The future of Food all in 20 mins

+ more

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Financial Times

"Environment stresses and strain and social well being. . . Are likely to prove one of those tectonic forces that – like globalization or the aging of populations – gradually but powerfully changes the economic landscape in which [businesses] operate. . .

Firms that recognize the challenge early, and respond imaginatively and constructively, will create opportunities for themselves and thereby prosper.

Others, slower to realize what is going on or electing to ignore it, will likely to fail."

To start a bit about BSI

By Royal Charter

Founded 1901

- The world's first National Standards Body
- A founding member of ISO and CEN (Europe)
- A Royal Charter Company – A mandate focused on creating best practice

Thought leaders

- Shaped 80,000+ best practice standards and guidelines.

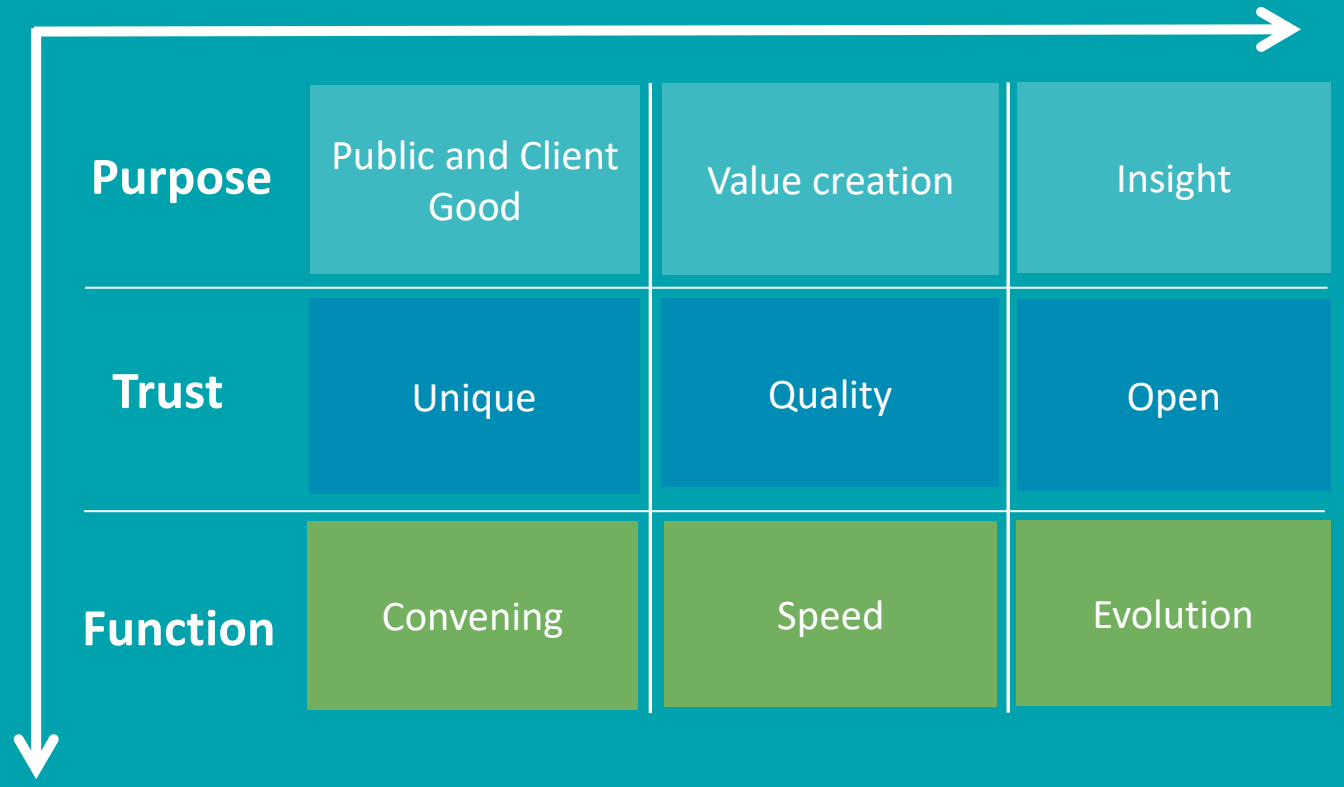
Global best practice partner

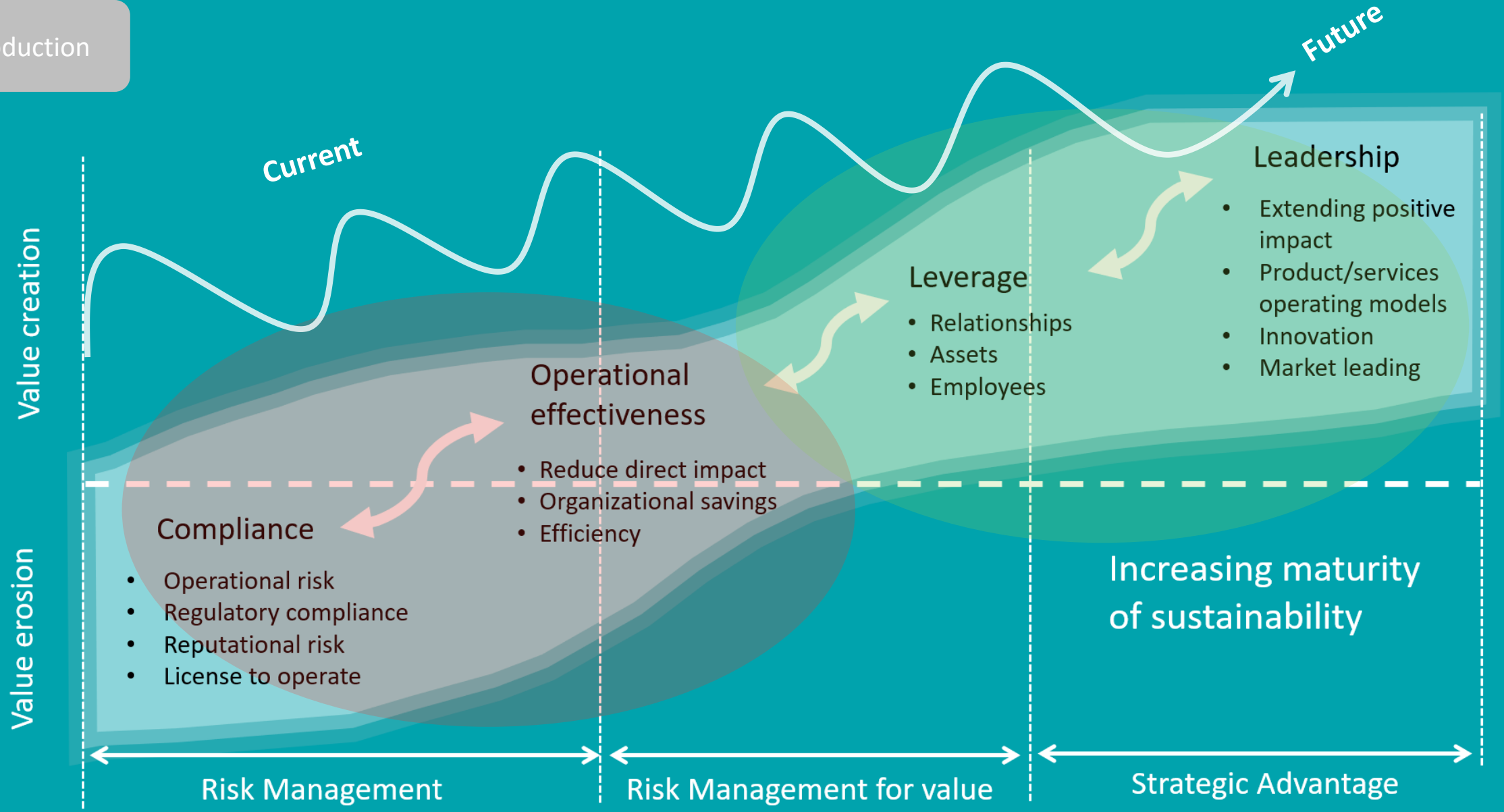
- 4,500 employees and 12,000 experts in 182 countries

Our mission

To share knowledge, innovation and best practice to help people and organizations.

Encompassing the following components





The important ingredient to drive change in the context of food

Living Within Environmental Limits

Respecting the limits of the planet's environment, resources and biodiversity – to improve our environment and ensure that the natural resources needed for life are unimpaired and remain so for future generations.

Ensuring a Strong, Healthy and Just Society - Sharing best practise

Meeting the diverse needs of all people in existing and future communities, promoting personal wellbeing, social cohesion and inclusion, and creating equal opportunity for all.

