# EBRD's Masterclasses for consultants series:

Green Transformation through Consulting Projects

How can consultants promote green agenda?

How to find green opportunities in mainstream consulting projects?

By: Astghine Pasoyan



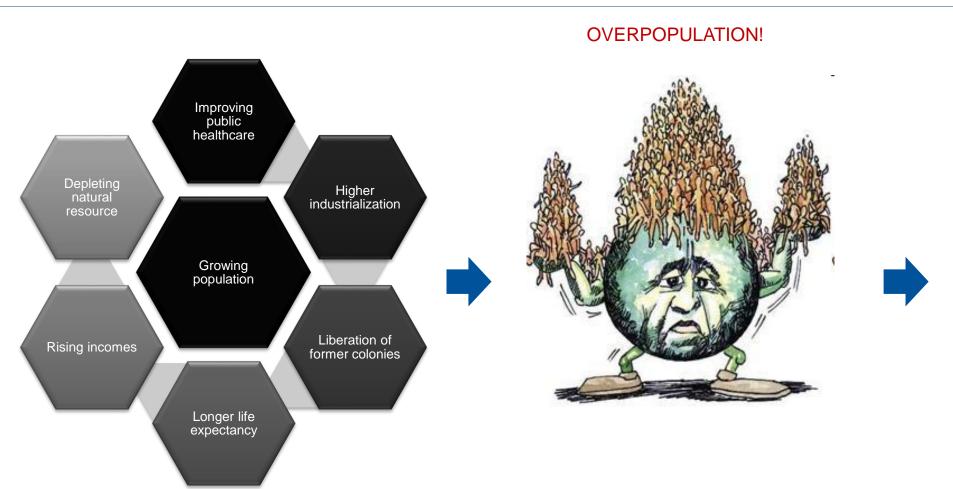
# **Outline**



- · Start with setting the scene (planetary boundaries, climate change)
- · International frameworks and agreements addressing the challenges (SDGs, Paris agreement, EU green deal)
- · What are the risks for local businesses and how local businesses can 'help' to address the challenges
- · Pressure from the clients
- · Resource efficiency
- · How can consultants promote green agenda how to find green opportunities in mainstream consulting projects
  - · Green business models
  - · Green entrepreneurship
  - · Green procurement
  - · Green supply chains
  - · Green marketing
- · Marketing & Sales: How to talk to the clients!!!

# Do we have a problem?

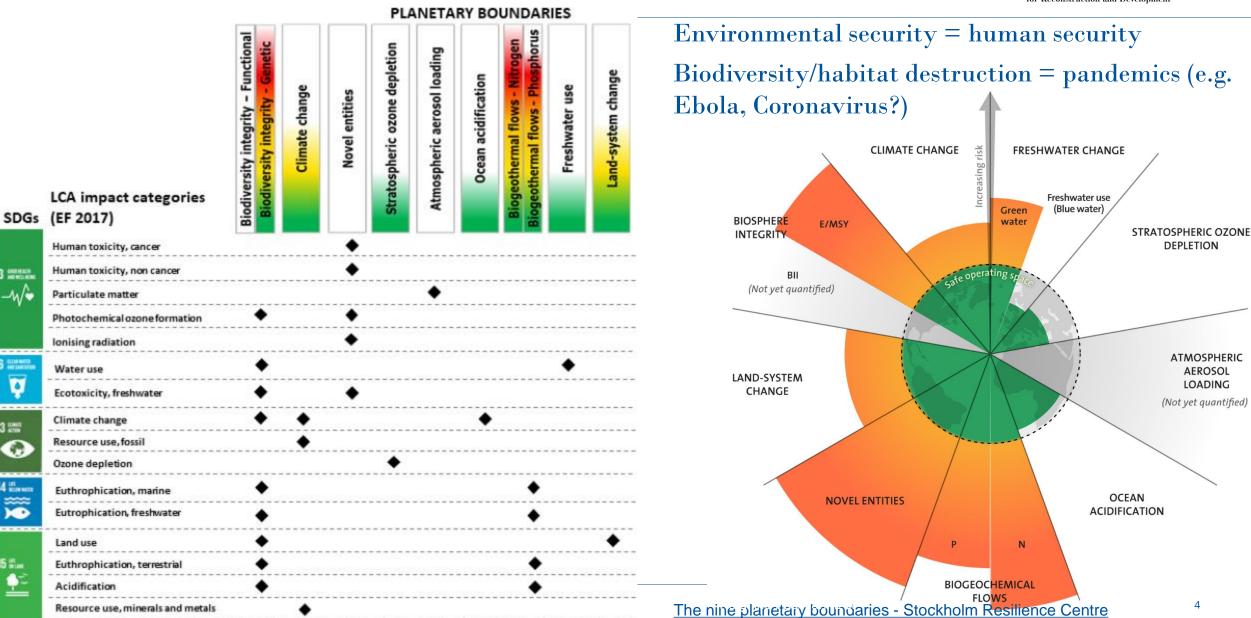






# But why do we need to solve it? Planetary boundaries

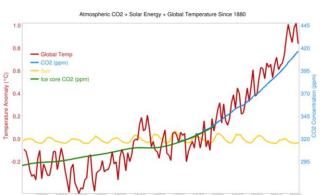


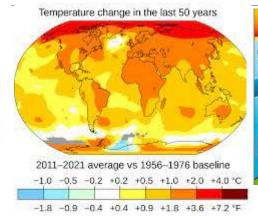


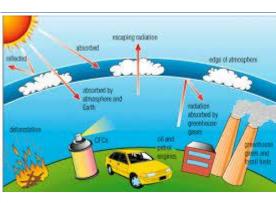
# Climate Change

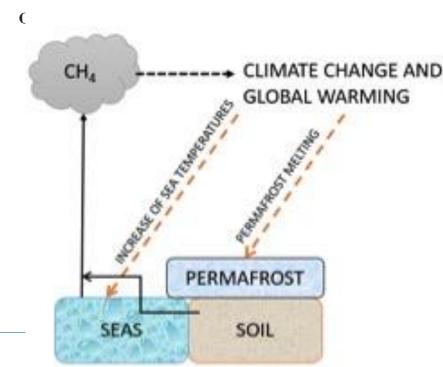


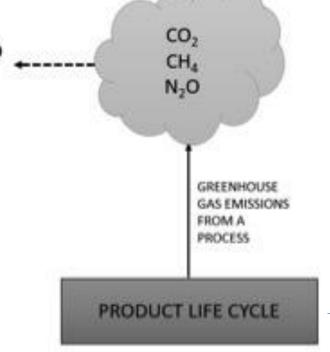
Global climate change is happening as greenhouse gas emissions from human activities increase, they build up in the atmosphere and warm the climate, leading to many other changes around the world—in the atmosphere, on land, and in the











The sources of GHG emissions are:

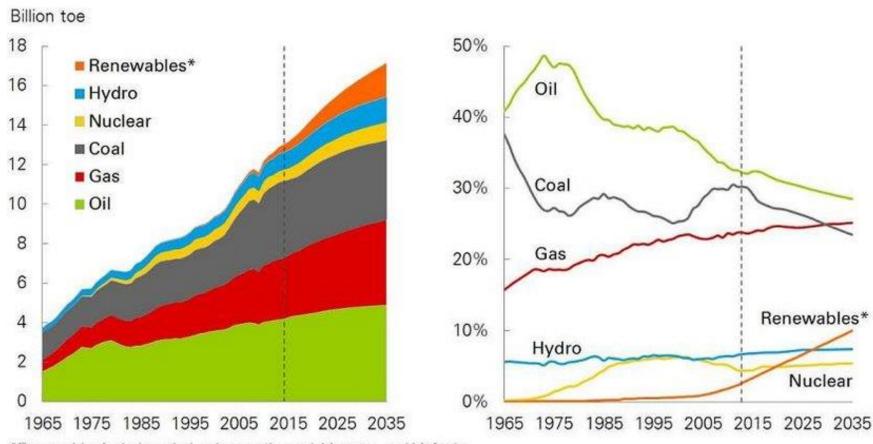
- 1. Combustion of Fossil Fuels (Power, transportation, industrial energy use, heating and cooling spaces, etc.)
- 2. Agriculture (use of chemical fertilizers, enteric fermentation from cattle, field burning of agricultural residues, rice cultivation, etc.)
- 3. Industry (e.g. cement production)
- 4. Land Use change and Forestry (abandonment of agri.lands, deforestation, etc)
- 5. Waste (landfilled municipal waste, liquid wastewater)

# How did we get there? - Energy



### Primary energy consumption by fuel

#### Shares of primary energy



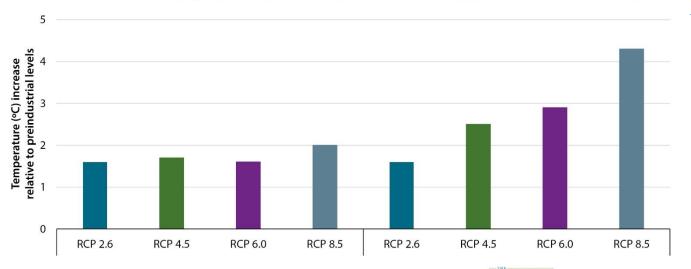
<sup>\*</sup>Renewables includes wind, solar, geothermal, biomass, and biofuels

2017 Energy Outlook

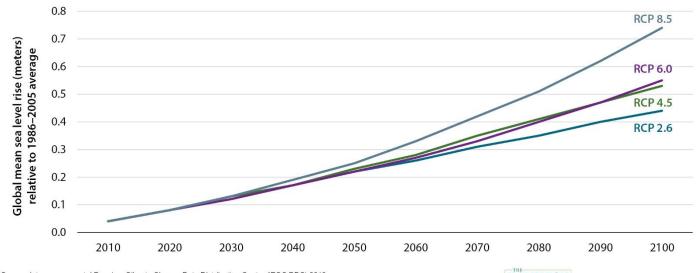
# Climate Change is offending the Corporate world like never before



Global Mean Surface Temperature for Selected Climate Scenarios, 2031–50 and 2081–100



#### Global Mean Sea Level Rise for Selected Climate Scenarios, 2010–2100



### Impacts of climate change:

- 1. More frequent and intense drought, storms, heat waves,
- 2. Rising sea levels,
- 3. Melting glaciers,
- 4. Warming oceans

These are directly harming animals, destroying habitats, disrupting people's livelihoods and communities.

ource: Intergovernmental Panel on Climate Change Data Distribution Centre (IPCC DDC) 2019

Note: "RCP" refers to representative concentration pathways, described in box



# International frameworks and agreements addressing of

European Bank for Reconstruction and Development

For Sustainable Development

the challenges : SDGs



### UNFCCC, Article 3. 1992



United Nations Framework Convention on Climate Change

"The Parties should **protect the climate** system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities (CBDR). Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof"



# Paris Agreement



Adopted at climate conference (COP21) in December 2015

Entry into force in 2016

FIRST EVER Legally binding international

treaty on climate

Adopted by 196 parties

Sets clear cap goals – 1.5 and 2°C

Requires economic and social

transformation

Requires national plans (Nationally

Determined Contributions - NDCs)

Requires long-term plans (Low-emission

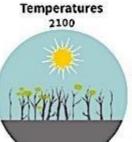
development strategies - LEDS)

