Sustainability: the way forward for Business

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25 April 2024

Where do you come from???

Which is the area of your work/studies

The framework

Knowledge: inherent part of a sustainable business

What knowledge?

Some facts

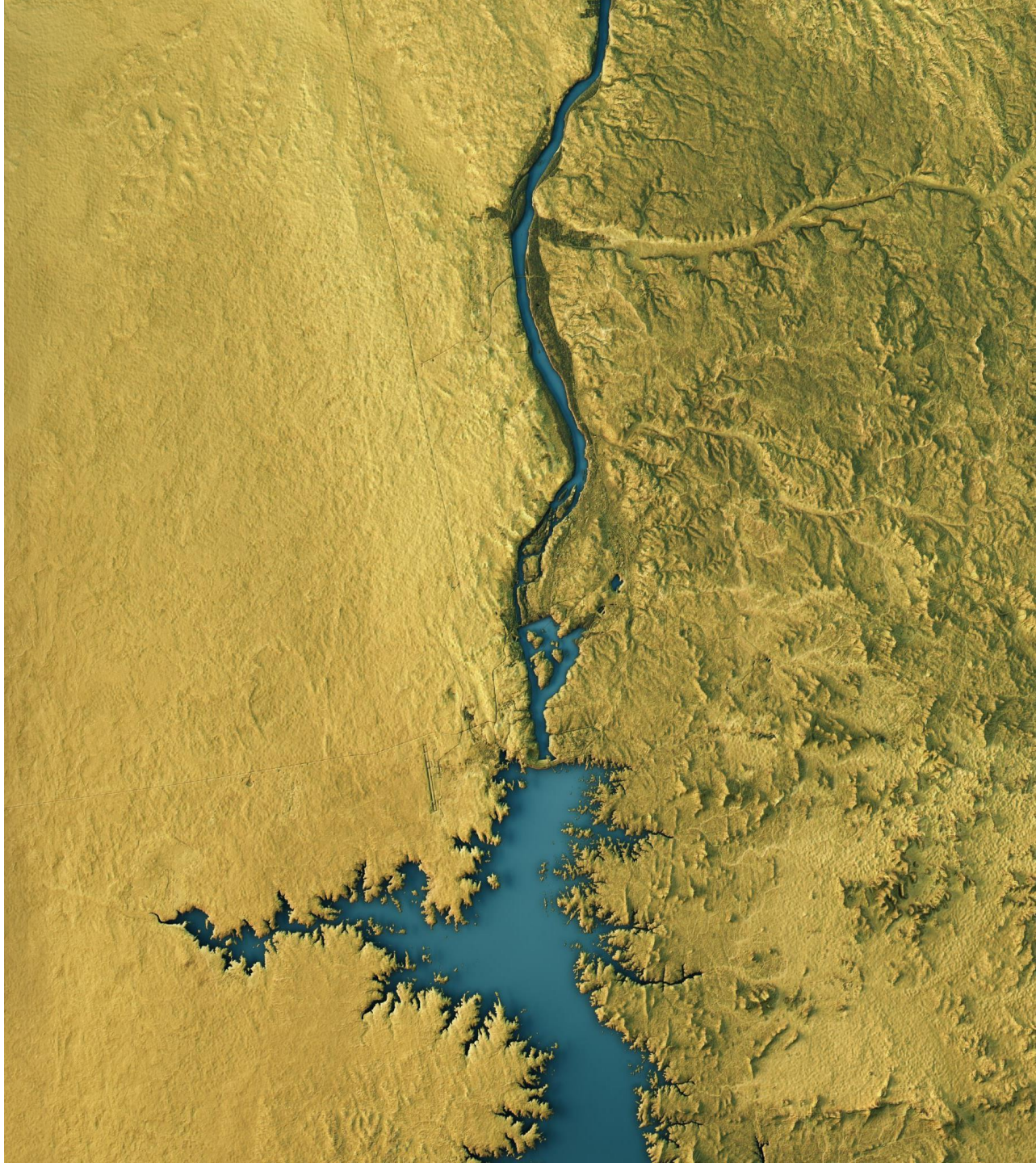
- **The Mediterranean region is an important climate change hotspot due to pronounced warming and drying projected under future greenhouse gas emission scenarios (IPPCC 2022)**
- **Mean temperature rise: 1.4 degrees Celsius since 19th century**
- **The Mediterranean region is warming 20% faster than the global average (UNEP 2022).**
- **The Mediterranean Sea has been identified as the most polluted sea in Europe (Gerigny et al., 2019)**

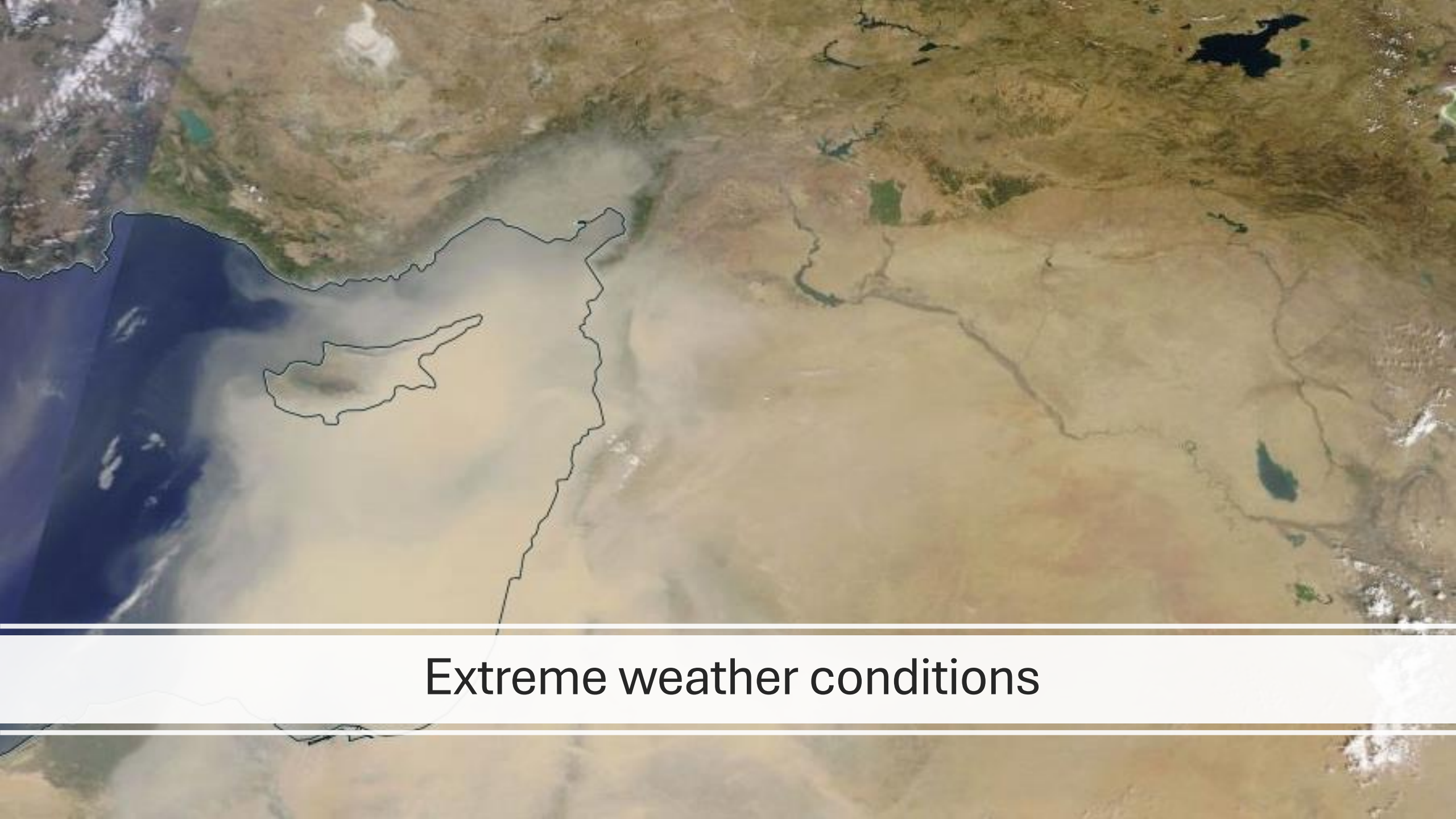
Some more facts

- **Mediterranean is the most affected sea by marine litter worldwide (Fossi et al., 2018).**
- **A recent report estimates that the plastic stock accumulated in the Mediterranean Sea is around 1.2 million tonnes (Boucher and Bilard, 2020).**
- **more than 400 million of international tourists arrivals – 30% of international tourism (2019, ITA)**
- **21 countries bordering the Mediterranean. About 529 million: 205 million live on the northern shore and 324 on the southern and eastern shore (UN, 2020)**

Challenges from climate crisis environmental-social- economic

- SLR – lagoons, islands, estuaries
- Extreme weather conditions
- Water scarcity
- Erosion (land and coastal)
- Pollution
- Ecosystem degradation/destruction
- Climate refugees
- Economic impacts
- Expensive regulations for GHG control/minimization
- Food crisis
- Energy
- ……..