Achieving a Sustainable Economy

Building a strong, stable and sustainable economy which provides prosperity and opportunities for all, and in which environmental and social costs fall on those who impose them (polluter pays), and efficient resource use is incentivised.

Promoting Good Governance

Actively promoting effective, participative systems of governance in all levels of society – engaging people's creativity, energy, and diversity.

Using Sound Science and industry knowledge Responsibly

Ensuring policy is developed and implemented based on strong scientific evidence, whilst considering scientific uncertainty (through the precautionary principle) as well as public attitudes and values.

The future of Food

+ more

Trends

That will shape our future for food

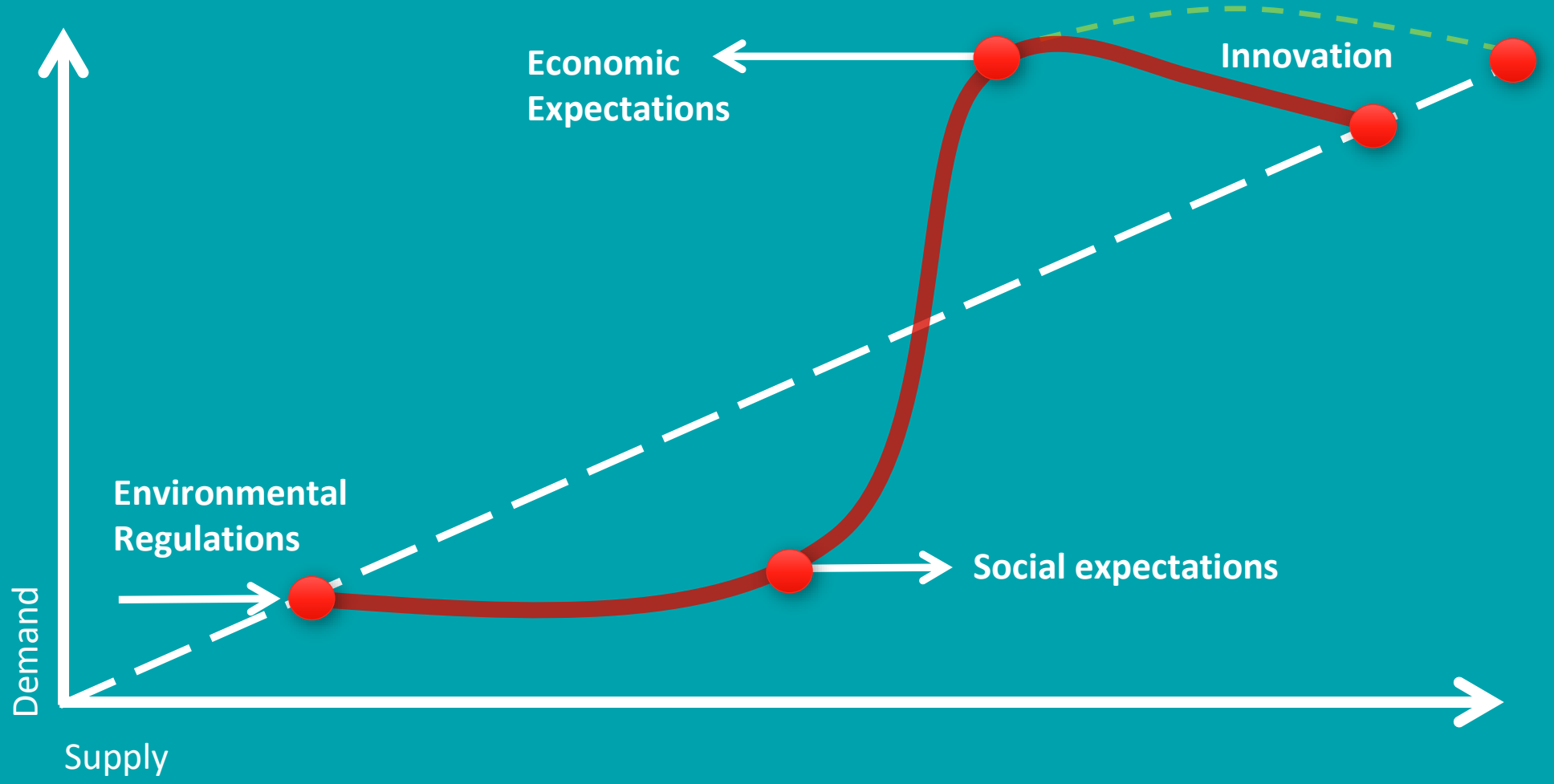
The Problem of Food

Food production process are highly resource intensive; they can leave large environmental footprints, are increasingly volatile ,and unequal to the task of feeding a growing population, with high levels of waste

By 2050, the world population is estimated to be 9 Billion, with the majority living in cities.