Reaffirms commitment to finance,

technology transfer and capacity building

#### The Paris climate agreement: key points

The historic pact, approved by 195 countries, will take effect from 2020



 Keep warming "well below 2 degrees Celsius".
 Continue all efforts to limit the rise in temperatures to 1.5 degrees Celsius"



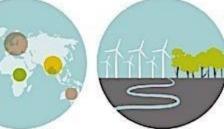
- Rich countries must provide 100 billion dollars from 2020, as a "floor"
- Amount to be updated by 2025



- Developed countries must continue to "take the lead" in the reduction of greenhouse gases
- Developing nations are encouraged to "enhance their efforts" and move over time to cuts

# 210

#### Emissions objectives 2050



- Aim for greenhouse gases emissions to peak "as soon as possible"
- From 2050: rapid reductions to achieve a balance between emissions from human activity and the amount that can be captured by "sinks"

#### **Burden-sharing**



- Developed countries must provide financial resources to help developing countries
- Other countries are invited to provide support on a voluntary basis

#### Review mechanism



- A review every five years First world review: 2023
- Each review will inform countries in "updating and enhancing" their pledges

#### Climate damage

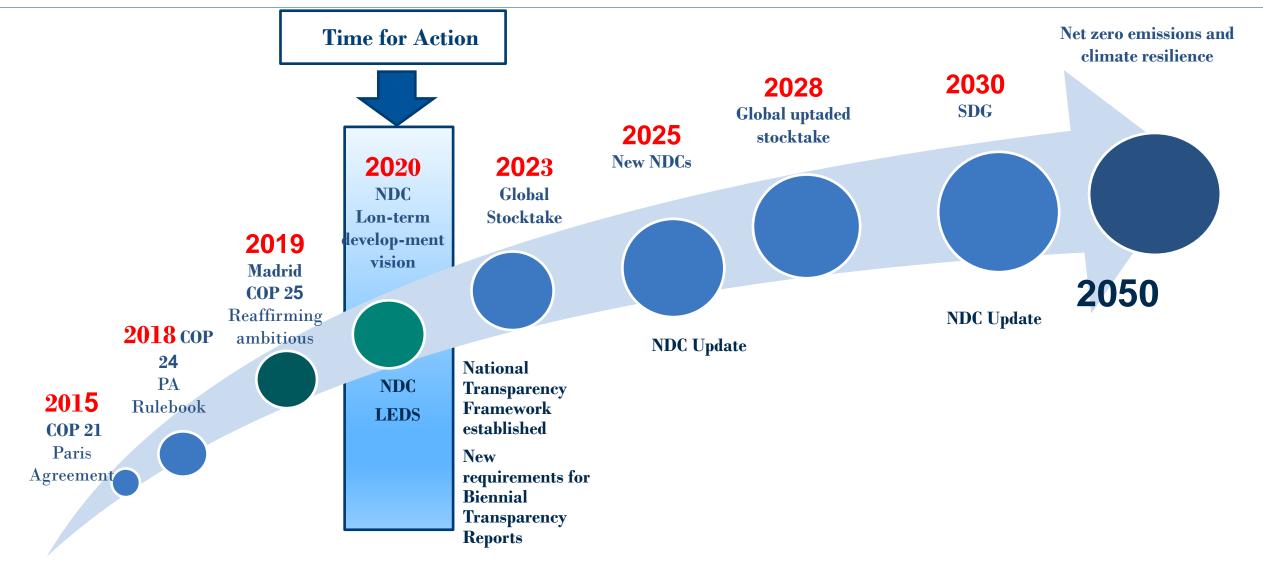


 Vulnerable countries have won recognition of the need for "averting, minimising and addressing" losses suffered due to climate change

AFP

# Global Commitments: new challenges





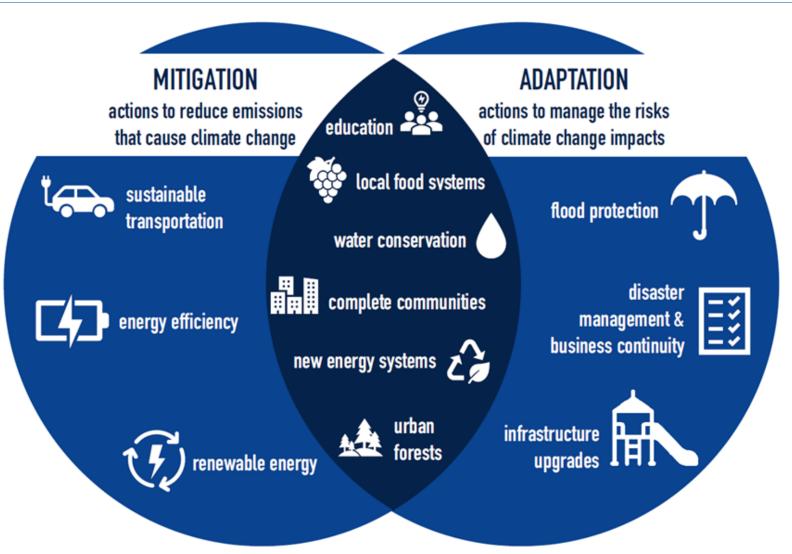
# Mitigation, Article 4

# Adaptation, Article 7



The Paris Agreement establishes binding commitments by all Parties to prepare, communicate and maintain a nationally determined contribution (NDC) and to pursue domestic measures to achieve them.

It also prescribes that Parties shall communicate their NDCs every 5 years and provide information necessary for clarity and transparency.

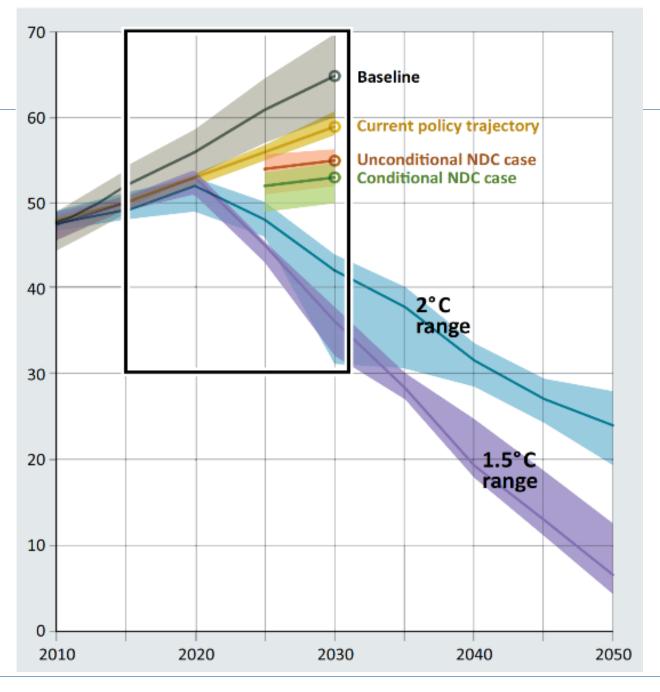


The Paris Agreement establishes a global goal on adaptation — of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change.

It aims to significantly strengthen national adaptation efforts, including through support and international cooperation. It recognizes that adaptation is a global challenge faced by all.



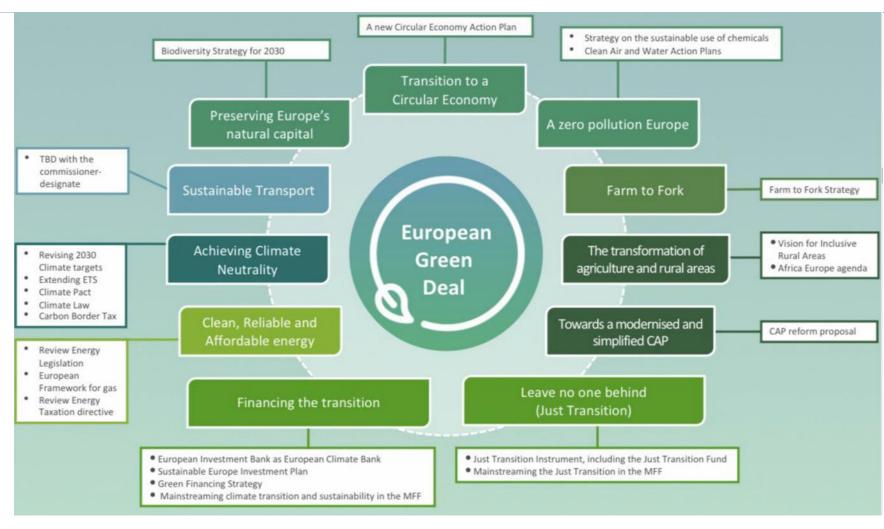
The next 10 years will determine how bad it will get.



# The European Green Deal



Under the European Green Deal, which was announced by the new **EU Commission in 2019 and** approved in 2020, the EU aims at meeting the goals of the Paris Agreement and plans to become the first climate-neutral continent by 2050 and that will only be possible by reviewing all existing law and adapt it to climate mitigation, as well as by channelling private investment into the transition to low-carbon, more resource-efficient and sustainable economy. The Green Deal also advocates for the development and implementation of a new sustainable finance strategy to support the green transition.

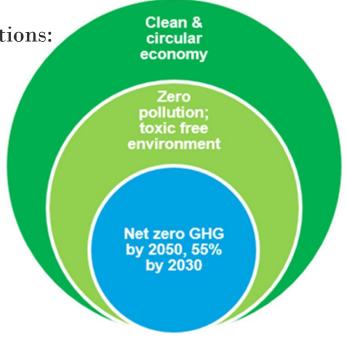


### The EU Action Plan



EU Action Plan is based on three pillars, each of which is broken down into a series of actions:

- Redirecting capital flows toward a long-term green investments:
  - Setting up a classification framework for sustainable activities (EU Taxonomy);
  - Developing standards and labels for sustainable financial products;
  - Promoting investments in green projects;
  - Integrating sustainability in the provision of financial guidance;
  - Developing sustainability indices and standards.
- Turning mainstream sustainability ("greenwashing") into a risk management tool:
  - Integrating sustainability into market research and credit ratings;
  - o Clarifying institutional investors' and asset managers' fiduciary duties with regards to sustainability;
  - Integrating sustainability into the requirements for banks and insurers.
- Fostering transparency and long-termism:
  - Strengthening disclosure and reporting on sustainability, as well as the development of reporting standards;
  - Promoting sustainable corporate governance and diminishing short-term vision in capital markets.



### Back to the EU level



Five fundamental pillars for the EU's energy system:

- energy security,
- internal energy market,
- energy efficiency,
- decarbonisation, and
- research & innovation



# **PACKAGE**

Implementation of the Energy Union strategy

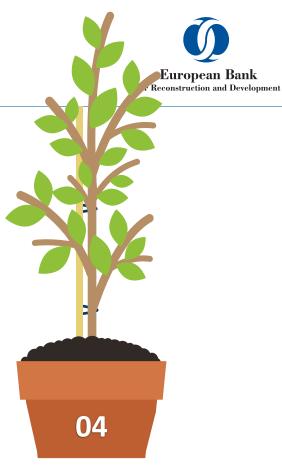
- Governance Regulation (EU) 2018/1999
- Renewable Energy Directive (2018/2001/EU)
- And 6 additional legislations



03

"The EU's new growth strategy"

- Carbon neutrality by 2050
- Upgraded targets
- Revised legislations



#### **EU RECOVERY PLAN**

 Additional funding opportunities via new schemes the or of existing upgrade ones.