Extreme weather conditions

Integrated approach

there is no more such approach as…. ***business as usual***

the curse of URGENT

- E.g. Energy poverty is a result of a long- standing neglect of what is coming! renewables- just sun? What else?

- Climate change is part of the development model of our countries?

??????????????

- Nicosia upgrading!

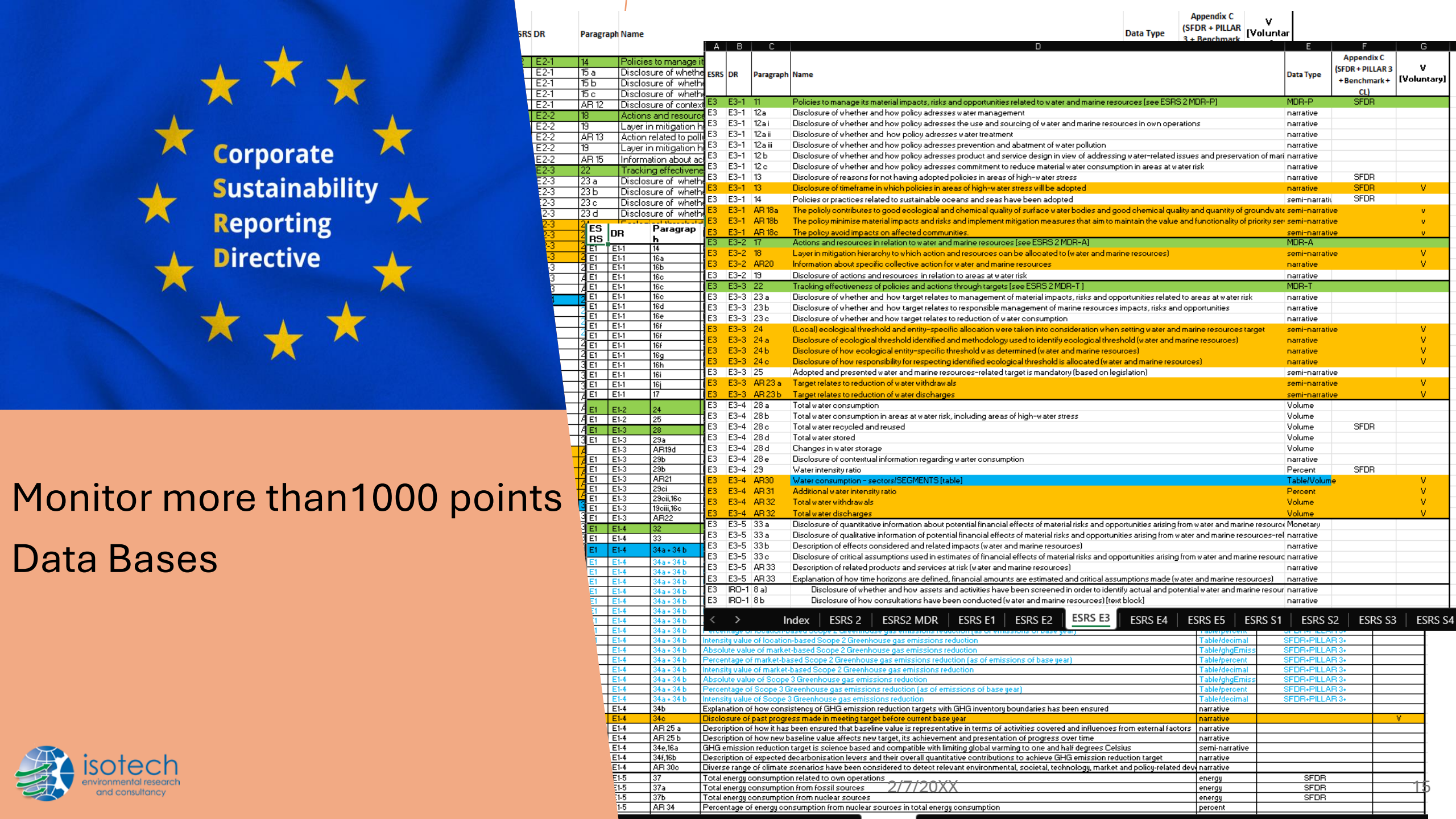
What’s new and important in Europe towards …. FIT FOR 55?

- ***CSRD***
- ***EU TAXONOMY***
- ***GREEN CLAIMS DIRECTIVE – THE GREENWASHING DIRECTIVE***

- ***CIRCULAR ECONOMY***
- ***ISO, INDEXES,***
- ***GHG, SCOPE 1, 2, 3***
- ***…..***

Corporate Sustainability Reporting Directive

Monitor more than1000 points Data Bases



ESRS	DR	Paragraph	Name	Data Type	Appendix C (SFDR + PILLAR 3 + Benchmark + CL)	V [Voluntary]
E3	E3-1	11	Policies to manage its material impacts, risks and opportunities related to water and marine resources [see ESRS 2 MDR-P]	MDR-P	SFDR	
E3	E3-1	12a	Disclosure of whether and how policy adresses water management	narrative		
E3	E3-1	12a i	Disclosure of whether and how policy adresses the use and sourcing of water and marine resources in own operations	narrative		
E3	E3-1	12a ii	Disclosure of whether and how policy adresses water treatment	narrative		
E3	E3-1	12a iii	Disclosure of whether and how policy adresses prevention and abatment of water pollution	narrative		
E3	E3-1	12 b	Disclosure of whether and how policy adresses product and service design in view of addressing water-related issues and preservation of mari	narrative		
E3	E3-1	12 c	Disclosure of whether and how policy adresses commitment to reduce material water consumption in areas at water risk	narrative		
E3	E3-1	13	Disclosure of reasons for not having adopted policies in areas of high-water stress	narrative	SFDR	
E3	E3-1	13	Disclosure of timeframe in which policies in areas of high-water stress will be adopted	narrative	SFDR	V
E3	E3-1	14	Policies or practices related to sustainable oceans and seas have been adopted	semi-narrati	SFDR	
E3	E3-1	AR 18a	The policy contributes to good ecological and chemical quality of surface water bodies and good chemical quality and quantity of groundwate	semi-narrative		v
E3	E3-1	AR 18b	The policy minimise material impacts and risks and implement mitigation measures that aim to maintain the value and functionality of priority ser	semi-narrative		v
E3	E3-1	AR 18c	The policy avoid impacts on affected communities.	semi-narrative		v
E3	E3-2	17	Actions and resources in relation to water and marine resources [see ESRS 2 MDR-A]	MDR-A		
E3	E3-2	18	Layer in mitigation hierarchy to which action and resources can be allocated to (water and marine resources)	semi-narrative		V
E3	E3-2	AR20	Information about specific collective action for water and marine resources	narrative		V
E3	E3-2	19	Disclosure of actions and resources in relation to areas at water risk	narrative		
E3	E3-3	22	Tracking effectiveness of policies and actions through targets [see ESRS 2 MDR-T]	MDR-T		
E3	E3-3	23 a	Disclosure of whether and how target relates to management of material impacts, risks and opportunities related to areas at water risk	narrative		
E3	E3-3	23 b	Disclosure of whether and how target relates to responsible management of marine resources impacts, risks and opportunities	narrative		
E3	E3-3	23 c	Disclosure of whether and how target relates to reduction of water consumption	narrative		
E3	E3-3	24	(Local) ecological threshold and entity-specific allocation were taken into consideration when setting water and marine resources target	semi-narrative		V
E3	E3-3	24 a	Disclosure of ecological threshold identified and methodology used to identify ecological threshold (water and marine resources)	narrative		V
E3	E3-3	24 b	Disclosure of how ecological entity-specific threshold was determined (water and marine resources)	narrative		V
E3	E3-3	24 c	Disclosure of how responsibility for respecting identified ecological threshold is allocated (water and marine resources)	narrative		V
E3	E3-3	25	Adopted and presented water and marine resources-related target is mandatory (based on legislation)	semi-narrative		
E3	E3-3	AR 23 a	Target relates to reduction of water withdrawals	semi-narrative		V
E3	E3-3	AR 23 b	Target relates to reduction of water discharges	semi-narrative		V
E3	E3-4	28 a	Total water consumption	Volume		
E3	E3-4	28 b	Total water consumption in areas at water risk, including areas of high-water stress	Volume		
E3	E3-4	28 c	Total water recycled and reused	Volume	SFDR	
E3	E3-4	28 d	Total water stored	Volume		
E3	E3-4	28 d	Changes in water storage	Volume		
E3	E3-4	28 e	Disclosure of contextual information regarding warter consumption	narrative		
E3	E3-4	29	Water intensity ratio	Percent	SFDR	
E3	E3-4	AR30	Water consumption - sectors/SEGMENTS [table]	Table/Volume		V
E3	E3-4	AR 31	Additional water intensity ratio	Percent		V
E3	E3-4	AR 32	Total water withdrawals	Volume		V
E3	E3-4	AR 32	Total water discharges	Volume		V
E3	E3-5	33 a	Disclosure of quantitative information about potential financial effects of material risks and opportunities arising from water and marine resource	Monetary		
E3	E3-5	33 a	Disclosure of qualitative information of potential financial effects of material risks and opportunities arising from water and marine resources-rel	narrative		
E3	E3-5	33 b	Description of effects considered and related impacts (water and marine resources)	narrative		
E3	E3-5	33 c	Disclosure of critical assumptions used in estimates of financial effects of material risks and opportunities arising from water and marine resourc	narrative		
E3	E3-5	AR 33	Description of related products and services at risk (water and marine resources)	narrative		
E3	E3-5	AR 33	Explanation of how time horizons are defined, financial amounts are estimated and critical assumptions made (water and marine resources)	narrative		
E3	IRO-1	8 a)	Disclosure of whether and how assets and activities have been screened in order to identify actual and potential water and marine resour	narrative		
E3	IRO-1	8 b	Disclosure of how consultations have been conducted (water and marine resources) [text block]	narrative		

