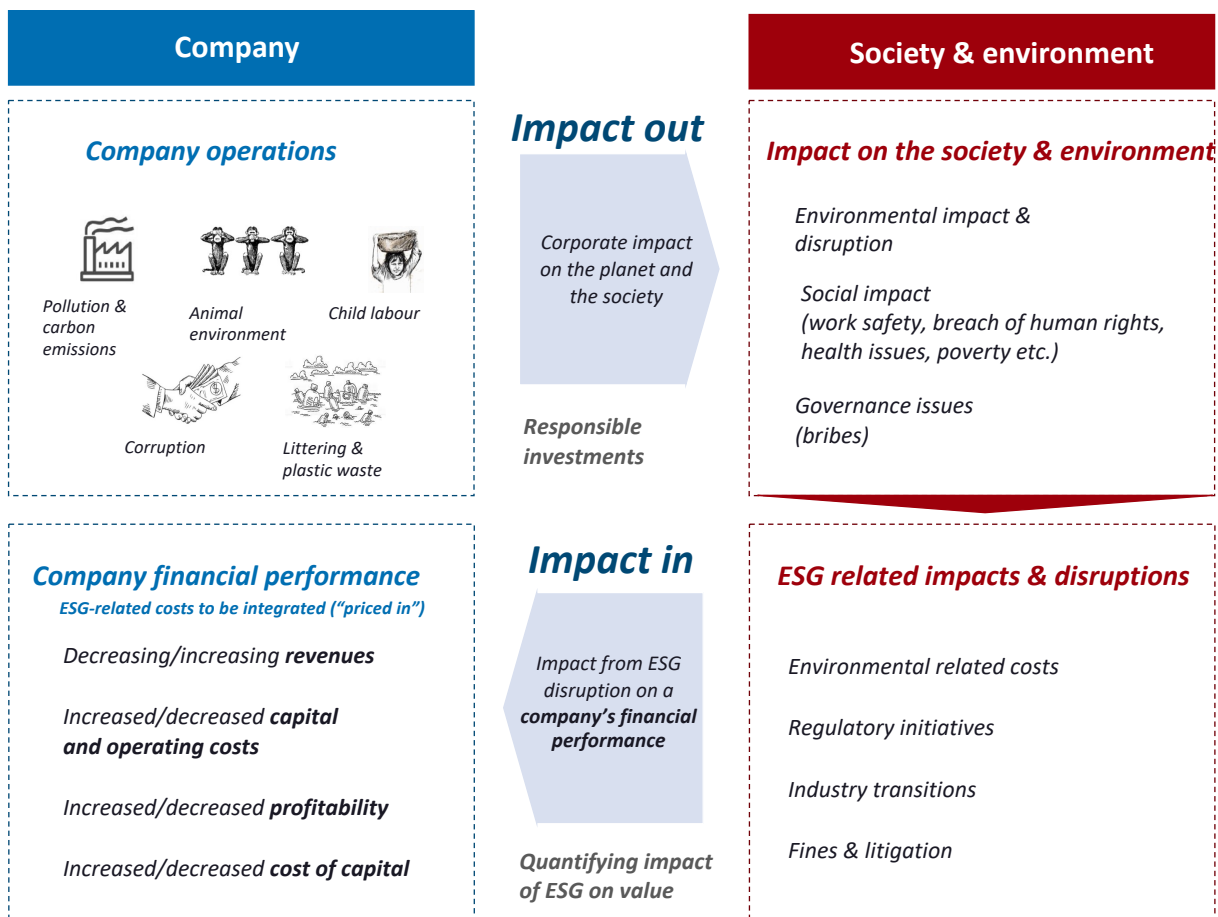
Climate classification of our credit portfolio based on Paris Agreement