Food security is therefore one of the single biggest challenges, impacting on the environment, economic and political implication

The process of change



Some of the trends that will shape us

1. **Environment / climate pressures:** Increasing environment and climate pressures on business operations and supply chains
2. **Risk management:** Requirement for businesses to manage environment and climate risks (including through accounting/financial reporting)
3. **Transparency:** Increasing expectation of businesses being transparent on sustainability, including in supply chains
4. **Resources:** Shifting resource availability and affordability due to increased demand and evolving global market conditions
5. **Technology:** Technology driving and enabling sustainable solutions for businesses
6. **Market opportunities:** Emerging sustainability-oriented market opportunities
7. **International agenda:** Growing influence of international sustainability agenda/goals and targets
8. **Policy and fiscal:** Policy and fiscal changes facilitating transition towards sustainability
9. **Legislation:** More legislation requiring businesses to consider sustainability throughout their operations
10. **Corporate liability:** Increasing likelihood of liability for social and environmental impacts from operations (including in supply chains)
11. **Governance:** Continued shift to new forms of sustainability governance and new actors
12. **Consumption:** Changing values and consumption patterns toward more sustainable products and services and business models

BSI Research

Food and Retail

Assessment of influence of drivers on industries

Key Drivers						Notes
Environment/ climate pressures						Evidence suggests all industries are concerned about climate change impacts. This is likely to continue in the short-term and become increasingly severe in long-term.
Risk management						Managing climate risks is likely to become a requirement for all industries. The financial services industry is increasingly concerned about environment / climate risks to their investments.
Transparency						Sustainability reporting among larger organizations in the food/retail, healthcare and automotive industries appears common.
Resources						Shifting resource availability will significantly affect industries that are resource intensive (e.g. built environment/construction) and/or highly reliant on natural resources (e.g. food/retail).
Technology						Technology is transforming (or will transform) all these industries and their ways of working. Its influence is complex and uncertain.
Market opportunities						In the short term the automotive industry and food industry will likely take advantage of the rapid growth of the EV market/ MaaS and plant-based protein market respectively.
International agenda/goals						Sustainability reporting against the UN SDGs is becoming increasingly common among larger organizations.

Key

Light yellow = Low influence	Orange = Medium influence	Red = High influence

BSI Research

Food and Retail

Assessment of influence of drivers on industries

Drivers						Notes
Policy and fiscal						Green recovery packages will likely have the greatest influence for industries that have been the most affected by the Covid-19 pandemic.
Legislation						Emerging new legislation in ESG metrics and extended producer responsibility will likely influence all industries.
Corporate liability						The highest risk remains for fossil fuel companies. Increasingly ambitious CO_2 targets and air quality standards also result in significant risks for aerospace and automotive industries.
Governance						The sustainability champions that have joined up in global initiatives and coalitions predominantly are seen in the retail, aerospace and built environment industries.
Consumption						Consumers and employees are increasingly scrutinising corporate values especially for industries that people associate with climate, environmental and social impacts.

Key

Light yellow = Low influence	Orange = Medium influence	Red = High influence

What does this all mean

Our past, our present, and a guess at the future

Past

Present

Future

How did we get here ?

1940's

1960's

1970's

1990's

2000's

2010's

- Mechanization, speed became the key measures of efficiency in agriculture

- The "Green Revolution" with the use of high-yielding cereal, pesticides and fertilizers
- Packing food boom begins
- Marketing of processed food

- The natural food movement, around food co-operatives
- Instant and frozen food revolution
- Tracking consumers purchases commonplace

bsi.

Past

How did we get here ?

1940's

1960's

1970's

1990's

- Fair trade movement to engage producers
- Food labelling draws attention to nutrition and ethical provenance
- Supermarkets introduce luxury and premium ranges
- WHO – recognise obesity as a global epidemic

2010's

2000's

- Clear connection between industrial food production, agricultural policy and obesity and decline of the family meal

Past

How did we get here ?