# A Green Deal for Europe - General

- Europe will try to become the world's first climate neutral continent
- More ambitious climate target for 2030
- Sustainable Europe Investment Plan (1 trillion €/10y)
- European Climate Pact (including regions, local communities, civil society, industry and schools)
- Biodiversity Strategy for 2030
- New Circular Economy Action Plan

# A Green Economy



#### **UN Environment definition of Inclusive Green Economy**

"an economy that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities"

A Green Economy addresses 3 global challenges:

- eradicating poverty,
- sharing prosperity equitably,
- staying within planetary boundaries

ERADICATING POVERTY

Within planetary boundaries

SHARING PROSPERITY

A new generation of assets produces goods and services in an environmentally friendly manner

ECONOMIC TRANSFORMATION

Consumption, investments, public spending and trade shift towards goods and services produced with these new assets

Public

spending

Natural capital Physical capital

Human capital

Social capital



Consumption Inve

Investments

Trade

#### **Green Trade**

Export of environmental goods (% of total export)

#### **Environmental Patents**

Measure of green technology innovation (% of total patents)

#### Renewable Energy

Share of renewable energy supply (of total energy supply)

#### **Energy Use**

Energy use (kg of oil equivalent) per USD 1,000 GDP

#### Palma Ratio

Ratio of the richest 10% of the population income over income of the poorest 40%

#### Access to Basic Services

Access to improved water sources, electricity, sanitation (% of total population)

#### Air Pollution

PM2.5 pollution mean annual exposure (micrograms per cubic meter)

#### Material Footprint

Raw material consumption of used biotic and abiotic materials (tonnes/person)

#### **Protected Areas**

Sum of terrestrial & marine protected areas (% of total land area and territorial waters)

#### Gender Inequality Index

Inequality in gender across reproductive health, empowerment, & the labour market

#### **Pension Coverage**

Share of population above statutory pensionable age receiving a pension

#### Mean Years of Schooling

Average number of years of education received by people ages 25 and older

#### Life Expectancy

Life expectancy by contribution and sex































1 NO POVERTY



5 GENDER EQUALITY

ⅉ









The Green Economy Progress Measurement Framework has 14 direct links to 10 of the 17 SDGs

# Impacts of Climate Change on Businesses: Sample list



physical damage from extreme weather events
(e.g. drought, floods, tsunamis or bushfires), or
forced closures.

 driving involuntary migration and indirectly increasing the risks of violent conflict

supply chain being disrupted by extreme weather, or income being reduced.

 disruptive impacts climate change will have on the stability of the financial system (COVID already tested this!)

challenges of comfort and energy performance in buildings and other operations

 Need to invest in more energy efficient buildings to manage energy bills

employee health and wellbeing impacted by climate change will create financial climate-related liability

 urgency of acting to protect people in urban areas (predicted to be 64% of the world's population by 2050)

Agricultural, forestry and fishing sectors are most at risk of catastrophic climate change impacts.

reduced crop yields, and predicted food price rises of 37% (rice), 55% (maize), and 11% (wheat) by 2050
losses to global fisheries of up to \$40 billion by 2050

Retail trade, tourism and manufacturing also highly exposed, with all types of business at risk of the effects of climate change.

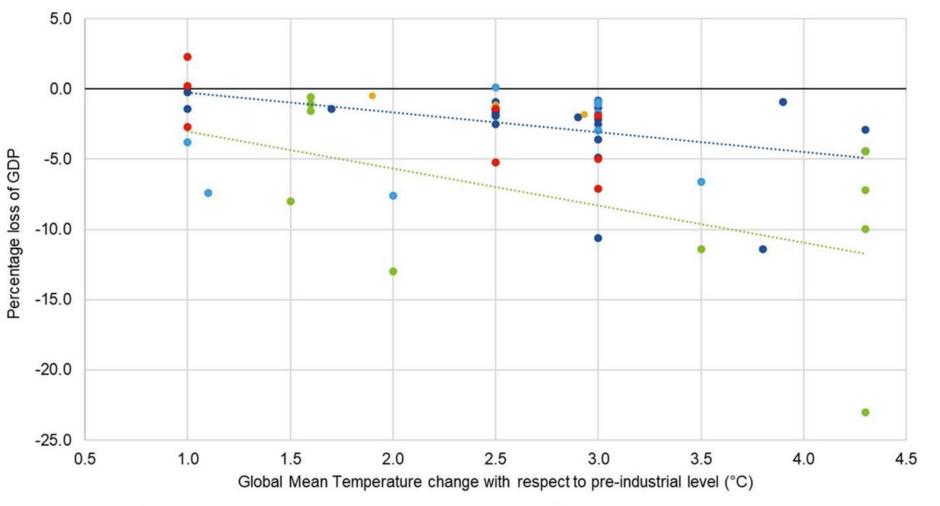
• These can pressure local economy, jobs, asset value, etc

transition risks increase costs due to changes in technologies, markets and regulation, undermining the viability of products or services, asset values

 Need for additional energy supply investments of between \$190-900 billion per year from now until 2050, in order to meet the 2°C target

# Costs of Climate Change as % Loss of GDP by Various Assessment Methods





Source: IMF Staff elaboration compiled from surveys in Tol (2009, 2014), Kahn and others (2021), and Howard and Sterner (2017).

Note: Global mean temperature change with respect to 1850–1900 and percentage global loss of GDP with respect to a scenario with no climate change in the year in which the temperature level is reached. Different colors denote different methods. The trend lines are a linear fit of damages estimated with integrated assessment models and panel econometric studies.

- Integrated Assessment Model
- Econometric (Panel)
- Other
- ----- Econometric (Panel) Linear Fit

- Econometric (Cross-Section)
- Computable General Equilibrium Models
   Integrated Assessment Model Linear Fit

#### Share of CFOs feeling the pressure to act on climate change coming from their clients, from investors and from regulators, by industries.

To what extent does your company feel pressure to act on climate change from the following stakeholders? (% 'to a moderate/large extent')

#### for Reconstruction and Development CLIENTS/CUSTOMERS INVESTORS/SHAREHOLDERS **REGULATORS/GOVERNMENT** Tourism & travel Energy, utilities, mining Tourism & travel 76% 64% stakeholders Tourism & travel **Transport & logistics** Consumer goods 61% 64% stakeholders? Automotive **Transport & logistics** Automotive ■ To a large extent ■ To a moderate extent ■ To a small extent ■ Not at all 58% 58% Clients/customers Energy, utilities, mining Retail Life sciences Construction Construction Consumer goods Board members/ management **Business & professional services Transport & logistics Financial services Employees Industrial products & services Industrial products & services** Consumer goods Regulators/government Top Survey Findings for Users and Other Respondents<sup>1</sup> **Financial services** Retail Construction Cited an increase in the availability of climate 95% Civil society (e.g. activists, media) related financial **Financial services** Energy, utilities, mining Automotive disclosures (173) **Use** climate-related financial disclosures in decision-making (42) Technology, media & telecoms **Business & professional services** Retail Shareholders/investors Cited *improvements* 88% in quality of disclosures (173)Technology, media & teleco **Business & professional services Industrial products & services Use** disclosures to Competitors price assets or determine rates (42) Life sciences Technology, media & telecoms Life sciences Banks/lenders Source: Deloitte European CFO survey autumn 2019. Deloitte Insights | deloitte.com/insights 20 60

# The Public Pressure to

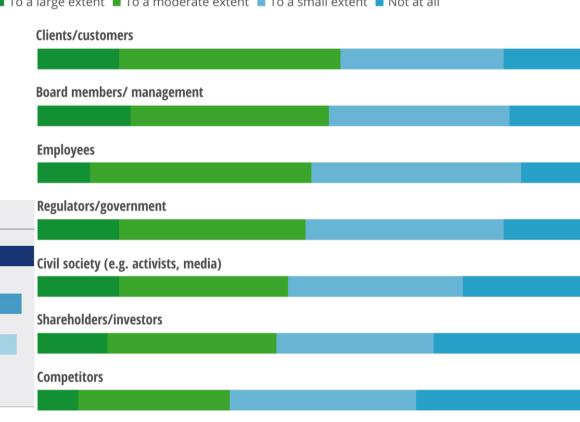


80

# Take Action

# Pressure to act on climate change felt by companies from different

To what extent does your company feel pressure to act on climate change from the following



# **Businesses and sustainable development**





Source: BSR/GlobeScan survey

- Businesses need sustainable climate, economic and social conditions
- Society increasingly expects companies to play a greater role in sustainable development
- Businesses focus on SDGs varies, with climate action and decent work being key focus areas
- SDG-aligned investment needs of \$2-3
   trillion a year

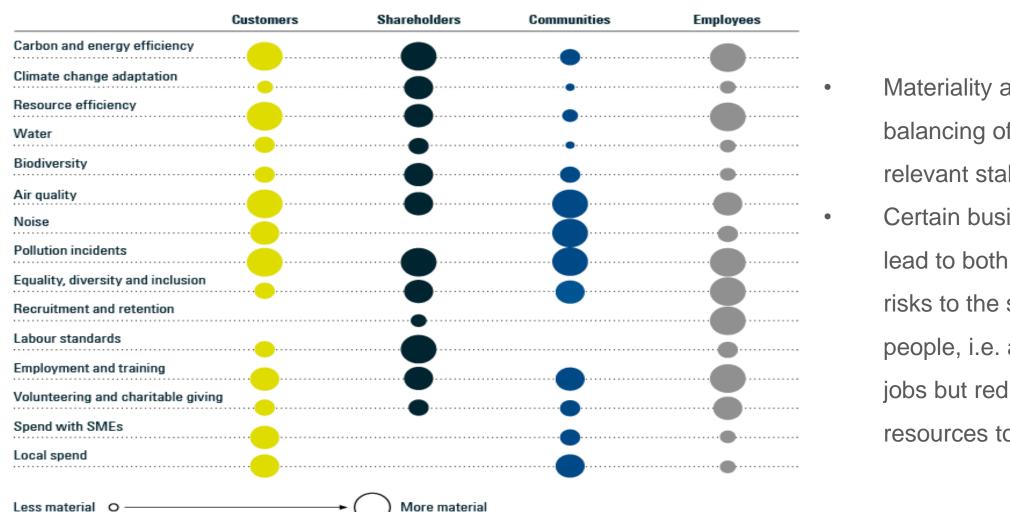
# Materiality analysis & key E&S risks and opportunities



- Materiality analysis is a methodology a company can use to identify and estimate possible Environmental, Social and Governance (ESG) issues that may impact the business and its stakeholders
- Engagement with various stakeholders lies at the heart of materiality analysis
- Materiality analysis is a periodic (usually once a year) exercise, not a one-off analysis
- The frequent review of materiality topics allows to respond to changes in external environment and within the company, which could make certain environmental and social issues relevant for the business and its stakeholders
- The results of the analysis are largely driven by the company's sector, geographies, size and other business specific aspects.