Understanding a customer's climate transition



Responsible investment strategies

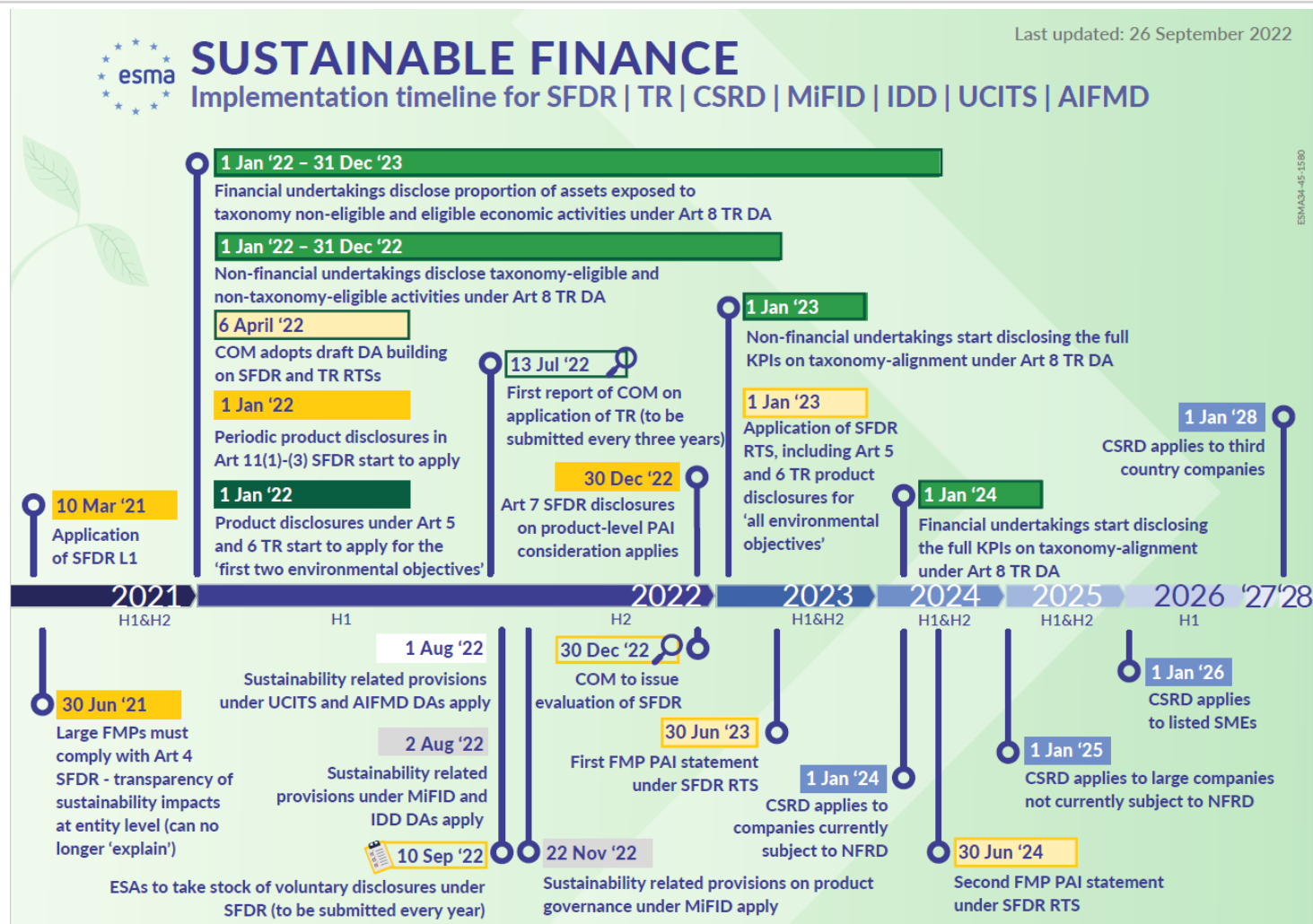