Index | ESRS 2 | ESRS2 MDR | ESRS E1 | ESRS E2 | ESRS E3 | ESRS E4 | ESRS E5 | ESRS S1 | ESRS S2 | ESRS S3 | ESRS S4

E1-4	34a + 34 b	Intensity value of location-based Scope 2 Greenhouse gas emissions reduction	Table/decimal	SFDR+PILLAR 3+	
E1-4	34a + 34 b	Absolute value of market-based Scope 2 Greenhouse gas emissions reduction	Table/ghgEmiss	SFDR+PILLAR 3+	
E1-4	34a + 34 b	Percentage of market-based Scope 2 Greenhouse gas emissions reduction (as of emissions of base year)	Table/percent	SFDR+PILLAR 3+	
E1-4	34a + 34 b	Intensity value of market-based Scope 2 Greenhouse gas emissions reduction	Table/decimal	SFDR+PILLAR 3+	
E1-4	34a + 34 b	Absolute value of Scope 3 Greenhouse gas emissions reduction	Table/ghgEmiss	SFDR+PILLAR 3+	
E1-4	34a + 34 b	Percentage of Scope 3 Greenhouse gas emissions reduction (as of emissions of base year)	Table/percent	SFDR+PILLAR 3+	
E1-4	34a + 34 b	Intensity value of Scope 3 Greenhouse gas emissions reduction	Table/decimal	SFDR+PILLAR 3+	
E1-4	34b	Explanation of how consistency of GHG emission reduction targets with GHG inventory boundaries has been ensured	narrative		
E1-4	34c	Disclosure of past progress made in meeting target before current base year	narrative		V
E1-4	AR 25 a	Description of how it has been ensured that baseline value is representative in terms of activities covered and influences from external factors	narrative		
E1-4	AR 25 b	Description of how new baseline value affects new target, its achievement and presentation of progress over time	narrative		
E1-4	34e,16a	GHG emission reduction target is science based and compatible with limiting global warming to one and half degrees Celsius	semi-narrative		
E1-4	34f,16b	Description of expected decarbonisation levers and their overall quantitative contributions to achieve GHG emission reduction target	narrative		
E1-4	AR 30c	Diverse range of climate scenarios have been considered to detect relevant environmental, societal, technology, market and policy-related dev	narrative		
E1-5	37	Total energy consumption related to own operations	energy	SFDR	
E1-5	37a	Total energy consumption from fossil sources	energy	SFDR	
E1-5	37b	Total energy consumption from nuclear sources	energy	SFDR	
E1-5	AR 34	Percentage of energy consumption from nuclear sources in total energy consumption	percent		

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(EU taxonomy)

Delegated ACT BY EU:
21 November 2023

a cornerstone of the EU's sustainable finance framework and an important market transparency tool. It helps direct investments to the economic activities most needed for the transition, in line with the European Green Deal objectives.

Benchmarks

Banks can identify environmental risk and adapt the terms of the loans accordingly

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Green Claims Directive (Greenwashing Directive)

January 2024: approved by EU parliament

Every claim has to be validated based on numbers/ validated data

No more, Zero Waste, Net Zero etc

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Change the way we deal with – opportunities?

- Production
- Waste management
- Urban planning – concrete cities
- Coastal Zone Management
- Agricultural practices
- Conservation areas
- Industry - Circular Economy
- Energy - Energy poverty –Net Zero/ Fit for 55

- Waste Management
- Urban development and cement
- Carbon captures/sequestration/ removal GHGs
- Best agricultural practices
- Sustainable industry
- sustainable tourism
- …. SKY IS THE LIMIT

MARKET PUSH

- Legal Framework
- Investors
- Consumers
- ?????????????
- ????????????.

- Lack of knowledge
- What and HOW??
- Locate the opportunities

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The example of booking.com

Booking is changing its Travel Sustainable filter

by **Harold Goodwin**

Director of the Responsible Tourism Partnership

Booking.com ends sustainability program under pressure from ACM

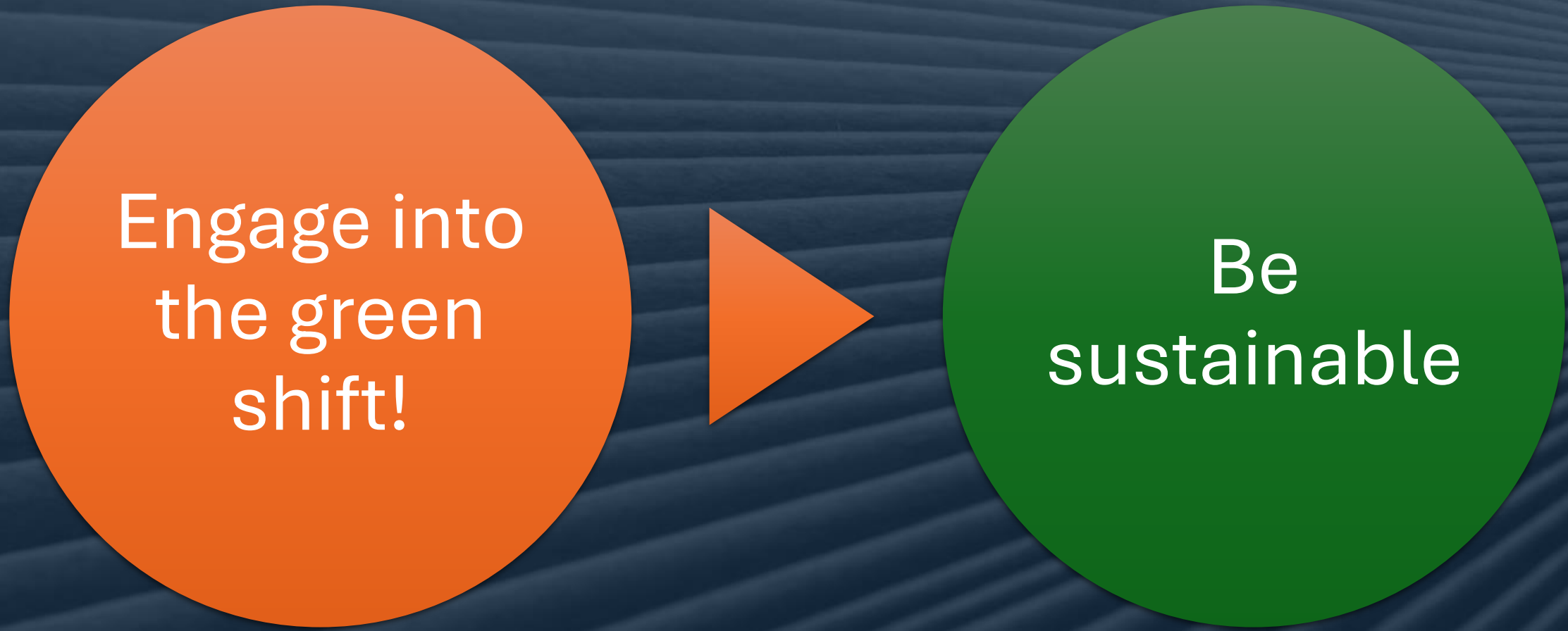
25 March 2024 door Theo de Reus

Booking.com takes 'Travel Sustainable' program offline following ACM action

"Booking.com is taking action and that it is working on an improved program based on third-party certification and which is aimed at making accommodations more sustainable."