# Materiality analysis & key E&S risks and opportunities





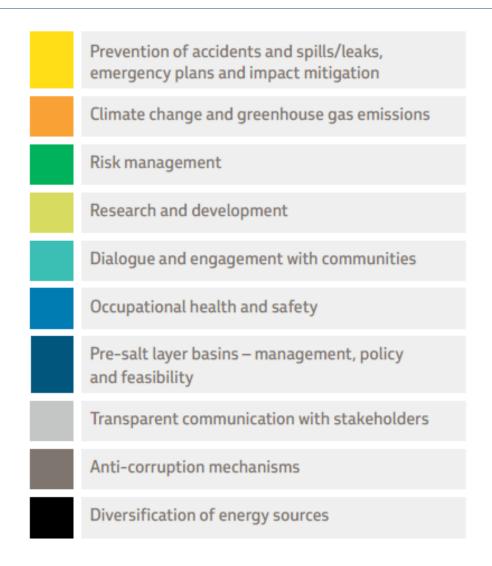
Materiality analysis promotes balancing of interests of all relevant stakeholders

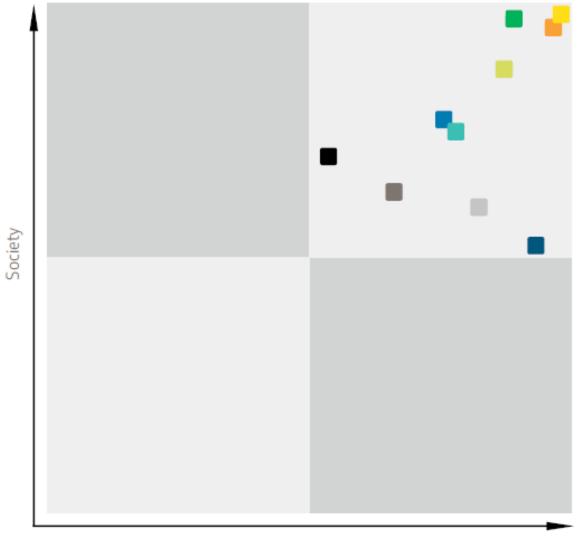
Certain business decisions can lead to both opportunities and risks to the same group of people, i.e. a new plant creates jobs but reduces freshwater resources to the community

Source: Balfour Beatty

# **Materiality Matrix**







# Measuring and disclosing climate and other environmental risks and opportunities



# Some of the main international frameworks for measuring and reporting climate and other environmental risks and opportunities

- The Task Force on Climate-Related Financial Disclosures or TCFD,
- The Taskforce on Nature-related Financial Disclosures or TNFD
- The Equator Principles

Governance	Strategy	Risk Management	Metrics and Targets	
Disclose the company's governance around climate-related risks and opportunities.	Disclose the actual and potential impacts of climate-related risks and opportunities on the company's businesses, strategy, and financial planning where such information is material.	Disclose how the company identifies, assesses, and manages climate-related risks.	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	
a) Describe the board's oversight of climate-related risks and opportunities.	a) Describe the climate- related risks and opportunities the company has identified over the short, medium, and long term.	a) Describe the company's processes for identifying and assessing climate-related risks.	a) Disclose the metrics used by the company to assess climate-related risks and opportunities in line with its strategy and risk management process.	
b) Describe management's role in assessing and managing climate-related risks and opportunities.	b) Describe the impact of climate-related risks and opportunities on the company's businesses, strategy, and financial planning.	b) Describe the company's processes for managing climate- related risks.	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	
	c) Describe the resilience of the company's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the company's overall risk management.	c) Describe the targets used by the company to manage climate-related risks and opportunities and performance against targets.	

State of Climate-Related

**Financial Disclosures** 

Review of Five Years of

TCFD Implementation

Case Studies on Board

Initiatives Supporting TCFD

Oversight

**Appendices** 



# Task Force on Climate-Related Financial Disclosures (TCFD)

A framework to help public companies and other organizations disclose climate-related risks and opportunities

# **Green Business Models**





# Green Economy – Priority Sectors



One of the significant scientists in this field is Karl Burkart who defines a green economy as based on six main sectors (Burkart, 2012), but this categorization is too wide and focusses on different aspects than job creation and market potential.

Rationale for Greening the Sector

- 1. Green buildings
- 2. Renewable energy
- 3. Land management
- 4. Sustainable transport
- 5. Waste management
- 6. Water management







Reduce deforestation

Increase food security

Increase water-use efficiency



Mitigate climate change





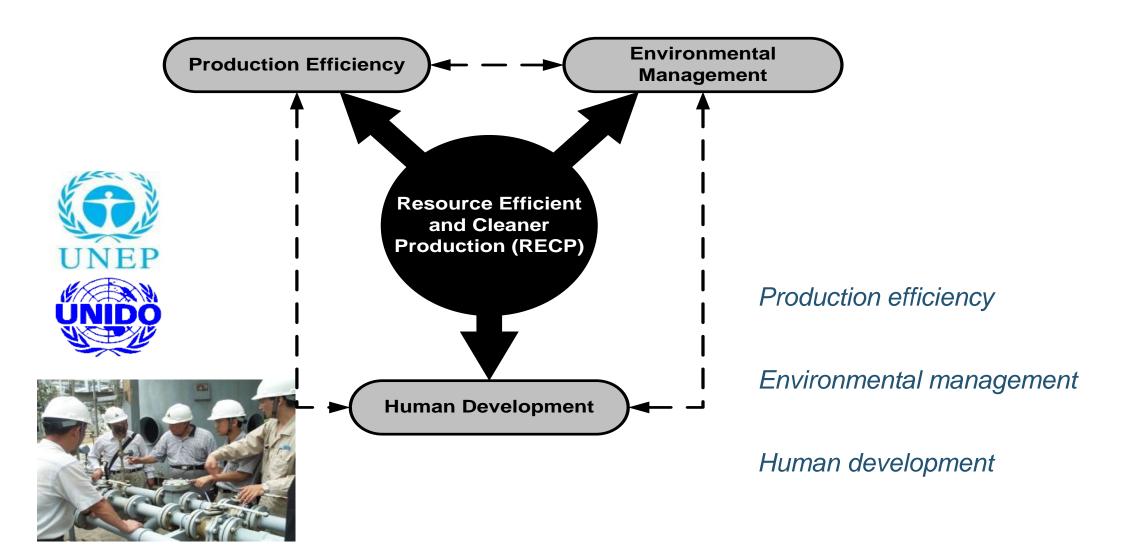
Reduce poverty

Restore soil fertility

A green economy is defined as <u>low carbon</u>, <u>resource efficient</u> and <u>socially inclusive</u>. In a green economy, growth in employment and income are driven by public and private investment into such economic activities, infrastructure and assets that <u>allow reduced carbon emissions</u> and <u>pollution</u>, <u>enhanced energy and resource efficiency, and prevention of the loss of biodiversity and ecosystem services</u>.

### Resource Efficient and Cleaner Production





# Resource Efficient & Cleaner Production Practices



Good Housekeeping Input Material Change Better Process Control Equipmen t Modifi-cation



Resource Efficient & Cleaner Production

Technology Change Onsite
Reuse &
Recycling

Production of Useful Byproduct

Product Modification

# Green Economy and Trade – assessing risks and opportunities



GE Transition not without challenges, particularly for poor

Previous studies focused on **potential risks**, including related to trade protectionism

→GE needs to be implemented in a fair, open and transparent manner to mitigate risks

BUT, number of trade opportunities that can create and strengthen developing countries' capacity to benefit from a transition to a GE and contribute to poverty reduction





- GE transitions can create economic benefits, particularly for developing countries, to expand their presence in export markets for sustainable food, products and services
- Green trade opportunities also exist in terms of value-addition relationships, e.g. through certification
- Due to growing wealth and changing consumer preferences, and growth of cross-border trade, demand for sustainable goods and services is likely to further increase
- GE shift can also yield significant environmental and social benefits

### **Fisheries**



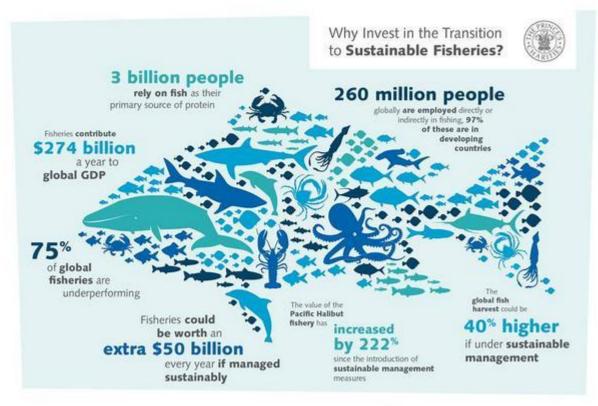
**Demand for certified fish products** (such as eco-label products) has gained momentum

Sustainable procurement policies of large international food firms are likely to further drive demand

**Processing:** developing countries yet to exploit **additional gains** with product certification:

 Growth areas include frozen organic fish and sustainable aquaculture

**Tourism**: recreational fishing, whale watching, scuba diving, etc.







# Trade opportunities – Example: agriculture



#### Organic farming

- most production in developing countries (75%)
- certification => access new markets
- development of regional organic trade (e.g. S. America)
- growth areas: fresh and processed tropical products, wild harvested products
- value-added organic products (dried fruit, coffee, juices, etc.)

Sustainably produced products, e.g. renewable raw materials replacing petroleum as feedstock

Higher price premiums

Use of local instead of imported inputs

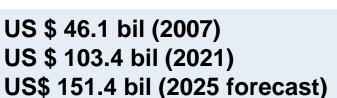
#### The global market:

- 97% of buyers in OECD countries;
- 80% of producers in Africa, Asia & Latin America

296,203 ha/ 206,803 farmers increase (2008)

185,000 ha, 45,000 farmers (2004) 48-68% less emissions and carbon sequestration





# Trade opportunities – forests

Legal and certified timber – evolving regulatory environment

Recycled timber

Other wood products

Biotrade / non-timber forest products (NTFPs)

Tourism (e.g. nature trails, gorilla watching)











# Trade opportunities – renewable energy



Export of renewable fuels (e.g. biofuels, hydrogen) or the inputs for renewable fuels

Export of raw materials/components for renewable energy supply (RES) products or of finished RES products – RES often produced in developing or developed countries but using raw materials or intermediate inputs sourced from developing countries (DC) – thus, entry into supply chains through trade in intermediate goods is a key opportunity for DC

Exports of renewable electricity – minimal but likely to expand in future, including to other developing countries



- Growing export opportunities for raw materials and components for renewable energy supply products (e.g. solar panels, wind turbines)
- Entry into supply chains through trade in intermediate goods key opportunity for developing countries (encouraged by government policies, such as feed-in tariffs)
- Exports of renewable energy: many developing countries have abundant renewable energy resources (potential to export), including solar energy, wind power, geothermal energy, biomass and hydro
- Potential opportunities for sustainable second-generation biofuels

# Green Power = Green Jobs



For instance, the wind industry alone could employ up to 8 million people by 2030, almost 10 times more than the amount of employees today, and nearly twice as many employed by the oil and gas industry.