From impact out to impact in



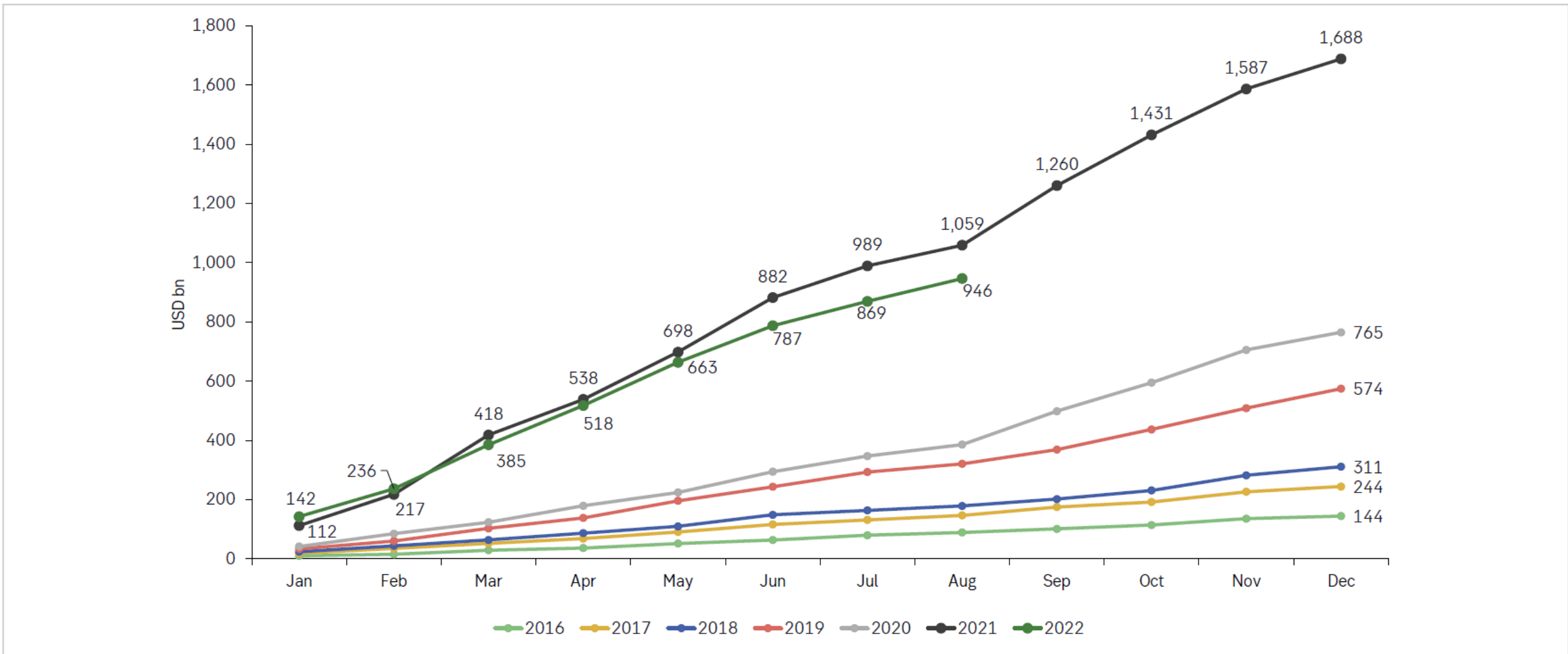
Overview of ESG integration investment strategies