All claims must be **VALIDATED**.

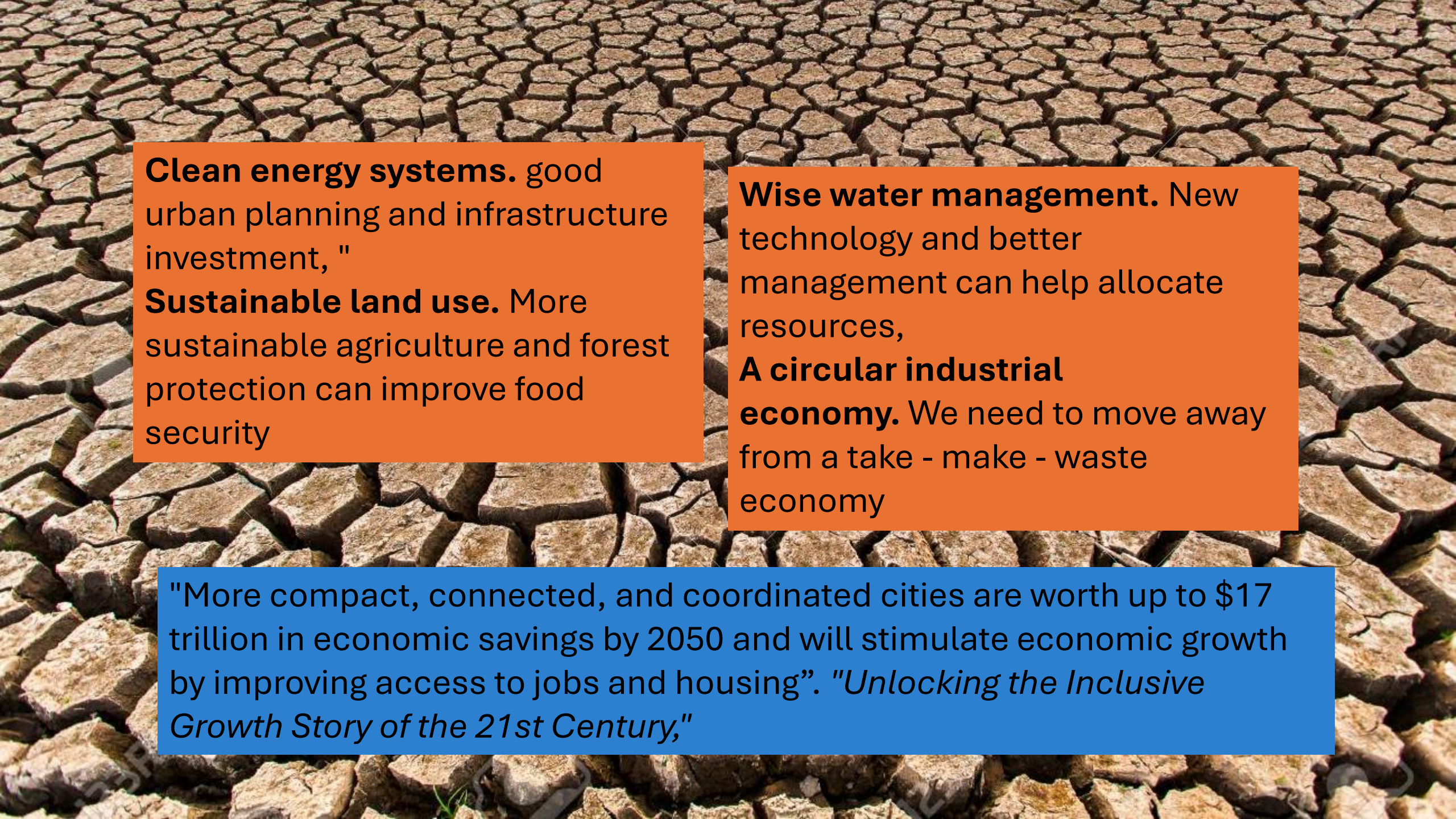
HOW TO PROCEED???


Engage into the green shift!
Be sustainable

STRATEGY

Climate Change Is a $26 Trillion Growth Opportunity. 5 Business Models to Consider Today

Shifting to a low-carbon economy in 5 key areas could create huge financial benefits and 65 million new jobs.



Clean energy systems. good urban planning and infrastructure investment, "
Sustainable land use. More sustainable agriculture and forest protection can improve food security

Wise water management. New technology and better management can help allocate resources,
A circular industrial economy. We need to move away from a take - make - waste economy

"More compact, connected, and coordinated cities are worth up to $17 trillion in economic savings by 2050 and will stimulate economic growth by improving access to jobs and housing". *"Unlocking the Inclusive Growth Story of the 21st Century,"*