1940’s

1960’s

1970’s

1990’s

2000’s

2010’s

- The rise of digital engagement, with finding, sourcing, ordering, reviewing and investigating our food
- Renewal of convenience shopping
- Increase in artisan foods
- Consumers more thoughtful of the healthiness of their food/beverages

Current

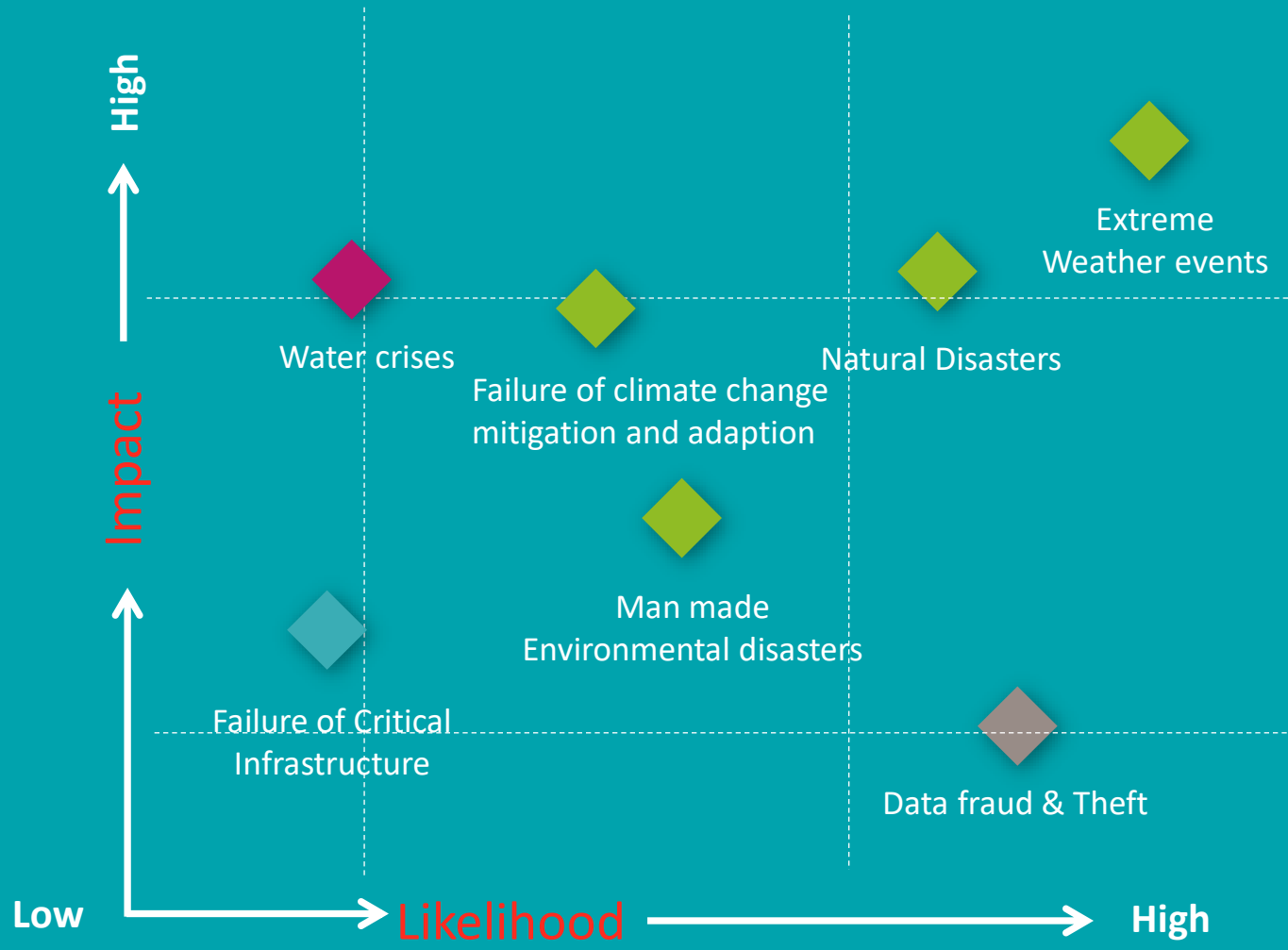
Key

Categories

- Economic
- Environmental
- Social
- Technological

Top 5 risks in terms of likelihood

- Extreme weather event
- Natural disaster
- Data fraud or theft
- Cyber attacks
- Man made environmental disasters