This figure stands at around 9 million for solar power, more than the coal industry employs today worldwide



# Manufacturing



Switching to more efficient manufacturing will save energy and resources and enable developing countries to produce **goods for export at a lower price** -> increased competitiveness

Potential to generate **new business from remanufacturing:** -> technology and knowledge transfer, increased employment and exports

**Eco-labels** to market sustainably manufactured products -> growing demand in developed countries

New greener products, e.g. energy efficient products like light bulbs -> new market opportunities





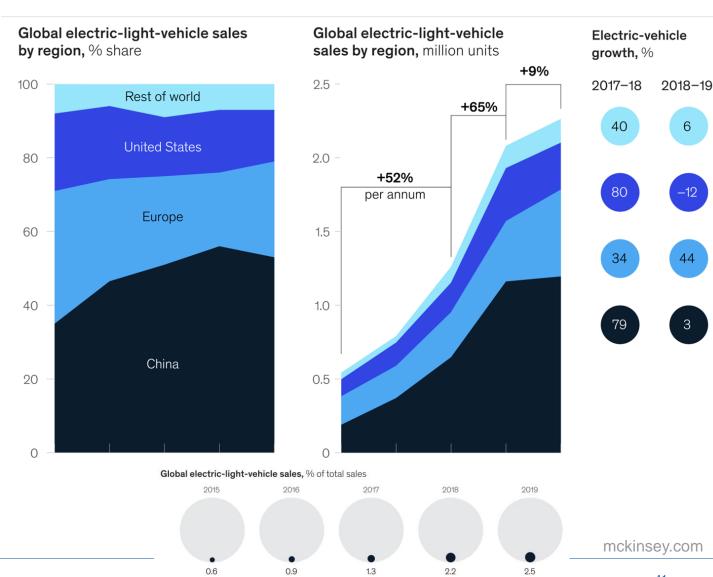
# **Electrifying Transport**



The transition from fossil fuels to renewable electricity for the transport sector worldwide "is one of the most hard parts of the Energy (R)evolution and requires a true technical revolution". But it is far from impossible.

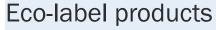
As renewable don't use fuel, savings could be significant to this industry. The transport sector would save up to around \$1.07 trillion annually. Eventually, the costs of the transition would be met in full by the fuel cost savings, with a "crossover" in this equation happening between 2025 and 2030.

Automotive industry response????



# Trade opportunities – manufacturing EcoLabel





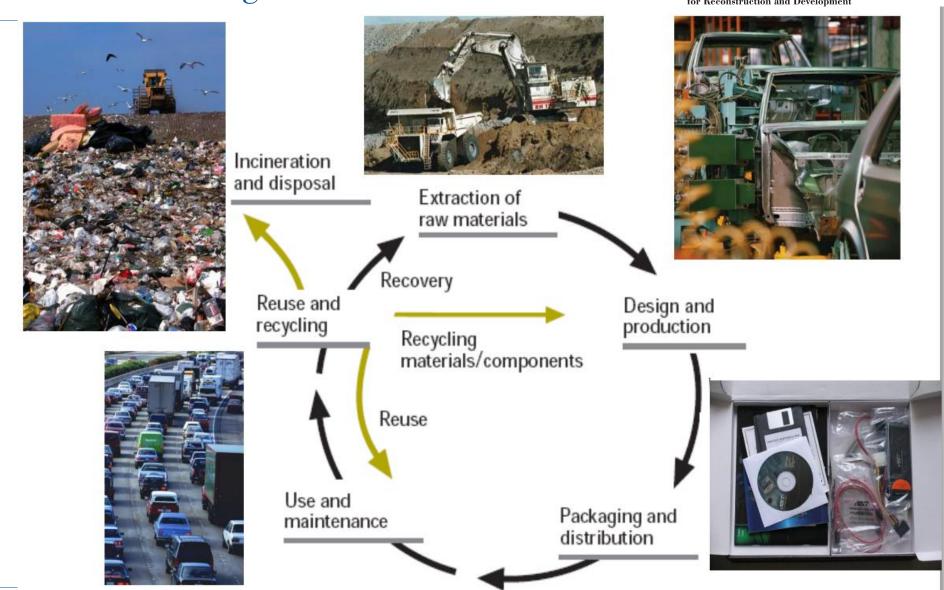
Other sustainably produced products

Re-use and recycling

Upcycled

Sustainable fashion

Energy efficient products, e.g. light bulbs, electrical goods





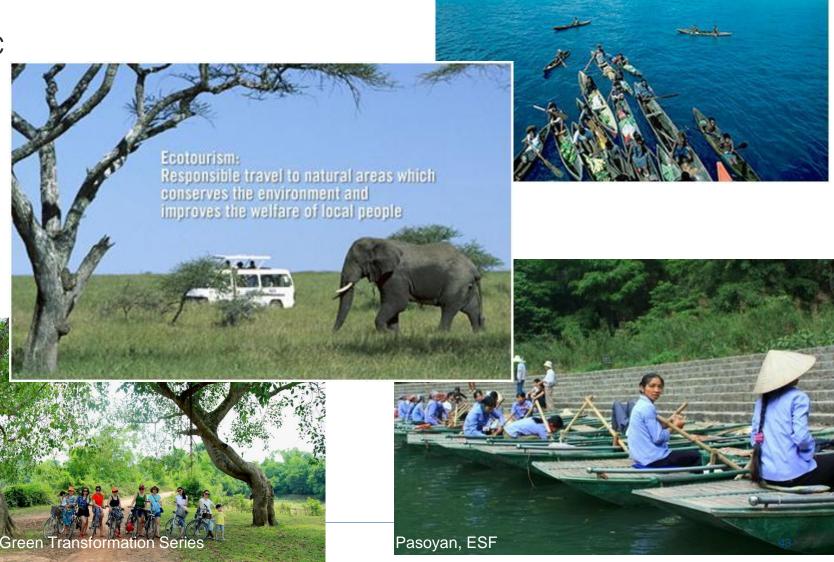
# Trade opportunities – tourism

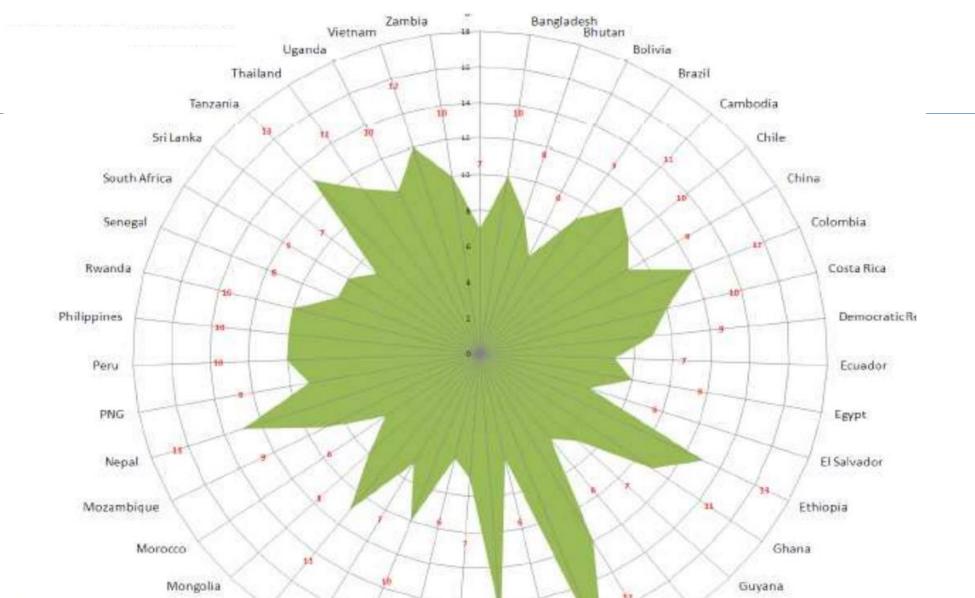
Size and growth of the tourism sector – biggest growth rates in DC

Changing consumer patterns – sustainable tourism

Current under-evaluation of the market

**Eco-tourism** 





Honduras

India

Indonesia

lamaica

Kenya

Number of GE Initiatives

providing support

Mexico

Mauritius

Mali

Lebanon

Laos



# Early movers on GE in developing countries

# Green Value Chain - Definitions



Value Chain: The value chain describes the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final consumers, and final disposal after use.

Green Value Chain: promotes green market opportunities, where economic benefits from the use of renewable resources are maximized while environmental harm is minimalized.



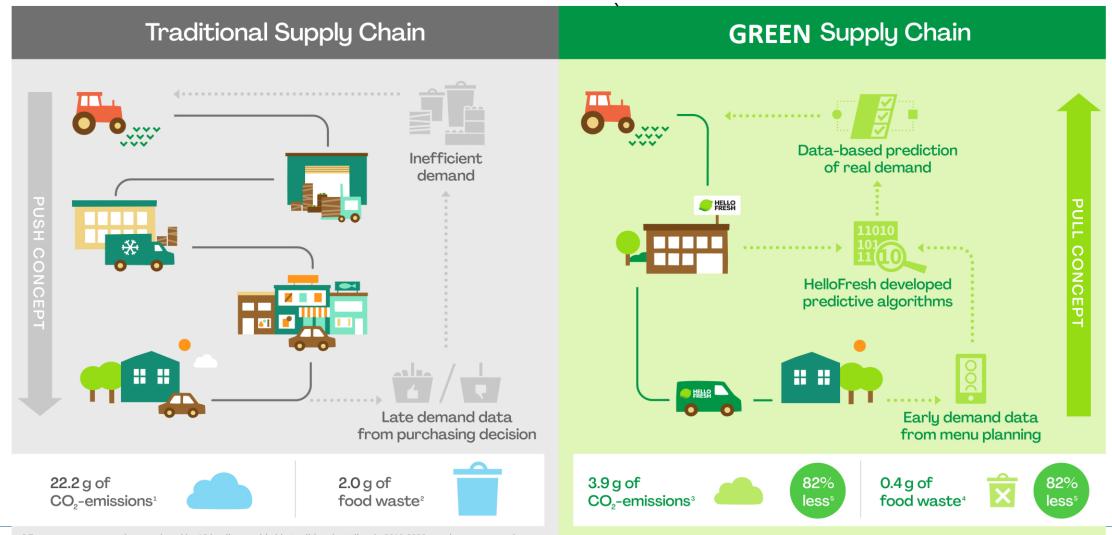
Green supply chain practices: incorporate sustainability concepts into traditional supply chain management. The goal is to help industries reduce their carbon emissions and minimize waste while maximizing profit.

12/19/2022 45

# Green Product Lifecycle: From Design to Supply Logistics



# Transforming the Food Supply Chain



¹ From power consumption, produced by 12 leading worldwide traditional retailers in 2018-2020, yearly average per € revenue ² Produced by 12 leading worldwide traditional retailers in 2018-2020, yearly average per € revenue

# Digitalization for Green Transformation





## Extending the lifetime and repairability of digital technology

• extending the lifetime of all smartphones by just 1 year would save 2.1 Mt CO2 per year by 2030, equivalent to removing 1 million cars from our roads. Switching from 4G to 5G networks can reduce energy consumption by up to 90%.

## Sustainable digitalization of society

 human-centric, sustainable vision for digital society that empowers citizens and businesses.