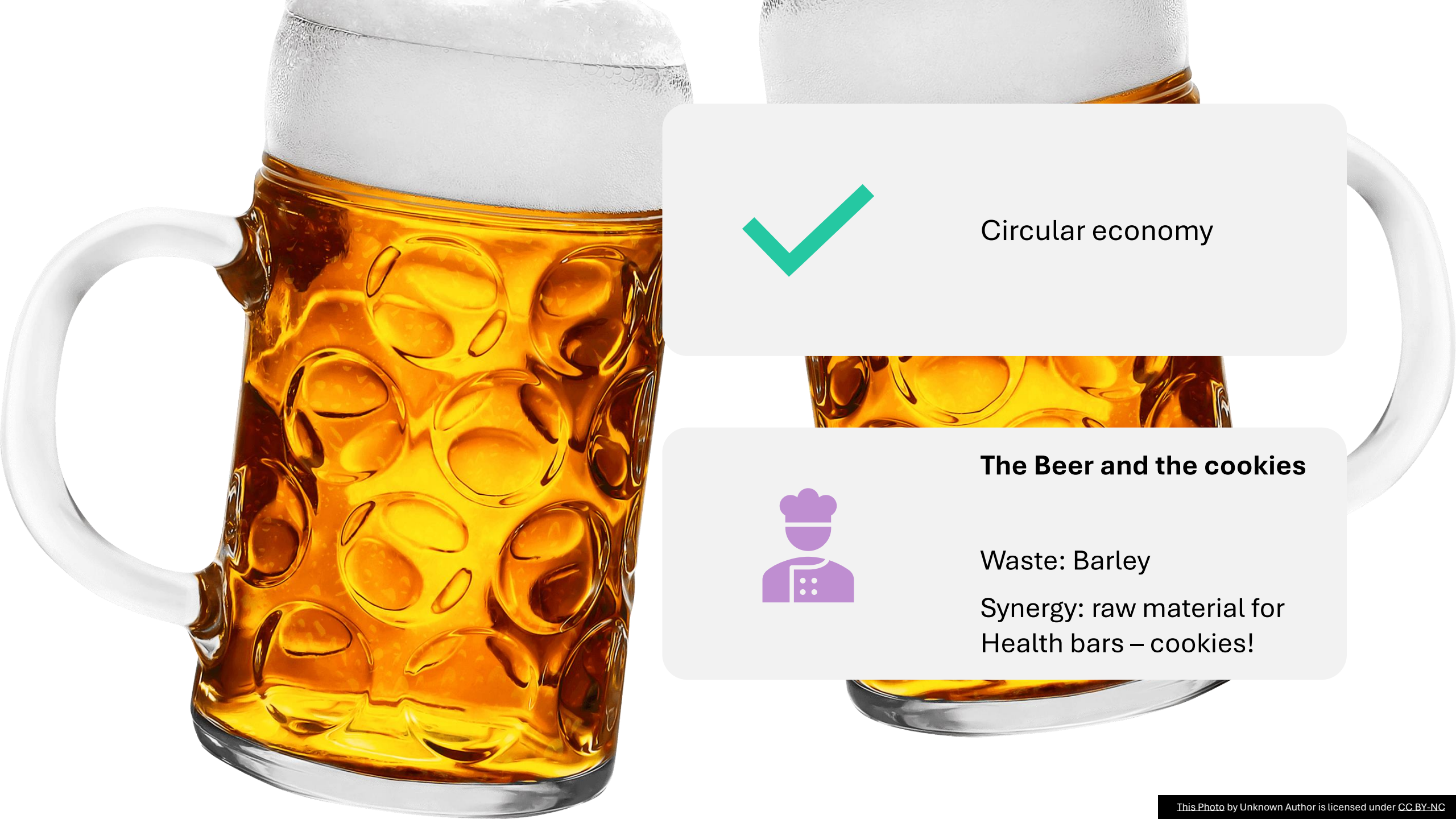
ECONOMY

ENVIRONMENT

SOCIETY

SYNERGIES


Synergy
Working together
Harmony
Teamwork
Unity
Collaboration
Partisanship
PARTS
Collaboration
Synergism
CO ACTION
INTERACT
INTERACTION
UNITY
PARTS
Enhance
Whole
Combined effort
Combination
CONNECTION
COOPERATION
Joint Effort
AGENTS
Parts
Interaction
Partner
Co-action
Unit
Joint Action
SYMBIOSIS



Circular economy

The Beer and the cookies

Waste: Barley

Synergy: raw material for Health bars – cookies!

- CARPENTERS IN CYPRUS
- 2 MILLION EURO PER YEAR PAID AS GATE FEES TO LANFILL THE “WASTE”!

- “WASTE” CAN BE USED AS RAW MATERIAL FOR NEW PRODUCTS – ISOLATION, FLOORS, ETC

- CGHANGE MINDSET: INVEST IN NEW INFRASTRUCTURE INSTEAD OF PAYING!!!

Compost

- More than 3 million imports of compost per year
- High cost for organic farming
- Chemicals in agriculture = nitro-pollution

RE...

- Re-thinking
- Re-design
- Re- purpose
- Re-use
- Re-bottle
- Re-cycle
- Re-adjust
- Re- wildering
- Re-gift (sharing with others)
- …

Integrated approach. Knowledge based decisions

Twisted: what is innovation??

Digital Innovation?

"Creativity is thinking up new things. Innovation is doing new things."

Theodore Levitt

- Come up with the idea
- Develop the idea
- Market research
- Business plan
- Pitching – investors
- MARKETING – MARKET SEARCH
- Synergies

Well, this is the usual. What’s the difference?

Agriculture/ Technologies

Global Agriculture Sensors Market, Executive Summary

By Product

- Overview
- Physical Sensors
- Mechanical Sensors
- Chemical Sensors

By Application

- Yield Monitoring and Mapping
- Soil Monitoring
- Disease Control and Detection
- Irrigation and Water Management

By Geography

- Overview
- North America
- Europe
- Asia Pacific
- Rest Of The World

By Competitive Landscape

- Overview
- Company Market Ranking
- Key Development Strategies

Company Profiles

- Texas Instruments
- Auroras s.r.l
- Bosch
- Avidor High Tech
- Libelium
- Sol Chip Ltd
- Pycno Agriculture
- CropX Inc