Source - The Global Risks Report - World Economic Forum

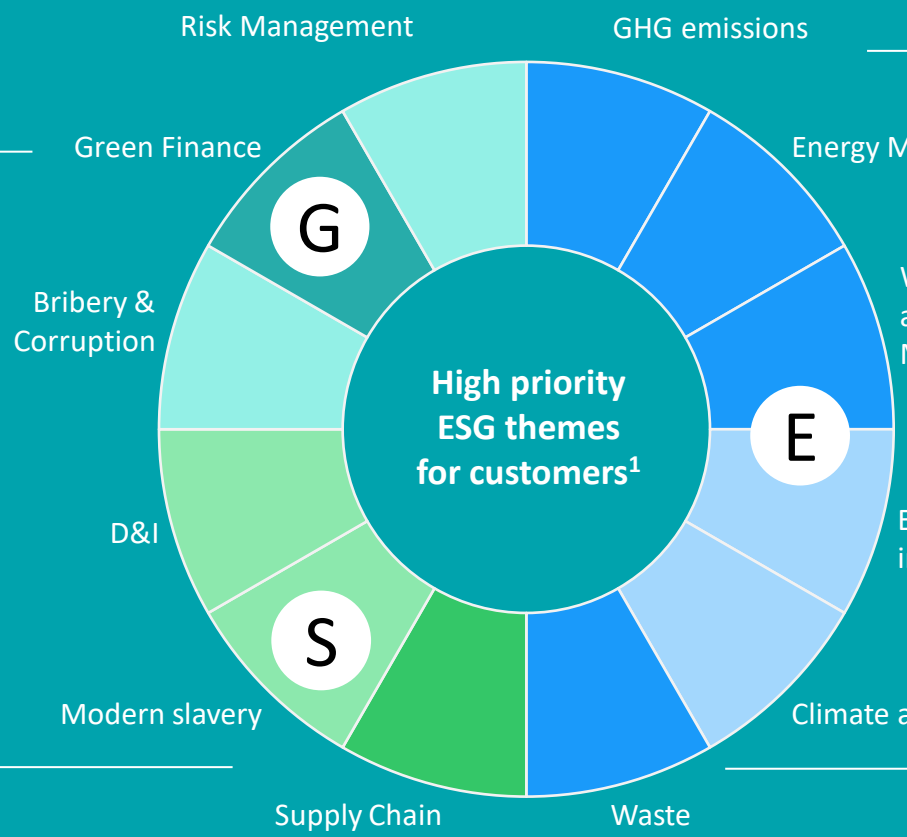
Current

key component in a changing world

- Demographics
- Mass urbanisation
- Climate mitigation
- Climate resilience & adaption
- Resource scarcity
- Technology integration
- Communications
- Austerity: doing more for less

Current

Overview of relevant sustainability customer requirements / themes



"Sustainable finance and voluntary carbon markets are very important but still immature in their development."
Former Chief Sustainability Officer, Consumer Goods (UK)

"There is huge potential because of sustainable finance to offer digital assurance & certification services."
Food Technology (UK)

"We have an interest in understanding our supply chain better, it's a space we can't see into very well."
ESG Director, Retail (US)

"Right now, supply chain is an area of focus and human rights in supply chain is top of mind."
Head of Sustainability, Manufacturing (DE)

"Our main concern is reaching net zero and reaching our commitment to SBTi. We also want to understand our scope 3 emissions."
Food Manufacturing (UK)

"We have robust goals on each topic but packaging and circular economy is a big challenge. New materials and new supply chains need to be stood up for a lot of companies to meet their plastic & carbon commitment."
Food Manufacturing (UK)

Will Sustainability be enough ?

What may the future hold

Future

- Engineered Edibles – 3D printing of food
- Meat without Footprints
- Hydroponic Farming/ Film Farms
- Offsetting on farms to deliver Carbon Neutral foods
- SMART Farms – IOT

Future

- Urban Agriculture
- Open Source GMO
- Use of Drones (Monitor & Trace)
- Beyond Vegan
- Circularity

Introduction | PAST | **Current** | **Future**

Q&A