### Digital modelling of the Earth systems

• High level of detail and elaboration can enable a real breakthrough in terms of accuracy, local detail, access-to-information speed and interactivity

### Green cloud and green data centers

 digital technologies account for between 8-10% of our energy consumption, and 2-4% of our greenhouse gas emissions – small percentages but big numbers.

## Big data for climate and sustainability:

 e.g. digital modelling of the Earth systems, monitoring and mapping of resources, remote sensing of biodiversity and pollution, etc.

#### **Blockchain for climate action**

 Accountability, Supply Chain Efficiency, Tokenization, Adaptation and Resilience, Crowdsourcing, community-based solutions

# How Blockchain can Help Fight Climate Change



# **Accountability**

- Blockchain-based systems can be used to more reliably track CO<sub>2</sub> emissions, conservation efforts, and climate metrics for accountability.
- Example: Open Forest Protocol

# **Supply Chain Efficiency**

- Blockchain can bring greater transparency and efficiency to food supply chains, while mitigating climate impacts.
- Example: Fishcoin

## **Tokenization**

 By tokenizing carbon sequestering assets such as rainforests, or carbon credits, tokenization can incentivize more climatefriendly behaviors, while protecting natural assets

• Example: Toucan Protocol

# **Adaptation & Resilience**

- Blockchain can help vulnerable populations by helping deliver more efficient emergency financial aid, resilient food supply chains, and providing low cost decentralized insurance to farmers.
- Example: Etherisc

# Crowdsourcing

- Decentralized tools allow for new ways to crowdsource solutions to complex challenges facing the climate, and to crowdfund in support of these solutions and climate causes.
- Example: Seaworthy Collective

# **Community Agency**

- Web3 tools such as Decentralized autonomous organizations (DAOs) create new ways to organize communities by providing a structure to raise funds and advocate for climate causes and.
- Example: EarthFund

# Sustainable Procurement and Building Circularity



UN Environment Program defines sustainable public procurement as a "process whereby public organizations meet their needs for goods, services, works and utilities in a way that achieves value for money on a whole lifecycle basis in terms of generating benefits not only to the organization, but also to society and the economy, whilst significantly reducing negative impacts on the environment"

Circular procurement focuses on closing energy and material loops within supply chains.

# **Definition and scope**





**Responsible procurement** is a process whereby organizations meet their needs for **goods, services, works and utilities** in a way that achieves value for money on a whole life basis in terms of generating benefits not only to the organization, but also to society and the economy, while minimizing damage to the environment."



Responsible Procurement should consider the environmental, social and economic consequences of:

design

non-renewable material use

manufacture and production methods

logistics

service delivery

use of product in life

operation

maintenance

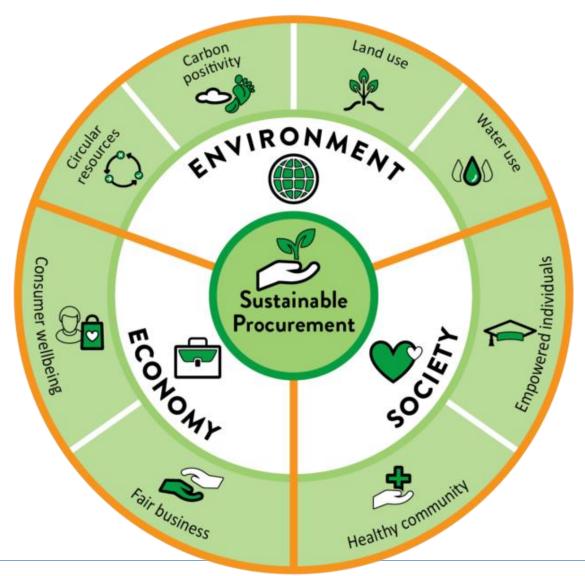
material reuse

recycling options

disposal

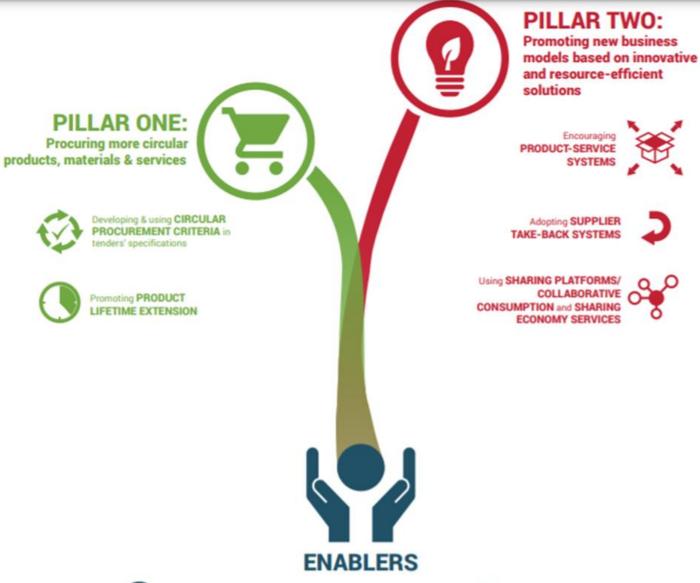
# **Sustainable Procurement**





Consider the environmental, social and economic consequences of:

- design
- non-renewable material use
- manufacture and production methods
- logistics
- service delivery
- use of product in life
- operation
- maintenance
- material reuse
- recycling options
- disposal





Sustainable procurement approaches, tools and solutions advancing circularity

New business models based on innovation and resource efficiency lead to reduced resource use, reuse, and recycling



Strengthening & adapting CONSUMER INFORMATION TOOLS



LIFECYCLE COST & TOTAL COST OF OWNERSHIP methods



COOPERATING with other organizations



**KNOWLEDGE &** INFORMATION MANAGEMENT **SYSTEMS** 



INSTRUMENTS



INSTRUMENTS

# Developing and using "circular" procurement criteria in tenders' specifications



•Meet specified resource efficiency levels on a whole lifecycle basis (e.g. thresholds for the use of fuel or electricity.)

•Recycled content inclusion (e.g. expectations on the % of recycled fiber in the case of procurement of textiles.)

•Potential for reparability (e.g. ease of finding spare parts, maintenance), recyclability and/or the ability to dismantle products after use.

•Limit and ultimately eliminate the use of hazardous chemicals and/or ensure the nontoxicity of components, which can hinder high quality recycling.

# You do not want these signs at your bank's

building, do you?











## **Green Credit Definition**



Natural resource protection, **Energy Saving and** Green Agriculture Forestry environmental Water Saving restoration, disaster prevention Renewable energies Recycling of natural Water supply (solar, wind, Waste treatment projects resources biomass, hydro etc) Energy saving and Green projects by international Green building Green transportation water saving services standards

# Users of green finance: green bond



# GREEN BONDS—

# MAIN USES



Renewable energy



Energy efficiency



Clean transportation



Responsible waste management

Europe needs industry to become greener, more circular and more digital while remaining competitive on the global stage. These three drivers will transform our industry, support our SMEs and keep Europe sustainable and competitive.



#### **GREEN TRANSITION**

#### **DIGITAL TRANSITION** GLOBAL COMPETITIVENESS

The European Green Deal is Europe's new growth strategy.

At the heart of it is the goal of becoming the world's first climate-neutral continent by 2050.

The right conditions are needed for entrepreneurs to turn their ideas into products and services and for companies of all sizes to thrive and

The EU must leverage the impact, the size and the integration of its single market to make its voice count in the world and set global standards.

Digital technologies are changing the face of industry and the way we do business.

They allow economic players to be more proactive, provide workers with new skills and support the decarbonisation of our economy.

### **Achieving industrial transformation**

These are fundamental factors in making Europe's industrial twin transformation happen:





# EU Taxonomy



The EU Taxonomy wants to serve as a cornerstone of the green revolution in Europe.

EU taxonomy for sustainable activities is a classification system that identifies which operations are environmentally sustainable and gives a framework for evaluating how green a company's turnover, CAPEX, and OPEX are.

The Taxonomy "is a list of economic activities and relevant criteria flexible to adapt to different investment styles and strategies based on latest scientific and industry experience dynamic, responding to changes in technology, science, new activities and data" (European Union, 2019).

# **EU Taxonomy**

The EU Taxonomy classification establishes four criteria through which economic activity can be considered environmentally sustainable and, therefore, Taxonomy aligned.

## These include:

Substantially contributing to at least one environmental objective;

**Policy** 

Environmental

objective

- Doing no significant harm to any other environmental objective;
- Complying with minimum safeguards;
- Complying with the technical screening criteria.

Regarding the scope of the framework, non-listed firms must submit their first EU Taxonomy reports by January 2024, whereas listed firms were obliged to submit their first reports by January 2022.



# Self-assessment tool for sustainable initiative transparency



	Translucent companies	Transparent companies			
Being sustainable High commitment		Sustainability is an important topic of the overall corporate strategy. Consequently, the marketing and communication approach to sustainable initiatives is consistent with what the company actually does. 'Sustainable value' is made up of definite activities, well-communicated to stakeholders, and the reputation of the company is supported by facts and figures. Sustainability is a competitive advantage.  "We communicate what we are"			
	Dark companies	Opaque companies			
Low commitment	Companies are not at all aware of the relevance of sustainability as a strategic topic. There is no company website on sustainability and no possibility for stakeholders to know anything about the organization's mission, values, etc. Sustainability is not a concern.  "What are you talking about?"	Sustainability is used as opportunistic leverage.  Management overpromises and underdelivers on sustainability, and this could put the company's reputation at risk. 'To appear' is more important than 'to be': the marketing and communication strategy regarding sustainable initiatives is emphasized, but is inconsistent with what the company actually does.  "We are (we pretend to be) what we communicate'			
	Low-profile	High-profile			

# Self Assessment Checklist of Commitment and Communication for Sustainability

How does your company define sustainability? What's in and what's out? Is there a separate group working on corporate citizenship initiatives? How do social, environmental, and philanthropic initiatives and strategies interact?

Do you have an inventory of all the sustainability actions going on at your company? You might be surprised who is talking about sustainability or pursuing sustainability initiatives on your company's behalf. Are there unknown unknowns?

Do you have a sustainability strategy and goals? What is your overall corporate strategy? Are your sustainability initiatives integrated with this wider corporate strategy and directly relevant to your business priorities?

Who's accountable and who's empowered? Many companies have sustainability teams, but not all employees know who is empowered to make decisions about sustainability and to enforce them. Is it your CEO, CMO, a strategy officer, the EH&S department, or perhaps your sustainability team itself? Who is responsible for facilitating cross-departmental sustainability action and communication?

Is there a forum at your company for aligning and cross-pollinating ideas on sustainability? How is sustainability coordinated throughout the organization? Is there a sustainability team that convenes cross-functional groups? If someone at your company has an idea related to sustainability, to whom do they take it?

Do you have systems in place for incorporating sustainability in decision-making? Is sustainability a criterion for purchasing decisions? Do you have a project gating system? Do you have a system for vetting green marketing claims? Does sustainability factor into your acquisition due-diligence process? Do you consider sustainability in your R&D and tech investments? Ensuring that *all* relevant decisions made across your business align with your green intentions can cut risk and reinforce your existing sustainability initiatives.