VERIFIED MARKET RESEARCH

1054 × 621

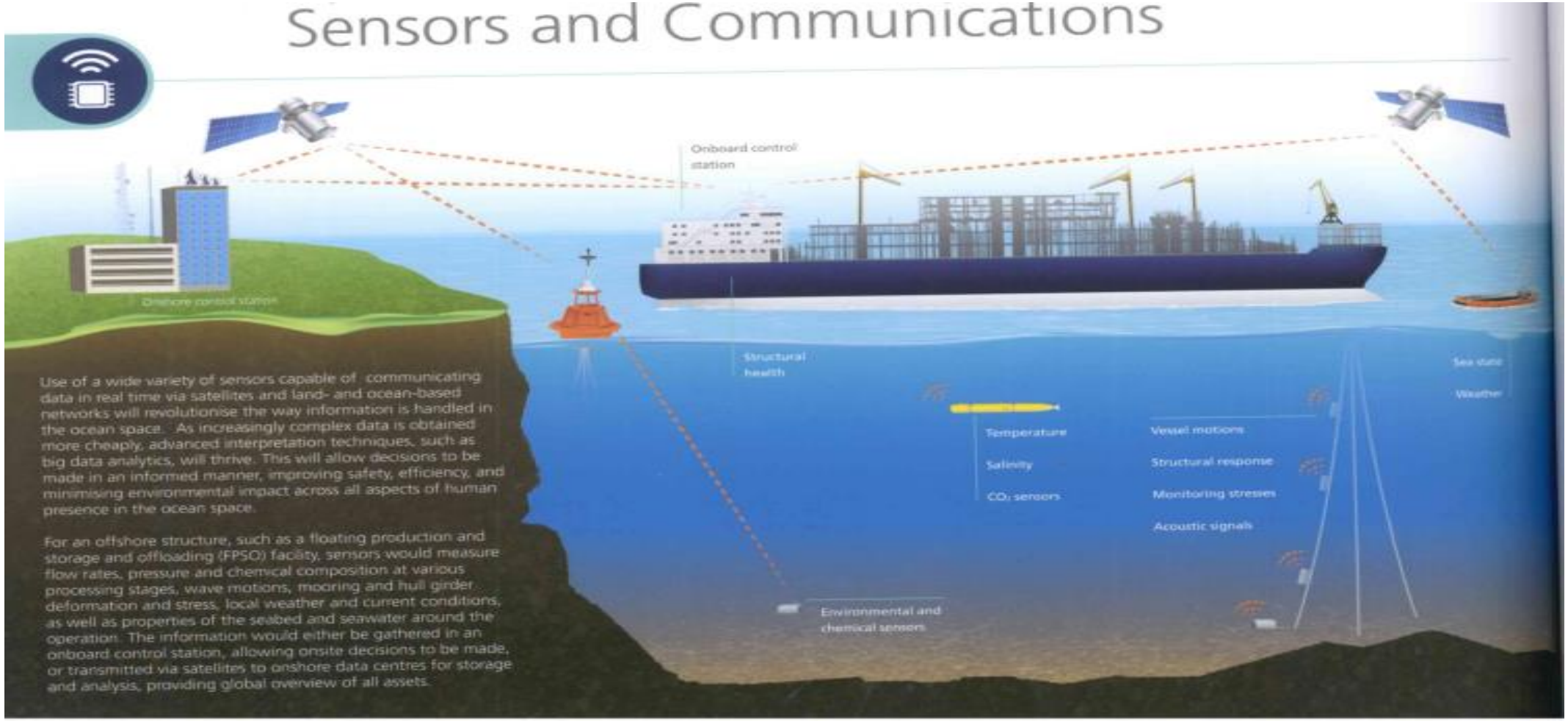
GLOBAL AGRICULTURE SENSORS MARKET

Opportunities and Forecast

Global Market is expected to reach **US$ 2.6 Bn** by 2026

Growing at a CAGR of **11.10%**

Marine technologies

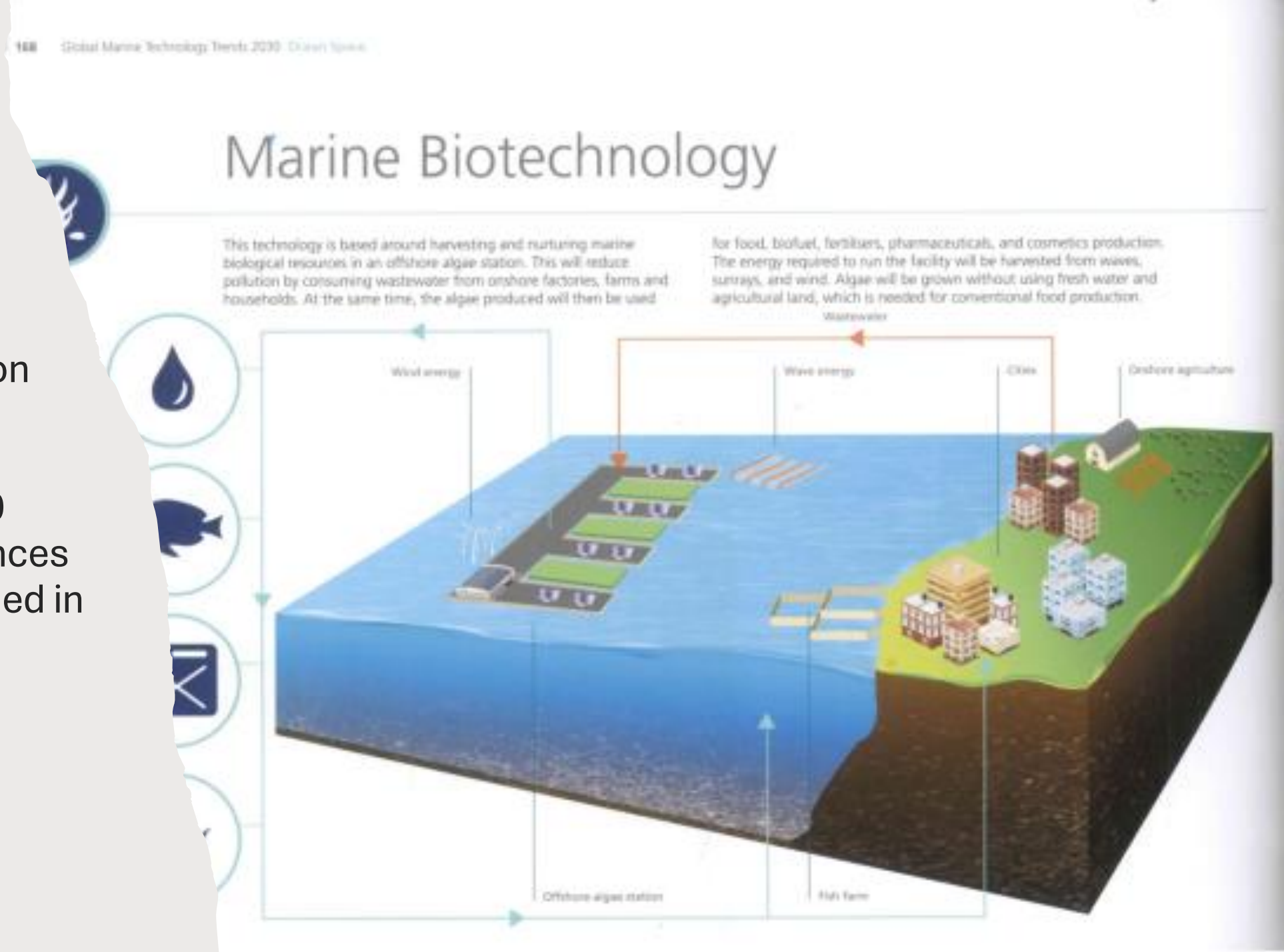


Algae

More than 1 million algae

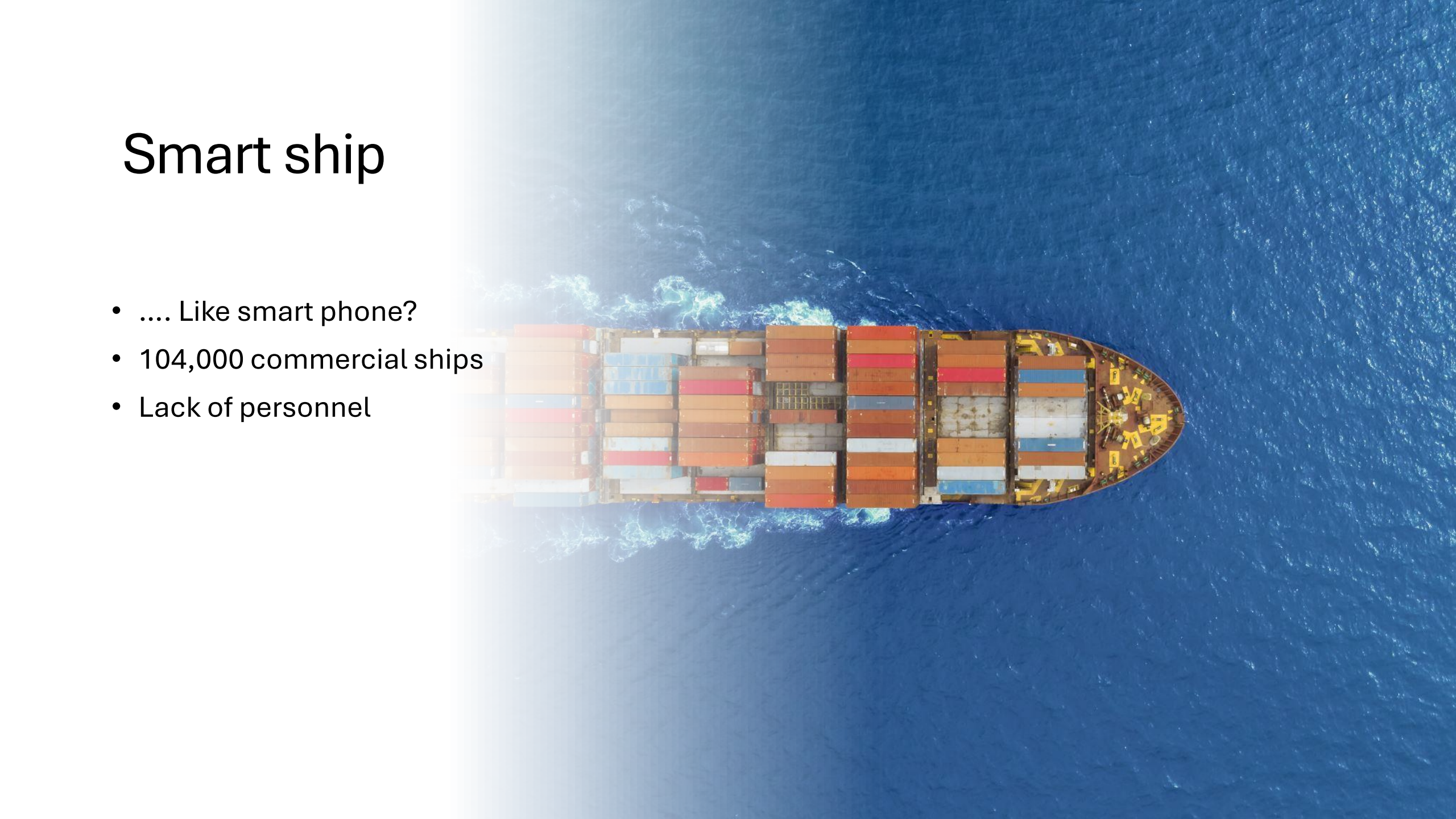
More than 15,000 chemical substances have been identified in algae