Regulatory overview



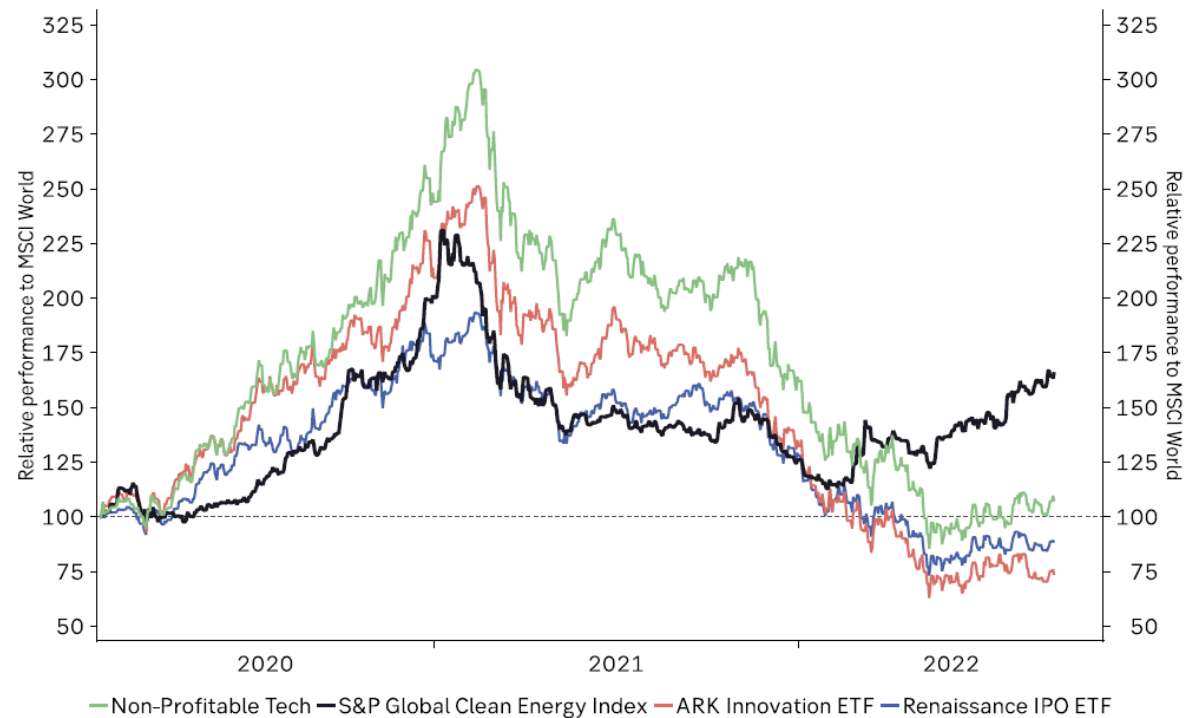
Cumulative sustainable debt transactions



Source: SEB Green Bonds – September 2022 report

Equity markets – telling a story of transition...