Can everyone at your company articulate your company's point of view on sustainability? Do you have a program to educate employees regarding your sustainability standpoint? All of your employees should be aware of your company's position and activities, especially in the event of an environmental crisis.

Do you think that communicating your initiatives is important? Are you implementing a clear communication strategy regarding your sustainability through different media? Do you have a section of your website, or perhaps a dedicated website, to promote your sustainable actions? Do you also communicate your initiatives with your customers through direct interfaces (e.g., the packaging of your product)?

What is the CEO's relationship to sustainability? What has your chief executive said about sustainability? How, if at all, has his or her message changed across the years? Is this message aligned with actual performance and future plans?



There is a difference between genuine sustainability of production and "greenwashing" as a marketing trick to impress consumers.

Greenwashing is the process of conveying a false impression or misleading information about how a company's products are environmentally sound.

# Turning environmental challenges into business opportunities – YOUR plan for "greening" SMEs



01

# Raise SME's awareness of:

- Own ecological footprint
- Resource Efficiency improvements;
- circular economy's potential for Productivity, Competitiveness and Business opportunities.

02

# Inform SME about various national and international support initiatives:

- Donor/IFI programs
- International rating systems
- Local policy and fiscal tools that can be used
- International trade and market windows that can help get access to the "green" markets for goods and services

03

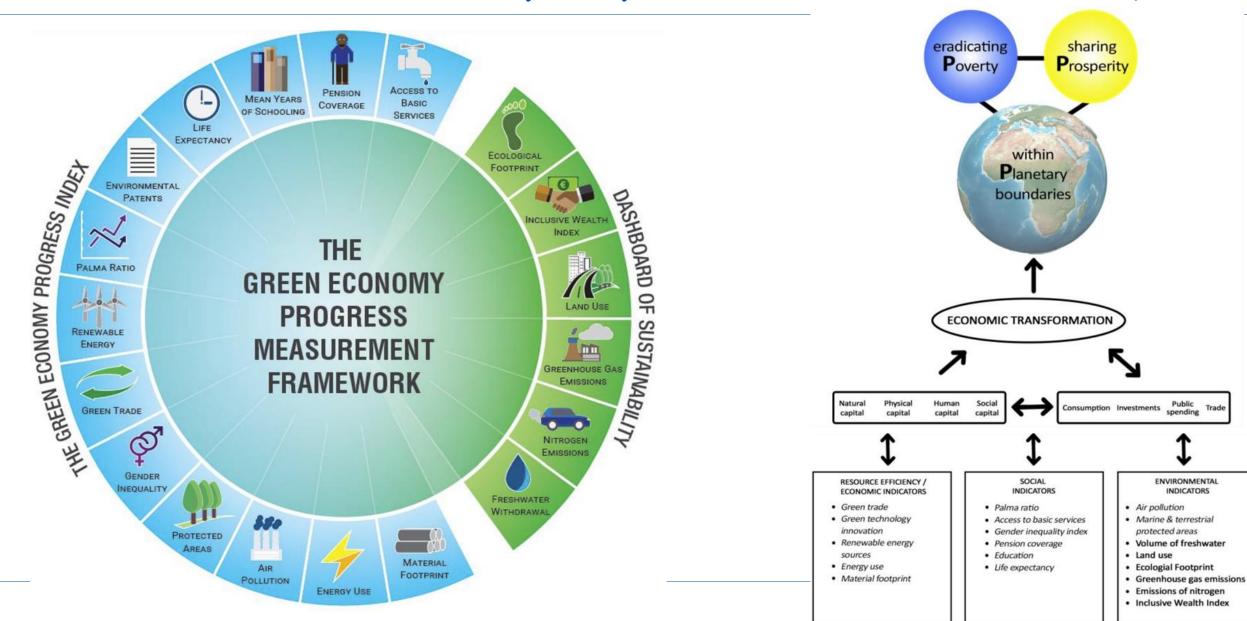
# Set objectives and corresponding actions :

- Greening SMEs for more competitiveness and sustainability: improving resource efficiency in SMEs with a view to both reducing production costs and increasing productivity gains.
- Green entrepreneurship: enter the environmental goods and services market.
- Greener value chain: Circular economy activities like remanufacturing, repair, maintenance, recycling and ecodesign, may become the new drivers of economic growth and job creation, alongside their key role in addressing environmental challenges

12/19/2022 61

# Indicators in the GEP Measurement Framework and the Inclusive Green Economy analytical framework





# GHG Emissions from Company standpoint

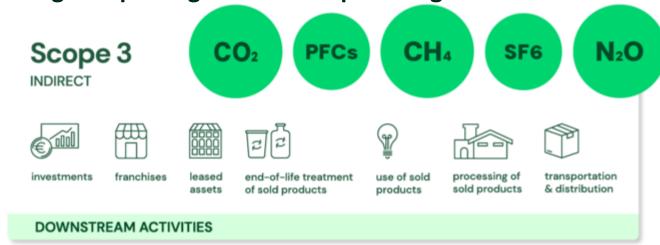


**HFCs** 

According to the leading <u>GHG Protocol corporate standard</u>, a company's greenhouse gas emissions are classified into **three scopes**. Scope 1 and 2 are mandatory to report, whereas scope 3 is voluntary and the hardest to monitor. However, **companies succeeding in reporting all three scopes will gain a sustainable competitive** 

advantage.









purchased electricity, steam, heating & cooling for own use

# Scope 3

INDIRECT



purchased goods & services



capital

goods



fuel & energy

related





transportation

& distribution



waste from

operations



business

travel



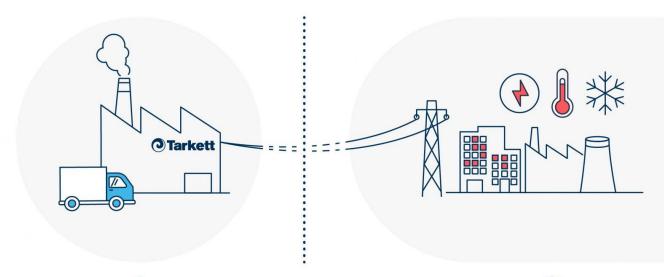


employee leased commute assets

# Scopes 1, 2 & 3



## **DIRECT EMISSIONS**



## **INDIRECT EMISSIONS**





Direct emissions
- From our sites

Emissions we make directly.

They are created through energy used by

Tarkett-owned equipment and vehicles – for
example heaters, boilers, company vehicles.



Indirect emissions - Energy purchased

Emissions created by the generation of purchased energy like electricity, steam, heat, or cooling. They occur at sources owned or controlled by the supplier, the energy company.



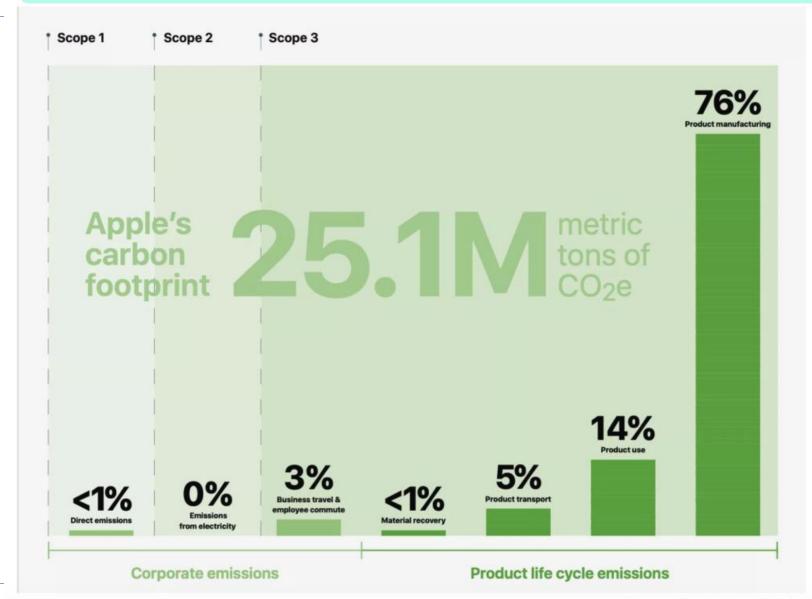
Indirect emissions - Value chain emissions

Emissions generated by activities occurring across our value chain, such as our suppliers' emissions through raw material extraction and processing, shipment of goods and end of use emissions.

Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity. Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity, but occur at sources owned or controlled by another entity.

# Why measure all 3 scopes?





More often than not, emissions along the value chain represent the biggest **GHG impact**. For decades, companies have missed significant opportunities for improvement. For example, Kraft Foods reported that 90% of its total emissions, fell under its value chain (cf. scope 3). Finally, companies must conduct a full GHG emission inventory - scope 1, 2 and 3 - to focus their efforts on reducing carbon emissions, carbon footprint and becoming carbon-neutral.

Reporting and reducing carbon emissions is time-consuming, challenging and deserves close expertise.

# How to Sell Green Transformation? Offer an Efficiency Audit



## Offer a resource efficiency audit to the industry

- Mention some potential resource conservation measures that could provide positive net benefits (energy, water, raw material)
- Mention many no regret opportunities (no/low cost measures)
- Remain credible: Do not promise what you can't keep! Do not offer what you are not convinced about!
- <u>If you are 100% sure</u> that you will be able to detect a certain minimum % target of no/low costs savings:
  - Consider to offer to pay back the audit fee in the case if a contracted minimum resource saving potential would not be detected. Define then in a contract with the customer <u>exactly in which case</u> he would get his money back, how much no & low cost investment potential you would need to identify and define that no & low value.

# Convincing arguments for green transformation





Even without any investment, the usually identifiable energy and water saving options and Green Transformation will lead to *considerable cost savings* (give examples) that will pay back in at least ... years;



Green Transformation may improve the *quality of products/services* 



Green Transformation could improve workers/clients "comfort"



Green Transformation improve your *competitiveness/lower you OPEX* that eventually could translate into higher market shares



Green Transformation may improve the competitiveness and export perspectives

# Putting Potential Clients' Mind at Rest



## **Convincing arguments**

- ✓ Reduce risks from energy price shocks
- ✓ Combine efficiency investment with a *capacity increase* or adjustment
- ✓ Green Transformation **improves company image** and public reputation and could be used for your company's **marketing** purposes
- ✓ Investment in new technology provides credibility for your claim about being a modern company / industry, being up to date leader in business standards
- ✓ Comply with stricter **regulations** towards European markets approach

## **BUSINESS PROCESS TRANSFORMATION STEPS**



# Arguments



## Good references are a very convincing argument for the industry

- Demonstrate your successful projects (and planned projects)
- Demonstrate benefits of these projects (but keep confidentiality!)
- Difference between your industry and the competitor e.g.:
  - Long term experience/expertise available
  - Follow up services
  - Possibility of assistance during Implementation
- Planned and executed projects



a Book mill ERC

Hellenic Bank Branches, Cyprus

Straveles Municipality & Theater Building Stroveler Commercial office building 4.650 m² / EPC

Larnaca/Ammechestes District Court, Larnata

Supreme Court Building Court building 15.563 m<sup>2</sup> / EPC

Paphos District Court, Faphos 1,260 m<sup>3</sup> / EPC

Limassel Town Central Pelice Station, Limeson Larnaca District Pest Office. Commercial office building District Office, Larnaka

Commercial office building

Pheliza House, Limason

Lighthouse Restaurant

UBIL m1/EPC

1,400 m1 / EPC

Downtown Center, Limass Commercial office building

Jimessol Junury Restaurant Building 725 m1 / EPC

> 400 m1 / EPC Panthea Elementary School

Limessol School building 2,416 m1 / EPC

Commercial office building 560 m² / EPC

Engineering, Nicosia University buildings (4)

Artistes Melis Building Lakatamia ommercial office building 1,755 m<sup>3</sup> / EPC

Paylenapa Hetel, Avia Neps Hotel building 9,600 m² / EPC

Crusader Hetel, Limases Hotel building 5,000 m² / Energy Audit

**Multitech Headquarters** Nicosia Commercial office building 1,800 m² / Energy Audit

Consultants of the Mallania Rani during the process to accuire Energy Consulting Services

Management and design of a Energy Consulting Services

# **Counter Arguments**



# Typical counterarguments and (mental) barriers of potential industries with regard to resource efficiency and green technology transition investments

- "I have no money for Green Transformation/resource efficiency"
- "I have no time for this Green topic. I am already full with business issues"
- "I do not know enough about new technologies, it's not my business"
- "I'm not sure whether Green Transformation will really support my business."
- "Efficiency measure implementation may disturb my daily business."
- "An efficiency audit may detect some nonconformity with regulations."