Algae for energy



Smart ship

- …. Like smart phone?
- 104,000 commercial ships
- Lack of personnel



Θαλάσσια αθλήματα

New material : Prada and the EU Single use plastic Directive

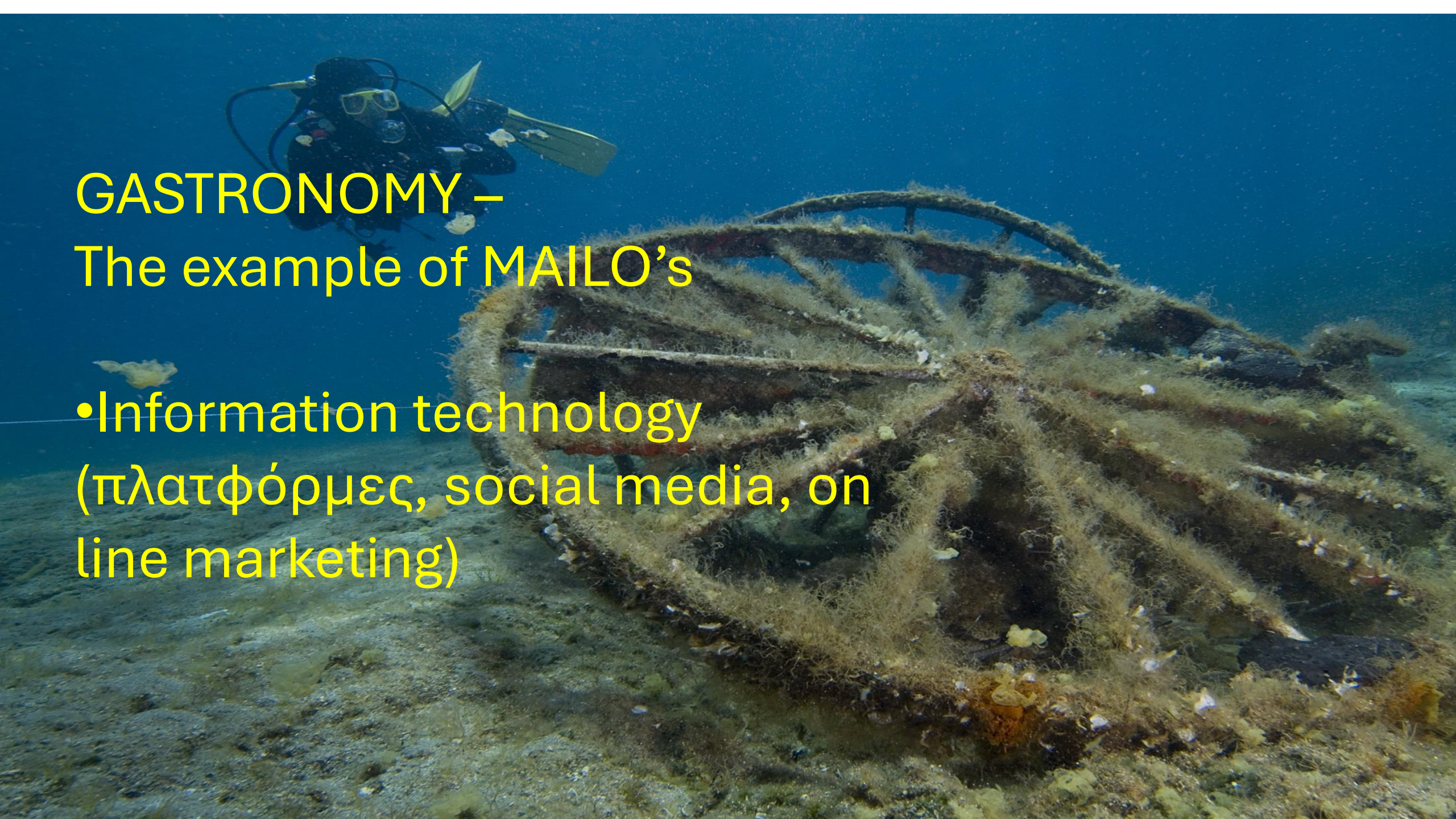
New material in Engineering

ECOTOURISM

MARINE BIOLOGY

EDUCATION


NEMESIS III
P. Kranos



GASTRONOMY –
The example of MAILO's

- Information technology (πλατφόρμες, social media, on line marketing)

Sincerely food!
LOCAL PRODUCTS
-Green Cluster

- https://www.repaircafe.org/en/

REPAIR CAFE

8Rs of a Circular Economy

RETHINK
REPAIR
REUSE
REDUCE
REFUSE
RECYCLE
RECOVER
REGIFT

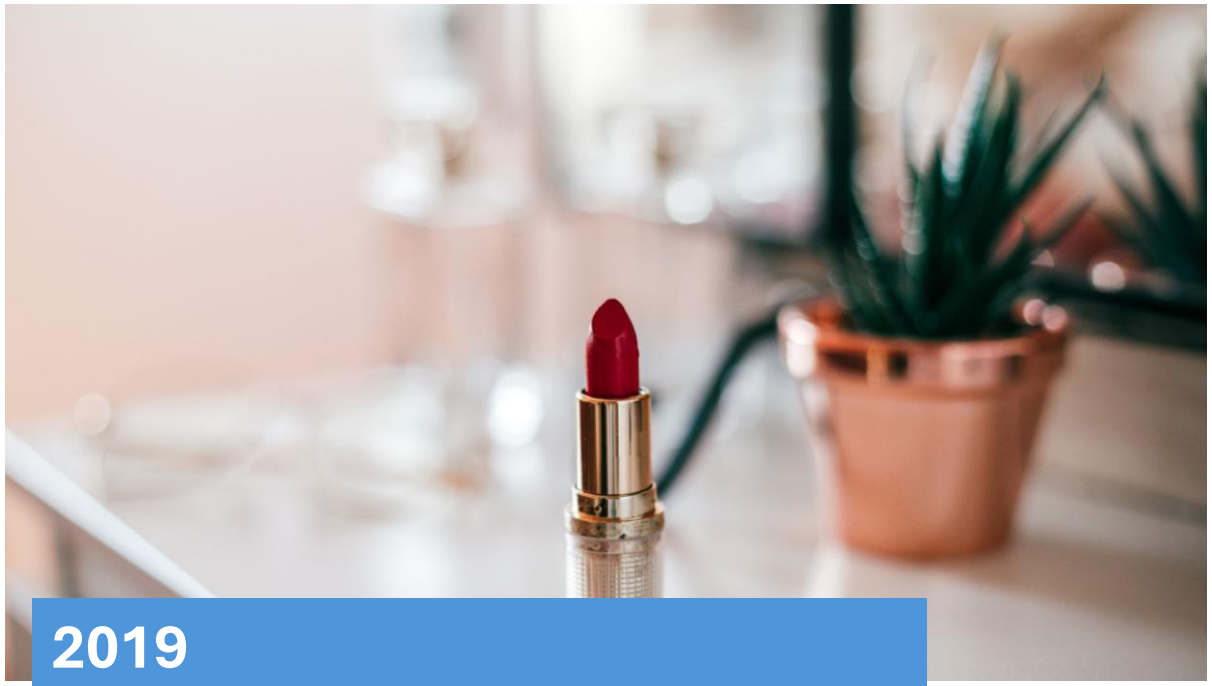
INTERNATIONAL MOVEMENT TO PROMOTE THE 8R OF CIRCULAR ECONOMY

Energy ad water management

Eco-innovation Cluster Partnership

13 eco-clusters FROM 10 EU countries

https://greenovate-europe.eu/wp-content/uploads/2020/08/Ecoclup_booklet.pdf



Cosmetics

2019

17 COUNTRIES

SUPPORT GREEN TRANSITION IN COSMETICS INDUSTRY

https://cosmeticsclusters.com/2021/04/23/global-cosmetics-cluster-the-association-is-born/

Crypto.com NFT | DRESSX | DRES

crypto.com/nft/drops-event/494dc9b74a05def9130e7a0d18a9b423?utm_source=Google&utm_medium=cpc&utm_ca...

Facebook | A-F | G-M | N-S | T-Z | ES | Task Force on Clima... | Mary Robinson Fou... | 12 Ways to Close th... | UNWTO and IMO Is...

Meta fashion/
upcycling fashion

NFT | Search collectibles and collections | Marketplace | Drops | Brands | Create | Sign In | Sig Up

ENDED

Thu, Oct 21

DRESSX x UNSEENBERRIES

CONSTRUCTION

BELGIUM

CLUSTERING OF ARCHITECTS.

CLUSTER ECO CONSTRUCTION

https://clustercollaboration.eu/cluster-organisations/cluster-eco-construction

Green Cluster

ΤΗΓΑΝΟΚΙΝΗΣΗ

Conversion of domestically-used cooking oil into a useful fuel for education, innovation, environmental and social responsibility in schools in Cyprus

90,000

STUDENTS

participate in the programme, becoming active participants in their school's and their country's sustainability

>400,000 €

returned to schools and invested in

780 green infrastructure and actions to make the schools more sustainable

SCHOOLS

455

participate in the programme. That's 85% of Cypriot schools!

Τηγανοκίνηση

TONNES

of domestically-used cooking oil collected and converted to biodiesel so far

600

330

donate their used cooking oil to the schools in their communities

BUSINESSES

Key facts about the implementation of 'Tiganokinisi' programme in Cyprus


GENDER
What's the connection between climate change and gender?
www.ecoltdgroup.com

Gender issues

STEM UP!