Clean energy and growth indices vs. MSCI World

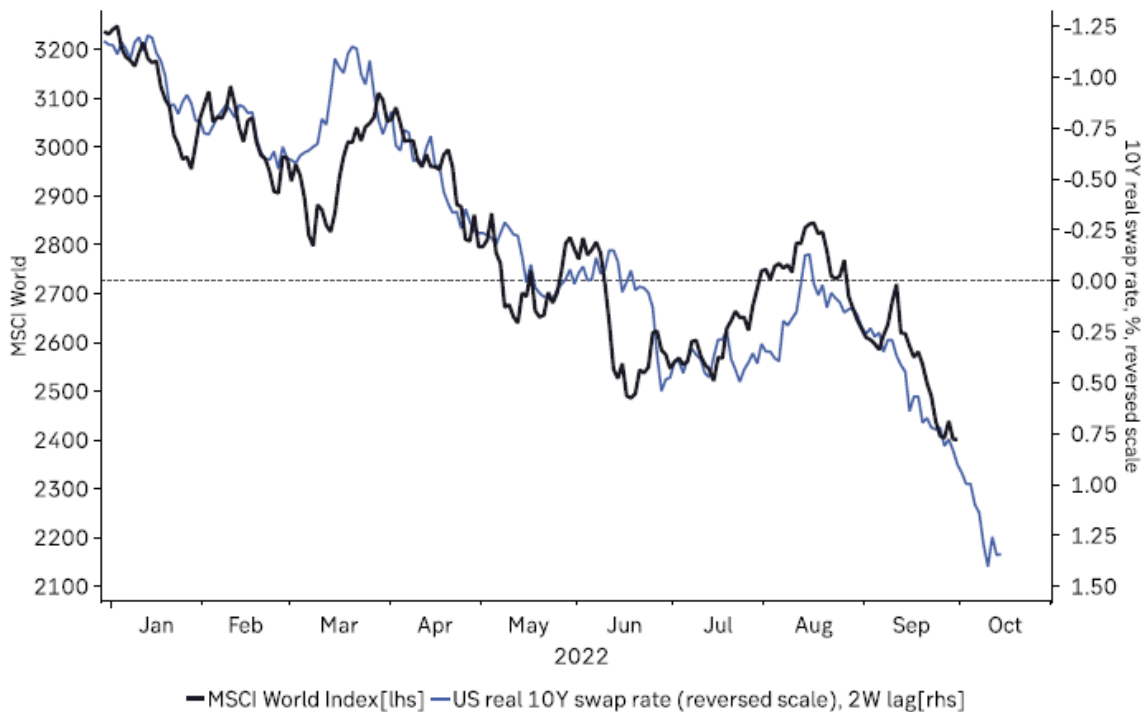


Clean energy index and 12M fwd EPS

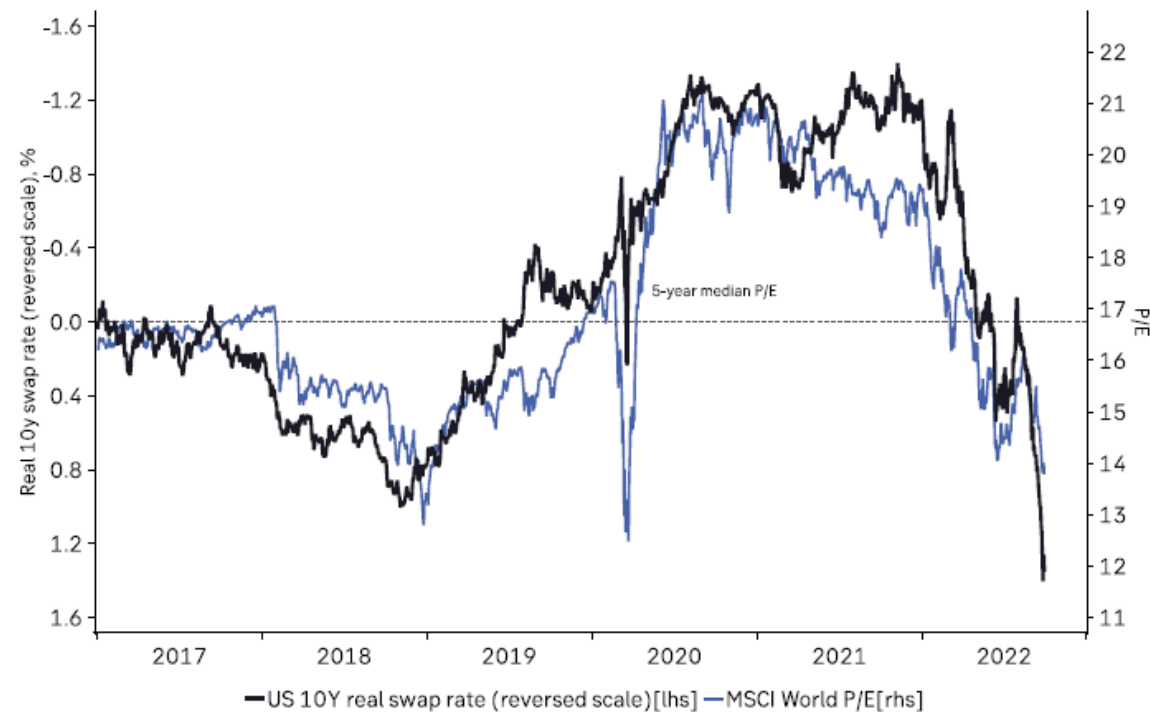


... and rates...

MSCI World and US 10Y real swap rate



MSCI World P/E and US 10Y real swap rate



Final remarks

No doubts about the direction

Self-sufficiency, country risk, green transition, defence

Understand the risks and opportunities in the transition

Regulation -> Transparency - > Impact

An aerial photograph of a large lake with several forested islands. In the background, a town is visible, surrounded by dense forests. The sky is a soft, hazy orange, suggesting a sunset or sunrise. The word "Questions?" is overlaid in the center in a large, white, sans-serif font.

Questions?