# A glimpse into ESG



MSCI ESG Score									
Environment Pillar				Social Pillar				Governance Pillar	
Climate Change	Natural Capital	Pollution & Waste	Env. Opportunities	Human Capital	Product Liability	Stakeholder Opposition	Social Opportunities	Corporate Governance	Corporate Behavior
Carbon Emissions	Water Stress	Toxic Emissions & Waste	Clean Tech	Labor Management	Product Safety & Quality	Controversial Sourcing	Access to Communication	Board	Business Ethics
Product Carbon Footprint	Biodiversity & Land Use	Packaging Material & Waste	Green Building	Health & Safety	Chemical Safety	Community Relations	Access to Finance	Pay	Tax Transparency
Financing Environmental Impact	Raw Material Sourcing	Electronic Waste	Renewable Energy	Human Capital Development	Consumer Financial Protection		Access to Health Care	Ownership	
Climate Change Vulnerability				Supply Chain Labor Standards	Privacy & Data Security		Opportunities in Nutrition & Health	Accounting	
					Responsible Investment				
Key Issues	selected for the	Soft Drinks Sub	Industry (e.g. Co	ca Cola)	Insuring Health & Demographic Risk		Universal Key I	ssues applicable	to all industries

Environmental, social and governance (ESG) is a term used to represent an organization's corporate financial interests that focus mainly on sustainable and ethical impacts.

Markets use ESG to evaluate organizations and determine future financial performance. While ethical, sustainable and corporate governance are considered non-financial performance indicators, their role is to ensure accountability and systems to manage a corporation's impact, such as its carbon footprint.

At first glance, governance can appear as the outlier of the three ESG pillars. While the 'E' and the 'S' focus on a company's relationship with the wider world, the purpose of the 'G' is to look internally, assessing how the company is run.

Thus each element should be addressed objectively and effort should be put where the company seems to be lagging.

# A glimpse into ESG



## Pros of ESG practices include the following:

- •Investment returns and sustainability can mix. Sustainability funds can achieve similar or better returns compared to traditional funds.
- •ESG can attract consumers for additional growth. Consumers seek more sustainable product options or services provided by companies that are focused on ESG.
- •ESG investing helps make other positive investment decisions. ESG organizations tend to focus on ethical practices.
- •ESG-focused organizations often outperform in the stock market. ESG organizations often take more calculated risks.
- •ESG attracts and retains quality employees. It can boost employee motivation and increase overall productivity by giving a sense of purpose.
- •ESG can cut costs. When ESG practices are incorporated into the fabric of an organization, companies can reduce costs over time, such as operating expenses.

19/12/2022 72

# A glimpse into ESG



## Cons of ESG practices include the following:

- •ESG does not follow a one-size-fits-all approach.
- •ESG strategy must be authentic and not only in communications. Organizations that focus on ESG inconsistently or use it as a brand image ploy will not be successful.
- •Strong market performance isn't guaranteed. While there are success stories, focusing on ESG does not guarantee strong company performance in the market.
- •Creating a diverse investment portfolio can be difficult. For investors focused on an ESG-led investment strategy, it may be harder for a financial advisor to create a balanced portfolio that aligns with long-term strategy.
- •Detailed performance reporting across each ESG criteria point can be challenging. Most ESG factors aren't tied directly to financial data, resulting in additional effort to provide tangible performance results.

# Top ESG rated companies lead the stock market



Ethical investing is booming right now, with more investors seeking to put their money to good use. The latest buzzword is ESG Investing, meaning investing in companies that actively demonstrate a favorable Environment Policy, Social **Responsibility, and transparent Corporate** Governance.

8,000

Companies

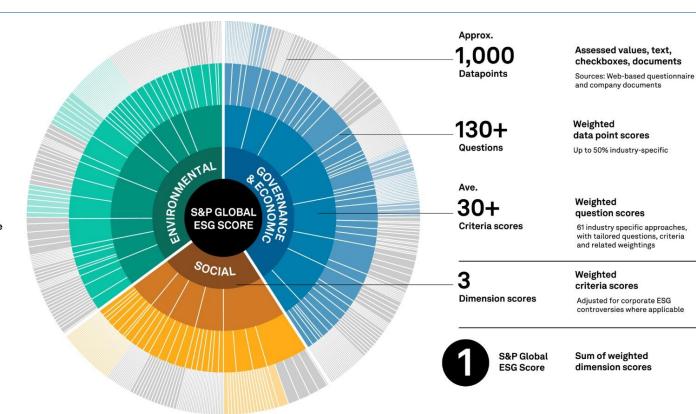
90%

Global market capitalization

340,000+

**Current Research Universe** and Active Securities

20 Top ESG Co	mpanies (20 rows)				otes (0) O Add Col	umn Actions -	· · · · ·
Views ▼ < I	Stock Rover Ratings	Fair Value Ar	nalyst Estimates Bala	nce Sheet Cash	Flow Current Returns	Dividends ETI	F & Fund Pro
Ticker	Overall Ratings Score 1	Growth Ratings Score	Valuation Ratings Score	Efficiency Ratings Score	Financial Strength Ratings Score	Dividends Ratings Score	Momentur Ratings Sco
VRTX	100	100	(88)	98)	97)		91
CRM	99	99	66	63	.96	-	(89)
INTC	98	46	84	92	(79)	92	97
GOOGL	98	70	58	90	99	-	89
MSFT	97	81	64	96)	(77)	54	99
EW	94)	88	58	97	90		45
GILD	92)	35	80	88)	90	(84)	60
BLK	91)	63	45	93	78	60	92
NVDA	91	76	26	(99)	94)	38	100
A	90)	36	(85)	95	79	69	65
JNJ	89)	70	63	89)	85	47	69
HD	81	58	53	93	(11)	95	81
AAPL	78)	49	36	100	55	47	97
V	78	73	21)	97	97	9	87
MA	76	85	9	99	(79)	13)	92
NEE	76	96	28	90	27	44	94
DIS	69	56	44	91	81	39	46
PG	59.	78	5	68	79	48	52
ECL	39	48	(21)	91	35	18)	61
		-	-	-		-	



**ESG Investing, 20 Highly Rated "Ethical" Stocks** 

S&P Assesses 20 Big-Name Companies With Strong ESG Policies, So Investors Can Invest Ethically & Profitably

# Cases of Green Transition Goals Set by Businesses





**ESG Rating Company** 

Moody's

CDP

REFINITIV -

ISS ESG >

MSCI A I MSCI ESG

ECPI Sense in sustainability

Gaïa RESEARCH

**Fitch**Ratings

SUSTAINALYTICS



- Reduce absolute Scope 1 and 2 emissions 60% from 2016 levels.
- By 2030, reduce absolute upstream value chain (Scope 3) emissions 20% from 2016 levels.
- 100% recyclable, reusable, or compostable for all plastic packaging by 2025. ...
- 100% certified or post-consumer (PCR) paper & pulp-based packaging by 2025.
- https://www.jnjconsumerhealth.com/sustainability



#### Net-zero climate impact across our value chain.

- By 2030: Source 100% renewable electricity in our own operations and tier one and two suppliers.\*
- Reduce electrical intensity (kWh/sqm of sales area and opening hour) by 25% (2016 baseline).
- Reduce scope 1, 2 and 3 greenhouse gas emissions by 56% (2019 baseline).\*\*
- By 2040: Achieve net-zero.
- Net-positive impact on biodiversity.
- Circular ecosystem for our products, supply chains and customer journeys.
- Operate within planetary boundaries.
- Design all products for circularity by 2025.
- https://hmgroup.com/sustainability/leading-the-change/goals-and-ambitions/



### NIKE. 2025 Targets:

- 70% absolute reduction of GHG emissions in owned or operated facilities through 100% renewable electricity and fleet electrification
- GHG emissions from key suppliers' manufacturing and transportation operations will be at or below 202 levels despite anticipated business growth, through use of renewable energy, energy efficiency, and alternative fuels
- To meet our 2030 Science-Based Target, we need to reduce our carbon footprint by 65% in owned or operated spaces and by 30% across our extended supply chain -- In FY21, NIKE reached 77% of our 100% renewable energy target in owned and operated facilities
- 0.5M tons of GHG emissions reduced through increasing our use of environmentally preferred materials to 50% of all key materials
- 10% waste reduction per unit in manufacturing, distribution, headquarters and packaging through improved design and operational efficiency
- 100% waste diverted from landfill in our extended supply chain with at least 80% recycled back into NIKE products and other goods
- 10X the amount of finished product waste refurbished, recycled or donated



81 / 100

ESG Vulnerability Score = Tier 1

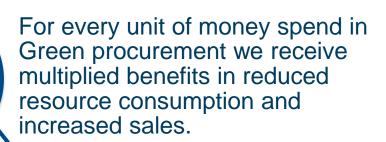
Rating

### Net zero carbon emissions by 2050

- · increasing the proportion of lower-carbon products such as natural gas, biofuels, electricity and hydrogen in the mix of products
- In February 2021, Shell replaced its previous climate targets. The company now to reduce the carbon intensity of its operations (Scope 1 and 2 emissions) and the carbon intensity of its energy products (Scope 3 emissions) by 6-8% by 2023, 20% by 2030 and 45% by 2035. By 2050, it aims to reach 100% reductions net zero, in absolute terms.
- Shell's partnership with Bio-bean, a start-up business aiming to produce biofuel from coffee grounds, has involved a \$57,000 award from Shell in start-up funding.
- In 2018, InfluenceMap assessed Shell's spend on climate-related branding at \$55 million annually



# Wrap Up





Think
Long
Term
Benefits

Small changes in the procured goods or services will have a great impact in the operations and marketing image.

Green marketing and NOT greenwashing must become the core of every new marketing effort.

Find your clients' buttons (*legal* compliance, public image, cost minimization, new market niches, concessional financing, etc.) and persuade them for the benefits with facts





Thank
you for
your
attention!