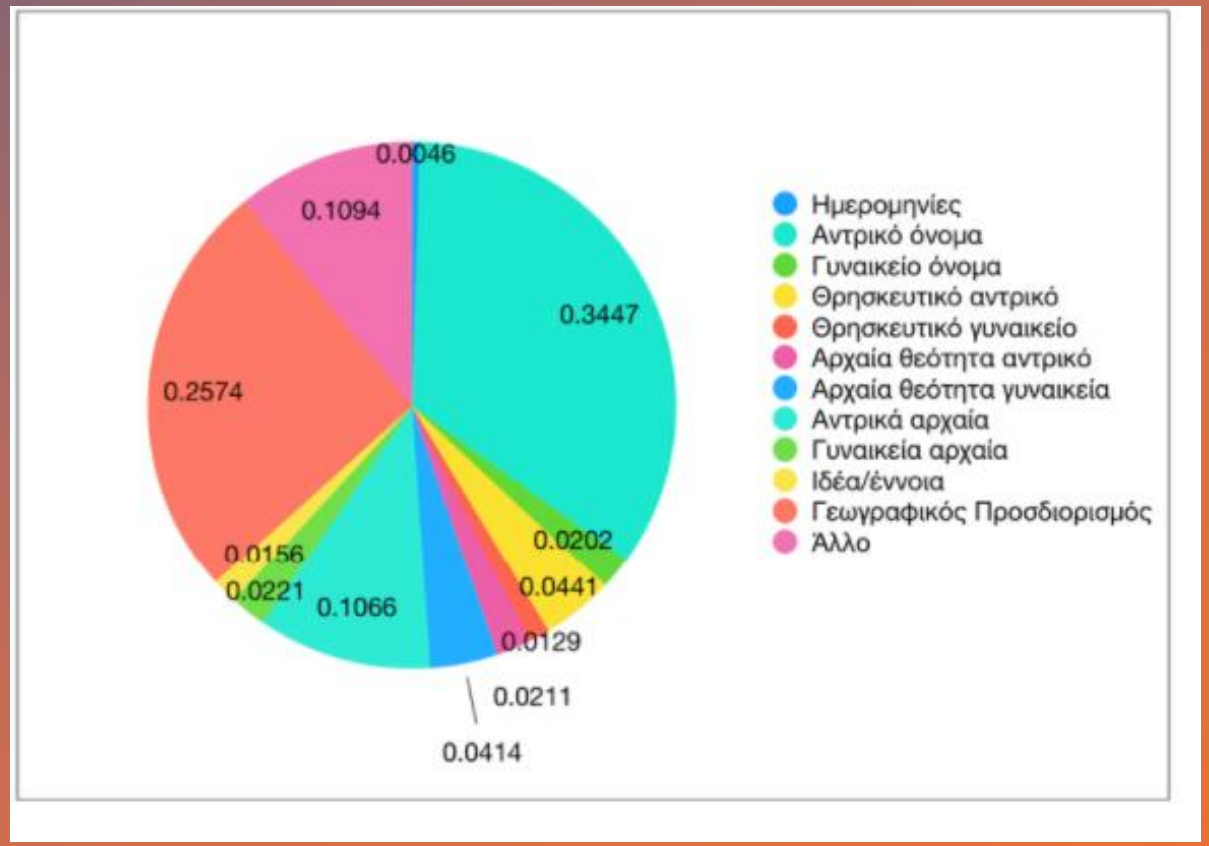
Cyprus (Gender Equality Index 2019)

who study STEAM?: 40% women
who works in STEAM?: 4% women

The proportions of both women and men (27%) working in STEAM occupations in Cyprus are among the lowest in the EU.

The EU policy framework of the European Green Deal and other relevant policy (the EU Gender Equality Strategy 2020-2025 and the Recovery and Resilience Facility) puts forward ambitions to incorporate gender and intersecting (in)equalities goals in the green transition, but specific gender measures and systematic gender mainstreaming could be strengthened.

Mapping sexism – ΑΚΤΙ
eg Larnaka 1088 streets,
2% have a woman's name, 34,5% a man name!

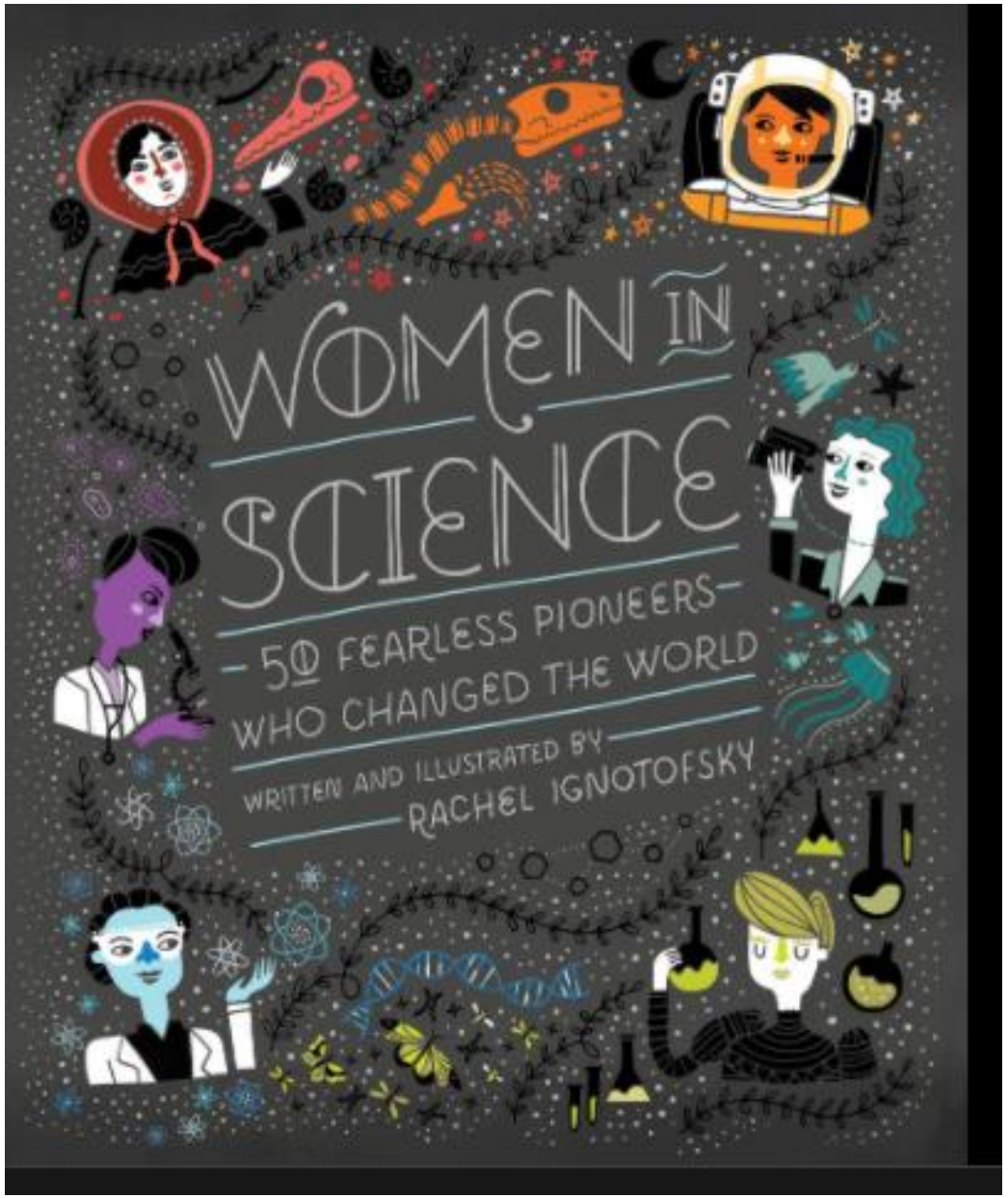


- **Male-Dominated Cultures:** Because fewer women work in STEAM, and even less are part of Cypriot decision- making system, these fields tend to adjust to male-dominated cultures that are not supportive of or attractive to women.

- So green transition becomes another male dominated area unless we act NOW

Fewer Role Models:

girls have fewer role models to inspire their interest in these fields, seeing limited examples of female scientists and engineers in books, media and popular culture. There are even fewer role models of Black women in math and science.




Failure??

anything to do with ....

Cyprus ranks last in innovation among EU countries

mindset?

- Which is the major gap/need to proceed towards a sustainable business model?

2. Which is a solution to address the major gap/need to proceed towards a sustainable business model?

Sustainability is magic that works

Sustainability is not theory
Do it correct!

Develop the business from concept to implementation in a sustainable way

Knowledge based decisions

Innovation
Synergies

Creativity

Be bold


SUCCESS
IS A STATE
OF MIND


GREEN IS
GOOD!